

**DISPLACEMENT, 'LAND SCARCITY', AND PROCESSES OF
SOCIETAL TRANSFORMATION**
**SOCIAL CONSTRUCTIONS AND DYNAMICS OF 'LAND ACCESS' AROUND
GHANA'S BUI DAM**

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“It is not easy, to be sure. The whole terrain is an intellectual and political minefield, dotted with institutional jealousies and border police, with well-placed and often concealed booby-traps, diversions and dead ends. Some people who attempt to work in such areas never seem to emerge alive. Those who do, often re-emerge tattered and in such a state of shock that they never seem able to say anything about any concrete politics or problems of the world again. But it has been done and can be done.”

(Leftwich 2004, 117: What is Politics?)

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ABSTRACT

'Land scarcity' has been unquestionably a recurring problem around many large dams. Besides the perceptible land takes by inundation and other relevant facilities, studies show that the problem prevails around projects, such as Ghana's Bui Dam, which have even implemented resettlement strategies. Key among these strategies is the land-for-land strategy, which has been globally promoted as fundamental to restoring the resource base and livelihoods of the characteristically rural agrarian populace that frequently constitute the affected. Relevant literature show that rather than being the upshot, experiences of 'land scarcity' incite people to adopt strategic responses that may spur processes of societal transformation with further implications for 'land scarcity' and livelihoods. Considering this pervasiveness and the fundamental consequences, this research seeks to provide a causal explanation of the incidence of 'land scarcity' around the Bui Dam and its implications for societal transformation in six affected communities with diverse experiences of displacement and resettlement. These include, the Bui, Dokokyina, and Akanyakrom resettlement communities, the Bongase host community, and the Gbolekame North and Carpenter downstream communities.

Towards this objective, the research primarily capitalizes on emergent discourses on the social construction of land scarcity to explain that the phenomenon transcends a mere a physical unavailability and largely encompasses the failure to achieve conceived land values or expected benefits from land. In this regard, it infers from the relevant literature to proffer 'land access' as the antithesis of 'land scarcity', which denotes the achievement of targeted land values. Based on these, it employs Bourdieu's *Theory of Practice* to problematize 'land scarcity' by deconstructing the concomitant factors of land values, power and power relations, land tenure, and mechanisms and strategies of land access that underlie its incidence in general situations and ultimately, around large dams. It further uses the theory to elucidate the strategic responses that may drive societal transformation in affected communities. The research develops these into the theoretical framework, which guides the analyses of data towards the achievement of the stated objective.

Of relevance to this, it adopts the paradigm of Critical Realism (CR) and its associated ontological realism and epistemological relativism to guide its methodological aspects. For its approach, it employs the newfound Situational Analysis (after the *Interpretive Turn*) to capsule its complex findings. Consistent with this approach, the research subsequently employs multiple qualitative instruments to collect and analyze the secondary and primary data that were foundational to its achievement of the objective. Particularly regarding its primary data, it employs resource and social mapping, semi-structured interviews, and focus group discussion among others as its key instruments for data collection. By following a six-stage explanatory model based on CR, it further employs abduction and retroduction for analyzing the acquired data towards a causal explanation of the incidence of 'land scarcity' around the Bui Dam and its implications for societal transformation.

Accordingly, the research's findings show that like other large dams, the Bui Dam has engendered 'land scarcity' in the study communities. Key to its implications for the problem are the associated regulative

and administrative encumbrances, imposed spatial changes, and changes in the patterns of access to resources, which have affected the pre-existing qualities of land, land tenure system, the agents' land access mechanisms, and strategies. These have in turn, affected the agents' achievement of conceived land values, and hence, resulted in varied social constructions of 'land scarcity'. Of relevance too, the agents' strategies, including their strategic responses, have underlain the BPA's social construction of 'land scarcity', because they have obstructed its achievement of certain land values. Predictably, the strategic responses of the BPA and the other agents to their social constructions of 'land scarcity' have also engendered societal transformation by altering the pre-existing land values, mechanisms of access, power and power relations, and land tenure. These findings underscore the research's causal explanation of the incidence of 'land scarcity' around the Bui Dam and its implications for societal transformation. Ultimately, the research expects its findings to be the thrust for alterations to amorphous and ill-defined policies and practices of large dam construction globally, to the benefit of affected communities.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	iii
ABSTRACT	v
FIGURES.....	xvi
TABLES.....	xvii
PICTURES	xvii
LIST OF ACRONYMS	xx
CHAPTER 1: FOREGROUNDING THE RESEARCH IDEA.....	1
1.1 Introduction	1
1.2 The problem statement.....	2
1.2.1 Large dams, development politics, and ‘land scarcity’	2
1.2.2 An overview of the Bui Dam and its implications for ‘land scarcity’	10
1.3 Theorizing ‘land scarcity’ and societal transformation around large dams	14
1.4 The research’s overarching question and contextual scope	15
1.5 An overview of the research methodology	15
1.6 The outline of the thesis	16
CHAPTER 2: NESTING THE RESEARCH IN THEORY.....	18
2.1 Introduction	18
2.2 Conceptualizing ‘land scarcity’	18
2.2.1 ‘Land scarcity’ as a polyrational social construction.....	20
2.2.1.1 Spatial power scarcity.....	20
2.2.1.2 Ecological scarcity	20
2.2.1.3 Locational scarcity.....	20
2.2.1.4 Capability scarcity.....	21
2.2.2 Summary and implications for theory selection.....	21
2.3 Demystifying ‘land scarcity’ with Bourdieu’s <i>Theory of Practice</i>	25
2.3.1 Habitus: An elucidation of land values.....	25
2.3.2 Capital: The basis of social positions and power relations.....	28
2.3.2.1 Economic capital	28
2.3.2.2 Cultural capital.....	29

2.3.2.3 Social capital	29
2.3.2.4 Symbolic capital	30
2.3.2.5 Perspectives on Bourdieu's capitals	31
2.3.3 Social space: The domain of social structuring	32
2.3.3.1 Social Field	32
2.3.3.2 Physical space	35
2.3.3.3 Appropriated social space and arena	35
2.3.4 Social practices: An analogy of strategies of land access	36
2.3.5 Summary and implications for the research.....	37
2.4 Situating 'land scarcity' and societal transformation around large dams	40
2.4.1 The consequences of large dams	41
2.4.1.1 The environmental costs of large dams	41
2.4.1.2 The social costs of large dams	43
2.4.2 Resettlement and its implications for 'land scarcity'	49
2.4.2.1 An overview of land-based resettlement policies and their outcomes.....	51
2.4.2.2 Conceptualizing the general failure of DID and land-based resettlement strategies	53
2.4.2.3 Summary and implications for analyzing the research findings.....	59
2.5 Research questions	63
2.6 Summary of the chapter	64
CHAPTER 3: THE RESEARCH PROCESS	66
3.1 Introduction: Self-reflexivity and methodological foundations	66
3.2 Pursuing critical realism as an encapsulating research paradigm	68
3.2.1 Ontological realism: A befitting perspective of reality	69
3.2.2 Epistemological relativism: A distinctive knowledge of reality	72
3.3 Situational Analysis: A robust approach to the knowledge of reality	74
3.3.1 The research proposition and the situation of inquiry (unit of analysis)	75
3.3.2 Capturing the complexities of the situation of inquiry	76
3.3.3 Decentering human subjects to include non-human actants	77
3.3.4 Summary and implications for the selection of research instruments.....	78
3.4 Research instruments: Employing pluralism towards a qualitative SA.....	79
3.4.1 Secondary data: Sources, collection, and analyses	79
3.4.1.1 Identification, selection, and categories of secondary data sources.....	79
3.4.1.2 Collection of secondary data and characteristics of acquired data	81

3.4.1.3 Analysis and presentation of secondary data	81
3.4.2 Primary data: Sources, collection, and analysis	81
3.4.2.1 Identification, selection, and categories of primary data sources.....	81
3.4.2.2 Collection of primary data and characteristics of acquired data	86
3.4.2.3 Analysis and presentation of primary data	91
3.5 Generalizability of findings and quality assurance	96
3.6 Ethical considerations	96
3.7 Limitations and delimitations of the research.....	97
3.8 Summary of the chapter	98
CHAPTER 4: THE STUDY AREA IN CONTEXT	100
4.1 Introduction	100
4.2 The physical characteristics of the study area	100
4.2.1 Location and administrative characteristics	100
4.2.2 Topography and drainage	102
4.2.3 Geology and soil.....	102
4.2.4 Climate.....	103
4.2.5 Vegetation	103
4.3 The socio-economic characteristics of the study area.....	104
4.3.1 Demography	104
4.3.2 Ethnicity.....	105
4.3.3 Economic activities.....	106
4.4 Summary of the chapter	106
CHAPTER 5: THE HISTORICAL EPISODES AND SOCIAL CONSTRUCTIONS OF 'LAND SCARCITY'	107
5.1 Introduction	107
5.2 The historical system of land access	107
5.2.1 Descriptive analyses of the historical land tenure systems	109
5.2.1.1 The right of ownership and control.....	109
5.2.1.2 The right of use.....	118
5.2.1.3 The right of transfer	122
5.2.2 Descriptive analyses of the historical qualities of land	123
5.2.2.1 The extents of accessible land	124

5.2.2.2	The productivity of the soil and general crop yields	127
5.2.2.3	Marketability of land	128
5.2.3	Theory-guided interpretation: The historical system of land access.....	130
5.2.3.1	A preliminary conceptualization of the historical fields of land access	130
5.2.3.2	Land: The stake of the historical fields of land access.....	131
5.2.3.3	Customary land tenure systems: The historical logics of the fields of land access.....	135
5.3	The historical agents and their power relations.....	137
5.3.1	Descriptive analyses of the historical agents of land access.....	137
5.3.1.1	Managers.....	137
5.3.1.2	Users/ appropriators.....	138
5.3.1.3	Providers/ contributors	140
5.3.2	Descriptive analyses of the agents' mechanisms of land access and power relations	143
5.3.2.1	The mechanism of land access of the TAs and their providers	143
5.3.2.2	The mechanisms of land access of the farmers and their providers	145
5.3.2.3	The mechanisms of land access of the builders and their providers	148
5.3.2.4	The land access mechanisms of the herders and their providers	149
5.3.3	Theory-guided interpretation: The historical agents and their power relations	149
5.3.3.1	The objective structure of relations of the historical subfields of land access	151
5.3.3.2	The fields of power of the historical fields of land access	158
5.3.3.3	Summary and implications for the historical fields of land access	160
5.4	The historical strategies of land access.....	160
5.4.1	Descriptive analyses of the land access strategies of the TAs	161
5.4.1.1	Facilitating land access	161
5.4.1.2	Regulating land access	162
5.4.2	Descriptive analyses of the land access strategies of the farmers.....	162
5.4.2.1	Selection of farmlands and soil preparation.....	163
5.4.2.2	Crop cultivation and farm maintenance	165
5.4.2.3	Crop harvesting, processing, use, and reinvestment	167
5.4.3	Descriptive analyses of the land access strategies of the builders.....	168
5.4.3.1	Selection of building lots	168
5.4.3.2	Mobilization of building materials	168
5.4.3.3	Construction of preferred houses	169
5.4.4	Descriptive analyses of the land access strategies of the herders.....	169
5.4.5	Theory guided interpretation: The historical strategies of land access as social practices	169
5.4.5.1	The social practices of the TAs in the subfields of chieftaincy.....	170
5.4.5.2	The social practices of the farmers in the subfields of arable farming.....	171

5.4.5.3	The social practices of the builders in the subfields of real estate	172
5.4.5.4	The social practices of the herders in the subfields of pastoralism	173
5.4.5.5	Summary: Foregrounding the historical fields and subfields of land access.....	174
5.5	The agents' interpretations of their historical land access	177
5.5.1	Descriptive analyses of the TAs' interpretations of their historical land access	177
5.5.1.1	Facilitating land access	177
5.5.1.2	Regulating land access	178
5.5.2	Descriptive analyses of the farmers' interpretations of their historical land access	178
5.5.2.1	Selection of farmlands and soil preparation.....	178
5.5.2.2	Crop cultivation and farm maintenance	179
5.5.2.3	Crop harvesting, processing, use, and reinvestment	180
5.5.3	Descriptive analyses of the builders' interpretations of their historical land access	182
5.5.3.1	Selection of building lots	182
5.5.3.2	Mobilization of building materials	182
5.5.3.3	Construction of preferred houses	182
5.5.4	Descriptive analyses of the herders' interpretations of their historical land access.....	183
5.5.5	Theory-guided interpretation: The agents' historical social constructions of 'land access' and 'land scarcity'	183
5.5.5.1	The TAs' historical social constructions of 'land access' and 'land scarcity'	183
5.5.5.2	The farmers' historical social constructions of 'land access' and 'land scarcity'	184
5.5.5.3	The builders' historical social constructions of 'land access' and 'land scarcity'	185
5.5.5.4	The historical herders' social constructions of 'land access' and 'land scarcity'	186
5.6	Summary of the chapter	186
CHAPTER 6: The ADVENT OF THE BUI DAM AND RECENT SOCIAL CONSTRUCTIONS OF 'LAND SCARCITY'		189
6.1	Introduction	189
6.2	The recent system of land access.....	189
6.2.1	A descriptive analyses of the recent land tenure system.....	192
6.2.1.1	The right of ownership and control.....	193
6.2.1.2	The right of use.....	195
6.2.1.3	Right of transfer.....	197
6.2.2	A descriptive analyses of the recent qualities of land	198
6.2.2.1	The extents of accessible land	199
6.2.2.2	The productivity of the soil and general crop yields	206
6.2.2.3	Marketability of land	208

6.2.3 Theory-guided interpretation: The recent system of land access	212
6.2.3.1 A preliminary conceptualization of the recent field of land access.....	213
6.2.3.2 Land: The stake of the recent field of land access	214
6.2.3.3 Statutory tenure system: The recent logic of the field of land access.....	217
6.3 The recent agents and their power relations	219
6.3.1 Descriptive analyses of the recent agents of land access	219
6.3.1.1 Manager.....	220
6.3.1.2 Users/ appropriators.....	220
6.3.1.3 Providers/ contributors	221
6.3.2 Descriptive analyses of the agents' mechanisms of land access and power relations	226
6.3.2.1 The mechanisms of land access of the BPA and its providers	226
6.3.2.2 The mechanisms of land access of the TAs and their providers.....	227
6.3.2.3 The mechanisms of land access of the farmers and their providers	227
6.3.2.4 The mechanisms of land access of the builders and their providers	231
6.3.3 Theory-guided interpretation: The recent agents and their power relations.....	233
6.3.3.1 The objective structure of relations of the recent subfields of land access	233
6.3.3.2 The field of power of the recent field of land access	242
6.3.3.3 Summary and implication for the recent field of land access	244
6.4 The recent strategies of land access	244
6.4.1 Descriptive analyses of the land access strategies of the BPA	244
6.4.1.1 Land administration	245
6.4.1.2 Infrastructure development.....	246
6.4.2 Descriptive analyses of the land access strategies of the TAs	247
6.4.2.1 Facilitating land access	247
6.4.2.2 Regulating land access	247
6.4.3 Descriptive analyses of the land access strategies of the farmers.....	248
6.4.3.1 Selection of farmlands and soil preparation.....	248
6.4.3.2 Crop cultivation and farm maintenance	249
6.4.3.3 Crop harvesting, processing, use, and reinvestment	250
6.4.4 Descriptive analyses of the land access strategies of the builders	251
6.4.5 Theory-guided interpretation: The recent strategies of land access as social practices.....	252
6.4.5.1 The social practices of the BPA in the subfield of spatial development	252
6.4.5.2 The social practices of the TAs in the subfield of chieftaincy	254
6.4.5.3 The social practices of the farmers in the subfield of arable farming	255
6.4.5.4 The social practices of the builders in the subfield of real estate.....	256
6.4.5.5 Summary: Foregrounding the recent field and subfields of land access.....	257

6.5 The agents' interpretations of their recent land access	260
6.5.1 Descriptive analyses of the BPA's interpretations of its land access	260
6.5.2 Descriptive analyses of the TAs' interpretations of their recent land access	260
6.5.2.1 Facilitating land access	261
6.5.2.2 Regulating land access	262
6.5.3 Descriptive analyses of the farmers' interpretations of their recent land access	263
6.5.3.1 The resettlement communities	264
6.5.3.2 Bongase.....	268
6.5.3.3 Gbolekame North.....	269
6.5.3.4 Carpenter.....	270
6.5.4 Descriptive analyses of the builders' interpretations of their recent land access	271
6.5.4.1 The resettlement communities	271
6.5.4.2 Bongase.....	273
6.5.4.3 Gbolekame North.....	273
6.5.4.4 Carpenter.....	273
6.5.5 Theory-guided interpretation: The agents' recent social constructions of 'land access' and 'land scarcity'	274
6.5.5.1 The BPA's social construction of 'land access' and 'land scarcity'	274
6.5.5.2 The TAs' recent social constructions of 'land access' and 'land scarcity'	275
6.5.5.3 The farmers' recent social constructions of 'land access' and 'land scarcity'	276
6.5.5.4 The builders' recent social constructions of 'land access' and 'land scarcity'	281
6.6 Summary of the chapter	284
CHAPTER 7: STRATEGIC RESPONSES TO RECENT SOCIAL CONSTRUCTIONS OF 'LAND SCARCITY'	
.....	287
7.1 Introduction	287
7.2 The agents' strategic responses to their recent social constructions of 'land scarcity'	287
7.2.1 The strategic responses of the TAs.....	287
7.2.1.1 Dokokyina	288
7.2.1.2 Bui	288
7.2.1.3 Bongase.....	289
7.2.1.4 Gbolekame North.....	292
7.2.1.5 Carpenter.....	293
7.2.2 The strategic responses of the farmers	296
7.2.2.1 Dokokyina	296
7.2.2.2 Dokokyina No. 1	301
7.2.2.3 Bui	302

7.2.2.4 Akanyakrom	305
7.2.2.5 Bongase.....	308
7.2.2.6 Gbolekame North.....	312
7.2.2.7 Carpenter.....	313
7.2.3 The strategic responses of the builders	315
7.2.3.1 The resettlement communities	316
7.2.3.2 Dokokyina No. 1	317
7.2.3.3 Bongase.....	318
7.2.3.4 Gbolekame North.....	319
7.2.3.5 Carpenter.....	319
7.2.4 The strategic responses of the BPA.....	319
7.2.5 Theory-guided interpretation: Strategic responses as symbolic struggles.....	321
7.2.5.1 The symbolic struggles of the TAs.....	322
7.2.5.2 The symbolic struggles of the farmers	324
7.2.5.3 The symbolic struggles of the builders	328
7.2.5.4 The symbolic struggles of the BPA	330
7.3 Summary of the chapter	331
CHAPTER 8: ONGOING SOCIETAL TRANSFORMATION IN THE STUDY AREA	332
8.1 Introduction	332
8.2 Transformations in the system of land access	332
8.2.1 Descriptive analyses of the transformations in the land tenure system	332
8.2.1.1 Transformations in the right of ownership, control, and transfer.....	333
8.2.1.2 Transformations in the right of use	333
8.2.2 Descriptive analyses of the transformations in the qualities of land	335
8.2.2.1 Transformations in the extent of land	335
8.2.2.2 Transformations in the productivity of soil and the general crop yields	336
8.2.2.3 Transformations in the marketability of land	337
8.2.3 Theory-guided interpretation: Transformations in the system of land access	337
8.2.3.1 Preliminary transformations in the recent field of land access.....	337
8.2.3.2 Transformations in social constructions of the stake	337
8.2.3.3 Transformations in the logic.....	339
8.3 Transformations in the agents' diversity and power relations	340
8.3.1 Descriptive analyses of the transformations in the agents' diversity	340
8.3.1.1 Transformations in the category of managers and sub-managers	341
8.3.1.2 Transformations in the category of users.....	341

8.3.1.3 Transformations in the category of providers.....	342
8.3.2 Descriptive analyses of the transformations in the agents’ mechanisms of land access	346
8.3.2.1 Transformations in the land access mechanisms of the BPA and its providers	346
8.3.2.2 Transformations in the land access mechanisms of the TAs and their providers.....	346
8.3.2.3 Transformations in the land access mechanisms of the farmers and their providers	347
8.3.2.4 Transformations in the land access mechanisms of the builders and their providers	350
8.3.2.5 The land access mechanisms of the herders and their providers	352
8.3.3 Theory-guided interpretation: Transformations in the agents’ capitals and power relations..	352
8.3.3.1 Transformations in the objective structure of relations of the subfields	352
2.4.1.2 Transformations in the field of power of the recent field of land access	359
8.4 Summary of the chapter	361
CHAPTER 9: CONCLUSIONS AND FUTURE PERSPECTIVES	362
9.1 Introduction	362
9.2 Highlights of the research’s key findings	363
9.2.1 A causal explanation of the incidence of ‘land scarcity’ around the Bui Dam	363
9.2.1.1 Regulative and administrative encumbrances	363
9.2.1.2 Imposed spatial changes	364
9.2.1.3 Changes in patterns of access to resources	366
9.2.1.4 Other key highlights	367
9.2.2 A causal explanation of the implications of ‘land scarcity’ for societal transformation.....	368
9.2.2.1 New qualities and social constructions of the stake.....	369
9.2.2.2 New property regimes.....	369
9.2.2.3 New agents, networks, and power relations.....	370
9.3 Implications of the findings	371
9.3.1 Disciplinary implications	371
9.3.2 Methodological implications	372
9.3.3 Policy and practical implications	373
9.4 Recommendations.....	373
9.4.1 Recommendations for policy and practice	374
9.4.1.1 Legislative and policy reforms on land expropriation and resettlement	374
9.4.1.2 Rationalize resettlement planning and implementation	374
9.4.1.3 Combine land allocations with alternative livelihood programs	375
9.4.2 Recommendations for further studies.....	376
9.5 Final remarks	376

Bibliography	378
Appendices	395

FIGURES

Figure 1.1: The share of hydropower projects in all aid projects (1970-2008)	5
Figure 1.2: Global total hydropower generation (1980 - 2014)	7
Figure 1.3: Lifecycle GHG emissions of energy sources	8
Figure 2.1: An initial conceptualization of the field of land access and its subfields	38
Figure 2.2: Cernea's IRR Model	54
Figure 2.3: Scudder-Colson Four-Stage Model	55
Figure 2.4: Large dams, 'land scarcity', and societal transformation	62
Figure 3.1: Re-conceptualizing 'Land scarcity' and societal transformation in dam-affected areas as ontological realism	71
Figure 4.1: A map of the study area in the district and regional contexts	101
Figure 5.1: A map showing the historical locations of the communities	124
Figure 5.2: The polyrational habitus (land values) of the historical agents	134
Figure 5.3: Categories of historical agents and their providers	142
Figure 5.4: A summary of the historical social practices of the traditional authorities	170
Figure 5.5: A summary of the historical social practices of the farmers	172
Figure 5.6: A summary of the historical social practices of the builders	173
Figure 5.7: A summary of the historical social practices of the builders	174
Figure 5.8: A diagrammatic representation of the historical field of land access of the respective communities	176
Figure 6.1: A map of the study area showing the current locations of the study communities	192
Figure 6.2: A composite resource map of the resettlement communities showing the recent extent of accessible land	200
Figure 6.3: A resource map of the Bongase community showing the recent extent of accessible land	203
Figure 6.4: A composite resource map of the Gbolekame North community showing the recent extent of accessible land	205
Figure 6.5: A resource map of the Carpenter community showing the recent extent of accessible land	206

Figure 6.6: The polyrational habitūs (land values) of the recent agents	217
Figure 6.7: Categories of recent agents and their providers.....	225
Figure 6.8: A summary of the social practices of the BPA.....	253
Figure 6.9: A summary of the recent social practices of the traditional authorities.....	255
Figure 6.10: A summary of the recent social practices of the farmers.....	256
Figure 6.11: A summary of the recent social practices of the builders.....	257
Figure 6.12: A diagrammatic representation of the recent field of land access	259
Figure 8.1: Transformations in the categories of recent agents and their providers.....	345
Figure 8.2: A diagrammatic representation of the transformations in the recent field of land access	360

TABLES

Table 2.1: Official records of the number of displaced people in selected dam projects.....	44
Table 3.1: An overview of some identified objects/ generative mechanisms by category	78
Table 6.1: The BPA’s imposed charges for acquiring building lots in the study area	210

PICTURES

Picture 3.1: Resource mapping by a group of women in Gbolekame North (Source: E. Agyepong, 2 October 2018).....	87
Picture 3.2: An individual interview with a herder in Banda Nkwanta (Source: E. Agyepong, 11 November 2018).....	88
Picture 3.3: A Focus Group Discussion with TAs of Akanyakrom (Source: E. Agyepong, 10 December 2018)	89
Picture 3.4: Analyzing primary data with meta-cards (Source: E. Agyepong, 25 October 2018).....	94
Picture 3.5: Meeting with some participants with doctoral supervisor (Source: E. Agyepong, 9 February 2019).....	96
Picture 5.1: A site plan showing the land area leased by the PTCL in Bongase (Source: E. Agyepong, 9 December 2018)	112
Picture 5.2: A page of the agreement showing the paramount chief as the lessor (Source: E. Agyepong, 2 December 2018)	112
Picture 5.3: A page of the agreement showing the chief and kurontihene of Bongase as witnesses to the transaction (Source: E. Agyepong, 9 December 2018	113

Picture 5.4: The participating staff of the LVD illustrating the historical cluster farming practices of the farmers (Source: E. Agyepong, 22 September 2018)	163
Picture 6.1: One of several signboards within the study area that publicize the acquisition (Source: E. Agyepong, 22nd September, 2018)	190
Picture 6.2 A purchase receipt issued to the Evangelical Presbyterian Church for a plot of land (Source: E. Agyepong, 3rd March, 2019)	211
Picture 6.3: A roaming agrochemical vendor in Dokokyina (E. Agyepong, 6 September 2018)	223
Picture 6.4: A farmer 'pumping' land in Bongase by the slash method (E. Agyepong, 7 November 2018)	249
Picture 6.5: A typical agroforestry farm in Bongase consisting of cashew trees and subsistence crops (E. Agyepong, 7 November 2018)	249
Picture 6.6: A farmer weeding around a farm in Dokokyina with a cutlass (E. Agyepong, 29 November 2018)	249
Picture 6.7: Some women processing beans in Bongase (E. Agyepong, 7 November 2018)	250
Picture 6.8: Stored yams and yam setts on the ground surface in Dokokyina (E. Agyepong, 29 November 2018)	250
Picture 6.9: Hired laborers winning sand near Bongase (E. Agyepong, 13 November 2018)	251
Picture 6.10: A farmer showing the poor quality of yam yields to support claims of the deteriorated soil productivity (Source: E. Agyepong, 13 September, 2018)	265
Picture 7.1: The cover page of the permit issued to fisher folks (Source: E. Agyepong, 9 December 2018)	291
Picture 7.2: A page of the registration book showing the information of a herder (Source: E. Agyepong, 9 December 2018)	291
Picture 7.3: The information page of the permit (Source: E. Agyepong, 9 December 2018)	291
Picture 7.4: One of the herders' sturdy villages near Gbolekame North (Source: E. Agyepong, 14 December 2018)	293
Picture 7.5: A concrete blockhouse under construction within one of the herders' sturdy villages near Gbolekame North (Source: E. Agyepong, 14 December 2018).....	293
Picture 7.6: A poster of the public announcement on the forum and demonstration against the BPA (Source: E. Agyepong, 4 September 2018).....	300
Picture 7.7: A proliferating industrial cassava processing business in Akanyakrom (Source: E. Agyepong, 1 February 2019)	305

Picture 7.8: A group of women farm laborers from Akanyakrom processing melons (Source: E. Agyepong, 13 September 2018)	306
Picture 7.9: The contractor carving mortars out of shea timber in Bongase (Source: E. Agyepong, 6 November 2018)	310
Picture 7.10: A signpost of the UNDP-backed project in Bongase (Source: E. Agyepong, 29 November 2018)	311
Picture 7.11: A herd of cattle grazing around Gbolekame North (Source: E. Agyepong, 19 January 2019)	312
Picture 7.12: Trucks loading bags of charcoal in Carpenter (Source: E. Agyepong, 10 November 2018) ..	315
Picture 7.13: A woman roasting cassava flakes over a hearth in Akanyakrom (Source: E. Agyepong, 10 December 2018)	316
Picture 7.14: An abandoned house at the Dokokyina resettlement community showing a damp, peeling and cracked wall (Source: E. Agyepong, 14 December 2018)	318
Picture 7.15: An abandoned house at the Dokokyina resettlement community showing a collapsed manhole and exposed electrical wires (Source: E. Agyepong, 3 March 2019)	318
Picture 7.16: A house under construction in Bongase with an inscription by the BPA to stop work (Source: E. Agyepong, 13 December 2018).....	321
Picture 8.1: An incense tree on fire on a cashew farm in Dokokyina (Source: E. Agyepong, 29 November 2018)	334
Picture 8.2: The chapel of the Calvary Baptist Church in Bui (Source: E. Agyepong, 4 February 2019)	341

LIST OF ACRONYMS

BPA	Bui Power Authority
CR	Critical Realism
DA	District Assembly
DCE	District Chief Executive
DID	Dam-induced displacement
ECG	Electricity Company of Ghana
ESIA	Environmental and Social Impact Assessment
FGD	Focus Group Discussion
GHC	Ghana Cedis
GoG	Government of Ghana
GRIDCo	Ghana Grid Company Limited
GSS	Ghana Statistical Service
IFC	International Finance Corporation
IPCC	Intergovernmental Panel on Climate Change
LVD	Land Valuation Division of the Ghana Lands Commission
MP	Member of Parliament
NDC	National Democratic Congress
NEDCo	Northern Electricity Distribution Company
NGO	Non-Governmental Organization
OECD	The Organization for Economic Co-operation and Development
PTCL	Pioneer Tobacco Company Limited
RPF	Resettlement Planning Framework
SA	Situational Analysis (Grounded Theory after the Interpretive Turn)
SAP	Structural Adjustment Program
TAs	Traditional Authorities

TCPD	Town and Country Planning Department
UN	United Nations
UNCC	United Nations Climate Change
UNDP GEF/SGP	United Nations Development Program Global Environmental Facility/ Small Grants Program
USA	United States of America
USD	United States dollar
VRP	Volta River Project
WCD	World Commission on Dams

CHAPTER 1: FOREGROUNDING THE RESEARCH IDEA

1.1 Introduction

In his book, *Development Projects Observed*, Hirschman insightfully remarks that development projects are “a special kind of investment” that “connotes purposefulness, some minimum size, a specific location, the introduction of something qualitatively new, and the expectation that a sequence of further development moves will be set in motion” (2015, 1). This idea has predominantly fomented the construction of large dams since their development in the 19th century to generate electricity for advancing the industrial revolution that had taken off in the 18th century (Kumar et al. 2011, 443; Larrain 1989, 1; McCully 2001, 15; Timmons, Harris, and Roach 2014, 3). Consequently, large dams have contributed to the economic growth of many countries, which has reportedly positioned them as reliable sources of electricity and symbols of economic growth (Altinbilek and Cakmak 2002, 59; Smil 2017, 243; Carbonnier and Grinevald 2011, 6; McCully 2001, 11). However, parallel to these accolades, large dams have also been associated with various socio-economic problems, key among which is land scarcity (Cernea 1997, 1572; Terminski 2015, n/a¹). Relevantly, their construction usually occurs in remote areas where livelihoods are largely land-based (Agleby 2017, 2; Terminski 2013 n/a; Vanclay 2017, 4). Thus, the resultant land scarcity makes the affected communities susceptible to the risk of impoverishment, which encompasses homelessness and food insecurity (Cernea 1991a, 191; Terminski 2015, n/a).

Accordingly, recent resettlement schemes and attempts to mitigate the socio-economic consequences of large dams have prioritized land-for-land strategies (OECD Development Assistance Committee 1992, 7; IFC 2012, 3; The World Bank 2004a, 61). However, empirical studies of large dams including Ghana’s Bui Dam, which is focal to the research continue to underline the prevalence of land scarcity in host communities (Agleby 2017, 55; Dao 2010, 332, 335; Moore, Dore, and Gyawali 2010, 2–3; Obour et al. 2016, 292; Scudder 2005, 71–72; Yankson et al. 2017, 0482). Besides its immediate effects on livelihoods, studies show that land scarcity incites people to adopt dynamic strategic responses, which may cause profound transformations with further implications for land access (de Wet 2004, 55; Oliver-Smith 2001, n/a). Given these and considering its adoption of a land-for-land resettlement strategy, the research seeks to provide a causal explanation of how the Bui Dam has engendered land scarcity in its affected communities and the implications of the problem for societal transformation.

Towards this objective, the research takes recourse to emerging discourses on the social construction of land scarcity. In this regard, it argues that the phenomenon, which is henceforth referred to as ‘land scarcity’, is not about a mere physical unavailability, but is a social construction based on the varied meanings and values of land to people in societies typically riddled with political processes and asymmetric power relations. Along this line of reasoning and inferring from various empirical studies, the research further proffers that besides the obvious impacts of inundation, the resultant displacement and

¹ the use of ‘n/a’ here and across the thesis implies that the source is without page numbers

resettlement dismantle the social, political, cultural, and economic patterns and organizations that support the land access and general livelihoods of the characteristically rural populations (Cernea 1991a, 22; de Wet 2004, 54; McDonald-Wilmsen and Webber 2010, 156). These include their land rights, social networks, socio-political structures, and production processes (Cernea 1991a, 22). Despite their crucial roles in land access, the World Bank observes that dam construction and resettlement schemes largely overlook these patterns and organizations because they are frequently obscure (2004a, xxv). Consequently, resettlement schemes have usually limited mitigation efforts to mere land allocations, believing that they aptly compensate for the affected lands. Moreover, studies show that the key objective behind the development of large dams has been to promote economic growth, which overshadows concerns for these patterns and organizations, and ultimately, the basic livelihoods of the grassroots, including their access to land (Altinbilek et al. 2002, 59; Cernea 1991a, 191; Terminski 2015, n/a). Thus, the oversights actuate and entrench 'land scarcity' in host communities, leading to various forms of impoverishment.

Against this background, this introductory chapter aims to foreground the research idea. It begins by expatiating on the problem statement to justify the research idea. Thereafter, it gives an overview of the theoretical framework as a foreknowledge of the perspectives that guided the research's problematization of the 'land scarcity' phenomenon and its implications for societal transformations. Following this, the chapter emphasizes the research's overarching question and contextual scope. Subsequently, it gives a summary of the methodology to show how the research operationalized its questions. After this, the chapter closes with an outline of the thesis as a guide to its organization.

1.2 The problem statement

As recounted above, the prevalence of 'land scarcity' around large dams is due to the economic underpinnings of their development, but also the general neglect of the immaterial factors that support the land access and general livelihoods of affected communities. Following this argumentation, this section elaborates on the blunders to justify the research idea. Towards this purpose, the section first infers from relevant studies to describe the development politics that have underlain the historical expansion of large dams in the global context. Based on this, it further underlines the manner in which large dams have fomented 'land scarcity' and affected local livelihoods. Subsequently, the section narrows down the discussion to the development of the focal dam, the Bui Dam of Ghana, and its documented implications for 'land scarcity'.

1.2.1 Large dams, development politics, and 'land scarcity'

Studies show that the development of hydroelectricity begun in the 19th century (Kumar et al. 2011, 443; Larrain 1989, 1; McCully 2001, 15; Timmons, Harris, and Roach 2014, 3). This was followed by technological advancements and a global expansion, which were both facilitated by various forms of exchanges (see: Kumar et al. 2011; McCully 2001; Schnitter 1994). Inferring from Appadurai, such exchanges may be categorized as 'ethnoscapes' (flows of people), 'technoscapes' (flows of technology), 'financescapes' (flows

of capital), mediascapes (flows of information), and 'ideoscapes' (flows of knowledge and ideologies) (1996, 33). In this regard, ideoscapes were reportedly responsible for the evolution of dams from earth fill to gravity and from small to large in the early 20th century (Schmitter 1994, n/a). Following the definition provided by the reputed International Commission on Large Dams (ICOLD), large dams in this sense are those with heights of 15 meters and above from the lowest foundation to the crest and impound more than 3 million cubic meters (2011, 3). Reminiscent of the economic agenda, which underlay the conception of hydroelectricity in the 19th century, the global expansion of large dams in the subsequent years were stimulated by certain development agendas. The next paragraphs discuss these agendas and the consequent exchanges to underscore the dire socio-economic scenes that have marred the veneer of large dams.

The global expansion of large dams in the 20th century was driven by the United States of America (USA) through its establishment of the Bureau of Reclamation (BuRec) and the Tennessee Valley Authority (TVA) in 1902 and 1933 respectively (Josephson 2002b, 19; Khagram 2004, 6). Particularly, the TVA implemented a comprehensive river basin development for hydroelectricity among others, which became foundational to the USA's manufacture of munitions during World War II (Khagram 2004, 5; Law and Troja 2019; Sneddon 2015, 55). This inspired the proliferation of water bureaucracies across the warring countries (Khagram 2004, 5; Law and Troja 2019; Roemer and Stern 1981, 16; Sneddon 2015, 55). After World War II in 1945, the Cold War (1946-1991) between the USA and the Soviet Union became an additional thrust for the expansion of hydropower dams in the respective countries (Josephson 2002b, 18, 26-27; McCully 2001, 17-18; Sneddon 2015, 11; van de Giesen 2010). Concurrently, the wave of decolonization that swept across South Asia and Africa between 1945 and 1960 also paved the way for both countries to propagate hydropower dams in the newly independent countries, with the intent of establishing political and economic hegemony to curb the spread of the opposing ideology (Josephson 2002b, 18, 26-27; Sneddon 2015, 11).

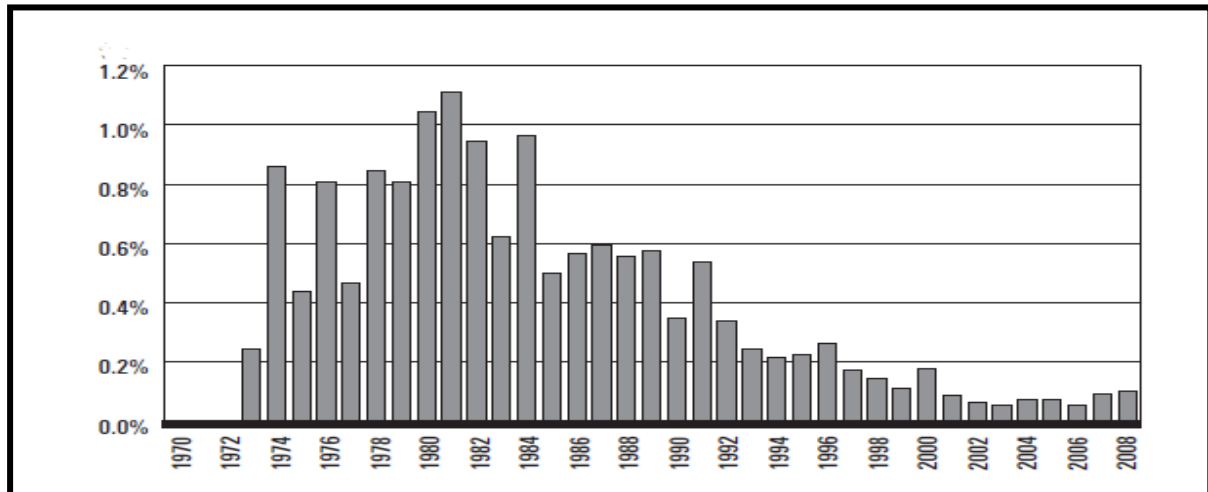
At the time, the newly independent countries were pursuing nation building, which eventually came to include the strife for modernization and economic growth (Escobar 1995, 6; Larrain 1989, 22; Rapley 2007, 1). The impetus for this was due to their categorization as 'Third World Countries' by the more advanced countries based on their supposed poverty and underdevelopment (Escobar 1995, 21; Larrain 1989, 22; Rapley 2007, 1). Josephson reports that, hydropower dams consequently became a 'corridor of modernization' (2002a, 132), because the USA and the Soviet Union promoted them as fundamental to the countries' achievement of a revolutionized economy driven by the sort of industrialization that had activated theirs (Josephson 2002b, 18, 26-27; Sneddon 2015, 3, 11). Although the nationalist politicians of the new countries embraced and promoted the idea, they lacked the capital for investment (Miescher and Tsikata 2011, 16). Besides having economies that were largely characterized by the primary sector (Larrain 1989, 7; Rapley 2007, 1; Roemer and Stern 1981, 17), their independence and eviction of the colonists had inadvertently, also expelled the capital, which could have supported their economic growth (Chua 1995, 266). This paved the way for the USA and the Soviet Union to offer support in the guise of 'development assistance' and 'development expertise' (Escobar 1995, 40; Josephson 2002a, 132; Sneddon 2015, 11-12).

However, besides the warring countries, other industrialized countries and the World Bank also offered various forms of assistance to the newly independent countries (Escobar 1995, 86–87; Miescher 2014, 343). Relevantly, the offers expedited financescapes, ethnoscapes, technoscapes, and ideoscapes (Escobar 1995, 40; Josephson 2002a, 132; Sneddon 2015, 11–12). To the warring countries, these served their respective interests of spatializing political and economic relations (Escobar 1995, 40; Josephson 2002a, 132; Sneddon 2015, 11–12).

Consequently, by 1949, about 5,000 large dams had been built worldwide, increasing to 45,000 by 1990 (WCD 2000a, 8). These included the Wu-Sheh Dam of Taiwan (1953) and the Aswan High Dam of Egypt (1960s), which were respectively built by the USA and the Soviet Union (Cody 2003, 142; Sneddon 2015, 165, 171, 175). Of relevance to this study, the period also saw the construction of Ghana’s Akosombo Dam by the USA in 1966 under the Volta River Project (Hilton 1966, n/a; Miescher 2014, 342; Miescher and Tsikata 2011, 19–20). The project included plans for the dam, but also the Bui Dam, a harbor in Tema, aluminum industries, and highways to expedite industrialization and minimize the country’s reliance on cocoa exports (Miescher 2014, 342; Diaw and Schmidt-Kallert 1990, 5). Through ideoscapes, the Ghanaian Government also emulated the USA and established the Volta River Authority as a water bureaucracy to plan, implement, and manage the projects on the Volta River (Miescher and Tsikata 2011, 22). Given these global outcomes, Sneddon aptly describes the Cold War as the period of ‘Concrete Revolution’, reiterating that the geopolitical popularization of dams occurred through discourse and the construction of knowledge (2015, 3). McCully also emphasizes that dams were the largest single structures built by humanity for most part of the 20th century, becoming icons of economic development and technological advancements equaled only to the discovery of nuclear bombs and motor cars (2001, 1, 3, 4).

However, besides the Cold War and the opportunities created by decolonization, the onset of environmentalism in the 1950s and the oil crises of the 1970s and 1980s also influenced the globalization of large dams within the period. Regarding the former, studies show that the proliferation of local environmental groups in the United Kingdom (UK) and USA against pollution among others, resulted in legislations that reduced dam construction in the respective countries and other industrialized countries (Dalby 2016, 45; Devine 1995; Lifset 2016, 467, 469). Coupled with the oil crises, this compelled the countries to increase their dependence on coal, natural gas and nuclear power (Devine 1995; 2005, 20; Kreienbaum 2013, n/a; Lifset 2016, 467). Given their lack of capital, the so-called Third World Countries were incapable of joining the revolution (Meierding 2011, 55). Thus, despite backpedaling in their respective countries, some industrialized countries and the World Bank continued to provide development assistance for large dam construction to facilitate the beneficiary countries’ access to energy for industrial development (Khagram 2004, 2; Michaelowa and Michaelowa 2011, 65, 66). Presenting the graph in Figure 1.1 on the next page, Michaelowa and Michaelowa report that this pertinacity increased the share of hydropower projects in all development aid projects between 1974 and 1984 (2011, 69).

Figure 1.1: The share of hydropower projects in all aid projects (1970-2008)



Source: Michaelowa and Michaelowa (2011, 69)

Although large dams had stimulated some form of economic growth in countries including Ghana (Diaw and Schmidt-Kallert 1990, 5), their growing numbers however, incited divergent perceptions about their societal implications from the 1960s onwards (Stanley 2004, n/a). Terminski observes that the large dams of the industrialized countries had had less disruptive effects on people, because the affected areas were less populous and compensations were paid to improve the livelihoods of the inhabitants (2015, n/a). Conversely, the dogged quest for modernization and economic growth by the Third World Countries had overshadowed concerns for the grassroots, leading to indiscriminate site selections and a general neglect of compensation payments (Michaelowa and Michaelowa 2011, 68; Terminski 2015, n/a). In the case of Ghana’s Akosombo Dam, Miescher and Tsikata underline that the State compensated some of the affected people in cash and neglected the downstream communities in an attempt to cut cost (2011, 23, 25). Consequently, many large dams in Third World Countries became environmental and socio-economic snares, because they caused environmental degradation and mass displacements of people who had previously lived sustainably in the affected areas (Malone 2002, 161; Stanley 2004, n/a). Reporting on the magnitude of the displacements, Cernea underlines that the Sobradinho (1982) and Cirata (1988) Dams of Brazil and Indonesia for instance displaced about 65,000 and 70,000 people respectively, leading to ‘land scarcity’ and impoverishment (1991a, 22). Although it was estimated that the Akosombo Dam would displace about 18,000 people, it ended up displacing about 84,000 people with the same consequences (Abrampah et al. 2015, 276; Diaw and Schmidt-Kallert 1990, 39; Miescher and Tsikata 2011, 23).

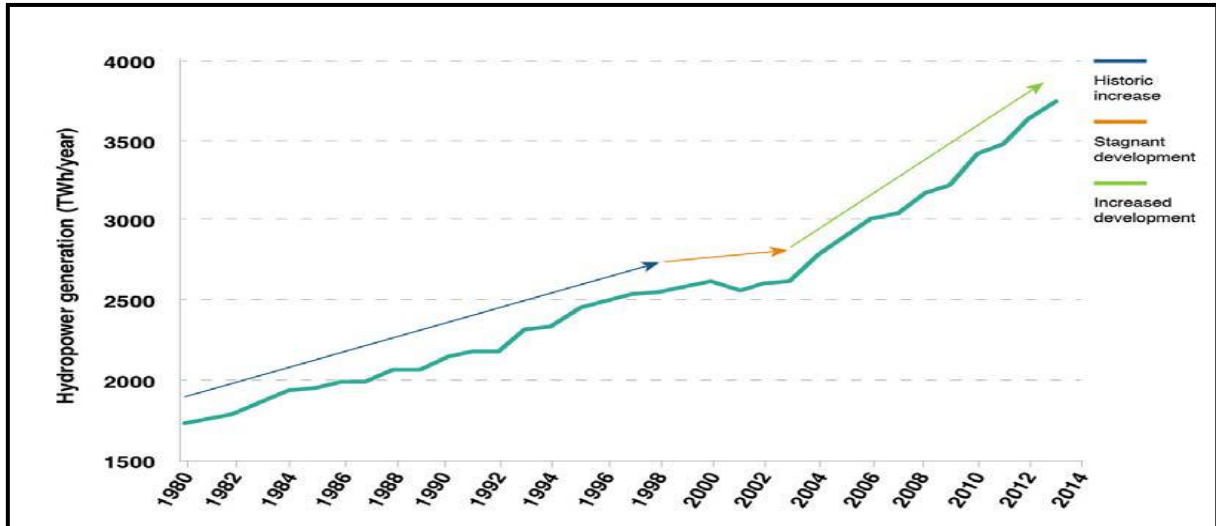
These mishaps incited domestic resistances in the late 1970s, beginning with the Three Gorges, Narmada, and Tucurui Dams in China, India and Brazil respectively (Michaelowa and Michaelowa 2011, 68). Subsequently, through mediascapes and ideoscapes, the resistances proliferated into networks transcending national boundaries, which earned the support of non-governmental organizations (NGO) that were also challenging the dominant development ideology at the time (Islam and Islam 2016; Khagram 2004, 4; Stanley 2004). As later elaborated in Chapter 2, these campaigns led the World Bank to pioneer guidelines for involuntary resettlement in 1980 for resettlement planning and livelihood improvement and

restoration (Cernea 1988, 80:2; Stanley 2004, n/a; The World Bank 2004a, xxiv). They also raised awareness about participation, legitimacy, accountability and transparency, and the norms and principles of human rights, indigenous peoples, and the environment (Dwivedi 2002, 709). Moreover, they compelled supranational structures, including the development banks of Africa and Asia and some countries to adopt resettlement policies (African Development Bank 2003; Asian Development Bank 1995; Stanley 2004, n/a). According to Asmal, the donors and host governments acknowledged these overtures. However, they were unwilling to cede their ideologies on modernization and economic growth, and argued that the growth propelled by the infrastructures will generate enough means to address the said problems (2001, 1415).

Despite this, the persistent campaigns compelled the World Bank to spearhead the establishment of the World Commission on Dams (WCD) in May 1998 with a diverse group of stakeholders (WCD 2000b, 2). Among its responsibilities, the WCD was to review the development effectiveness of large dams and develop acceptable guidelines for dam decisions (ibid). After assessing the cumulative effects of 150 dams across the world, the WCD confirmed the dire social and environmental consequences of large dams (WCD 2000a, ix). Subsequently, it proposed an approach based on rights and risks for dam decisions and outlined key strategic priorities and corresponding policy principles for water and energy development. According to the World Energy Council, the development of hydropower declined significantly between 1999 and 2005 when the WCD was active (2015, 6). Relevantly, the campaigns against dams within the period caused the reformation, postponement, cancellation, and decommissioning of many dams in Japan, Namibia, and India among other countries (Haque 2015, 1; Khagram 2004, 2; McCully 2001, xvi).

Following this brief success, large dam constructions reportedly resumed in 2005 (World Energy Council 2015, 6). This has been attributed to discourses on climate change and growing investments by emerging economies such as China who are looking to establish economic hegemony in Third World Countries (Goodland 2008, 8; World Energy Council 2015, 6). Although the climate change phenomenon gained some traction in the 1970s, it became part of global diplomacy after the establishment of the Intergovernmental Panel on Climate Change (IPCC) and the United Nations Framework Convention on Climate Change (UNFCCC) in 1988 and 1992 respectively (Malone 2002, 165). Fundamentally, the scientific evidence on climate change largely points to the production and consumption of fossil fuels for electricity and heat as the main sources of greenhouse gas (GHG) emissions (AGECC 2010, 7; Berga 2016, 314; Burkett et al. 2014, 188-89). Thus, key to the global efforts to reduce electricity-related emissions and decarbonizing the energy sector in general is to transition to clean energy sources such as solar, wind, geothermal, bioenergy, and interestingly, hydropower (see: IPCC 2018). Given this, wind and solar energy have reportedly become evolutionary in recent years (UNCC 2018, n/a). However, for many countries, hydropower remains fundamental to energy generation, because unlike the others, it facilitates energy storage and a reliable and predictable access to electricity (Berga 2016, 315; Haque 2015, 2; UNCC 2018, n/a). Thus as shown in Figure 1.2 below, there has been a dramatic increase in hydropower development since 2005.

Figure 1.2: Global total hydropower generation (1980 – 2014)

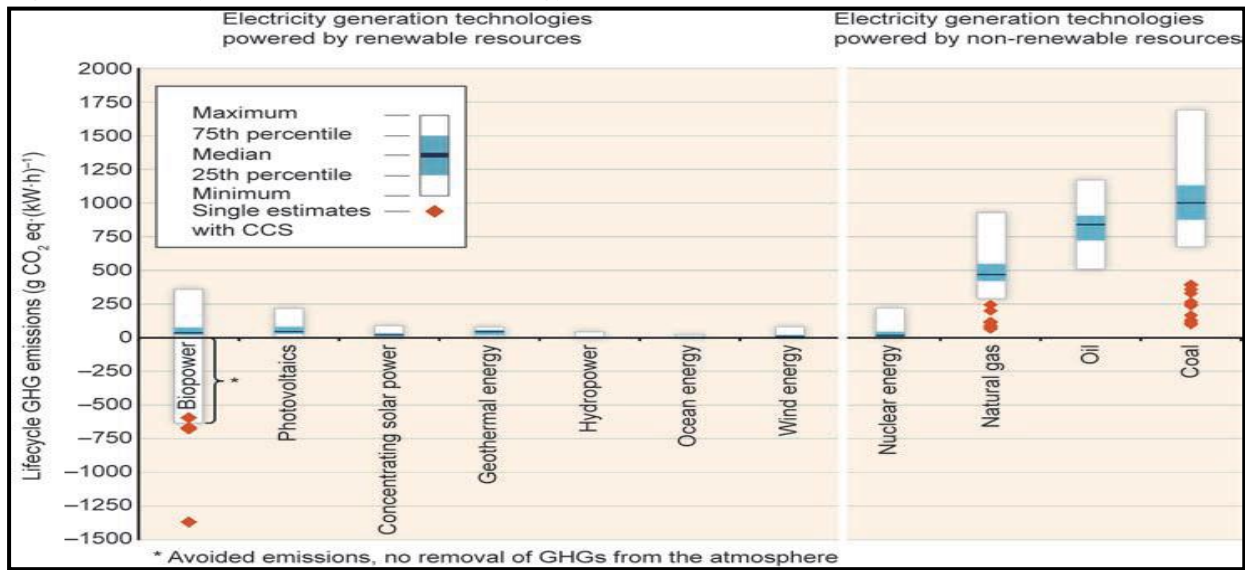


Source: World Energy Council (2015, 6)

However, this development has not been without criticism as studies show that dams also emit GHG through the decay of organic matter and carbon inflows (Hu and Cheng 2013, 708; WCD 2000a, 75). Presumably, due to its long interest in expediting the development of large dams, the World Bank has disproved this criticism. In a published technical note, it claimed that the critical studies were based on unfavorable conditions and that recent dams emit less than 1 per cent of gross GHG emissions (Varis et al. 2012 cited in Liden 2013, 10). Other supporting studies also claim that dams, including those on the Zambezi River prevent methane emissions from wetlands, freshwaters, and downstream floodplains (Muller 2019, n/a). Thus, the IPCC has presented the graph in Figure 1.3 on the next page to show that hydropower provides cleaner energy over their lifecycles than fossil fuels and some other renewable resources. In this regard, it further notes that although the outliers show that hydropower may release about 4 to 14 grams of carbon dioxide over their lifecycles with the potential for much larger quantities, this is still relatively less than what other energy sources emit (Edenhofer et al. 2011, 84). Elaborating on its benefits to climate change mitigation, the International Hydropower Association (IHA) also reports that hydropower prevents the emission of 148 million tonnes of particulates, 62 million tonnes of sulfur dioxide, and 8 million tonnes of nitrogen oxide each year (2018, n/a). Moreover, it reports that in 2017 alone, hydropower prevented the emission of 4 billion tonnes of additional GHG (ibid).

Given these, the IPCC touts hydropower as a “proven, mature, predictable technology” that slows the climate change process (Edenhofer et al. 2011, 80; Kumar et al. 2011, 441). The UNCC also endorses it as fundamental for implementing the Kyoto Protocol and achieving the Paris Climate Change Agreement (2018). Even the broader United Nations outfit considers it relevant for achieving the Sustainable Development Goals (SDGs) 13 and 7, which include the Sustainable Energy for All (SEforALL) initiative. Respectively, these goals aim at combating climate change and facilitating a global access to affordable and clean energy to end poverty. Towards these goals, Berga argues that hydropower provides the cheapest and most reliable electricity among the renewable energy sources and has one of the best conversion efficiencies from water to wire (2016, 315).

Figure 1.3: Lifecycle GHG emissions of energy sources



Source: World Energy Council (2015, 6)

Relevantly, these endorsements have overshadowed the socio-economic consequences of large dams at the grassroots and driven the traditional development banks to renew their capital investments in especially Third World Countries (Goodland 2008, 8; Moore, Dore, and Gyawali 2010, 5; The World Bank 2009, n/a; Gies 2014). Besides climate change, the propagation of hydropower is additionally based on recent studies that have theoretically confirmed the link between a country’s level of economic growth and its electricity availability rates (Berga 2016, 313; Best et al. 2018, 2-3; Stern et al. 2019, 8, 21). Accordingly, a study by Ritchie and Roser shows that out of the 940 million people who lacked electricity access in 2016, greater percentages were in countries in Sub-Saharan Africa, Latin America, and Asia (2019). Given this, the traditional development banks have reportedly invested about \$50 billion annually in so-called sustainable infrastructure, which includes large dams in poor countries towards the SDG and the Paris Climate Change Agreement (Bhattacharya et al. 2019, 4). However, estimates show that this contribution falls short of the estimated \$7.6 trillion required annually to meet the targets by 2030 (ibid). Thus, capitalizing on this gap and the increasing demand by Third World Countries, the national development banks of countries, including China, Brazil, and India have also begun hydropower investments internationally (Berga 2016, 313; Best and Burke 2018, 2-3; Bhattacharya et al. 2019, 4; Gies 2014). Of interest is their use of attractive concessional funding to provide the beneficiary countries with flexible repayment plans over long periods and at interest rates below market rates (Bhattacharya et al. 2019, 4).

Consequently, the respective donor countries have successfully infiltrated some Third World Countries (Gies 2014, n/a). However, the most successful has been China, which has made pronounced impacts through its ‘Going Global Strategy’. Launched in 1999, the strategy aims to encourage Chinese investments abroad due to a growing local competition and a desire to access external resources and markets among others (Gies 2014, n/a; Hensengerth 2013b, 286; Urban and Nordensvard 2014, 1). Thus, while China was associated with only six overseas dams before the year 2000, it is now responsible for at least 330 of them, including the Bui Dam, which of interest to this research (Fam 2017, 120; International Rivers 2012, 11; 2014,

n/a; Terminski 2015, n/a). Besides offering concessional funding or loans, China also provides mixed package commercial loans and no-string policies on political and economic governance, which have reportedly become attractive to the beneficiary governments than those of especially the west (Hensengerth 2013b, 287). Of relevance too, China's investments are implemented by the State-owned Sinohydro Corporation Limited (henceforth, Sinohydro), which has accordingly become the world's biggest hydropower company (Global Development Policy Center 2019).

Given this, China has gained a global recognition in hydropower development. However, its investments have also garnered major concerns about the trail of social and environmental damages in host communities (Bansal 2018; Gies 2014; International Rivers 2014). Interestingly, its critics include the western countries and traditional banks, which have long propagated large dams despite a general awareness about their dire implications. However, while these traditional investors have recently abandoned projects such as the Narmada and Xayaburi Dams of India and Laos respectively due to protests and the fear of attracting bad press and lawsuits, Chinese investments have been unfazed by them (Hensengerth 2018, 28). A case in point is its investment in the Merowe Dam of Sudan after the police shot and killed farmers protesting the dam in 2006 (Brautigam 2009, 302). Sinohydro also financed the Patuca III Dam of Honduras after American and Taiwanese firms abandoned it because of increasing opposition (International Rivers 2012, 35). China's brazen disregard for the social and environmental costs of large dams through its increasing investments has led some commentators to conclude that its concepts and practices of development differ from the norm (Brautigam 2009, 303; Hensengerth 2013a, 287). Subsequently, the global pressure and a desire to augment its international competitiveness have compelled it to adopt some global norms (Brautigam 2009, 303; Hensengerth 2013a, 290; International Rivers 2012, 21). Among its efforts, China's Overseas Foreign Direct Investment Law and Ministry of Commerce and Environmental Protection require companies to comply with the local laws and culture of host countries (International Rivers 2012, 20–21; Yoshikawa and Anbumozhi 2018, 83). Its Export-Import (Exim) Bank, which is one of the biggest global dam financiers also adopted environmental guidelines in 2004. Relevantly, the guidelines require environmental and social impact assessments on all proposed projects as well as public consultations before loan approvals (International Rivers 2012, 23). Likewise, Sinohydro adopted a comprehensive Policy Framework for Sustainable Development in 2011 in which it set out specific policies on environment and community relations (*ibid*, 21).

Despite this progress, Hensengerth argues that the revenue-driven agenda of Chinese companies has debilitated their implementation and monitoring of contractual arrangements, domestic governance arrangements, and the norms imposed by host governments among others, leading to dire consequences (2013a, 13). However, he also faults the weak monitoring systems of the host governments for these (*ibid*). Thus, advancing the same view, Fam refers to Malaysia's Bakun Dam to underline that the responsible Chinese companies were able to shirk their obligations mainly because of the government's negligence (2017, 121). Of relevance to the research, Hensengerth states that similar incidences occurred during the construction of the Bui Dam project (2018, 24). Studies show that such oversights and those related to resettlement have been fundamental to the adverse socio-economic and environment impacts on affected

communities (see: Asiama 2015; 1988, 80:24; de Wet 2004, 52; Scudder 2005, 47). However, besides these institutional failures, de Wet argues that the problems also stem from some inherent complexities that accompany resettlement and are not always amenable to rational planning and procedure (2004, 52). These complexities include an involuntary spatial change, changes in resource access patterns, accelerated socio-economic change, and the creation of larger and more heterogeneous settlements, as well as wider administrative, political, and economic structures (ibid).

As indicated by multiple studies, 'land scarcity' underlie the socio-economic consequences, because large dams affect substantial lands, which are inarguably fundamental to the agrarian livelihoods of the affected communities, such as those around the Bui Dam (Zakout et al. 2006 cited in Asiama 2015, 15; M. Cernea 1997, 1572; Johnson et al. 2015, 207; Obour et al. 2016, 295; Terminski 2015, n/a). Primarily, besides depleting land, the displacement and resettlement associated with large dams upset the communities' social, cultural, political, and economic characteristics that expedite their land access and general livelihoods (Cernea 1991a, 22; de Wet 2004, 54; McDonald-Wilmsen and Webber 2010, 156). Consequently, Cernea, who refers to the problem as 'landlessness', has dubbed it "the principal form of decapitalization and pauperization of displaced people" (1997, 1572). Rather than being an end in itself, studies show that the incidence of 'land scarcity' compel people to adopt various strategic responses, which may in turn, further transform pre-existing characteristics and entrench 'land scarcity' and impoverishment (Cotula 2013, n/a; Oliver-Smith 2001, n/a; Ribot and Peluso 2003, 160).

Ultimately, the foregoing shows that the globalization of large dams has long been underlain by ideologies of modernization and economic growth, and recently, climate change, which have overshadowed the basic livelihoods of affected communities, including their access to land. Relevant studies show that the development of the Bui Dam was also underlain by certain discourses (see: Hensengerth 2018; Miescher and Tsikata 2011), which may invariably explain the prevalence of 'land scarcity' and dire socio-economic impacts. Thus, the next section further situates the research idea by giving an overview of the Bui Dam and its implications for 'land scarcity'.

1.2.2 An overview of the Bui Dam and its implications for 'land scarcity'

The Bui Dam was conceived as part of the Volta River Project (VRP) in 1925 when Ghana was still under British colonial rule (Hilton 1966, n/a; Miescher 2014, 342; Miescher and Tsikata 2011, 19–20). Initially discovered by Albert Kitson, a geologist, the objective of the British colonist was to develop both the Bui and Akosombo Dams to process bauxite into aluminum for the benefit of the metropole particularly during World War II (Miescher and Tsikata 2011, 18). Thus, the needs of the colony and grassroots were inconsequential to the plans (ibid). However, the plans were actuated by the nationalist politicians in the 1960s after Ghana's independence in 1957, at which they also changed the project's objective (ibid, 19). Led by Dr. Kwame Nkrumah, the first Prime Minister of Ghana, the government's objective for the VRP was to stimulate industrial development in the country as the foundation for wealth creation and elevating the living standards of the people (Lumsden 1973 cited in de Wet 2000, 7; Miescher 2014, 353, 358; Miescher

and Tsikata 2011, 19). Accordingly, the Akosombo Dam was constructed with the financial and technical support of the USA in 1966 (Hilton 1966, n/a; Miescher 2014, 342, 355; Miescher and Tsikata 2011, 19–20).

Although social issues and resettlement were uncommon at the time, they became part of the project planning (Sneddon 2015, 161). Thus, a report prepared by the USA's Bureau of Reclamation projected the debilitating effects of government restrictions and actions on natural resource access and livelihoods in general (*ibid*). It also underlined the fundamental importance of addressing traditional land tenure and power structures to a successful resettlement (*ibid*). According to Sneddon, the former became a great concern to the communities around the proposed site (*ibid*). Therefore, the government promoted the Akosombo Dam and their resettlement as an opportunity for modernization, which would reverse their backwardness by providing rural electrification, kick starting mechanized agriculture, and “building 52 new towns with modern amenities like pipe water, clinics, cement houses, and schools” (Miescher 2014, 358, 359; Miescher and Tsikata 2011, 24). However, studies show that this was only a rhetoric because only some of the affected households received single-room houses while most received compensation in cash to cut down the cost of resettlement (Chambers 1970, 229; Diaw and Schmidt-Kallert 1990, 39; Miescher 2014, 359; 2011, 23, 25). Most of the communities also ended up without electricity, pipe-borne water, clinics, nor opportunities for mechanized agriculture (Chambers 1970, 228, 234; Diaw and Schmidt-Kallert 1990, 37; Miescher 2014, 359; Koranteng 2015, 1). Relevantly, while the communities could previously access land openly and practice shifting cultivation, they were limited to about three acres of land per household (Chambers 1970, 233, 235; Diaw and Schmidt-Kallert 1990, 39). Thus, besides annulling their previous land rights through eminent domain, the displacement and resettlement dismantled their pre-existing socio-political and cultural structures, as well as restricted their land access, which only served to deteriorate their livelihoods.

While the Akosombo Dam was underway in the early 1960s, the government attempted to balance its relationship with the warring countries of the Cold War by engaging experts from the Soviet Union to conduct feasibility studies on the Bui Dam (Miescher 2014, 364; Miescher and Tsikata 2011, 26). Relevantly, the dam was intended to supplement the electricity generated by the Akosombo Dam and propel industrialization and economic growth (Miescher 2014, 364; Miescher and Tsikata 2011, 26). However, the dam was disrupted by a coup d'état in February 1966, which ousted Dr. Kwame Nkrumah and his government. (Hensengerth 2018, 14; Miescher 2014, 363; Miescher and Tsikata 2011, 28). Following this, subsequent governments attempted to revive the project without success due to financial challenges and a general lack of immediate market for the electricity (Darko et al. 2019, 14; Fink 2005, 64; Hensengerth 2011, 12; Miescher and Tsikata 2011, 28–29). Thus, between 1977 and 1982, the Kpong Dam was constructed in the south as a more feasible option to serve the aluminum industry and supplement the electricity generated by the Akosombo Dam for all other users (Agbley 2017, 9; Miescher and Tsikata 2011, 29).

Although the Akosombo and Kpong Dams generated enough electricity, some of which was sold to Togo and Benin, the country began to experience a recurrent energy crisis from the early 1980s due to poor rainfall patterns in the Volta Basin (Miescher and Tsikata 2011, 30, 32, 34). Coupled with this, the government had implemented the World Bank's Structural Adjustment Program in the 1980s, which had

attracted foreign investments in mining and manufacturing through its liberalization component (Berry 1997, 1226; Miescher and Tsikata 2011, 34). The consequent deficit in electricity supply for the growing industries, but also for the hinterland generated a negative press for the government from particularly the media and opposition political parties (ibid Miescher and Tsikata 2011, 33–34). This led the government to revive the plans for the Bui Dam in 1998, which eventually attracted the interest of the Chinese government in 2005 (Hensengerth 2018, 14; Miescher and Tsikata 2011, 34). Reportedly, the government embraced China's interest because the World Bank and other potential financiers were disinterested in the project due to the increasing social and environmental awareness at the time (Hensengerth 2013a, 286; Yankson et al. 2017, 0480). Consequently, in an unsolicited bid, China offered to finance and implement the project through its Exim Bank and Sinohydro respectively (ibid 2013a, 291; 2018, 14). Regarding the former, China's Exim Bank provided a concessional loan and a buyer's credit for the construction of the Bui Dam (ibid 2018, 15). With these, the Government of Ghana (GoG) entered into a turnkey project contract with Sinohydro, which involved the latter's building of the Dam and its immediate handover to the former (BPA 2016; Hensengerth 2018, 14).

Interestingly, the implementing government changed the objective of the Bui Dam to suit the topical situation at the time. To this end, they promoted it as a strategy "to diversify economic growth" from the urbanized south to the north, which is largely rural (Hensengerth 2018, 13; Appiah et al. 2017, 2). Reminiscent of the revolutionized global norm and following the requirements of the Chinese Exim Bank, the GoG engaged a firm in the UK to undertake an Environmental and Social Impact Assessment (ESIA) and design a Resettlement Planning Framework (RPF) (Hensengerth 2018, 14–16; International Rivers 2012, 23). Following this, the GoG established the Bui Power Authority (BPA) in 2007 under the BPA Act 740 as a body corporate to fully oversee the project's implementation, which took place between January 2008 and December 2013 and its subsequent management. Under its administration, Sinohydro constructed the Bui Dam as a 400 megawatt roller-compacted concrete gravity project with a crest of 492 meters long, a volume of 1 million cubic meters, and on an elevation of 185 meters above sea level (Agbley 2017, 10; Hensengerth 2018, 16). Besides generating supplementary electricity, the components of the Bui Dam also included an irrigation scheme for agricultural development, opportunities for ecotourism and fisheries, and the development of a township (BPA 2016; Appiah et al. 2017, 2)

Despite the ESIA, RPF report, and the socio-economic components of the Bui Dam, its construction was beset by significant environmental and social consequences. Primarily, the dam submerged about 21 per cent of the Bui National Park, which affected aquatic and terrestrial ecosystems, but also wildlife populations including rare black hippopotamus and diverse monkey species (Agbley 2017, 10; Appiah et al. 2017, 2; Yankson et al. 2017, 0480). It also led to the acquisition of 1,843.71 km² or 455, 590.66 acres of land in the now Bono and Savannah Regions (formerly the Brong Ahafo and Northern Regions respectively), which encompassed twenty lands under customary ownership. Some of these lands were in the river valley and were hence submerged. As agriculture is the mainstay of the economy, this affected the communities' livelihoods significantly (Appiah et al. 2017, 2). The dam operation also caused fluvial flooding, which displaced downstream fisher folks, while the erection of transmission towers displaced

dozens of farmers in other communities. Ultimately, the submergence and dam construction led to the resettlement of 1,216 people (219 households) from eight communities including Bui, Akanyakrom, Dokokyina, Brewohodi, Agbegikuro, Dam Site, Lucene, and the camp of the Wildlife Division in charge of the Bui National Park (BPA n.d.). Although the BPA implemented a resettlement program between June 2011 and June 2012, it was reportedly initiated by the Chinese companies (Hensengerth 2018, 17–18).

Particularly, the land expropriation and the RPF were based on the World Bank's Operational Policy on Involuntary Resettlement (OP 4.12) and Ghana's domestic regulations (Hensengerth 2018, 18). These included the 1992 Constitution, the 1986 Land Title Registration Act, the 1962 State Lands Act, the 1962 Administration of Lands Act, the 1960 State Property and Contracts Act, and the 1965 Public Conveyancing Act (*ibid*). Thus, given the primary economic characteristics of the affected area, the resettlement was based on a land-for-land strategy and presented as an opportunity for development (see: Asiana 2015; Otu-Tei 2009, 116 cited in , Hensengerth 2018, 24; Obour et al. 2016, 295). However, studies show that it has been the bane of the livelihoods of the affected communities, because its implementation was generally flawed. To begin with, the BPA and Sinohydro reportedly ignored suggestions by the RPF to ensure public participation in the process and the selection of resettlement sites that supported the economic, social, and cultural characteristics of the communities and were acceptable by them (Hensengerth 2018, 19, 22; Urban et al. 2015, 583). Thus, fishing communities were resettled farther from the water body that supported their livelihoods (Hensengerth 2018, 20). Besides the usual housing facilities, they and the agrarian communities were subsequently allocated with farmlands that were reportedly smaller and less productive than what had been lost (Agleby 2017, 37, 55; Appiah et al. 2017, 6; Mortey et al. 2017, 25; Obour et al. 2016, 292, 295). Other affected communities, including those that became hosts to the resettled were also left with smaller land sizes due to the inundation and other dam-related facilities. Given these, all the farmers have had to cultivate smaller land sizes, which has affected their usual extensive farming practices. The limited land sizes and the poor soil quality have reportedly led to a decline in crop yields and general livelihoods (Agleby 2017, 55; Appiah et al. 2017, 6; Hensengerth 2018, 22; Yankson et al. 2017, 0482). Thus, underscoring the cardinal role of land access to the livelihoods of the affected communities, the relevant studies explain that 'land scarcity' has become the major challenge to them (Agleby 2017, 55; Obour et al. 2016, 292; Yankson et al. 2017, 0482).

The failure of the Bui Dam resettlement program has led Otu-Tei to posit that the dam completion "was prioritized at the expense of sustainably restoring or improving the living conditions of the affected people" (2009, 116 cited in Hensengerth 2018, 24). Following emergent discourses on the social construction of 'land scarcity', the research argues that the apparent physical consequences aside, the Bui Dam has transformed the social, cultural, economic, and political landscape of the communities, which may provide an in-depth explanation of the incidence of 'land scarcity', despite the implementation of a land-for-land resettlement strategy (see: Davy 2016; Mehta 2007; Scoones et al. 2019; Till 2011). Like many parts of Ghana, the previous land tenure arrangement of the area was based on customary systems, whereby the lands were under the custodianship of traditional authorities (TAs) (see: Berry 1997; Obour et al. 2016, 294). In this regard, land access was largely underlain by traditions and embedded socio-cultural relations and structures (Cotula,

Toulmin, and Hesse 2004, 2; Obour et al. 2016, 295). Thus, inferring from de Wet, the research conjectures that the displacement and resettlement may have resulted in positional and relational rearrangements of the physical and social attributes of the communities, which may have affected their access to land, including common and symbolic resources (2004, 55). Moreover, it surmises that the knock-on effects of the dam construction and resettlement, and other coincidental events may have triggered larger and more heterogeneous settlements and rapid socio-economic changes, which may have also affected land access (Cotula 2013, n/a; de Wet 2004, 55). As resettlement schemes usher affected communities into wider political and administrative structures, including livelihood programs (de Wet 2004, 56), the research further surmises that the Bui resettlement program may have upset existing methods of land access through the imposition of new structures and regulations. Fundamentally, these suppositions set the pace for the research as it seeks to provide a causal explanation of how the Bui Dam has engendered 'land scarcity' in its host communities and the implications of the problem for societal transformation as perceived by the varied affected populations.

1.3 Theorizing 'land scarcity' and societal transformation around large dams

As related above, the research premises on the social construction of 'land scarcity' to ground its quest to provide a causal explanation of the incidence of 'land scarcity' around the Bui Dam and its implications for societal transformation. It takes recourse to Davy, who argues that social constructions of 'land scarcity' derive from a failure to achieve land values or benefits, which may be territorial, environmental, exchange, or use (2016, 135). In this regard, Davy underlines that land values are implicit agendas that result from different social constructions or meanings of land (ibid, 133). He further argues that, they are contingent on land rights and their social construction involves political processes and asymmetric power relations among differently positioned agents (ibid, 138, 142). Further inferring from Ribot and Peluso, the research supplements Davy's argumentation by explaining that 'land access' is the antithesis of 'land scarcity' and defines the ability to achieve land values or derive expected benefits from land (2003, 155). Such abilities are underscored by property rights and other structural and relational mechanisms established within political, economic and cultural contexts and deployed to certain strategies, which facilitate the achievement of values or expected benefits (ibid, 154, 164). Conclusively, social constructions of 'land scarcity' develop from ineffective (or lack of) mechanisms and strategies of access.

While prefacing the general argumentation, the research deduces that the conclusions drawn above require a social theory that aptly accounts for and associates the attributes of the relevant concepts to explain the incidence of 'land scarcity', but also its consequential societal transformation. These include the conception and variation of land values, the rudiments of power and power relations, the functioning of land tenure, which defines land rights, and land access mechanisms and strategies, which underlie the achievement of land values. Analytically, the supposition about 'land scarcity' denotes an interplay between structure and agency, whereby objective relations and arrangements condition the formation and achievement of subjective meanings and values about land (Lewis 1993, 49). Considering this, the research is inclined towards a social theory that ontologically encompasses structure and agency, but also acknowledges their

interdependent functions. Thus, it generally alludes to the Practice Theory, which as a family of comparable social theories, has gained immense application in human geography today for empirical studies of various phenomena, including livelihoods (see: Etzold 2013; Everts, Lahr-Kurten, and Watson 2011; Sakdapolrak 2014). In this regard, the foundational theories, including the works of Bourdieu and Giddens, but also Schatzki, prioritize the idea of practice, which ontologically encapsulates the pertinent “material and immaterial” elements and arrangements that constitute “social reality” (Everts et al. 2011, 323, 324). Particularly, the research adopts Bourdieu’s *Theory of Practice*, whose primary conceptual submissions on ‘habitus’, ‘capital’, ‘social space’, and ‘social practices’ aptly expedite the problematization of ‘land scarcity’. In this regard, the research harnesses habitus to explain the genesis of land values; capital to explain power and power relations; social space to explain social structuring (including the functioning of land tenure); and social practices to explain strategies of land access. Besides these, the research uses Bourdieu’s additional concept of ‘symbolic struggles’ to describe the strategic responses to ‘land scarcity’ that invariably stimulate societal transformations. With these, the research further indulges in an exposition of relevant studies to show how large dams engender ‘land scarcity’ and societal transformation. Ultimately, this results in the research’s theoretical framework, which guides the analyses of data towards a causal explanation of the incidence of ‘land scarcity’ around the Bui Dam and its implications for societal transformation.

1.4 The research’s overarching question and contextual scope

In line with its objective, the research’s overarching question is: *‘To what extent has the Bui Dam engendered ‘land scarcity’ in its immediate communities and how and with which demarcations is this process causing societal transformation?’*

Contextually, the research’s attempt to address this question encompasses the major land uses of the area. These are spatial development, arable farming, building, pastoralism, and uses by traditional authorities. Per its theoretical framework, the research considers the participants’ objectives of land access (land values), inputs (mechanisms), and strategies of access to ascertain their social constructions of ‘land scarcity’. Thus, it first addresses their historical experiences as a keyhole for understanding their recent experiences and strategic responses, which are inextricably linked with the Bui Dam construction. Further, the research looks at the transformations that are occurring in the societies’ institutional, political, social, cultural, and economic landscapes due to the ongoing events. Temporally, the historical scope of the research covers the years immediately before the land acquisition and dam construction between 2007 and 2013. Conversely, the recent scope encompasses the subsequent years up to March 2019 when the research completed its fieldwork.

1.5 An overview of the research methodology

To address the question above and its sub-questions, which are outlined in the next chapter, the research adopted the paradigm of critical realism to define its scope and guide the selection of methodology and

methods for data collection and analysis. Consequently, it capitalized on the associated ontological realism and epistemological relativism to ground the object of study as the field of land access, which encompasses the participants' experiences and social constructions, the events and actions that inform them, and the structuring frames of action. Based on these, the research adopted Situational Analysis as the approach for studying its object. Fittingly, this approach fostered an analytical foregrounding of the broader situation that is under study, including the enduring arrangement of relations among elements that are pertinent to the object. Thus, by this, the research acknowledged and enmeshed diverse complexities and non-human actants with which the study participants co-constitute and co-construct knowledge in their social world.

Further capitalizing on its adoption of Situation Analysis, the research employed multiple qualitative instruments for data collection and analysis. Fundamentally, it relied on both primary and secondary data sources. Regarding the latter, the research collected the data by reviewing relevant documents. It further employed discourse analysis to review the acquired data according to the subjects of interest. Subsequently, it presents the data descriptively and explanatorily. With respect to its primary data, the research employed instruments such as resource and social mapping, transect walks, semi-structured interviews, focus group discussion, participant observation (thick participation), and photo documentation for data collection. To analyze the resultant data, the research employed abstraction and retroduction, which facilitated a stringent interpretation and uncovered meanings, relations, and coherence towards a causal explanation of the incidence of 'land scarcity' and societal transformation in the study area. In this regard, it adopted Danermark et al.'s six-stage explanatory model for conducting social science research based on critical realism (2002, 109). These include description, analytical resolution, abduction or theoretical redescription, retroduction, comparison between different abstractions, and concretization and contextualization. Ultimately, the primary data is presented qualitatively, encompassing descriptions and explanations of the incidence of 'land scarcity' around the Bui Dam and its implications for societal transformation in the affected communities.

1.6 The outline of the thesis

The thesis is divided into nine broad chapters. The current chapter, which introduces the research idea constitutes Chapter 1. Chapter 2 encompasses attempts at *Nesting the Research in Theory*. Thus, it conceptualizes 'land scarcity' and analyzes the basis for its incidence with Bourdieu's *Theory of Practice*. Subsequently, it infers from existing literature to show the manner in which large dams engender 'land scarcity' and societal transformation to formulate the theoretical framework for analyzing the research's primary data.

Chapter 3 details *The Research Process*. It initially discusses the researcher's self-reflexivity, the research paradigm and approach. From these, the chapter describes the instruments and techniques that expedited the collection, analyses, and presentation of both primary and secondary data.

Chapter 4 presents *The Study Area in Context*. It infers from Chapter 3 to give a full account of the physical and socio-economic characteristics of the focal communities as a precursor to the subsequent chapters, which discuss the results of the primary data.

Chapter 5 describes *The Historical Episodes and Social Constructions of 'Land Scarcity'*. Here, the chapter narrates the nature of land access in the years before the Bui Dam construction. Thus, it focuses on the historical system of land access, the characteristics of land users, their mechanisms and strategies of land access, and their interpretations of historical experiences.

Subsequent to this, Chapter 6 discusses *The Advent of The Bui Dam and Recent Social Constructions of 'Land Scarcity'*. Reminiscent of the previous chapter, it will detail the recent system of land access, the characteristics of land users, their mechanisms and strategies of land access, and their interpretations of recent experiences.

Chapter 7 focuses on the agents' *Strategic Responses to Recent Social Constructions of 'Land Scarcity'*. Characteristically, it bridges the preceding and ensuing chapters by underling the agents' reactions to their recent social constructions of 'land scarcity', which serves as an antecedent to discussions on the *Ongoing Societal Transformations in the Study Area* in Chapter 8.

Finally, Chapter 9 concludes the thesis by outlining the research's key findings and making recommendations for policy and further studies.

CHAPTER 2: NESTING THE RESEARCH IN THEORY

2.1 Introduction

This chapter develops the analytical framework of the research. It begins by inferring from Davy (2016) to conceptualize 'land scarcity' as a social construction that results from lapses in people's achievement of land values rather than an absolute or relative unavailability. Following Bourdieu's *Theory of Practice*, the chapter deconstructs the emergent concepts of land values, power, and land tenure and land rights, which underlie distinct strategies of land access and the achievement of land values. Based on this, the chapter unwraps how people develop social constructions of 'land scarcity' and how this influences certain responses that may trigger processes of societal transformation in a given context. With these, the chapter engages in an exposition of discourses to problematize the manner in which everyday situations and particularly, irruptive events like dam constructions engender 'land scarcity', which may consequently transform existing social life. This culminates into the theoretical framework of the research. Thereafter, the chapter closes by posing the questions, which the research seeks to address in the context of its study area.

2.2 Conceptualizing 'land scarcity'

Dominant discourses on the scarcity of land – that is the part of the earth's surface that is not covered by water - have long perpetuated the idea as an absolute physical or a natural shortage in supply or availability to meet demands (Till 2011, 6; Davy 2016, 131). Commonly associated with Thomas Malthus (1970 cited in Scoones et al. 2019, 232–33), this description aligns with the general etymology of scarcity – *escarcté* – derived from Old Northern French, which implies an insufficiency of supply (Till 2011, 1; Mehta 2003). In this regard, scarcity is also described in terms of its opposite, abundance (Stern 1996, 1; Till 2011, 3–5; Xenos 1989, 35). Other proponents have over the past years also emphasized the economic, and hence relative nature of scarcity in line with the intellectual reasoning of David Ricardo (Scoones et al. 2019, 233). They maintain that scarcity denotes "limitation in relation to demand" that is based on both quality and quantity and is as well soluble (*ibid*). However, referring to Samuelson who contentiously debunks the solubility of natural resource scarcities, Davy draws attention to emerging discourses that argue that people also encounter "so-called contrived scarcities" with respect to natural resources (1976 cited in 2016, 142).

Writing about water scarcity in Kutch, a district within the jurisdiction of India's Sardar Sarovar Dam, Mehta for example refers to Yapa's concept of 'discursive materialism' (1995) to submit that scarcity is not only material or physical, but also social and discursive (2007, 661). Till also distinguishes between the 'ideology of scarcity' and the 'reality of scarcity' by noting that "there are real scarcities, with real and profound human consequences, but the ideology of scarcity in its twinning with abundance holds out the eternal promise that there are endless ways escape those conditions [sic]". The ideology of scarcity also "naturalises [sic] (*it makes obscure*) the social component of the limits of these [resource] flows" (emphasis in original) (2011, 4). Thus, unlike the ideology of scarcity, Till conceptualizes the reality of scarcity as socially

“produced” by deep-seated socio-cultural and political relations among actors, which even the supply of additional resources would not be able to fully counter (2011, 4-6). Also acknowledging this framing of scarcity, Scoones et al. classify it as ‘political scarcity’, expounding that it is about the co-construction of meanings and interpretations in arenas of power and contestation that underlie problems of access, inequality, and historical relations of power (2019, 231, 234).

By and by, these socio-cultural and political underpinnings of natural resource scarcity, generally referred to as the ‘social construction of scarcity’ are gaining grounds in discourse and are attracting immense academic consideration. This has given rise to a body of literature that is arguing that all forms of scarcities are actually social constructions rather than physical. As the authors of *The Scarcity Fallacy* interestingly observe about the ideology of hunger or lack of food, ‘lack’ or ‘shortage’ is myth and hunger is attributable to dynamics including social inequalities, distribution systems, and other economic and political factors (2010, 35). Of relevance to this research is Davy’s argumentation on ‘land scarcity’. Responding to Samuelson’s distinction between natural and contrived scarcities, he argues that “all scarcities are ‘contrived’” or social constructions and are largely based on meanings and interpretations of facts (2016, 141). Advancing this argumentation, Davy points out that as “land means different things to different persons”, the social construction of ‘land scarcity’ is hinged on the different land values – either as use or exchange among others – conceived by differently positioned actors in a given context (2016, 134–35).

Citing the book, *Poor Little Rich Slum* as an example, Davy describes how the residents, businessman, developer, tourists, and government differently perceived and valued Dharavi, a famous slum in Mumbai, and how these variations underlay what scarcity also meant to them (2016, 134). To recap his explanation: the residents perceived the slum as a way of life due to the accumulation of social capital and hence perceived scarcity by their lack of social relations. The businessman and developer respectively perceived the slum as a convenience and as a prime property and perceived scarcity as a lack of rental protection and obstacles to slum clearing. The outsider or tourist perceived the slum as a project – an opportunity for pictures and heart-warming stories – and perceived scarcity as a lack of existence of the slum. The government in power, who ‘owns’ the slum and hence conceived of the territorial value of the land for the creation of a new city saw it as a “time-bomb”. Thus, it perceived scarcity in terms of existing opposition to this opportunity (ibid). This differentiation shows that material objects are not a given with universal appreciations, but have different meanings to different people based on their objectives or expectations. Thus, Davy concludes that scarcity, like value, has no “true meaning” and is at best polyrational, that is based on simultaneous actor social constructions (rationalities and voices) and conceptions (2016, 141-42). According to the theory of polyrationality, social constructions are not baseless, but are the cultural interpretations (labelling, framing, foregrounding etc.) of facts through implicit agendas that are not “propaganda or manipulation ... without ill will or wicked intentions” (ibid). In line with this, Davy identifies some categories of ‘land scarcity’, which correspond with social constructions of land and conceptions of land values. The next section describes these.

2.2.1 'Land scarcity' as a polyrational social construction

According to Davy, the social constructions or meanings of land encompass territory, environment, commodity, and capability, which respectively relate to conceptions of the territorial, existence or environmental, exchange, and use values of land (2016, 135). Primarily, these conceptions of land values are the bases for differentiated endeavors, the results of which underlie corresponding social constructions of 'land scarcity'. These are spatial power scarcity, ecological scarcity, locational scarcity, and capability scarcity. The next sections expound on these categories of 'land scarcity' to ground the research's theoretical framework.

2.2.1.1 Spatial power scarcity

The social construction of land as a territory with territorial values underlies the spatial power of the landowner as a territorial sovereign or proprietor, through legal or extra-legal avenues to exercise exclusive rights over land with liminal functions. Claims to space is thus an expression of spatial power and an assertion of territorial values, which relates to the liminal functions of the land's boundaries to simultaneously divide, separate, and connect (Davy 2016, 138). Therefore, social constructions of spatial power scarcity or liminal scarcity relate to powerlessness and occur when rights over land become dysfunctional or when any of the liminal functions over or under performs.

2.2.1.2 Ecological scarcity

Davy posits the idea of ecological scarcity with relation to the environmental quality of land and conceptions of its existence value (2016, 140). Its rudiments are naturalistic, based on a lack of existence of land. Essentially, Davy draws from 'the land ethic' as perceived by Leopold to underline that the existence or environmental value of land encompasses a collection of "soils, waters, plants, and animals" which though could be altered, managed and used, affirm their right to continued existence (1949 cited in 2016, 140). Thus, humans are citizens of "land-community" and have ethical relations to land, which necessitates a high regard for its values. Given this, the existence value of land is fundamental to the other values because their conception results from the actual presence of land apart from any human use. Yet, Davy also maintains that the existence value of land surpasses physical existence and includes "perceptions and sentimental interpretations of nature" or a place (2016, 140). This implies that the existence value of land may include 'cultural values' with respect to native cosmology or beliefs among others.

2.2.1.3 Locational scarcity

The basis of Davy's conceptualization of locational scarcity is the social construction of land as a commodity and the associated conception of its exchange value (2016, 135-36). Fundamentally, it concerns the balance between demand and supply, but with suitable locational properties in terms of the quality and quantity of the positional and relational features (ibid). It thus implies limited supply of desirable land in desirable locations.

2.2.1.4 Capability scarcity

Davy associates capability scarcity with conceptions of the use value of land, which relates to the utility of land (2016, 137). The use value of land is about (individual) user preferences and how land satisfies desires or serves purposes (Davy 2016, 137). As stressed by Ribot and Peluso, 'use' is "the enjoyment of some kind of benefit or benefit stream" (2003, 154). Inferring from Harvey, Davy explains that because land and its improvements are commodities fundamental to every individual, its use values "reflect a mix of social needs and requirements, personal idiosyncrasies, cultural habits, life-style habits, and the like" which "are basically formed with respect to what might be called the "life support system" of the individual" (1973 cited in 2016, 137). In this regard, Davy emphasizes the relevance of Martha Nussbaum and Amartya Sen's capability approach for analysis and design (ibid). As a normative framework, the capability approach primarily focuses on the freedom and opportunities of a person to achieve the valuable functionings of life; that is being and doing (Robeyns 2005, 95). Therefore, it relates to human agency, which Giddens also defines as the capability or power of people to do things (1984, 9). On this basis, Davy describes land use value as "the access of every individual to minimal land uses" such as food or shelter and capability or functionality scarcity as the lack of capability to satisfy or achieve these basic land-related functionings (2016, 137). This means that capability scarcity occurs – even when land is physically available – due to certain limitations.

Following Robeyns's 'conversion factors', which she formulated within the context of the capability approach, these limitations may be in different forms (2005, 99). They may be personal factors, which include physical conditions, gender, intelligence, and technical skill among others (ibid). They may also be social factors, which relate to the characteristics of society in which the individual lives including public policies, social norms, discriminating practices, gender roles, societal hierarchies, power relations, and structures (ibid). Lastly, they may relate to environmental factors (the environmental value of land), which encompass the physical and built environmental conditions such as the climate and soil quality that influence an individual's ability to use land to his/her benefit (ibid). The research conjectures that besides individuals, organizations may also pursue the use value of land for idiosyncratic purposes and hence may socially construct capability scarcity when they fail to achieve them.

2.2.2 Summary and implications for theory selection

Ultimately, the categories above show that social constructions of 'land scarcity' are far from being a universal fact but result from different conceptions of land values. Following Ribot and Peluso, land values could then relate to expected benefits or profits, gained through the use of various mechanisms of access including rights and capability among others (2003, 155). In this regard, 'land access' may describe the achievement of such expected benefits or conceived land values in line with the authors' definition of access (ibid). As land values or the expected benefits from land are polyrational, so are social constructions of 'land access' and 'land scarcity'. This insight underlies the social construction of both 'land access' and 'land scarcity' (Davy 2016; Ribot and Peluso 2003) . In effect, the social construction of 'land scarcity' is about a failure to achieve conceived land values or expected benefits, which are based on rights, capability,

or desirable existence. It is therefore the opposite of 'land access'. Fundamentally, this conceptualization enables one to understand thoroughly, the varied underpinnings and implications of 'land access' and 'land scarcity' to different people without limiting them to a mere physical availability or shortage. As Davy affirms regarding 'land scarcity', it is not about "the physical space in itself, but its social construction" which "results in *assertions* of abundance or poverty, urgency or tranquility, distress or relief, terra nullius or fully appropriated land" (emphasis mine) (2016, 142).

To achieve their land values or realize 'land access', people invest their mechanisms of access in actual strategies. Given this, 'land access' and 'land scarcity' respectively result from the advancement of and obstructions to the mechanisms and strategies by which people achieve conceived land values or expected benefits from land. Far from being theoretical, empirical studies support this argumentation. Analyzing the conflict between agriculturalist and herdsmen over land access in Adamawa-Cameroun, Gausset makes interesting observations, which support the current thesis. In his research, he observes that although there was room for many more farmers and cattle-herders in the area, each of them somehow socially constructed an inadequacy between the resource and their needs based on their respective social constructions, uses, and management systems among others (2005, 96, 97). Thus, to the agriculturalists who socially constructed the grassland as agricultural and fallow land, 'land scarcity' was not about the number of people that could not cultivate crops. It was rather about the number that *could not continue to practice shifting cultivation or maintain their fields and harvests* due to the threat of random bushfires started by the herdsmen and the random movement of cattle (emphasis mine) (ibid, 97, 98). On the other hand, the herdsmen socially constructed the grassland as fodder and did not socially construct 'land scarcity' as the number of cows that the plain could not accommodate. Rather, they socially constructed it as, *the restraints on their liberty to light bush fires randomly to hasten grass re-growth, move, and graze their cattle freely* (emphasis mine) (ibid). Based on these, the research deduces that the agriculturalists socially constructed 'land access' as their ability to continue practicing shifting cultivation and maintaining their fields and harvests. Conversely, the herdsmen socially constructed 'land access' as the liberty to light bush fires without restraint and graze their cattle freely.

Gausset's example shows that rather than an objective lack or insufficiency, the respective social constructions of 'land scarcity' by the agriculturalists and herdsmen related to their conceived values or expected benefits from land and the threats to their strategies of achieving them. Inferring from Davy, the research relates the conceptions of both the agriculturalists and herdsmen to the use and territorial values of land, as they were about their need to use land for idiosyncratic purposes and protect their holdings from unwanted access. Thus, 'land scarcity' in both cases could relate to capability and spatial power respectively. Consistent with Gergen's narrative, framing 'land scarcity' within the (meta) concept of social construction thus concerns the denaturalization of knowledge by re-enculturation; that is tracing social constructions of 'truth' (meanings and interpretations) to its historical, social, and cultural lodgment within communal life (2001, 2). To this end, attempts to ascertain the incidence of 'land scarcity' in a given context should be preceded by the identification of the varied land values and subsequently, an analysis of the obstructions, threats, or irregularities to their achievement. However, inferring from Davy, land values are

subjective because they are the results of differentiated social constructions or meanings of land (2016, 133). This implies that, their identification might be circuitous, requiring inferences from certain factors including speeches and actions. Besides facilitating an understanding of their rudiments, a retrospect of the subjective foundations of land values will explain their variations among a group of agents and the possibility of their transformation.

According to Davy, the social construction of land and its values involves political processes and asymmetric power relations among differently positioned agents (2016, 142). This is because different agents are usually interested in a given land, with each conceiving their land values and acting from different social positions. Thus, the process is at best irregular, tainted with contestations, overlaps and conflicts (ibid, 133). This implies that the strategies of access by which the agents achieve their land values also involve power relations. Following this line of reasoning, Till rightly observes that the social construction of all forms of natural resource scarcity is part of a complex network or political ecology (2011, 1). Fundamentally, political ecology alludes to the political processes and power relations that underlie contestations over resources and meanings, with implications for the distribution and control over resources (Benjaminsen and Svarstad 2019, 393, 396). Given this intricate connection, William Sewell puts scarcity, power relations, and meaning – which as argued, underlies the conception of values – in a triad by emphasizing that they constitutively shape the discursive features of every social relation (1993 cited in Till 2011, 8; Dworkin 2014, 99). Maintaining that these mutually shape each other, he explains that scarcity is shaped by power and meaning, meaning by power and scarcity, and power, by meaning and scarcity (Sewell 1993 cited in Till 2011, 8; Dworkin 2014, 99). Thus, power is also of analytical importance for understanding ‘land scarcity’. This begs the question of what constitutes power in a given context and how it shapes the conception of land values and hence social constructions of ‘land scarcity’?

Davy also underlines that land values are contingent on land rights, which are archetypal forms of property and are defined by land tenure (2016, 138). Following Dekker, land tenure is described as “the perceived institutional arrangement of rules, principles, procedures, and practices” by which “a society or community defines control over, access to, management of, exploitation of, and use of means of existence and production” that is land (2005, 1). Thus, it allocates property rights to land (FAO 2002, 3:7), which are defined as the “enforceable authority to undertake particular actions” with respect to land (Hess and Ostrom 2001, 124). Property rights are usually allocated in bundles and may include the rights to use, manage, extract or generate income from, exclude others from, alienate or transfer, and receive compensation for land (Hess and Ostrom 2001, 124; Wehrmann 2008, 9). For ease of application, these are simplified in this research as use, control, and transfer in line with the Food and Agriculture Organization’s (FAO) recommendation (2002, 3:9-10). Generally, land tenure could be statutory (defined by the state) or customary (defined according to the custom of a group of people) (ibid, 7-8). Its categorization may include the following:

- a. Private: When exclusive rights are assigned to private parties who can then determine access by others.

- b. Communal: When members of a community have independent rights to use the holdings of the community.
- c. Open access: When rights are shared by members and non-members without exclusion.
- d. State: When a public authority holds the rights.

In the case of Ghana the study country, Articles 11 and 39 of the Constitution (1992) recognize the relevance of customary law besides statutory law. Thus, the country is legally pluralistic (Cotula, 2013; Crook et al., 2007; Peters, 2012). However, while statutory tenure systems are inscribed, customary systems like those of the country are frequently implicit and are only observable in people's practices. Irrespective of the form of tenure system, the defined land interests or rights may not always be exclusive, but composed of intersecting webs (FAO 2002, 3:7). These could be overriding such as when a sovereign power takes over the power to allocate land through expropriation, or overlapping such as when different parties have different rights to the same land. They could also be complementary such as when different parties share the same interest in the same land, or competing such as when different parties have similar but competing claims over the same land (*ibid*, 7-8). Given the role of land tenure in defining land rights, which structure land values, but also underpin the power relations among agents, the contextual analysis includes an analysis of its functions in a given context.

Though the allocation of property rights facilitates the achievement of land values, Ribot and Peluso argue that they are nonexclusive to the mechanisms that enable people to undertake certain strategies that fulfill the associated land benefits or values (2003, 154, 164). Referring to countries where legal pluralism exists like Ghana, they maintain that the rights provided by the respective tenure systems may not always be consonant, whereby some actions considered legal under one may be illegal under the other (*ibid* 2003, 156). Besides this, property rights holders also require other mechanisms to realize the full benefits from land (*ibid*). Inherent positional differentiation in societies may also limit rights to land to some agents, compelling those without rights to access land through mechanisms that do not impart property rights (*ibid*). Given these, Ribot and Peluso proffer that mechanisms of access transcend property rights and include illegal as well as structural and relational mechanisms established within respective political, economic and cultural contexts (2003, 164). Such structural and relational mechanisms include technology, markets, labor, knowledge, social identity, and relations among others. From this perspective, the research conjectures that a comprehensive analysis of 'land scarcity' must transcend obstructions to property rights and include impediments to other mechanisms of access by which agents undertake their strategies of access to achieve conceived land values.

To summarize the deductions above, social constructions of 'land scarcity' result from failures to achieve the expected benefits from land/ or land values. Based on varied social constructions or meanings of land and achieved with the use of certain mechanisms, land values – as implicit agendas – and their corresponding strategies of access embody the exercise of agency by the relevant agents. Given that the social positions of agents are characteristically asymmetrical, their exercise of agency is underlain by power relations and political processes. Thus, it involves conflicts, contestations, and overlaps among them.

Moreover, the processes by which land values are conceived and the underlying power relations are structured by land rights, which are defined by relevant land tenure systems. Inferring from Lewis's theory, the research deduces that 'land scarcity' is analytically the result of the interplay between (subjective) agency and (objective) structure (1993, 49). This is because it is about the capability of people to interpret an object, devise a corresponding plan about it, and act towards achieving the plan, all within the confines of established structures and relations (ibid). Given the foundational role of the structures and relations to the agency of people, the research conjectures that the elucidation of 'land scarcity' requires a social theory that encapsulates structure and agency, as well as deconstructs all the foundational elements of the phenomenon. These include the conception and variation of land values, the rudiments of power and power relations, the subtleties of land tenure, and land access mechanisms and strategies, which underlie the achievement of land values. Towards this end, the research adopts Bourdieu's *Theory of Practice* as an integrative framework for analysis. The next section elaborates on this theory and its implications for analyzing 'land scarcity'.

2.3 Demystifying 'land scarcity' with Bourdieu's *Theory of Practice*

Bourdieu's *Theory of Practice* is a corpus of work that is literally about the factors underlying social practices (Bourdieu and Wacquant 1992, 121). Transcending the objective structures and subjective judgments that determine social life, his work seeks to bridge the gap between structure and agency by accounting for their mutually sustaining operations. Thus, he describes his work as structuralist constructivism or constructivist structuralism (1989, 14). To achieve this, Bourdieu resorts to the nuanced and interconnected concepts of habitus, capital, social fields, and social practices. The subsections describe these concepts and underline their implications for analyzing 'land scarcity'. Bourdieu acknowledges that the definition of concepts are only systemic, designed for empirical application in a systemic fashion (Bourdieu and Wacquant 1992, 96²). While capitalizing on this impetus, the research also acknowledges that a sequential description of the concepts is somewhat futile given their interconnectedness. Therefore, although the respective descriptions are unique to specific argumentations, the thesis refers to the other concepts as appropriate to ensure a comprehensive understanding of the theory's application to the current context.

2.3.1 Habitus: An elucidation of land values

Bourdieu's concept of 'habitus' (plural: habitūs) lies at the heart of his theory. It is his primary attempt to explain how normal practices proceed without the dictates of explicit rules. It follows his observation about social practices – like rich heirs marrying among themselves – being more of a social game and “the locus of certain regularities” rather than strict and explicit rules (Bourdieu 1990b, 65). Thus, he coined the concept of habitus to capture the system of schemes that produces societal practices as well as the system of

² The book is essentially a dialogue between Pierre Bourdieu and Loïc Wacquant about the former's central concepts. Thus, here and in other parts, the thesis refers to the respective speaker that is being referenced.

perceptions (or social constructions) and appreciation of practices (Bourdieu 1989, 19). Bourdieu defines habitus as a “system of deeply inscribed dispositions: an *embodied manner* of being, *seeing*, acting and *thinking*; a schema of *perception, conception* and action” (emphasis mine) (2002, 43 cited in Sakdapolrak 2014, 22). As it encapsulates these pertinent attributes, the research relates habitus to both the social construction of land and the conception of land values (Davy 2016, 141-142). Following Davy, these two are interrelated because the latter depends on the former (ibid). However, the latter constitutes the core of his argumentation on ‘land scarcity’. Thus, in the next paragraphs, the research uses Bourdieu’s habitus to explain especially the conception and variation of land values. It follows that; this will invariably revert to an explanation of the social construction land.

Fundamentally, Bourdieu’s definition of habitus raises questions about its engendering factors. To this, Bourdieu explains that habitus is the product of two conditions operating in concert with each other (1977, 78; 1990b, 130-31). These are (a) the instantaneous sum of stimuli, mental structure, or cognitive construction through which people deal with the social world; and (b) the conditions or conjuncture in which the habitus is operating and represents the state of the structure (1977, 78; 1990b, 130-31). Elaborating on the connection between these two conditions, Bourdieu argues that rather than fate, mental or cognitive structures are socially structured. This is because they have social origins in history (including upbringing and educational experience), but also the internalization of the structures of the social world (or specific field) (1990b, 130-31; Bourdieu and Wacquant 1992, 133, 136). As explained later, the field is the site of action, and its structures encompass the objective relations among *agents* (italics mine) – based on the possession of certain capitals – and the corresponding logic, including the regulative principles and prescribed values that delimit the site (1990b, 130-31; Bourdieu and Wacquant 1992, 133, 136).

To digress, Bourdieu’s conceptualization of *agents* encompasses the existence of individuals not merely as biological entities, actors or subjects, but as socially constitutive beings who are active and acting in a given field by the fact that they possess the requisite properties (capitals) to be effective and produce effects (1992, 107). Thus, his idea is comparable with Giddens’ description of ‘human agency’, which as earlier explained, is underpinned by capability or power (1984, 9). Moreover, as explained later, Bourdieu relates that agents obtain this capability or power by possessing certain capitals that are relevant to the specific field. Given that the mental structure “is *socially* bounded” and “socially structured” in history and specific fields, Bourdieu describes habitus as “a socialized subjectivity” (emphasis in original) (1992, 126). In its current application to land values, the implication of this is evident in particularly how Gergen emphasizes social construction as embedded in specific historical, social, and cultural contexts. In effect, the historical experiences of agents and the social structure in which they find themselves, together structure their conception of land values.

On the other hand, mental or cognitive structures contribute to the constitution of the social world or field by generating representations and practices that are objectively differentiated by position, but facilitate interactions among agents (Bourdieu 1989, 19; 1996, 17). Thus, habitus instils common sense in the social world (ibid 1977, 80; Etzold 2013, 22). With respect to land values, this deduction underscores their foundational importance to people’s relationship with land, which is usually universally or differentially

acceptable within the confines of the respective social world. Inferring from Sakdapolrak, the deduction also supports the role of land values in structuring and shaping strategies of access to land, which are in turn the thrust that lead to their achievement (2014, 2). As Bourdieu puts it, "... habitus ... has the merit ... of better accounting for the actual logic of actual practices ..." (1992, 131). Ultimately, these representations and practices sustain the relations among agents, which reproduce or change the social world (Maton 2014, 53; Etzold 2013, 21).

In view of the mutually sustaining nature of the conditions underlying habitus, Bourdieu sums up the concept as a structured structure that functions as a structuring structure (1990a, 53). This summation captures the distinctiveness of habitus, but also land values as the internalization of the exterior and the exteriorization of the interior (Sakdapolrak 2007, 56). Bourdieu also justifies his use of 'disposition' as a term that encompasses the interconnectedness of the underlying conditions of habitus (1977, 214). He explains that 'disposition' expresses "the result of an organizing action, with a meaning close to that of words such as structure" and designates "a way of being, a habitual state (especially of the body) and, in particular, a predisposition, tendency, propensity, or inclination (emphasis in original) (ibid). Thus, he further describes habitus as "systems of durable, transposable dispositions" (1990a, 53). To this end, land values as used in this research are embodied dispositions towards land; that is an inclination to a particular quality of land, acquired through the mental incorporation of the structural conditions of the social context and portrayed through patterns of practice and interactions. Of relevance too, Bourdieu explains that due to differences in cognitive structures, life histories, and social positions, agents' habitus (and hence land values) are hardly uniform, but differentiated (1996, 17; 1989, 19; Etzold 2013, 21). Primarily, these dissimilarities also underscore social differentiation by representing the respective trajectories and positions from which they are portrayed (Bourdieu 1996, 17; 1989, 19; Etzold 2013, 21). Like habitus, the variations of land values reveal the "sense of one's place" and the "sense of the place of others" (Bourdieu 1989, 19).

Although habitus - and land values - may seem to relate to individual agents, Bourdieu emphasizes that it is also a collective enterprise and a harmonization of varied individual experiences (1990b, 131; 1977, 80). Although unique, individual experiences habitually occur in shared structures in which others with similar class, gender, ethnicity, and occupation may also have their experiences. This implies that while land values may be unique to individual agents, the shared characteristics of the group to which they belong could engender similarities in land values, resulting in a group or class land value. Logically, this represents a subjective system of internalized structures, schemes of social constructions, conception, and action common to all members of a group or class, which undergirds the objective coordination of their observable and predictable practices and shared worldview (Bourdieu 1977, 80, 86). Thus, Bourdieu relates that individual histories are nothing but a specification of the collective history of the group to which they belong (1977, 86). In this regard, the classification of an agent's personal style as unique is nothing more than "a deviation in relation to the style of the period or class so that it relates back to the common style not only by its conformity ... but also by the difference" (ibid). Concerning land values, this implies that the range and variations are delimited in the respective fields at certain historical periods such that any unusual disposition is so classified because of its dissimilarity to the known or acceptable.

2.3.2 Capital: The basis of social positions and power relations

Davy underlines that the social construction of land and its values involves political processes and asymmetric power relations among differently positioned agents (2016, 142). This argument aligns with Bourdieu's, because he also maintains that habitus is influenced by social positions (L. Wacquant 1998, 268). Thus, the research considers it analytically relevant to deconstruct the constitution of social positions as well as power relations to facilitate its problematization of 'land scarcity'. In the words of Bourdieu, social position (together with habitus) "is what gives the best prediction of practices and representations" (1985, 739; 1989, 19). To this end, Bourdieu's *Theory of Practice* is relevance to the research because it additionally provides the framework for understanding social positions and power relations. According to him, social positions are objectively defined by "the structure of the distribution of species of power or 'capital' whose possession commands access to the specific profits that are available in the field, as well as by their objective relation to other positions" in terms of domination, subordination, or homology (Bourdieu and Wacquant 1992, 97). Besides emphasizing their foundations to social positions, this definition implies that the forms of capital are universally acceptable in the field for obtaining the specific benefits associated with the stake of interest, such as land. Thus, the possession of such capital confers power on people due to the extent to which it enables them to realize key objectives such as land values. It also implies that social positions are relational in that people are categorized as superior to others, inferior to others, or equal to others based on the overall volume or relative weight of the relevant capitals they possess (Bourdieu 1985, 724; Bourdieu and Wacquant 1992, 97). This deduction raises questions about the nature of Bourdieu species of capital. Contrary to the narrow economic explanation of 'capital' as a term associated with monetary exchange, Bourdieu identifies four broad species of capital, which the subsections describe (1986, 242-43; 1985, 724).

2.3.2.1 Economic capital

Bourdieu identifies economic capital as a crucial specie for gaining status and power (1993, 32). According to him, it generally encompasses all forms of exchangeable material assets, which are institutionalized "in the form of money, acquired property or ownership rights" among others (Bourdieu 1983, 185; 2004, 218 cited in Etzold 2013, 22). Given its diversity, the research infers from David Ricardo to classify economic capital as fixed or circulating (Marx 1956, 2:93). In this regard, it uses the former for stationary assets such as buildings and the latter for assets that are routinely deployed towards certain objectives. The latter may then include acquired inputs such as exchangeable property rights and agro inputs (seeds, seedlings, and fertilizer) and outputs (crops and money). Economic capital is foundational to the general accumulation of all forms of capital and is as well the outcome of capital (Grenfell and James 2004, 510; Etzold 2013, 22). Thus, it frequently manifests in cultural and social capitals such as schooling, whose operationalization results in economic capital through jobs among others (Grenfell and James 2004, 510). Although it is the key capital that gives status and power, an agent is supposedly better off with both economic and cultural capitals (Thomson 2014, 71). Moreover, Etzold argues that the social differentiation among agents in a field cannot be explained by only economic capital but the relative distribution of both economic and cultural capitals (2013, 22).

2.3.2.2 Cultural capital

Bourdieu's conception of cultural capital is about the possession of knowledge, skills, and qualifications, as well as the internalization of values, social norms and world views through education and social experience (Etzold 2013, 23). Thus, he also refers to it as informational capital and identifies three forms of it: embodied, objectified, and institutionalized cultural capitals (Bourdieu and Wacquant 1992, 119). Embodied cultural capital is linked to the body and refers to the accumulation, incorporation, or internalization of culture or the structure of the field (Bourdieu 1986, 244; Etzold 2013, 23). Its acquisition depends on the period, the society, and the social class or family to which an agent belongs, but more importantly, on the effort of the agents themselves through self-improvement (Bourdieu 1986, 244). Thus, it entails personal cost through investment in time within the appropriating capacity of the individual agent, including his/her biological capacity or memory (*ibid*, 244-45). Due to its nature, agents cannot transmit embodied cultural capital instantaneously like money or property rights and it declines and dies with its bearer (*ibid*, 145). Besides these intrinsic factors, Bourdieu argues that embodied cultural capital may include physical properties (the body) in fields where they function as capital and facilitate the achievement of related profits (1984, 206).

Objectified cultural capital refers to the material objects through which culture is transmitted, such as the media, paintings, monuments, and instruments among others that require specific skills to be read or used (Bourdieu 1986, 246; Etzold 2013, 23). It can be acquired materially with economic capital or symbolically through embodied capital (Bourdieu 1986, 247). Thus, while one is able to acquire a machine with money (economic capital) for instance, its effective use requires knowledge (embodied capital). Lastly, institutionalized cultural capital takes the form of academic qualification or accreditation and is acquired through formal education and professional credentials such as certificates, academic titles and letters of recommendation (Bourdieu 1986, 247; Etzold 2013, 23). Though embodied in the agent and limited biologically, institutionalized cultural capital is distinct from embodied cultural capital because it is objectified (Bourdieu, 1986, 247). It also has a monetary value, which makes it comparable with others and exchangeable on the labor market (*ibid*, 248).

2.3.2.3 Social capital

According to Bourdieu, social capital is "the sum of the resources – actual or virtual – that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition" (1992, 119; 1986, 248). It is basically about being a member of a group, which may be socially instituted as in families or tribe with or without recognizable names, and being entitled to the associated benefits of membership such as property rights through material or symbolic exchanges, which are the basis of solidarity (Bourdieu 1986, 249). Thus, it entails inclusion and mutual support for members as well as exclusion and denial of benefits for non-members (Etzold 2013, 23). However, the measure of an agent's social capital or ability to utilize his social capital does not depend on only the size of his/her network of connections (Bourdieu 1986, 249; Etzold 2013, 23). Rather, it also depends on the overall volume of economic, cultural, or symbolic capital possessed by the

members of the network, the agent's position within the group, and his/her own stock of capitals (ibid). Thus, social capital functions as a multiplier of the other capitals (Bourdieu 1986, 249; Etzold 2013, 23).

According to Bourdieu, such networks are not a natural or a social given, but the product of continuous efforts at institution, which facilitates the production and reproduction of useful relationships (1986, 249). This implies that although one may be born into a certain group, his/her ability to retain membership or enjoy the benefits of membership depends on "investment strategies" such as the exchange of gifts or kind words, which facilitates recognition (Bourdieu 1986, 249–50; Etzold 2013, 23). Etzold highlights three common types of social capital, which include bonding, bridging, and linking social capitals (2013, 31). Bonding social capital is "based on trust solidarity, kinship and emotional ties between horizontally-aligned agents" who interact daily, share resources, and are literally close to each other. Bridging social capital is "based on the day-to-day interactions in a horizontal network, where the common needs, shared interests, and similar intentions build the foundation of the agent's cooperation and mutual understanding". Lastly, linking social capital occurs in "vertical networks of agents with unequal endowment with capital and thus power" where relations of dependency exist between powerful and deprived agents (ibid).

2.3.2.4 Symbolic capital

Symbolic capital is not a different form of capital per se, but rather about "the outcome of the conversion of the other forms of capital" and its recognition as legitimate by the social agents (Lawler 2011, 1419). As Bourdieu explains, the other capitals provide differential profits that can be converted into recognizable distinctions "through the representations that agents form and perform of them" (2013, 297). This means that the basis of symbolic capital is both objective and subjective, because it is about the use of profits to acquire properties that are relatively different in value from corresponding properties and their recognition by other agents as distinctive from others (ibid). Given this, Wacquant stresses that symbolic capital "designates the effects of any form of capital when people do not perceive them as such (1998, 268). As symbolic capital is based on inherent social schemes of symbolic categorization, it provides a "profit of distinction" (Bourdieu and Wacquant 2013, 297) or social asymmetry in favor of the possessor that results in social recognition in the form of prestige, reputation, and renown (Bourdieu 1985, 724). Symbolic capital is then "*the most valuable form of accumulation*" that is easily convertible to economic capital (emphasis in original) (Bourdieu 1977, 179, 183, 195).

While symbolic capital may be generally accessible to all social agents, Bourdieu implies that its possession is associated with the responsibility of benevolence. According to him, symbolic capital "presupposes a form of labor, a visible expenditure ... of time, money, and energy, a redistribution that is necessary to ensure the recognition ... by the one who receives to the one who ... is in a position to give, a recognition of indebtedness which is also an acknowledgement of value (2013, 299). Using a tribal chief or a rich man as an example, Bourdieu underlines how their affinity for giving gifts is a way of possessing such that it builds up a capital of obligations and debts with the recipients of the gifts (1977, 195). In the end, the recipient repays the gifts in the form of homage, respect, loyalty and when the opportunity arises, work

and services, leading to the accumulation of new material goods by the chief or rich man (*ibid*). Thus, symbolic capital gives the possessor what Bourdieu calls 'symbolic power', which is the power to impose recognition or visions of social divisions on other minds (1989, 23; 1990b, 138). By recognizing or tacitly acknowledging the legitimacy of the king or rich man's power and the hierarchical relations in which they are embedded, the recipient agents participate in their own subjection (Editor's introduction in Bourdieu 1999, 23). In this regard, Bourdieu refers to 'symbolic violence' as the subtle imposition of certain systems of meanings by a dominant agent with the complicity of the subjugated one(s) in a manner that legitimizes and concretizes structures of inequality (L. Wacquant 1998, 217). Despite the power it confers, symbolic capital is unstable and subject to loss over time (Bourdieu 1999, 67). For example, the death of a prestigious head may negatively affect the family's symbolic capital, which may change its image and objectives such as marriage alliances (*ibid*).

2.3.2.5 Perspectives on Bourdieu's capitals

Ultimately, these species of capital engender power at given historical periods with implications on habitus (and land values) and social practices. Hence, they determine the chances of success by the respective agents in a given context (Bourdieu 1985, 724). Retroactively, Bourdieu's species of capital compare with the mechanisms of access submitted by Ribot and Peluso (2003) as earlier discussed. For instance, economic capital relates to property rights, cultural capital to knowledge, and social capital to social identity and relations. Thus, Ribot and Peluso also compare these mechanisms of access to "bundles of powers", "that affect people's ability to benefit from resources" by maintaining or controlling access (2003, 154, 158). In this regard, access maintenance is about keeping one's access to a resource open by expending resources/capital, while access control is defined as "the ability to mediate others' access" by checking, directing, and regulating action, and relates to the possession of symbolic capital (Ribot and Peluso 2003, 158-59).

Peluso and Lund identify that mechanisms of control (symbolic capital) could be legal or illegal - involving violence and force - and may not always align but wielded in competition with one another (2011, 668). This means that in a given space, multiple agents could possess symbolic capital made up of a combination of different capitals and that their exercise of power could be in concert or conflict. Yet, in every society, the value of capitals (power) is structured by the specific logics of the sectors. Thus, the chances an agent has of achieving his/her objective depend on the kind of power he has in relation to the sector or 'field' in Bourdieu's words (1985, 724). Impliedly, agents possessing a volume of cultural or economic capital stand better chances of benefiting in fields where cultural and economic capitals are respectively effective or deemed as power. In view of this, 'fields' are foundational to social positions and merits attention. As Bourdieu's conceptualization of 'field' falls within his broader concept of 'space', the next section gives a general overview of the latter and discusses its other typology besides 'field' to capture its relevance to the current research.

2.3.3 Social space: The domain of social structuring

Bourdieu's idea of *space* represents the distinction of a set of coexisting positions "which are defined in relation to one another through relations of proximity, vicinity, or distance" and others, including above, below, or between (1996, 11). In the current context, the research uses Bourdieu's concepts of social fields, physical space, and arenas to support its theorizing about the incidence of 'land scarcity' (Bourdieu 1989, 16; 1996, 12).

2.3.3.1 Social Field

The 'social field' is foundational to Bourdieu's *Theory of Practice*. He explains that social phenomenon or interactions between people cannot be reduced to what happened or was said but must be examined within the social space in which they occur to unmask the structures that determined them (Bourdieu 2005, 148; 1989, 16). Relevantly, this aligns with the framing of phenomena as a social construction, which as Gergen elucidates, involves the denaturalization of knowledge by re-enculturation; that is tracing them to their historical, social and cultural lodgment (2001, 2). According to Bourdieu, a social field is a "multi-dimensional space of positions" (1985, 724), which as previously explained, are based on the distribution of active properties or capitals. It thus constitutes a set of objective power relations among agents based on the overall volume and relative weight of their capital possessions (Bourdieu 1985, 724; Bourdieu and Wacquant 1992, 97). Besides the objective power relations among agents, social fields are also differentiated by their 'logic' (*nomos*), which together constitute their structure (Bourdieu 1985, 725; Etzold 2013, 16; Schmitz et al. 2017, 51). They are also differentiated by their internal interests or 'stakes', which are the dominant capital that exists as power and over which the agents compete (Bourdieu 1985, 725; Etzold 2013, 13; Schmitz, Witte, and Gengnagel 2017, 51). On these bases, Bourdieu identifies that social fields may be artistic, religious, and economic among others (Bourdieu and Wacquant 1992, 97). He also intimates that social fields may have 'subfields' with unique logics (ibid 104). In this case, he underlines that an agent's movement between the subfields (or from one field to another) "entails a genuine qualitative leap" or adjustment to the logic of the destination subfield (ibid). Inferring from this, the research surmises that, subfields are also spaces of objective power relations among the corresponding agents and have specific (sub) stakes associated with the principal stake of the respective field. Relevantly, fields can be conceptualized and analyzed at different scales from the household to the national or the global levels (Etzold 2013, 17).

Following the above argumentation, the research conceptualizes the 'social field (henceforth 'field' for brevity) of land access' for the sole purpose of theorizing the general incidence of 'land scarcity'. It conceptualizes land as the field's stake and land tenure system - either statutory or customary - as the field's logic. As land is multifunctional and may have 'sub-stakes' and different rules and regulations for the respective uses, the field of land access may be conceptualized as encompassing different subfields. These may include arable farming, real estate development, pastoralism, and infrastructure development among others. The research surmises that each of these subfields constitutes agents with objective power relations based on their capital possessions. However, regardless of the relative autonomy of a field or a

subfield, agents may operate in more than one space simultaneously, adjusting to the specific logics as and when they transition (Thomson 2014, 70; Bourdieu and Wacquant 1992, 104).

Considering that fields are internal networks of objective relations between positions (Bourdieu and Wacquant 1992, 97), they are the frame in which capital is put into action by valuation and legitimization (Etzold 2013, 17; Thomson 2014, 70). Thus Bourdieu states that “*A capital does not exist and function except in relation to a field*” (emphasis in original) (1990b, 134). In turn, capital activates power over fields; that is “over the materialized and embodied instruments of production or reproduction whose distribution constitutes the very structure of the field” by positioning agents in relation to each other (ibid 98, 101). Relevantly, the relations among agents in a given field involve (in)direct interactions, flows of exchange of money, goods, or information etc., mutual obligations, relations of trust and solidarity among others (Etzold 2013, 30–31). In line with the earlier discussion on capital, such relations embody social capital, and could thus be networks of bonding, bridging, or linking as previously explained (ibid).

Regarding the logics (*nomos*) of fields, Bourdieu explains that they are the cumulative products of history and encompass the regulative principles and prescribed values of the capitals and the field-specific stake (Bourdieu and Wacquant 1992, 17; L. J. D. Wacquant 1989, 41). The regulative principles delimit the boundaries of a given field, while the values are the profits or benefits associated with the different capitals and stakes (Bourdieu and Wacquant 1992, 17; L. J. D. Wacquant 1989, 39). Thus, a field’s logic generally defines its boundaries and form such that the field extends to the point where the effects of the logic ceases (Bourdieu and Wacquant 1992, 17, 100). With respect to this, the research infers from Etzold and surmises that, subfields of a given field may be autonomous, with different logics, or heteronomous, sharing similar or overlapping logics (2013, 18). Bourdieu also distinguishes between different types of logics by identifying that a field’s logic could be a rule in the form of “a social norm” or a regularity or scheme (1977, 27; Lamaison and Bourdieu 1986, 114). He explains that a rule is “expressly stated and explicitly recognized, like moral or juridical law” while a regularity or scheme is immanent in the practices or discourses of the agents rather than in their consciousness (Bourdieu 1977, 27; Lamaison and Bourdieu 1986, 114). Following this and with respect to the conceptualized field of land access, the logic – that is land tenure system –, which usually encompasses statutory and customary systems may both relate to a rule, while regularities or schemes may include practices such as taboos related to land access. Bourdieu further emphasizes that agents only participate or invest in a field based on an ‘illusio’ (plural: illusiones); that is a tacit belief in the value of the stake, or the fact that participation is worth their efforts (1998, 77–78; 1990a, 65). Additionally, agents who participate in a field may be committed to its specific presuppositions or rules such that they perceive it as a natural given fact or ‘doxa’ (plural: doxas) (Bourdieu 1990a, 66; Sakdapolrak 2007, 56).

At this point, it is important to deconstruct Bourdieu’s idea of a field’s values. He observes that, values are usually wrongly reduced to exclusive economic or objective explanations (1990a, 112). In the context of the current research, this observation is akin to the parochial understanding of land, which Davy also questions to explain the social construction of land values and ‘land scarcity’. Referring to such narrow explanations as “monothetic” (synonymous with Davy’s monorationality), Bourdieu discerns that they project societies or people as only capable of having singular intents or objectives at a time (1990a, 113). Thus, underlining

the “polythetic” (polyrational) reality of societies, he argues that at every historic period, multiple meanings are deployed to the very same object (or stake) (Bourdieu 1990a, 112–13; Calhoun 2006, 1411–12). By this, Bourdieu sustains Davy’s submission on the multiple meanings and values of land (Davy 2016, 141–142). Also regarding capital, Bourdieu decries the economic reduction of human relations or transactions to “callous cash payment” by underlining that “Economism is a form of ethnocentrism” (1990a, 113). Thus, it basically de-socializes relations or transactions (Calhoun 2006, 1411–12). Inferring from his contention on polythetic realities and his species of capital previously described, Bourdieu emphasizes that, capital transcends money (or even land rights) (1990a, 113; Calhoun 2006, 1411–12). As the research compares Bourdieu’s capitals with land access mechanisms, this position echoes Ribot and Peluso’s, who argue that mechanisms of access encompass property rights, and structural and relational factors (2003, 164).

Besides this, Bourdieu also underlines that fields structure the dispositions and interests of agents, making it a representation of a symbolic space of lifestyles and status (1992, 114; 1990b, 133; 1996, 14). Thus, he characterizes fields as generally “systems of objective relations, which are the product of the institution of the social in things or in mechanisms that have the quasi reality of physical objects (Bourdieu and Wacquant 1992, 127). Ultimately, fields, – including the field of land access – are structured such that agents are ranked on the bases of their capital possessions, but also their habitus and objectives or interests (Bourdieu 1985, 724; Bourdieu and Wacquant 1992, 97; Etzold 2013, 17). This implies that, habitus (or land values in this case) determine the social positions of agents in a field besides their capitals. Given this and with respect to the field of land access, it may be concluded that agents socially construct and pursue a range of land values based on their social positions in the field (Maton 2014, 52). Despite this, Bourdieu underlines that fields are inherently inharmonious (1990b, 134; Etzold 2013, 17). This is because there is a constant struggle among agents of varied social positions to preserve or transform the corresponding logic towards achieving their differentiated objectives (Bourdieu 1990b, 134; Etzold 2013, 17). Ultimately, Bourdieu stresses that agents with the most power (or largest symbolic capital) regularly influence the logic in their favor, which may trigger contestations by other agents due to an inherent disposition of resistance (1990b, 134; Bourdieu and Wacquant 1992, 81, 103).

Based on their organizational functions, Bourdieu describes fields as the ultimate “locus” of relations of force and of meanings (Bourdieu and Wacquant 1992, 112). Thus, they are the “true object of social science research (Bourdieu and Wacquant 1992, 107). According to Bourdieu, field analysis involves three steps: an analysis of the position of the field (or subfield) in relation to the field of power, a map out of the objective structure of relations between positions competing for dominance, and an analysis of the habitus of agents (Bourdieu and Wacquant 1992, 104–5). The last two steps respectively encompass an account of the respective capitals and dispositions of the agents of interest. The first however, brings the ‘field of power’ to the fore as a new concept. According to Bourdieu, it is “the space of the relations of force between different kinds of capital or ... agents who possess a sufficient amount of one of the different kinds of capital to be in a position to dominate the corresponding field, whose struggles intensify whenever the relative value of the different kinds of capital is questioned ...” (1998, 34). Thus, it is an integrative space

that transcends (sub)fields and where agents with the highest volumes and relative weights of the relevant capitals engage and compete over power, including the exchange values of capitals to establish the legitimacy of a resource as symbolic capital (Schmitz et al. 2017, 55; Maclean and Harvey 2019, 110). Due to the concentration of ample capitals, the research infers from Navarro to define the field of power as “a ‘meta field’” where powerful agents struggle to gain symbolic power (2006, 18). Through this, they systematize the logic and the social “differentiation and struggles” within the corresponding field (ibid). Thus, besides showing the relations of struggle between the dominant agents of a field, the field of power shows the origin and meaning of power in a field (ibid). It also shows how power and power shifts affect the preservation of a field’s logic and the relative positions of the respective subfields based on their relevance to the holder of symbolic power.

2.3.3.2 Physical space

The ‘physical space’ is the material abstraction of space and embodies spatial distribution; that is the location of an agent or thing or where something takes place, which may be defined by external characteristics such as range, surface, and dimensions in relation to its natural or manmade surroundings (Bourdieu 1989, 16; 1996, 12; Etzold 2013, 19). Hence, it connotes the distinct physical features of a location in terms of buildings, land size, soil characteristics, and vegetation among others. It also connotes the boundedness of people or things in places, underscoring the fact that people physically exist in only one place at a time.

2.3.3.3 Appropriated social space and arena

The ‘appropriated social space’ is the actualization of the social order and the social distribution of power in the physical space (Etzold 2013, 19). The agents of a field can be grouped into social classes depending on their social positional similarities in terms of the volume and structure of their capitals (ibid, 17). Regarding this, Bourdieu observes that, the classes and relationships may retranslate themselves into the physical or geographic space “in the form of a definite distributional arrangement of agents and properties” (1989, 16; 1996, 12). In this context, agents who are closer in the physical space may have common properties, while those who are distant may have fewer properties, underscoring hierarchy and distance among them (Bourdieu 1989, 16). Bourdieu also notes that the agents’ location in the physical space may conversely indicate their social positions in the field (1996, 12). This is because an agent’s physical location may determine his or her chances of appropriating spatially distributed goods and services (Etzold 2013, 20). With respect to land access, the appropriated social place is therefore relevant for determining how access to certain locations may underpin the social positions of agents in the field. Additionally, Bourdieu contends that “part of the *inertia* of the structures that make up the social space” is attributable to their inscription in the physical space (Emphasis in original) (1996, 13). Therefore, any modification to the structure first requires “*transplantation*, by moving things and by uprooting or deporting” the respective people (Emphasis in original) (ibid). As is shown later, the relevance of this lies in how the construction of large dams, which affect the physical space, leads to transplantation, that is displacement and resettlement.

This upsets the established structures of the field and the agents' strategies of access, which may result in social constructions of 'land scarcity'.

Of relevance too is Bourdieu's concept of 'arena', which refers to a space where different agents "compete over access to resources, own positions, and the profits that are generated at specific places" (Etzold 2013, 30). Thus, it is a "space of conflict and competition", encompassing the physical presence of agents, their spatial and social distance, but also spatial practices and the visible material manifestations in the form of products or profits (Wacquant 1992, 17 cited in Etzold 2013, 30). In the current context, the research adopts the concept to represent the social field in its entirety, including the very stake (land) under contestation, the agents' social relations, their physical and conflicting activities, and the consequences thereof. Accordingly, agents of the conceptualized arena may or may not share a logic, which contributes to their conflicts and competition.

2.3.4 Social practices: An analogy of strategies of land access

Bourdieu's submission on habitus, capital (social positions), and field ultimately culminates in the conceptualization of 'social practices', which are generally "habitual and routinized actions informed by practical knowledge and an implicit 'practical sense'" (Sakdapolrak 2014, 22). According to Bourdieu, social practices, but also representations are based on "the double and obscure relation between habitus ... and fields ..." (Bourdieu and Wacquant 1992, 126-27). He thus uses the equation below to simplify this relation (1984, 101):

$$[(\text{Habitus}) (\text{capital})] + \text{Field} = \text{Practice}$$

Following Maton, the equation initially implies that practice is the result of the relations between habitus and social positions in the field within the ongoing state or circumstances of the field, which is the logic (2014, 51). To advance this: an agent's practice depends on his position in the field (the distribution of specific capital) and his disposition, which corresponds with the former (Bourdieu and Wacquant 1992, 101). Both the agent's position and disposition are structured by the field (logic) within which he finds himself. This is to say that the field defines the value or weight and legitimacy of capitals as well as structures the agent's disposition and interests or objectives (ibid). Thus, the field primarily undergirds and guides the agents' practices (ibid). In this context, habitus, capital, and logic, may also be called the frames of action that guide an agent's social practice. Given the interrelation between the field and social practices, Bourdieu concludes that "Practice has a logic" because it organizes thoughts, perceptions (social constructions) and actions and puts them into practical functions that are "intrinsically coherent and compatible with the objective conditions", which essentially encompasses the field, the objective relations between positions, and habitus (1990a, 86).

Bourdieu also intimates that practice entails attempts by agents to safeguard or improve their positions in the field and to impose the principles of hierarchy most favorable to their own capitals (Bourdieu and Wacquant 1992, 101). As elaborated, social positions entail the accumulation of relevant capitals, whose values depend on how they facilitate access to the profits of the stake as defined by the field. This means

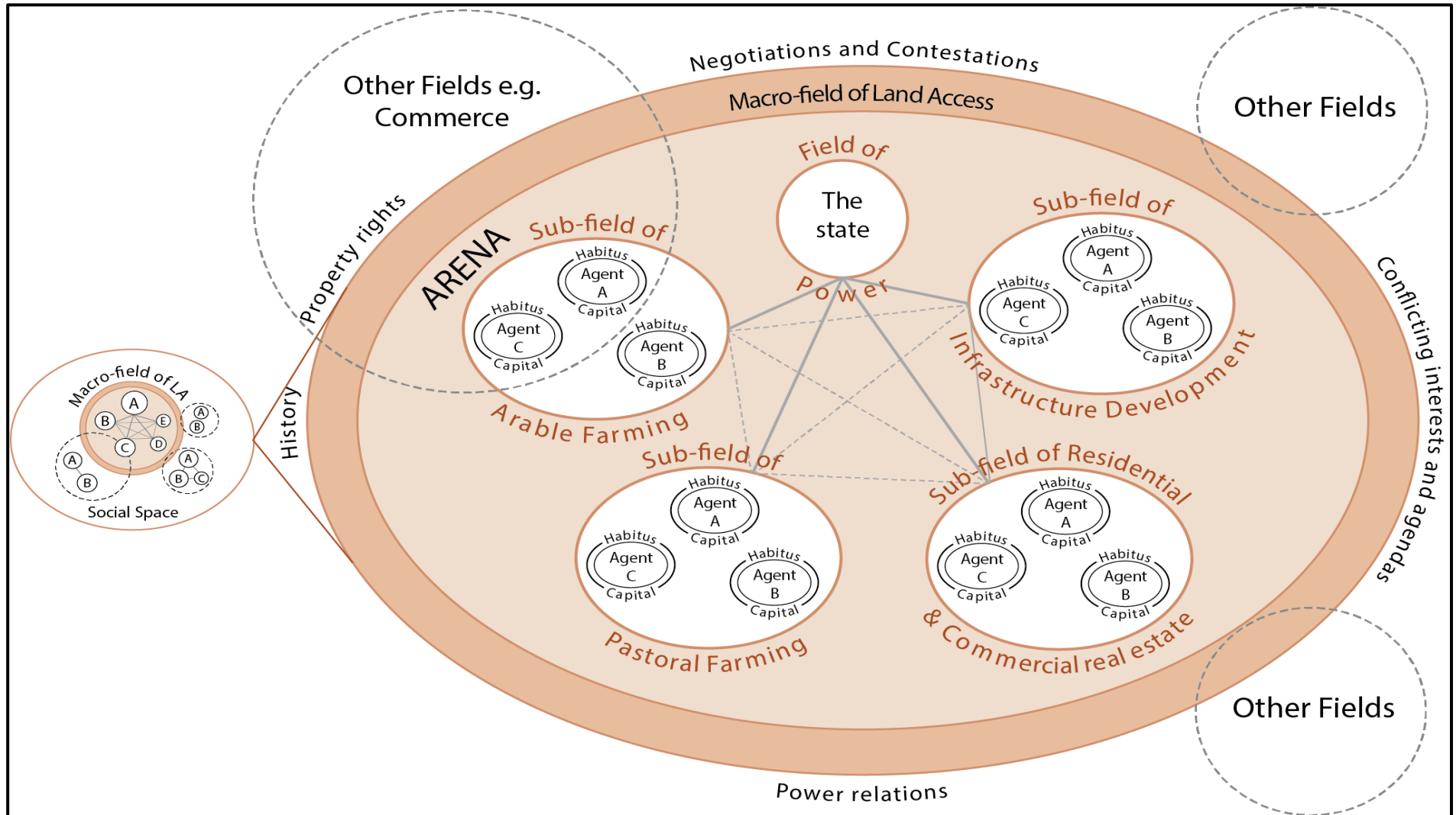
that practice is primarily about achieving the varied values of the field's stake. Concerning land access, practices are then the varied strategies by which people access their respective land values. This is not to be confused with 'mechanisms of access' which are more like instruments, means or inputs, while strategies relate to methods, approaches or processes. Such strategies of access include definitive actions such as arable farming, pastoralism, and construction of residential and commercial buildings, and physical or development infrastructure. They also include routine actions or processes such as land clearing, ploughing, spraying, harvesting, policing, or patrolling among others.

As emphasized previously, agents only socially construct and pursue certain land values according to the limitations imposed by their possessed capitals and hence social positions. In this regard, the implication drawn above presupposes a rigidity of agents' habitus (pursued land values), social positions, and practices. To unravel this stringency, Bourdieu explains that practice is not only a function of the current capital(s) possessed by an agent and the corresponding habitus and possibilities (Bourdieu and Wacquant 1992, 99). Rather, it is also a function of the "*evolution over time*" of the capital, which is the social trajectory "and of the dispositions (habitus) constituted in the prolonged relation to a definite distribution of objective chances" (emphasis in original) (ibid). Impliedly, both capital and habitus (land values) are subject to change with implications on an agent's social practices. In essence, agents are not permanently anchored to certain positions or social constructions in the field, but could assume other positions and acquire different dispositions based on their accumulation of capital over time.

2.3.5 Summary and implications for the research

Figure 2.1 on the next page is a diagrammatic representation of the field of land access as conceptualized by the research. It shows that, while a field is distinctive from other fields based on its stake and structure (logic and objective structure of relations), it may also have subfields that share the stake but have different internal interests or sub-stakes and unique structures. Thus, for the field of land access, the subfields may include arable farming, real estate, and pastoralism as shown in the diagram. For explanatory purposes, the diagram presents the subfields as autonomous; yet, they could overlap particularly when they share properties like active agents and exchange capitals. Likewise, as shown by the dotted circles, the field of land access may overlap with other external fields, such as commerce when they share properties or have flows of exchanges between them. Fundamentally, such distribution underlies the embeddedness of agents and the fact that fields usually exist in configuration with other fields. The diagram also implies that subfields may exist in the same socio-physical space where the agents compete over the same resource, which in this case, is land, and its associated benefits. Therefore, the research conceptualizes the shared space (as shown in the lighter shade) as the field's arena, which is the space of negotiation, conflict and competition (Etzold 2013, 30).

Figure 2.1: An initial conceptualization of the field of land access and its subfields



Source: Author's construct (2020)

As the agents of the respective subfields are closely related and may share many properties but with conflicting interests, subfields are invariably also subject to negotiations, contestations, and power relations. Hence, although it is bounded, it is also inharmonious. In this regard, individual social practices are also differentiated – and often conflicting – corresponding with the respective habitus and capitals of the agents. Relevantly, social practices are not an end in themselves but are undertaken towards achieving the differentiated land values or habitus. Thus, the social practices feed back into the field, by invariably sustaining or changing the capital distribution among agents and hence their positions and dispositions. Given this, the entire field is subject to change or reproduction in relation to the agents' social practices and the achievement of their respective habitus (land values). The implied interrelation between social practice and the field is also emphasized by Berger and Luckmann in their attempt to explain the social construction of reality (1966, 78). Describing the relationship as a “dialectical process”, they relate that the relationship between man (as a producer) and the social world (as a product) interact constantly to produce and reproduce each other.

Recalling the previous conclusion drawn on ‘land scarcity’, the research maintains that ‘land scarcity’ as a social construction is the consequence of obstructions to people’s social practices and the achievement of their land values. However, considering the intricate interconnection between social practices on one hand, and field (logic), habitus, and capital on the other hand, such obstructions do not only befall the agents’ social practices, but may also befall the others with implications on subsequent social practices. Thus, while ‘land scarcity’ could for instance be the result of conflicting social practices, they could also be the result of changes in the field’s logic or the values of capital, or due to the inherent struggles among agents. Ultimately, all these have implications on the ability of agents to undertake their social practices. Of relevance too, this implies that ‘land scarcity’ may result from everyday social practices without external influences.

Fundamentally, this begs the question of how the construction of large dams engender ‘land scarcity’. To be sure, it is easy to visualize the physical impacts of a large dam construction on land. However, based on the foregoing discussion, the research contends that the construction of large dams amidst the day-to-day practices of existing agents engender ‘land scarcity’ in more profound ways that are irreducible to mere generic physical qualities. This contention sets the pace for the next section. It primarily seeks to problematize large dams as a social practice undertaken by an agent such as the State, which obstructs the social practices of other agents beyond their normal experiences and ultimately, their achievement of habitus or land values. Of relevance to the discussion are then questions regarding the general changes that occur in the field of land access when people experience such profound ‘land scarcity’. Given the importance of land to people’s survival, it is understood that agents may continue to pursue their land values despite the intense obstructions. Logically, such persistence may also affect the entire field with implications on existing habitus, power relations, and future social practices. Thus, besides problematizing large dams in respect of ‘land scarcity’, the next section conceptualizes the agents’ responses to their experiences. It also conceptualizes how such responses may result in societal transformation. These discussions eventually culminate in the analytical framework of the research.

2.4 Situating 'land scarcity' and societal transformation around large dams

As discussed in Chapter 1, large dams have been built over time to advance industrialization and ultimately, economic development (see: Altinbilek et al. 2002; 2013, Brede et al.; McCully 2001). Referring to the 'production logic' behind this goal, Korten underlines that it is assuredly premised on the idea that an increase in production will automatically result in improvements in human wellbeing (1984, 299). Yet, studies show that the benefit streams of dams and other economic development projects have served a minority group of people and the macro interests of the State. This is because they have only contributed to indicators such Gross National Product (GNP) to the detriment of host local communities who end up burdened with the associated consequences (Altinbilek et al. 2002, 59; Cernea 1991a, 191; Terminski 2015, n/a). According to Oliver-Smith, this lopsided consequence has also been compounded by the increasing involvement of private capital in large-scale development projects, which seek to reproduce capital in the form of profits (2001). Thus, from his long research experience on dams, Thayer Scudder, a leading anthropologist recently wrote that the "... important short and medium term benefits of large dams tend to be followed by major and unacceptable longer term economic, environmental and social costs including costs for more than half a billion project-affected people living in dammed river basins" (2019, 2). Of interest, the dire environmental and socio-economic implications of large dams explain the macroeconomic priority attached to their construction, but also the power relations between the State, as a promoter and sometimes a developer and the affected populations in host regions.

Relevantly, large dams are considered an expression of State hegemony over people and territories (Bennett and McDowell 2012, 4; Oliver-Smith 2001, n/a). To cite Bourdieu, the State may be conceptualized as both a social structure and a mental structure" (1998, 40). This respectively encompasses its existence as an "objectivity, in the form of specific organizational structures and mechanisms" and as a "subjectivity, in the form of mental structures and categories of perception and thought" (ibid). With respect to the former, Bourdieu underlines that, "The [S]tate is *the culmination of a process of concentration of different species of capital: the capital of physical force or instruments of coercion (army, police, economic capital, cultural or (better) informational capital, and symbolic capital)*" (emphasis in original) (ibid, 41). With this "metacapital", it "exercises power over the different fields" and "the different ... species of capital" and their conversion rates "and therefore over the relations of force between their respective holders" (ibid, 41-42). By this, the State effectively becomes the field of power of the corresponding field(s). Moreover, the State obtains symbolic power with its symbolic capital, which underscores its ability to impose certain visions on the minds of other agents and hence its existence as a mental structure (ibid 1990b, 138; 1998, 40). Thus, it is able to assume "the monopoly of the legitimate use of physical and *symbolic* violence over a defined territory and over the totality of the corresponding population", which in the current context may underlie the construction of large dams (emphasis in original) (ibid 1998, 40).

Bourdieu's perception of the State's symbolic power and its subjective effects is widely shared. To cite an example, Foucault acknowledges that the State is the central source of power in the relations of power embedded in societies (1977, 131). His idea of "relations of power" is contingent on "the production, accumulation, circulation and functioning of a discourse" (1976, 93). This embodies the constitution of

knowledge created at certain historical periods (1970, 66). According to him, discourses are made acceptable and functional by “regimes of truth”, which are shaped by “constant economic and political incitement” and “produced and transmitted under the control [...] of a few great political and economic apparatuses”, which mainly constitute the State (1977, 131–32). Thus, the State has a totalizing and individualizing power to shepherd the direction of development and impose certain ways of life on the people subject to its regime (2009, 118–19; 1977, 131). Davy also makes a similar observation about the State, but relevantly about land access. He maintains that the State has the power to define (physical) spaces as overflowing or empty, and hence is able to augment its power to determine the value of spatial purposes (2016, 142).

Against these corresponding backgrounds, the subsequent sections discuss the manner in which large dams express the State’s hegemony over physical, but also social spaces. In this regard, they will show how large dams cause ‘land scarcity’ by re-defining existing structural and relational properties through displacements and resettlements, which profoundly affect the agents of the fields of land access (Bennett and McDowell 2012, 1; Cotula 2013, n/a; Vanclay 2017, 7). In the words of Bourdieu, “To change the world, one has to change the ways of making the world, that is the vision of the world and the practical operations by which groups are produced and reproduced” (1990b, 137). Overall, this section builds on the deductions made in the previous sections to formulate a comprehensive analytical framework for the research.

2.4.1 The consequences of large dams

Studies show that the adverse effects of large dams are both environmental and socio-economic. Thus, this section attempts to outline the respective issues under each of them to show the implications of large dams for ‘land scarcity’. The research conjectures that, as land is itself an environmental resource, a description of the pertinent environmental consequences of large dams will be an appropriate precursor to their socio-economic impacts, and their respective implications for ‘land scarcity’.

2.4.1.1 The environmental costs of large dams

From inundation to trapping sediments, dams have characteristically had severe impacts on ecosystems and have been ruled out by many as an environmentally-friendly resource (Berga 2016, 317; Hu and Cheng 2013, 708; WCD 2000a, 75). Many relevant studies associate this conclusion to their atmospheric GHG emissions, but also to their effects on terrestrial and aquatic ecosystems and biodiversity. For the purpose of this research, the ensuing sub-sections describe some of the consequences that are considered pertinent to the discourse on ‘land scarcity’. It is important to mention that while some of these consequences manifest in the short-term, others may take years, underscoring McCully’s opinion that dams are a “long-term and largely irreversible environmental experiment without a control” (2001, 31).

The effects of large dams on terrestrial ecosystems and biodiversity: Characteristically, large dam construction inundates large tracts of land. It is estimated that about 400, 000 km² (0.3 per cent) of the world’s land has been lost to dams (International Rivers n.d.). As dams are usually built in river valleys

where some of the world's most fertile lands are found (McCully 2001, 7), the varied submergence has wasted a significant amount of fertile farmlands (Haque 2015, 3; International Rivers n.d.). It has also displaced wildlife habitats, including endangered species (WCD 2000a, 75), such as the hippopotamus and monkey species of the Bui Dam which is currently under study. Other studies show that inundation creates landbridge islands, which isolate forests and lead to extinctions of vertebrate species in particularly tropical areas (see: Benchimol and Peres 2015; Wu et al. 2004). Besides wildlife, studies show that the inundation caused by large dams destroys rich terrestrial plants and forests, which are usually found in river valleys due to their topographical and elevational gradients (see: Benchimol and Peres 2015; Homeier 2008; Robinson et al. 2018). Regarding this, a study by Terborgh et al. of the Sinnamary River in French Guyana finds that in addition to a massive decrease in species diversity, the inundation killed all the trees within four months, creating "ghost forest" zones (1997 cited in Wu et al. 2004, 244). Fundamentally, the loss of fertile soils, wildlife, and tree species has significant implications for 'land scarcity'. Considering that the environmental value of land encompasses all these and is as well fundamental to the other land values (Davy 2016, 140), the destruction of these elements affect the environmental quality of land, which embodies the totality of the 'stake' or the principal capital that underlies the field of land access. Thus, it underlies ecological (existence) scarcity, and leads to other types of 'land scarcity' including capability, territorial, and locational scarcities.

Moreover, although dams reportedly control floods, they often fail to retain floodwaters in extreme events, leading to fatalities and damages to properties and livelihoods downstream. A case in point is the fatal flooding of some parts of Zimbabwe, Mozambique, and Malawi in March 2019 after the Tropical Cyclone Idai increased the water levels of the Marowanyati and the Cahora Bassa Dams in Zimbabwe and Mozambique respectively. As reported, more than 750 people died from the floods and thousands were left homeless (VOA 2019). These incidences significantly affect downstream communities by eroding the topsoil of farmlands and destroying cultivated crops (Haque 2015, 3; Tortajada 2015, 2). Dams also trap sediments and nutrients behind their walls, affecting channels, floodplains, and coastal delta morphology (WCD 2000a, 81). Thus, from their study of dams on the Elwha River in Washington, Shafroth et al. find that, segments of its downstream were geomorphically less dynamic with lesser forest structures and species composition mainly due to a reduction in sediment and soil nutrient supply (2016). Additionally, dams also increase water loss through open water evaporation due to their large surface areas (Altinbilek and Cakmak 2002, 59). While this may increase precipitation, studies of dams including Ghana's Volta Lake show that the seasonal and spatial feedback is erratic and may not always benefit the source of the evaporation (Woldemichael et al. 2012, 2; Knoche and Kunstmann 2013, 12,356). Relevantly, these consequences underpin 'land scarcity' because they undermine the capacity of land to meet people's expectations of harnessing its soil productivity among others. Thus, they engender capability scarcity. Furthermore, downstream flooding and their consequent destruction of properties are analogous to a breach of boundaries and hence underlie spatial power scarcity.

The effects of large dams on aquatic ecosystems and biodiversity: Due to their obstructive nature, dams also affect aquatic ecosystems and biodiversity by altering river flow regimes, water temperature, and

chemistry. McCully underlines that by altering the natural flooding of rivers, dams isolate rivers from their floodplains, turning them from floodplain rivers to reservoir rivers with dire implications for the survival of aquatic species (2001, 31). The water storage function of dams also alters the water temperature and affects native fish species. By trapping sediments and nutrients, reservoirs also trigger algae blooms, which among other things, debilitate the growth of macrophytes (large visible aquatic plants) by obstructing the penetration of sunlight, altering the pH balance of waterbodies, and depleting water oxygen when they die and decompose (Kaparapu et al. 2016, 26; McCully 2001, 38; WCD 2000a, 78). Given these, dams have been partly blamed for the loss of about 80 per cent of freshwater species in the last 50 years (Reid and Cooke 2019; WWF 2018). Of significance to this research is the subsequent effect on land access due to the shift of fisher folks to arable farming among others. As this research will show, this shift increases the number and diversity of agents operating in the field of land access, thereby intensifying conflict and competition, with profound implications for 'land scarcity'.

The above discussion shows that, regardless of being promoted as economically and environmentally sound, large dams lead to dire environmental problems that overshadow their benefits. Besides these consequences, they also have profound socio-economic impacts, which the next subsection discusses.

2.4.1.2 The social costs of large dams

Given that large dams affect river basins, which serve multiple functions, such as complex webs of dependencies and interactions (WCD 2000a, 102) and host the livelihoods of groups of subsistence farmers, indigenous peoples, and ethnic minorities (Nüsser 2003, 21), they have profound social, cultural and spatial consequences. While these consequences vary by location, multiple studies have recorded some regularities across space, which the research capitalizes on to elaborate the implications of large dams for 'land scarcity'. The social costs of large dams are principally associated with displacement, because the accompanying reservoirs, buffer zones, and other facilities inevitably removes the pre-existing inhabitants from their primary lands, homes, and sources of livelihoods (see: Cernea 2004; 1997). As implied earlier, such instances evince the power relations between the State and the displaced people. Thus, following Bourdieu, the State has symbolic power, which it derives from possessing a metacapital. This underlies its ability to expropriate land for mammoth projects such as large dams. With its symbolic power, the State gains the ability to impose a new logic on existing fields of land access, which expedites its achievement of set objectives such as the *habitus* of the territorial and use values of land. As such objectives involve restrictions of the physical boundaries for the purposes of the project, they ultimately result in the expulsion of pre-existing inhabitants. Consequently, Davy refers to assertions of territoriality as a social construction of property as private or common rather than a fact of nature (2016, 138). With respect to large dams, this initial maneuver engenders spatial power scarcity to the affected people, because it entails a breach of their territories. It further dispossesses them of certain species of capital, which impairs their abilities to pursue other preconceived land values. Thus, it entrenches the related forms of 'land scarcity' among them.

Due to its debilitating effects, dam-induced displacements have been the subject of relevant studies since the mid-1950s when the globalization of development projects was in progress (Terminski 2015, n/a). Such

studies were spearheaded by anthropologists including Thayer Scudder, Elizabeth Colson, David Brokensha, and Robert Chambers who conducted researches on Ghana's Akosombo Dam, Egypt's Aswan Dam, and the Kariba Dam of south-central Africa among others (Scudder 2005, 32; Terminski 2015, n/a). Inspired by the famed campaigns against dams in the late 1970s, further researches were conducted by others, leading to the pioneering sociological conceptualization of displacement by Cernea in the early 1990s (see: Cernea 1991b; Dwivedi 2002; Terminski 2015). To be sure, the causes of displacement transcend large dams and include other development projects and even environmental factors and conflicts (Terminski 2015, n/a). Thus, the concept of development-induced displacement was coined in the 1980s to distinguish it from other causes of displacement (ibid). Afterwards, various classifications of development-induced displacement also came up, leading to the concept of dam-induced displacement (DID) (ibid).

Although all forms of development-induced displacement have similar consequences and share the same theoretical orientation, the distinction among them is based on the extent and intensity of their consequences (Cernea 1991a, 192). Regarding this, Cernea observes that, as the aggregation of the losses – including the number of people who lose their assets and jobs, environmental losses, and costs of movement etc. – is fraught with data gaps, the overall number of affected people is usually the best indicator and proxy for the others (1991a, 192). Following this, it has been reported that DID has the greatest consequence among all forms of development-induced displacement, because it affects larger groups of people and results in worst forms of economic and social dispossessions and disruptions (Cernea 2004, n/a; Stanley 2004, n/a; Terminski 2015, n/a; WCD 2000a, 102). To be sure, the WCD estimated that about 40 to 80 million people had been displaced by large dams by the year 2000 (2000, 104). Among them is China's Three Gorges Dam, which reportedly affected about 1.3 million people from 13 cities, 140 towns, and 1,350 villages, underlining the towering extent to which dams cause displacement (International Rivers n.d.). Based on multiple sources, Table 2.1 below shows the number of displaced people in some dam projects, including the Bui Dam, which is central to this research.

Table 2.1: Official records of the number of displaced people in selected dam projects

Name of Dam	Year of construction/ opening	Number of resettled
Three Gorges Dam, China	1994 – 2009	1, 300, 000
Sanmenxia Dam, China	1957 – 1960	370, 000
Aswan High Dam, Egypt	1960 – 1970	100, 000
Kossou Dam, Cote d'Ivoire	1972	75, 000
Kainji Dam, Nigeria	1964 – 1968	44, 000
Kariba Dam, Zambia and Zimbabwe	1955 – 1959	57, 000
Mangla Dam, Pakistan	1961 – 1965	110, 000
Sardar Sarovar Dam, India	1987 – 2017	>200, 000
Akosombo Dam	1961 – 1965	84,000
Bui Dam	2009 – 2013	1,216

Source: Compiled from multiple sources (2019)

Although the figures shown in Table 2.1 are staggering, they are only official records of the numbers that were resettled and not the actual numbers displaced by the projects and their supplementary developments (WCD 2000a, 103; Wragg-Morris 2012, 2). These include those in downstream communities who usually experience various economic effects from incessant flooding for instance, and are often excluded from resettlement programs. Thus, McCully argues that the actual numbers of displaced people around large dams may be seven times higher than the officially-recorded numbers (1997, n/a). As a matter of fact, the WCD discredits China's official statistics by showing that rather than 10.2 million people that had reportedly been displaced between 1950 and 1990, about 10 million had been displaced in the Yangtze Valley alone (2000a, 104). Likewise, a World Bank mission to India in 1987 found that while official records showed that dams had displaced about 39,700 people in 1979, the actual number was 60,000 (ibid). Given these extensive effects, displacement has recently been categorized as encompassing both physical and economic dimensions. While physical displacement involves a loss of shelter and hence relocation, economic displacement is about restrictions of access to resources that support the livelihoods of the affected people, with or without a physical removal (Bennett and McDowell 2012, 3; Vanclay 2017, 3; WCD 2000a, 103). Consequently, displacement may occur even after a physical removal due to knock-on developments such as restrictive regulations and natural disasters (Wang et al. 2014, 45). In line with this argumentation, Cernea underlines that, besides downstream communities, indigenous people living around large dams may experience displacement from restrictions to their access to vital resources even when they are not physically removed (2005, 48).

Accordingly, Cernea emphasizes "economic and social uprooting" as central to forced displacement in his sociological conceptualization of development-induced displacement in general (1997, 1572). Relevantly, he portrays this through his *Impoverishment Risk and Reconstruction (IRR) Model*, which categorically functions as a tool for diagnosis, prediction, problem-resolution, and research (Cernea 1997, 1571). Of relevance to the research, the IRR model underlines impoverishment as the ultimate consequence of the social, economic, cultural, and psychological effects of displacement when counter measures are ignored (ibid). In this regard, it identifies eight corresponding impoverishment risks, which include landlessness, joblessness, homelessness, marginalization, food insecurity, increased morbidity and mortality, loss of access to common property, and social disarticulation. Concerning large dams, studies emphasize that these risks affect people who live above the dam and are directly displaced, those who live in communities that host the displaced, and those who live in downstream communities that depend on the natural flow of rivers for sustenance (Scudder 2005, 18). For these groups of people, studies further show that the risks could be idiosyncratic, affecting individuals and households, or covariant, affecting groups of households and entire communities (Wayessa 2012, n/a). Cernea also emphasizes that different categories of people experience the risks differently because of differences in their circumstances and location (1997, 1576). This means that the risks could vary by gender, age, and social status among others, but also by location, either downstream or upstream. Based on Bourdieu's *Theory of Practice*, the next paragraphs describe the risks with examples and their implications for 'land scarcity'.

Landlessness: Fundamentally, DID entails a dispossession or removal from the primary lands on which “people’s productive systems, commercial activities, and livelihoods are constructed” (Cernea 1997, 1572). This is due to the inundation, creation of buffer zone, and the construction of the structure and its facilities. Thus, DID inevitably puts affected people at the risk of landlessness or a lack of land if proper reconstructive measures are not implemented. For example, in its report, the WCD states that although two-thirds of the 96,000 people displaced by the Tarbela Dam in Pakistan qualified for replacement agricultural land, about 20,000 of this number did not receive land due to a shortage in the amount of land promised (2000a, 106). Perhaps, their qualification for land replacement was based on recognizable claims or effective use and occupancy. Nevertheless, it shows that they were in some ways active in the respective field of land access. Therefore, for the disadvantaged people, the involuntary experience of landlessness cripples their ability to function in the field, as land is invariably its principal stake and the ultimate economic capital input.

Needless to say, for the indigenous and ethnic minorities who are usually affected by dams, land is also an important objectified cultural capital, which underpins the transmission of culture in the form of rituals and cosmological meanings, and hence their *habitus* (land values) (Agyepong 2013, 76). It also underlies their social bond and their functional existence as kinship groups (*ibid*). Thus, the risk of landlessness, either by physical removal or by restrictions due to a revocation of property rights, also implies the risk of losing cultural and social capitals. Ultimately, this affects their sovereignty as a people and their ability to persevere in the field of land access. As per Davy’s categorization of land values, the risk of landlessness then affects all land values and results in all forms of ‘land scarcity’, including ecological (existence), spatial power, capability, and locational scarcities. Due to its far-reaching effects, Cernea calls landlessness “the principal form of decapitalization and pauperization of displaced people” (1997, 1572).

Homelessness: DID puts people at risk of losing their homes or shelter due to their removal from primary lands. Homelessness could be in the short term or long term if counter measures are overlooked. As houses or shelters are acquired property, homelessness is a loss of (fixed) economic capital. Therefore, referring to the case of Danjiangkou reservoir in China, Cernea observes that those who were left permanently homeless, ended up destitute (1997, 1573). For rural folks, houses may not be a direct economic input, which could facilitate access to bank loans as collateral for instance. However, homelessness affects other important capitals and debilitates their social practices, which expedite the achievement of certain *habitus* (land values). In this regard, Cernea infers from the idea of “place attachment” to explain that homelessness also connotes a loss of cultural space, which leads to alienation and deprivation (1997, 1573). Fundamentally, the idea of place attachment is the bond a person forms with a place through emotional connection, meaning, and understandings (Junot et al. 2018, 50). This may include an attachment to the adjacent natural and man-made objects, but also the social capital represented by families, neighbors, and communities. Therefore, the risk of homelessness in DID encompasses alienation of people from the objects fundamental to their sentiments, and hence *habitus*, and the deprivation of their accumulated social capital through disintegration. The former may underlie an outright social construction of ecological (existence) scarcity (Davy 2016, 140). However, the latter, which is crucial for the acquisition of other capitals such as

embodied cultural capital (skills and abilities etc.), may severely impair the ability of affected people to achieve their habitūs, including territorial, use, and exchange land values through certain social practices. This may thus result in spatial power, capability, and locational scarcities.

Loss of access to common resources: In addition to land loss, DID may also sever people from other natural resources such as common forests, water bodies, and grazing lands among others. This may occur through physical displacement or economic displacement resulting from restrictions. Fundamentally, the risk of losing access to common resources underpins the risk of all forms of 'land scarcity'. With reference to the Son La Dam in Vietnam for example, Dao recounts that out of the 23, 333 hectares of land that was flooded, more than 3000 hectares were forests partly owned by the Thái, La Ha, Kinh, Mông, and Giáy ethnic groups (2010, 332). Like land, such common resources have cosmological meanings to indigenous people and ethnic minorities and underlie their peoplehood and habitūs (Nüsser 2003, 21; Terminski 2013, 45; WCD 2000a, 124). Besides the landless, indigenous people and ethnic minorities also harvest goods such as firewood and herbs from the resources, which may be used domestically or exchanged for money. Thus, the resources sustain all forms of capital – social, cultural, and economic – and substantiate the achievement of idiosyncratic and covariant habitūs or land values. Given this, the risk of losing access to the resources, either physically or economically, engenders ecological, territorial, use, and locational scarcities to the affected people.

Joblessness: Studies show that dams frequently affect rural areas where subsistence farming is the mainstay of the economy (see: Dao 2010). Thus, the risk of joblessness in DID is usually tied to the loss of arable land and the loss of access to common resources (WCD 2000a, 103). However, the expectation of the dam, prior to its construction may also affect people's habitūs by discouraging them from any meaningful investment, leading to joblessness (Cernea 1988, 80:20; WCD 2000a, 99). In any case, joblessness refers to the cessation or absence of social practices such as farming and pastoralism. Principally, this affects people's ability to achieve their habitūs or land values and hence results in all forms of 'land scarcity'. The absence of the social practices also has negative impacts on the reproduction of the field of land access as it inhibits the accumulation of capital and the field's functioning. Dao also observes that dam-affected farmers often have little formal education (institutionalized cultural capital); hence, displacement leaves them with very few options, making them landless laborers and impoverished (2010, 326). Among other things, this implies that, in terms of cultural capital, such farmers largely possess embodied and objectified capitals such as local knowledge, skills, social norms, and local instruments. Thus, a disintegration of the field of land access to which such capitals are well suited, limits them from assuming dominant or relevant positions in other fields where they are not. Even when the field of land access perseveres, disadvantaged farmers who once held relevant positions may be reduced to drudgery and dependency to achieve their habitūs or conceived land values

Food insecurity: The FAO describes food security as encompassing food availability, access to the requisite resources including land and other common resources, and use and stability of access to food at all times (2006, 1). Primarily, this relates to the existence, access, and use of land and other common resources. Fundamental to food security is also agricultural productivity, which relates to the existence, quantity and

quality of land, but also the right to use land and the capability to use it (FAO 2017, 1, 4). Thus, given that DID inevitably dispossesses people of land and other common resources by revoking their rights, expelling them, and restricting their access, Cernea emphasizes food insecurity as a risk to the affected people (1997, 1575). Pointing to Bailiamba reservoir in China, he explains that due to a decrease in the area of cultivated land, local food production became insufficient, necessitating an annual food relief of 75,000 tons for several years. Food insecurity and its health implications (undernourishment) may seem like ultimate costs (Cernea 1997, 1575; Terminski 2013, 45); yet they have implications for 'land scarcity' because they incapacitate people from accumulating capital and investing in meaningful social practices, which may result in in capability scarcity.

Increased morbidity and mortality: In addition to food insecurity, DID also causes social stress, psychological trauma, poor sanitation, and lack of access to clean water, which all have health implications for the affected people (Altinbilek and Cakmak 2002, 59). For example, Cernea observes that the people affected by Ghana's Akosombo Dam were exposed to schistosomiasis after the inundation in 1960 (1997, 1574). Therefore, the recorded cases increased from 1.8 per cent prior to the inundation to 75 and 100 per cent among adults and children respectively after the inundation. Given these, Cernea maintains that dams and their resultant displacement increases morbidity and mortality among affected people (1997, 1574). Morbidity refers to the condition of having a disease or the symptoms of a disease as well as the amount of disease within a population (NCI 2011, n/a), while mortality refers to the condition of being dead or the number of deaths in a population. As implied under food insecurity, morbidity may incapacitate people from accumulating capitals and investing in meaningful social practices, and hence may result in capability scarcity. Mortality may also reduce accumulated social capital, but also sources of economic and cultural capitals, particularly when rich, knowledgeable and skillful members of the units pass away.

Social disarticulation: As emphasized previously, DID fragments existing social capital, which encompasses families, kinship groups, informal networks of mutual help, and whole communities with embedded value systems (Cernea and McDowell 2000, 30). According to Cernea, this creates "anomic regions", which are societies with disintegrated social norms or values (1997, 1575). Downing thus maintains that although "the people may physically persist", "the community that was" does not (1996, 34). The loss of social capital affects the security and cultural identity of people (Cernea 1997, 1575; Downing 1996, 33) as it undermines the acquisition of some cultural and economic capitals including skills and rights to certain common resources. This is especially true for indigenous people and ethnic minorities whose livelihoods revolve around "self-organization, social interaction, and reciprocity" (Cernea and McDowell 2000, 30, 363). In this regard, social disarticulation may inhibit their investment in the social practices that expedite the achievement of their habitus or land values, resulting in 'land scarcity' to individuals and the group as a whole. Given its subtle yet intense implications, McDowell argues that social disarticulation is the most complex part of displacement (2002, n/a). De Wet also suggests the addition of 'cultural disarticulation', which encompasses the impacts on cultural integrity and autonomy of the group or community (2004, 63). Fundamentally, this also affects the ability of people to advance their social practices towards achieving certain habitus or land values, which also leads to 'land scarcity'.

Marginalization: It is the relegation of individuals or groups of people to the “margins of social, political, economic, ecological, and biophysical systems” of society (Gatzweiler et al. 2011 cited in von Braun and Gatzweiler 2014, 3). Thus, marginalization prevents people from accessing resources, assets, and services (ibid). It also restrains freedom of choice and prevents people from developing their capabilities, which eventually leads to extreme poverty (ibid). Cernea identifies three forms of marginalization that result from displacement, including economic, social, and psychological (1997, 1574). Economic and social marginalization occurs when people lose economic capitals and social statuses respectively. Psychological marginalization on the other hand occurs through depreciation of self-image and confidence. Concerning the field of land access, DID may cause economic, social, and psychological marginalization by dispossessing people of vital capitals such as land and social networks. Therefore, it abases them by diminishing their social positions in the field. Even when resettled, the deprivation caused by displacement puts the affected people at the rim of the new field, effectively making them powerless agents. This in turn makes them voiceless and unable to influence decisions in the field. Relative marginalization of all kinds may occur before displacement, particularly when people discontinue their social practices of access due to expectations of loss.

Summary: In view of these cross-cutting risks, Cernea compares displacement with impoverishment (1997, 1571), which refers to a multifaceted process of losing one’s livelihood. Downing acknowledges this too, and underlines that displacement “may render social life chaotic, unpredictable and meaningless” filled with uncertainties and disorder (1996, 41–42). Therefore, DID and other development-induced displacement have received criticisms as crises in development (Dwivedi 2002, 712). In contrast, others posit that although inevitable in the pursuit of the greater public good, displacement is also an opportunity for livelihood reconstruction and regional development (Dwivedi 2002, 712; 1999, 44). Dwivedi categorizes these opposing views as radical movementist and reform managerial approaches respectively (2002, 712). Of these two, the latter is widely promoted by governments and powerful brokers, including donors. Therefore, it has been foundational to the discourse and practice of development in general. Central to it is however resettlement, which is seen as a strategy to minimize the impoverishment risks and launch local development (Cernea 1988, 80:19; Dwivedi 2002, 712). Accordingly, the next section outlines some of the key initiatives and debates on resettlement and their implications for ‘land scarcity’.

2.4.2 Resettlement and its implications for ‘land scarcity’

Resettlement in development projects encompasses a physical relocation and reestablishment of the productive activities, services, and community lives of the displaced people (Terminski 2013, 14; The World Bank 2004a, 5). It is generally regarded as involuntary due to the divergence of interests between the State and the affected people and the coercive nature of land expropriation (Artur and Hillhorst 2014, 361; Bennet et al. 2012, 4; Oliver-Smith 2001, n/a). Physical relocation schemes have been implemented for a relatively long time (Cernea 1988, 80:9; Scudder 2005, 32; Sneddon 2015, 161). However, as previously mentioned in Chapter 1, the World Bank pioneered specific policies on involuntary resettlement in 1980 after the campaigns against dams began in the late 1970s (Khagram 2004, 4; Scudder 2005, 32; The World Bank 2004a,

n/a). Due to these, there was also an increased awareness of the inherent sociological risks of displacement and of the need for adequate planning and financial provision (Cernea 1988, 80:9; 1991a, 199–200; Stanley 2004, n/a). Subsequently, the Organization for Economic Co-operation and Development (OECD) also adopted an involuntary resettlement policy in 1992 to guide its funded projects (1992). Countries like China, Uganda, and Cote d'Ivoire also established relevant principles in the 1990s (Stanley 2004, n/a). Despite this milestone, studies show that the problems associated with displacement escalated and led to further social movements in the 1990s (Dwivedi 2002, 710). Therefore, Cernea, then a World Bank Senior Advisor for Sociology and Social Policy, developed the IRR model as an “equity compass” to guide planning and the allocation of resources to prevent or mitigate impoverishment in displacement (1997, 1570). In line with the risks discussed previously, he recommended counter strategies including land-based resettlement, job creation, and social inclusion among others, which became influential to certain resettlement policies and of significance to this research, the work of the World Commission on Dams (WCD).

Relevantly, the WCD further advanced a rights and risks approach to negotiated decision making in resettlement based on the values of equity, efficiency, participatory decision-making, sustainability and accountability (2000a, 204). On these bases, it recommended seven specific strategic priorities for dam construction and corresponding policy guidelines. Of relevance to this research is the strategic priority on the need to “recognize entitlements and benefit sharing”. Associated with this, the WCD outlined policy guidelines that emphasize the need to compensate lost assets and implement appropriate livelihood restoration and enhancement measures (2000a, 242). These are: land-for-land options, agricultural livelihoods, and access to forests, grazing lands and other common resources. They also include sustainable non-agricultural employment, protection against land alienation, and resettlement of people as a community or viable social unit close to their original habitat to facilitate their recovery. These resonate with Cernea’s recommendations for resettlement to reestablish the affected people to levels equal to their previous lives or higher than what would have been without the project (1988, 19).

Although not legally binding, the WCD’s recommendations have reportedly become the most influential benchmark globally, leading to national-specific resettlement policies such as Vietnam’s Decree Nos. 197/2004/ND-CP and 69/2009/QD-TTg (Dao 2010, 329). According to International Rivers, the WCD has also influenced the national policies of countries including Germany, South Africa, and Nepal (2008, n/a). At the international level, its recommendations also received some endorsement from the World Bank and the International Hydropower Association (International Rivers 2008, n/a). To be sure, the World Bank also reformatted its policies in 2001 and 2013 to strongly emphasize the need for resettlement to “be conceived and executed as sustainable development programs” that enable displaced people to share in the benefits of the project (2004a, 71). Probably due to the WCD recommendations, the African Development Bank’s Involuntary Resettlement Policy also draws attention to the impoverishment risks and strongly advocates for a development-oriented approach to resettlement (2003, 16). Although the Asian Development Bank did not fully endorse the recommendations (McDonald-Wilmsen and Webber 2010, 144), its relatively recent policy, which primarily accedes to the World Bank’s policy, also follows the same

principle (Asian Development Bank 2009). All these policies resound the need to restore and improve the livelihoods of affected people and protect their fundamental rights.

The OECD, International Finance Corporation (IFC), and the UN have also taken other initiatives in the recent past based on the principles of human rights and sustainable development. The OECD *Guidelines for Multinational Enterprises* (2011) and its associated *Due Diligence Guidance for Responsible Business Conduct* (2018) provide a roadmap for corporations operating in and from its member countries to address social issues in line with the *Universal Declaration of Human Rights*. The IFC's *Performance Standard 5 on Land Acquisition and Involuntary Resettlement* advises clients against involuntary resettlement, and when inevitable, to minimize impacts by being responsive to issues such as gender, human rights, and climate change among others (2012). The UN *Global Compact* also outlines ten principles with which businesses can align their strategies and operations to advance the goals of universal human rights and environmental sustainability among others (2004). In particular, principles numbers 1 and 2 admonish businesses to “support and respect the protection of internationally acclaimed human rights” and ensure that “they are not complicit in human rights abuses” in any form (ibid). Likewise, the Working Group on Business and Human Rights is also implementing the *Guiding Principles on Business and Human Rights* regarding the UN's ‘*Protect, Respect and Remedy*’ Framework (2011), which provides a code of conduct for transnational corporations and business enterprises on the issue of human rights.

Consequently, the provisions of these policies encompass land-based and non-land based resettlement strategies. However, they generally prioritize the former for especially rural areas such as those affected by dams. The argument is that, as these areas are primarily agrarian and inhabited by indigenous or ethnic minorities with strong attachment to land, the provision of land is more elemental to reestablishing their socio-economic livelihoods than mere cash compensation. As Terminski relates, the loss of land is the primary consequence of all development-induced displacements, because land is the fundamental point of economic, social, and cultural reference that triggers the other threats including joblessness, homelessness, food insecurity, and social disarticulation among others to particularly such groups of people (2015, n/a). Based on this, the next section outlines the specific provisions on land-based strategies and their outcomes to date.

2.4.2.1 An overview of land-based resettlement policies and their outcomes

Following a study of multiple dam-induced resettlement (DIR) programs across the world, the WCD concluded that cash compensation has been “ineffective in recreating lost assets and opportunities in less monetized economies” (2000, 142). Thus, key to its recommendation is for resettlement to encompass the implementation of adequate safeguards even when the displaced show a preference for cash compensation (ibid). Other policies have however been more explicit in their recommendations. For instance, the World Bank categorically states that “preference should be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based” (2004, 61). Likewise, the OECD has long stressed that “preference should be given to land-based resettlement strategies for people dislocated from agricultural settings” (1992, 7). The IFC *Performance Standard 5* also gives precedence to land-based compensation for

displaced people whose livelihoods are land-based and in situations where land is collectively owned as is the case for most indigenous communities (2012, 3). While the African Development Bank also encourages that "... in the case of rural areas, the resettlement program should emphasize and provide land-for-land for displaced persons whose livelihoods are based on land..." (2003, 16). Besides these, some national policies such as those of Vietnam and Liberia acknowledge the preeminence of land-for-land strategies (see: Nguyen et al. 2017; WAPP 2012). Other strategies such as cash compensation and alternative income generating opportunities are only encouraged when land is physically unavailable.

Per these fundamental obligations, many recent DIR programs have implemented land-for-land strategies. For instance, the Nam Theun 2 Dam in Laos which was partly funded by the World Bank provided land compensation for house lots (with titles) and for agriculture for particularly people who lost more than 20 per cent of their production lands (The World Bank 2004b, 12). The ethnic groups that were affected by Vietnam's Son La Dam and the Binh Dien Hydroelectric Dam also received land replacements per the national obligations concerning indigenous people and resettlement (Dao 2010, 329; International Rivers n.d.; Nguyen et al. 2017, 3). In Africa, the Resettlement Action Plan for the rehabilitation of the defunct Mount Coffee Hydropower Project in Liberia also made provisions for land compensation for the affected communities (WAPP 2012, 167). While the resettlement of people affected by the Rusumo Falls Hydroelectric Project, which is on the border between Tanzania and Rwanda also prioritized land-for-land options, including the provision of residential plot with titles and agricultural land equivalent to the land lost to the project (The World Bank 2013, i-j). As mentioned previously, the communities affected by the Bui Dam, which is under study also received land compensations for their lost lands (see: Agbley 2017; Asiamama 2015; Hensengerth 2013a; Obour et al. 2016).

Despite these strides, studies continue to show inadvertent failures in DIR schemes, with profound land access problems and worsening social, economic and cultural conditions (see: Moore et al. 2010, 2-3; Scudder 2005). Scudder's study of fifty dams across the world few years after the publication of the WCD's report found abysmal results that support these findings (2005). Relevantly, he finds that 86 per cent of forty-four cases still had intricate problems of landlessness, leading to the associated problems of joblessness, food insecurity, and loss of access to common property resources among others (ibid, 71-72). Scudder fails to deconstruct the problem of landlessness in his case studies; yet, the argumentation above shows that it may underlie the loss of economic, but also social and cultural capitals, explaining its effects on jobs, food security, and access to common property resources among others. Besides explicitly relating to ecological (existence) scarcity, landlessness in these cases may also relate to capability, spatial power, and locational scarcities according to how the affected people socially constructed or expressed it. Other cases such as the Son La Dam mentioned above also show that the displaced ethnic groups continue to face problems of land access even after receiving land compensation (Dao 2010, 332, 335; Nguyen et al. 2017, 12). This may be due to their loss of other vital capitals such as social, cultural or even the lack of outright ownership of the compensated land, which inhibit their achievement of varied habitus or land values. Thus, they may also be experiencing various forms of 'land scarcity'. Records of dire livelihood outcomes in the case of the Nam Theun 2 Dam are also said to be associated with inaccess to common resources and a

general scarcity of resources at the resettlement sites to accommodate the natural demographic growth (International Rivers n.d.). Retrospectively, the underlying factors in this case undermine economic, social, and cultural capitals, and hence engender all forms of 'land scarcity' to the affected people. To be sure, all these problems are recurrent in many findings. Thus, Dao aptly observes that "land compensation usually fails to restore its land basis" (2010, 326). Scudder also concludes that the frequency of these impacts is "a condemnation of the nature of resettlement outcomes" (2005, 70).

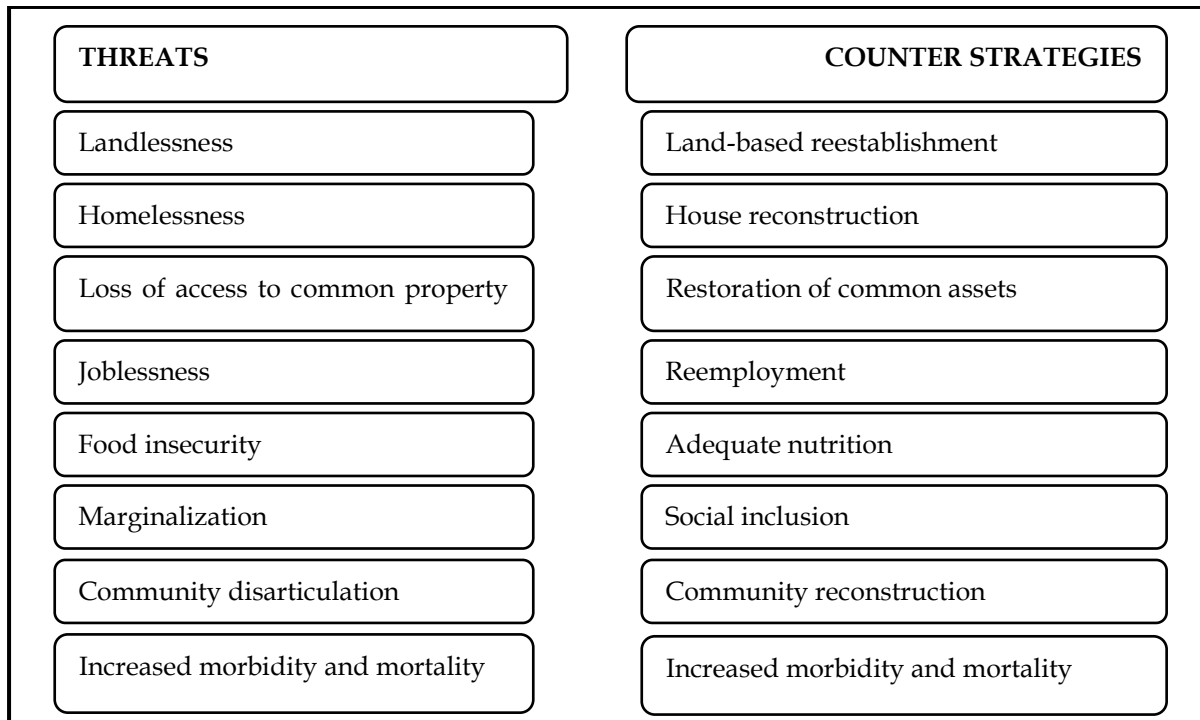
To this end, the impact of the WCD (and other policies) has been questioned (Moore et al. 2010, 9–10). It is worthy to note that these policies are not legally binding on any implementing country (Stanley 2004, n/a). As Terminski underlines, member countries have the autonomy to determine their development paths and hence, are responsible for addressing their respective development-induced displacement and resettlement (2015, n/a). Therefore, while the resettlement scheme of the Rusumo Falls, referred to earlier, was for instance financed by multi-national lenders, international policies were subordinated to the respective national legislations (The World Bank 2013, i). Today, many countries have established resettlement policy guidelines; yet, in some cases, implementation is being constrained by the increasing involvement of transnational corporations and private capital (Moore et al. 2010, 3; Oliver-Smith 2001, n/a; Terminski 2015, n/a). Moore et al. note that external financiers like China, which is operating in many countries, have frequently imposed different approaches to safeguards and oversights (2010, 3), putting the mitigation of DID consequences into question. Given all these undercurrents, many attribute the abysmal outcomes of DID to poor policy frameworks, planning, and implementation. However, a growing body of literature is also shedding light on certain inherent factors of resettlement that are generally not amenable to rational planning and implementation, but have profound implications on outcomes. Respectively, De Wet conceptualizes these two positions as the "inadequate inputs" and "inherent complexities" approaches (2004, 51). The next subsection deconstructs the factors underlying the failure of resettlement schemes in general to advance the problematization of large dams with respect to 'land scarcity'.

2.4.2.2 Conceptualizing the general failure of DID and land-based resettlement strategies

The 'inadequate inputs' approach: Existing literatures that fall within this category argue that the poor outcomes of resettlement programs are attributable to poor inputs such as national legislations and policies, political will, funding, pre-resettlement surveys, planning, consultation, implementation, and monitoring (de Wet 2004, 52). Key to this perception is Cernea's IRR model and its problem resolution function (1997, 1576). Primarily, Cernea argues that the displacement risks provide a matrix, which as shown in Figure 2.2 on the next page, is directly convertible into planning provisions and substantive activities. Based on this, Cernea maintains that the general risk patterns inherent in displacement "can be controlled through a policy response that mandates and finances integrated problem resolution" (2000, 34). On land, Cernea acknowledges that as displaced people are mainly agrarian, its provision is central to reconstructing their "productive potential" (1988, 80:24). However, while he notes that population density could limit land availability and constrain allocation efforts, he particularly emphasizes that in most cases some policy

factors cause land scarcity (ibid). These include poor planning, lack of efforts to identify land reserves, lack of political will to use State authority to provide land, and a lack of imagination to design proper solutions.

Figure 2.2: Cernea's IRR Model



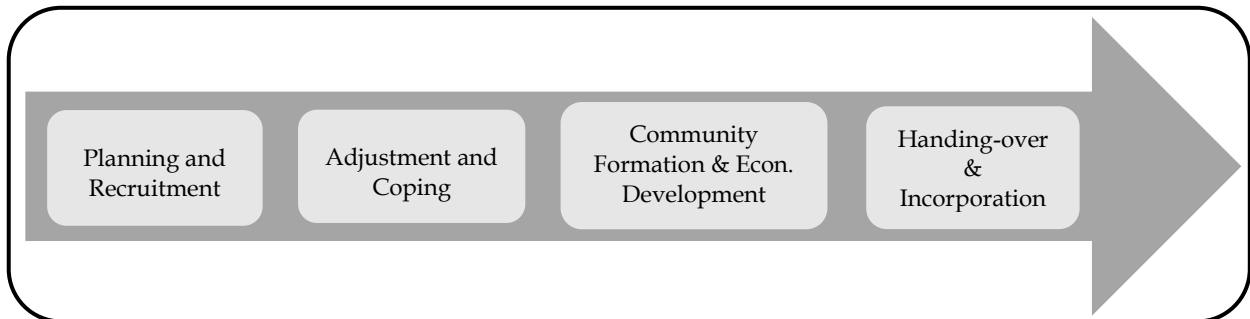
Source: Reproduced by author based on Cernea 1997 (2019)

To be sure, some studies support this conclusion. For instance Shoemaker et al. find that the villagers around the Nam Theun 2 Dam mostly complained that the compensation had “not come close to making up for the livelihood losses they have suffered” (2014), directly reproaching the resettlement program. Thus, largely, the IRR model is influential in DIR discourses; yet, it has also received some criticisms. De Wet for instance finds its primary supposition too optimistic in tenor as it disregards factors that may not be amenable to policy designs (2004, 52). Koenig also groups Cernea’s risks into economic (land, jobs, and common property), socio-cultural (marginalization and community disarticulation), and social welfare (housing, food security and health) and argues that the approach largely focuses on the economic aspects, neglecting the others, which invariably underline the power and capabilities of the affected people to reconstruct their livelihoods (2001, 16–17). In fact, Cernea himself admits that the success of reconstruction is also hinged on the initiative and participation of the displaced as well as their perception of and response to the risks (2000, 19, 34). Thus, his neglect of their agency makes the approach incomplete to explain the poor outcomes of DIR.

To fill this gap, Scudder has attempted to integrate the IRR model with the *Scudder-Colson Four-Stage Model*, which was primarily developed to predict the behavior of resettlers under the provision of sufficient opportunities towards a successful resettlement (2005, 32, 47). Success, according to Scudder, is achieved when development is environmentally, economically, institutionally, and culturally sustainable (ibid). As

Figure 2.3 below shows, the model thus encompasses four stages of resettlement. Stage 1 involves planning for displacement, rehabilitation, and development. Stage 2 is the period when physical removal takes place and the resettled people adopt multiple strategies to adjust and cope with their new social, economic, and institutional environments. During this period, many of them are risk-averse and the general living standards tend to decrease. Stage 3 occurs in a minority of cases and is when the resettled people take risks to rebuild their economic and social lives. Stage 4 involves a handing over of institutional responsibility and assets by the resettlement project authorities to the resettled people and other public agencies. It is also the stage when the resettled are incorporated into the wider regional context and when the second generation of resettled people takes over from the first generation. Thus, it deals with power relations between generations and the relationship between the resettled communities and the larger political-economic structure (Koenig 2001, 17).

Figure 2.3: Scudder-Colson Four-Stage Model



Source: Adapted from Sapkota et al. (2017, 2)

Scudder argues that the use of stages simplifies the complicated and dynamic resettlement process by breaking them into a series of critical time periods during which the resettled people and the planners predictably address the corresponding issues (2005, 33). The research conjectures that the four stages could respectively be associated with certain risks as conceptualized in the IRR model. Stage 1 for instance could be associated with joblessness given that some people may be discouraged from investing in productive activities due to the expectation of the project and their displacement (Cernea 1988, 80:20; WCD 2000a, 99). Stages 2 to 4 could also be associated with all the risks. Some may argue that resettlement (Stage 2) reduces risks like homelessness. However, the results of this research will show that due to factors such as land-use regulations, many young adults who do not benefit from the initial residential allocations may experience homelessness and hence ‘land scarcity’ in later years. Others may yet argue that the ubiquity of landlessness in rural productive activities wanes over time due to the inadequacy of land and people’s tendency to diverge to other fields of livelihoods. To this, it is important to draw attention to the critical role of land in residential and commercial sectors among others besides agriculture. Thus, it follows that in all cases, the demand for land increases with population and income growth.

Although the Scudder-Colson model explicitly shows that resettled people play a key role in the outcomes of resettlement, it shares some similarities with the IRR model. Firstly, the model focuses on economic reconstruction with little attention to cultural reconstruction (Scudder 2005, 54). Scudder also agrees with

Cernea that success is largely dependent on planning, implementation and the opportunities offered to the affected population (2005, 47). In fact, he underlines that his study of fifty dams shows that “government policies and the activities of project authorities have been the main factors constraining a successful resettlement process” (2005, 32). Given these similarities, Scudder finds the IRR and Scudder-Colson models complementary, with the potential to mutually offset their respective failures (2005, 47). However, irrespective of its focus on affected people, Koenig criticizes the Scudder-Colson model for being “insufficiently comprehensive” (2001, 10). Other criticisms have been levelled against its generalization of the behavior of resettled people without regards for social differences (Scudder 2005, 41). Acknowledging its exclusion of political and cultural factors, Scudder calls for certain factors to be integrated into the model to deepen understanding of the outcomes of involuntary resettlement (2005, 31, 48). These are, unexpected events, resettlement complexity, wider political economy and institutional contexts within which involuntary resettlement occurs, the political dimensions of involuntary resettlement, gender issues, human rights, and cultural dimensions, such as symbolisms of space and time (ibid). He also proposes other dimensions of social differentiation such as age and status. Fundamentally, all these embody de Wet’s submission on the “inherent complexity approach” to explaining the outcomes of involuntary resettlement (2004, 54).

The ‘inherent complexity’ approach: Regarding his submission on the inherent complexity approach, De Wet argues that involuntary resettlement is characterized by a complexity that results in a range of problems more difficult to deal with than merely providing inputs (2004, 52). Like Scudder and Cernea, he acknowledges that involuntary resettlement is a problematic institutional process, because it is usually implemented by staff with poor capacities and resources and under conditions of conflicting goals between the State and the affected people (2004, 57 & 60). However, he extends the argumentation beyond these technical and institutional explanations by emphasizing that involuntary resettlement has certain inherent complex characteristics that give rise to developments that are not always amenable to rational planning and procedure (ibid). Referring to Bourdieu’s concepts of field (logic), habitus, and capital, the following paragraphs explain these characteristics with examples and their implications for ‘land scarcity’.

Imposed spatial change: de Wet explains that as involuntary resettlement involves moving people from one area to another, it has “cultural, social, political and economic implications” for the affected people (2004, 55). The previous sections have shown that the importance of land transcends economic purposes and includes social and cultural purposes, which underpin lifestyles and identities and hence habitus. Thus, an involuntary transfer of people from their primary lands to another engenders not only economic risks, but also social and cultural risks, because it entails positional and relational rearrangement of the physical and social characteristics of space. In this regard, resettlement may turn a place from rural to urban and change the proximity of neighbors and of people to vital resources such as forests and rivers. Writing about the Bo Hon villages affected by Vietnam’s Binh Dien Dam, Nguyen et al. conclude that their social capital has been severely affected by their alienation from the primary environment and common resources, impeding their achievement of a comprehensive livelihood improvement (2017, 11). From this, the research deduces that, although resettlement may compensate for the physical land that is lost, it may

not replace the sentimental value of land and may separate people from relatable resources that underpin their peoplehood and livelihoods. To indigenous people and ethnic minorities, these are an affront to their cultural, social, and economic capitals, which in profound ways enhance their achievement of idiosyncratic and covariant *habitus* or land values. Thus, an imposed spatial change debilitates their efforts to adjust to the new environments and pursue known social practices, which may lead to 'land scarcity'.

Changes in patterns of access to resources: de Wet observes that due to the imposed spatial change, resettlement invariably changes patterns of access to resources (2004, 55). Studies show that resettlement processes usually neglect the preferences of displaced people in site selection (Moore et al. 2010, 4; WCD 2000a, 107). Thus, displaced people usually end up on undesirable lands that are less arable and insufficient, but also rapidly lose their capacity to support them (*ibid*). At the outset, this leads to locational scarcity as it frustrates people's desire for certain locational properties. It also engenders capability scarcity because of the poor quality and quantity of the allocated land, which underlies deficiencies in the stake. This may sabotage certain social practices (such as farming), leading to poor yields. Underscoring the poor quality of compensated land, the WCD refers to the Liu-Yan-Ba project in China, which relocated 40,000 people from "fertile valleys" to "windswept uplands" that were infertile and prone to erosion (2000, 107). Dao also observes that the average landholding of especially farmers always fall after resettlement (2010, 326). Ultimately, a deficiency of land affects the continuity of specific subfields or the entire field of land access due to its subversion of capital accumulation. Thus, regarding the Liu-Yan-Ba project, the WCD finds that the people had to abandon the farmlands altogether (*ibid*), implying a disruption or discontinuity of farming. Also, resettlement often overlooks downstream communities and embedded secondary rights, which are typical of customary tenure systems (Koenig 2001, 11; Lund et al. 2006, 19). Hence, it deprives them of certain economic capitals, entrenching capability and ecological scarcities.

Moreover, Scudder finds that land allocations merely redress short-term and discernible consequences, excluding obscure and unquantifiable losses such as social and symbolic attachments (2005, 54). Downing also acknowledges that although "'social costs' and 'social impacts' of displacement are mentioned again and again" in policy guidelines, there is a dearth of clear explanation as to what social even implies (1996, 34). These observations explicitly support the explanations of the previous point as they underline the fact that land compensation fails to replace social and cultural losses associated with land. These losses encompass specific features that underpin place attachment. Therefore, resettlement, which is invariably a replacement of physical land, reduces the value of land to economic capital. This dissipates the social and cultural relations to land that underlie certain *habitus* (land values). In this regard, the loss may outrightly underlie environmental scarcity. However, its knock-on effects on people's identity and the transmission of culture among other things also subvert social and cultural (embodied) capitals, which obstructs the social practices that require these. In the end, it engenders other types of 'land scarcity'. Besides this, de Wet observes that resettlement programs, such as agricultural programs, may also lead to new land use patterns (2004, 55), which affect the existing logic of the field with implications for the achievement of existing *habitus* or land values. This may also be the case for communities that host the displaced people.

Larger and more heterogeneous settlements: Involuntarily resettled people usually end up in settlements that are larger and more ethnically diverse than their old ones. Dams and their complementary infrastructure also attract in-migration to the resettlement areas (Cotula 2013, n/a). Thus, the communities that host the displaced become doubly affected by the resettlement and in-migration. According to de Wet, these demographic changes lead to competition over resources, for which access has already been diminished and altered (2004, 55). This ignites tensions and conflicts, which disintegrate communities and severely affect social capital. As social capital underpins the accumulation of certain capitals like embodied cultural capital, this effect inhibits people from acquiring relevant capitals to advance their planned social practices. Besides this, population growth has adverse impacts on land availability as it unbalances demand and supply. Thus, it leads to locational and ecological scarcities. However, the constraints on land also affect people's economic capital and their ability to achieve the use value of land for instance, or protect the liminal functions of their land from encroachment. This inability may thus engender capability and spatial power scarcities respectively.

Wider structures: De Wet argues that involuntary resettlement puts people in wider administrative, political and economic structures (2004, 56). This is particularly true for dams, which in various ways, usher the affected communities into certain administrative oversights. Dam projects also have administrative authorities, which oversee them and the affected communities. Depending on the financier, resettled communities could be placed under the influence of the lending or donor institution. Resettled communities could also become part of another regional or municipal administration. Even when the communities are relocated within their original municipalities, the events surrounding their displacement and resettlement put them 'in the spotlight', which could further incorporate them into the administrative oversight of the municipal authorities. Moreover, resettlement may attract aid and assistance from civil society organizations, which could put the resettled people under their control (de Wet 2004, 64–65). Given these, Robert Chambers describes resettlement as a movement of people and an element of planning and control (Terminski 2013, 13–14).

On the whole, the incorporation of resettlement communities into wider political and administrative structures involves an imposition of governance structures (Dalby 2016, 43–44; de Wet 2004, 56). This establishes the symbolic power of the administrative authorities over local institutions and the enforcement of new logics in relevant fields, including land access. As previously mentioned, resettlement usually includes agricultural programs, which establish new logics and define new land use patterns. Thus, access to land could become bureaucratic and farmlands could for instance become restricted buffer zones. Due to this, the imposition of new structures often affects existing social practices, leading to 'land scarcity'. Hence, Koenig observes that, "resettled people are typically not simply poor in terms of resources, but also in terms of political power in their own societies" (2001, 4).

Accelerated socio-economic change: Besides the administrative and demographic changes, resettlement increases the speed at which the affected people become involved with, and depend on their "wider political and economic" environments (de Wet 2004, 56). As Cotula relates, development projects and their complementary infrastructure induce spill-over effects through wages from formal employment,

integration into world markets, and pressure from non-agricultural land uses among others, which enhances agricultural potentials in rural areas but also exerts pressure on land even in areas of abundance (2013, n/a). De Wet also adds that the constraints on land could reorient the livelihood strategies of particularly agrarian folks to “cash sources of income”, with implications on their rural economy (2004, 56). To be sure, the acceleration of the social and political economy of resettlement areas may boost the accumulation of economic capital, which could facilitate the achievement of *habitus* such as the territorial, use, and exchange values of land. Yet as implied by Cotula, it may also lead to ecological and locational scarcities from demand and trigger conflicts among people. Suffice it to say that when this happens, it is usually “unlikely that parcels of fertile lands” will be “lying vacant in the surrounding areas awaiting distribution” (Wilmsen et al. 2011, 12). In the end, the conflicts fragment social capital with further implications for *habitus* and the transmission of certain cultural capitals like skills and social norms.

Based on these, de Wet concludes that resettlement outcomes depend on inherent complexities besides institutional efficiency (2004, 57, 60, 62, 66). The World Bank, whose views have long aligned with the inadequate input approach even supports this conclusion. Primarily, it acknowledges that resettlement outcomes have been unsatisfactory because among other things, some adverse impacts such as socio-cultural impacts are covert, and become too late for mitigation when they are eventually identified (2004a, xxv). Additionally, new projects produce unanticipated problems, which make existing resettlement plans too obsolete to be responsive and generate the requisite behavioral responses that facilitate success (*ibid.*). To this end, de Wet calls for an open-ended, systematic and flexible approach to resettlement rather than a strict adherence to technical frameworks as promoted by the inadequate input approach (2004, 66). Retrospectively, the inherent complexities approach expedites analyses of resettlement outcomes to overstep the risks associated with only displacement and incorporate those posed by resettlement. On this, de Wet accedes to the impoverishment risks conceptualized by Cernea, emphasizing that they could be generated by the complexities at different levels of comprehensiveness and incorporation including the individual/household, community, resettlement, institutional, national, and international levels (2004, 57, 62). Relevant to this study are the individual/household and community levels, which de Wet associates with all the impoverishment risks (2004, 62–63). Ultimately, the inherent complexities approach supplements the inadequate inputs approach and together, they expedite the explanation of the outcomes of DIR and land-based resettlement strategies.

2.4.2.3 Summary and implications for analyzing the research findings

This section has described the general implications of large dams for ‘land scarcity’. It has shown that while ‘land scarcity’ could occur among agents in their day-to-day activities, the construction of large dams and the consequent displacement and resettlement are intrusions that engender profound setbacks to the achievement of their *habitus* or land values. Indisputably, displacement engenders ‘land scarcity’. However, of interest is resettlement, which though a reconstructive strategy, also engenders ‘land scarcity’ to people who experience physical and economic displacements. In both cases, the State or its responsible public authority – as the financier or overseer of the project – becomes an active agent, which following

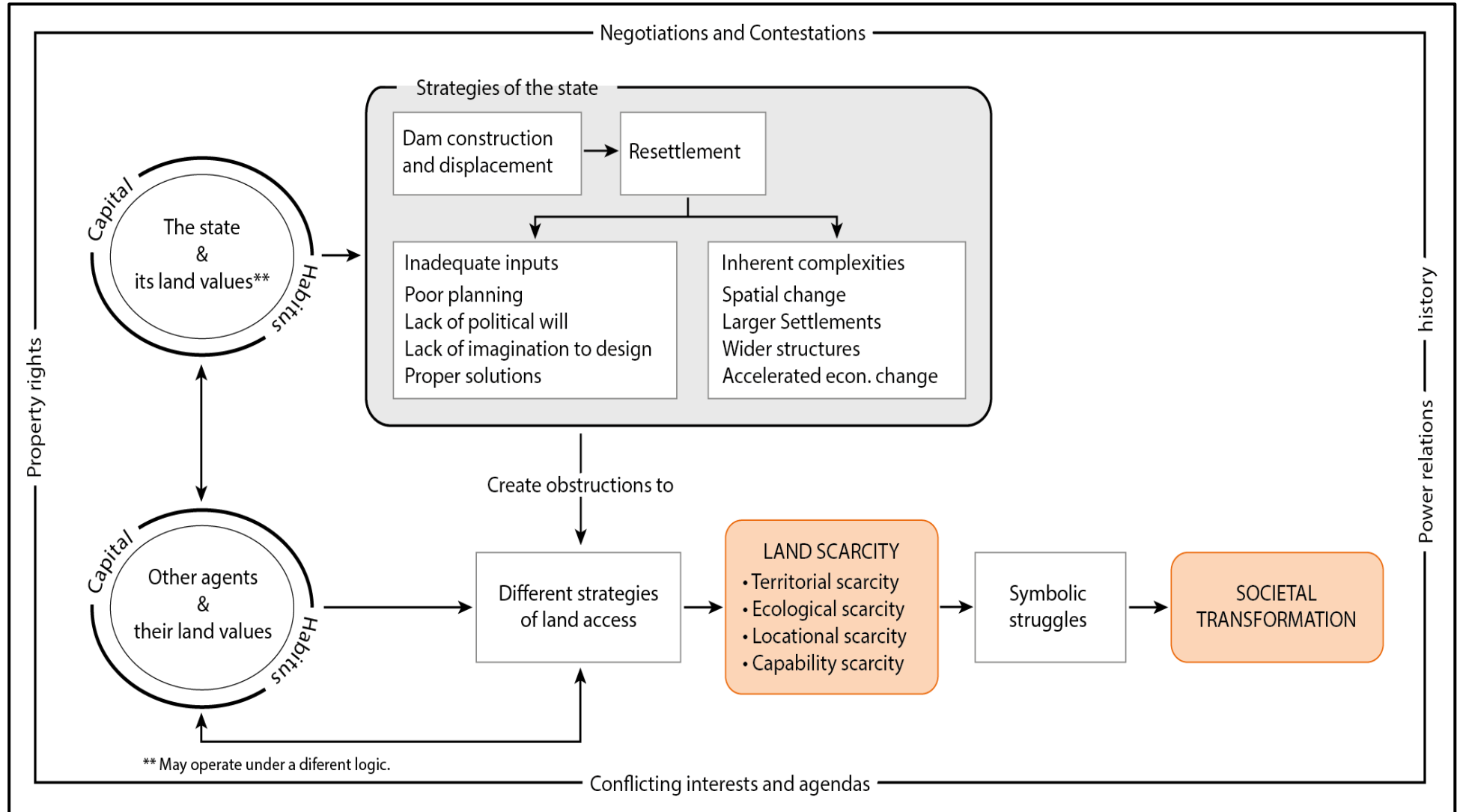
McDonough (2006, 630), may be socialized in their own habitus such as the territorial and use values of land. At the disposal of the State or the relevant public authority is a set of capitals (economic, social, and cultural), which may give it symbolic power in the field. Depending on the situation, it could operate under a similar logic as the pre-existing agents or a different one, in which case, its symbolic power would underlie the dominance of its imposed logic in the field. Relevantly, the dam construction is its social practice by which it endeavors to achieve its habitus in the field. By this, the State or the responsible public authority pitches itself against the other agents of the field. However, given its symbolic power, its social practice tends to override the other agents' social practices, resulting in acts of physical violence including displacement and resettlement. These in turn obstruct the agents' social practices and their achievement of the respective habitus or land values. Invariably, this leads them to socially construct various forms of 'land scarcity' according to their habitus. Considering that the agents' social practices feed back into the field's frames of action, their experiences of 'land scarcity' may impair the accumulation of capital and consequently, their ability to maintain or advance their social positions in the field. Impliedly, they may further entrench their subjugation in the field.

However, Bourdieu conjectures that in a field, the inclination of powerful agents to influence the logic incites contestations from subjugated agents, because of an inherent disposition of resistance (1990b, 134; 1992, 81, 103). To be sure, struggles over knowledge – that is conceptions and representations of the social world – and recognition – that is capital, social positions, and social practices – regularly transpire among existing agents even without external intrusion (Bourdieu 1990b, 134; 2000, 187). Thus, rather than being passive subjects, the subjugated agents of an externally appropriated field may also resist dominant ones, particularly when their actions frustrate pre-existing expectations. To this end, Bourdieu conceptualizes “symbolic struggles” to capulate such resistances, emphasizing that they could be objective or subjective (ibid). According to him, objective symbolic struggles encompass individual or collective social practices that are meant to emphasize certain realities by imposing as legitimate the principles most favorable to their own social being (ibid). In this regard, groups may undertake demonstrations, while individuals may adopt certain social practices designed to manipulate their self-image or social position (ibid). Concerning the latter, people may for instance change their arable farming social practices from subsistence to commercial to boost their economic capital and social positions. Subjective symbolic struggles on the other hand represent attempts by individual agents to change their categories of perception and evaluation of the field to persevere in it. Thus, they may include individual changes to social constructions of land and habitus (land values) among others. Regarding this, people from indigenous societies may for instance shift from cosmological to economic appreciations of land due to the developments.

Banally, symbolic struggles also involve tensions and conflicts due to the inherent differences among agents. Considering that they are resistances to opposing knowledge of the social world and recognition, they ultimately influence the frames of action of the field (habitus, capital, and the logic) and may transform them (Bourdieu 1990b, 134). Following dominant discourses, the research characterizes such transformations as 'societal transformations', which Kollmorgen aptly defines as radical long-term formation of new frames of action (2010, 3). To be sure, relevant studies on dams (see: Oliver-Smith 2001,

n/a) and land access (see: Ribot and Peluso 2003, 160) respectively show that profound changes in rural economies and resource scarcity lead to institutional, economic, environmental and social transformations. Proffering the concept of “new frontiers of land control” to describe such areas of profound transformation, Peluso and Lund rightly identify them as sites where a major land grab “marks the beginning of a process of gaining (or grabbing) access” by multiple agents (2011, 667–69). This leads to “new enclosures, property regimes, and territorializations” that challenge the “authorities, sovereignties, rights, and hegemonies of the recent past” (ibid). Consequently, they may produce “new ‘urban-agrarian-natured’ environments, which comprise of new labor and production processes; new actors, subjects, and networks connecting them;” and new legal, violent, and practical means for “possessing, expropriating, or challenging previous land controls” (ibid). Thus, besides transforming the existing frames of action, symbolic struggles also have implications for subsequent social constructions of ‘land access’ and ‘land scarcity’. Based on the foregoing and with reference to Figure 2.1 on page 38, Figure 2.4 on the next page summarizes the theoretical framework by showing the manner in which large dam engender ‘land scarcity’ and trigger symbolic struggles and societal transformation.

Figure 2.4: Large dams, 'land scarcity', and societal transformation



Source: Author's construct (2020)

2.5 Research questions

Based on the foregoing, the overarching research question is: *'To what extent has the Bui Dam engendered 'land scarcity' in its immediate communities and how and with which demarcations is this process causing societal transformation?'* The research seeks to answer the following sub-questions as a yardstick to addressing the question above:

- a. How does the current system of land access contrast with the system(s) before the Bui Dam was constructed?
 - i. What were the land tenure systems before the construction of the Bui Dam?
 - ii. What are the recent land tenure systems?
 - iii. What were the qualities of land before the construction of the Bui Dam?
 - iv. What are the recent qualities of land?

- b. Which dynamics have occurred in power relations regarding land access?
 - i. Who were the key agents involved in land access before the construction of the Bui Dam?
 - ii. Who are the key agents recently involved in land access?
 - iii. What were the power relations among the agents before the construction of the Bui Dam?
 - iv. What are the recent power relations among the agents?
 - v. What are the shifts in the legitimization of power?

- c. What are the shifts in the strategies of land access between the past and the present?
 - i. What were the strategies of land access before the construction of the Bui Dam?
 - ii. What are the recent strategies of land access?
 - iii. What driving forces underlie the dynamics between past and present strategies of access?

- d. How do the dynamics influence the agents' interpretations of land access?
 - i. How did the agents interpret land access before the dam construction?
 - ii. How do the agents interpret their recent land access?
 - iii. What accounts for the changes between the past and present?

- e. How are the above complexities transforming existing frames of action and livelihood constellations?
 - i. How are the agents responding to the changes in land access?
 - ii. What have been the outcomes of these responses on existing frames of action?

2.6 Summary of the chapter

The current chapter has developed the theoretical framework of the research. To launch the conception, it firstly capitalized on emerging discourses to submit an alternative idea of land scarcity. In this regard, it inferred from Davy to argue that rather than a mere physical lack or unavailability of land, land scarcity is a polyrational social construction, which results from people's inability to achieve their conceived land values or expected benefits from land. Its antithesis, 'land access', then embodies the realization of set land values. Against this background, the chapter has shown that social constructions of 'land scarcity' may arise even when land is physically available due to power relations, deficiencies in mechanisms of access, and obstructions to strategies of access. With recourse to Bourdieu's *Theory of Practice*, the chapter has further developed the framework underlying social constructions of 'land scarcity' in a given context. Hereof, it used the constitutive concepts of 'habitus', 'capital', 'space', and 'social practice' to deconstruct the identified subtleties that underlie 'land scarcity'. Specifically, the chapter has associated the concept of habitus to the conception of land values because they both embody manners of being, seeing, and thinking or a schema of perception (social construction). It has also associated the concept of capital (economic, cultural, and social) to mechanisms of land access that underlie social positions and power relations among agents. Of equal importance is the adoption of the related concept of 'symbolic capital' to explain how agents may gain recognition to advance their endeavors in the field.

Moreover, the chapter has built on Bourdieu's concept of space by focusing on the concomitant concepts of 'social fields', 'physical space', 'appropriated social space', and 'arena' to explain the ordering of social domains. Particularly, it has capitalized on the concept of social fields to conceptualize 'the field of land access' as a domain constituted by agents with objective power relations based on the distribution of capitals. Further adopting the idea of 'stake', the chapter has explained the centrality of certain capitals such as land to the endeavors of the agents of a given field. Additionally, it has linked the idea of a field's 'logic' to land tenure systems by arguing that they structure the values of the stake and the capitals requisite for pursuing conceived land values or habitus. To crown the discussion, the chapter has also associated Bourdieu's concept of social practice to strategies of land access, showing that the frames of action (habitus, capital, and logic) influence the courses of action of agents towards achieving their habitus or conceived land values. In this regard, the chapter has inferred from Bourdieu to theorize that the agents' achievement or inability to achieve their habitus respectively result in social constructions of 'land access' and 'land scarcity'. As their achievement or lack thereof culminate in the acquisition of capitals, they also influence the agents' social positions and power relations in the field and hence, their successive habitus. By this, the chapter has ultimately justified that the agents of a given field are not permanently anchored to social positions and schemes but may maintain, improve, or diminish their statuses with implications for their future expectations.

Subsequent to deconstructing the incidence of 'land scarcity', the chapter has turned to the main focus of the research, which is problematizing large dam construction in respect of 'land scarcity'. For this, it has engaged in an exposition of literature to show the environmental and social costs of large dams and their implications for 'land scarcity' as understood and applied in the research. By underlining displacement –

either physical or economic – as the primary social cost of large dams, the chapter has subsequently referred to Cernea’s acclaimed *Impoverishment Risk and Reconstruction (IRR) Model* to explain its implications for ‘land scarcity’. Relevantly, it has built on the associated impoverishment risks of landlessness, homelessness, loss of common resources, and marginalization among others, to show how large dams engender ‘land scarcity’ in host communities. Retrospect of the rampant resettlement programs that have for long been implemented in dam projects, the chapter has shown how measures such as land-for-land strategies have also contributed to ‘land scarcity’. Consequently, it has elaborated on de Wet’s ‘inadequate inputs’ and ‘inherent complexities’ approaches as complementary explanations of the failures of resettlement programs.

Based on these, the chapter has turned back to Bourdieu’s *Theory of Practice* to underscore the fervency with which agents respond to experiences of ‘land scarcity’. In this regard, it has adopted his concept of ‘symbolic struggles’ as reference for describing such responses. Given that symbolic struggles influence the frames of action of the field, the chapter has concluded by hypothesizing that they lead to societal transformation. From these, it has outlined the overarching research question and sub-questions, which may decidedly deepen knowledge on how Ghana’s Bui Dam has engendered ‘land scarcity’ in the focal communities. Principally, the assessment of the quality of social science research depends not only on the findings but also on how the research questions were operationalized. To this end, the next chapter details the general methodology of the research. This includes the personal experiences underlying the research idea, the adopted research paradigm, approach, and instruments.

CHAPTER 3: THE RESEARCH PROCESS

3.1 Introduction: Self-reflexivity and methodological foundations

In his Nobel Prize Lecture, Gunnar Myrdal observes that at any time and on every issue, knowledge, but also ignorance “tends to be opportunistically conditioned” such that they are “brought to deviate from full truth” (1975). Basically, this observation underlies the idea of reflexivity in research, which questions the role of a researcher’s positionality and subjective values and meanings, and the research area’s wider political context in framing the research (King et al. 2019, 174). Contrary to being problematic, reflexivity encourages an exposition of these ‘hidden’ opportunistic tendencies and political contexts as a resource whose development can enhance and intensify social research (ibid). Thus, the research acknowledges that an initial reflection on its idiosyncratic tendencies and positionality will explain its foundational idea and the questions addressed thereof. This will effectively unmask the personal disposition that underlies the research paradigm and approach, and the instruments employed for data collection, analysis, and presentation.

This research idea originated from personal and professional experiences of land expropriation and ‘land scarcity’ in Ghana, which is the researcher’s home country. Her personal experience relates to the expropriation of farmlands – including her mother’s – in her village, Fiapre, in 1998 for the construction of the Catholic University without compensation. Being a farming community with mainly customary tenure systems, the consequent physical and economic displacement of farmers and traditional heads among others, ignited a violent conflict, which would later provoke the State to impose a strict curfew on the village (see: Tsikata and Seini 2004, 26). During this time, news about the village preferring cassava farms to a university spread. Therefore, the researcher recalls being shamed by her classmates in junior high school in Sunyani, the capital, for being a ‘villager’ who lacks the foresight for making sound choices. In their defense, she frequently related the complaints of her family members about their limited access to land. However, as a child, she never really put much meaning into how distinct their complaints were until she decided to pursue the current research.

Besides this personal experience, the researcher’s previous work as a Community Development Officer at Newmont Ghana Gold Limited (NGGL) in 2007/2008 also shaped the research idea. At the time, she witnessed the expropriation of land in the catchment communities of Kenyasi Nos. 1 and 2 and Ntotroso among others, where access to land was largely based on customary tenure systems. Here, she again registered the profound and differentiated accounts of the affected people regarding the implications of the land expropriation. Consequently, for her master’s degree between 2010 and 2011, she compared the manner in which the legal and policy frameworks of Ghana and Chile secured the land tenure of indigenous peoples. Of significance to this account, she found that customary law is highly recognized in Ghana’s legal and policy frameworks. Article 11 of its Constitution actually describes it as “the rules of law which by custom are applicable to particular communities in Ghana” (1992). Despite this, Article 257 of the Constitution grants the State power over certain resources including minerals and water bodies, which overrides all claims (1992). Article 20 further grants the State the power of eminent domain for public

purposes and to determine the value of compensation payable to the victims (ibid). Thus, in her work, the researcher concluded that indigenous people are at risk of experiencing varied degrees of tenure insecurity despite the legislative recognition. To be sure, Oliver-Smith argues that although displacement, which ensues from expropriation, does not only affect the most disadvantaged of society such as indigenous peoples, it is also hardly the case that the privileged or powerful are asked to abandon their homes and communities for public purposes (2001, n/a). For the latter, their political power, the high market value of their lands, and accompanying statutory land titles enable them to resist displacement and negotiate for adequate compensation when displacement becomes inevitable (Koenig 2001, 16; Oliver-Smith 2001, n/a). Hence, Oliver-Smith concludes that resettlement, which is the ultimate outcome of being displaced “is one of the most acute expressions of powerlessness because it constitutes a loss of control over one's physical space” (2001, n/a).

With these experiences, the researcher began to question the broader implications of land expropriation and how literature commonly presents its effects on local populations. Following the opportunity to pursue a dam-related topic for her doctoral degree, she found many literatures that mentioned the prevalence of ‘land scarcity’ around dams despite land compensation, without specifying the intricate meanings of the problem to the varied categories of affected people. She also found an inherent failure in the relevant resettlement policy frameworks to rectify this oversight as they all generalize the need for land compensation without emphasizing the need for tailored responses. Thus, she surmised that the prevalence of the problem is attributable to a general lack of understanding of what land and ‘land scarcity’ means to different people. Given this background, the current research’s primary ontology (the philosophical assumptions about the nature of reality) of land and ‘land scarcity’ encompassed the varied social constructions of people rather than a universal explanation. To this end, her initial objective was to explore and provide deeper insights into the intricacies of ‘land scarcity’ around large dams by using the Bui Dam as an empirical case. For this purpose, Davy’s article on *‘Land Values as the Social Construction of Scarcity’* (2016) became instrumental in advancing this primary ontology as it underlines the roles of subjective land values and objective land tenure systems and power relations in structuring polyrational ‘land scarcity’ in time and space. Based on the findings of the preliminary fieldwork and fruitful discussions with her doctoral supervisor, the researcher extended the objective to emphasize the societal transformations that were inadvertently occurring in the study area due to people’s strategic responses to the problem. Against these backgrounds, she employed Bourdieu’s *Theory of Practice* as an analytical framework to deconstruct the factors underlying ‘land scarcity’ and societal transformation, which paved the way for a comprehensive problematization of large dams in respect of ‘land scarcity’.

Given its objectives, the research may be characterized as applied and explanatory. This is because it seeks to provide a foundation for responsive measures to future risks through deeper insights into the intricacies of the incidence of ‘land scarcity’ and its implications. Accordingly, the underlying ontology of ‘land scarcity’, which encompasses not only subjective, but also objective factors leans towards the paradigm of critical realism. Thus, the next section presents an overview of the paradigm and justifies its application to the research by detailing its ontology and epistemology. The subsequent section describes the research’s

methodological approach and instruments. Further, another section presents the research's generalizability and recounts the ethical considerations of the process. The chapter then closes by detailing the limitations and delimitations of the research to define its contextual boundedness.

3.2 Pursuing critical realism as an encapsulating research paradigm

A research paradigm is primarily, "the conceptual lens" through which a researcher looks at the world" (Kivunja and Kuyini 2017, 26). It is "the basic belief system or worldview that guides" a researcher to examine "the methodological aspects of their research" and to choose appropriate methods for data collection and analysis to avoid methodological disarray (Guba and Lincoln 1994, 105; Kivunja and Kuyini 2017, 26). Therefore, a paradigm expresses a researcher's own philosophical orientation, but also dictates the object of study, the manner in which it should be studied, and the meanings and interpretations that may be attached to the emerging data (Kivunja and Kuyini 2017, 26). Given this, critical realism (CR) befits this research due to its holistic ontology and etiology, and its specific epistemology.

Originating from Roy Bhaskar, CR transcends positivism and interpretivism, which have long dominated social science research (Archer et al. 1998, ix, xi; Gorski 2013, 664–65). Respectively, the bases of the ontologies of positivism and interpretivism are observed events (and structures) and human agency (the conceptualization of reality by social actors) (Bhaskar 1979, 21–23; Bourdieu and Wacquant 1992, 15; Fleetwood 2014, 194). Positivism requires the acquisition of scientific knowledge through the observation of events or the explicit behavior of people based on a covering law or theory, which enables prediction and testing to falsify or uncover an objective truth (Fleetwood 2014, 184, 194; Gorski 2013, 661). Thus, besides being a presupposition and generally subordinated to epistemology (Fleetwood 2014, 184, 194; Gorski 2013, 661), the research considers the ontology of positivism trivial for its objective. Conversely, interpretivism advances the idea that knowledge about social life should only be gained by studying the behavior of people from the inside via their "thoughts, beliefs, intentions, and interpretations" about their social world (ibid). Sprouting out of it are social constructivism and social constructionism, which also define a worldview to research based on people's subjective meanings, respectively reducing reality to cognitive processes and discourse or social interchange (Gorski 2013, 661–62; Sommers-Flanagan and Sommers-Flanagan 2012, 279, 281). Like CR, ontology is foundational to interpretivism and constructivism/ constructionism (Fleetwood 2014, 186; Gorski 2013, 662). Yet, they fail to recognize the existence of independent entities that may be the object of people's meanings and interpretations. Thus, while they are probable paradigms for the research, they are ontologically inadequate. Given this, the research considered CR a fitting paradigm, because it combines and reconciles ontological realism, epistemological relativism, and judgmental rationality (Archer et al. 1998, ix, xi; Gorski 2013, 664–65).

As a paradigm, CR is philosophically inharmonious, because it has "many different perspectives and developments" (Danermark et al. 2002, 1). However, rather than a stringent philosophical critique, the research only seeks to ground its analysis in its guiding methodology. Thus, it draws mainly upon interpretations of Bhaskar's works, whose basic ontological question is: "What must reality be like to make

the existence of science possible?" (1978 cited in Danermark et al. 2002, 18). According to Danermark et al., this implies the following: (a) What properties of reality make research purposeful? (b) What should be researched or should research try to address? and (c) How is it done? (2002, 18). Respectively, these represent the ontology, epistemology, and approach as described below.

3.2.1 Ontological realism: A befitting perspective of reality

Transcending events and subjective meanings, CR ontologically maintains that reality is stratified, differentiated, emergent, relational, and transformational (Archer et al. 1998, xi; Fleetwood 2014, 182). Reality is 'stratified and differentiated' because it has three domains: the empirical, the actual, and the real. The empirical consists of direct or indirect experiences that may be observable. They are apprehensions of the actual, which includes activated events and actions (and counteractions) that may be observable or experienced or not. The real consists of various forms of 'entities' - with their powers and tendencies - that may not be directly observable at the domain of the empirical but produce events or have "causal efficacy" that can be experienced indirectly (Bhaskar 1978, 56 cited in Danermark et al. 2002, 20, 25; Fleetwood 2014, 205; Gorski 2013, 665).

Fleetwood explains that entities are basically neutral and changeable and may be material (e.g. land or weather), ideal (e.g. discourse or beliefs), social (e.g. institutions, organizations, and social structures including class and gender), and artefactual, which is a synthesis of all the first three entities (e.g. building or technology) (2014, 204). Thus, the domain of the real ('the real') consists of a combination of any of these entities, generally called generative mechanisms or frames of action as used in the previous chapter. By themselves, the generative mechanisms (frames of action) are individually formed by the relations of constituent parts known as the 'structure' (Sorrell 2018, 1271). Structures are thus the 'lifblood' of generative mechanisms such that they sustain them over time and underlie their causal properties (ibid). This contributes to the idea of 'emergence' in ontological realism, whereby the causal powers of generative mechanisms emerge from the structure of their constituent parts, but are not reducible to them (ibid, 1272). Generative mechanisms may also exist independently of their identification, while some may not (Fleetwood 2014, 204; Sorrell 2018, 1271). Overall, the causal powers of generative mechanisms have a tendency to create certain events and actions (the actual), which underlie people's experiences (the empirical).

CR also perceives reality as 'relational and transformational', emphasizing its resolution of the dualism between structure and agency and the transformational nature of societies in general (Archer et al. 1998, xiii; Fleetwood 2014, 205-6). The stratified and differentiated domains of reality as described above straddle both structure and agency. To this end, ontological realism acknowledges their distinctiveness, but merges the divide by positing their mutual existence and interrelation (Fleetwood 2014, 205-6; Gorski 2013, 668). Though the order of existence of structure and agency is ontologically contested (Danermark et al. 2002, 65), the research follows Bhaskar's dialectics which presupposes the pre-existence of the former (Collier 1994, 10; Gorski 2013, 668). It holds that pre-existing structures enable and constrain individual actions and are in turn reproduced or transformed by the actions (Fleetwood 2014, 205-6; Gorski 2013, 668; Sorrell 2018,

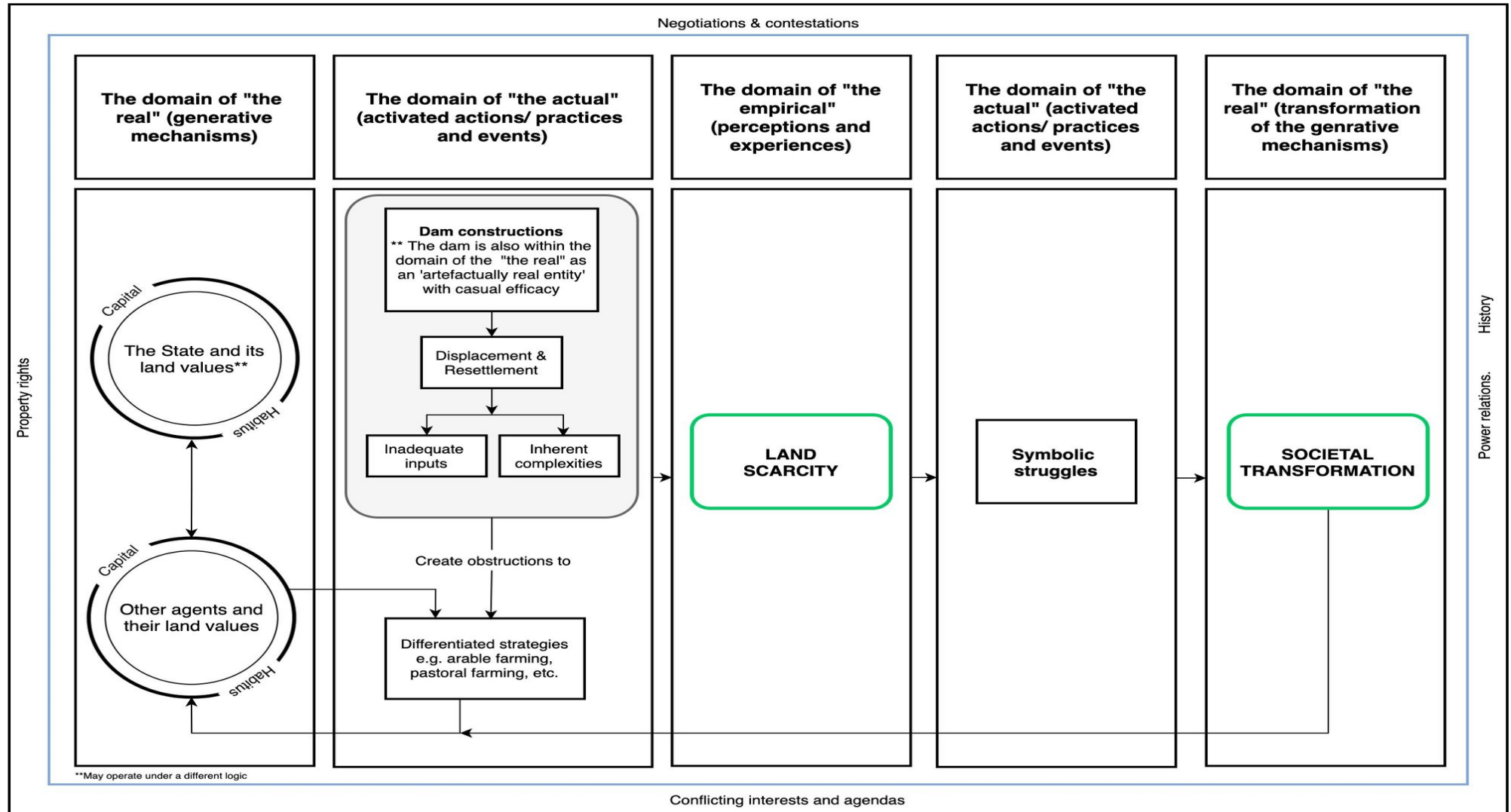
1274). Thus, both structure and agency have causal powers, which also underscores their emergent powers (Danermark et al. 2002, 64; Jessop 2005, 49). While structure conditions agency, agency influences its continuity or change.

Given the above, ontological realism justifies research as a practice transcending mere recording of events, behavior, and statements. It shows that research is not about showing regularities but about uncovering relationships and non-relationships between what people experience, what actually happens, and what gives rise to these, without which nothing new can be discovered (Danermark et al. 2002, 21). For this research, the implication of ontological realism is as follows: 'the real' is the objective relations between habitus (ideally real) and capital (artefactually real), which are conditioned by the specific logic (socially real) in respect of land (materially real and the stake). All these constitute the generative mechanisms (frames of action), which respectively have underlying structures. Thus, habitus (land values) is for instance the product of a combination of cognition and structural conditions such as history. Capital comprises certain species, the combination of which confers power and determine power relations among agents. The logic, which is the cumulative product of history, involves regulative principles and prescribed values of capital, including the principal capital (stake), which is land and has different meanings to people.

Although the causal powers of the generative mechanisms are irreducible to their constituent parts, they shape different actions and events ('the actual'), which in the context of this research, are land access strategies. Thus, people's experiences in respect of these underlie 'the empirical', which is their social constructions of 'land access' or 'land scarcity'. Their experiences also influence future strategies, which may change or reproduce the generative mechanisms. Given this, CR's ontology aligns with Bourdieu's discursive approach as structuralist constructivism or constructivist structuralism (1989, 14). Thus, it upholds the research's conceptualization of 'land scarcity' without limiting it to a universal physical condition. This guides the research to account for all intricacies and their interrelations and make profound meaning of the data. Consequently, Figure 3.1 on the next page re-conceptualizes the theoretical framework as presented in page 62 to justify the relevance of ontological realism and simplify the data analysis.

Figure 3.1 shows the interrelation between the strata of the reality of 'land scarcity' in dam-affected areas and the transformations that may occur in the process. It holds that, a combination of generative mechanisms or frames of action (capital, habitus, and logic) constitute 'the real', which trigger certain practices and events ('the actual'), such as dam construction and agricultural practices among others. In turn, people's varying experiences of the practices underlie 'the empirical', which may be 'land access' or 'land scarcity'. As people have inherent dispositions of resistance, 'the empirical' triggers further events or strategic responses ('the actual'), which Bourdieu refers to as symbolic struggles (1990b, 134; 2000, 187; Bourdieu and Wacquant 1992, 81, 103). These eventually lead to transformations in 'the real', underlining the relational and transformational nature of reality. Thus, it is processual and cyclical. This delineation justifies the reason for research as it shows that rather than being accidental occurrences, events and experiences have complex underlying structural relations. However, this begs the question of what the focus of research should be to expedite the knowledge of reality. For this, CR employs epistemological relativism, which the next subsection describes.

Figure 3.1: Re-conceptualizing 'Land scarcity' and societal transformation in dam-affected areas as ontological realism



Source: Author's construct (2020)

3.2.2 Epistemological relativism: A distinctive knowledge of reality

Epistemology concerns assumptions about the nature of knowledge and guides the focus of research to facilitate a knowledge of reality. For this, CR differentiates between two dimensions of knowledge: (a) “intransitive, constituted by the world qua referent”, and (b) transitive, “constituted by the concepts” used “as references to the world” (Al-Amoudi and Willmott 2011, 29; Bhaskar 1978, 21 cited in Danermark et al. 2002, 22–23; Gorski 2013, 664–65). Primarily, the intransitive dimension of knowledge refers to “the reality of being” or ontology (Bhaskar 1978, 21 cited in Danermark et al. 2002, 22–23; Gorski 2013, 664–65). Given the causal efficacy of ‘the real’ to ‘the actual’ and ‘the empirical’, it is usually emphasized as the focus or object of study which acts as “the explanatory key to understanding” social events and actions, as well as experiences and perceptions (social constructions) (Bhaskar (1989, 4) cited in Collier 1994, 10; Fleetwood 2014, 207). As Bhaskar explains, social structures like the economy depend on social relations, which are by themselves structures into which people enter and are reproduced or transformed by the actions of the people (1989, 4 cited in Danermark et al. 2002, 20). Retrospectively, these structures of social relations lie in ‘the real’, which embodies truth about social life or phenomenon. For this research, these are the generative mechanisms or frames of action, which include the habitus, capitals, and logic.

However, CR acknowledges that the intransitive object of knowledge – ‘the real’ – may exist independently of their identification by all, but not the active agents to whom it activates certain events and actions (Al-Amoudi and Willmott 2011, 29; Fleetwood 2014, 204–5). Although social reality has an objective existence, it always occurs in an open system whereby its identification by the active agents is “conceptually mediated” (Danermark et al. 2002, 15, 16, 29; Fleetwood 2014, 208). Thus, they respectively interpret and conceptualize reality at given historical periods based on their own experiences and knowledge, which constitute ‘the empirical’ (ibid). As Danermark et al. explain, objects have no meaning whatsoever in themselves but rely on meanings created “in different practices and in the interactive communication between members in a community where language is the principal medium” (2002, 28). Therefore, besides being socially-produced through reproduction and transformation by the active agents, social structures are also socially-defined (Danermark et al. 2002, 16, 30, 35). To this end, an exclusion of domestic concepts of reality – ‘the empirical’ – from research dissolves the very object of study (Al-Amoudi and Willmott 2011, 29; Danermark et al. 2002, 28, 34).

Bhaskar acknowledges this conclusion by emphasizing that social explanations of reality depend on the perceptions (social constructions) and concepts of agents, which are in turn dependent on “material substrate” or outer aspect, without which the social constructions and concepts will not be sufficient for explanation (1979, 149–50). In hindsight, the social constructions and concepts of agents are ‘the empirical’ while the material substrate is ‘the real’. However, the social constructions and concepts of agents are also related to their assessment of the results of their actions (the domain of the actual) with respect to set goals such that they “communicate, discuss and compare” their “experiences with those of others”, conceptualizing their varied results as “meaningful knowledge of reality” (Danermark et al. 2002, 28). By this, they change their actions to generate new experiences, which are also subject to conceptual communications and registrations as reality (ibid). Given this, Danermark et al. argue that the intransitive

dimension of knowledge may be extended from 'the real' to what is broadly conceived as ontology, including 'the actual' and 'the empirical' (2002, 206).

The research follows this argumentation and relates knowledge of reality to the entirety of the field as shown in Figure 3.1 above. It contends that although knowledge lies in uncovering causal mechanisms ('the real'), one can only gain it through the experiences and social constructions of the specific people ('the empirical') for whom they trigger events and actions ('the actual'). Thus, the whole field encapsulates the knowledge of reality or 'truth', whereby the focus of research is on people's experiences and social constructions but in respect of the events and actions that are the results of the generative mechanisms or frames of action. This deduction echoes Bourdieu's argument. According to him, 'the field' is the "true object of social science" because it is the ultimate "locus" of relations of force and meanings (Bourdieu and Wacquant 1992, 107, 112). He concedes that, "One cannot construct a field if not through individuals" as the information necessary for analysis "is generally attached to individuals" (ibid, 107). However, he maintains that the 'truth' of any interaction between people is never entirely found in the interaction "as it avails itself for observation", but within the social space or field in which they are located (2005, 148; 1989, 16). In effect, interaction is not "a two-way relation" but "a three-way relation" involving the agents and their social space or field (Bourdieu 2005, 148). To be sure, "it is knowledge of the field itself in which they evolve that allows us best to grasp the roots of their singularity, their *point of view* or position (in a field) from which their particular vision of the world (and of the field itself) is constructed" (emphasis in original) (Bourdieu and Wacquant 1992, 107). By this, Bourdieu agrees that knowledge of reality encompasses individual social constructs in relation to their experiences and social constructions ('the empirical'), but also events and actions ('the actual') and the structures or frames of action ('the real'), which all constitute the field.

Regarding the other dimension of knowledge - the transitive - CR underlines the importance of a foundational sociological theory for understanding a social object of study (Al-Amoudi and Willmott 2011, 29-30; Danermark et al. 2002, 18, 20, 116). Danermark et al. explain that, "We see and understand the world with the help of theories" (2002, 121). They further relate that, observations are inevitably theory-laden; thus, "it is impossible to make neutral observations of 'facts' about reality" (ibid, 41). To this end, extant sociological theories within the framework of CR are "constitutive for the social phenomena making up the field of research" (ibid, 33, 37, 120). This means that they describe and conceptualize the characteristic properties of the object of study, including the mechanisms and structural relations that activate events and actions without limiting them to accidental occurrences (ibid). Thus, although theories and their associated concepts are abstractions, they concretize the necessary conditions that define the social phenomenon of interest, becoming frameworks for the ensuing interpretation and explanation of data. This explains why the research uses Bourdieu's *Theory of Practice* to conceptualize the field of land access and explain the phenomenon of 'land scarcity'. Consequently, the *Theory of Practice* guides the research process and analysis to produce results, which as later explained, are in themselves qualitative conceptualizations (Al-Amoudi and Willmott 2011, 29-30; Danermark et al. 2002, 23, 34, 120). Thus, the results are relative to the foundational theory and may add on to it, underscoring the fact that theories are also constantly in-flux

(Danermark et al. 2002, 32, 116, 117). Given that CR research interprets domestic concepts with theories, Danermark et al. call the process a “double hermeneutics” (2002, 32).

According to Danermark et al., theoretical descriptions are largely fallible, but not equally fallible (2002, 25, 116). Therefore, while competing theories exist for understanding social phenomena, it is possible to select one that best fits the phenomenon under study. For this, CR maintains that the selection should be based on a reflection “on the explanatory power of the critical ideas” regarding the distinction between ontology and epistemology (Al-Amoudi and Willmott 2011, 32; Danermark et al. 2002, 202). To this end, while the choice of Bourdieu’s theory might be contested as unexclusive or unfitting to this research, it is evident that it amply facilitates an ontologically realistic description and explanation of the phenomenon of ‘land scarcity’. Additionally, it justifies the field of land access as the true object of knowledge of this reality without reducing epistemology to the activated events such as dam constructions and agricultural practices or mere experiences of ‘land scarcity’. Having underlined the research’s object of knowledge, the next section describes the selected approach to acquiring this knowledge, without which the research would have been rendered illogical and lacked tangible direction for data collection and analysis.

3.3 Situational Analysis: A robust approach to the knowledge of reality

Under the tenets of critical realism (CR), it is generally posited that knowledge of reality is acquired through empirical studies that facilitate a ‘causal explanation’ of the necessary properties underlying the object of study and hence the phenomenon at stake (Danermark et al. 2002, 41; Fleetwood 2014, 192). Thus, premised on qualitative inquiry, the research initially adopted the Grounded Theory (GT) approach to identify and conceptualize the field of land access and the inherent causal mechanisms and processes underlying ‘land scarcity’, as well as its impacts as understood and questioned by the agents involved. Very well aware of diverting and new interpretations to show up in the field, the empirical assessment was ready to accept and integrate ‘grounded’ ideas and social constructions. However, given the complex findings of the preliminary data collection phase – including the significant role of certain non-human entities – the research advanced this approach to the concept of Situational Analysis (SA), with particular reference to its logical foundations in the interpretive turn; that is within postmodernism, poststructuralism, and interpretivism (Clarke, Friese, and Washburn 2017, 8–10). Though an offshoot of especially Straussian GT (rather than Glaserian GT), SA radically shifts the analytical focus of research from the typical basic social processes to analytically foregrounding the broader situation being researched (ibid 4, 16, 47). This involves an enduring arrangement of relations among different kinds of elements in the social world in which the production and consumption of knowledge takes place (ibid, 2, 13, 14, 17).

Primarily, SA contends that all knowledge is situated, because it is “produced and consumed by *particular* groups of people, historically and geographically locatable” (emphasis in original) (Clarke et al. 2017, 9–10). Thus, the pursuit of such knowledge – to understand reality – requires the researcher to focus on its embeddedness in the larger social context; that is the *situation* (Emphasis mine) (ibid, 13–14). As Dewey emphasizes, “... we never experience nor form judgements about objects and events in isolation, but only

in connection with a contextual whole" or situation (emphasis in original) (1938, 66 cited in Clarke et al. 2017, 47). Given this, SA is "deeply committed to 'situating interpretation'" rather than focusing on the actions of "the knowing subject" (ibid, 13). This aligns with Bourdieu's, which as previously inferred to justify the research's epistemology, urges that social interactions must be examined within the social space in which the people involved are located to unmask the underlying structures (1989, 16; 2005, 148). Thus in SA, the structural conditions – including structural and power elements – are themselves grounded "*in the situation with everything else*", cementing the fact that they do not surround, frame, or contextualize the situation, but "*are constitutive of it*" (emphasis in original) (Clarke et al. 2017, 46, 50).

In this regard, the 'situation' as interpreted in SA encompasses people and things, humans and nonhumans, discourses, disciplinary and other regimes or formations, symbols, controversies, organizations, institutions and even other fields of practice that are mutually consequential to the phenomenon under study (Clarke et al. 2017, 46-47). This makes the situation in its entirety inclusive of all conditional elements and even those that on the surface may appear to be external or even removed from the field of interest (ibid, 46). Accordingly, these diverse elements are coconstitutive; that is they shape and coconstitute "each other through their interactive relations in a distinctive (and always emergent) ecology of that situation" (ibid, 46). The situation is hence "*the momentum of the relationality among the different elements*" such that any rupture to the momentum is consequential and an excellent site of analysis (emphasis in original) (ibid, 70-71). Due to these, the situation, which embodies the collection of all pertinent elements, is the unit of analysis in SA research (ibid, 17, 47, 71).

Although varied, one of the primary goals of SA research, which is relevant to the current one is to construct the inherent processes and sensitizing concepts to understand the ongoing relationalities among the elements; that is the "*ecologies of knowledge*" (ibid, 10, 57). This undergirds a causal explanation of an object of study. However, unlike CR, SA does not "distinguish between 'causal, intervening, and contextual conditions'" (ibid, 46). Nonetheless, its premise – which allows for an extension of the object of study where necessary – makes it a robust approach for understanding a phenomenon like 'land scarcity' around large dams and its impacts. While this sustains its present adoption, the research still alludes to the ontology of CR, which distinguishes between 'the real' (generative mechanisms or frames of action), 'the actual' (events and actions), and 'the empirical'. As presumed, the distinction will allow for robust and ordered analyses of the empirical data. Although SA also has varied methodological implications, its use in the current research is limited to the following analytical considerations.

3.3.1 The research proposition and the situation of inquiry (unit of analysis)

As stated previously, the overarching question, which the current research seeks to address is: '*To what extent has the Bui Dam engendered 'land scarcity' in its immediate communities and how and with which demarcations is this process causing societal transformation?*' Primarily, the proposition underlying this question is that the construction and operation of large dams engender 'land scarcity' by hindering other agents from achieving their habitus (land values). This incites the agents to undertake certain actions that consequently influence the frames of action of the field of land access. Following this and the logical

foundations of SA, the research considered its concrete situation of inquiry as encompassing the object of study, which is the field of land access, and its key subfields. As explained above, SA acknowledges that elements, which are seemingly external, are constitutive of the object of study and contribute to the evolution of the social phenomenon at stake. Thus, the research further considered its situation of inquiry as including all such elements and fields, which are distinct from but germane to the field of land access. It contended that the relationalities between all these underlie the ‘big picture’, which will comprehensively provide a causal explanation of the necessary properties fundamental to the functioning of the field of land access and hence the phenomenon of ‘land scarcity’ and its implications for societal transformation.

While this conception maintains the epistemology described above, it also opens up the analysis to “systematically consider the *possible* importance” of many conventionally ignored elements (Clarke et al. 2017, 117). These include the fields of cashew seed commerce, subsistence crop commerce, and artisanal fishing among others, all together with their discursive materials. As the next chapters will show, these fields effectively intersect with some subfields and hence, empirically “matter” or make a serious difference to the phenomenon of ‘land scarcity’ in the study area (ibid). Other elements constitutively pertinent to this research’s situation of inquiry are objects including the dam, soil, yam, and cashew trees and seeds, which the subsequent section describes. Relevantly, the broadly conceived situation of inquiry could include many other elements such as other subfields of land access and national and transnational political and economic elements (ibid, 49, 117). However, given the admonishment to focus on only the elements that “matter” to the affected people and form part of their experiences and social constructions of ‘land scarcity’ (ibid, 17, 117), the research limited its conception of the situation of inquiry to these elements after an extensive analytical process. In this regard, the conceived situation of inquiry was also not bound to the physical space per se (ibid), but was open to the entire social space within which the field of land access and the focal elements are situated.

3.3.2 Capturing the complexities of the situation of inquiry

SA acknowledges that rather than being harmonious, situations are riddled with complexities; including differences, multiplicities, and instabilities (Clarke et al. 2017, 10, 13, 53). It emphasizes the inherent differences in the positions of situated people and their implications for knowledge production and claims of truth (ibid, 10, 14, 54). Thus, it calls for research to “untangle agents and positions sufficiently” to clarify inherent contradictions, ambivalences, and irrelevances (ibid, 14, 54). This enterprise includes acknowledging those in marginal positions whose social constructions may appear illegitimate or may be overshadowed by strong ones (ibid). To be sure, Bourdieu also affirms this necessity, emphasizing that the inclusion of agents’ social constructions in sociology has to be cognizant of the antagonistic positions from which they are taken (1990b, 130). Although they may conflict and some even fallible, and also less prominent than others, these diverse social constructions invariably underlie the practices of the respective agents (ibid 1990b, 131) and merit equal consideration in research. The proponents of critical realism also share this view. Primarily, they posit that as people’s interpretations of their worlds (situations) influence

their actions, all interpretations are important for understanding reality, whether they are right, wrong, conflicting, or parallel (Danermark et al. 2002, 32–37).

In addition to emphasizing diversity, SA affirms the fluidity of social differentiation within situations (Clarke et al. 2017, 13). It underlines that rather than being anchored to certain positions, the inherent “relationalities” among people undergo a continuous shift through the negotiations that characterize social relations in social life (ibid). Hence, negotiations typify the key social processes, which also make the situations in which the specific people are constituent of, “mutually constitutive” or “coproduced”, but also unstable (ibid, 13). This attention to instability echoes Bourdieu’s, which as indicated earlier, acknowledges the variability of positions and the entire field (Bourdieu and Wacquant 1992, 99). Likewise, it mirrors CR, which underscores the relational and transformational characteristics of reality (Archer et al. 1998, xi; Fleetwood 2014, 182). Thus, the adoption of the SA approach transcends a quest for “commonalities” as GT does (Clarke et al. 2017, 13, 14). Rather, it embraces “representations of *differences and contradictions*” and processes of change and stabilities that constitute “actual situations” (emphasis in original) (ibid).

3.3.3 Decentering human subjects to include non-human actants

Due to its logical foundations, SA recognizes the analytic importance of non-human actants or objects in situations (Clarke et al. 2017, 16, 86, 90). It agrees with Blumer, who stresses that “the ‘worlds’ that exist for human beings and for their groups are composed of ‘objects’ and that these *objects are the product of symbolic interaction*” (emphasis in original) (1969, 10-11 cited in ibid, 87). Blumer describes an object as “anything that can be indicated” or “that is pointed to or referred to” (ibid). In actuality, there is an extricable link between people’s experiences and the objects of their environments such that they co-constitute and co-construct (ibid, 16, 86-87, 90, 91). On one hand, objects are central to the constitution and maintenance of individual and collective identities (ibid, 86), because they “*structurally condition* the interactions within the situation through their specific material properties and requirements” and through people’s “engagements with them” (emphasis in original) (ibid, 91). On the other hand, the very nature of objects comprises of the meanings that they have for people and the social world for whom they matter (Blumer 1969, 10-11 cited in ibid, 87). In this regard, the human agents within social worlds (fields) routinely produce discourses about the objects of concern in the situation and about other situated social worlds (ibid, 18).

This impression is akin to Bhaskar’s position on the “material substrate” or outer aspect underlining the social constructions and concepts of agents (1979, 149–50). In hindsight, the relevant objects are similar to the generative mechanisms or frames of action constitutive of ‘the real’, which in the context of this research are the habitus, capital, logic of the field of land access and its subfields, and the stake. Due to their role in the co-constitution and co-construction of situations and the social world in general, SA acknowledges that objects also have agency, which when accounted for in research, enables one to “see the world afresh” (Clarke et al. 2017, 88, 90, 91). By this, SA aligns with Bhaskar’s contention that, without the knowledge of objects, the social constructions and concepts of agents are insufficient for explaining reality (1979, 149–50). This insight is thus an additional validation for the choice of SA as an approach for knowing the field of land access and its intricacies. To this end, the research follows SA in its commitment to decenter human

subjects to bring the situated non-human elements – materially and discursively – to light (Clarke et al. 2017, 91). For this purpose, SA presents various ways of categorizing objects (ibid, 87-90). However, the research maintains CR’s categorization of generative mechanisms to avoid disorientation. These include material, social, ideal, and artefactual entities, which respectively, define land, the logic, habitus, and capital. Table 3.1 below shows some of the research’s identified objects by category. Ultimately, these objects provided a profound knowledge of ‘land scarcity’, because they constitute the frames of action that trigger the actions and events underlying peoples’ experiences, social constructions, and reactions.

Table 3.1: An overview of some identified objects/ generative mechanisms by category

Categories of objects	Empirical focus
Material objects (The stake of the field of land access)	a. Land (the principal stake)
Social objects (The logic of the field of land access)	a. Customary land tenure systems of the various communities and ethnicities (including the principles, practices, and procedures of ownership and control, use, and transfer of land). b. Statutory land tenure system administered by the Bui Power Authority
Ideal objects (The habitus of the field of land access)	a. Beliefs, taboos, rituals, meanings, understandings, explanations, concepts b. Historical discourses and narratives, signs and symbols c. Moral ideas and principles
Artefactual objects (The capitals of the field of land access)	a. Economic capital – Allodial property rights to land, money, technology, crops, houses b. Cultural capital: Knowledge, skills, physical capabilities, accreditations and recognitions, the dam and its facilities c. Social capital: Social networks, relations of exchange and markets, social identity

Source: Author’s construct (2020)

3.3.4 Summary and implications for the selection of research instruments

Based on the analytical considerations above, the research regards its adoption of SA as expedient for knowing the field of land access and for addressing the specific questions of interest. However, SA specifies the conceptualization of the broad situation of inquiry as the explanatory key to its constitutive parts, which puts the research at risk of the charge of “holism” (Danermark et al. 2002, 64). To overcome this risk, the research followed the foundational logics of critical realism and Bourdieu’s *Theory of Practice*. In this regard, they both guided the distinct empirical assessment of the constitutive frames of action, processes, and actor experiences, but within the frame of the broad situation of inquiry to ascertain their emergence, relationalities, and relevance (ibid, 159). Through this, it was able to offer a causal explanation of the necessary properties underlying the field of land access and the incidence of ‘land scarcity’ and its implications for societal transformation as understood by the characteristically diverse agents.

Additionally, SA acknowledges the embodiment and situatedness of researchers in studies and how their traits are eventually inscribed on the knowledge produced (Clarke et al. 2017, 42). All researchers clearly approach their study interests with some prior knowledge and some level of personal interests, which

among other things, enable them to articulate pertinent questions that yield new knowledge and reflect on data (ibid, 35-36). Therefore, SA encourages researchers to be reflexive about the research process and accountable for the choice of data presented (ibid, 35). As this research idea builds on the researcher's personal experiences, the choice of SA, with its empirical and conceptual targets, is considered a plausible guide for meeting certain requirements. These include the selection of, and engagement with study participants, data selection and analysis, and the manner of data presentation and how it advances 'truth' about the field of land access, and hence 'land scarcity'. For these, SA follows traditional Grounded Theory, which underlines the need for proximity to the empirical world under study, the use of flexible (evolving and emergent) instruments for data collection and analysis, and the development of integrated theoretical concepts grounded in the empirical data that show the processes, relationships, and connectedness within the specific social world (Denzin 2007, 455 cited in ibid, 8). Given its adherence to these guides, the research's empirical and analytical processes were initially inductive, but also intensive and extensive. The ensuing section outlines the instruments it employed to meet the commitments of adopting SA as a robust approach to gaining knowledge of reality.

3.4 Research instruments: Employing pluralism towards a qualitative SA

Per the norm of qualitative research reporting, this section discusses the set of instruments, which the research employed for data collection, analysis, and presentation respectively. As the research epistemologically embraces both transitive and intransitive dimensions of knowledge, the section discusses these under two subsections corresponding with secondary and primary data sources to achieve consistency. Each subsection begins with a description of the data sources and their selection as a backdrop to the choice of instruments. Subsequently, they each recount how and why the research used certain instruments and the associated outcomes. Given that the choice of instrument influences research findings, the subsections further outline their observed advantages and disadvantages to the research where necessary, to justify the quality of the results.

3.4.1 Secondary data: Sources, collection, and analyses

This section presents the sources of secondary data and the instruments that were employed for their collection and analyses.

3.4.1.1 Identification, selection, and categories of secondary data sources

The research relied on existing discourse materials to broaden knowledge on large dams, displacement, resettlement, and 'land scarcity'. It also relied on them to develop the theoretical framework, research paradigm, and approach. The materials were both qualitative and quantitative. Primarily, secondary data on large dams, displacement, resettlement, and 'land scarcity' showed the existing knowledge gaps that helped to concretize 'land scarcity' as a viable subject for research. These data were from published and unpublished books, organizational reports, research papers and dissertations, journal articles, conference

papers, and newspaper articles in electronic and print formats. While they also underlined the development of a theoretical framework befitting of the primary data, others – particularly Bourdieu’s works – were also foundational to it. With respect to the research paradigm and approach, the research benefitted from the works of Bhaskar and Clarke et al. who are considered pioneers of CR and SA respectively. In all cases, the research also relied on the reviews of the published works and their application in scientific studies. Additionally, the research used the websites of certain Ghanaian public agencies and local governments for data on the demographic and physical properties of the study area. It also sourced relevant laws from public and independent websites to support its findings.

Of relevance, the research’s sources of print materials were the library, doctoral supervisor, and some acquaintances. However, it obtained its electronic data from web searches using Google. By gleaning from the references of its initial materials, the research primarily identified other thematically useful materials. These encompassed those on Ghana and the Bui Dam, and key concepts related to the Global South and particularly Africa. Fundamentally, the research conjectured that Ghana shares many experiences with these parts of the world in terms of large dam financing and socio-economic qualities among others. This informed its decision to corroborate their experiences to develop the research problem and theoretical framework. Moreover, the research only relied on credible electronic sources such as the websites of the Government of Ghana and journals including but not limited to ScienceDirect, Academia.edu, ResearchGate, and International Rivers. Considering ethical requirements, the research ensured that the electronic sources were in the public sphere and permitted data use and transmission.

Besides these, the research also benefitted from the report of the Bono regional Land Valuation Division (LVD) of the Ghana Lands Commission on the Bui resettlement processes. The Lands Commission is a public agency responsible for managing public and vested lands under Article 258[1] of the Constitution (1992). Following Section 22 of the Lands Commission Act (Act 767), its LVD assesses all compensations payable on lands acquired by the State. Thus, its report on the Bui Dam resettlement process was key to the research. To be sure, although specific to the Bono Region, which constitutes one of the affected regions, the research found that the regional LVD also valued the lands and properties of the communities of the Savannah Region, the other affected region. Hence, the research excluded the Lands Commission of the Savannah Region from its scope. The research also focused on the activities of the United Nations Development Program Global Environmental Facility/Small Grants Program (UNDP GEF/SGP), which is operational in the study area. Thus, it obtained the relevant proposals and reports from the Desk Officer of the Banda District to understand the organization’s work and its implications for the research.

As the research could not be present in all the study communities at the same time, it relied on archived news videos on the official YouTube sites of some news stations to catch up on some relevant issues that occurred during the study period. These were on the recommendations of the relevant participants themselves and included an anti-corruption program – ‘Dwa so nsem Fabewoso’ – on Adom FM. As gathered, the program hosted the Chief of Carpenter regarding an ongoing litigation with the BPA on the payment of compensation for some economic (sacred) trees. The research also used copies of

correspondence between the BPA and some participants to emphasize certain findings. Relevantly, it acquired the documents from the participants, who approved their use for the purpose of the study.

3.4.1.2 Collection of secondary data and characteristics of acquired data

As stated previously, the collection of secondary data focused on all contextual information related to the topic. It thus involved a review of all relevant and available materials. Impliedly, the accessibility of the relevant materials limited the process. To save the materials in cloud and keep track of them, the research used the referencing application, Zotero. Of significance, the application facilitated ease of access to the contents of the materials by allowing the research to take notes on entries, tag, and relate similar materials for referencing. For additional security, the research also saved the accessed materials in Dropbox.

3.4.1.3 Analysis and presentation of secondary data

Analyses of secondary data were by discourse analysis. The research did these systematically by evaluating the materials according to the set objectives. Thus, the process was thematic and aligned with the key concepts of the research, which included large dams, displacement, resettlement, and 'land scarcity'. It also included the concepts related to the Theory of Practice, critical realism, and Situational Analysis. In this regard, the evaluation of secondary data was primarily deductive, driven by these interests. However, upon evaluation, the research also built on the interpretations of the emerging data to underline relevant threads for further analysis. Thus, the analytical process was also inductive, encompassing a search for similarities and contrasts among the literatures in relation to the categories.

As secondary data vary in quality and reliability, the research relied on multiple sources to validate the acquired data before use. This explains why certain claims have more than one reference. Mitchell observes that while the analysis of secondary data entails the challenge of fitting the original data to the research questions (or objectives in the current case), some have underlined the need to re-contextualize and interpret the data for respective uses to expedite explanation rather than mere description (2015). Thus, the research interpreted the data by linking them to its focus. As observed in the texts, the presentation of the relevant secondary data was both descriptive and explanatory. Having described the research's secondary data, the next section discusses the sources, collection, and analysis of its primary data.

3.4.2 Primary data: Sources, collection, and analysis

This section discusses the sources of the research's primary data and the instruments of collection and analysis respectively.

3.4.2.1 Identification, selection, and categories of primary data sources

In line with its initial approach, Grounded Theory, the research anticipated an extensive engagement with a number of participants. Thus, based on extant literature and intuition, it primarily adopted purposive sampling to identify and select the individuals and groups, which it considered active in the field of land

access. For this, the research developed an initial typology of prospective participants, which included farmers, herders, builders, and traditional authorities (TAs). Specifically, the research defines TAs as the totality of the chief, queen mother, sub-chiefs, and sub-queen mothers of the respective communities. The research also identified public authorities like the Bui Power Authority (BPA) in charge of the Bui Dam, the Bono and Savannah Regional Lands Commissions and Town and Country Planning Departments, and the Physical Planning Departments of the Banda and Bole Districts, which are the affected districts.

Through a staff of the University of Energy and Natural Resources in Sunyani, contacts were established with the Environmental Officer of the BPA and a former Assembly member of one of the electoral areas of the study area. Through the BPA staff, the research became familiar with the established protocol for gaining access to the BPA outfit. Subsequently, an introductory letter from the Center for Development Research (ZEF) was submitted to the BPA head office in Accra, after which the BPA Land Administrator was assigned to the research as a contact person. This paved the way for the first visit to the study area in July 2018, whereupon the former Assembly member became engaged as a gatekeeper and a research assistant due to his depth of knowledge of the area and good human relations. During the visit, the names and availability of the TAs of the respective communities were obtained. Useful observations about the area in general were also made, which led the research to make a key adjustment to the initial idea. Relevantly, it observed that contrary to the initial assumption, the study area was not peri-urban. However, following its results, the research proffered it as a possible transformation that could occur in future due to the current events.

Through the research assistant, homages were paid to the relevant TAs with drinks as is customary in Ghana. This initially involved individual visits to the chieftains (chiefs and queen mothers) or the representatives of eleven target communities in both the Bono and Savannah Regions, which respectively border the western and eastern parts of the Black Volta River and the Bui Dam. The communities of the Bono Region included Bongase, Bongase Toko (a squatter fishing community), Bui, Akanyakrom, Dokokyina, and Gbolekame South. Those of the Savannah Region included Jama, Jama Newtown, Gbolekame North, Banda Nkwanta, and Carpenter. Thereafter, preliminary communal workshops were arranged with the TAs of ten communities except Banda Nkwanta. This is because the Chief declined any engagement with the team, because he assumed that the research was under the BPA's sponsorship and hence, demanded a formal introduction by the Director of General Services besides the introductory letter from ZEF. However, further meetings and clarifications assuaged this misconception and paved the way for a preliminary communal workshop in the subsequent days.

Of significance, the workshops were exploratory and aimed at gathering initial data on the relevant natural resources that support the communities' livelihoods, their distribution, access, and use. Additionally, they aimed at gathering information on the social characteristics of the area. Thus, through the workshops, the research gained insight into the outstanding land access problems. It was consequently able to validate the presumed typology of participants and identify new ones. In addition to the workshops, some key informants were interviewed on the emerging issues to broaden knowledge of the area. Through this and the workshop in Dokokyina, the research found that some households refused the BPA's resettlement offer

and have remained at the former community, which is on the border between the Bui National Park and the BPA acquired area. As gathered, land was central to their decision; thus, the research organized a separate workshop for them. Accordingly, it refers to it as Dokokyina No. 1 to distinguish it from the Dokokyina resettlement community.

Following the initial findings – including the relevance of non-human elements and distinct sectors to the participants’ social constructions of ‘land scarcity’ –, the research changed its research approach to Situational Analysis (SA). Given the logical foundations of SA, it contended that its adoption would enhance an in-depth understanding of the frames of action and an explanation of the findings on a conceptual level. Besides this, analyses of data gathered from the preliminary workshops and key informant interviews showed extensive differences in the issues confronting some of the communities. Thus, given time and financial constraints, the research narrowed down the communities to achieve precision. It did this with reference to the communities’ experiences of displacement, the severity of the ‘land scarcity’ problem, the spatial characteristics of the cluster communities, their social structures, and the interconnectedness of their respective issues. Along these lines, it settled on Bongase (including Bongase Toko and other squatter fishing communities), Dokokyina No. 1, and the resettlement communities of Bui, Akanyakrom, and Dokokyina, which are all in the Bono Region. It also maintained Carpenter and Gbolekame North of the Savannah Region. Due to the relative geographic locations of the Regions to the Black Volta River and the Bui Dam, the research categorizes the respective communities as the western and eastern communities. The rest of the discussion focuses on how the research obtained and analyzed the primary data obtained.

The research found that the selected communities had unique experiences of displacement and hence ‘land scarcity’. In the case of Bui, Akanyakrom, and Dokokyina, their experiences of displacement were both physical and economic, because the inundation led to their resettlement near Bongase. Thus, they all lost considerable lands, which affected their farming activities. The Akanyakrom community whose members were predominantly artisanal fisher folks, also lost their livelihoods. The resettlement of the three communities and the inundation physically and economically displaced a large number of Bongase farmers from preferable farmlands. Although the eastern communities of Gbolekame North and Carpenter are neither host nor physically resettled communities, they also experienced some form of displacement and ‘land scarcity’. The research found that due to the downstream location of the former, the incessant fluvial flooding caused by the dam operation affected the main economic activity, which was artisanal fishing. Thus, the members have forcibly become farmers. As the landowner has also admitted herders to the land, they have recently experienced increasing competition with them, necessitating a renegotiation of the terms of their land access with the landowner. On the other hand, Carpenter, which is relatively distant from the river and whose members are predominantly farmers has also experienced physical displacement from farmlands due to the erection of four transmission towers and an impending solar farm. Part of its land have also been under acquisition by the Forestry Commission of Ghana since the early 1970s. Thus, its members presently subsist on only a portion of their original land, which some recently admitted herders

also use as pastureland. Given these divergent experiences of displacement, the research considers all the communities interesting cases for studying the prevalence of 'land scarcity' around the Bui Dam.

Ultimately, the analyses of data gathered from the workshops and key informant interviews yielded tentative conceptual categories on the outstanding land access issues for further investigation. Besides enhancing the focus of the research, this served as a guide for developing the research questions and collecting data towards saturation. Based on the conceptual categories, the research adopted theoretical sampling to identify other relevant participants. These included some of the participants of the workshops and those who were implicated by the key informants during the respective interviews. After interviewing the subsequent participants, the research analyzed the data to corroborate and enrich the identified categories, but also to identify new or contradictory information. This facilitated the identification of new participants, among which were relatives, friends, and acquaintances whose names came up due to the nature of their experiences. Thus, for these, the research adopted snowball sampling, but also criterion, homogenous, and intensity sampling. While criterion sampling guided the research to focus on participants who were interested in land, homogenous sampling enabled it to focus on participants with shared experiences. On the other hand, intensity sampling directed it to focus on those with varied or unique experiences to capture the faceted social constructions of 'land scarcity'. Essentially, these sampling techniques guided the research until the point of saturation, when all the categories were developed and emerging data was largely repetitive of old ones.

Precisely at this stage, the research identified the central role of youth organizations to the discourse. Thus, it targeted and interviewed key members of the respective associations to broaden knowledge on their activities, challenges, and outcomes. However, the interviews did not result in any new data but validated the old ones acquired from other participants. Noteworthy is also the fact that many participants were initially reluctant to participate in the research. They explained that although they had participated in many researches in the past, they had not seen their benefits and hence did not want to participate in further researches. For this, the research resolved to explaining the general benefits of academic studies to the people by relating the manner in which the dissemination of information leads to better responses to social problems. As a familiar example, it frequently referred to how their resettlement was an improvement of the Akosombo Dam resettlement. Consequently, the research won the people's acceptance and their full participation.

Although the research relied on the sampling instruments aforementioned, it refrained from coercing the participants to suggest people for further interviews. Rather, it allowed the interviews to take a natural course, gleaning the details of successive participants by paying close attention to the narratives. With these voluntary suggestions and sometimes with the permission of the participants, the research contacted the identified participants for interviews. Upon contact with the successive participants, it withheld the names of the informants and all prior information about them to initiate new interviews. This enabled the participants to share their broad experiences without limiting them to what had been heard about them. Among the identified participants were specific TAs, public officials, and the staff of relevant organizations. To expedite referencing and analysis, the research clustered the primary sources of data by study

community, public authority and decentralized body, trade association, and international development assistance. Under each of these, it further categorized the participants either by strategy of land access or role. Hence, under study communities, it identified categories including TAs, farmers, builders, nomadic and transhumance herders among others. The categories under public authorities and decentralized bodies included the participating officers of the BPA, Lands Commission, District Agriculture Department, the Wildlife Division, and the Banda District Assembly. Table 1 of Appendix A shows these and the other categories of participants.

Although the research did not pre-determine the number of participants, it was conscious of the demographic characteristics of the communities and employed a degree of flexibility and tact to target relevant groups and capture their respective issues. Of relevance too, it found some degree of ethnic homogeneity in the respective communities. For instance, many of the participants from Akanyakrom, Gbolekame North, Bongase Toko, and the other satellite squatter fishing communities along the reservoir largely identified as Ewes. However, in Gbolekame North, it identified other minority ethnicities including Dagaates and Fulani. The people of Bui, Dokokyina, and Carpenter also identified as Mos, although the inhabitants of Carpenter were largely migrant Dagaates. The people of Bongase identified mainly as Bandas; yet, there were pockets of other ethnicities such as Dagaates. In view of this, many of the participants belonged to the dominant ethnic group of the respective communities. However, the research also found that references to ethnicity in land access was relative. This is because although the Sissalas, Gonjas, Grusies, and Wangalas were non-natives, the Mos considered them otherwise because of a historical relation among them. Thus, they enjoy the same latitudes as natives do in land access and do not have to go through the procedure expected of other non-natives.

Thus, besides the dominant groups, the research engaged people of minority ethnicities including the native Mos of Carpenter to understand their peculiar experiences too. Fundamentally, all these groups were in various ways involved in the field of land access. Except the Ewes and Fulani, the people of all the other ethnicities – both natives and non-natives – were traditionally farmers. Even among the Ewes of Akanyakrom and Gbolekame North, who were known artisanal fisher folks, findings of the preliminary workshop showed that they had shifted to farming due to the displacements. The Fulani were also known for their pastoralism. However, the transhumance herders had also began farming actively for subsistence. Moreover, both natives and non-natives use land for residential purposes.

Although the research presupposed that the participants would be adults of fifteen years and above, which is the definition of adulthood by the Ghana Statistical Service (GSS) (2014a, xvi), it was open to the local perception of adulthood and how this influences land access. To this end, it discovered that in arable farming and building, adulthood begins at the ages of fifteen and twenty respectively. The research did not also limit participation to any class of people based on social positions, because its interest lay in gleaning the embeddedness and relevance of status to the 'land scarcity' discourse. For all participants, the research obtained personal consents before engaging with them. It achieved this through prepared Consent Forms, which among other things, related the purposes of the research and required the endorsement of the participants to symbolize their conscious participation. As the text of the form was in English, the contents

were read out to the participants of the study communities in Akan, a widely spoken local language. In a few cases, the research assistant translated them into Ewe for participants who did not understand Akan. Despite its attempts to clarify the purposes of the study, a few people refused to participate in the research after the Consent Form had been read out to them. For such ones, the research refrained from forcing their participation – even covertly – to satisfy ethical requirements.

3.4.2.2 Collection of primary data and characteristics of acquired data

Following the research approach, the collection of primary data focused on all the elements at the study site that related to the situation of inquiry, which is the field of land access. To expedite the acquisition of data that address the questions, the research employed multiple instruments over a period of nine (9) months – from July 2018 to March 2019 – at the study site. These instruments included resource mapping, social mapping, transect walk, semi-structured interviews, focus group discussions (FGD), participant observation, and photo documentation. The following paragraphs elaborate on the reasons for choosing these instruments and the characteristics of the acquired data.

Resource and social mapping: Subsequent to developing the research idea from secondary data, the research recognized the need to acquire primary knowledge of the study area, especially with respect to land access and social characteristics. This urgency underpinned the organization of the preliminary communal workshops in the twelve communities. For ten of these communities, the research employed some basic instruments of Participatory Rural Approach including resource and social mapping. These communities included Bongase, Jama, Gbolekame North and South, Akanyakrom, Dokokyina, Dokokyina No. 1, Banda Nkwanta, Jama Newtown, and Carpenter. Regarding the Bui resettlement community, the research could not employ the instruments because of a low turnout and the participants' unwillingness to engage in mapping exercises. Although participation in Bongase Toko was relatively high, the participants were also unwilling to engage in mapping exercises due to their transient availability. In this regard, the men had to leave at certain times to set fish traps on the reservoir, while the women had to leave frequently to preserve fresh fish due to the community's lack of electricity. Despite this, the participants agreed for discussions on the relevant issues to proceed. Thus, for both Bui and Bongase Toko, the workshops did not involve mapping exercises.

Primarily, the resource mapping exercises involved the participants' identification, plotting, and classification of vital natural resources that support their livelihoods. It also involved information about the significance of the resources, their historical and present distribution, access, and use. Social mapping on the other hand involved their identification of the inherent social structures of the community and the distribution of the population in terms of ethnicity. For these exercises, the research clustered the participants when necessary to increase their focus and participation. This was the case for communities such as Bongase, Akanyakrom,



Picture 3.1: Resource mapping by a group of women in Gbolekame North (Source: E. Agyepong, 2 October 2018)

Gbolekame North and South, and Jama Newtown where the numbers of participants were high. In this regard, it grouped them by gender. However, for Jama, the research grouped the participants by TAs (consisting of both men and women) and other men and women. This was because those who belonged to the category of 'other men' were younger and rowdy, while those in the group of 'other women' were shy and reluctant to participate in the exercises. Consequently, the research used these groupings to avoid uncomfortable situations and non-participation by especially the women. For Dokokyina No. 1, Carpenter, and Banda Nkwanta, although the recorded numbers of participants were also high, they elected to work together. Although their choice contrasted with the plan, the research had to oblige to expedite their participation in the exercises. Regarding Dokokyina, the participants worked together because the turnout was relatively low. In all cases, participation was voluntary and supported by the participants' endorsement of the Consent Form. Table 2 of Appendix A shows the details of the preliminary communal workshops including the number of participants by gender and status.

Each of the exercises followed a pre-designed process. First, the research asked the participants to show the location of vital resources in relation to the communities by drawing or using twigs, leaves and other available materials to indicate the various features. Depending on the setting of the meeting place, the participants either drew their responses on the ground or on flipcharts with markers. The latter was especially the case for Jama and Akanyakrom, where the workshops were respectively at the chiefs' palace and residence, which both have concrete floors. However, upon completion, the research transferred the outputs of those who drew on the ground onto flipcharts to expedite the subsequent discussions. Following this, representatives of the groups led discussions on the outputs and answered questions from the team and other participants. Consequently, the participants also answered questions on the significance of the identified resources, and their distribution, access, and use over time. The respective groups also worked on the relevant social characteristics of the communities and discussed them with the larger group of participants. During the discussions, the research team recorded notes of the emerging issues on flipcharts. It also recorded minutes of the workshops to avoid oversights in the acquired data. Thus, the data from the workshops were in the form of maps and texts. They served as the background information on the local

perceptions of the socio-spatial layout of the communities, key actors, their roles, and relevant issues. As regards time, the workshops spanned an average of 3-4 hours.

Transect walk: Subsequent to the mapping exercises, the research conducted transect walks in all the communities with the assistance of some key participants. The objective of the exercise was to corroborate the data obtained from the workshops. Thus, it involved systematic walks across the defined areas, which the participants identified and plotted on the maps during the resource mapping exercises. Through these, the research observed the qualities of the respective communities, which shaped decisions such as the dismissal of the initial assumption of peri-urbanization in the area.

Semi-structured interviews: As mentioned previously, the research interviewed some key informants besides the preliminary workshops to gain additional knowledge of the area. It also identified some individual participants through these key informants and the workshops, through whom it further identified and interviewed others. Such individual interviews were semi-structured. This means that, although they were interactive in nature, they followed a pre-designed guide, which structured the process. The objective of the interviews was to acquire data on the realities, social constructions, and experiences of the individual participants to broaden knowledge of



Picture 3.2: An individual interview with a herder in Banda Nkwanta (Source: E. Agyepong, 11 November 2018)

of the field of land access and the phenomenon of 'land scarcity'. By this, the research gained extensive knowledge on the influence of the situation of inquiry and the participants' backgrounds on their related accounts. Thus, the research was also attentive to the key elements – human and non-human – and the historical chronicles, which the participants implicated as fundamental to these accounts.

As shown in Appendix B, the research structured the interview protocol into initial, intermediate, and ending questions. It designed the initial questions as an icebreaker to set the participants at ease. Thus, for all the participants of the communities, the interviews began with questions about their ethnicity, economic activity, and related activities for the day. Especially for the resettlement communities, they also included questions about how they came to be at the present location, the events that led to this, and what they were doing or what was going on in their lives at the time when these happened. The intermediate questions concerned land access. They included inquiries about the changes that have occurred in the participants' land access, the period when they observed the changes, what they thought about them, and their strategic responses to them. They also questioned the influences on the participants' decisions, available opportunities, and challenges. To conclude the interviews, the ending questions briefly touched on the participants' views on some of the preceding responses, their thoughts on how the problems may be addressed, and the implementation of the recommendations. Regarding the participants from public authorities and organizations, the research's focus was on their work in the study communities, the

objectives, outcomes, and experiences. The interviews also included the emerging issues that could influence future trajectories.

In total, the research interviewed one hundred and thirty-nine (139) individual participants. As Table 1 of Appendix A shows the specific number of interviewees from the relevant public agencies and organizations, but also from the Banda Traditional Area, Table 3 only illustrates the number of participants from the study community by gender. As observed, the research engaged more males than females in each of the study communities. While this was far from deliberate, the participants' availability and willingness to participate in the research were key factors. For this, the research went to all extents to meet participants for interviews. As most of them were farmers who often left for their farms at dawn and returned at night, tired and disinterested in interviews, the research conducted some of the interviews on their farms. It also took advantage of days, which were by custom, taboos for farmers to attend to their farms. Through these, it reached as many participants as possible. Of relevance too, the research began each interview by reading out the Consent Form, answering the participants' related concerns before securing their signature. On the average, each of the interviews spanned an hour and half to two hours.

As also observed in Table 3 of Appendix A, the number of individual participants from Gbolekame North was few. Illustratively, the research found that except for two unique cases involving the police and the clan heads who owned the land, all the participants shared similar

experiences, which they respectively narrated in detail during the workshops and the FGDs. Thus, the research focused on gaining knowledge of the exceptions. To avoid oversights in data collection, the research audio recorded each interview session on phone or a recorder with the permission of the participants. As audio recording is limited to voice, the research also maintained a field note to keep records of observations of the participants during the sessions as well as notes on their responses for easy referencing. Thus, the acquired data were in the form of audios and text.

Focus Group Discussions (FGD): Besides semi-structured interviews, the research also engaged the participants in FGD to capture their categorical experiences and social constructions based on group dynamics. Thus, it targeted the organizations, which the participants had implicated during the individual interviews. These included farmers and youth associations, traditional authorities, and groups of laborers among others. Additionally, the research deliberately engaged groups of women in all the communities to compensate for their limited participation in the individual interviews. It further engaged groups of fisher folks from Bongase Toko and other satellite communities around the reservoir in FGDs. The clan heads of Jama also availed themselves for an FGD. As gathered, one of them was the landowner of the Gbolekame North community. Thus, the research considered their contributions relevant to its focus.



Picture 3.3: A Focus Group Discussion with TAs of Akanyakrom (Source: E. Agyepong, 10 December 2018)

Consequently, with their assistance, the research was able to reach the herders on their respective lands, after which it conducted an FGD with the head herders who currently live around Gbolekame North.

All the FGDs were semi-structured with specifically designed protocols for each of the groups. Thus, for farmers, youth, and other associations, the research focused on their objectives, activities, experiences, and outcomes with particular reference to land. For the others, the research followed the guide of the semi-structured interviews. However, rather than adhering strictly to the guide, it used the emerging issues of the discussions to seek further information that will achieve the objectives. For particularly established groups like farmers and youth associations, the research observed cues such as individual dominance and how it influenced the groups' aspirations and the distribution of benefits such as the allocation of seedlings among members. Upon identifying the relegated ones of the groups, the research targeted them for further interviews to capture their views. Despite this, it appreciated the cues as important data for broadening its understanding of the problem at stake. In the case of the TAs, although the research was aware of the inherent traditional hierarchy, the FGDs provided an insight into how the power structures played out in reality. This deepened its understanding of how certain discourses, such as the link between landownership, power, and 'land scarcity' emerged and have been concretized over time. Of relevance is also the ratio of male to female representation in some groups such as the youth and farmers associations and among the TAs. Regarding this, the research observed that in many cases, the call for meetings resulted in a large male attendance, which eventually became useful data for gender analysis.

Like the semi-structured interviews, the research also recorded the audios of the FGDs and sometimes took notes of the participants' responses on flipcharts. The research also took minutes of the meetings to keep track of the responses and the corresponding names of the participants. Thus, the data of the FGDs were also in the form of audios and texts. Ultimately, the research's use of multiple recording techniques enabled it to capture as much information as possible. Table 4 of Appendix A presents the groups, which the research engaged in FGDs by community and their corresponding number and gender representation.

Participant observation (thick participation): The research employed participant observation as an instrument to complement the interviews and FGDs. It conjectured that some relevant characteristics such as the participants' habitus were internalized and could only be accessed through a close participation in the situational context. Thus, it sought to live within the communities and observe them in their natural environments to capture patterned characteristics, unusual behaviors, activities, interactions, and events. Although the research purged all preconceptions for this process, it developed empathy for the people, which enhanced its understanding of their circumstances. Also included in the process were memorization, informal interviewing of those observed, and textual recording. Thus, the research's field note also came in handy for this purpose, mainly resulting in personal observational texts or scripts. Through this, the research came to understand other inherent characteristics such as the social structure and power dynamics. The extended period of fieldwork also built the trust of the participants. Consequently, they invited the research team to observe sensitive proceedings such as the resolution of land disputes and a town hall meeting between the BPA and the resettlement communities. The data acquired from such observations also added on to the research's knowledge of the communities' social construction of 'land

scarcity'. During the fieldwork, the research maintained a diary in which it summarized the activities, observations, and outcomes at the end of each field day. It also kept a logbook of the names and contact details of all participants for future referencing.

Photo documentation: Given the research's attentiveness to other situational elements besides the narratives of the participants, it employed photography as an additional instrument for documentation to enhance its memory of observations and for referencing non-discursive practices and material objects. As observed in this chapter and the subsequent ones, the research used the resultant pictures as evidence of the adopted instruments and the findings.

Summary: Following epistemological relativism, the research acknowledged all responses during data collection. However, it acknowledged that some participants may have learned to tune their responses to the perceived expectations of research due to their vast exposure to researchers over time. Thus, the research treated all the responses as actively constructed narratives, without losing focus on the period in which they reportedly occurred. With these considerations, the research benefitted from the accounts of a wide range of participants, which have culminated into an in-depth knowledge of the respective fields of land access and the 'land scarcity' problem in the study area.

Of relevance is also the manner in which the research maintained access to the study communities and the participants. Given the rural characteristics of the area, the team members were mindful of their outfits and attitudes to create a good impression within the communities. Specifically, they wore simple and conservative clothing with an attentiveness to the culture and blighted livelihoods of the people. Thus, they gained their acceptance and were able to mingle without causing discomfort among the people. The team also avoided judgmental comments and any offer of unsolicited feedback. In fact, they were frequently tempted to offer opinions on the communities' current situations and the increasing land disputes. However, following the admonishment of the lead, the others were ever mindful of their role in the communities and desisted from any such acts even when the participants solicited opinions. These and the team members' respectful attitudes have cemented the research's relations with the communities, which made it possible for it to reconnect with them and seek clarification on some issues where necessary. Having described the primary data collection instruments, the next section discusses the instruments, which the research used to make meaning of the acquired data and for presentation and dissemination.

3.4.2.3 Analysis and presentation of primary data

The analyses of the primary data were two-fold and mainly processual. They involved an analysis of the demographic information of the participants and a subsequent analysis of the data on their lived experiences as recounted by them. The research's objectives of processing demographic information was to keep records of the participants' details, assign specific codes to them to ensure anonymity and their protection, and to understand and relate the emerging issues to distinctive features such as age, gender, and ethnicity. To this end, the research stored all the names of the participants on MS Excel and assigned codes to them. Specifically, the codes constituted the first initials of the respective communities, which were

subsequently distinguished by numbers. Hence, the research assigned codes such as A001 and D001 and so forth to participants from Akanyakrom and Dokokyina. In essence, the numbers increased with each additional participant.

Regarding age, the research initially categorized the participants by five-year interval from the ages of 15 to 89, which were respectively the least and highest recorded. The intention was to ease the recording process and referencing. However, the research found significant similarities in the historical experiences of farmers of all age groups. The only observed difference was in relation to the natives' historical preferences of housing. As gathered, those between the ages of 20 and 39 preferred concrete blockhouses, while those 40 years and above preferred mud and thatch grass houses. The research did not observe these differences in the present context because all the participants preferred concrete blockhouses. However, the research found that people between the ages of 15 and 49 were responding differently to the changes by capitalizing on established youth associations and taking actions ranging from demonstrations and negotiations with the BPA. The research also found that some communities had formed farmers' associations with membership of varying ages. In communities such as Bui and Bongase, the members of the farmers' association were between the ages of 15 and 45. However, in Akanyakrom and Dokokyina, the associations' members were of all ages, including octogenarians. Based on these observations, the research only distinguishes the age groups where appropriate to underline the identified differences.

Of relevance too, the research took cognizance of the local definition of 'adulthood' and 'youth' and how they influence land access. From the meetings, it gathered that the definition of 'adulthood' was the age of 15 and above and 'youth' was between the ages of 15 and 49. The local definition of 'adulthood' aligns with Ghana's Statistical Service's definition (2014a, xvi). However, the description of 'youth' contrasts with what Ghana's Ministry of Youth and Sports provides, which is between the ages of 15 and 35 (2010, 5). In terms of gender, the research categorized the participants by males and females. As previously described, it also categorized the participants by ethnicity, which was predominantly Banda, Mo, Ewe, Dagaate, and Fulani. Although other ethnicities such as Sissala, Gonja, Grusie, and Wangala also existed, the research found that their populations were relatively less. Given their historical connection with the Mo, they also enjoy certain liberties of land access as the natives do. Thus, unlike the Dagaate and Fulani non-natives who have peculiar issues, the research considered these minority groups as natives. Relevantly, the respective statuses of these ethnicities as native and non-native were also key to the analysis.

Following its paradigm and approach, the objective of the primary data analysis was to offer a causal explanation of the fields of land access of the study area. This encompassed a description and analytical explanation of the relationalities and processes of the necessary properties of the fields towards ascertaining the incidence of the 'land scarcity' and its implications for societal transformation. For this, the research acceded to Danermark et al.'s submission on social science explanation from the perspective of critical realism (CR) (2002, 74). According to them, this implies; (a) describing and conceptualizing the properties and generative mechanisms ('the real') underlying events and making things happen ('the actual'), and (b) describing how the different mechanisms manifest under specific conditions (ibid). As generative mechanisms or frames of action are central to the co-constitution and co-construction of

situations and social worlds, gaining knowledge of them complements the perceptions (social construction) and experiences of agents for explaining reality (Bhaskar 1979, 149–50; Clarke et al. 2017, 88, 90, 91). In hindsight, the submission of Danermark et al. aligns with the analytical consideration of decentering human subjects to bring the situated non-human elements – materially and discursively – to light (Clarke et al. 2017, 91). Thus, besides the empirically observable, the research extended its analyses of primary data to unveil the generative mechanisms or frames of action and their transfactual conditions, which are the inherent conditions or objects underlying their qualities (Danermark et al. 2002, 113, 160).

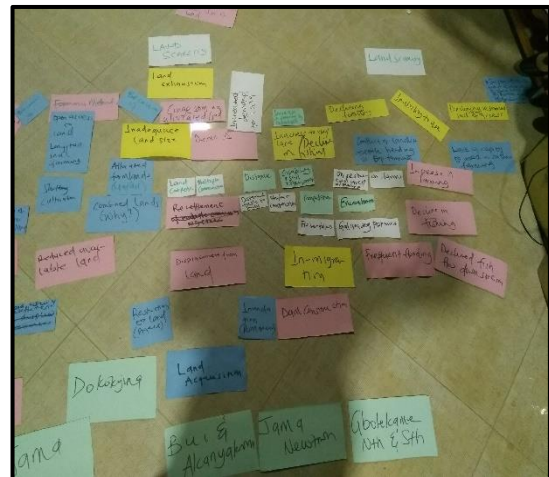
To this end, Danermark et al. underscore an analytical approach based on a combination of abduction –, which is also endorsed by Situational Analysis (Clarke et al. 2017, 30, 32) – and retroduction (2002, 74). Abduction is a method for describing and conceptualizing the properties of a phenomenon while retroduction “is a method for finding the prerequisites or the basic conditions for the existence of the phenomenon studied” (Danermark et al. 2002, 1, 74). Applied together, abstraction and retroduction facilitated a stringent interpretation of the data that uncovered meanings, relations, and coherence towards a causal explanation of the necessary properties underlying the field of land access and relevantly, the ‘land scarcity’ phenomenon and its implications for societal transformation. In this regard, the research adopted the six-stage explanatory model proposed by Danermark et al. for conducting social science research based on CR (2002, 109). Described as “a movement from the concrete to the abstract and back to the concrete”, the model identifies, isolates, and validates the structures that generate events through which phenomena occur (ibid, 43, 109). While the concrete embodies empirical knowledge as acquired, the abstract refers to the processes of conceptualization, abstraction, and inferencing through abduction and retroduction (Raduescu and Vessey 2008, 20). Although the authors distinguish the six stages of the model by focus, they acknowledge that they are intertwined and open to movements between them. Besides guiding the analysis of primary data, which the research did alongside data collection, the use of the model also underpinned the presentation of findings. The subsequent paragraphs detail the stages of the analysis and how they facilitated these.

Description: Following Danermark et al., this stage involved a description of the situation of inquiry – in the broad sense of the term – as recounted by the participants (2002, 109). Thus, it was an extensive description of the domestic or “everyday concepts” used by the participants to characterize their circumstances (ibid). The stage also benefitted from the photographs and observations of how the people deployed material objects discursively and undertake non-discursive practices. Relevantly, the research began this process at the early stages of fieldwork by transcribing the acquired texts and audios. It achieved this with the aid of Express Scribe Transcription, a free software. As the sources of data varied, the research compared the individual audios with the texts of the field notes and minutes to ensure consistency and to recall the circumstances under which the participants made certain claims.

Analytical resolution: Given the considerable number of study communities and the extent of acquired data, the research devoted this stage to identifying patterns, themes, and relationships in the transcripts to find similarities and contrasts for drawing relevant conclusions. Thus, it involved some degree of abstraction through open coding with MaxQDA, a qualitative data analysis software. Subsequently, the

research identified and classified certain structural patterns, events, practices, rules, and resources that underlie the fields of land access and hence 'land scarcity'. These included the link between physical displacement and land loss, and certain restrictions of access and inadequate land. It also included the identification of practices such as shifting cultivation and its historical background, as well as its implication for land claims. Ultimately, the codes were summaries that represented key words and phrases in the transcripts.

Based on their properties and scope, the research subsequently sorted the generated codes into manageable categories. In addition to MaxQDA, it used meta-cards and flip charts to visualize and order the codes to expedite the process of categorization. It also wrote memos during the process to earmark recurrent and sparsely discussed issues that 'mattered' or 'made a serious difference' for further inquiries (Clarke et al. 2017, 17, 117). Particularly at the initial stages of the fieldwork, the research found memoing useful for adjusting the research focus to the actual situation. This explains the research's additional attention to the rise and impacts of commercial cashew farming on the transformations occurring in the area. During the successive stages, the process facilitated the corroboration and enrichment of formulated categories towards saturation. It also facilitated the identification of new cases and loopholes in the original categories for further inquiries. Thus memoing was additionally useful for broadening knowledge of the fields of land access and the 'land scarcity' phenomenon. Ultimately, the thematic results of the process constituted the descriptive parts of the research's findings. Chapters 5 to 8 of the dissertation present these findings qualitatively by description and explanation.



Picture 3.4: Analyzing primary data with meta-cards
(Source: E. Agyepong, 25 October 2018)

Abduction/ theoretical redescription: Subsequent to acquiring and categorizing all relevant data, the research interpreted them based on the theoretical framework. This involved a conceptualization of the necessary properties and processes characteristic of the fields of land access of the study area. Fundamentally, the properties included the generative mechanisms or frames of action (the real), which include habitus, capital and logic, and their structural relations, which underlie the reported events and actions of the participants (strategies of land access), and consequently, their social constructions of 'land scarcity (the empirical). However, following Meyer and Lunnay, the research's adoption of abduction also involved referencing data that fell outside the theoretical framework to complement the findings (2013, 1). By this, the research was able to provide an extended knowledge of the situation of inquiry.

To this end, the process involved a relatively higher degree of abstraction - through open and selective coding - by comparing and integrating the initial categories and other relevant data to the theoretical framework. For this, the research oscillated between the empirical data and the theoretical framework, underscoring the double hermeneutics characteristic of critical realism. The results were 'sensitizing concepts', which according to Clarke et al., are references for understanding the "difference(s),

complexities, and heterogeneous positionings” of the situation, including the processes of change and stabilities (2017, 55). This deviated from an emphasis on commonalities based on fixed benchmarks and universal truths. Rather, the research embraced a causal explanation of the relationalities and processes fundamental to the fields of land access and hence ‘land scarcity’ and societal transitional that was grounded in the situation as a ‘hopeful suggestion’ to deepen understanding beyond the empirically observable (Clarke et al. 2017, 32; Danermark et al. 2002, 120). However, the research acknowledges that its results represent one of several ways of interpretation. Despite this, it also acknowledges that they provide new insights into the prevalence of ‘land scarcity’ around large dams, which has frequently been taken for granted as a universal physical condition. The concepts developed at this stage constituted the theoretical interpretations of the descriptive parts elaborated previously. Thus, the research also presents them qualitatively through descriptions and explanations.

Retroduction: This stage of the analytical process involved attempts to uncover the transfactual conditions constitutive of the generative mechanisms or frames of action, which the research identified through abduction and their relations (Danermark et al. 2002, 80, 96; Jessop 2005, 43; Meyer and Lunnay 2013, 1, 3). Following Danermark et al., the guiding question was: what properties underlie the existence of the generative mechanisms or frames of action? (2002, 97, 110). According to them, these properties are usually unobservable at the domain of the empirical (2002, 44, 80). Thus, the research adopted a process of retroduction, which entailed a high level of abstraction to uncover them. Relevantly, the research argued backwards from the established concepts and reconstructing them through metaphors and analogies. By this, it was able to describe for instance the properties (capitals) underlying social positions and power relations, socially and culturally acquired dispositions (habitus), and regulative principles (logic) that structured the related events and the actions of the participants, which influenced their social constructions of ‘land scarcity’. Besides this, the research was attentive to the possibility of change in the field of land access. Thus, the process of retroduction also uncovered the properties that influenced new generative mechanisms or frames of action. To finalize the process, the research justified the explanatory power of certain factors to social constructions of ‘land scarcity’ as afore discussed. In their model, Danermark et al. assign this process to Stage 5 (2002, 110). However, the research includes it in the current stage due to the semblance of the relevant issues. Ultimately, the presentation of the results of the retroductive analysis was explanatory.

Concretization and contextualization: Following Danermark et al., the research devoted this analytical stage to “examining how different structures and mechanisms manifest ... in concrete situations” (2002, 110). Hence, it particularly emphasized the relations between the generative mechanisms or frames of action and concrete events and actions such as land access strategies. Based on this, the research was able to underline the structural and accidental conditions that have given rise to ‘land scarcity’. As before, the presentation of the findings was also qualitative and encompassed descriptions and explanations.

Ultimately, the above discussions have given a comprehensive idea about the data sources of the research and the instruments it employed to collect and analyze them. The subsequent sections conclude the chapter

by describing the generalizability of the findings, the ethical considerations of the research, and its limitations and delimitations.

3.5 Generalizability of findings and quality assurance

Although the research eschews claims of absolute or universal truths and focuses on the unique complexities of the situation of inquiry, the results of the study have some degree of generalizability. Following Danermark et al., the research explains this by its application of Bourdieu's *Theory of Practice* and its identification of the transfactual conditions that underlie the generative mechanisms or frames of action (2002, 78). These include the influence of cognition and structural conditions such as history on the formation of habitus (land values), the species (economic, cultural, and social capitals) that combine to underlie power and power relations, and the collection of history that define a field's logic. To this end, Bhaskar relates that, "Scientifically significant generality does not lie on the face of the world, but in the hidden essence of things", which are the transfactual conditions (ibid, 77). On these bases and given its pursuit, the research characterizes its findings as aptly generalizable.

Besides this, the research adopted certain measures to ensure that the acquired data was empirically credible. Primarily, it used multiple instruments for data collection. It also employed multiple techniques for recording the data, including audio recorders, field notes, minutes of workshops and FGDs, and photography. Subsequently, it compared all the types of data during transcription to gain a comprehensive understanding of the participants' accounts. Moreover, it ensured that the transcription was contextually unadulterated and in-depth per the acquired data. The research also conducted closing workshops for each of the focal communities in March 2019 to share its findings with the participants. Through this, it obtained the participants' feedback, which validated the findings and provided new information for consideration. Also useful were the field visits by the research adviser and supervisor in November 2018 and February 2019 respectively. During these visits, the research organized meetings with some of the participants for them to share their personal experiences and validate the research findings. Ultimately, all the above underscore the generalizability and quality assurance of the research.



Picture 3.5: Meeting with some participants with doctoral supervisor (Source: E. Agyepong, 9 February 2019)

3.6 Ethical considerations

Given that the research involved a close engagement with the communities, it followed some ethics by undertaking the fieldwork and reporting the findings in a manner devoid of harm to the participants and the team. Primarily, the standards of ZEF and other professional codes of conduct guided the research. In

this regard, the Consent Form, developed according to ZEF's standards, offered potential participants the opportunity to decide their participation by giving them in-depth information about the research and its purpose among others. The research further required amenable ones to sign their consent, after which they received copies of the form as evidence of the agreement. The agreement also included their approval of photo documentation. In effect, the research refrained from forcing the participation of its target populations even covertly, which underscored its respect for their decisions.

The research also secured the participants' personal information by anonymizing the data through labelling. Thus, as mentioned earlier, it replaced their names with letters and numbers. Additionally, the research stored all the data on password-protected computers and only shared some information with the research assistants during transcription. Although the research intended to protect the participants, all of them consented to its use of their names and details as needed. However, besides referring to their specific commentaries to buttress key arguments where necessary, the research refrains from naming them in its report to protect their identities.

Moreover, the research was attentive to the culture of the varied study communities. Thus, during the initial visits, it paid homages to the respective TAs with drinks as is customary in Ghana. It was also attentive to the choice of words used during interactions and other mannerisms to avoid contempt. Of relevance too, it avoided questions or situations that would have incited tensions between individuals and groups. This explains why it separated the participants of some of the preliminary workshops. Regarding electronic sources of data, the research only relied on those that were in the public sphere and could be used and transmitted. To protect the team against the hazards of working in a remote area, the research provided the members with safety clothes and boots. It also maintained first aid kits to treat accidents and minor ailments. With these, the research was able to adhere to acceptable ethical standards, while achieving its objective.

3.7 Limitations and delimitations of the research

Generally, the research encountered limitations of time and language. Regarding time, although the fieldwork spanned nine months, unforeseen events hindered the research's adherence to the schedule. One of such instances was the reluctance of the Banda Nkwanta Chief to participate nor allow access to the community due to his misconception of the research's link to the BPA. This delayed the planned workshop for the community, which in turn, affected the analytical process and the definition of the research focus. Moreover, while certain unexpected outcomes enriched the research, their complexities demanded more attention, which derailed the planned timeline.

Language was also a key constraint to the research. This was particularly true for participants who did not speak nor understand Akan, the widely spoken language of Ghana. To overcome this constraint, the research relied on one of its research assistants, who was an Ewe to translate interactions with participants when needed. Although useful, this put the research at the risk of losing key information through the

translation process. Thus, the research tried to corroborate the answers by asking the same questions in different ways.

Of significance is also the research's inability to reach certain implicated agents including the Paramount Queen mother of the Banda Traditional Area, the Queen Mother of Carpenter, and the nomads who frequented the entire area before the dam construction. Regarding the first two, although the respective Chiefs emphasized that they spoke on their behalf, the research acknowledges that their direct participation would have enriched the findings. With respect to the nomads, the research made all attempts to reach them by scouring the areas where they usually settled and imploring the TAs to draw attention to their arrival when they announced themselves. Yet, due to their irregular movements, all these efforts were futile. Therefore, the research relies on the accounts of the participants, including the herders who have recently been admitted to the area, to relate the historical land access of the nomads.

Regarding its delimitations, the research has contextual, geographic, and temporal boundaries. Its contextual scope has been related in Chapter 1. As also related in Chapter 4, its geographic limits are the western communities of Bongase (including Bongase Toko and other satellite squatter fishing communities), Akanyakrom, Bui, and Dokokyina (including Dokokyina No. 1). They also include the eastern communities of Gbolekame North and Carpenter. Thus, the research excludes all other communities affected by the dam to achieve the requisite precision within the limited timeframe. Its timeframe of consideration is from the period before the dam construction up to the period of active data collection, which was between July 2018 and March 2019. Impliedly, its analysis omitted all other events occurring after this period.

3.8 Summary of the chapter

This chapter has described how the research operationalized and addressed its questions. It began by detailing the researcher's reflexivity as a precursor to the research paradigm, critical realism (CR). In this regard, it has shown that the research originated from anecdotal evidences of profound and distinct accounts of 'land scarcity' by family and acquaintances, which led to deep reflections about the generalization of the problem and its influence on policy and the livelihoods of affected populations. Subsequent to this, the chapter has outlined the foundations of the paradigm, elucidating its ontology and epistemology as relevant justifications for certain choices. Capitalizing on the reasoning of ontological realism, it has reconceptualized the theoretical framework to show the parallelism between it and the foundational social theory, which is Bourdieu's *Theory of Practice*, and to ease the subsequent data analysis. From this, the chapter has further discussed epistemological relativism, which underscores the relevance of intransitive and transitive dimensions of knowledge for gaining in-depth knowledge of the phenomenon under study. Consequently, it has given an overview of the research approach, Situational Analysis (SA), and how its adoption facilitated a robust knowledge of the complex findings. These include pertinent non-human entities and the larger social context in which the field of land access is embedded. The chapter has also outlined the research instruments that were employed for collecting and analyzing both primary and

secondary data. Following this, it has described the research's generalizability and credibility, but also its ethical considerations, limitations, and delimitations. Fundamentally, the research considers all the above as the springboard for discussing its findings, which are presented from Chapters 5 to 8. However, prior to these, the next chapter gives an account of the basic characteristics of the study communities to serve as a foreknowledge of the findings.

CHAPTER 4: THE STUDY AREA IN CONTEXT

4.1 Introduction

The previous chapter has shown that due to time and financial constraints, the research selected six out of the eleven initial communities to achieve its objective of providing a causal explanation of how the Bui Dam has engendered 'land scarcity' in its host area and the implications of the problem for societal transformation. As catalogued, these communities included Bongase (including the squatter fishing communities), Dokokyina resettlement community (including Dokokyina No. 1) Bui resettlement community, Akanyakrom resettlement community, Carpenter and Gbolekame North. Relevantly, the research considered the severity of the 'land scarcity' problem in the respective communities, their experiences of displacement, and spatial and social characteristics in its selection. The current chapter describes the physical and human characteristics of the study area to lay the groundwork for discussing the research findings in the next chapters.

4.2 The physical characteristics of the study area

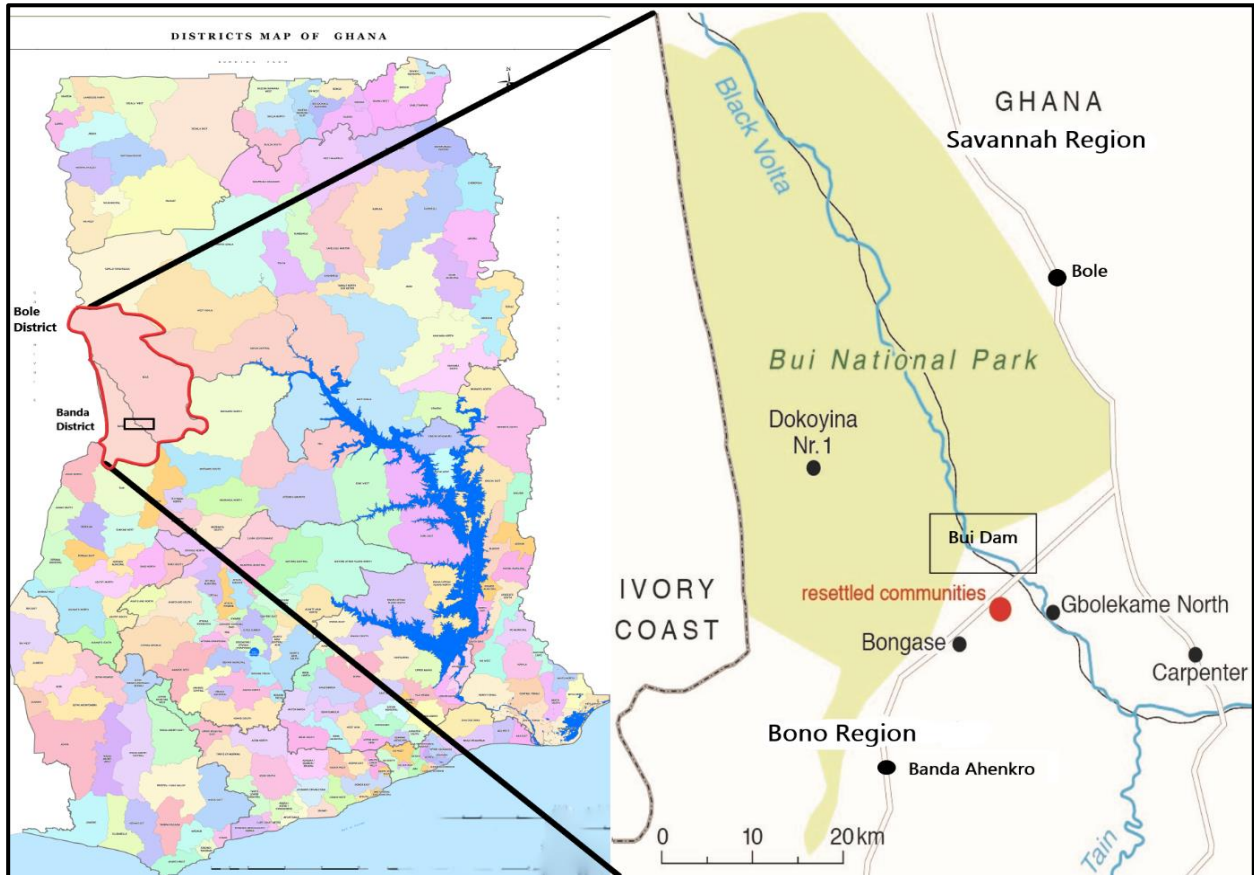
Indicatively, this section describes the physical characteristics of the study communities. These include their location and administrative boundaries, topography and drainage, geology and soil, climate, and vegetation, which are recounted sequentially. Fundamentally, these details are important to the research because they give an idea of the geographic scope of the communities and the opportunities available for their agrarian livelihoods and development in general.

4.2.1 Location and administrative characteristics

Geographically, the Bui Dam situates between the Banda and Bole districts of Ghana, which are respectively in the Bono and Savannah Regions. Categorically, Bongase (and its satellite communities), Bui, Dokokyina (including Dokokyina No. 1), and Akanyakrom are part of the Banda District while Gbolekame North and Carpenter are part of the Bole District. The Banda District is located within latitudes 8° 10' 0" N and longitudes 2° 22' 0" W, which is in the northwest of Sunyani, the regional capital (Ministry of Local Government n.d.). Its land area is 2,298.3 square kilometers (ibid). Within the Bono Region, the District shares boundaries with the Tain District to the south and the Jaman North District and the Wenchi Municipality to the southwest. However, it also shares boundaries with the Bole District in the Savannah Region to the north and northeast and the Kintampo South District in the Bono East Region to the southwest. Of relevance too, the Banda District is on the fringes of the international border between Ghana and Cote d'Ivoire, which as later explained, was host to the first cashew seed market hub in the sub region. The capital of the district is Banda Ahenkro, where the District Assembly and the offices of all decentralized public agencies including the Departments of Physical Planning and Agriculture are located. Following the Ghana Statistical Service's definition of urban areas, which is a locality of 5,000 or more persons (2014b, 10), the research deduces that all the thirty-four settlements in the Banda District including the study

communities are rural. This may partly account for the agrarian livelihoods of the communities as it underlies the availability of land for related uses and the unavailability of other livelihoods sources. Constitutently, all the focal communities of the district belong to the Bongase Electoral Area.

Figure 4.1: A map of the study area in the district and regional contexts



Source: Reproduced from multiple sources (2021)

The Bole District is conversely located within latitudes 8' 10.5 and 09' and longitude 1.50 E' and 2.45 W, which is in the southwest of Damongo, the regional capital of the Savannah Region (Ministry of Local Government n.d.). It covers an area 4800 square kilometers (ibid). In the region, the Bole District shares boundaries with the Sawla-Tuna-Kalba District to the north, the West Gonja Municipality to the northeast, and the Central Gonja District to the east (ibid). It also shares boundaries with some districts in the Bono East and Bono Regions. With the former, the district shares boundaries with the Kintampo North Municipality to the southeast and the Kintampo South District to south (ibid). However, with the latter, it shares boundaries with the Banda District to southwest (ibid). Like the Banda District, parts of the Bole District also skirts Ghana' international boundary with Cote d'Ivoire (ibid). Its district capital is Bole, where the District Assembly and all decentralized public agencies are located (ibid). Relevantly, the district has 148 settlements, out of which only Bole is urbanized (Ministry of Food and Agriculture n.d.). Other major towns in the district are Bamboi, Maluwe, Tinga, Mandari, and Banda Nkwanta (Ministry of Local Government n.d.). Impliedly, most of the settlements, including Gbolekame North and Carpenter, which are relevant to the research are rural. As deduced above, this may explain their agrarian livelihoods,

because it suggests an availability of land to expedite the relevant uses and a general absence of other livelihoods. Politically, Gbolekame North and Carpenter are part of the Jama and Teselima Electoral Areas respectively. Figure 4.1 on the previous page shows a map of the study area in the district and regional contexts.

4.2.2 Topography and drainage

The topography of the study area is mainly low and undulating with gentle slopes, some of which serve as basins of the tributaries of the Black Volta River (Agbley 2017, 21; Ministry of Food and Agriculture n.d.). Generally, the altitude of the Banda District is between 30 and 60 meters above sea level (Agbley 2017, 21). However, some areas around Banda Ahenkro have higher elevations of 592.2 meters above sea level (ibid). On the other hand, the altitude of the Bole District ranges between 183 and 365.76 meters above sea level (Ministry of Food and Agriculture n.d.). Both districts are drained by the Black Volta River, which also marks their shared boundary and that of their respective regions (Agbley 2017, 22; Ministry of Food and Agriculture n.d.). They are additionally drained by the tributaries of the Black Volta River. Thus, the Banda District benefits from the Tombe and Tain tributaries while the Bole District benefits from Laboni and Kalurakun tributaries (Agbley 2017, 22; Ministry of Local Government n.d.; Mul et al. 2015, 5). As explained in a subsequent section, the area experiences harmattan or dry seasons like other parts of the country, which may dry up some streams (Agbley 2017, 22; Ministry of Local Government n.d.). However, the Black Volta River reportedly flows throughout the year, which besides the elevational drop of the river, accounts for the construction of the Bui Dam on it (Agbley 2017, 22; Ministry of Local Government n.d.). Besides the surface water sources, the area is also said to have a high groundwater potential for water supply (Agbley 2017, 22; Ministry of Food and Agriculture n.d.; Ministry of Local Government n.d.). The research deduces that the low lying topographies, drainage systems, and river valleys provide good prospects for agriculture, which may also explain the communities' predominant agrarian livelihoods.

4.2.3 Geology and soil

The Banda and Bole Districts are mainly located on the Birimian rock formation, which is constituted by metamorphosed phyllite and schist sediments (Agbley 2017, 22; Wyman, O'Neill, and Ayer 2008, 27). Consequently, the soils of the districts are savannah ochrosols and are predominantly sandy loam (Agbley 2017, 22; Ministry of Food and Agriculture n.d.; Ministry of Local Government n.d.). The river valleys also have loamy alluvial soils. Relatively, these soils are rich in nutrients that support the cultivation of yams, maize, cassava, and leguminous crops (Agbley 2017, 22; Ministry of Food and Agriculture n.d.). They also support the growth of grasses and shrubs, which serve as pasture for livestock (Ministry of Local Government n.d.). Moreover, some parts of the area have clay deposits and sand, which are extracted for constructing houses (Agbley 2017, 22).

4.2.4 Climate

The study area falls within the Volta basin system, which is one of the three tropical hydro-climatic zones of Ghana (The World Bank 2011, 2). Characteristically, the zone is marked by extreme wet (rainy) and dry (harmattan) seasons due to the cardinal movement of the Intertropical Convergence Zone (ITCZ) (Ministry of Local Government n.d.; Mortey et al. 2017, 4). However, while the Banda District has a bimodal rainfall pattern, the Bole District has a unimodal rainfall pattern (Agleby 2017, 23; Ministry of Food and Agriculture n.d.; Ministry of Local Government n.d.; Yao et al. 2018, 2). In this regard, the former experiences an average annual rainfall of between 1,140 and 1,270 millimeters whereas the latter has an average of between 800 and 1,200 millimeters per annum (Ministry of Local Government n.d.; Ministry of Food and Agriculture n.d.; Yao et al. 2018, 2). Relevantly, the major rainy season of the Banda District occurs between April and July while the minor season occurs between September and November (Ministry of Local Government n.d.). Given its unimodal pattern, the rainfall of the Bole District usually occurs between May and October (Yao et al. 2018, 2). Impliedly, the dry seasons of the Banda and Bole Districts are between late November and March, and November and April respectively.

Regarding temperature, the Banda District reportedly has an average of 24.5 degrees Celsius throughout the year (Ministry of Local Government n.d.). The average maximum and minimum temperatures are 30.9 and 21.2 degrees Celsius, whereby the former is usually recorded in the months of February, March, and April (ibid). However, the Bole District records an average annual temperature of between 26 and 27 degrees Celsius (Aning et al. 2019, 105). Its maximum and minimum temperatures are respectively, 40 and 28 degrees Celsius (Ministry of Local Government n.d.). The hottest months of the year are December, January, and February (ibid). Principally, these climatic conditions support the agrarian livelihoods of the study communities and also account for the vegetation of the area, which is discussed in the next section.

4.2.5 Vegetation

The Banda District has a dual vegetation consisting of the moist semi-deciduous forest and the guinea savannah woodland (Ministry of Local Government n.d.). According to Agleby, the latter is the result of limiting climatic and edaphic factors, as well as human activities such as incessant bushfires and logging on the original forest vegetation (2017, 24). Consequently, timber species including Odum, Sapele, Wawa and Mahogany are currently only found in communities such as Dorbor and Bongase (ibid). Moreover, the Bui National Park, which partly falls within the district and other forest reserves such as the Sawsaw, Yaya and Bawa Watersheds are host to wildlife such as deer, antelope, and some monkey species. The Bui National Park is also one of the only two areas in the country that host viable populations of hippopotamus (BirdLife International 2021). Reportedly, the combined vegetation facilitates the cultivation of a wide variety of crops including legumes, tuber, and vegetables, and consist of grass and shrubs for feeding livestock (Ministry of Local Government n.d.).

Unlike the Banda District, the vegetation of the Bole District is predominantly guinea savannah woodland with grasses and scattered trees (Ministry of Food and Agriculture n.d.; Ministry of Local Government n.d.). As reported, this is mainly the result of human activities such as extensive crop cultivation, animal

grazing, and logging (Ministry of Local Government n.d.). However, towards the south of the district where the focal communities of Gbolekame North and Carpenter are located, the vegetation is said to be dense with relatively more tree cover (Ministry of Food and Agriculture n.d.). Even in the extensive savannah areas, there are economic trees such as shea, African locust bean, teak, and kapok, which support the livelihoods of the communities (Ministry of Local Government n.d.). Generally, the vegetation of the district also supports the cultivation of legumes, tuber crops, and vegetables, as well as provides fodder for livestock (Ministry of Local Government n.d.). Having described the physical attributes of the study area, the next section outlines its human characteristics to serve as an additional precursor to the discussions on the research findings.

4.3 The socio-economic characteristics of the study area

This section describes the socio-economic attributes of the study area. Specifically, it relates its demography, ethnicity, and economic activities, which are relevant to the research.

4.3.1 Demography

Following the traditional benchmark, the Ghana Statistical Service (GSS) conducts censuses every ten years (United Nations 2017, 24). Thus, its last census was in 2010 when it recorded a national total population of 24,658,823 (Ghana Statistical Service 2013). At the time, the Bono and Savannah Regions had not been created. Hence, the study districts and communities were part of the Brong Ahafo and Northern Regions whose recorded populations were 2,310,983 and 2,479,461 respectively (ibid). The report excluded the populations of the respective communities but accounted for those of the Banda and Bole Districts, which were 20,282 and 61,593 respectively (Ghana Statistical Service 2014b, 15; 2014c, 14). However, during its projection of the recorded population in 2016, the GSS only focused on the national and regional statistics. Consequently, it estimated that the populations of the Brong Ahafo and Northern Regions had increased to 2,660,642 and 2,858,793 respectively (Ghana Statistical Service 2016). Given this and the shared characteristics between the new and old regions, the research relies on the GSS' regional population projections to determine the recent populations of the study districts. As the projection year is closer to the research's temporal limit of 2019, it conjectures that the results will give a practical idea of the demography of the study area that will underscore the nature of the focal communities. In this regard, the research uses the population growth rates of the regions to determine the recent populations of the study districts. Relevantly, it applies the common equation as shown below to calculate the population growth rates of the regions (USAID n.d., 19):

$$\frac{\text{Natural increase} + \text{net in-migration}}{\text{Starting population}} \times 100$$

Fundamentally, the GSS's annual projections only account for the total populations, which encompass both natural increase and net in-migration. Thus, based on the projected populations of the Brong Ahafo and

Northern Regions in 2016, the research deduces that their growth rate over the 6 year period was 15 per cent. However, to use this result to determine the populations of the study districts, the research further applies the equation below, which is commonly used to project populations:

$$N_t = P e^{(r \cdot t)}$$

In this regard, 'N_t' is the future population; 'P' is the starting population; 'e' is the base of the natural logarithms and equals 2.71828; 'r' is the growth rate; and 't' is the time period. As the research's deduced growth rate of the regions encompasses the time period, r*t equals 0.15. Consequently, the research estimates that the populations of the Banda and Bole Districts in 2016 were 23,564 and 71,559 respectively. As mentioned previously, most of the communities of the districts including the study communities have populations of less than 5,000 persons, which underscores their rural categorization (Ghana Statistical Service 2014b, 10; Ministry of Local Government n.d.).

With respect to the sex distributions of the districts, the GSS reports that males and females constituted 10,372 (51.1 per cent) and 9,910 (48.9 per cent) of the population of the Banda District in 2010 (ibid, 15). However, in the Bole District, they respectively constituted 31,022 (51.7 per cent) and 30,571 (48.3 per cent) (Ghana Statistical Service 2014c, 14). Using the equation above, the populations of the genders in the Banda District in 2016 may be estimated as 12,050 (51.1 per cent) and 11,513 (48.9 per cent) respectively. Conversely, those of the Bole District in the same year may be projected individually as 36,041 (50.4 per cent) and 35,517 (49.6 per cent).

Age-wise, the GSS reports show that the study districts have youthful populations (2014b, 16; 2014c, 15). Following the definition of the Ministry of Youth and Sports, these are between the ages of 15 and 35 (2010, 5). However, as gathered from the study communities', the local age range of youths is between 15 and 49. Based on this local definition and inferring from the GSS report, youths constituted 9,145 (45.1 per cent) of the population of the Banda District in 2010. In the Bole District, they constituted 28,387 (46.1 per cent). Projecting these with the given equation above, the research concludes that youths constituted 10,625 (45.1 per cent) and 32,980 (46.1 per cent) of the respective populations of the Banda and Bole Districts in 2016. Relevantly, the youthful characteristics of the districts' populations imply that many of the people are economically active, which in turn underscores the need to facilitate livelihood opportunities in the area.

4.3.2 Ethnicity

Ethnically, the study area is diverse. The Banda District constitutes ethnicities including the Ligbi, Banda, Ntore Awutu, Mo, Bono, Gonja, and Ewe among others (Agleby 2017, 25), while the Bole District constitutes the Vagia, Brifor, Safalba, Mo, Dagaate, Grushie and the Pantras among others (Ministry of Local Government n.d.). Although the study communities are also ethnically-diverse, each of them has a dominant ethnicity. Thus, in the Banda District, the people of Bongase are mainly Bandas, those of Bui and Dokokyina are mainly Mos, while those of Akanyakrom are Ewes. In the Bole District, the Gbolekame North and Carpenter communities constitute mainly Ewes and Dagaates, although the latter is originally a Mo community. Of significance too, some of the people have hybrid ethnicities due to intermarriages.

4.3.3 Economic activities

The major economic activity of both the Banda and Bole Districts is agriculture, which together with forestry and fishery absorbs 71.2 per cent and 59.6 per cent of the respective populations (Ghana Statistical Service 2016, 39; 2014c, 33; Ministry of Local Government n.d.). Primarily, farming is for subsistence; however, the farmers sell some of their horticultural produce to earn money for other necessities (Ministry of Local Government n.d.). In both districts, the major horticultural crops are yam, groundnut, maize, cassava, and legumes such as millet and sorghum (ibid). Besides these, the farmers have recently begun to cultivate cashew trees on a large-scale (ibid). As explained later, they sell the seeds to earn money to support their livelihoods. Relevantly, the largely agrarian economy of both districts underscores the importance of land to the livelihoods of the people, which in turn validates previous research findings on the profound effects of the Bui Dam on host communities (Agbley 2017; Asiamah 2015; Mettle 2011; Obour et al. 2016).

Besides agriculture, forestry, and fishing, the other major economic activities of the districts are mining and quarrying, construction, repair of motor vehicles and motorcycles, and manufacturing. In the Banda District, these sectors respectively engage about 0.3 per cent, 5.8 per cent, 7.0 per cent, and 3.1 per cent of the population. Conversely, in the Bole District, they respectively engage about 9.3 per cent, 1.3, 10.4 per cent, and 6.6 per cent of the population.

4.4 Summary of the chapter

This chapter has given an overview of the study area by describing its physical and socio-economic attributes. The former encompassed a description of the locations of the study districts, their administrative boundaries, topography and drainage, geology and soil, climate, and vegetation. However, the latter includes a description of the demographic characteristics of the districts, the respective ethnicities, and dominant economic activities. Relevantly, the chapter is intended as a precursor to the next chapters, which present the research findings. As outlined in Chapter 1, these encompass a chronicle of historical and recent events on the land access and varied social constructions of 'land scarcity' among the varied study participants and the implications of these for societal transformation. In this regard, Chapters 5 and 6 address the historical and recent circumstances and the participants' consequent social constructions of 'land scarcity' in the respective periods. Following the research questions, each of the chapters focuses on the system of land access (that is the land tenure systems and the qualities of land), power relations, land access strategies, and the participants' interpretations of the outcomes. Subsequently, Chapter 7 discusses the participants' strategic responses to their recent social constructions of 'land scarcity'. This culminates in Chapter 8, which details the consequences of the strategic responses on existing frames of action. With these, the research ultimately aims to achieve its objective of providing a causal explanation of how the Bui Dam has engendered 'land scarcity' in the affected communities and the implications of the problem for societal transformation.

CHAPTER 5: THE HISTORICAL EPISODES AND SOCIAL CONSTRUCTIONS OF 'LAND SCARCITY'

5.1 Introduction

This chapter is the first of four that address the research questions by discussing the chronological findings on 'land scarcity' in the study communities. It focuses on the historical period, which serves as the keyhole for understanding the agents' recent social constructions of 'land scarcity'. To this end, the chapter details the findings on the pivotal themes, including the historical system of land access (the land tenure systems and qualities of land) and power relations that underlay the agent's land access endeavors in the past. Based on these, the chapter discusses the agents' land access strategies and their interpretations of the outcomes. Following the logic of epistemological relativism, these descriptions will constitute the intransitive dimension of knowledge, which encompasses the actual situation; that is the agents' socially produced definitions of the situation. Thus, in order to have relevance and advance knowledge, the chapter interprets each of the thematic descriptions per the theoretical framework, which represents the transitive dimension of knowledge.

Consequently, the chapter will capitalize on the historical system of land access to conceptualize the historical fields and subfields of land access. These will include a submission on the stake of the fields and the pertinent sub-stakes of the subfields. It will also result in the identification of the agents' habitus or land values and the fields' logics. Subsequently, the chapter will build on the agents' power relations to identify the relevant capitals of the subfields and the legitimization of power within the subfields and the fields in general. It will additionally use the findings to emphasize the external fields that contributed to the agents' endeavors, the fields of power, and thus, the historical holders of symbolic power. Hereafter, the chapter will interpret the analytical description of the agents' strategies of land access as social practices by emphasizing the manner in which their habitus, capitals, and the field's logics influenced them. As the agents' habitus, power relations, and the logic constitute the generative mechanisms or frames of action of the field, the chapter will at this stage attempt to foreground the historical fields of land access in order to show its embeddedness. Lastly, the chapter infers from the agents' interpretations of their historical land access to give insight into their social constructions of 'land access' and 'land scarcity' in the period. Based on the degree of similarities, the chapter may discuss certain themes by community or in general to avoid monotony. Ultimately, the results of this chapter will be the baseline for the next chapter, which focuses on recent events and their implications for land access.

5.2 The historical system of land access

Data gathered from the study communities show that the Traditional Authorities and some members were aware of the State's provisional land acquisition, which had been effected in the 1960s. Among such ones was the Abusuapanin (clan head) of the Bui Resettlement Community, an 84-year-old retired soldier who witnessed the initial works on the project. As he explained during a key informant interview on 4

September 2008, "When Nkrumah decided to build the dam in 1962, he brought in some Russians who demarcated our land and the land of the other affected communities, such as Dompofie to facilitate the acquisition." During the period, customary tenure systems were predominant in the area; yet, the State invoked legislations including the Administration of Lands Act (1962a), the State Lands Act 125 (1962b), and the Public Conveyancing Act 302 (1965) to exercise its eminent domain (Koranteng 2015, 1). Although the dam construction was abruptly terminated in 1966 after the coup d'état, remnants of the camp used by the Russian engineers and some dam construction equipment perpetuated the idea of the land acquisition. Subsequently, the new government re-demarcated some of the acquired land – including the Dokokyina community – as part of the Bui National Park during its establishment in 1971 under the Wildlife Reserve Regulations (Legislative Instrument 710).

For this, the Yabonwura (meaning chief in the local language) of Gonja received full compensation as the allodial titleholder of the lands in the north of the Park. However, recalling from an existing document, the Head of the Wildlife Division in charge of the Bui National Park explained that in the south including Dokokyina, the State only paid 14 per cent of the total compensation to a number of people. According to him, issues such as domestic disputes over the rightful recipient delayed further payments. The Paramount Chief of the Banda Traditional Area, Osabarima Okokyeredom Kwadwo Tsito, who rules over the south corroborated this account. However, he clarified that the State paid the money to the Paramount Chief at the time, Nana Kofi Juro, and that the delay was due to disputes over the rightful successor to the paramountcy after his passing. Relevantly, the establishment of the Park displaced a hamlet, Kasa, without resettlement. Although the Dokokyina community was also affected by the Park, it was not displaced. As explained by the Head of the Wildlife Division, the community was well established; thus, its displacement was pending a resettlement plan when the State re-acquired the land for the Bui Dam. Despite the historical acquisition, the research gathered that the communities still applied their respective customary tenure systems to land access. Those who lived within and around the Bui National Park also applied their customary tenure systems even when they accessed land illicitly. Primarily, the participants attributed the resilience of their customary tenure systems to the failure of the dam and the unpaid land compensations, which reportedly, would have substantiated the State's ownership.

Before the construction of the Bui Dam, land also had some distinctive qualities, which underpinned its meaning and value to the people. The participants recounted that it was a common-pool resource and communally owned such that members and some non-members of the landowning communities had unexclusive access to it. Based on historical preoccupation, the landowning communities included Bongase, Bui, Dokokyina, and Carpenter. Consequently, the Akanyakrom and Gbolekame North communities, which migrated to the area in 1919 for artisanal fishing and were respectively guests to the Bui and Jama communities, were non-landowners. Despite this, the Akanyakrom Chief was enstooled as the Dabenhene (overlord of migrants) of the Banda Traditional Area in the 1960s, which subsequently elevated the members to the status of natives. Although an offshoot of the Akanyakrom community, the Jama community also considers the members of the Gbolekame North community as natives due to their long-term residence. Given these local perceptions, the research acknowledges the Akanyakrom and

Gbolekame North communities as natives along with the landowning communities. References to non-natives thus encompass seasonal and relatively recent settlers and those who the communities' refer to as such. Against this background, this section addresses research questions 'a (i)' and 'a (ii)', which are '*What were the land tenure systems before the Bui Dam construction?*' and '*What were the qualities of land?*' It encompasses two broad subsections, which respectively focus on the descriptive analyses of the participants' accounts and subsequently, a third, which provides their corresponding theoretical interpretations.

5.2.1 Descriptive analyses of the historical land tenure systems

Hess and Ostrom emphasize that common-pool resources may be owned and used according to specific property regimes, with associated implications for those concerned (2001, 120). Consequently, although the lands of the study area were common-pool resources, the customary tenure systems defined respective property rights for the people. As mentioned in Chapter 3, Ghana's Constitution (1992) guarantees the application of customary tenure systems. Thus, the lands of the study area were part of those characterized as customary lands, which according to Kasanga, constituted about 78 per cent of the country's total land area (22,754,000 hectares) (2003). Although ethnically and geographically diverse, the landowning communities – including Bongase, Bui, and Dokokyina in the south, and Carpenter in the north – shared some principles of land tenure. Conversely, the non-landowning communities of Akanyakrom and Gbolekame North abided by the land tenure systems of their host communities, Bui and Jama. The customary tenure systems were characteristically unwritten; however, their principles were widely known by the members. Thus, following their accounts, the subsections describe the historical land tenure systems of the study communities. Specifically, these encompass the principles, procedures, and practices of ownership and control, use, and transfer of land. As the participants of the communities could not provide the names of the associated interests, the research analyzes their responses within the context of Ghana's Land Bill (2020) to identify the specific interests. Typically, customary tenure systems are evolutionary. Thus, the research treats the descriptions as the participants' interpretation of the system in operation just before the State's re-acquisition of the land.

5.2.1.1 The right of ownership and control

According to the participants of the study communities – including Dokokyina, which was located within the Bui National Park –, the lands belonged to the stools of the communities before the State acquired them recently. Primarily, stools as used by them are the seats of the chieftains (the chief and the queen mother) and are symbolic of their authority. Like the Ashantis, the stools also represent "the repository of the spirit and soul" of the community that underlie their "common ancestry and corporation" (Baryeh 1997, 7). Customarily, designated kingmakers who are themselves sub-chieftains, appoint the chieftains from royal families. As gathered, the selection depends on the system of inheritance of the ethnic groups. Thus, among the Bandas of Bongase who practice a matrilineal system of inheritance, the kingmakers select the chieftains from the descendants of the female royal members. Conversely, the other ethnic groups – including the

Mos of Bui, Dokokyina, and Carpenter and the Ewes of Akanyakrom – practice a patrilineal system of inheritance. Hence, the kingmakers select their chieftains from the descendants of the male royal members. With respect to the Chieftains of Akanyakrom, the Chief of Bui selected and enstooled (the act of installing) the first ones before their assumption of the role of Dabenhene at the Banda Paramountcy. Subsequently, the appointed chieftains enstooled kingmakers, whose descendants continue to appoint chieftains when necessary. Although the Gbolekame North community has a status similar to the Akanyakrom community, it lacks self-standing chieftains. This is because the land on which the community subsists belonged to a clan head of the Jama community, which is also ethnically Mo. Thus, he governs the community and randomly selects caretakers to substitute him in his absence. Given this, the role of caretaker is not heritable.

In all cases, the sub-chieftains of the respective communities support the chieftains to undertake their responsibilities. Together, the chieftains and sub-chieftains constitute the traditional authorities (TAs) and are sanctioned by the institutions of chieftaincy, which is the traditional systems that generally underlie their selection and undertakings. Regardless of their ethnicity and systems of inheritance, all the communities believed that the royal families led them historically through conquests and settling at their present locations. Thus, they revered the chieftains as their respective socio-political and socio-cultural leaders and the holders of the allodial titles to land. In this regard, land underpinned the landowning stools mainly because of its historical acquisition through conquest. Consequently, the communities believed that the extent of land controlled by the chieftains determined their might or authority. All the communities also shared certain cosmological traditions with respect to land. Of relevance, all the landowning TAs had reserved certain trees as sacred – and exempt from felling –, because their existence spanned many lifetimes and was used to transmit the communities' shared beliefs to generations. Although the research could not find the origin of this belief, its shared characteristic underscores the spatial fluidity of the customs of the research communities. Given their beliefs, the landowning TAs considered land ownership and control as authority because they undergirded their political and spiritual roles. As emphasized by the Bongase Abusuapanin during an interview on 5 November 2018,

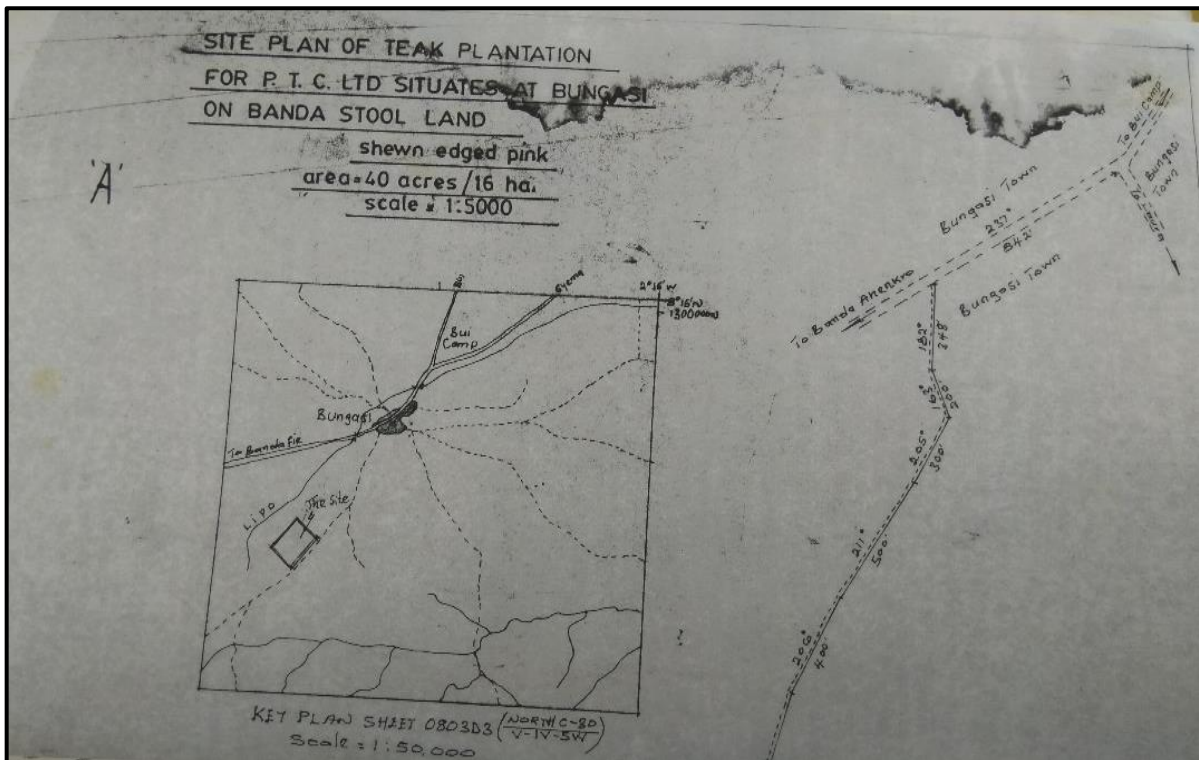
"Land is what makes a stool; without land, one cannot rule."

To this end, the chieftains oversaw all matters – including those related to land – as a unit. Although the queen mothers participated in relevant discussions, they largely ceded their authority to the chiefs who also represented the unit and communicated all decisions to the communities. Thus, most references to land ownership applied to the chiefs and not the unit, which included the queen mothers. As implied by the Abusuapanin of Bui at the preliminary workshop on 5 September 2018, *"We are all under the authority of the chief, who owns the land."* While this assertion related to his community, it also pertained to the entire Banda Traditional Area, of which the community and the other western communities are still part of the established paramountcy. It also applied to the eastern communities, which are part of the Mo Traditional Area. Briefly, a Traditional Area is the administrative and geographic boundaries that are under the jurisdiction of a traditional leader such as a paramount or divisional chief. Consistent with Sections 12 and 14[1] of the Chieftaincy Act 759 (2008) of Ghana, which repeals the Chieftaincy Act 370 (1971), each Traditional Area has a Traditional Council, made up of all the legitimate chieftains of the area; that is those

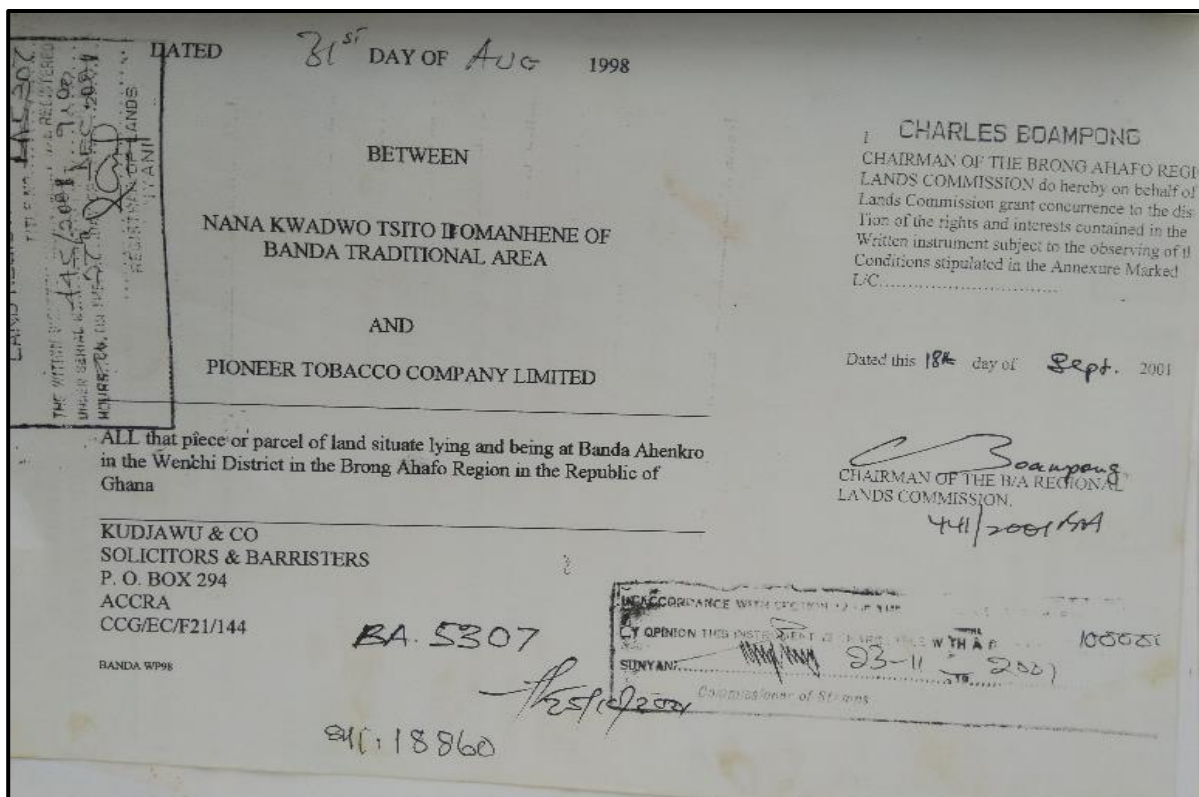
who are registered at the National House of Chiefs under Section 59 of the Act. Following the primary data, the main interest that encompassed landownership and control was the allodial title, which according to Section 2 of Ghana's Land Bill may be "held by the State, a stool ... clan ..." based on "compulsory acquisition, conquest, pioneer discovery ..." (2020). However, the landowning communities of the west – Bongase, Bui, and Dokokyina – and the east – Carpenter and Jama – allocated this title differently. Thus, the next paragraphs discuss the rights of ownership and control by cardinal area.

The western communities: In the Banda Traditional Area of which the western communities are part, the Paramount Chieftains held the allodial title to land. The paramountcy alternates between two royal families –Kralongo and Petele –, which are respectively from Banda Ahenkro and Kabronum. Thus, while the former presently holds the office, it will automatically revert to the latter upon the passing of the Chief. In this regard, the affiliate landowning chieftains of the western communities are divisional or subordinate to the paramountcy. Thus, they exercise the allodial titles on behalf of the Paramount Chieftains at the community level. Explaining the principles of land ownership of the area during an interview with the Paramount Chief on 9 December 2018, his Chief Linguist emphasized that, "*Banda is a unified state and the land belongs to the Paramount Chief. As he enstools the divisional chieftains who govern the respective communities, they are considered caretakers of the land for him and thus consult him on all land-related matters.*" To support this claim, he referred to a lease by the Pioneer Tobacco Company Limited (PTCL) of about forty acres of land in Bongase in 1998 for agricultural purposes. As shown in Picture 5.1 on the next page, although the leased land was in Bongase, it was categorized as a stool land of the Banda Traditional Area. Consequently, Pictures 5.2 and 5.3 show that the Paramount Chief signed the lease as the lessor and the Bongase Chief and his Kurontihene (literally the head of the community and next in command to the Chief) signed as witnesses. Impliedly, the Paramount Chief had the right to manage and alienate land. His role as the lessor supports the fact that he fronted all land-related matters on behalf of the Paramount Chieftains. Likewise, while the Queen mother of Bongase may have participated in the transaction, the Chief's endorsement showed that he represented the unit.

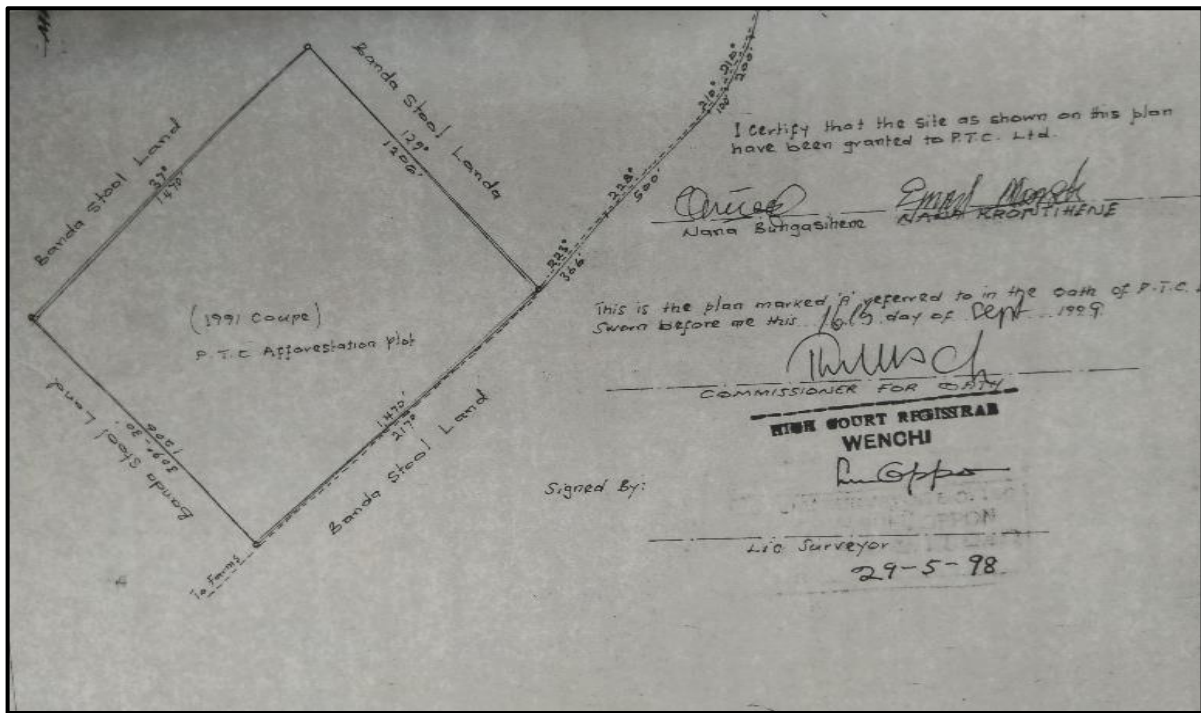
The Bongase Abusuapanin confirmed this import as follows during his interview: "*The lands belong to the paramountcy of the Banda Traditional Area. However, every divisional chief has the authority to oversee his respective land. For instance, every divisional chief has independently prohibited the felling of certain trees and established specific taboo days, which we call 'Dzopo', when productive activities like farming are expected to be interrupted to allow the earth to rest.*" Besides this, he confirmed that while the kingmakers customarily appoint the chieftains when there is a vacancy, the Paramount Chieftains enstool them. Thus, the Chieftains of Bongase are divisional to the Paramount Chieftains and hold the positions of Adontenhene and Adontenhema, which are traditional military positions.



Picture 5.1: A site plan showing the land area leased by the PTCL in Bongase (Source: E. Agyepong, 9 December 2018)



Picture 5.2: A page of the agreement showing the paramount chief as the lessor (Source: E. Agyepong, 2 December 2018)



Picture 5.3: A page of the agreement showing the chief and kurontihene of Bongase as witnesses to the transaction (Source: E. Agyepong, 9 December 2018)

To be sure, the Bongase community is ethnically Banda and has been traditionally subject to the Banda Paramountcy since they all settled in the area. However, the landowning communities of Bui and Dokokyina, which are ethnically Mos, only joined the paramountcy relatively recently. From oral history, the Bui community migrated to the south from across the river in the north, where it shared boundaries with Jama, another Mo community. In 1944, the British colonists created a Native Court in Banda among other places under the Native Courts (Colony) Ordinance Cap. 98 (1944) (see: Agyepong 2013, 121; Amankwah 1970, 46). At the time, the British governor, Sir Allan Burns reportedly emphasized his need for “the necessary powers” to “grant, withhold or withdraw recognition” of paramount and head chiefs (Knierzinger 2011, 9; Manu 1975, 118). Thus, the Banda Paramount Chief recounted that “When the ‘white man’ [the colonial governor or his representative] came to the area during the colonial era, he was impressed by the organization of the Banda Chieftains because there was a Head Chief and Queen mother and their sub-chiefs and sub-queen mothers who governed the respective communities. As a result, the Banda chieftaincy institution was one of five or six, which he commended in the Bono area and maintained for the purpose of the Native Court.”

Given the Bui community’s location in the south and proximity to the Banda area, the colonial governor included it in the Native Court of Banda under the headship of the then Banda Chief. To date, the Bui community has remained part of the jurisdiction of the Banda Area despite the traditional and administrative changes from Native Courts to paramountcies. The successive chieftains have also been enstooled by the Paramount Chieftains after their appointment by the kingmakers. However, as the Bui community is ethnically Mo, the act is merely symbolic and does not result in a traditional title at the paramountcy. Moreover, despite its membership of the Banda Traditional Area and Council, the Chief of Bui maintained that the authority of the Paramount Chieftains excluded their ownership and control over the stool lands of the Bui community. As explained by the Abusuapanin during his interview, the Bui

community was the first to settle in the area and in fact hosted the people of Banda before they migrated westwards, where another community called Dompofie hosted them. He further explained that the Bui community's pre-occupation is the reason behind the name of the National Park and recently, the Dam. Thus, he stated that the Bui Chieftains hold the allodial title to their respective land and not the Banda Paramount Chieftains as was the case of the Bongase community. This explains why they granted land access to the Akanyakrom community independently of the Banda Paramount Chieftains.

The history of the Dokokyina community's membership of the Banda Traditional Area is conversely disparate. Claims by the Paramount Chief of the Banda Traditional Area indicated that the community was originally migrant hunters, who following the permission of the then Banda Paramount Chief, settled on the land and automatically became subjects to the paramountcy. However, during an FGD on 19 January 2019 with the TAs of Dokokyina, the Chief disputed this claim by explaining that their ancestors migrated from among the Grusie of northern Ghana and were the first to occupy and claim the vacant lands at the former settlement. Although these lands became part of the Bui National Park after its establishment in 1971, the Wildlife Division gave the Dokokyina community access to some lands for farming. *"Our lands were very extensive and we lived farther from the other communities including Banda Ahenkro. During the colonial era, the 'white man' came to our community by aircraft and suggested that we should join forces with the Banda people because we were not easily accessible"*, the Chief further explained when asked about their affiliation with the Bandas. Thus, like the Bui community, the Dokokyina community was compelled to become part of the Native Court of Banda, which has consequently cemented their membership of the present day Banda Traditional Area. As they are also not originally Banda, the Chieftains do not hold any traditional title at the paramountcy. However, unlike the Bui Chief, the Dokokyina Chief acknowledged that they ceded their authority over land to the Paramount Chieftains when they joined the paramountcy. Hence, during the establishment of the Bui National Park, the Banda Paramount Chieftains were the payees of the land compensation.

The eastern communities: Regarding Carpenter and Jama, host to the Gbolekame North community, although they are also part of a paramountcy – the Mo Traditional Area and Council – their systems of landownership are dissimilar to the western communities above. As gathered, the Mo chieftains established the Mo Traditional Area to distinguish themselves from their Gonja neighbors, with whom they shared a Traditional Council in the past. During an interview on 12 December 2018 with one of the TAs of Jama, he explained that, *"When the current Chief of Jama was enstooled, he realized that the Gonjas have a different dialect, costume, and chieftaincy institution from us Mos. While the Gonjas are enskinned, our chieftains are enstooled. Therefore, he called for a separation of Mos and Gonjas, which led to the establishment of the Mo Traditional Council."* Subsequently, the center of the Mo Traditional Area is Bamboi, a notable town in the area, and the paramountcy or presidency currently resides with the Chieftains of Bamboi. Unlike the Banda Traditional Council where the paramountcy alternates between two royal families, the position in the Mo Traditional Council rotates among all the chieftains of the affiliate communities. Thus, the chieftains appoint successors upon the passing of the sitting Paramount Chieftains. To be sure, this arrangement is unusual in respect of Section 13[2] of the Chieftaincy Act (2008), which states that under circumstances of

rotational paramountcies among independent communities, the presidency should rotate biennially and in alphabetical order of the stools. Moreover, given the circumstances surrounding their paramountcy, the presidency excludes ownership and control of the lands of the member communities. Due to this, the member chieftains are autonomous and hold the allodial titles to their communal lands per the respective customary tenure system.

However, while the Chieftains of Carpenter held the allodial titles to their communal land, the Chieftains and three sub-chiefs shared the title in Jama, which is host to the Gbolekame North community. Traditionally, the Chieftains and sub-chiefs are heads of the four major clans of the community, which are Jankwera, Chaara, Nyamala, and Bian. According to oral history, these clans migrated separately from among the Sissalas, Gonjas, Grusies, and Wangalas in the north to their respective lands but decided to join forces to fight against their enemies. Following this, they made the Head of the Jankwera Clan the Chief. As the clans had already installed their gods on the respective lands, they agreed that each head would own and control his clan land. Relevantly, none of the clans had a queen mother. However, the Jankwera Clan enstooled one recently, making her the Queen mother of the Jama community. This means that except the Jankwera Clan, the other clan heads were the sole allodial titleholders of their respective lands. Consequently, the Head of the Bian Clan held the allodial title to the land occupied by the Gbolekame North community. Regardless of their autonomy, the respective clans shared a land tenure system, which also applied to the Gbolekame North community. However, as gathered, each of the clan heads could introduce new principles independently to advance their interests when necessary. Despite the autonomy and power of the clan heads, only the Chieftains are recognized by the National House of Chiefs.

Other key findings: Although the allodial title-holding chieftains – the Paramount Chieftains of Banda, the Chieftains of Bui and Carpenter, and the Bian Clan Head of Jama – had so-called ownership and control of the land of their respective jurisdictions, their roles were somewhat constitutionally delimited. Primarily, their rights excluded the right over minerals found on the land, rivers, streams, and watercourses as per Article 257[6] of Ghana's Constitution (1992). Legally, these resources are vested in the President of the Republic "on behalf of, and in trust for the people of Ghana". However, due to their waterfront locations, the Chieftains of Bui and the Bian Clan Head extended their control over land to the river. This explains their ability to grant the Akanyakrom and Gbolekame North communities access to the river. Although contrary to the constitutional provision, the research also gathered that they exercised their authority decades before the Constitution was established. Besides this, Article 267[1] underlines that "All stool lands in Ghana shall vest in the appropriate stool on behalf of and in trust for the subjects of the stool in accordance with customary law and usage." On this basis, Article 36[8] also maintains that "... the managers of ... stool ... lands are fiduciaries charged with the obligation to discharge their functions for the benefit ... of the people of ... the stool ... concerned and are accountable as fiduciaries in this regard." Given this, the role of the chieftains were more of custodians of land rather than outright owners. In fact, stool lands are common in nature rather than privately owned resources and customary tenure systems are common property regimes. These mean that all members of the individual communities owned the lands together and had bundles of rights, including the right to exclude non-members from access.

To this end, the agreement between the Banda Paramount Chieftains and Pioneer Tobacco Company Limited emphasized the representational role of the Paramount Chief. As it states, the Paramount Chief acted on behalf of “the Principal Elders of the Stool [including the Queen mother and divisional chieftains] whose knowledge, consent and concurrence are essential or necessary for the valid alienation, grant or transfer of any land”. This implies that while the divisional chieftains had to seek the consent of the Paramount Chieftains before making a grand land-related decision, the latter also informed them about all land-related decisions because they represented the interests of the respective communities. Besides sustaining the constitutional provision, the agreement aligns with Section 45 of the Chieftaincy Act (2008), which emphasizes that the alienation of stool property should be by “the consent of the Traditional Council concerned.” Ultimately, these underscore the fact that land belonged to the larger community of the Banda Traditional Area, whose representatives were the divisional chieftains. This principle of ownership also applied to the Bui, Carpenter, and Jama communities.

Despite lacking absolute ownership of customary lands, the accounts thus far has shown that the chieftains – including the Bian Clan Head – legally managed and governed the land of their respective communities. Ubink et al. note that such circumstances do not preclude the State’s involvement to some extent through its Land Sector Agencies in “land use planning, ... Stool Lands Revenue collection, and adjudication of land disputes” among others (2009, 163). Consequently, the Banda Paramount Chief related that there was a government appointed Stool Lands Revenue Collector, who worked under the Office of the Administrator of Stool Lands and collected payments such as rents from especially non-native land users. Such payments, including rents, dues, royalties, and revenues were in respect of Section 1[b] of the Office of the Administrator of Stool Lands Act 481. Per Section 7 of the Act, the accumulated revenue was distributed as follows: 25 per cent to the stool through the TAs for the maintenance of the stool; 20 per cent to the TAs; and 55 per cent to the jurisdictional District Assembly. Given this, the Banda Paramount Chief mentioned that he received a percentage (about 45 per cent) of the annual revenue from the collector on behalf of the stool and the entire body of TAs. However when asked about this, none of the non-native farmers had encountered a Stool Lands Revenue Collector at all. Further inquiries showed that the artisanal fisher folks of Akanyakrom however, made annual payments as ‘stool land revenue’ based on the number of canoes individually possessed. Despite this, the Bui Chieftains – who were the host of the Akanyakrom community and the purported allodial titleholders – claimed that they never received any money from the Stool Lands Revenue Collector. This implies that Stool Lands Revenue Collector considered the communal land of Bui as part of the lands under the Banda Paramountcy. Moreover, as the fisher folks paid the revenue according to the number of canoes possessed, the research surmises that the Stool Lands Revenue Collector believed that the river was part of the stool lands, which contrasts with the Constitution. Regarding the eastern communities, the Chieftains of Carpenter and the Bian Clan Head denied any historical involvement with a Stool Lands Revenue Collector.

With a general mandate to develop human settlements, the research presumed that at the very least, the respective District Physical Planning Departments must have been involved in the land use planning of the study communities (Town and Country Planning Department, Ghana 2021). Thus, it inquired about the

chieftains' experiences with them. Although the Banda Traditional Area was part of the Wenchi District and later, the Tain District after a historical split from the former in November 2003, the Banda Paramount Chief and the divisional chiefs did not recall any engagement with the corresponding Departments. When interviewed, the Chief of Carpenter and the Bian Clan Head also claimed that they had not been involved with the Physical Planning Department of the Bole District Assembly, whose jurisdiction encompasses their communities. Further inquiries at the respective District Assemblies revealed without explanation that there were no planning schemes for the study communities. Effectively, this disclosure supports the chieftains' claims because land use plans are by law, initiated and designed with the participation of the local communities, which are traditionally headed by chieftains (Section 2[1a] National Development Planning (System) Act 480 1994; Section 37[2k] Land use and Spatial Planning Act 925 2016). In retrospect, the relevant laws do not limit the mandate of the Physical Planning Departments by settlement size nor type. Yet they are more active in urban and peri-urban areas, where population and economic growth among others are necessitating urgent preparations and enforcements of land use plans. The research conjectures that the rural characteristics of the study communities must have underlay the Departments' indifference to their land uses.

Regarding the adjudication of land disputes over use and boundaries for instance, the chieftains themselves executed judicial functions based on customary law at the various levels in accordance with Section 30 of the Chieftaincy Act (2008). At the preliminary workshop held in Bui on 5 September 2018, the Abusuapanin, who substituted the Chief due to his frequent absence from the community acknowledged this by stressing that, *"As the land was under the authority of the Chief, he had delegated his responsibility to settle land disputes to me."* In addition to the other chieftains of the west, the Chief of Carpenter and the Bian Clan Head of the east also made a similar claim. However, at the level of the paramountcy where the Traditional Council is established, there is also a Judicial Committee, which per Section 35[1] of the Chieftaincy Act (2008), has *"the same powers as a District Court in civil matters "but conducts "its proceedings according to customary law"*. Membership of the Judicial Committee constitutes chiefs appointed by the Traditional Council according to Section 29[2] of the Act.

In the case of the western communities, the Banda Paramount Chief explained that the Traditional Council appoints new committee members and a presiding judge for every case involving disputes and conflicts over chieftaincy and land. Following Section 29[3 & 4] of the Chieftaincy Act (2008), he further explained that people aggrieved by the judgement passed by the Judicial Committee are at liberty to appeal to the Regional House of Chiefs where there is a higher Judicial Committee. However, in the east, the Chief of Carpenter and the Bian Clan Head related that given the nature of land ownership and control, they hardly involved the paramountcy in domestic land disputes. Ultimately, the legal recognition of the governing, managerial, and judicial powers of chieftains in respect of land underscores their custodianship of customary land. Besides land ownership and control, the participants also described the historical rights of land use, which the next section discusses. Due to their vast similarities, it generalizes the cases of all the communities to avoid repetition and tedium. However, it also emphasizes exceptional cases where appropriate.

5.2.1.2 The right of use

The right of use encompassed usufructuary interests and customary tenancies. According to Section 5[1a] of Ghana's Land Bill, usufructuary interests are "acquired in the exercise of an inherent right by a subject or member of a stool ... clan or group which holds the allodial title through the development of an unappropriated portion of the land of the stool ... clan or group" (2020). Thus, native farmers and all builders (with the exception of the non-native builders of Carpenter), held usufructuary interests. However, the non-native builders of Carpenter and the non-native farmers and herders had customary tenancies. According to Section 7 of the Land Bill, these are interests "created by contract" between an allodial titleholder or usufructuary interest holder and another person based on terms and conditions such as the payment of rents and crop sharing among others (2020). Based on this, the next paragraphs describe the historical rights of use for arable farming, building, and pastoralism.

Arable farming: As land was a common-pool resource and communally owned, holders of usufructuary interests had independent rights of use and extraction, and the right to exclude others from accessing their individual and communal land holdings. Customary tenants could not exclude others from the communal holdings but could enjoy all the other rights. Together, both usufructuary interest holders and customary tenants could extract from fruit trees such as shea trees that were not within individual holdings. They could also extract straw and sand for building and other purposes. Additionally, they could manage the land they had individually accessed to some extent by making approved changes and regulating the use patterns. In this respect, native farmers could cultivate desired crops without restrictions. Although the Wildlife Division had banned the Dokokyina community – which was within the Bui National Park – from cultivating perennial crops, the research gathered that the members, who mainly ascribed to the customary tenure system, had started cultivating cashew trees on a large scale since the early 1990s. This was due to the community's proximity to Cote d'Ivoire and Sampa, a border town in Ghana, where markets for the seeds had proliferated. All the TAs had also proscribed non-native farmers against cultivating perennial crops to prevent them from making permanent land claims.

Whereas citizenship underlay usufructuary interests, which were permanent, customary tenancies were conversely terminable at the discretion of the grantor. For usufructuary interest holders, the chieftains could not deprive them of their rights due to the communal nature of land. However, their interest excluded outright ownership of land. In all cases, usufructuary interest holders and customary tenants could claim land for as long as they occupied it, either actively or inactively in the form of trails in absentia. Thus, they were only entitled to use, manage, harvest, and exclude others during the tenure of their hold. As explained by some TAs, this principle was to prevent farmers from making outright claims to expedite the chieftains' ownership and control and maintain the communal nature of land.

Given their extensive rights, both natives and non-natives referred to an open-access to land by all, regardless of gender, age, or status. During an interview on 26 November 2018 with a middle-aged woman from Akanyakrom, she underlined that, "At the old settlement, we all had an open access to land without discrimination and did not have to inform the traditional authorities before accessing farmlands". By extension, even members of the non-landowning communities of Akanyakrom and Gbolekame North, who were

originally admitted to the respective areas for artisanal fishing, had usufructuary interests in land. Accordingly, the research inquired about the reason behind this privilege from the respective host TAs. At an FGD with the clan heads of Jama on 12 December 2018, the Bian Clan Head explained that, "*Non-natives who settle permanently among us are considered natives and are entitled to all the benefits enjoyed by natives such as unfettered access to land*". A member of the Bui TAs also gave a comparable explanation during the FGD with them on 5 February 2019. To be sure, this consideration is in line with Section 5[b] of Ghana's Land Bill, which states that non-natives and their descendants may acquire usufructuary interests in land "through settlement for a period of not less than fifty years, with the permission of the holder of an allodial title" (2020, 16). As mentioned in Chapter 2, the members of Gbolekame North and their parent community, Akanyakrom have lived in the area since 1919, which qualifies them for usufructuary titles, but with the consent of the allodial titleholders.

For the western communities, the idea of an open access to land extended to all the lands in the Banda Traditional Area and even those belonging to other Banda communities across the border in Cote d'Ivoire. Banda natives -, which besides Bongase include members of communities like Kabronum, Gbaw, and Wewa among others - could freely access land anywhere within the Banda area without consulting the respective chieftains. During an interview on 17 January 2019, a resident staff of the Wildlife Division affirmed that, "*Although I am from Kabronum, another Banda community, I was able to access land in Bongase for farming without necessarily consulting anyone because every Banda native has the freedom to access any land around here*". Members of the affiliate communities of Dokokyina and Akanyakrom, and even Bui whose chieftains claimed unqualified ownership and control of their communal land also enjoyed this freedom of access. Thus, the boundaries of the lands of the western communities were reportedly, indistinct.

Mos could also access land in other Mo communities without problem. Thus, the western Mos of Dokokyina and Bui were at liberty to access land in the eastern Mo communities of Jama and Carpenter and vice versa. However, unlike the settlers of Akanyakrom, those of Gbolekame North and the non-natives of Carpenter who were largely Dagaates did not have the liberty to access land outside their host communities. Despite this, the Gbolekame North community could access the lands of the other clans of Jama. Besides these lands, they and the Dagaates of Carpenter had to follow certain procedures of introduction before accessing land in other communities. Also among the Mos, due to their historical descent from the Sissala, Gonja, Grusie, and Wangala, people belonging to these ethnicities had usufructuary interests in land and could access land freely without an introduction.

On equality of access, both the western and eastern communities had no restrictions based on age, gender, nor status. The participants related that access to land was based on 'strength'; that is one's physical fitness, financial capability, and the quality of his/her social support networks. Referring to this, a 34-year-old native of Bongase illustrated the following at an FGD for youths on 19 January 2019: "*When I was growing up, access to land was based on strength and everyone could access as much land as their strengths allowed them to. We did not even have agrochemicals; people who were able to cultivate more lands had more yields and more money because they were able to sell their surplus crops to the traders who came by during the harvest season. Weaker ones only harvested enough for subsistence*". Given this, it was possible for a younger person and a commoner to

access more land and at advantageous locations than an older one and one with status such as a member of the TAs.

Women could also access as much land as their 'strength' allowed them to. However, as reported, those of the traditional farming communities of Bongase and Bui lacked the requisite 'strength' to access pristine land. Thus, they preferred to farm within or on the peripheries of the men's farms or on exploited lands. The women of Akanyakrom and Gbolekame North also farmed for their households while the men were mainly engaged in artisanal fishing. With respect to Dokokyina, the research found that the women were particularly encouraged to farm in order to avoid destitution upon the death of their spouses. As explained by the Queen mother during an interview on 11 November 2018, *"Among us Mos, when a man dies, his farm and other properties are shared between the wife, children, and extended family members. Thus women who relied on their husbands' farms risked losing everything upon his passing"*. Relevantly, the idea of sharing a farm implied sharing the crops on the land and not the land per se. Given the reason above, the Queen mother recalled that she maintained a separate farm from her husband when they lived at the old settlement.

As explained later, although land access was open, non-natives could only acquire customary tenancies by 'seeing' the TA. This involved the presentation of drinks and making some cash payments. To keep their access open, they also had to present foodstuffs to the TAs annually towards the yam festival, which was at the beginning of the yam harvest and involved ritualistic processes of thanksgiving before the communities could consume the harvested crops. This explains why the non-natives' land interest was subject to termination. Upon access, non-native farmers also had the liberty to cultivate as much land as their 'strengths' allowed them to without discrimination of any sort. When asked about the reason behind this during an interview on 9 November 2018 the right-hand man of the Chief of Carpenter responded that, *"Yes, we all have equal access to land irrespective of ethnicity. Our ancestors taught us to accept and treat migrants as we would ourselves"*. Yet, as previously mentioned, they were not at liberty to cultivate perennial crops like natives.

Despite having the opportunity to access land openly, the women of the Dagaate ethnic group, which was the largest non-native ethnicity in all the communities, were customarily forbidden to access land independently of their husbands or fathers. During an FGD with some of them in Carpenter on 7 February 2019, a 40-year-old explained that, *"We are not allowed to find land on our own. Our husbands will not even allow us to find land if we wanted to. In our custom, the man finds the farmland and gives the woman a portion to farm"*. Given this, it was the men who 'saw' the TAs to gain access to land and the women only gained access through them. For unmarried women, the community expected them to help their mothers to cultivate crops for their fathers. Relevantly, the research did not encounter any unmarried women who had migrated to the area by themselves. This implies that all of those identified were with their families. When asked at an interview on 10 November 2018 about the implications for a married woman to access land independently of a man or her husband, a 42-year-old Dagaate man shockingly responded, *"That will imply trouble at home because a woman who does that must be preparing to divorce her husband or to rebel. Otherwise, she will follow her husband or father by cultivating minor crops such as vegetables and cooking for him and his friends or*

laborers when they go to the farm". Thus unlike the natives, the Dagaate women could not take advantage of the open access to land as provided under the customary tenure systems of the study area.

As provided in Section 5[1a] of the Land Bill, usufructuary interests in land could be established through first occupation on the stool land (2020). Holders of customary tenancies (non-native farmers) could also claim land based on first occupation. The common farming method was shifting cultivation, which locally entailed farming longitudinally on a stretch of land. Thus, it was acceptable for the first occupants of a given farmland to claim the lands that stretched lengthwise from their active farms. References to claims thus included farmlands under active cultivation, lands left to fallow, and uncultivated lands that stretched from these longitudinally. The participants explained that although access to land was open, prospective farmers were required to consult the existing farmers of an area to avoid encroaching on their claims. Yet, as previously mentioned, farmers could forfeit an interest in land when they completely abandoned the farmlands without indications of a continuous occupation through for instance, a planted tree and remnants of farm huts among others. In such cases, the abandoned land was open to other farmers without restriction.

While farmers generally had the right to manage their claims, they were also under obligation to adhere to certain precepts. These precepts extended across all the study communities; that is from Bongase to Carpenter. Among them was the requirement for farmers to ensure that the bushfires they start do not extend to other farms. The TAs also expected them to adhere to the taboo days by suspending farming activities. They had additionally proscribed them against farming transversally to avoid encroachment on claimed lands. Farmers were also forbidden to uproot or destroy cultivated crops particularly in the event of disputes over land. Thus, even when the TAs found a farmer guilty of encroaching on another's claim, they granted him/her continued access to the land until s/he harvested the cultivated crops. In this regard, the Bongase Abusuapanin narrated an incidence during which one of his uncles angrily destroyed the yam farm of someone who had encroached on his claim. As he recalled during his interview on 5 November 2018, *"When the case was lodged with us, we did not rule over the man's encroachment on my uncle's farmland, but over the abomination that had been caused by my uncle through his actions."*

Besides these, the TAs had prohibited the farmers from felling certain trees deemed sacred in the area except in situations when the trees impeded crop cultivation. Such sacred trees included shea, African locus bean, frankincense, iroko, mahogany, and sapele trees. As explained above, the proscription was to sustain the trees to transmit the communities' shared beliefs to subsequent generations. Additionally, shea and African locus bean trees bear fruits, which the communities used for food and body cream among others things. Thus, they acknowledged that their conservation was useful to serve generations. The participants further admitted that they adhered to this protocol because of the established penalties. When asked about the nature of the penance during an interview on 9 November 2018, the right-hand man of the Chief of Carpenter explained that, *"Anyone who fell any of the forbidden trees was fined some bottles of schnapps, goats, and sheep for rituals to appease the earth"*. Regardless of this, people could harvest snags for firewood, which is still the dominant fuel in the area. The research also found that the Bui TAs expected the members of the

Akanyakrom community to present goats, chickens, and some drinks for rituals before accessing land to bury their dead.

Building: Regarding building plots, natives and non-natives of communities like Bongase, Bui, Dokokyina, Akanyakrom, and Gbolekame North had equal obligations of access. With the exception of Bongase, natives and non-natives of the other communities only had to inform the TAs of their intentions and the location by presenting an unspecified amount of drinks. However, in Bongase, they were both required to access building lots through an established committee and make some cash payment. When the research inquired from some TAs about why natives and non-natives had equal obligations of accessing building lots, they all responded that non-natives are the foundations for the expansion of towns. Thus, this strategy was their way of attracting them to settle in the communities. Given this, both native and non-native builders equally possessed usufructuary interests in building lots. Yet, in Carpenter, natives and non-natives had different obligations. While natives (including people of Sissala, Gonja, Grusie, and Wangala descent) could freely access lots by just informing the TAs, non-natives had to 'see' them by presenting drinks, kola nuts, and money before accessing lots. Upon the non-natives' exit from the community, the Chieftains also assumed ownership of their houses. Thus, while the native builders of Carpenter possessed usufructuary interests in building lots, non-native builders only possessed customary tenancies. Unlike native farmers, the usufructuary interests of builders were more permanent due to the nature of buildings. However, like farmers, the holders of both usufructuary interests and customary tenancies in building lots had the right to use and manage individual lots according to personal preferences. During an interview on 4 February 2019, a 52-year-old man from Bui stressed that, "*At the old settlement, we were at liberty to build whatever houses we preferred*". Essentially, most builders accessed lots for residential purposes. While the unbridled access might seem like the built environments were disorderly, the historical participants stated the opposite, explaining that houses were built in respect of accessibility and neighborliness.

Pastoralism: The research gathered that the study area hosted many herders in the past. They were mainly Fulani men from Burkina Faso and Niger who practiced nomadism. Although they could have rights of use, their citizenship limited their interests to customary tenancies. For these, the traditional authorities (TAs) expected them to 'see' them by making a one-off payment for entry, which was usually in cash or in-kind, but equivalent to a bull. The herders' right of use was also contingent on certain proscriptions. The TAs had for instance proscribed them against accessing cropped areas, starting bush fires, and felling trees. Regarding the specific areas of access, the research gathered that they stayed and grazed their cattle on the uncropped peripheries of the communal lands. Thus, the farmers recalled that they hardly encountered them and cohabited peacefully with them.

5.2.1.3 The right of transfer

From the foregoing, it is evident that the landowning chieftains possessed the rights to alienate land and determine access. These included the Chieftains of the Banda Paramountcy, Bui, and Carpenter, and the Bian Clan Head of Jama. Regarding the other western landowning communities – Bongase and Dokokyina – the respective chieftains exercised the allodial title on behalf of the Paramount Chieftains and hence could

transfer insignificant land sizes for farming, building, and pastoralism. However, they frequently ceded their authority to the allodial titleholders – the Paramount Chieftains – when the transfer involved permanent occupation and a substantial land for commercial purposes as was the case involving the Pioneer Tobacco Company Limited.

In all cases, the research found that the TAs disapproved of selling land outrightly, which pursuant to Section 3[1b] of the Land Bill, would have amounted to a customary law freehold interest (2020, 15). Besides being a proscription in respect of the law (ibid), the TAs explained that they did not sell land because they wanted to maintain their ownership and control over it. In this regard, they mentioned that they only accepted cash and in-kind payments from non-natives, which enabled them to maintain the stools through capital and recurrent expenditure. During his interview on 5 September 2018, the Chief of Carpenter elaborated on this as follows, *“As chieftains, we used the money and material benefits received from non-natives to maintain our stools by remunerating ourselves, organizing festivals, and preserving the palace accessories. From the same benefits, we could honor certain responsibilities like attending funerals and festivals in other communities”*. Consequently, all the TAs explained that they used material benefits such as drinks for libations and foodstuff for other ritualistic purposes during the yam festival, which were all relevant for preserving the customs of the people. They could also sell excess foodstuff for cash to maintain the stools.

Farmers with usufructuary interest – mainly native commoners – could also transfer land among themselves and to non-natives for customary (agricultural) tenancies without monetary fee. However, the research gathered that the natives usually entered into such agreements with non-natives rather than other natives because they also had an unfettered access to the land. For customary (agricultural) tenancies, which usually involved a share-cropping arrangement, native farmers were customarily required to introduce non-natives to the respective chieftains of the communities, who were the allodial titleholders. The possession of a customary tenancy precluded the holder from granting customary tenancies to others. However, the holder could introduce prospective non-native farmers to natives or the TA, who would in turn grant them customary tenancies. In all cases, the TAs expected the tenants to adhere to the established precepts and make annual presentation during the yam festival.

Moreover, usufructuary interest holders and customary tenants could sell their farms. Like sharing a farm, this fundamentally implied the transfer of cultivated crops for a fee as opposed to the land itself. During his interview, the Bongase Abusuapanin mentioned that he had bought a cashew farm some years ago in order to keep up with the proliferating industry. When asked to explain what the transaction entailed, he explained that, *“The man did not sell me the land, but the farm, which was the trees on the land”*. This shows that although the natives enjoyed the right to transfer land, they were devoid of outright alienation.

5.2.2 Descriptive analyses of the historical qualities of land

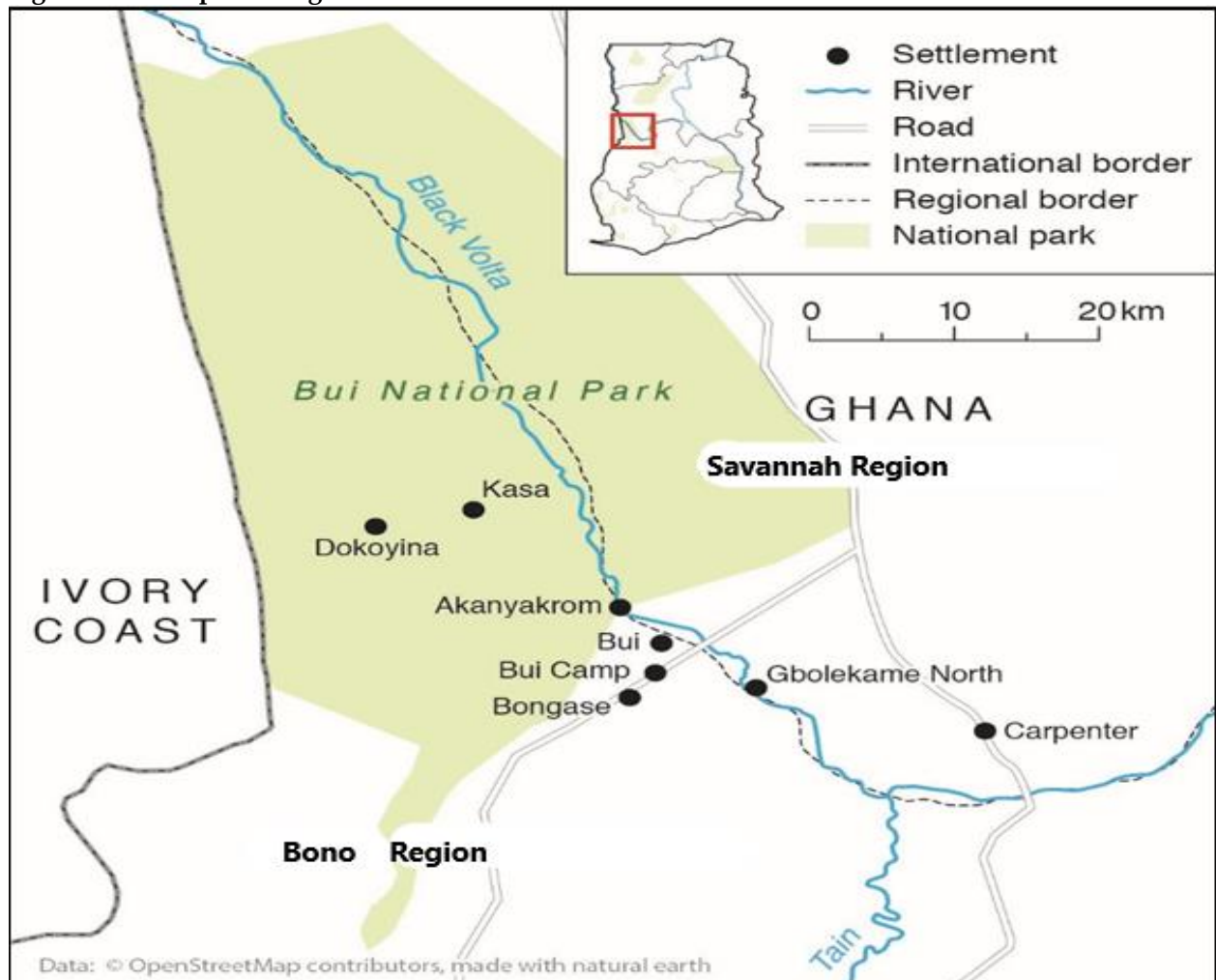
Naturally, the above accounts draw questions about what the qualities of land must have been like to have facilitated a defined but open access to land. Thus, following the narratives of the participants, this section describes the historical characteristics of land, which addresses research question 'a' (iii). These encompass

the extent, productivity, and marketability of land. The research found significant similarities in the accounts of the individual communities. Thus, as before, the section generalizes most of the descriptions. However, the section describes the historical extents of land by community to emphasize their particularities as a springboard for highlighting their recent experiences, which a corresponding section discusses in the next chapter.

5.2.2.1 The extents of accessible land

The extent of accessible land prior to the construction of the Bui Dam was reportedly vast. Although the communal boundaries were fuzzy, allowing natives to access land in other communities, the landowning chieftains stated that they controlled substantial land sizes. Besides the chieftains, the other historical participants – the farmers and builders – also recounted that they had access to vast extents of land. Despite these assertions, the traditional authorities (TAs) could not provide the actual land sizes of their respective communities. However, through metaphors and anecdotal evidence they and the other participants gave insights into the historical scope of accessible lands. As a visual aid, Figure 5.1 below shows the location of the communities before the dam construction to facilitate an understanding of their respective accounts.

Figure 5.1: A map showing the historical locations of the communities



Source: Reproduced from multiple sources (2021)

Dokokyina: As shown in the map, the Dokokyina community was remote, located within the Bui National Park towards the international border between Ghana and Cote d'Ivoire. Despite their location, the Wildlife Division had given them access to some lands. These included the lands that extended from the community to the international border in the west, but also some lands in the north-west, south-west, and immediate east of the community. According to the Head of the Wildlife Division, their access was to support their livelihoods while plans were underway to resettle them from the area. Thus, during her interview, the Queen mother recounted that, "*At the old settlement, we had access to a large area of land. Although our ancestors were extensive farmers and cultivated many acres of land, we still had extensive pristine lands at our disposal*". To be sure, the Dokokyina community had a reputation for being more avid farmers than the rest. The men and women respectively farmed at least twenty and five acres of yam per season on a shift basis. Thus, they had the largest yam harvests in the area. Due to the abundance of land, the farmers hardly re-used fallowed lands for yam cultivation, but used them for other crops such as groundnut, cassava, or even cashew trees. As yams were the major crops, which they cultivated seasonally, this account supports their historical access to vast lands. With respect to cashew farming, the men and women reportedly owned at least thirty and ten acres respectively, which also support the vast extent of land that was historically at their disposal.

Bui: The Bui community was geographically south of the Bui National Park and upstream west of the Black Volta River. Thus, as previously mentioned, the Bui Chieftains controlled access to the river and granted access to the Akanyakrom community in 1919. Despite hosting the latter, members of the Bui community reported that they had access to vast land, encompassing the lands north, west, and south of the community. "*At the old settlement, anyone could 'pump' as much farmland from here (the Bui resettlement community) to Jama without problems*", recalled a 34-year-old man from Bui during an interview on 3 February 2019. In the local parlance, to 'pump land' refers to the preparation of land for planting. According to Google maps, the distance between the resettlement community and Jama is at least 11.7 km, which supports the farmer's claim of the substantial size of available land. However, the farmers did not actually cultivate 11.7 km of land per season. Rather, the Bui Abusuapanin among others explained that the men and unmarried women respectively cultivated at least ten and three acres of land seasonally. Like the Dokokyina community, the farmers only re-used fallowed lands when they were suitable for other crops besides yam, which also underscores the vast extent of their land. As the community was in proximity to the Black Volta River, the members also had access to the alluvial plains for vegetable farming. Besides farming, some of them also engaged in artisanal fishing as a secondary economic activity.

Akanyakrom: Akanyakrom was an upstream riverine community and located just north of the Bui community. Hence, it was also west of the Black Volta River and on one part of the immediate southern fringes of the Bui National Park. Although the TAs of Bui admitted their ancestors to the area for artisanal fishing, the members were at liberty to access land for farming and real estate without restraint. In this regard, the members had access to the lands north and west of the community. "*Even though we shared boundaries with the Bui National Park in the north and the Bui community in the south, there were still adequate farmlands and we never experienced land disputes among ourselves*", recalled a 46-year-old man when

interviewed on 6 December 2018. However, as mainly artisanal fisher folks, the women largely engaged in farming and cultivated at least two (2) acres of land per season on a shift basis for subsistence purposes. Some of them also accessed the alluvial plains for vegetable farming.

Bongase: The Bongase community is still geographically located south-west of the Bui community and some distance from the Black Volta River. At the disposal of the members were the lands north of the community towards the Bui National Park, further south, east towards the river, and west. However, many members reportedly preferred the land towards the National Park for farming because it was within the river valley and more fertile. Irrespective of this high patronage, the participants claimed that the area had abundant land. The research gathered that generally, the men cultivated at least ten acres of land per season while the unmarried women cultivated about three acres of land. Like the Bui and Dokokyina communities, the farmers hardly re-used fallowed lands, except for crops besides yams.

Gbolekame North: Gbolekame North is a riverine community, which is still located downstream of the Black Volta River. Although an offshoot of Akanyakrom, the community has become part of Jama due to its location. The people were largely artisanal fisher folks. However, they also accessed land for farming and building. Among such lands were those north and east of the community. They also had access to the land south of the community including those that belonged to the other clans of Jama. Nevertheless, the women reportedly cultivated at least two acres of land per season for subsistence and accessed the alluvial plains for vegetable farming.

Carpenter: The Carpenter community is geographically located southeast of the above communities and farther from the Black Volta River downstream. The eastern land of the community has been under acquisition by the Forestry Commission since the 1970s. Hence, the extent of their accessible lands encompassed those west of the community towards the river and a thin strip between the built up and acquired areas. However, many of them preferred to access the former area because the latter was reportedly rocky and partly swampy in especially the rainy season. Despite this high preference, the farmers claimed that the western lands were vast. In the words of a 52-year-old Dagaate man who was interviewed on 15 October 2018, "*Although we all preferred to farm in the west, there was never a shortage of land nor disputes over access. I personally could access 10 acres of land per season*". In fact, like some of the other communities, the men of Carpenter cultivated at least ten acres of land per season while the native unmarried women cultivated about three acres per season. They also hardly re-used fallowed lands except for other crops besides yams.

Other key findings: The above underscore the fact that the communities had access to vast extents of land. Besides their ability to access desirable amounts of land, all the participating farmers recounted that they were able to access land in proximity to family members and friends, which underscored the vast extent of the land. As later explained, they preferred to farm in clusters in order guard their farms mutually against wildlife invasions. In all cases, the farmers could also lay claims to land, which as explained, included the lands under active cultivation and those within the longitudinal planes including exploited and pristine lands. As gathered, there were hardly any disputes among farmers over claims because; they could easily

access other lands and encroachment was rare. In this regard, the extent of land for especially the natives of Banda, which besides Bongase, included the members of Bui, Dokokyina, and Akanyakrom, encompassed all the lands under the jurisdiction of the Paramount Chieftains. It also included those belonging to other Banda communities across the border in Cote d'Ivoire. During his interview on 9 December 2018, the Banda Paramount Chief affirmed that, "*The Banda land is one without boundaries and access is open to all subjects of the paramountcy and other Banda natives in Cote d'Ivoire*". This explains why the boundaries of the lands of the western communities were reportedly undefined. For the eastern communities, native Mos could also access land in other Mo communities without restraint. These included Jama, Carpenter, Teselima, and Jogboi, but also in the western communities of Bui and Dokokyina, which are ethnically Mos. However, as mentioned previously, the respective settlers of the eastern communities – including the Ewes of Gbolekame North and the Dagaates of Carpenter – could only access the land belonging to their host communities.

The participants also claimed that there were vast lands for building purposes. According to them, they could build anywhere within the communities without a hitch. The research gathered that the communities were largely collectivistic and people belonging to the same ethnicity had an inclination to live together, but mainly in proximity to kin. Non-natives also preferred to live in proximity to kin or friends depending on their presence in the relevant communities. They believed that through this, they could enhance their senses of belongingness and mutually protect themselves. The participants also recounted that several herders frequented the area seasonally due to the availability of fodder, including water from the river. However, as mentioned in Chapter 3, the research could not trace such herders. Despite this, it deduces that their approved presence in the area also supports the participants' accounts of the vast extent of land.

5.2.2.2 The productivity of the soil and general crop yields

The research found that the livelihood of the study communities was mainly farming. Hence, when asked about the historical qualities of land, they also mentioned the productivity of the soil to justify their economic activity and the predominant subsistence crop, which was yam. For this, all the study communities gave comparable accounts. Hence, the research generalizes the description to avoid monotony. Following the account of the Bongase Abusuapanin as related on 6 September 2018, the Banda ethnic group was the first to settle in the present area from Kakala, a village in Cote d'Ivoire. While migrating, they discovered a plant known as 'yongmaa' (the English name for this is unknown) in their present location, which is believed to grow in areas suitable for yam cultivation. Given that yams were their traditional crops, they spread out in the area to secure the land from the Bonos and Mos, whose territories bordered the land to the southwest and northeast respectively. They also cultivated groundnuts extensively. Hence, he explained that the name 'Bongase' was a variant of 'Bongresay', which in their dialect, means 'groundnuts'. To date, the Bandas and the other study communities cultivate both yams and groundnuts extensively. They also cultivate other crops such as cassava, maize, beans, and melon, whose seeds are a major staple in local diets.

Except Dokokyina, the lands that were under active cultivation in Bongase, Bui, Akanyakrom, Carpenter, and Gbolekame North were within the river valley, which must have contributed to the purported fertility. However, in the case of Bongase, although the southern farmlands were not within the river valley, the few farmers who accessed them still claimed that the soil was fertile. The Dokokyina community also related that their farmlands, which were within the Bui National Park, were very fertile. Retrospectively, this must have been due to the sparse human activity in the area and the forest cover. Despite having access to productive soils, the farmers emphasized that the seasonal cultivation of yams required pristine soil to enhance the yields, which explained their practice of shifting cultivation and land claims.

Guided by their expectation, the farmers judged the productivity of the soil – domestically referred to as 'the fat of the soil' – by the size and quality of the crop yields. During an interview on 9 November 2018, a 69-year-old woman from Dokokyina affirmed that, "*The fat of the soil' was so good such that one could get more than a hundred big tubers of yams from just an acre of land. In my case, I got such high yields and even sold some to traders from Wenchi and Techiman*". Relevantly, these towns are market hubs for bulk foodstuffs like yams, cassava, and grains. The farmers reported that they sold yams when the harvest was more than a hundred tubers. With respect to the traders, the farmers also indicated that they were attracted to the area due to the quality of their yam yields. Moreover, due to the high quality of the yields, the traders reportedly accepted all the yams on offer. Although the farmers traded their yams for cash with external traders, the common system of exchange among the locals was barter trading. Therefore, the Bongase and Bui communities particularly traded their yams for fish with the Akanyakrom community. As gathered, fish was more expensive than yams. Thus, the farmers had to present acceptable yams that merited a trade.

Of significance to the historical participants was also the yield of yam setts or seeds. The research found that besides edible yams, an acre of land could yield enough yam setts to cultivate an acre and half the next season. Moreover, they underlined that the yields of the other crops – groundnuts, maize, beans, and melon (seeds) among others – were also very high. Although the participants referred to the 'fat of the soil' as mainly responsible for the high crop yields, some of them also acknowledged the general role of climatic conditions and rainfall patterns on the quality of the soil. "*Before 2007, rainfall was abundant and frequent*", pointed out a 45-year-old man from Bongase during an interview on 31 January 2019. He further explained that, "*As it used to rain at the right time every year, the soil was good, and all our crops did well*". Ultimately, all these underlie the historical productivity of the soil. In addition to these, the participants also referred to the marketability of land as another historical quality, which is discussed next.

5.2.2.3 Marketability of land

Many participants of the study communities reported that land was generally not fungible prior to the construction of the Bui Dam. As emphasized by the Chief of Carpenter during his interview on 5 September 2018, "*None of the lands around here was for sale*". Generally, the TAs explained that they enforced this strategy in order to maintain their ownership and control over land, while ensuring access by present and future members of the community. To be sure, this strategy was facilitated by the rural nature of the area and hence contrasts with especially urbanized areas of Ghana, where an increasing demand for land has

inflated land rents and resulted in multiple land sales by chiefs and boundary issues (see: Boamah 2013). Despite this, there were several indications that the TAs of the study communities required payment from non-natives before granting them access to land for farming and pastoralism. The subsections describe these obligations by activity.

Farming: In communities like Carpenter, the TAs required non-native farmers to make cash and in-kind payments for entry, as well as annual in-kind payments to maintain access to land. The Chief explained that the first payment included a goat, two chickens, and between Ghana Cedis (GHC) 50 to 100³. The TAs however calculated the latter for every acre of accessed land, which required the presentation of thirty tubers of yam, a basin of maize (approximately fifteen kilograms), a chicken, and GHC 20. Relevantly, the annual presentation was in respect of the celebration of the yam festival between June and September. Although the former arrangement was not applicable to the other study communities, the respective TAs expected prospective non-native farmers to notify them of their presence and intent by presenting an unspecified amount of drinks. As is done in Carpenter, the non-native farmers also presented similar items to the TAs for the yam festival. The research conjectures that the rigorous expectation in Carpenter must have been due to the relatively high population of migrant farmers, who by estimation, still constitute about 90 per cent of the community.

While the TAs expected these of non-natives such as the Dagaates who migrated to the area solely for farming, they exempted non-native white-collar workers from these requirements. *“Unlike the Dagaate migrant farmers, I was not obliged to notify nor pay anything to the Chief of Bongase before accessing farmlands”*, stated a retired nurse who used to work at the Bongase Clinic and now lives permanently in Dokokyina when interviewed on 26 November 2018. Another non-native white-collar worker who was formerly the manager of the Leyaata Hospital in Carpenter also gave a similar account. During the preliminary workshop on 5 October 2018, he recounted that, *“Even though I am not a native of Carpenter, I was able to access about ten (10) acres of land per season without making any payment to the Chief”*.

Building: As regards building lots, the research gathered that they were freely accessible by both natives and non-natives of communities including Bui, Dokokyina, Akanyakrom, and Gbolekame North. The TAs only required prospective builders to inform them of their intent and preferred sites by presenting some drinks for ritualistic ‘prayers’ to the land. In Carpenter, non-natives were also required to present kola nuts and pay some money with the drinks before accessing building lots. They also required them to relinquish their houses to the Chieftains when they moved out of the community. Unlike the others, the Bongase community had an established committee for allocating building lots. Although land was not fungible, the TAs required all prospective builders to offer some ‘drink money’ to the Chief through the committee. Speaking about his own experience during an interview on 6 November 2018, a native in his 50s disclosed that, *“I did not pay any money to the committee but only presented some drinks at my sole discretion”*. Despite this,

³ Using the European Commission’s rate for July 2020, €1 is equivalent to GHC 6.371. Also applicable to all other quoted charges in the dissertation

the Bongase Abusuapanin insisted that the 'drink money' was GHc 120 for both natives and non-natives.

Pastoralism: Given the short span of their stay, which was between December and April/May of the following year, the herders usually made a one-off cash or in-kind payment to the TAs upon their arrival to the respective communities. During their stay, the TAs of the other communities where their activities affected also expected them to announce their presence and make some cash payments. Such payments were usually in respect of the duration of their stay. Hence, the TAs also required them to announce their presence and make the requisite payments whenever they returned to the respective areas.

Ultimately, the descriptions above – including the land tenure systems and qualities of land – illustrate the historical systems of land access as recounted by the research participants. They relate to research questions 'a' (i) and 'a' (iii). To have relevance and advance knowledge on the agents' historical social constructions of 'land access' and 'land scarcity', the next section interprets the descriptions based on the theoretical framework.

5.2.3 Theory-guided interpretation: The historical system of land access

This section attempts to interpret the historical system of land access per the theoretical framework. To this end, it begins by inferring from the descriptions to conceptualize the historical fields of land access. It also identifies the participants' social constructions of land and land values based on their accounts on the respective land uses. Subsequently, the section closes by building on the customary tenure systems that were reportedly functional at the time to elaborate on the logics of the historical fields of land access and their implications.

5.2.3.1 A preliminary conceptualization of the historical fields of land access

The research shows that land was historically foundational to the livelihoods of the people and underlay their access to primary necessities such as food and shelter. Thus, the spatially distributed communities had distinct lands with physical properties such as extent and productivity that supported their endeavors. Following Bourdieu, the spatial distribution of the communities represented their physical spaces (1989, 16; 1996, 12; Etzold 2013, 19). Due to the importance of land to their livelihoods, each of the landowning communities had established certain principles, procedures, and practices to distinguish people's relationship with respect to its access. As previously explained, their property rights to land fundamentally defined these relationships. Inferring from Bourdieu's description of 'social fields' (1985, 725), the research conceptualizes fields of land access to characterize the distinctive sectors that were concerned with the communities' land access. Thus, the landowning communities of Bongase, Bui (which was also host to Akanyakrom), Dokokyina, Gbolekame North, and Carpenter had distinct fields of land access. Deducing from the proliferation of the cashew industry and the farmers relations of exchange with traders, the research acknowledges that the fields of land access were embedded in different organizational scales, which transcended the household level to even the global level. Thus, it accommodates the multiscale

drivers that influenced the major decisions and activities of the agents of the fields of land access in the historical context. This facilitates a crosscutting assessment of the agents' experiences of 'land access' and 'land scarcity' in respect of relevant structures and events.

The research further acknowledges that given their location, the fields of land access of the communities of Bui and Gbolekame North encompassed access to the river. However, it delimits its conceptualization to access to the physical space that was not covered by water. In this regard, land was the stake of the respective fields of land access because it was the dominant capital over which the agents competed for certain benefits (Bourdieu 1985, 724–25). The customary land tenure systems of the respective communities were conversely, the logics (nomos) of the fields of land access (Bourdieu and Wacquant 1992, 17; L. J. D. Wacquant 1989, 41). Against these basic deductions, the subsequent sections interpret the descriptions according to the theoretical framework to emphasize the implications of the stake and the logics to the conceptualized fields of land access. These address one of Bourdieu's three steps to field analysis, which is the analysis of the agents' habitus.

5.2.3.2 Land: The stake of the historical fields of land access

From the descriptions above, the research surmises that the stake – land – was a common pool resource collectively owned and used by the natives of the respective communities. Regardless of being common, it had different meanings and values (expected benefits) to the people based on their land rights and certain histories. The subsequent paragraphs identify and conceptualize these diverse meanings and values, which as explained relate to their habitus. The paragraphs also explain the conception and variation of these habitus from the perspective of the theoretical framework. Of relevance, the people's social construction of land and their conceptions of its values derive from the actual presence of the stake, which relates to its environmental value (Davy 2016, 140).

The traditional authorities (TAs): The research shows that the meaning of land to the TAs was authority because it underpinned their socio-political and socio-cultural dominance. The Bongase Abusuapanin implied this when he said that, "*Land is what makes a stool; without land, one cannot rule*". As explained, the TAs' primary social construction of land was the result of their internalization of the historical link between conquests and might. Besides this, the research also shows that the chieftains' allodial titles as defined by the customary logic expedited the TAs' social construction by granting them absolute rights of ownership and control. Based on these and inferring from Davy, the research deduces that the TAs socially constructed land as 'a territory' due to their quest to maintain their spatial power over it towards supporting their socio-political and socio-cultural authorities (2016, 138). Due to their determination to maintain exclusive ownership and control over land, the research conceptualizes their land value or expected benefit from land as 'territorial' (ibid). Besides primarily emphasizing their dominance, this was to enable them to determine access to the respective lands by others in order to protect their liminal boundaries, and earn other benefits to maintain the stools, which both culminated in advancing their authority.

The TAs' objective of land access was also to protect the sacred trees due to their desire to transmit the native cosmology. Thus, in line with Davy's categorization, the research concludes that by extension, the TAs conceived of the 'environmental' value of land, which in this context, related to a quest to conserve the existence of certain trees of sacramental value (2016, 140). Given that the land values were cognitive and based on their structural foundations in history and the respective logics, they represented the TAs' collective habitus or embodied dispositions towards land (Bourdieu 1977, 78; 1990b, 130–31). Thus, as explained later, they structured their social practices in the respective fields of land access (Bourdieu 1990a, 53; Sakdapolrak 2007, 56). To the other agents, the TAs' land values were unequivocal due to a shared history with them, and as explained in a subsequent section, a 'doxa' predicated on constructions of the logic as a natural given fact.

Farmers: From the descriptions above, the research deduces that the farmers socially constructed land in terms of its utility. In this regard, their expectation was to obtain high yields of especially yam, the traditional crop, but also groundnuts, beans, maize, melon seeds, and cassava for both subsistence and commercial purposes. The farmers of Dokokyina who had long been engaged in cashew cultivation also expected to gain high yields of cashew seeds. The research shows that the farmers' primary expectation of high yields of yam was the result of a history of yam cultivation. This involved the decision of the people of Banda to settle in the area due to the discovery of the 'yongmaa' plant, which reportedly thrives in areas suitable for yam cultivation. To the farmers of Dokokyina, their additional expectation to gain high yields of cashew seeds was due to their acculturation in the enterprise given their proximity to Cote d'Ivoire and Sampa, the market hubs for the seeds. Per the logic, the farmers also possessed the rights of usufruct or customary tenancy, which delimited their access to use, exclusive of claims of outright ownership.

In line with Davy, the research conceptualizes that the farmers socially constructed land as 'capability' (2016, 137). Based on this, it further surmises that they primarily conceived of the 'use' value of land, which embodied their expectation to use it to obtain high yields of the relevant crops to support their livelihoods (ibid). However, related to this expectation were subsidiary expectations to access desirable quantities and qualities of land at desirable locations and exclude others from their claims. These facilitated the farmers' achievement of their primary conception of the use value of land and corresponded with conceptions of the 'exchange' and 'territorial' values of land (ibid, 135–36, 138). The farmers' conception of the use value of land represented their inclination to a particular quality of it, which was its productive use to satisfy a basic need (ibid). Given this cognitive quality and its structuring by history and the respective logics of the fields of land access, the farmers' land values underscored their collective habitus or embodied dispositions towards land (Bourdieu 1977, 78; 1990b, 130–31). As discussed in a subsequent section, it also structured the farmers' decisions and perceptible practices in the fields of land access, which underscored its quality as a structuring structure (Bourdieu 1990a, 53; Sakdapolrak 2007, 56).

Builders: Inferring from the description, the research surmises that the historical builders also socially constructed land primarily in terms of its utility. Their expectation was to build preferable houses at preferable locations in order to have a sense of connection and security. As explained later, the builders' housing preferences were the results of certain histories. Moreover, the research gathered that the

communities had a high social cohesion, which underscored the people's belief in their mutual willingness to provide security and support. Fundamentally, this explained the builders' general preference for lots in proximity to family and friends. The builders also had usufructuary interests (or customary tenancies as was the case of the non-natives of Carpenter), which delimited their land access to use. Yet, due to the durability of houses, it appears that their tenure was more permanent than the farmers' were.

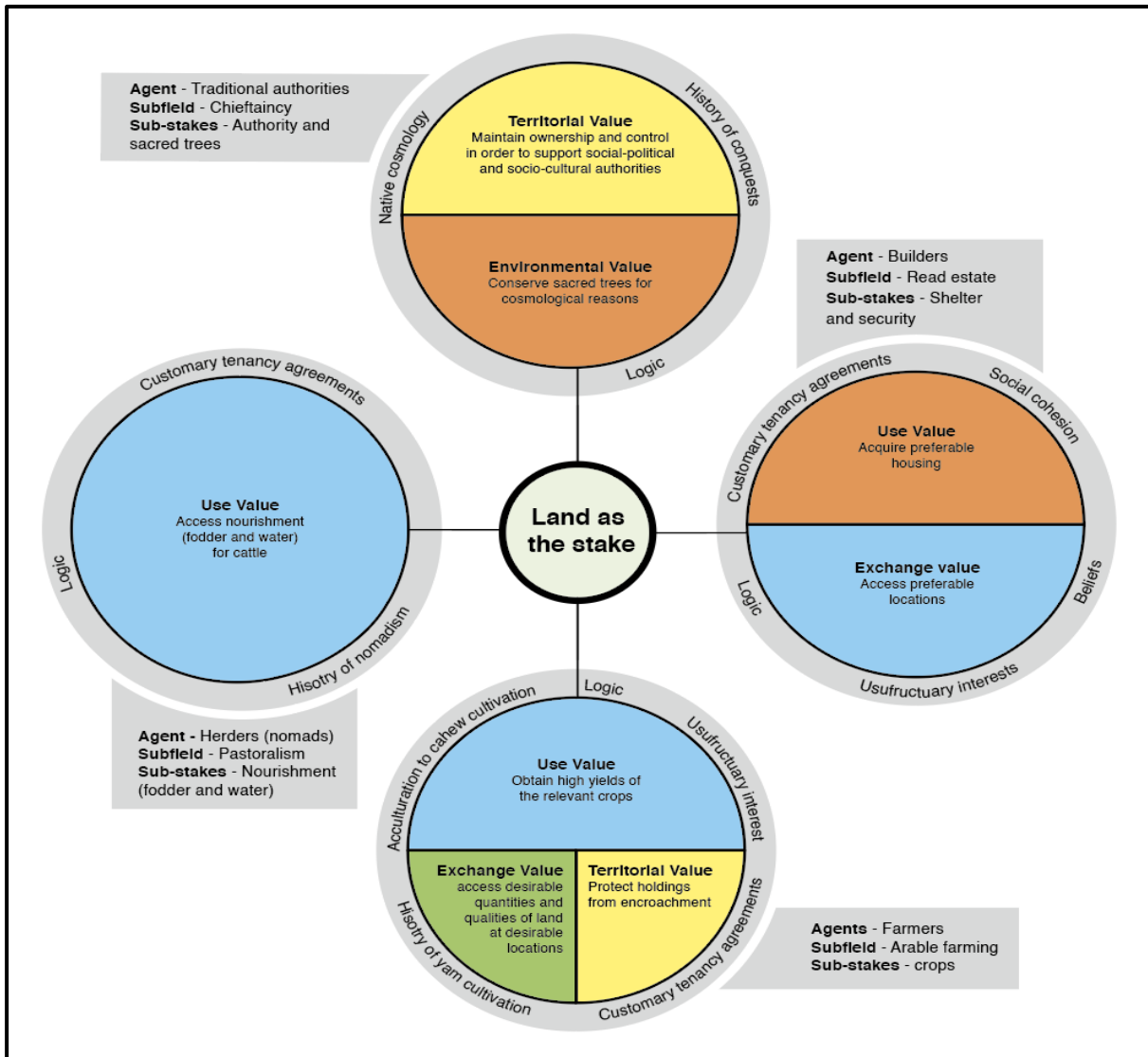
Following Davy, the research associates the builders' primary social construction of land to 'capability' (2016, 137). Associated with this was the social construction of land as a 'commodity' due to their desire for preferable locations (ibid, 135-36). Thus, the research conceptualizes that the builders conceived of the 'use' and 'exchange' values of land, which underscored their expectation to use it for shelter and security as basic related functionings (ibid, 137, 135-36). Given that these involved their cognition and were structured by certain experiences and the respective logics, the research relates the builders' land values to habitus or embodied dispositions towards the land (Bourdieu 1977, 78; 1990b, 130-31). The research will show that the builders' conceived land values influenced their endeavors in the fields of land access, which maintains Bourdieu's characterization of habitus as a structuring structure (Bourdieu 1990a, 53)

Herders: The research deduces that the historical herders also socially constructed land in terms of its utility because they accessed it for nourishment (fodder including water) for their cattle. As described, they were mainly Fulani men from Burkina Faso and Niger with a history of nomadism, which underlay their land access. They also had customary tenancies from the TAs that delimited their land access to use. Following Davy's classification of the meaning of land, the research relates the herders' social construction of land to 'capability' because they used it for a basic land-related functioning; that is to access fodder for their cattle (2016, 137). Based on this, the research deduces that they conceived of the 'use' value of land (ibid). As their land value was cognitive and structured by their history of nomadic pastoralism and the property rights as defined by the logic, the research relates it to their collective habitus or embodied dispositions towards land (Bourdieu 1977, 78; 1990b, 130-31). As later discussed, the herders' social practices were guided by their conceived land value, maintaining Bourdieu's depiction of habitus as a structuring structure (1990a, 53).

Summary: Figure 5.2 on the next page recaps the foregoing analysis. The figure shows that while the stake was common to the agents of the respective fields of land access, they had conceived of varied expectations of it, which related to their land values or habitus. Primarily, the agents' varied habitus support Bourdieu's position on the polythetic (or polyrational in Davy's words) reality of social spaces (1990a, 112-13; Calhoun 2006, 1411-12). The research also shows that land had certain qualities, which appealed to the agents and were the thrust of their participation in the fields of land access. These included its extent, productivity, and non-fungibility. In line with Bourdieu, the agents' belief in the potential of these qualities to support the achievement of their land values and hence their participation in the fields underscored their 'illusiones' (1998, 77-78; 1990a, 65). In this regard, the illusio of the landowning TAs was their belief in the implications of the existence of land for their authority. The illusiones of the farmers and herders were their beliefs in the productivity of the stake to facilitate high crop yields and fodder respectively. Conversely, the illusio of the builders was their belief in the existence of land to facilitate their access to preferable

locations. Additionally, to the farmers, herders, and builders, their illusions included a belief in the non-fungibility of the stake. Being the thrust of the agents' participation in the fields, the research concludes that the illusions fundamentally sustained the fields.

Figure 5.2: The polyrational habitus (land values) of the historical agents



Source: Author's construct (2021)

As deduced from the analytical discussion, the agents' varied land values or habitus were in respect of specific objects. Thus, although the farmers, builders, and herders equally conceived of the use value of land, they respectively socially constructed it as an opportunity to acquire crops, shelter and security, and fodder. The territorial and environmental values conceived by the TAs were conversely in respect of authority and undergirding their native cosmologies. Given this distinction, the research conceptualizes the agents' objectives as 'sub-stakes' over which they competed in order to realize their land values. To this end and as elaborated in the next subsection, the logic had specified rules that structured their access to the respective sub-stakes. As further discussed in the next broad sections, access to each of the sub-stakes required certain capitals and social practices, which underlay the objective structure of relations among the corresponding agents. The agents pursuing the respective sub-stakes also had different ways of

legitimizing and recognizing success among themselves. Thus, the research further conceptualizes that the sectors in which the agents competed for access to the sub-stakes embodied 'subfields' within the broader historical fields of land access. Specifically, it conceptualizes the subfields of 'chieftaincy', 'arable farming', 'real estate', and 'pastoralism' according to the social practices undertaken by the agents in respect of the identified sub-stakes. Despite these demarcations, the research observed that the agents' pursuit of the sub-stakes overlapped in the respective physical and social spaces because they undertook their social practices on the same land and were nested in the same primary power relations. Based on this, the research conceptualizes the totality of the respective fields of land access as 'arenas' where the agents competed over access to the stake, their social positions, and the benefits associated with the stake (Etzold 2013, 30).

5.2.3.3 Customary land tenure systems: The historical logics of the fields of land access

The customary land tenure systems of the study communities – including the principles, procedures, and practices of control, use, and transfer – fundamentally represented the logics of the respective fields of land access. Following Bourdieu, a field's logic (nomos) is the regulative principles – either explicit or implicit – and prescribed values in relation to the stake and other capitals, which is the cumulative product of specific histories (Bourdieu and Wacquant 1992, 17; L. J. D. Wacquant 1989, 41). Among other things, they delineated the principles of ownership and control, use, and transfer of the stake. As these were objective and explicitly recognized, the customary tenure systems may primarily be categorized as 'rules' (Bourdieu 1977, 27). Rather than being exclusive, the delineated interests in the stake were characteristically intersecting (FAO 2002, 3:7). For instance, the allodial titles of the chieftains, the usufructuary interests of the native commoners, and the customary tenancies of the non-natives overlapped because they were in respect of the same land (ibid). Among usufructuary interest holders and customary tenants, their interests were respectively complementary because they were shared rights among certain members to the same land (ibid). Following the discourse, it appears that the interests were hardly competitive, because the participants maintained that there were few cases of disputed claims among the interest holders (ibid).

Regarding the agents who had complementary interests in land, the research shows that the logic also involved unique principles of access by subfields. Thus, although native farmers and builders possessed the same interest, which was the right of usufruct, the former, who operated in the subfields of arable farming, did not have to see the traditional authorities (TAs) before accessing farmlands. Conversely, the latter who operated in the subfields of real estate were obliged to do so. Farming also involved the liberty to claim a stretch of land and practice shifting cultivation, while access to lots is restricted to a defined space. Likewise, although non-natives may obtain customary tenancies to participate in either the subfields of arable farming or pastoralism, they were required to follow different precepts in each of them. In this regard, those who participated in the former may have long-standing access to land, while those who participated in the latter were only welcomed for a period. In the subfields of chieftaincy, the TAs were also governed by certain principles, including the need to accede to the authority of the chieftains in all land transfers. Although constitutive of the fields' logics, these specific principles were only immanent in the agents' practices and may thus be called regularities or schemes in line with Bourdieu's definition (1977,

27). Thus, the logics encompassed both explicit or objective and implicit components. The agents' commitment to these logics – despite the apparent differences in latitudes in the respective subfields – may be said to have explained their 'doxas', which according to Bourdieu, is the perception of the rules and regularities as a natural given fact (1990a, 66; Sakdapolrak 2007, 56). The data show that the logics had established the relationship among the agents concerning land as well as delineated the precepts for a sustainable land use and peaceful cohabitation of the users.

As previously intimated, the logics' delineation of the principles of ownership and control, use, and transfer also delimited the habitus or the range of land values available to the agents. Davy explains that land values are contingent on land rights (2016, 138). Thus, the allodial titles, usufructuary interests, and customary tenancies explain the respective habitus of the chieftains, native commoners, and non-natives. The chieftains' possession of the allodial titles to land explains the habitus of the TAs of the territorial and environmental values of land. Conversely, the usufructuary interests and customary tenancies assigned respectively to native commoners and non-natives underlay their primary habitus of the use value of land. Depending on the sub-stakes of the subfield, their habitus also included exchange and territorial values of land. Yet, unlike the chieftains, their habitus of the territorial value of land was not in relation to absolute ownership because their interests in the stake were subordinate to those of the chieftains. Thus, the agents' interests (land rights) also underscored the objective structure of relations among them and delimited the range of conceivable and pursuable values available to them (Bourdieu 1993, 72; Maton 2014, 52).

Concerning this, the data also show that the customary logics prescribed or structured the value of the primary capitals (Bourdieu and Wacquant 1992, 17; L. J. D. Wacquant 1989, 41). Fundamentally, the logics had granted the natives preeminent access through usufructuary interests, which underlay its endorsement of social capital – particularly bonding (kinship ties) – as foremost among the capitals. Regarding this, the TAs' role, which underscored their allodial titles, primarily, related to institutionalized cultural capital, because they were the results of their selection and recognition by the revered kingmakers of the respective communities (Bourdieu 1986, 247; Etzold 2013, 23). Apart from these, the non-natives also acquired customary tenancies through linking social capital, whereby they depended on the natives to exercise their more influential rights to grant them access to land. To establish this relationship, the logics required them to spend circulating economic capital through cash and in-kind payments.

Although the logics did not restrict access to the stake by gender, the data show that certain non-native groups – especially the Dagaate – applied their own logic. This explains why they had proscribed their women against accessing land independently of men. While this shows that the fields of land access were open to foreign logics, it also shows that such compromise depended on the effects of the imported logic on existing ones and ultimately on the endeavors of the natives. The research noted that customary tenure systems are characteristically evolutionary. Following Bourdieu, this underscores the attribute of a field's logic as the cumulative product of specific histories (Bourdieu and Wacquant 1992, 17; L. J. D. Wacquant 1989, 41). Fundamentally, this explains why the tenure systems of the Dokokyina community changed upon its affiliation with the Banda Paramountcy. In effect, the chieftains ceded their allodial land title to the Paramount Chieftains of Banda, which subordinated them to the representatives of the paramountcy

at the community level. Also in line with Bourdieu's argumentation, the research acknowledges that the logic – the customary tenure systems – also delimited the boundaries of the fields of land access such that their application was not relevant for other fields that were constitutive of the societies at the time but only land access (1992, 17; L. J. D. Wacquant 1989, 39). Despite all these, Bourdieu notes that fields are inharmonious because they are sites of action where differently positioned agents struggle among themselves to preserve or transform the logic (1990b, 134; Etzold 2013, 17). Thus, the next broad section addresses the characteristics of the pre-existent agents of the fields of land access and their power relations to demystify their struggles and their implications for the fields of land access. Like the current section, the discussion includes descriptive and analytical parts.

5.3 The historical agents and their power relations

Prior to the acquisition of the land by the State and the construction of the Bui Dam, land relations involved almost all the economically active populations of the study communities, but in varied capacities. These active agents had supports from other agents, some of whom were involved in other sectors besides land access. Relevantly, there was a social differentiation among all the categories of agents based on certain factors. Among the active agents, a key factor was the tenurial arrangement. As Agbosu explains, the “social, economic, and political organization” of many African societies is “intertwined with land tenure” (2000, 11). Thus, following research questions ‘b (i)’, ‘b (iii)’, and ‘b (v)’, this section seeks to detail the characteristics of the historical agents, their inherent power relations, and the manner in which they legitimized power in the respective communities. To this end, the section has three parts: the first two subsections respectively provide data on these key issues as gathered from the field, while the last interprets the data from the perspective of the theoretical framework.

5.3.1 Descriptive analyses of the historical agents of land access

Based on their specific roles and activities in relation to land, the research characterizes the historical agents of land access as managers, users or appropriators, and providers or contributors. Together, the managers and the users were the primary agents of the historical fields of land access, while the providers were the secondary agents. However, the research acknowledges that some providers were more active than others were, because they participated in many stages of the respective practices. Based on this categorization and in response to research question ‘b (i)’, the subsections describe the agents who constituted the respective categories and their characteristics.

5.3.1.1 Managers

The category of managers encompassed those who administered land access by regulating and facilitating the activities of the other agents. Following the accounts thus far, these were the landowning traditional authorities (TAs), particularly the chieftains. This deduction is supported by Articles 267[1] and 36[8] of the Constitution (1992), which as cited previously, identify the appropriate stools (chieftains) as the

managers of stool lands. With respect to the western communities of Bongase and Dokokyina, the research found that the chieftains functioned at different levels of authority in line with the structure of the paramountcy. Thus, the Paramount Chieftains of the Banda Traditional Area were the managers of land access. As the Bongase and Dokokyina chieftains were subordinate to the paramountcy, they were sub-managers to the Banda Paramount Chieftains. Conversely, the Bui Chieftains were the sole managers of land access of their community, because their membership of the paramountcy was exclusive of land relations. They were also the managers of land access of the Akanyakrom community, because the community subsisted on their land.

In the east, the Chieftains of Carpenter and the Bian Clan Head of Jama who owned the land on which the Gbolekame North community subsisted were also the respective managers of land access. Their role was also regardless of their membership of the Mo Traditional Area, because the establishment of the paramountcy did not rule out their respective autonomy. Also in the case of the Bian Clan Head, the research found that although he was subordinate to the Jama Chieftains, the terms of the historical coalition of the four clans of the community were devoid of land relations. Hence, his role as the manager of his respective clan land was without question. In all cases, the chieftains of the communities had sub-chieftains who supported them. As previously emphasized, the totality of the chieftains and the sub-chieftains thus formed the traditional authorities (TAs) of the respective communities.

Accordingly, those appointed by the kingmakers in line with the respective chieftaincy institutions occupied the role of managers at all levels. In this regard, those whose heritages were not royal could not become managers of land access. Thus, as gathered, during the enstoolment of the Banda Paramount Chieftains, the stool was contested by the Chief of Kabronum, who went ahead to assume the paramount title without the support of the kingmakers. Given his lack of support, he failed to gain any social recognition. Subsequently, the kingmakers deposed him and enstooled the Banda Chieftains as the Paramount Chieftains. Like the other communal chieftains, the Chief of Kabronum is presently a sub-manager of land access to the Banda Paramount Chieftains and only has authority over the land of his community. To be sure, such cases of contestations were unusual in the study area, because members of the TAs were well aware of the inherent structures.

5.3.1.2 Users/ appropriators

The historical land users were those who actively appropriated land for their own uses or benefits. Following the accounts, they included the traditional authorities, farmers, builders, and herders. The subsequent paragraphs provide details of their respective attributes and relationships.

The traditional authorities (TAs): As explained previously, the TAs were a body of chieftains and sub-chieftains who governed the respective communities. Although they (especially the chieftains) were the managers of land, they were also users, because they transferred land for cash and in-kind benefits, which enabled them to maintain the respective stools.

Farmers: As land access was unrestricted by age, status, nor gender, the research found that the farmers of all the study communities were from the age of 15, and included both men and women, TAs and commoners, and even non-natives, who were largely of Dagaate ethnicity. However, while native women could access land independently of men, non-native Dagaate women could not, because their respective customary tenure system disallowed it. In the communities and among all the ethnicities, there was an explicit division of labor in the household. Thus, in the traditional farming communities of Dokokyina, Bui, Bongase, and Carpenter, the men usually did most of the farm work in the household and left home at dawn while the women usually followed in the late morning due to housework. However, in single households where the women catered for themselves, they attended to their farms as the men did. Except Dokokyina, only the men of the traditional farming households cultivated valuable crops like yam for subsistence and commercial purposes. The women of those communities cultivated accompanying crops like vegetables mainly for subsistence. Although both were considered family farms, the men's farms were characteristically the major farms from which the households earned money.

The women of Dokokyina and the single women of the other communities also cultivated valuable crops like yam and cashew. As previously explained, the former did this out of fear of destitution upon the death of their spouses. However, before the passing of their spouses, their farms are part of the family farms. While the people of Dokokyina had also long invested in cashew farming, the men and a few women of the other communities had only began cashew farming shortly before the dam construction. However, the TAs proscribed non-natives from cultivating perennial crops to prevent them from making permanent claims to land. In the fishing communities of Akanyakrom and Gbolekame North, the men were artisanal fisher folks. Thus, the women were mainly involved in farming as a secondary livelihood and cultivated staple crops such as yams for subsistence.

The farmers accessed pristine land every season. However, some women of communities such as Bongase and Bui accessed the exploited lands of their husbands or male relatives because of a lack of 'strength' to 'pump' them. Emphasizing the inherent division of farm work among the men and the women of households at the preliminary workshop on 14 September 2018, an elderly woman in her 70s from Bongase stated that, "*The men did most of the farm work. As women, we just cultivated beans, okra, and pepper*". This also applied to the married farmers of Bui and Carpenter. However, the unmarried ones cultivated these crops as well as yams and groundnuts for subsistence and commercial purposes. Reportedly, their farms were smaller than the farms of their male counterparts because of their relatively less 'strengths'. In view of their minimal farm work, the men of the traditional farming communities hardly regarded the women as farmers. Despite this general perception, the research still considers them as farmer agents, because they also appropriated land for their own benefits. Yet, it considers the Dagaate women as providers, because they were only involved in farming to assist the men.

Builders: The builders were also both natives and non-natives. The latter were largely the migrant Dagaate farmers who lived in some of communities and mostly in Carpenter. All the builders were predominantly men from the age of 20. Women rarely accessed land for building: married ones relied on their husbands, while unmarried ones relied on their fathers until they were married.

Herders: As regards herders, their use of land was seasonal and infrequent. They usually stayed in the area between December and April/May of the following year. They were mainly a group of Fulani men from Burkina Faso or Niger herding cattle of varied sizes, who settled in the forested areas away from the communities and farms.

Besides the above, the research found that the managers and users relied on certain agents to complement their access to land. It categorizes these agents as providers or contributors. The next section describes their particular characteristics.

5.3.1.3 Providers/ contributors

The providers included various groups of agents who functioned at different levels and in diverse ways by expediting the managers and users' access to land. Following Clarke et al., the research considers them as implicated agents (2017, 76). This is because some of them were either physically present in the communities – some of whom were silenced by powerful agents – or discursively present such that they were referred to as important for land access or targeted by the work of the active agents. In this regard, the managers may appear to have been providers to the non-natives. However, the research excludes them from this category, because of their managerial functions. Of relevance too, while many providers may have historically existed, the research focuses on those whom the participants claimed to have been empirically important or made a serious difference to their land access. The following paragraphs describe the providers by managers and users.

The traditional authorities (TAs): As mentioned earlier, with the exception of the Bian Clan Head, all the chieftains were registered at the National House of Chiefs according to Section 59 of the Chieftaincy Act 759 (2008). Fundamentally, this registration accorded them additional legitimacy in their capacities. The research also shows that the Banda Paramount Chieftains also benefitted from the work of the Stool Lands Revenue Collector, who was part of the organizational structure of the Office of the Administrator of Stool Lands. This was because in line with Section 7 of the Office of the Administrator of Stool Lands Act 481 (1994), the Paramount Chieftains received an annual percentage of the revenue collected from non-natives for their land use. Per Articles 271 and 267[2] of the Constitution (1992) respectively, both institutions were statutory and involved in public administration.

Farmers: The relevant historical providers of the farmers were those who supplied them with labor and markets. Regarding the former, the research found that those with economically active nuclear families relied on them because the farms were the joint properties of the family. Even in Dokokyina, the separate farms of the women belonged to the family until the passing of their spouses. Thus, the members of the nuclear families relied on each other for support. In all cases, the nuclear family members supported each other through many stages of the agricultural production cycle, including the preparation of the land, crop cultivation, farm maintenance, and harvesting. In the Akanyakrom and Gbolekame North fishing communities, the men usually paid the wages of laborers to prepare the farmlands. However, they and the economically active children assisted the women to plant and maintain the farms. Besides the above, the

women and the economically active children of the households of all the communities were responsible for processing crops like groundnuts, beans, and melons. Among the Dagaates, the women were additionally responsible for cultivating vegetables, legumes, and nuts for the men.

Particularly, the men of the traditional farming communities - Dokokyina, Bongase, Bui, and Carpenter - also relied on their extended family members and friends in an arrangement of mutual support. For this, they usually engaged each other to prepare the farmlands and plant the crops. They could also engage each other to maintain their respective farms and harvest the crops when the workload was beyond the capacities of their nuclear families. With respect to harvesting, the farmers could give their providers some of the crops as payment for their services. By contrast, the women hardly received any direct assistance from their extended male relatives and friends. Besides failing to consider the women as farmers, the men preferred to lend their support to other men, because they could expect them to reciprocate the offered support. Moreover, given the relatively smaller sizes of their farms, the married women could manage them with the support of their children. They and the unmarried ones could also rely on their female relatives for support in an arrangement of mutual support.

Farmers whose social support networks were inadequate and who had the financial means could hire wage laborers to assist the farm work. Some men also chose to rely solely on wage laborers instead of establishing an arrangement of mutual support with their relatives and friends. As explained later, the men of the traditional farming communities had relatively higher means than the women did and hence were able to hire laborers to assist land preparation, planting, maintenance, and harvesting. The laborers were mainly landless men from the northern regions of Ghana who usually flocked to the area during the planting and harvest seasons and when agricultural activities had declined in their own communities. Respectively, the seasons were between October and December and August and September. In Dokokyina, some of the laborers were also from Burkina Faso. Although the farmers could hire laborers for all tasks, they mostly hired them to prepare farmlands and plant the crops. Some also hired laborers to harvest especially groundnuts, because the plants were reportedly difficult to uproot in the dry season and the crops tended to germinate quickly in the event of a sudden rainfall.

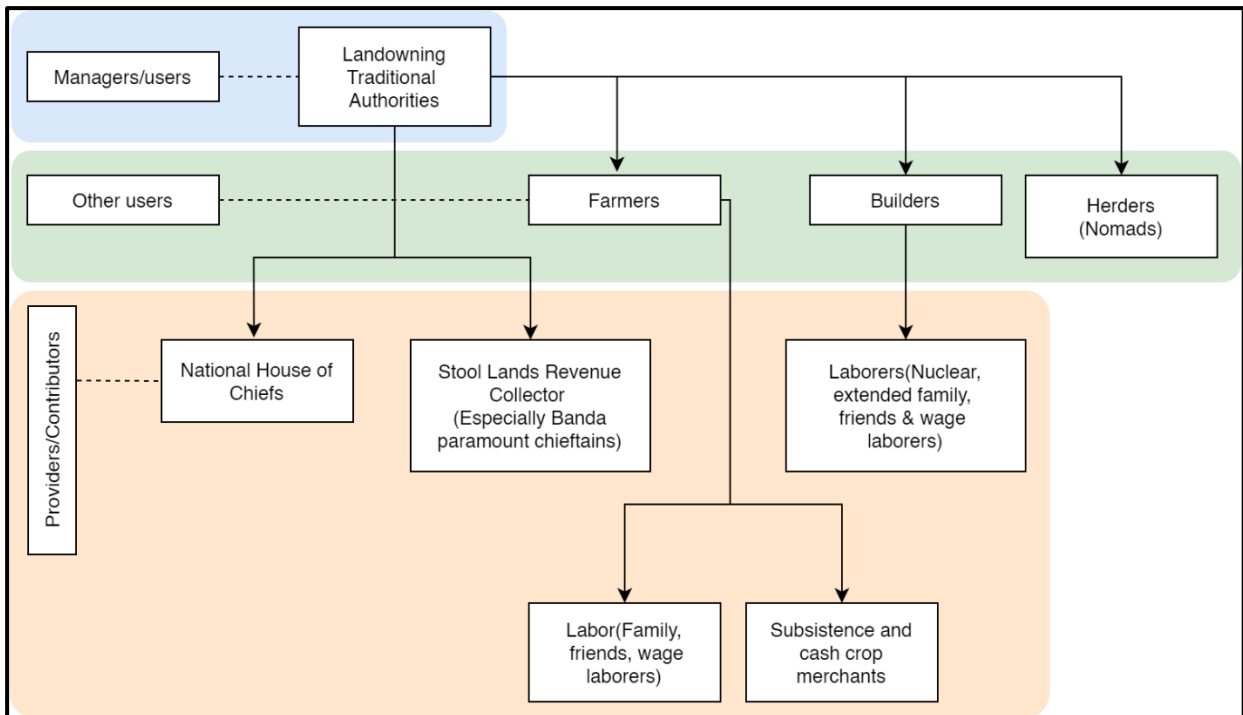
Although the farmers mainly cultivated for subsistence, those of the traditional farming communities sold some of their crops to domestic and external crop merchants to earn money for other necessities. The domestic subsistence crop merchants were themselves native farmers, who bought and stored the crops during the harvest season and sold them to the external subsistence crop merchants during the off-seasons. Conversely, the external subsistence crop merchants were from either Wenchi or Techiman and bought from the domestic merchants or directly from the farmers. The farmers of Bui and Bongase also barter traded their subsistence crops for fish with the fisher folks of Akanyakrom. In Dokokyina where cashew cultivation had advanced, the farmers traded the seeds with external cash crop merchants from Sampa and Cote d'Ivoire. These merchants were either employees of international buying companies or independent who sold the seeds to the companies. The few cashew farmers in the other communities sold their seeds to local cash crop merchants, who were also farmers. In turn, they assembled and sold the seeds to the external merchants.

Builders: The key providers of the builders were nuclear and extended family members and friends, and wage laborers. Building materials such as sand, thatch grass, and timber were locally available. Thus, family members and friends assisted each other to extract these resources. Subsequently, the native builders engaged masons as wage laborers to construct their preferred houses, which were either mud or concrete block. Those who preferred concrete blockhouses also engaged carpenters and steel benders among other specialized laborers. Although they also relied on vendors of building materials for cement and aluminum roofing sheets, they rarely implicated them as important, because very few builders preferred or could build concrete blockhouses. The non-native builders also preferred mud houses; yet, they rather lobbied their nuclear and extended family members and friends for the construction in an arrangement of reciprocity.

Herders: The research did not record any providers for the historical herders. As deduced, this was due to their absence and/or the research's inability to locate them.

Based on the above, Figure 5 below summarizes the historical primary agent categories and their providers. The research found that each of the agents employed certain mechanisms to expedite their land access and achieve their respective objectives. These mechanisms were also foundational to the power relations among them. Thus, in respect of research question 'b (iii)', and 'b (v)', the next section discusses the mechanisms of land access of the agent categories to explain their power relations in the historical period.

Figure 5.3: Categories of historical agents and their providers



Source: Author's construct (2020)

5.3.2 Descriptive analyses of the agents' mechanisms of land access and power relations

Due to the strong ethnic foundations of the study communities, their respective kinship systems defined the primary social structures. Generally, these encompassed the categorization and ranking of people according to custom. Regarding land access, other mechanisms, including economic, social, and physical – so-called 'strength' – also underlay the social structures among the agents, because they contributed to their accumulation of wealth and prestige. By describing their respective land access mechanisms, the subsections seek to show the historically bedded relationships among the agents.

5.3.2.1 The mechanism of land access of the TAs and their providers

The traditional authorities (TAs): As explained previously, the TAs' objective of land access was to maintain their ownership and control over land to undergird their socio-political and socio-cultural authority and conserve the sacred trees. For these, the research found that the TAs employed their allodial titles to land as their primary mechanism of access. As explained, Articles 267[1] and 36[8] generically guarantees custodianship of stool lands by the appropriate stools, but in accordance with the respective customary law. Impliedly, the Constitution had acceded to the eminence of customary law to determine the allodial titleholders. Thus, with the support of their sub-chieftains, the respective chieftains customarily held the allodial titles to the lands of the study area.

Primarily, the roles of the TAs were not by usurpation. Rather, the respective kingmakers selected them from royal lineages according to the institutions of chieftaincy. The sub-chieftains were also from recognized clans and selected by the respective kingmakers of the clans. The communities believed that the royal families had historically led them through conquests and finding permanent settlements. Thus, customarily, they revered especially the chieftains as their socio-political and socio-cultural leaders. Per the chieftaincy institutions, these capacities underscored the chieftains' responsibilities, which included maintaining peace, codifying custom, and upholding the collectiveness of the people through taboos, festivals, and ceremonies. The communities also believed that the chieftains were the bridge between them and their ancestors and the spirit world. Fundamentally, this socio-political and socio-cultural authority underscored the attribution of allodial titles to the chieftains, which together, gave them legitimate power among the people. Given these, the edicts of the landowning TAs in respect of land access and social life in general were indisputable. As emphasized by a youth association leader from Bongase during an interview on 31 January 2019, "*We respected the power of the chieftains because of their background, knowledge of tradition, and landownership. We thus considered everything they said or agreed to as final*".

Despite being the totality of the chieftains and sub-chieftains, the TAs had a customary hierarchy based on the institutions of chieftaincy. As stated above, the chieftains dominated the bodies and held the allodial titles to land while the sub-chieftains were subordinate to them. In the western communities, the Banda Paramount Chieftains dominated the body of TAs. However, in terms of landownership, they only held the allodial title to the lands of the Bongase and Dokokyina communities. As explained above, the Chieftains of the Bui community held their own allodial titles, which encompassed the lands occupied by

the Akanyakrom community. Thus, although the Chieftains of Akanyakrom held a traditional position at the paramountcy, they were still subordinate to the Chieftains of Bui, under whom they and their subjects were merely land users. This explains why the Bui Chieftains required them to make sacrifices before accessing the land to bury their dead. Regarding the eastern communities of Carpenter and Gbolekame North, the Chieftains of the former and the Bian Clan Head also held the respective allodial titles. As explained above, the Bian Clan Head was subordinate to the Jama Chieftains; yet, he had autonomy over his clan land. Consequently, he and the Chieftains of Carpenter also had the support of their sub-chieftains to exercise their allodial titles towards the land access objectives. Besides the kingmakers, the research found that all the chieftains, except the Bian Clan Head, had legal recognition under Section 59 of the Chieftaincy Act 759 (2008), because their names were recorded in the National Register of Chiefs. As previously explained, the Bian Clan Head was excluded from the registration because of his subordination to the Jama Chieftains. Nevertheless, within the Jama community and its satellite communities including Gbolekame North, he enjoyed a social recognition as the owner of his clan land. For all the chieftains, the social and legal (where applicable) recognition underscored their legitimate authority over land.

Principally, the chieftains' allodial titles and their roles as the socio-political and socio-cultural leaders were complementary. This is because while the latter accounted for the former, the former reinforced the latter. Regarding this, the following statement by the Bongase Abusuapanin comes to mind: "*Land is what makes a stool; without land, one cannot rule*". Impliedly, land access to the chieftains – and the bodies of TAs – symbolized authority and undergirded the collectiveness of the people of whom they were stewards. However, besides these, the research also found that the allodial titles of the TAs enabled them to transfer land and earn cash and in-kind tokens to maintain their respective stools, which were a repository of the shared spirit and soul of the communities. Especially for the Banda Paramount Chieftains, the annually assigned percentage of the Stool Lands Revenue was also useful for this purpose. As stated previously, the TAs used these cash and in-kind tokens for capital and recurrent expenses such as remunerating the chieftains, organizing festivals, and preserving the palace accessories. Moreover, as the allodial titleholder, the Chief of Carpenter who was also a farmer had established a rule that compelled non-native farmers to take turns to work on his farms. Thus, as gathered, he had large yam farms and was the wealthiest farmer in the community. Such a rule was however, non-existent in the other communities. The research surmises that this was due to the relatively low populations of migrant farmers compared to Carpenter, where they constituted about 90 per cent of the population.

The National House of Chiefs and the Stool Lands Revenue Collector: The juridical establishment and mandates of the National House of Chiefs and the Stool Lands Revenue Collector were the bases of their contribution to the land access of the TAs. As mentioned above, these institutions were respectively established according to Articles 271 and 267[2] of the Constitution (1992). Besides its constitutional establishment, Sections 12 and 59 of the Chieftaincy Act 759 (2008) mandates the National House of Chiefs to legitimize chieftains through registration. Conversely, Section 1[b] of the Office of the Administrator of Stool Lands Act 481 (1994) mandates the Stool Lands Revenue Collector to collect rents, dues, and royalties among others on stool lands, a percentage of which is allocated to especially the Banda Paramount

Chieftains. Through these, both the National House of Chiefs and the Stool Lands Revenue Collector contributed to the land access of the chieftains.

5.3.2.2 The mechanisms of land access of the farmers and their providers

Farmers: The farmers accessed land to obtain high yields of especially yams and the accompanying crops, which included groundnut, beans, maize, melon seeds, and cassava to support their livelihoods. The farmers of Dokokyina were already engaged in profitable cashew cultivation. Thus, they additionally accessed land to gain high yields of cashew seeds. To this end, the primary mechanisms of land access of the natives and non-natives were respectively, the usufructuary interest and customary tenancies. The natives – including the members of Akanyakrom and Gbolekame North – held the usufructuary interest by virtue of their accepted membership of the respective communities. However, non-natives such as the Dagaates obtained customary tenancies by 'seeing' the traditional authorities (TAs). This involved their introduction to the TAs with drink offers. They also had to make annual presentations of foodstuff to the TAs towards the yam festival to maintain their land access.

Subsequent to these land interests, both natives and non-native farmers required 'strength' to achieve their land access objectives. The research found that references to 'strength' encompassed the farmers' physical capabilities and skill, the quality of their social support networks (including households, extended families, and friends), and financial capability. In this regard, physically strong farmers with bigger and physically strong household members cultivated large farms and gained high yields. Those who had the additional support of large and physically strong extended family members and friends, and/ or money to hire laborers and purchase the requisite farm tools cultivated even larger farms and gained higher yields. However, as mentioned above, among the natives of Dokokyina, Bongase, Bui, and Carpenter where farming involved both genders, the men possessed larger quantities of this aggregated mechanism of access. Also among the Dagaates, the women were only involved in farming as providers for their husbands or fathers, who thus possessed these mechanisms of access.

Illustratively, in communities where both men and women farmed, the former were physically stronger than the latter. Thus, except in Dokokyina, the family men of the other traditional farming communities owned the farms while the women farmed within or on the peripheries of their farms or on their exploited lands. As regards the women of Dokokyina and the unmarried ones of the other traditional farming communities, they accessed lands as the men did, because they also cultivated yams. In addition to yams, the former cultivated cashew trees due to the community's history and proximity to Sampa and Cote d'Ivoire. Regardless of their independence, married ones acquired farmlands from their spouses. The women of the fishing communities of Akanyakrom and Gbolekame North relied on wage laborers to prepare their farmlands. For this, they relied on their spouses to pay the wages. Besides their households, the men of the traditional farming communities could establish arrangements of mutual support with the men of their extended families and friends to gain their assistance. As explained below, they were also relatively wealthier and could hire laborers for the tasks at their discretion. Conversely, the married women

could mainly gain the assistance of their nuclear families. They and the unmarried ones could additionally rely on their female relatives in an arrangement of mutual support.

Given that the men of the traditional farming communities cultivated more acres of the valuable crop, yam, and cashew (as was the case of the Dokokyina community), they were also wealthier than the women. Although some women of the Dokokyina community and the unmarried ones of the other communities also cultivated the valuable crops, their farm sizes were relatively smaller than the men's were. Therefore, the proceeds from the sale of their crops were comparatively less. Also in the case of the Dagaate women, the research found that the proceeds from the crops they cultivated – including groundnuts, maize, and melons – were for their husbands or fathers. Together with the married women of Dokokyina, Bongase, and Bui, they were responsible for harvesting and processing certain crops cultivated by the men; yet, they only received some compensation – in cash or kind – at the discretion of the men. Even so, the married women were supposed to use the compensation for 'soup'; that is to buy fish or meat to feed the household. On the contrary, the men and the unmarried women could use their wealth at their own discretion. Thus, unlike the married women, they could hire laborers to support their farm work. With respect to the fishing communities, the research found that the women only farmed for subsistence, while the men sold their fish for cash. Thus, the men were also wealthier than the women were, which explains why they paid for the cost of hiring laborers to assist the farm work. Moreover, the research found that although the people of the traditional farming communities shared a general knowledge about farming due to its long history in the area, some of them were more adept than others were. In this regard, the men were generally more adept than the women were, because of their extensive farming practices. The research surmises that the skewed distribution of the mechanisms of access – that is physical strength, skill, extensive social support networks, and money – underlay the perceived roles and division of farm work within the households. They also explain the relative success of men and women and their power relations.

Regardless of gender, age, and status, the hallmark of success among the farmers was the extent and number of particularly their yam farms due to the relatively high market value of the crop. However, in Dokokyina, the community judged the success of farmers by the extent of their cashew farms. Except Dokokyina and the fishing communities of Akanyakrom and Gbolekame North, the successful farmers of Bongase, Bui, and Carpenter cultivated more than ten acres of yam per season. Those of Dokokyina could cultivate more than twenty acres of yam seasonally and possessed more than thirty acres of cashew farms. Given the gendered possession of the mechanisms of access above, the successful farmers of the traditional farming communities – including Dokokyina, Bongase, Bui, and Carpenter – were only men. Fundamentally, this underlay their domestic authority at the household level. Besides the extent of their farms, the successful farmers had bigger houses (either mud or concrete block) and household sizes. The latter encompassed the number of wives, children, and other dependents such as the children of extended family members who were under their permanent guardianship. In this regard, the research found that the most successful farmer in Dokokyina was a 45-year-old man who owned more than a hundred acres of cashew farm and cultivated at least thirty acres of yam seasonally. He also had the biggest concrete blockhouse in the community, two wives, and twenty-two children, out of which ten were economically

active. Far from being fallacious, this farmer won the District Best Farmer Award in 2012 for the extent of his yam farms and yields.

Reportedly, seeds and seedlings could be obtained at no cost from family members, friends, and acquaintances because of the high crop yields and the inherent social cohesion among the people. Besides this, some successful farmers like the man from Dokokyina lent and donated money to less fortunate farmers, which earned them reverence and access to free labor when needed. However, regardless of their success and reverence, the farmers were still subordinate to the TAs, who had socio-political and socio-cultural authority. Additionally, although the TAs and successful farmers were generally revered, their access to land was at par with other farmers. This was because access to desirable locations – such as the river valley of Bongase and in proximity to family and friends – was open to all on a first-served basis, which effectively put early comers at an advantage over others. Despite this, the farmers related that they had access to choice farmlands. Thus, farm location was irrelevant for distinguishing among them. This latitude however, did not apply to the Carpenter community, where the Chief was reportedly privileged to access desirable locations due to his role and the large number of non-natives that constituted his subjects. Regarding this, the research found that the Dagaates preferred to settle in Carpenter because the community was historically sparsely populated, affording them access to relatively vast lands.

Laborers: With respect to the members of the households who supported each other mutually and the Dagaate women who supported their husbands, the research found that their key mechanism of access was physical strength and skill. With these, they contributed to the farmers' success and earned money or foodstuff to sustain the household. The members of extended families and friends who engaged in mutual support also employed physical strength and skill, which enabled them to gain similar support to advance their own objectives. Those who helped the farmers to harvest their crops sometimes received crops as payment, which augmented their own harvests. The non-native wage laborers also used their physical strength and skill – about yam farming for instance – to benefit from land. In this regard, the farmers usually hired those who were reputed to be physically strong and skillful.

Crop merchants: The mechanism of access of the domestic crop merchants was mainly money, with which they bought the crops from the farmers. In turn, they sold the crops to the external merchants for profits in order to augment the earnings from their own farms. The external merchants relied on money, but also on means of transportation and their access to retail and wholesale markets. The research found that the road networks leading from the market towns of Wenchi and Sampa to the western communities were historically deplorable and the farmers lacked personal means to transport their crops to the markets. Therefore, the merchants unilaterally decided the prices of the crops. The farmers related that although the prices were usually unfavorable, they were compelled to sell their crops in order to avoid incurring losses especially given their perishability. However, as the road networks to Carpenter were relatively better, the farmers could easily access public transportation to Wenchi. Thus, unlike the others, they could transport their crops to the market independently when the merchants offered unfavorable prices for them.

5.3.2.3 The mechanisms of land access of the builders and their providers

Builders: The historical builders accessed land to obtain preferable houses at preferable locations in order to have a sense of connection and security. For this, the research gathered that the primary land access mechanism of the builders was their usufructuary interests and in the case of the non-natives of Carpenter, their customary tenancies. Except in Bongase where the TAs required the builders to pay some money, the builders of the other communities could obtain usufructuary interests to lots by presenting drinks to the traditional authorities (TAs). In Carpenter, the non-natives could acquire customary tenancies to lots by presenting drinks, kola nuts, and some money. In addition to their land interests, all the builders required 'strength' to achieve their objectives. According to them, this generally encompassed their physical strength and skill, social support networks, and financial capability. Regarding their social support networks, the research found that, as certain building materials were locally available, the builders relied on nuclear and extended family members and friends, who employed their physical strengths to support the extraction. For concrete blockhouses, the builders spent money on additional building materials including cement and aluminum roofing sheets. Subsequently, they also relied on masons, carpenters, and steel benders among others, to construct the houses. The natives who preferred mud houses also relied on masons; however, the non-natives relied on their personal skills and physical strength, and on the support of their families and friends to construct their preferred mud houses.

The builders claimed that they had a general sense of satisfaction from building preferable houses at preferable locations. However, the communities perceived successful builders as those who had bigger mud houses and any type of concrete blockhouses with aluminum roofing sheets. Relevantly, the former was popular among older builders of forty years and above, who claimed that their preference was due to the medicinal properties of mud and thatch grass. However, in a direct emulation of city life, newly rich builders between the ages of 20 and 40 preferred the latter to underscore their success and sophistication. Given these, unsuccessful builders were those who owned smaller mud houses. As the economy was largely based on the primary sector, the successful builders of the traditional farming communities reportedly had bigger yam or cashew (as was the case of Dokokyina) farms, from which they earned money for the houses. In Akanyakrom and Gbolekame North, they owned bigger fishing equipment. In all cases, the research gathered that successful builders also had big household sizes. Although some unsuccessful ones also had big household sizes, the research gathered that they were unable to build bigger houses due to financial limitations. Moreover, the research found that only the natives used these demarcations to explain success. The non-natives largely preferred smaller mud and thatch grass roofing houses because of their transience and not financial limitations. Regardless of this, their houses were part of the local assessment of success.

Besides this, the research found that the participants' references to preferable locations were in respect of areas near kin and friends. This preference was the result of the characteristic social cohesion of the communities and the people's belief in a mutual willingness to provide security and support to each other. Consequently, the research observed that old communities – including Bongase, Carpenter, and Gbolekame North – still had settlement patterns based on ethnicities. In Bongase for instance, there was an

area called 'Dagaate Line' where many Dagaates lived. Likewise, in Carpenter, the research observed clusters of houses belonging to Dagaate families in certain areas, while the Ewes of Gbolekame North still live in areas distinct from the other ethnicities. The participants from Akanyakrom also mentioned that there was a 'Dagaate Line' at the old community. Within these clusters, the research found that both 'successful' and 'unsuccessful' builders built together without any distinct demarcations.

Laborers: Regarding the nuclear and extended families and friends who supported the builders, the research gathered that they all used their physical strengths to achieve their land access objectives. The nuclear family members acquired shelter by supporting the aspirations of the head of the household. By supporting others, the extended family members and friends could also earn support to build their own houses. Although the wage laborers (masons, carpenters, and steel benders) also employed their expertise and physical strength, they conversely earned money from the builders.

5.3.2.4 The land access mechanisms of the herders and their providers

As mentioned previously, the research could not trace the herders who traversed the study area before the dam construction. However, it deduces that they accessed the land for nourishment (fodder and water) for their cattle. Like the non-natives farmers, they primarily required customary tenancies from the traditional authorities (TAs) by making cash and in-kind payments. Thereafter, they could access uncropped areas within the communal holdings. They were also required to seek the consent of farmers before crossing their farms. Yet, as gathered from the farmers, they had no encounters with them, because their respective areas of access were far apart. Despite their ability to gain access, the herders lacked the privilege to settle permanently in the communities due to the destructive nature of their activities. Also as mentioned above, the research did not record any providers for them because of their absence or the research's general inability to locate them.

Fundamentally, the descriptions above show that the respective agents employed certain mechanisms to obtain their expected benefits from land. Following the theoretical framework, these mechanisms were the 'capitals' (resources or properties), which enabled them to achieve their objectives in the conceptualized subfields of land access (Bourdieu and Wacquant 1992, 97). Hence, they defined the objective relations among the agents in terms of domination, subordination, or homology (ibid). The next section elaborates on this interpretation to complement the agents' habitus as earlier discussed and to serve as a foundation for discussing their social practices in the subsequent section. Ultimately, this will contribute to determining the agents' historical social constructions of 'land access' and 'land scarcity'.

5.3.3 Theory-guided interpretation: The historical agents and their power relations

According to Bourdieu, fields and subfields are networks of objective relations (struggles) between agents (1992, 107). As he further explains, agents are the socially constitutive beings who are active and acting according to their possession of requisite properties (capitals), which makes them effective and produce

effects (ibid). Following this, the research aptly characterizes the managers, users, and providers as the historical agents of the conceptualized fields of land access of the study communities. Specifically, the managers (the traditional authorities) and their providers operated in the subfield of chieftaincy. On the other hand, the users – including the farmers, builders, and herders – and their related providers operated in the subfields of arable farming, real estate, and pastoralism respectively. Given the degree of their participation in the fields, the research considers the managers and users as the primary agents and the providers as secondary agents. As deduced, some agents were not exclusive to the subfields because they pursued different objectives simultaneously. In this regard, their movement between the subfields required what Bourdieu calls “a genuine qualitative leap”; that is an adjustment to the specific logic or unique principles of the destination subfield (1992, 104; Etzold 2013, 18). For instance, while native farmers did not have to ‘see’ the TAs to access farmlands, they had to follow the protocol by ‘seeing’ them before accessing lots for building.

The discussion also shows that rather than being homologous, the internal relations among the agents were dissimilar and structured by the distribution of socio-political and socio-cultural power, financial capability, social ties, and physical fitness among others. Following Bourdieu’s description, these factors corresponded with certain capitals, which facilitated the agents’ access to the stake and its benefits or the achievement of conceived land values (1992, 97). In turn, this enabled the agents to assume certain social positions, which defined their inherent power relations. Based on this, the research draws the analytical conclusions in the succeeding sections and emphasizes their implications for the historical fields of land access. These encompass the other two of Bourdieu’s three steps to field analysis. These are a definition of the field of power and the relative positions of the subfields to it, and an analysis of the objective structure of relations between the agents competing in the field (Bourdieu and Wacquant 1992, 104–5). Thus, they augment the previous theoretical explanation of the system of land access.

For logical consistency, the first subsection addresses the latter by relating the agents’ capitals and objective power relations in the respective subfields. This serves to complement the active agents’ (the managers and users) *habitus* as previously discussed, because Bourdieu emphasizes that agents’ dispositions correspond with their social positions (Bourdieu and Wacquant 1992, 101). Together with the logics, the agents’ capitals and their *habitus* constituted the frames of action of the field of land access. As explained in a subsequent section, these frames of action underlay the agents’ differentiated social practices and their achievement of the respective land values, which also underscored their social constructions of ‘land scarcity’. Ultimately, the analyses of the objective structure of relations in the respective subfields feed into the next subsection, which delineates the historical fields of power of the fields of land access. However, as a precursor to identifying the fields of power, the subsection will also explain the objective structure of relations among the primary agents of the broader fields of land access. The research conjectures that this will give an idea of the relative weights of the relevant capitals possessed by all the agents and hence expedite the delineation of the historical fields of power.

5.3.3.1 The objective structure of relations of the historical subfields of land access

As stated, this subsection attempts to interpret the power relations among the historical agents of the respective subfields. It identifies the relevant capitals that supported the agents' pursuit of their *habitus* (land values) and how the agents' possession of these capitals underlay their social positions and power relations. Based on this, the research also shows how the agents legitimized and recognized success or power in the subfields. These interpretations will pave the way for interpreting the historical fields of power of the fields in the next subsection.

The subfields of chieftaincy: As deduced from the previous section, the traditional authorities' (TAs) *habitus* were the territorial and environmental values of land. Fundamentally, these related to their quest to maintain their ownership and control over land to undergird their authority and maintain the sacred trees. Towards these, the accounts show that the TAs primarily employed their allodial titles, which they possessed by virtue of their recognition as the socio-political and socio-cultural heads of the communities. As explained, the TAs (especially the chieftains) had socio-political and socio-cultural authority because of their selection from royal lineages by revered kingmakers.

Per Bourdieu's description of capitals, the TA's objectives represented the sub-stakes of the subfield of chieftaincy. Theoretically, the sub-stakes related to gaining symbolic power (authority) and maintaining an objectified cultural capital (sacred trees) through which they transmitted certain beliefs (Bourdieu 1983, 185; 2004, 218 cited in Etzold 2013, 22, 23). The chieftains' allodial titles, which fueled their pursuit of the *habitus* (land values), represented a circulating economic capital (*ibid*). These hinged on their institutionalized cultural capital; that is their recognition by the revered kingmakers per the chieftaincy institutions, but also their recognition by the National House of Chiefs as the socio-political and socio-cultural authorities of the communities (Bourdieu 1986, 247; Etzold 2013, 23). Besides accentuating their asymmetric relations with commoners, this capital also underlay the TAs' veneration by them as the repository of custom.

Although the entire bodies of TAs occupied the respective subfields of chieftaincy, the research shows that there were inherent power relations among them per the respective chieftaincy institutions, which also sanctioned their possession of the relevant capitals. In this regard, the research shows that the chieftains customarily possessed the ultimate institutionalized cultural capital, which underscored their possession of the relevant economic capital; that is the allodial title. Thus, the Chieftains of Bui and Carpenter, and the Bian Clan Head of Jama dominated the subfields of chieftaincy of their respective fields of land access, while their sub-chieftains occupied subordinate positions. However, within the Banda Paramountcy, the Paramount Chieftains had dominance over the affiliate Chieftains of Bongase and Dokokyina, who served in the capacity of sub or divisional chieftains. Relevantly, the chieftains' customary possession of these ultimate capitals underscored their distinct authorities, which the other members of the TAs recognized and accepted without question. Thus, the chieftains had the symbolic capital within the subfields of chieftaincy and enjoyed the highest form of prestige among the TAs (Bourdieu and Wacquant 2013, 297; Lawler 2011, 1419).

Also relevant to the subfield of chieftaincy were the National House of Chiefs and the Stool Lands Revenue Collector. By its legal mandate, the former gave the chieftains legitimacy by registering them in the National Register of Chiefs. The latter contributed to the circulating economic capital of particularly, the Banda Paramount Chieftains through the disbursement of a percentage of the revenue collected on the stool lands. Following Bourdieu, the research relates the juridical mechanism of access of the National House of Chiefs and the Stool Lands Revenue Collector to institutionalized cultural capital (1986, 247). Given their statuses as public institutions, the research conceptualizes that both of them functioned in the field of public administration, from which they contributed to the chieftains' land access. Moreover, due to their direct involvement with the chieftains, the research further conceptualizes that the field of public administration overlapped with the subfield of chieftaincy.

The subfield of arable farming: The account shows that the historical farmers' primary habitus was the use value of land due to their pursuit of high yields of the relevant crops. They also had ancillary habitus of the territorial and exchange values of land as the catalysts to their achievement of the primary land value. Following Bourdieu, the farmers' quest, which is also the sub-stake of the subfield of arable farming related to a circulating economic capital because the crops were forms of consumable and exchangeable material assets that supported their livelihoods (1983, 185; 2004, 218 cited in Etzold 2013, 22). Towards this, the native and non-native farmers primarily deployed their property rights, which were respectively the usufructuary interest and customary tenancy as defined by their basic social capitals. Although both were devoid of outright ownership, the research deduces that the property rights of the native farmers related to circulating economic capital, because they could facilitate access to customary tenancies, which involved a relationship of exchange (Bourdieu 1983, 185; 2004, 218 cited in Etzold 2013, 22). While the natives' property rights predicated on their bonding social capital (citizenship and kinship ties), the non-natives' was based on their linking social capital (a relationship of dependency with the natives) (ibid).

Subsequent to their property rights, all the farmers required 'strength', which encompassed their physical capabilities, skills, social support networks, and financial capability. Theoretically, these represented their capitals. The farmers' physical capabilities and skills related to embodied cultural capital, while their social support networks and financial capability respectively related to various forms of social capital and circulating economic capital (Bourdieu 1986, 244, 248; Bourdieu and Wacquant 1992, 119; Etzold 2013, 22, 23). Based on these, the ensuing paragraphs interpret the description on the farmers' mechanisms of access to underline their historical power relations. Given the farmers' diversity, the research interprets their power relations by citizenship, gender, and status. The interpretation is also per the relevant social level, which includes the household and community levels where the power relations mainly played out. Thus, the section focuses on the relations between natives and non-natives, members of households, and among all the farmers at the communal level.

Regarding natives and non-natives, the above shows that that there was an apparent hierarchy based on the type of social capital possessed by them. Although the holders of usufructuary interests and customary tenancy arrangements both had an open access to land, the former was permanent and granted to natives by virtue of their bonding social capital. Conversely, non-natives could obtain the latter by establishing a

linking social capital through processes of introduction and acceptance, and expending circulating economic capital (payments) to maintain their access to the stake. Moreover, while the natives' property rights corresponded with circulating economic capital due to their exchangeable attributes, the non-natives' did not. In this case, the natives could admit other farmers into the subfield by establishing share-cropping arrangements, which could increase their circulating economic capital (yields). Based on these, the natives primarily dominated the non-natives in the subfields of arable farming. The research deduces that although the non-natives could gain high circulating economic capitals (yields) through their own efforts, their annual payments to the traditional authorities (TAs) reduced their net yields, which further affected their chances of improving their social positions relative to the natives.

The account also shows that there were power relations among members of both native and non-native farming households. As deduced, men had a higher embodied cultural capital (physical strength and skill) than women did. Their social capital; that is the social support networks, were also relatively higher than the women's were, because they had access to nuclear and extended family members and friends, while the women only had access to their nuclear families and female relatives. Following Etzold, the relationship among nuclear family members corresponded with bonding social capital, whereas the relationship among extended family members and friends corresponded with bridging social capital as it entailed an arrangement of mutual support (2013, 31). As social capital functions as a multiplier of the other capitals (Bourdieu 1986, 249; Etzold 2013, 23), the men had a higher chance of accessing larger land sizes and obtaining higher circulating economic capital (crop yields) than the women did. Thus, except in Dokokyina, all the men of the other communities cultivated larger acres of the major crop (yam) for commercial purposes while the married women cultivated accompanying crops for subsistence. Although the unmarried women of these communities and the women of Dokokyina also cultivated both the major and accompanying crops for subsistence and commercial purposes, their farms were comparatively smaller to the men's farms. Generally, this underscored the unequal distribution of the ultimate circulating economic capital (crop yields) between the genders.

In all cases, the men and unmarried women could convert their yields into money, which represented another form of circulating economic capital. With this, they could augment their bridging social, and objectified cultural capitals by hiring wage laborers and purchasing farm tools respectively. The research conjectures that the men could also augment their bonding social capital by marrying additional wives. Given the men's affinity for building houses, they could further convert their circulating economic capitals to fixed economic capitals. However, as discussed, the women were generally not inclined to building houses and depended on their husbands or fathers for shelter. Thus, ultimately, the men had relatively higher volumes of and weightier capitals than the women did, which underscored their domestic symbolic capital (authority) at the household level. The research shows that this skewed distribution of capitals was also true for the households of Akanyakrom and Gbolekame North. As explained, the men pursued artisanal fishing as a prestigious and more profitable economic activity, while the women pursued farming, which they considered secondary to artisanal fishing and less profitable.

Given the above, the men dominated the subfields of arable farming at the community level. However, the power relations among them were also the results of their possession of relatively higher volumes of and weightier capitals. Thus, besides their property rights, farmers who had relatively larger and weightier cultural, social, and economic capitals had comparative success in the subfields and gained higher social positions. To elucidate, male farmers who had higher embodied cultural capitals (physical strength and skill) and had higher volumes of and weightier bonding social capitals (in terms of larger, skillful, and physically strong economically active nuclear family members) stood a better chance of accessing larger land sizes and obtaining higher crop yields than those who lacked or possessed less of these capitals. Those who additionally had higher volumes of and weightier bridging social capital (social networks of mutual support with larger, physically strong, and skillful members) could augment the capitals above and achieve even better outcomes. Farmers who had the requisite circulating economic capital (money) could also obtain bridging social capital by hiring wage laborers to assist them. They could further obtain the objectified cultural capital (farm tools) to increase their chances of success. Benevolent ones such as the District Best Farmer Awardee from Dokokyina could also establish a linking social capital by developing a relationship of dependence with their beneficiaries. Given these, the research deduces that male farmers who had lesser volumes and weights of the embodied cultural capitals, bonding and bridging social capitals, and circulating economic capital (money) were less successful than those who had relatively more. It further deduces that those who had a higher volume and weight of circulating economic capital (money) and shunned their immediate bridging social capital could also achieve comparable success. This was because they could hire the requisite bridging social capital while investing their own embodied cultural capitals in their farms without any obligation of reciprocity to other farmers. Despite this, the account shows that the Chief of Carpenter mainly capitalized on his symbolic capital in the subfield of chieftaincy to gain a linking social capital with the non-native farmers, which facilitated his success in the subfield of arable farming.

Ultimately, besides the extents of their farms, the farmers' successes were also manifest in fixed forms of economic capitals (mainly houses), which embodied their conversion of the capitals above. They were also manifest in the sizes of their bonding social capital (households), which included the number of wives and children. Based on these local schemes of categorization, farmers like the Dokokyina farmer aforementioned also gained symbolic capital among the farmers of his community and had a recognition of success. He also had a symbolic capital by virtue of his benevolence, because it earned him the respect and support of his beneficiaries on his farms, which sustains Bourdieu's argument that symbolic capital is easily convertible to economic capital (1977, 179, 183, 195). The research surmises that as the women depended on the men, the men's success and symbolic capital transmitted to them and influenced their relative social positions among other women. Consequently, it further surmises that married women were more successful than unmarried ones.

The research also conceptualizes that besides the farmers, the subfields of arable farming constituted the landless wage laborers who supported them to achieve their habitus. To the Dagaates, the subfields of arable farming also included the women, who provided labor to the men. The research locates these groups

of agents in the subfields of arable farming, because their activities were socially, spatially, and functionally limited to those of the farmers. The research deduces that the objective of the wage laborers and the Dagaate women were to earn circulating economic capital. While the former's was in respect of money, the latter's was in respect of high crop yields for the benefit of the household. For these, they invested physical strength and farming skills, which relate to Bourdieu's concept of embodied cultural capital (1986, 244). Given that the wage laborers and the farmers interacted in a horizontal network of exchange, which represented a bridging social capital, the research concludes that their power relations were symmetrical (Etzold 2013, 31). However, the relations between the Dagaate farmers and their women correspond with bonding social capital due to the familial ties that existed between them (ibid).

The farmers also had relations of exchange with domestic and external subsistence and cash crop merchants. The domestic crop merchants also had relations of exchange with the external crop merchants, which enabled them to reproduce their circulating economic capital (money) with profits. As they were also farmers, this gain augmented their social positions in the subfields of arable farming where they competed with other farmers under the respective logics. On their part, the external crop merchants also had relations of exchange with other agents at various market hubs, which also expedited the reproduction of their circulating economic capital (money) with profits. Thus, they competed with other agents over access to the crops and access to markets under certain logics. Given this, the research conceptualizes that the external crop merchants functioned in the fields of subsistence and cash crop commerce. Considering the direct flows of exchange of money and crops between them and the farmers, the research also conceptualizes that the respective fields overlapped with the subfield of arable farming. Considering the dual activities of the domestic merchants, the research locates them in the overlap between the subfield of arable farming and the fields of subsistence and cash crop commerce.

Of significance too, the research shows that the power relations between the crop merchants and the farmers were asymmetrical. This is because the former possessed the money, which the latter required to be successful and gain symbolic capital in the subfield of arable farming. In particular, the external crop merchants also possessed the requisite objectified cultural capital (means of transportation) to ferry the crops to the market hubs. Because of these, the crop merchants imposed the crop prices on the farmers who sold off their crops to avoid loss. Thus, the research conceptualizes their relations as a linking social capital, which encompasses a relation of dependence between powerful and deprived agents (Etzold 2013, 31).

The subfield of real estate: The historical builders' habitus was the use and exchange values of land due to their quest for preferable houses at preferable locations. Following Bourdieu, these respectively related to gaining fixed economic capital and bridging social capital, which encompassed a cooperation among the builders for security and connection (1983, 185; 2004, 218 cited in Etzold 2013, 22). Towards these, the builders' primary mechanism of access was either their usufructuary interests or customary tenancies as was the case of the non-natives of Carpenter. However, for both natives and non-natives of all the communities, the respective traditional authorities (TAs) facilitated the builders' access to their preferred lots by accepting in-kind or cash payments. Given this, the research surmises that the basic capitals of all

the historical builders were circulating economic capital, with which they established the requisite linking social capital with the TAs (ibid).

Subsequent to these, the builders also required 'strength', which depending on their housing preference encompassed their physical strength and skill, social support networks and financial capability. With respect to their social support networks, all the builders relied on their nuclear and extended family members and friends to extract the locally available materials for building. The non-natives who preferred mud houses relied on their own physical strength and skill, and on those of their social support networks to construct their houses. However, the natives who preferred either concrete block or mud houses relied on wage masons to construct their houses. Those with preferences for concrete blockhouses additionally relied on carpenters and steel benders. Given these, the 'strength' of the native builders included their financial capability, while the non-natives' included their skill and physical strength. In line with Etzold, the builders' physical strength and skill corresponded with embodied cultural capital, their nuclear families corresponded with bonding social capital, while their extended family and friends corresponded with their bridging social capital due to the relationship of exchange among them (2013, 31). Money on the other hand related to circulating economic capital with which the natives acquired the specialized bridging social capital (masons, carpenters, and steel benders) to actualize their objectives (1983, 185; 2004, 218 cited in 2013, 22). Those who preferred concrete blockhouses also used this to obtain other circulating economic capitals (additional building materials). Conversely, physical strength and skill corresponded with embodied cultural capital.

The description shows that as the primary sector underlay the respective economies, the builders accumulated their circulating economic capital (money) mainly from farming and fishing. This explains why they were all men and why the successful ones of the traditional farming communities reportedly had bigger yam or cashew farms, while those of the fishing communities had bigger fishing equipment. Particularly with respect to the former, the previous analysis shows that the quality of the farmers' social capital primarily underlay their success. Thus, the research presupposes that successful farmers like the District Best Farmer Awardee from Dokokyina employed their social capitals not only for mobilizing building materials, but also for earning the circulating economic capital with which they pursued their objectives in the subfield of real estate.

Relevantly, the hallmarks of success among the native builders were the housing size and type. As mud houses were predominant, they considered those with bigger ones as successful or wealthy in terms of possessing relatively higher circulating economic capitals (money) from their farms or fishing businesses. Moreover, due to an increasing preference for concrete blockhouses among the younger natives, they also considered those who owned the few ones in the communities as successful and wealthy. In both cases, the successful builders also gained symbolic capital due to their categorization as distinct by the members of the respective communities. Given that some of them were also farmers, the research deduces that there was a direct link between gaining symbolic capital in the subfield of arable farming and the subfield of real estate.

Inferring from the above, those who owned bigger mud or concrete blockhouses (fixed economic capital) had higher volumes and weightier aggregates of bonding and bridging social capitals and circulating economic capital. Consequently, the research gathered that some builders who only owned a higher volume of bonding social capital had low chances of success. This was because they could not acquire larger circulating economic capital (from their farms for instance), which could have in turn, enabled them to advance their building objectives. In this regard, they could also not hire bridging social capital (mason among others) nor buy the requisite circulating economic capital (building materials) to be successful in the subfield of real estate. However, the research also argues that among such ones, their bonding social capital could have been weighty, particularly if some members had the embodied cultural capital (skill) to construct distinct houses, which may have improved their chances of success in the subfield of real estate. Based on this, it may seem as though those who had higher volumes of only circulating economic capital were successful in the subfield. However, inferring from the ongoing discussion, it is also apparent that such agents may have had high volumes of bonding or even linking social capital to be successful in the predominant primary sector, which enabled them to accumulate their circulating economic capital. Thus, logically, agents who had higher volumes of circulating economic capital also had higher volumes of the requisite social capital, which they redeployed to the subfields of real estate to expedite their achievement of the corresponding objectives.

The research shows that while the native builders had the schemes of categorization above, the non-native builders did not, because their preference for smaller mud houses was due to their transience and not a lack of circulating economic capital. However, as their houses were located within the same physical spaces as the natives were, they were systematically part of their assessment of success. Thus, the research deduces that the natives may have perceived them to be of lower social positions and associated the areas where they lived, with destitution. Following Bourdieu, this physical distributional arrangement and the associated perception of their social positions typified 'appropriated social space' (1989, 16; 1996, 12).

Like the subfields of arable farming, the research conceptualizes that the subfields of real estate involved the bonding (nuclear) and bridging social capitals (extended family members, friends, and wage laborers) which supported the builders to achieve their objectives. The activities of the agents who constituted these capitals were socially, spatially, and functionally limited to those of the builders, which explains their placement by the research in the subfields of real estate together with the builders. To the bonding social capital, their assistance enabled the builders to provide houses for the household, which contributed to their chances of achieving a collective symbolic capital. The immediate bridging social capital (extended family and friends) could also obtain their own houses when the builders reciprocated their support. Thus, from the builders, they could also acquire bridging social capital. However, to the specialized bridging social capital (wage laborers), their main objective of participation was to acquire circulating economic capital (money). Towards these varied objectives, all of them employed their embodied cultural capital, which as explained, included their physical strength and expertise.

The subfield of pastoralism: As deduced from the accounts, the historical herders' collective habitus was the use value of land, because they sought to use land to obtain nourishment (fodder and water) for their

cattle towards sustaining their livelihoods. In line with Bourdieu's classification of capitals, this sub-stake related to a circulating economic capital due to its consumable characteristics (Bourdieu 1983, 185; 2004, 218 cited in Etzold 2013, 22). For this, the most relevant mechanism of land access was the customary tenancy agreement, for which they expended circulating economic capital (cash and in-kind payments) to establish a linking social capital with the landowning traditional authorities (TAs) (ibid). They further had to establish a linking social capital with the farmers to traverse their farms. However, the discussion shows that this did not require any payment by them. As the linking social capitals facilitated the herders' access to the land, the research concludes that those who had them may have been more successful in the subfield of pastoralism than those who lacked them. Given that the research could not trace the historical herders, it could also not record any historical providers for them. Consequently, the analysis excludes any interpretation of their historical relations with providers.

Summary: Having interpreted the objective structure of relations among the historical agents of the respective subfields, the next subsection attempts to delineate the fields of power of the fields of land access. It begins by gleaning from the above to underscore the objective structure of relations among the primary agents of the broader fields of land access. Through this, the research identifies the historically powerful agents of the respective fields of land access of the study communities, which serves as the foundation for outlining the historical fields of power. As used by the research, the field of power is the meta-field where the powerful agents of the historical fields of land access struggled to gain symbolic power, by which they systematized the logic, social differentiation, and struggles within the fields. Thus, as explained in Chapter 2, an analysis of the historical fields of power will show the relations of struggle between the historically dominant agents of the respective fields of land access, but also the origin and meaning of power. Consequently, this will underlie the reason why the fields' logics endured. It will also explain the relative positions of the respective subfields to the field of power, which will in turn underscore their relevance to the holders of symbolic power.

5.3.3.2 The fields of power of the historical fields of land access

The research deduces that besides the respective subfields, there was an objective structure of relations among all the primary agents of the broader historical fields of land access. Following the discourse, it is apparent that the managers – that is the landowning traditional authorities (TAs) – possessed a higher volume and weightier cultural and economic capitals than the other primary agents did. Their institutionalized cultural capital, which was their customary recognition, gave them dominance over the other agents. The resultant circulating economic capital, that is the chieftains' allodial titles, surpassed the other property rights because it encompassed ownership rights and granted the TAs the power to control the other agents' land access. Given these capitals, the TAs of the study communities dominated the individual fields of land access. This explains why their habitus was mainly about the territorial value of land. Although the other agents, including the farmers, had similar habitus, theirs was with respect to a temporary possession of land rather than an absolute ownership or custodianship. Essentially, this

supports Bourdieu's assertion that habitus reveals the "sense of one's place" and the "sense of the place of others" (1989, 19).

The meta-field where the TAs' capitals were concentrated and where their power struggles occurred (the fields of power) were the institutions of chieftaincy, which were the systems that sanctioned their selection and undertakings according to custom. Thus, the subfields of chieftaincy situated within them. Within these meta-fields, the TAs systematized the logic by determining the values of the relevant capitals for land access. Accordingly, they had stipulated the preeminence of social capital (citizenship) for gaining access to land, and the value of certain circulating economic capitals (money, drinks, and foodstuff) to the non-natives and native builders' access to land. The research shows that the other agents had accepted these stipulations unquestionably, which underscored their 'doxas' (Bourdieu 1990a, 66; Sakdapolrak 2007, 56).

Although the entire bodies of TAs occupied the respective historical fields of power, the research has emphasized that there were 'relations of force' among them per the respective chieftaincy institutions. As mentioned above, the landowning chieftains – that is the Chiefs and Queen mothers of the Banda Paramountcy, Bui, and Carpenter, and the Bian Clan Head – customarily possessed the highest volume and weight of the aggregated capitals and hence dominated the bodies of TAs of their respective communities or jurisdictions. They had the ultimate institutionalized cultural capital and hence circulating economic capital, which was the allodial title to land. With respect to the Banda Paramountcy, the research shows that besides the Paramount Chieftains, the Chieftains of Bongase and Dokokyina rightly had the highest institutionalized cultural and circulating economic capitals in their respective communities. However, at the level of the paramountcy, they were customarily subordinate to the Paramount Chieftains. The Bian Clan Head was also subordinate to the Chieftains of Jama and lacked recognition by the National House of Chiefs. Yet, the customary nature of landownership of the community underscored his ultimate possession of the capitals above. Thus, he dominated the field of power of his subject community, Gbolekame North. Given these, the research deduces that the chieftaincy institutions, which encompassed the respective customs of the communities were historically the origins of power. Thus, to the communities, power encompassed the possession of institutionalized cultural capital; that is a legitimate socio-political and socio-cultural authority based on the recognition of the kingmakers.

Given these, the communities considered that the chieftains held the greatest power among them. Consistent with the theoretical framework, this recognition relates to Bourdieu's idea of 'symbolic capital' (Bourdieu and Wacquant 2013, 297; Lawler 2011, 1419). By this, the chieftains also had 'symbolic power'; that is the ability to "impose recognition" through visions of social divisions on the minds of the other agents and influencing the fields' logics in their vested interests (Bourdieu 1990b, 138). An instance of the latter was the chieftains' proscription against the sale of land, which advertently enabled them to maintain their rights of ownership and control. The research shows that given its relevance to their authority, they sustained this and other principles, procedures, and practices of the logic. Besides this, they also sustained the subfields of chieftaincy, which contributed to their authority and the maintenance of the stools through ownership, control, and transfers. Accordingly, the subfields of chieftaincy of the fields of land access were of great importance to the chieftains and thus, positioned in relative proximity to the institutions of

chieftaincy than the other subfields were. Generally, the communities' acceptance of the chieftains' symbolic power implied that they were complicit in their own subjection, which pertains to Bourdieu's idea of 'symbolic violence' (L. Wacquant 1998, 217). Of relevance too, the communities' perception of power in terms of institutionalized cultural capital explains why the commoners who gained symbolic capital in the other subfields could not gain symbolic power to influence the fields' logic. This implies that although they were successful and wealthy by local categorizations, these were short of the requisite capital that underlay power.

5.3.3.3 Summary and implications for the historical fields of land access

This section has delineated the agents' objective structure of relations in the historical context. Prior to this, the research built on the data to advance the fields' stake and logics, and the pertinent historical subfields, which included chieftaincy, arable farming, real estate, and pastoralism. The research has shown that although the subfields shared the stake and overarching logic, they had unique objectives (sub-stakes), which were respectively symbolic power (authority) and objectified cultural capital (sacred trees), circulating economic capital (crops), fixed economic capital (shelter) and bridging social capital (security), and circulating economic capital (fodder). In this regard, they also had unique logics that governed access to the sub-stakes. Against this background, the research has identified the key agents of the subfields, associating them with the identified sub-stakes. It has also identified the relevant capitals with which they pursued the sub-stakes to achieve their habitus (land values). Relevantly, the research has shown that the agents were nonexclusive but participated in multiple subfields and fields, moving their capitals accordingly to acquire the corresponding sub-stake. Moreover, the fields and subfields were not detached but nested in 'broader situations' with other fields, where the exchanges among the agents contributed to the achievement of related expectations and the fields' mutual functioning.

Rather than being an end, the primary agents used their capitals for specific strategies. Ultimately, their aim was to acquire the targeted sub-stake to achieve their habitus (land values) (Bourdieu 1992, 101). Inferring from Bourdieu, the strategies thus contributed to the agents' relative social positions in the subfields and fields of land access in general, because they engendered the respective sub-stakes, which were central to the objective structuring of their relations (ibid). Given that the agents' acquirement of the sub-stakes resulted in their achievement of the habitus (land values), the strategies also underscored their interpretations of land access. Thus, the next section elaborates on their strategies of land access in the respective subfields as the terminus for ascertaining their historical apprehensions.

5.4 The historical strategies of land access

The subsections provide a detailed description of the differentiated strategies by which the primary historical agents of interest pursued the sub-stakes and hence their land values. Following the description above, these categories of agents included the traditional authorities (TAs), farmers, builders, and herders. After the descriptions, another subsection interprets the data according to the theoretical framework to

underscore their importance to the historical fields of land access. Relevantly, the section addresses research question 'c (i)', which is 'What were the strategies of land access before the construction of the Bui Dam?'

5.4.1 Descriptive analyses of the land access strategies of the TAs

As explained above, the traditional authorities (TAs) sought to maintain their exclusive ownership and control over land to undergird their socio-political and socio-cultural authority and maintain the sacred trees for cosmological reasons. Towards these, the research shows that they deployed their primary mechanism of access (the allodial titles) to administering land access as a strategy. As also explained above, their possession of allodial titles hinged on their socio-political and socio-cultural roles. Consequently, their strategy of land access encompassed facilitating and regulating the land access of the user agents. The subsections elaborate on these.

5.4.1.1 Facilitating land access

The research found that the TAs facilitated the users' land access with their allodial titles to land to undergird their socio-political and socio-cultural authority in the respective communities. Fundamentally, their allodial titles were the basis of the users' property rights. Following Section 5 of the Land Bill (2020), the natives' usufructuary interests resulted from their membership of the allodial title holding stools. According to Section 7 of the Land Bill, the non-natives also acquired customary tenancies from the allodial titleholders or usufructuary interest holders who derived their interests from the allodial titleholders. Given these, the research gathered that the people acknowledged the chieftains land ownership and their subordination to them. Despite this, the TAs could not deny the natives of the interests of usufruct; yet the natives also acknowledged the limits of their rights. In this regard, they understood that the right of ownership and hence transfer were solely the preserve of the TAs.

Recognized as the repository of custom, the TAs also facilitated the users' land access by codifying the respective customary tenure systems to meet the differentiated needs of the users. As stated above, the use rights of the natives – and the approved non-natives – were limited in application, but also subject to the principles approved by the allodial titleholders, the TAs. To this end, the research found that the TAs had sanctioned an open access to land and claims by farmers. This was to expedite the farmers' practice of shifting cultivation and their realization of high yields of the valuable crop, yam. To the builders, the TAs had sanctioned their freedom to choose preferable locations at affordable costs and build preferable houses to enable them to achieve their corresponding objectives of land access. Conversely, the TAs had restricted the herders' access to the uncropped fringes of the communal lands to facilitate their access to requisite lands while avoiding conflicts between them and the farmers. Although enforced for the benefit of the users, the research deduces that the TAs used these principles to gain the users' cooperation and support for their authority.

Besides the above, the TAs facilitated land access by requesting non-native farmers, all builders, and herders to 'see' them before accessing land. The research gathered that this was to emphasize their

authority over land and gain some material benefits for maintaining the stools and hence their authority. As recalled from a previous explanation, the TAs needed the money to preserve the stools by remunerating the chieftains, organizing festivals, and preserving the accessories of the palaces. They also needed the drinks for libation and the foodstuff for ritualistic activities during the yam festival. Thus, fundamentally, they relied on the material benefits from land to cover the capital and recurrent costs of maintaining the stools. Additionally, through the Stool Lands Revenue Collector, the Banda Paramount Chieftains received an annual percentage of rents, royalties, and other land-related payments to expedite their maintenance of the stool.

5.4.1.2 Regulating land access

The TAs also regulated land access, which besides supporting their authority, was intended to protect the sacred trees. The research found that as the repository of custom, the TAs had demarcated the forms of tenure and associated rights, which included land ownership and control, use, and transfer. In this regard, they were the landowners with the authority to control land access, while the native and the non-native commoners only had use rights. As explained, the use rights were relatively limited in application because they were devoid of outright ownership. Thus, while farmers could not individualize farmlands nor sell them, the TAs could transfer lands on their own accord. Moreover, as discussed below, the holders of use rights had certain obligations to the landowners. Ultimately, the TAs enforced these property rights to uphold their authority over land and over the communities.

Additionally, the TAs used their socio-political and socio-cultural roles to adjudicate land conflicts, which were reportedly rare and enforce certain taboos including the days of rest and the prohibitions against felling sacred trees. Primarily, these specific taboos had ritualistic connotations that supported the communities' beliefs and the stools (authority). They also protected the sacred trees from deterioration. Other taboos were those against starting uncontrolled bushfires, farming transversally, and uprooting or destroying crops cultivated by another person especially during land disputes. As also explained above, the TAs required builders and non-natives to 'see' them and fulfil certain payment obligations before accessing land. In all cases, the TAs used the taboos and other obligations as a strategy of control. Particularly, they also used the taboos to preserve the native cosmology, which underscored the symbolism of the stool and their authority.

5.4.2 Descriptive analyses of the land access strategies of the farmers

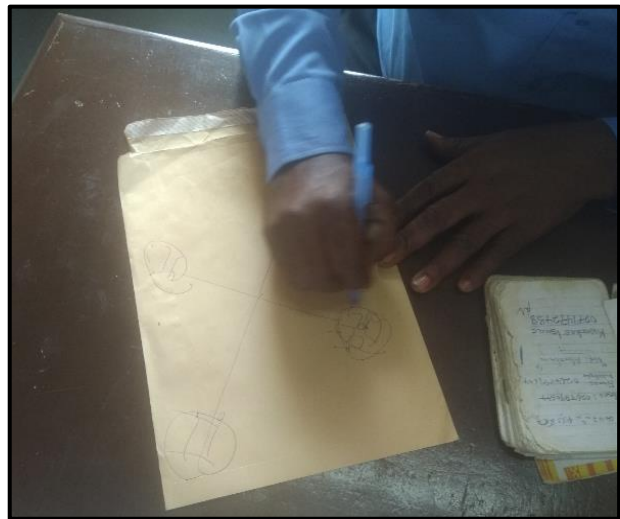
The objective of the historical farmers was to obtain high yields of the traditional crop, yam, as well as of the accompanying crops including groundnuts, beans, maize, melon seeds, and cassava. Those of Dokokyina additionally sought to obtain high yields of cashew seeds. For these, the research shows that the farmers primarily employed their property rights (either usufructuary interests or customary tenancies) and 'strength'; that is their physical capabilities, skills, social support networks, and money. As gathered, although the overarching strategy of the farmers was arable farming, the agricultural cycle involved routine strategies to which they deployed their mechanisms of access. These routine strategies included the selection of farmlands and soil preparation, crop cultivation and farm maintenance, and crop

harvesting, processing, use, and reinvestment. The subsections recount the farmers' routine strategies of access.

5.4.2.1 Selection of farmlands and soil preparation

The first routine strategy of the farmers was the selection of farmlands. The research gathered that in all the traditional farming communities including Dokokyina, Bongase, Bui, and Carpenter, the men farmed more extensively than the women did. They cultivated yams for subsistence and for commercial purposes, but also cashew trees. Although the women of Dokokyina and the unmarried ones of the other communities also cultivated these crops, the men farmed at larger scales than they did. Thus, in these communities, the family men selected the farmlands, while their spouses relied on them for farmlands. However, in single households, the men and the women sought out their own farmlands. Conversely, in the fishing communities of Akanyakrom and Gbolekame North, the women selected the farmlands because the men were mainly engaged in artisanal fishing.

According to the farmers, the basis of selecting farmlands was a general desire to be in proximity to family and friends. As related previously, this was to enable them to protect their farms mutually from wildlife invasion. To be sure, the farmers stated that the main historical threats to their farms were monkeys, partridges, and grass cutters. They explained that monkeys uprooted and fed on yam setts and mature yams while partridges uprooted sown legumes and nuts. Grass cutters on the other hand, chewed off the base of maize plants, which prevented them from thriving. Given these, the farmers preferred to share boundaries with



Picture 5.4: The participating staff of the LVD illustrating the historical cluster farming practices of the farmers (Source: E. Agyepong, 22 September 2018)

relatives and friends so that they could rely on them to guard their farms in their absence. In this regard, the research gathered that as the married women of Dokokyina received farmlands from the men, their farms were usually next to the men's farms. The married women of the other traditional farming communities also farmed within or on the peripheries of the men's farms, which enabled them to rely on them and their relatives and friends for security. Unmarried ones also preferred to farm near relatives for the same reason. Regarding the women of the fishing communities, the research found that they largely farmed next to their relatives and friends to achieve this objective. An officer of the Land Valuation Division (LVD) who was assigned by the Bono Regional Lands Officer (the head of the Lands Commission) to participate in the research corroborated the farmers' historical account of cluster farming. When interviewed on 8 March 2019, he related that he had been involved in appraising the properties of the study communities in 2008 as part of the land acquisition process. Thus, sketching the image in Picture 5.4 he

explained that, *"When we went to the cropped areas for valuation, we saw that extended family members and sometimes friends farmed together in clusters and towards each other till the land of the area was exhausted"*.

With the exception of Bongase where differences reportedly existed between the river valley and the other areas, the productivity of the soil of the other communities was the same. Thus, the farmers of these communities hardly selected farmlands based on this quality. A majority of those of Bongase however, preferred the river valley in the north while some chose to farm on the lands east of the community towards the river downstream. Also of relevance to the selection of farmlands by all the farmers was the extent of available land. As reported above, farming was extensive and the traditional farmers usually accessed at least five acres of land seasonally. The main crop, yam, also thrived on pristine soil. Thus, the farmers practiced shifting cultivation by accessing land longitudinally in order to obtain the requisite soil. Due to this, the farmers recounted that they selected areas that were expansive enough to accommodate them, their spouses, relatives, and friends for a minimum of three seasons. Other farmers chose to access lands that were farther from the active areas to fulfil this desire. One of them was a native octogenarian from Bongase who recalled that his parents, grandparents, and their relatives preferred to farm some distance from the other farmers to access larger areas. The research found that upon selection, the farmers usually marked some trees on the land with cutlasses as a sign of their hold.

Relevantly, the common practice of shifting cultivation had historical roots. During the preliminary workshop in Dokokyina No. 1 on 3 October 2018, a 30-year-old man explained that, *"Our ancestors practiced shifting cultivation and left cultivated land to fallow. At their own discretion, they could go back to it after 15 or 20 years, by which time the soil would have regenerated as though it had never been tilled"*. Besides showing that the practice had historical basis, this claim demonstrates that the farmers were aware of the detrimental effects of continuous cropping on the soil and on their chances of gaining high crop yields. Due to this, it was socially acceptable for farmers to have claims, which encompassed the exploited and untilled lands along the longitudinal planes of their active farms. The farmers only lost such claims when they completely vacated an area. Consequently, the farmers practiced shifting cultivation to boost crop yields and not to accumulate land. However, while the men of the traditional farming communities left land to fallow after every season, some of the women accessed the exploited lands due to their lack of 'strength' to access pristine ones and the type of crops they cultivated. With the men's approval, relatives and other members of the communities could also access such lands during their hold. Essentially, these show that although the farmers fallowed exploited lands, they were also open to their use by others, which underscored the communities' social cohesion and the communal land ownership.

Subsequent to selecting farmlands, the farmers 'pumped' (prepared) the land by slash-and-burn. For this, they mainly employed their physical strength and skill. Men with spouses and economically active children also engaged them for the task. Both they and those without nuclear families also engaged their male relatives and friends in an arrangement of mutual support. Thus, those whose farmlands were adjacent could 'pump' them together while those whose farmlands were at different locations took turns to 'pump' each other's land. However, the unmarried women usually hired laborers to 'pump' their lands. The men could also hire laborers to support their work depending on their financial capability. The farmers reported

that, they 'pumped' their farmlands between the months of October and November in order to take advantage of the impending harmattan season to dry out the weeds and burn them. It also expedited the early cultivation of yam between November and December. Others also prepared the land at this time for the late yam cultivation between February and April, which was just before the rainy season. Interestingly, most of the farmers acknowledged that the decay of the weeds and felled trees and their ashes after burning contributed to the soil productivity. The research also found that after 'pumping' the land, the farmers prepared the requisite mounds and ridges for cultivating the relevant crops. For this, they also mentioned that they engaged their male relatives and friends in an arrangement of mutual support and/ or hire laborers to assist them.

5.4.2.2 Crop cultivation and farm maintenance

With especially their physical strength and skill, and/ or the assistance of their nuclear families, the farmers engaged in different strategies for cultivating their preferred crops. Primarily, the suitability of the soil, their subsistent needs, and the economic values of the crops influenced their crop preferences. The first explains the decision of the Bandas to settle in the area due to their discovery of the 'yongmaa' plant. Based on this, the farmers largely cultivated yams, which besides being a traditional crop had a relatively high economic value. They also cultivated the accompanying crops – groundnut, beans, maize, melon seeds, and cassava –, because they were well suited to the soil, supported their dietary needs, and had some economic values. The farmers of Dokokyina had additionally invested in cashew cultivation due to the seeds' increasing market value and their proximity to Sampa and Core d'Ivoire.

To this end, the research gathered that while both men and women could seek the support of their relatives, the men could additionally seek the support of their friends. They and the unmarried women could also hire laborers to assist them. 'Strong' farmers usually practiced monoculture for yams and groundnuts in order to increase the respective yields because as reported, they were both root crops, which could not be intercropped. Consequently, a few of them preferred to cultivate groundnuts on exploited lands after they had harvested their yams. However, the farmers (especially the married women) cultivated the minor crops (okra, melons, beans, and maize) among yams or on the peripheries of the yam and groundnut farms with cassava. They could also cultivate them together on exploited lands. The farmers related that they did not cultivate cassava among yams nor groundnuts because they inhibited their growth. However, for want of 'strength', some farmers intercropped cassava with yams. In this case, they explained that they delayed the cultivation of the cassava until the yams were fully-grown and almost ready for harvest. Some farmers who lived in waterfront communities such as Bui, Akanyakrom, Bongase, and Gbolekame North also cultivated vegetables on the banks of the river.

As related above, cashew farming had also advanced in Dokokyina. Although the other communities planted the trees at home for shade, some natives of Bongase, Bui, and Carpenter had started investing in cashew farming few years before the dam construction. The research gathered that their interest was due to hearsay about the value of the seeds. However, the TAs had prohibited non-natives from cultivating cashew trees and other perennial crops to prevent them from making outright claims to land. Regarding the cultivation of cashew, all the relevant farmers recounted that they practiced agroforestry by

intercropping yams and cashew trees, which enabled them to prevent weeds from overwhelming the cashew seedlings. They also reported that the trees were usually mature during the yam harvest. Thus, they could not intercrop them further due to the repressive effects of their shade on other crops.

The research gathered that the farmers planted the respective crops according to certain considerations. They related that as tuber crops, yams required mounds to facilitate their growth and yield. Although groundnuts also grow underground, the farmers explained that due to their relatively smaller sizes, they planted them on ridges to make maximum use of space, while facilitating higher yields. Cashew and cassava could however thrive on the ground surface. Nevertheless, the farmers preferred to plant cassava in mounds, because the loose soil reportedly accelerated the growth of the plants and eased harvesting. Likewise, they planted beans on the sides of yam mounds or in beds to facilitate their growth. Yet, some also planted beans on the ground surface without explanation. The farmers also planted melons in mounds to facilitate their growth.

Besides the planting methods, the farmers also explained that they planted the crops at certain times to expedite their survival and yields. As explained above, they planted yams between November and December or between late February and April to capitalize on the major rainy season, which begins in April. They also planted groundnuts and melons in March for the same reason and beans between June and July towards the end of the major rainy season. When asked about the reason behind the latter, the farmers explained that beans require a moderate temperature to germinate and survive, which usually occurs at this time. However, they indicated that cassava and cashew could be cultivated all-year-round.

Ultimately, cashew seeds and yams were foundational to the investment of the farmers of Dokokyina, who were reportedly more avid farmers than those of the other communities. Thus, the men and women owned at least thirty and ten acres of cashew farms respectively. As stated previously, the District Best Farmer Awardee from Dokokyina owned about a hundred acres of cashew farm. Regarding yams, the research found that the men and women cultivated at least twenty and five acres seasonally. In the other traditional farming communities, although some farmers had begun to invest in cashew cultivation, yam was still foundational to their investment. Thus, per season, the men and women cultivated at least ten and three acres of yam respectively. The natives who had begun to invest in cashew reported that they had only managed to acquire between five and ten acres of farm before the dam construction. The women of the fishing communities of Akanyakrom and Gbolekame North also related that they cultivated yams and the other minor crops only for subsistence. For these, they accessed two acres of land seasonally.

With respect to maintaining their respective farms, the married farmers mentioned that, besides their physical strength and skill, they relied on the economically active members of their nuclear families. Those who had arrangements of mutual support with male relatives and friends could also rely on them especially when the workload was beyond the capacities of their nuclear families. Although the unmarried men could also rely on their male relatives and friends, the unmarried women could only rely on their female relatives. The men and unmarried women could additionally hire laborers to supplement these mechanisms or replace them. Relevantly, the farmers recounted that farm maintenance only involved

regular weeding around the crops with simple farm tools, including cutlasses and hoes. By this, they were able to rid the crops of competition and create enough space for them to thrive and yield sufficiently.

5.4.2.3 Crop harvesting, processing, use, and reinvestment

At harvest, the men mainly relied on their nuclear family members while the unmarried ones relied on their female relatives. The men could also seek the support of their relatives and friends when the volume of work was beyond the capacity of their nuclear family members. They and the unmarried women could also hire laborers for especially the harvest of groundnuts. The farmers related that they harvested yams, groundnuts, and melons between August and September and beans between October and November. Cassava could however be harvested after six months of planting depending on the maturity of the tubers. Although cashew trees fruit after a year of planting, it reportedly takes two years for the harvest to be profitable. In this regard, the farmers mentioned that they harvested the cashew seeds between December and May after two years of planting.

The research gathered that at harvest, the farmers stored their yams on the farms because the volumes were usually very high and they and/ or the members of their household could not ferry them home in a single day. Thus, depending on the farms' exposure to especially monkeys, the yams were either stored in trench silos or in heaps on the ground surface, after which they were transported home in smaller quantities. Concerning the other crops, the research gathered that the married men relied on their wives and economically active children, who processed them either on the farms or at home. The unmarried men and women processed the crops by themselves or sought the assistance of especially their female relatives. Relevantly, the research gathered that the farmers processed melons and cassava on the farms due to their weightiness. The former involved podding and sun drying the seeds on the farms after which they transported them home for household consumption or for sale. Processing cassava on the farm involved peeling, chipping, and sun drying. Subsequently, the farmers carried the dried chips home and ground them into powder for household consumption or for sale. They could also process the fresh tubers at home by peeling and grating the fruit into dough mainly for household consumption. The research also gathered that they processed cashew on the farm by detaching the seeds from the fruits, after which they transported the seeds home for sale. Regarding groundnuts and beans, they transported them directly home after harvest for processing, which respectively involved shelling and podding. The research found that the women and children also gathered herbs, fruits from shea and African locust bean trees for consumption and for commercial purposes. They also harvested straw for brooms for sale at the local markets.

As deduced, the farmers consumed most of the crops at home. However, after storing enough for domestic consumption, they sold the surplus of their subsistence crops such as groundnuts, beans, melon seeds, and cassava to either the domestic or the external subsistence crop merchants. The farmers of Dokokyina also sold their cashew seeds to external cash crop merchants from Sampa or Cote d'Ivoire. The few farmers of the other communities who had also begun investing in cashew farming sold the seeds to local cash crop merchants who assembled and sold them to the external cash crop merchants. However, unlike Dokokyina, the research found that the merchants hardly went to these communities to buy cashew seeds because they

were relatively farther from Sampa and Cote d'Ivoire. Consequently, the price per kilogram of seeds was very low, which fueled pessimism among the farmers and was the reason behind their low interests in expanding their cashew farms. However, a few were persistent, cultivating up to about ten acres of cashew. When asked about the reason for his determination during an interview on 28 November 2018, an octogenarian from Bongase related that, "*Like the others, I was hopeful that the demand for the seeds would increase someday and the merchants would become interested in our products*".

Although the farmers consumed and sold some of their crops, the non-natives especially presented some to the respective traditional authorities towards the yam festival in order to keep their access to land open. The research also found that the farmers reserved some of their crops for replanting. Specifically, the farmers harvested yam setts besides the edible yams, which they replanted during the relevant season. They also saved some of their groundnuts, beans, and melon seeds for the same purpose. The cashew farmers also reserved some of the seeds, which they nursed and replanted. With respect to cassava, the research found that the farmers used pieces of the stems for replanting. Fundamentally, this follows the selection of farmlands and soil preparation, which marked the beginning of a new production cycle.

5.4.3 Descriptive analyses of the land access strategies of the builders

The objective of the historical builders was to obtain preferable houses at preferable locations in order to have a sense of connection and security. Commercial real estate was reportedly non-existent. As recalled by the Land Valuation Officer, "*The area was predominantly rural and was dominated by agrarian activities without signs of active commerce*". Towards achieving their objective, the builders primarily employed their property rights and 'strength', which encompassed their social support networks and financial capability. Their broad strategy of land access, building, involved the selection of the lots, mobilization of building materials, and the construction of the houses. The subsections give a descriptive account of these strategies.

5.4.3.1 Selection of building lots

Like the farmers, the builders selected lots based on their proximity to family and friends. Thus, there were settlement clusters of the various ethnicities in the study communities. According to the builders, their locational preference was to enhance their senses of connection and security, because the communities had a high social cohesion and they had an inherent belief in the willingness of their kin to provide mutual security and support. To this end, the research gathered that all the builders were at liberty to identify a lot and notify the traditional authorities (TAs), who would then endorse their access after they have made the requisite payments.

5.4.3.2 Mobilization of building materials

Subsequent to selecting lots, the builders mobilized the required building materials to construct their preferred houses. The research found that materials such as sand, timber, and grass were locally available. Thus, the builders used their physical strength and skill and relied on those of their social support networks

– including nuclear and extended family members and friends – to extract and assemble them. Those who preferred concrete blockhouses also spent money on additional materials, including cement and aluminum roofing sheets from vendors.

5.4.3.3 Construction of preferred houses

The research found that the builders had varied housing preferences. Older natives of 40 years and above preferred mud and thatch grass houses due to a belief in their medicinal properties. However, the non-natives preferred similar houses due to their characteristic transience. Younger natives preferred concrete blockhouses with aluminum sheet roofing because they believed that they symbolized success and sophistication. As gathered, the natives who preferred either mud and thatch grass houses or concrete blockhouses with aluminum sheet roofing relied on wage laborers for the construction of their houses. However, the non-natives who usually preferred mud and thatch grass houses relied on their own physical strength and skill and those of their social support networks to construct the houses. In all cases, walling was generally uncommon due to the builders' proximity to family and friends. However, a few of them mentioned that they were compelled to fence off their properties to ward off wandering livestock from accessing the crop harvests.

5.4.4 Descriptive analyses of the land access strategies of the herders

The herders practiced nomadism and hence migrated to the area in search of fodder (and water). As gathered by the research, this was usually between December and April/May of the following year. The herders primarily employed the customary tenancies obtained from the traditional authorities (TAs) through cash and in-kind payments. With this, they could access the uncropped peripheries of the communal lands to avoid altercations with the farmers. Although their access was for grazing, the TAs acknowledged that they also pitched tents for themselves during their stay.

The descriptive analyses show that each of the agent categories engaged in diverse strategies within the subfields to achieve their objectives with respect to land, the stake. These objectives included authority, high crop yields, shelter and security, and fodder. In line with Bourdieu, these strategies were the agents' social practices, which were structured by the respective frames of action; that is habitus, capitals, and the functional logic (Bourdieu and Wacquant 1992, 101). Based on this, the next subsection interprets the descriptions per the theoretical framework to emphasize their relevance to the historical fields of land access and hence ascertain the agents' social constructions of 'land access' and 'land scarcity'.

5.4.5 Theory guided interpretation: The historical strategies of land access as social practices

Inferring from the accounts, the research deduces that the agents' social practices were attempts to maximize their acquisition of the sub-stakes of the respective subfields and hence achieve their habitus (land values) (Bourdieu and Wacquant 1992, 101). This would in turn safeguard or improve their relative

social positions in the subfields and in the respective fields in general (ibid). Thus, the agents' social practices were "habitual and routinized actions informed by practical knowledge and an implicit 'practical sense'" (Sakdapolrak 2014, 22). Along this line of reasoning, the subsections interpret the historical strategies of land access of the respective categories of agents.

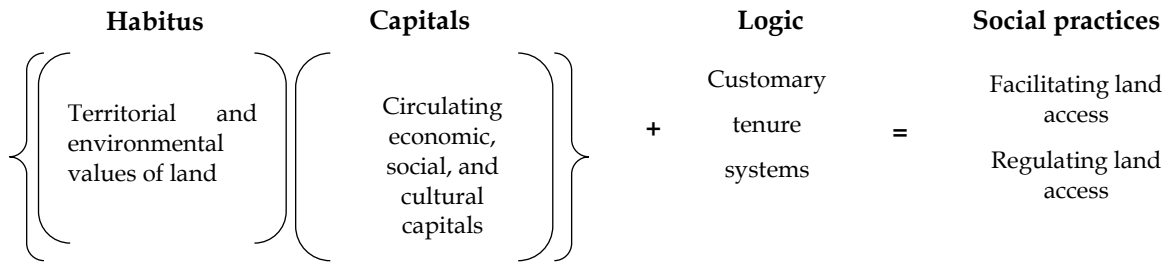
5.4.5.1 The social practices of the TAs in the subfields of chieftaincy

The accounts show that the traditional authorities (TAs) administered land as a social practice to maintain their exclusive ownership and control over it. This was meant to undergird their socio-political and socio-cultural authority and maintain the sacred trees for cosmological reasons. Specifically, their social practice encompassed the 'habitual and routinized actions' of facilitating and regulating the users' access to the stake. As deduced previously, the TAs' objectives of access were authority and maintaining the sacred trees. These corresponded with gaining symbolic power and preserving certain objectified cultural capitals, which represented the sub-stakes of the subfields of chieftaincy. Drawing from this, the research has earlier underlined that the stake, land was of territorial and environmental values to them (Davy 2016, 137). Following the description, it is evident that the sub-stakes of the subfields and hence the TAs' habitus (land values) defined their social practices, because they constituted the object of their participation in the field of land access.

Toward these, the accounts show that they employed their respective capitals. Thus, regarding their facilitation of the users' access, the TAs' circulating economic capital, which is the allodial title, was the basis of the users' usufructuary interests and customary tenancies. Based on this and the underlying institutionalized cultural capitals, the TAs had also required certain users to seek their permission before accessing the stake. They also used their institutionalized cultural capitals to demarcate the range of land tenure and associated rights available to the other agents and to codify the customary tenure systems to meet their differentiated needs. Likewise, they used this capital to play judicial roles and enforce the taboos associated with accessing the stake.

As discussed earlier, the respective customary logics structured the TAs' habitus (land values) and the values of their primary capital, the allodial title. This is because the logics delineated the eminence of the TAs' rights of ownership and control, which underscored their primary habitus of the territorial value of land. As Davy maintains, land values are contingent on land rights, which are defined by the prevailing land tenure system (2016, 138). Ultimately, the TAs' habitus (land values) and capitals, and the respective logics constituted the frames of actions that culminated in their social practices. This underlay Bourdieu's characterization of social practice as the double and obscure relations between habitus, capital, and a fields' logic (Bourdieu and Wacquant 1992, 101; Maton 2014, 51). Against this conclusion and inferring from Bourdieu (1984, 101), the TAs' social practices within the subfields of chieftaincy may be represented by the equation in Figure 5.4 below.

Figure 5.4: A summary of the historical social practices of the traditional authorities



Source: Author's construct (2021)

5.4.5.2 The social practices of the farmers in the subfields of arable farming

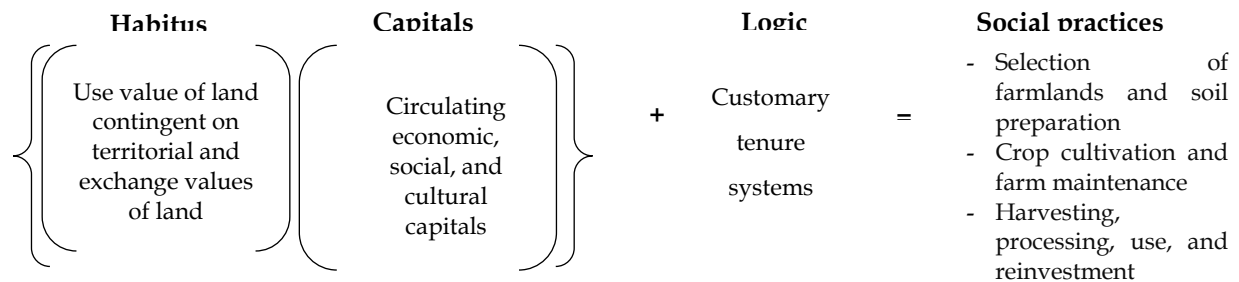
The research shows that the key social practice of the farmers was arable farming. However, this involved what Sakdapolrak refers to as “habitual and routinized actions” that were “informed by their practical knowledge” of how to maximize their acquisition of the sub-stake of the subfields of arable farming, which was the relevant crops (2014, 22). Per Bourdieu’s categorization of capitals, the sub-stake corresponded with circulating economic capital because the crops were consumable and exchangeable material assets (1983, 185; 2004, 218 cited in Etzold 2013, 22). Towards this, the farmers’ routinized actions included the selection of farmlands and soil preparation, crop cultivation and farm maintenance, and harvest, processing, use, and reinvestment. Deducing from the sub-stake, the research has earlier emphasized that the farmers’ collective habitus was the use value of land. Subject to this were the habitus of the exchange and territorial values of land, which underlay their expectations to access desirable quantities of the stake (to practice shifting cultivation) at desirable locations and exclude others from their claims. Thus, the sub-stake of the subfield and the farmers’ habitus (land values) informed the above social practices.

However, the research shows that the farmers executed their social practices with the relevant capitals, which included social, cultural, and economic. In this regard, their capitals were the bases of their primary access to the stake. While the natives held usufructuary interests by virtue of their bonding social capital (citizenship), the non-natives’ customary tenancies were the results of their linking social capital, which relates to their dependence on the natives. Subsequent to applying these basic capitals, the farmers used other forms of social capital – that is bonding (nuclear families) and bridging (extended family members, friends, and laborers) –, embodied cultural capital (physical strength and skill), circulating economic capital (money, seeds and seedlings), and objectified cultural capital (farm tools) to prepare the soil and cultivate the crops. They also used them to maintain the farms and harvest the crops when they were due. However, the married men mainly relied on their bonding social capital (nuclear families) to process the crops, while the unmarried men and women used their own embodied cultural capitals (physical strength and skill) and sometimes bridging social capitals (relatives, friends, and laborers) for these tasks. All the farmers also relied on their linking social capitals (crop merchants) to earn circulating economic capital (money) for other necessities. The non-natives also gave some of their gains to the traditional authorities (TAs) to maintain their access to the stake.

Essentially, the respective customary logics of the fields of land access structured the farmers’ habitus (land values) and the values of their primary capitals. Consequently, the usufructuary interests of the native

farmers were based on their bonding social capital and were the highest use rights of the fields. The non-natives obtained customary tenancy agreements based on their investment of circulating economic capital (money and in-kind payments) to establish a linking social capital with the respective TAs. Although they enjoyed the same latitudes as the natives did, their interests were less secure. In both cases, the logics had delimited the rights to use, which explained the farmers' primary habitus of the use value of land. Thus, unlike the TAs, their ancillary habitus of the territorial value of land was in respect of claiming lands during the tenure of their hold and not absolute ownership or custodianship. Given these, the research concludes that the farmers' habitus or land values, capitals, and the fields' logics were the frames of action, which underscored their social practices. This maintains Bourdieu's argumentation on the factors that underlie social practices (Bourdieu and Wacquant 1992, 101; Maton 2014, 51). Thus, based on his proffered equation (1984, 101), the research sums up the farmers' social practices within the historical subfields of arable farming in Figure 5.5 below.

Figure 5.5: A summary of the historical social practices of the farmers



Source: Author's construct (2021)

5.4.5.3 The social practices of the builders in the subfields of real estate

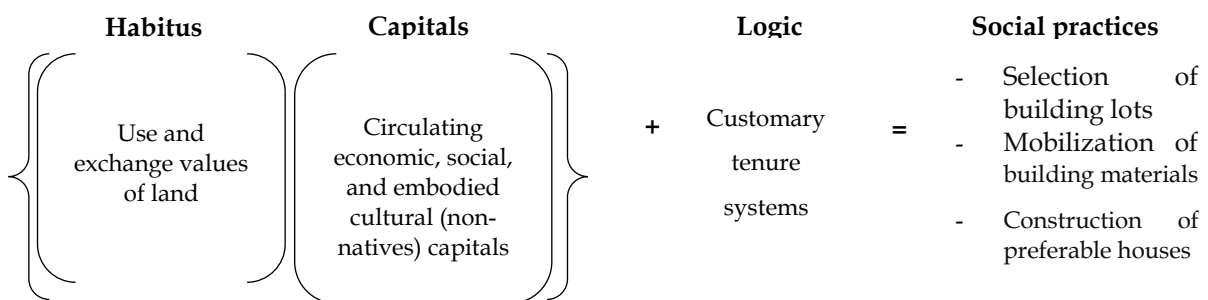
The land access objective of the historical builders was to build preferable residential houses at preferable locations to obtain security and connection. Thus, as surmised previously, the sub-stakes of the subfields of real estate were shelter and security, which following Bourdieu, have been classified as the quest for fixed economic capital and bridging social capital (1983, 185; 2004, 218 cited in Etzold 2013, 22). Based on these, the research has concluded that the stake (land) was of use and exchange values (habitus) to the builders. To achieve these, the builders' main social practice was building. This involved the selection of building lots, mobilization of building materials, and the construction of the houses. These show that the sub-stakes of the subfields and the builders' habitus (land values) structured their social practices, because they were the targets of their endeavors.

The research thus far shows that certain capitals, among which were social, circulating economic and embodied cultural capitals facilitated the builders' social practices. Their primary access to the stake (land) was based on their property rights. In this regard, except the non-natives of Carpenter who had customary tenancies, both natives and non-natives held usufructuary interests to lots in all the other communities. However, all the builders obtained their interests to land from the traditional authorities (TAs) by expending circulating economic capitals (in-kind and cash payments). Thus, the builders also had to

establish a linking social capital with the TAs to gain access to land. Subsequent to this and securing preferable lots, the builders also employed their embodied cultural capital (physical strength and skill), bonding (nuclear families) and bridging (extended family members and friends) social capitals to mobilize the requisite building materials, which were reportedly locally available. Those who preferred concrete blockhouses expended circulating economic capital (money) to acquire other requisite materials such as cement and aluminum roofing sheets. They and the natives who preferred mud and thatch grass houses also expended circulating economic capital (money) to obtain bridging social capitals (masons and other specialized laborers) to construct the houses. Conversely, the non-natives, who mainly preferred mud and thatch grass houses relied on their own embodied cultural capital (physical strength and skill), and those of their bonding and bridging social capitals to construct the houses.

Like the farmers and the TAs, the logics of the fields of land access structured the builders' collective habitus (land values) and the values of their primary capitals. Thus, as per the logic, their acquirement of land interests – either usufructuary interests or customary tenancies – required an investment of circulating economic capital (cash and in-kind payments) to establish a linking social capital with the respective TAs. This explained why even the natives could not access lots at will as they did farmlands. The logics had also defined the limits of their rights to use, exclusive of outright claims of ownership. Yet, given the durability of houses, the research argues that their access to land was more permanent than that of the farmers. Principally, the builders' use rights also explained their limited habitus of the use and exchange values of land. Consequently, in line with Bourdieu, the research concludes that in the subfields of real estate, the builders' habitus (land values), capitals, and the fields' logics were the frames of action, which underlay their social practices (Bourdieu and Wacquant 1992, 101; Maton 2014, 51). Along this line of reasoning, the research infers from Bourdieu (1984, 101) and submits the equation in Figure 5.6 below as a summary of the builders' social practices and their underlying factors.

Figure 5.6: A summary of the historical social practices of the builders



Source: Author's construct (2021)

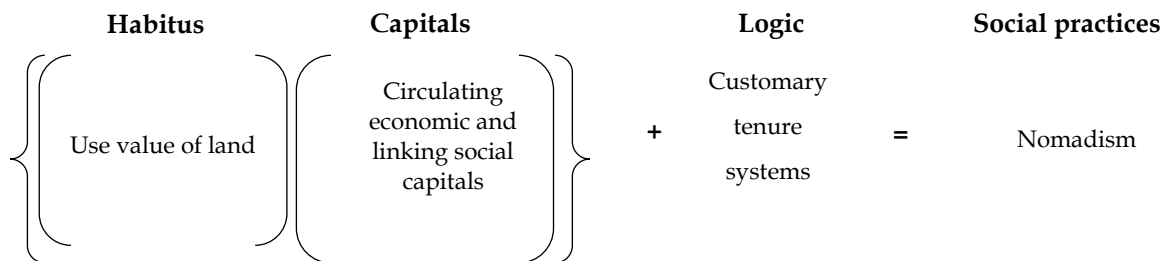
5.4.5.4 The social practices of the herders in the subfields of pastoralism

To the historical nomads, the research has surmised that their land access objective was to obtain nourishment (fodder and water) for their cattle. In line with Bourdieu's classification of capitals, this target related to a circulating economic capital due to its consumable characteristics (1983, 185; 2004, 218 cited in Etzold 2013, 22) and represented the sub-stake of the subfields of pastoralism. Given this, the research

deduces that the herders' collective habitus was the use value of land. Their key social practice was nomadism, which involved infrequent seasonal migration in search of nourishment. Thus, the sub-stake of the subfield of pastoralism and the nomads' habitus (land value) influenced their social practices. However, they also employed certain capitals to undertake their social practices. Their land interest (customary tenancy), which gave them primary access to the stake was obtained by establishing linking social capital with the traditional authorities (TAs) through circulating economic capitals. These included cash and in-kind payments.

The research shows that the logics of the fields of land access structured the herders' collective habitus (land value) and the value of their primary capital. In this regard, the logics had defined the prerequisite for acquiring customary tenancies, which included an investment of circulating economic capitals (cash and in-kind payments) to establish linking social capitals with the respective TAs. The logics had also delimited their land rights to use in accordance with the agreements, which underlay their habitus of the use value of land. Consequently, the research concludes that the herders' habitus (land value), capitals, and the logics of the fields of land access were the frames of action that structured their social practices, which maintained Bourdieu's argumentation on the subject (Bourdieu and Wacquant 1992, 101; Maton 2014, 51). To this end, the research refers to Bourdieu and summarizes the herders' social practices with the equation in Figure 5.7 below.

Figure 5.7: A summary of the historical social practices of the builders



Source: Author's construct (2021)

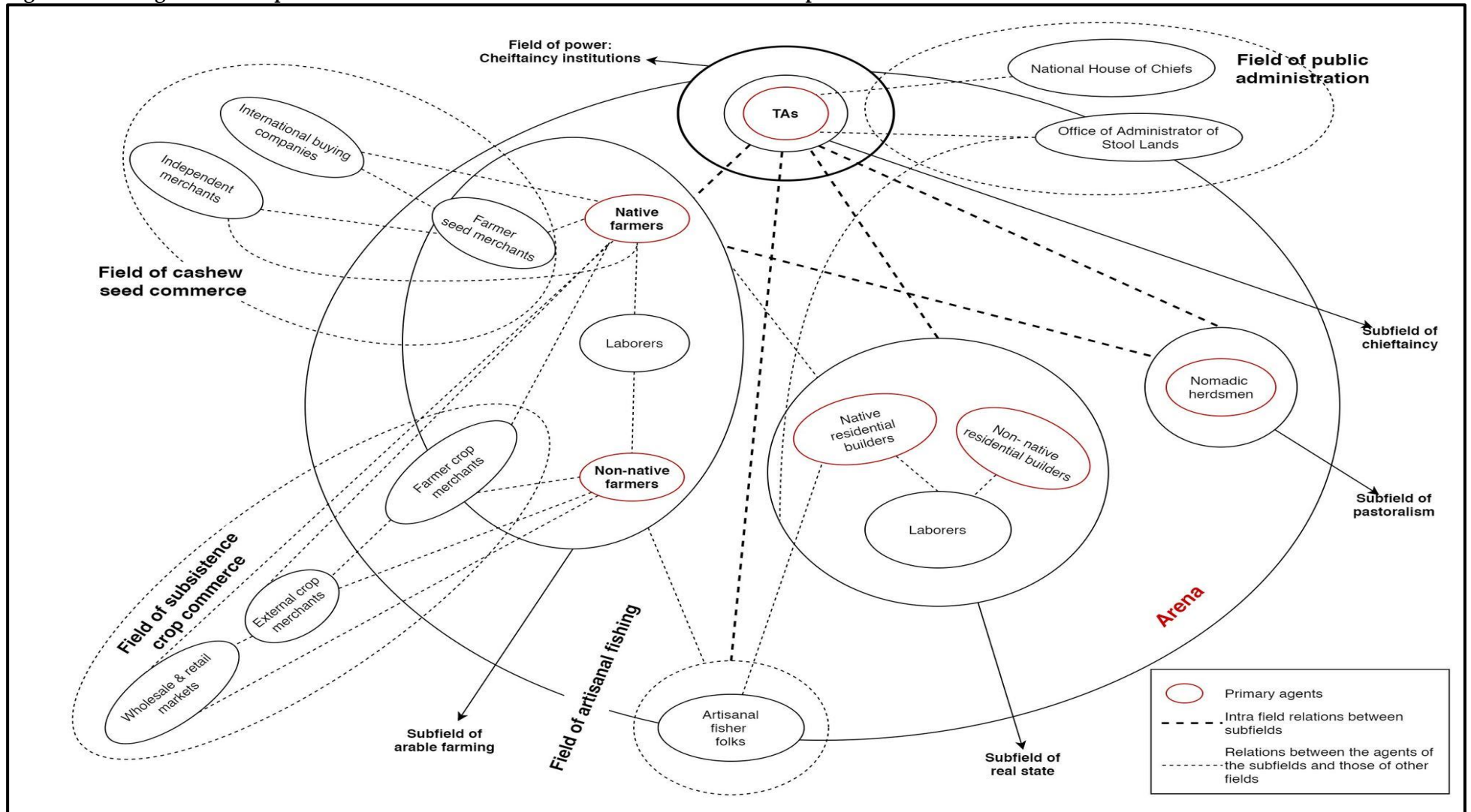
5.4.5.5 Summary: Foregrounding the historical fields and subfields of land access

Having described the agents' social practices, the research closes in on its conceptualization of the historical fields of land access of the study communities. Thus, prior to recounting the agents' interpretations of their land access, this subsection attempts to foreground the historical fields of land access in their broader contexts (Clarke et al. 2017, 4, 16, 17). By this, the research seeks to summarize the foregoing discussion to show the embeddedness of the fields. It will also show the relative positions of the subfields to the field of power, which as previously explained, underscore their relevance to the holders of symbolic power and hence their sustenance. Thus far, the research has conceptualized the historical fields of land access and the relevant subfields, which included chieftaincy, arable farming, real estate, and pastoralism. It has shown that these subfields respectively constituted traditional authorities (TAs), farmers, builders, and herders as primary agents. These agents acted from different social positions based on their possession of certain

capitals and pursued the sub-stakes that corresponded with the subfields and their habitūs (land values). The sub-stakes of the subfields of chieftaincy were symbolic power (authority) and objectified cultural capital (the sacred trees) while the sub-stakes of the subfields of arable farming and pastoralism were circulating economic capitals, which were respectively, crop yields and fodder (including water). Conversely, the sub-stakes of the subfield of real estate were fixed economic capital (shelter) and bridging social capital (security).

The discussion has also shown that the subfields constituted secondary agents who supported the primary agents in their land access endeavors. While some of them were decisively situated in the subfields, others were simultaneously active in other fields. In this regard, there were flows of exchange between the primary and secondary agents. Similarly, there were flows of exchange between the subfields because the agents transmitted their capitals between them to achieve the corresponding objective. In both cases, the flows of exchange underpinned the embeddedness of the agents, subfields and the entire fields of land access. The discussion also shows that the fields' logics (the customary tenure systems) structured the agents' habitūs (land values) and the values of the relevant primary capitals. Ultimately, the logics and the agents' habitūs and capitals structured their social practices. Against this summary, the research foregrounds the historical fields of land access in Figure 5.8 on the next page. Due to the intricate constituents of the historical fields of land access, the diagram is simplified and excludes the agents' habitūs and capitals, but also the logic, which structured them.

Figure 5.8: A diagrammatic representation of the historical field of land access of the respective communities



Source: Author's construct (2021)

5.5 The agents' interpretations of their historical land access

While seeking to understand the agents' interpretations of their historical land access, the research observed that besides relating their achievement of the objectives, they also referred to the ways in which the qualities of land, land tenure systems, and other mechanisms of access expedited the achievements. Accordingly, the following subsections detail the agents' accounts of their historical land access, emphasizing the manner in which these recounted factors influenced their interpretations. As before, the broad section encompasses descriptive and analytical parts. Of significance, the section addresses research question 'd (i)', which is '*How did the agents interpret land access before the dam construction?*'

5.5.1 Descriptive analyses of the TAs' interpretations of their historical land access

As emphasized, the landowning traditional authorities (TAs) sought to maintain their exclusive ownership and control over land to undergird their socio-political and socio-cultural authority and conserve the sacred trees for cosmological reasons. Towards this, they endeavored to administer land by facilitating and regulating the access of users. When the research inquired about their social constructions of the historical land access, they all agreed that they were able to achieve the objectives. Specifically, their explanations corresponded with the achievement of the respective strategies. The subsections describe their interpretations accordingly.

5.5.1.1 Facilitating land access

All the landowning TAs stated that they were able to undergird their authority by facilitating the users' land access. They attributed this success to the vast extent of land and their allodial titles. Relevantly, they recounted that the chieftains' allodial titles were foundational to the other land interests, which gave the entire bodies of TAs a communal recognition as the landowners with absolute rights including the right of transfer. According to the TAs, this recognition accentuated their authority, because it evinced the historical social differentiation that was inherent in the respective communities. Besides this, the research found that the TAs endeavored to meet the differentiated needs of the land users by codifying the customary tenure systems. Thus, they allowed farmers to enjoy an open access to land and have claims, while they allowed builders to access lots of their choice at affordable charges and build their preferred houses without restrictions. Although they also accepted herders, they limited their access to the uncropped fringes of the communal lands where they could move freely about and stay away from the cropped areas. In the TAs' estimation, these sanctions were responsive to the respective users' needs and hence earned them the cooperation of especially the natives to maintain and exercise their socio-political and socio-cultural authority.

The TAs also facilitated land access by requesting non-native farmers, builders, and herders to 'see' them before accessing land. According to them, this strategy was useful for emphasizing their authority over land and for earning certain material benefits to maintain the stools. Regarding the latter, the TAs mentioned that they used the money received from prospective users to remunerate the chieftains, organize festivals, and preserve the accessories of the palaces. They also received drinks and foodstuffs, which they

used for libations and other ritualistic purposes during the yam festival. By selling the excess of the presented foodstuffs, the TAs earned additional money to support these purposes. Given their ability to cover the associated capital and recurrent costs from these contributions, the TAs argued that their land access maintained the respective stools, which were also emblematic of their authority and the shared spirit and soul of the communities. In the words of the Chief of Carpenter when interviewed on 5 September 2018, *"I really felt like a Chief in the past because I had authority over land and earned money from it to carry out my traditional responsibilities"*.

5.5.1.2 Regulating land access

The landowning traditional authorities (TAs) related that they were able to support their authority and maintain the sacred trees by regulating the land access of the users. As the allodial titleholders, they were primarily responsible for demarcating the customary property rights. This had enabled them to delimit the rights of the other agents while upholding their absolute rights of ownership and control and the associated latitudes, which contributed to their authority among the people. With their recognition as the socio-political and socio-cultural leaders, the TAs enforced the relevant taboos such as those regarding the days of rest and the prohibitions against felling sacred trees. The people also revered them as the ultimate judges whose rulings were reportedly indisputable. The TAs recounted that this recognition and the resultant feats enabled them to complement their authority. Particularly, their capability to enforce the prohibitions maintained the environmental quality of land by protecting the sacred trees towards achieving the communities' cosmological objectives. Although the TAs referred to their allodial titles and socio-political and socio-cultural recognition as foundational to their success, they also maintained that it was due to the actual existence of land and the trees.

5.5.2 Descriptive analyses of the farmers' interpretations of their historical land access

The research shows that the farmers accessed land in order to obtain high yields of the traditional crop, yam, as well as the accompanying crops including groundnuts, beans, maize, melons, and cassava. Those of Dokokyina additionally sought to obtain high yields of cashew seeds. The farmers' quests were for subsistence and commercial purposes. Thus, as discussed, they used their property rights and 'strength' to undertake routine strategies. When the research inquired about their interpretation of the historical land access, all the farmers claimed without exception that they were able to gain high yields of all the crops. Specifically, they related the manners in which certain factors enabled them to achieve the expectations of the respective routine strategies. Thus, by strategy, the subsections detail the farmers' interpretations of their historical land access.

5.5.2.1 Selection of farmlands and soil preparation

The farmers stated that they selected farmlands based on a desire to access large tracts of land in proximity to kin and friends. Respectively, these were to enable them to practice shifting cultivation in the selected

area for at least three seasons while relying on each other to guard their farms against wildlife invasion. In addition to these, the farmers of Bongase also selected farmlands based on the soil quality. Relevantly, the farmers claimed that the purpose of these decisions was to boost their crop yields. Thus, they recounted that they could easily find farmlands that satisfied these desires, which explained their high crop yields. Specifically, they referred to the large extents of the land as the main reason for their success. The farmers of Bongase also referred to the availability of relatively good soil in the river valley located in the north and east of the community. All the farmers also mentioned that the customary tenure systems enabled them to claim land, which made it possible to access large tracts of land at the same area to practice shifting cultivation. Hence, it also secured their tenure.

In addition to these, the men also related that they had access to social support networks – including their nuclear and extended family members and friends – that helped them to prepare the farmlands for cultivation. Regarding this, they recalled that there was generally a shared commitment among them to support each other towards their respective targets. This explained their tendency to farm in clusters, and the ease with which they could mobilize themselves to prepare each other's farms. Fundamentally, this support enabled them to access large tracts of land. The women who depended on them could also access the same lands by farming within or on the peripheries of the prepared land. Those who were unmarried related that they could also hire laborers to support the preparation of the land. They and the men who hired additional laborers explained that their financial capability was the results of previous earnings from the high crop yields. Although most farmers accessed pristine land seasonally, the research found that besides some women, a few men also accessed exploited lands to cultivate minor crops. The farmers reported that such ones could easily access their exploited lands with their approval because they hardly re-cultivated them.

Moreover, the farmers recalled that their success was also due to the predictability of the weather. According to them, they had experienced the same conditions over years and could tell when the seasons begun without fail. Based on this, they followed a pattern, whereby they prepared their farmlands at the beginning of the dry season in order to capitalize on the weather to dry and burn the weeds and felled trees. Subsequently, they could cultivate their crops in time for the early rains, which contributed to the crops' survival and ability to yield sufficiently. On a final note, they also explained that their practice of slash-and-burn contributed to the soil quality and their high crop yields.

5.5.2.2 Crop cultivation and farm maintenance

As explained, the farmers cultivated crops that were considered well suited to the soil and supported their dietary needs, and had some economic value. This explained why they were mainly inclined towards cultivating yams and cashew, as was the case of the Dokokyina community. For each of the crops, the farmers adopted different strategies of cultivation. According to them, they were able to put through their strategies to expedite the yields of the crops. Primarily, they all attributed this to the productivity of the soil and the absence of agro pests. Those who practiced alluvial farming also attributed this to the availability of the alluvial plains. However, they all also recounted that their long histories of farming had

given them immense knowledge about the various strategies of cultivation. Thus, they knew the types of crops that could be cultivated together and those that could not. They were also aware that certain crops required mounds and ridges to facilitate their growth and yield. The Dokokyina farmers who were investing in cashew had also gained their knowledge about its cultivation from Cote d'Ivoire and Sampa, which were both in proximity to the area. Thus, they knew that practicing agroforestry protected the seedlings from being overwhelmed and stifled by weeds.

In this regard, all the natives also related that the customary tenure systems had given them the freedom to cultivate the crops of their choice without restriction. Although the TAs had conversely proscribed the non-natives from cultivating perennial crops, they were content with cultivating just yams and the other crops. According to the non-native farmers, the proscription made no difference to them, because the economic value of cashew seeds was at the time unattractive in the communities where they lived due to their distance from Cote d'Ivoire and Sampa. As mentioned previously, the rainfall pattern was predictable and the farmers could plant their crops at the right time to facilitate their growth and yield.

Besides these, the men indicated that with their physical strength and the support of their families and friends, they could cultivate their desired farm sizes and maintain them. Those who had the financial means from previous crop earnings could also hire laborers to support them for the associated tasks. The married women's farms were usually part of or near the farms of the men; thus, they could depend on them and the other members of the nuclear family to cultivate their crops and maintain them. Those who were unmarried could also hire laborers or call on their female relatives to assist them to cultivate and maintain their farms with ease. Ultimately, the research gathered that the resources – that is the soil quality, skill, physical strength, social support networks, financial means, and the customary tenure systems – underlay the farmers' ability to cultivate the preferred crops and maintain the farms, which enabled the crops to thrive and yield enough for subsistence and commercial purposes.

5.5.2.3 Crop harvesting, processing, use, and reinvestment

The farmers recounted that due to their farming histories, they were knowledgeable about the appropriate time to harvest each of the crops. For the harvest, they employed their skill and physical strength. Those with nuclear families relied on them for support. The men additionally relied on the support of extended families and friends or wage laborers when the workload was excessive. The unmarried women related that they could also engage wage laborers if they had the means to pay them. With all these, the farmers reported that they could efficiently harvest their crops to sustain the gross yields. When asked about the quality of their harvests, they all claimed that they were very high because the soil quality was top notch. As indicated previously, a 69-year-old woman from Dokokyina who was interviewed on 9 November 2018 emphasized that, *'The fat of the soil' was so good such that one could get more than a hundred big tubers of yams from just an acre of land*". Likewise, a 39-year-old man from Bui interviewed on 4 February 2019 also recalled that, *"I could harvest a bag of unshelled groundnuts [approximately 30 kilograms] from just an acre of land"*. However, besides the soil productivity, the farmers also referred to their ability to practice shifting

cultivation, the predictability of the weather, their reliance on family and kin, and their own physical strength, skill, and financial capability as underlying reasons for the high yields.

The men also acknowledged that the women who processed crops like beans, melons, and groundnuts had the requisite skill for it, which minimized losses. With respect to yams, the farmers claimed that their knowledge of trench storage was useful for preserving the crops while they ferried them home in smaller quantities to avoid breakages. Some also indicated that the absence of monkeys and cattle in certain areas enabled them to store their yams on the ground surface of their farms. Relevantly, all these enabled the farmers to gain high crop yields for subsistence and commercial purposes, and for re-cultivation the following season. Regarding re-cultivation, the farmers mentioned that an acre of yam farm could for instance yield enough yam setts for re-cultivating an acre and half the following season. To the Dagaates, the high crop yields also enabled them to fulfil their obligations to the traditional authorities, while retaining enough for themselves. Thus, access to food was reportedly secure.

Concerning their commercial activities, the traditional farmers mentioned that markets were readily available for the subsistence crops. According to them, they sold their yams to domestic and external merchants when the harvest was more than a hundred tubers. While the domestic merchants lived in the communities, the external merchants frequented the communities during the harvest, going from house to house to purchase all the crops on offer due to the quality of the yields. Those who could not transport their yams home in time to sell them to the external merchants sold them to the domestic merchants at slightly lower prices. The farmers of Dokokyina additionally stated that they had access to ready markets for their cashew seeds, which had begun to overtake yams as the main crop due to their relatively high economic value. According to them, external merchants from Sampa and Cote d'Ivoire went to the community to buy the seeds. However, the farmers of the other traditional farming communities – Bui, Bongase, and Carpenter – related that they had poor access to the cashew markets because the traders hardly went to their communities to buy the seeds. Regardless of this, they were content that they could rely on the economic value of yams to earn some money for their idiosyncratic needs including shelter. Although the merchants imposed the crop prices on the farmers, they were generally content with their earnings.

The women of especially Bui and Bongase also mentioned that they could barter trade some of their crops for fish with the women of Akanyakrom. Due to their abundance, all the women recounted that they could gather a lot of wild herbs, shea, and African locus bean fruits, as well as straw for brooms. Besides domestic use, they reported that they earned some money from their sale, which augmented the farm earnings of especially the natives. Although the Dagaate women could not access land independently of men, they also mentioned that they were content, because the yields from the men's farms were sufficient for the households. They also received frequent remittances from the men, which enabled them to maintain the households and their personal lifestyles.

5.5.3 Descriptive analyses of the builders' interpretations of their historical land access

The historical builders accessed land to obtain preferable residential houses at preferable locations. To achieve this, the research shows that they used their property rights and 'strength' to undertake specific strategies, which have been discussed above. When the research inquired about their interpretations of the historical land access, all the builders also claimed that they sufficiently met their objectives without problems. Like the farmers, they recounted the manner in which the relevant factors enabled them to undertake the respective strategies towards their objectives. Thus, the subsections describe their accounts by strategy.

5.5.3.1 Selection of building lots

As described, the historical builders preferred lots that were in proximity to family and friends to advance their senses of connection and security. In this regard, they related that they were able to access preferable locations because land was available and the principles of the respective customary tenure systems gave them the latitude without restrictions and at minimal costs. Thus, they referred to the clusters of the various ethnicities in the communities as evidence of their claim. Relevantly, the builders also claimed that their locational preferences enhanced their bonding with family and friends and their senses of security. Elaborating on his personal experience during an interview on 5 September 2018, a 38-year-old opinion leader from Akanyakrom recalled that, *"At the old settlement, I built my house next to a very good friend of mine whose wife was also friends with mine. Thus, we looked out for each other and our wives took turns to clean up our respective fish catches. We also dined together every day and shared our meals. As a result, we had a strong bond and could rely on each other for everything"*. Ultimately, such experiences underscored the builders' formation of social bonds, which expedited their quest for connection and security.

5.5.3.2 Mobilization of building materials

Regarding their access to building materials, the builders related that sand, timber, and grass were locally available and easily accessible. They also explained that there was a high sense of commitment among them. Thus, it was easy to mobilize family and friends to support the extraction and assembling of the materials. Those who had to purchase additional materials also claimed that they were financially capable because they earned enough from farming or fishing. During an FGD with the youths of Bui on 3 February 2019, a 45-year-old man recalled that, *"Besides having the latitude to access preferable locations for our houses, we could easily mobilize the requisite support and money for the construction of houses"*. This claim echoed the general sentiment, which shows that the builders were content with their access to building materials.

5.5.3.3 Construction of preferred houses

As explained, the older native builders (40 years and above) preferred mud and thatch grass houses due a belief in their medicinal properties. The non-natives however preferred similar houses due to their transience. The younger natives preferred concrete blockhouses with aluminum sheet roofing due to a

belief in their symbolism of success and sophistication. Regarding these, all the builders recounted that they successfully built their houses because there were no restrictions against the type of housing. Besides the leniency of the customary tenure systems, the natives also mentioned that they earned enough money from their thriving economic activities (arable farming and fishing) to pay the specialized laborers for the construction. They further explained that those who had bigger farms (and hence bigger social support networks) or fishing equipment could thus build big mud or concrete blockhouses to satisfy their preferences. Likewise, those who had relatively smaller farms or fishing equipment could also obtain their preferred houses. The non-natives also related that they could count on family members and friends to support the construction of their houses due to the inherent sense of commitment among them.

5.5.4 Descriptive analyses of the herders' interpretations of their historical land access

Although the research could not trace the historical herders, it surmises that their seasonal return to the area must have been due to their success in accessing fodder (including water) for their cattle. Among other things, this may have been due to the minimal cost of entry, which was a one-off payment to the traditional authorities. It may also have been due to the vast extent of land (and the existence of the river) and their social acceptance by the communities.

The above descriptions are the agents' interpretation of their historical land access. Analytically, these underline their social constructions of 'land access' or 'land scarcity'. Accordingly, the next section interprets the descriptions in line with the theoretical framework of the research to explain the agents' related social constructions.

5.5.5 Theory-guided interpretation: The agents' historical social constructions of 'land access' and 'land scarcity'

The analytical descriptions show that the agents interpreted their historical land access based on their acquisition of the sub-stakes and hence the achievement of the respective habitus (land values). Following the theoretical framework, these interpretations provide a yardstick for ascertaining their social constructions of 'land access' and 'land scarcity', which as explained in Chapter 2, respectively encompass their achievement or failure to achieve their habitus (land values). Thus, the subsections infer from the theoretical framework to underline the agents' historical social constructions of 'land access' and 'land scarcity'.

5.5.5.1 The TAs' historical social constructions of 'land access' and 'land scarcity'

The research shows that the sub-stakes of the respective subfields of chieftaincy were symbolic power (authority) and objectified cultural capital (the sacred trees). These corresponded with the traditional authorities' (TAs) collective habitus of the territorial and environmental values of land respectively. To this end, they strived to facilitate and regulate the users' land access. Following the analytical description, the

TAs historically acquired the sub-stakes. Thus, per the theoretical framework, the research relates their interpretations to the achievement of their habitūs (land values) and hence the social construction of 'land access' (Ribot and Peluso 2003, 155). As indicated, the basis of the TAs' successes was the existence of the stake. However, it was also due to the chieftains' possession of the ultimate circulating economic capital, the allodial title. With this, they gained symbolic power as landowners and the source of the land interests of the other agents. In this regard, some agents were obliged to consult them and make cash and in-kind payments before accessing the stake. The TAs used the payments, which constituted circulating economic capital to maintain the stools – the symbol of their authority – by covering the associated capital and recurrent expenditure and for other overt ritualistic purposes. Besides their allodial titles, the discussion also shows that the TAs used their institutionalized cultural capital to facilitate land access by codifying the principles requisite for meeting the objectives of the respective subfields. Through this, they won the support of the other agents for their authority. Following Bourdieu, this perpetuated symbolic violence, which is the imposition of certain systems of meanings by dominant agents with the complicity of the subjugated ones in a manner that legitimizes and concretizes structures of inequality (L. Wacquant 1998, 217). Consequently, the TAs' institutionalized cultural capital and circulating economic capital underlay their successful facilitation of the users' access to the stake, which undergirded their symbolic power in the fields of land access.

The TAs also regulated the users' access to complement their symbolic power and maintain the objectified cultural capital of interest. Besides the primary existence of the stake, their institutionalized cultural capital expedited this. Accordingly, the account shows that they had demarcated the limits of the respective property rights, which enabled them to maintain absolute ownership and control of the stake. They had also enforced the taboos associated with the stake and were revered by the people as the ultimate judges, which both contributed to their symbolic power. By enforcing the taboos, the TAs also conserved the objectified cultural capital; that is the sacred trees. Relevantly, all the above underscored the TA's historical achievement of the habitūs, which were the conceived territorial and environmental values of land and hence underlay their social construction of 'land access'.

5.5.5.2 The farmers' historical social constructions of 'land access' and 'land scarcity'

The sub-stake of the historical subfields of arable farming was circulating economic capital, which encompassed the relevant crops. Their primary habitūs was thus the use value of land. As explained, this was subject to the ancillary habitūs of the exchange and territorial values of land, because the farmers' achievement of their primary habitūs depended on their ability to access desirable quantities of land at desirable locations and claim the requisite lands. To this end, their key social practice, arable farming, encompassed habitual and routinized actions including the selection of farmlands and soil preparation, crop cultivation and farm maintenance, and harvest, processing, use and reinvestment. As recounted in the analytical descriptions, these actions resulted in the farmers' historical acquirement of the expected quantities and qualities of the sub-stake. Thus, the research deduces that the farmers achieved their habitūs (land values) and hence 'land access' (Ribot and Peluso 2003, 155).

Specifically, the farmers attributed the achievement of their habitūs of the exchange value of land to the capacious and productive quality of the stake. They also credited the fields' customary logics for their tenure security and hence the achievement of their habitūs of the territorial value of land. Besides these, the men also ascribed their success to the possession of the relevant capitals. These included embodied cultural capital (physical strength and skill), bonding (nuclear families) and bridging (extended families and friends) social capitals, and circulating economic capital (money). Their possession of all these capitals underlay their ability to seasonally prepare and cultivate large tracts of land and appropriately harvest and process the crops to avoid losses. The native married women's possession of especially bonding social capital expedited their successful access to prepared farmlands while the unmarried ones' possession of circulating economic capital (money) facilitated their access to bridging social capital (laborers) for the associated tasks. Relevantly, the farmers' achievements of their habitūs of the exchange and territorial values of land underscored their achievement of the habitūs of the use value of land and hence their collective social construction of 'land access'. To the natives, this success was additionally due to the latitude provided by the fields' logics to cultivate crops of their choice.

The farmers' accounts show that their success was also due to the absence of agro pests and the predictability of the weather. Theoretically, these do not fit into any of Bourdieu's adopted concepts. Thus, the research introduces 'environmental capital' as an additional but generic concept to capulate them and expedite the theoretical interpretation. In this regard, environmental capital embodies all natural factors – be it the weather/ climate, wildlife, and plant pests and diseases among others that influence the agents' social practices towards achieving their objectives. Based on this, the research deduces that the farmers had the right environmental capital, which expedited their social practices and the achievement of their collective habitūs of the use value of land. This in turn supported their social construction of 'land access'. Moreover, the farmers' accounts show that their linking social capital, which is the crop merchants, also expedited their access to markets and their ability to earn from their crops. To both the native and non-native women, their access to wild fruits and herbs also underpinned their social construction of 'land access'. The research shows that while the Dagaate women could not cultivate land independently of men, they also achieved 'land access' as they benefitted from their husbands' sufficient earnings of the sub-stakes.

5.5.5.3 The builders' historical social constructions of 'land access' and 'land scarcity'

Regarding the historical subfields of real estate, the discussion thus far shows that the sub-stakes were both fixed economic and bridging social capitals, which respectively corresponded with shelter and security. The builders' collective habitūs were thus the use and exchange values of land. To acquire the sub-stakes and achieve their habitūs, the builders carried out certain social practices. In this regard, their accounts show that their land access was successful, which implies that they acquired the sub-stakes and hence achieved their habitūs of the use and exchange values of land. Theoretically, this relates to social constructions of 'land access' (Ribot and Peluso 2003, 155).

Following their accounts, the builders' success was primarily due to the availability of the stake, land and the favorable qualities of the fields' logics, which both enabled them to access preferable lots towards achieving especially their habitus of the exchange value of land. The logic additionally enabled them to build their preferred houses without restrictions towards achieving their habitus of the use value of land. Besides these, the builders' success was also attributable to their access to social capital, which included bonding (nuclear) and bridging (extended family members and friends). With these, the builders could extract and assemble the requisite circulating economic capitals (locally available building materials) for their preferred houses. Those who preferred mud and thatch grass houses also used the acquired local capitals for the construction, which expedited their achievement of the habitus of the use value of land. Moreover, the builders' accounts show that those who preferred concrete blockhouses also had the circulating economic capital (money) to acquire the other vended circulating economic capitals (cement and aluminum roofing sheets) towards achieving their habitus of the use value of land. This was due to their success in the subfields of arable farming or the other fields (mainly artisanal fishing) that supported their livelihoods. Relevantly, all these successes underlay the builders' historical social constructions of 'land access'.

5.5.5.4 The historical herders' social constructions of 'land access' and 'land scarcity'

As surmised above, the sub-stake of the subfields of pastoralism was circulating economic capital; that is fodder and water. This related to the herders' collective habitus of the use value of land. Based on the research's supposition, the herders acquired the sub-stake and hence achieved their habitus. Specifically, the research associates such achievement with the vast extent of the stake, the fields' favorable logics, and the herders' linking social capital with both the traditional authorities and the farmers, which facilitated their access. Given these, the research concludes that they also achieved 'land access' (Ribot and Peluso 2003, 155).

5.6 Summary of the chapter

Following the research questions, the chapter has detailed the historical episodes and social constructions of 'land scarcity'. It has presented the analytical descriptions and theoretical interpretations of the focal themes, which include the system of land access, the agents' power relations, their strategies of access, and their consequent interpretations of the historical situations. Particularly regarding the system of land access, the chapter has indicated that the respective communities had customary tenure systems that defined the rights of ownership and control, use, and transfer. Thus, the chieftains held the allodial titles, which encompassed the rights of ownership, control, and transfer. Relevantly, the other members of the traditional authorities (TAs) also benefitted from this holdership by gaining due recognition as landowners. The native commoners held usufructuary interests for farming and building, while the non-natives could enter into customary tenancy agreements with the TAs or native commoners to gain use rights for the specific activities. Regarding the qualities of the communal lands, the chapter has shown that they were vast and the soil was productive and suitable for cultivating the traditional crops including yams and

groundnuts. Although the TAs accepted some payments from non-natives and native builders to access land, land was generally non-fungible and openly accessible. Ultimately, these findings have resulted in the research's preliminary conceptualization of the historical fields of land access of the study communities and the pertinent subfields, which include chieftaincy, arable farming, real estate, and pastoralism. The findings have also resulted in the identification of land as the stake of the fields and the customary tenure systems as the fields' logics. Based on the accounts, the chapter has also surmised the respective habitus of the TAs, farmers, builders, and herders who constituted the primary agents of the subfields.

Subsequent to this, the chapter has also described the agents' power relations. This encompassed the identification of the roles of the primary agents and their mechanisms of accessing land. With respect to the former, it has identified the landowning TAs as the historical managers of land access. It has also identified them, the farmers, builders, and nomadic herders as the primary users of land. For each of these primary agents, the chapter has further identified their key providers, who as explained, contributed to their achievement of the sub-stakes of the subfields. Regarding their mechanisms of access, the chapter has shown that each of the agents employed varied means, which generally included property rights, physical strength, skill, social support networks, and financial capability. Relevantly, these descriptions have culminated in a theoretical interpretation of the historical agents' capitals and hence, social positions and power relations. In this regard, the research has identified the chieftains as the most powerful of the subfields of chieftaincy due to their possession of allodial titles and socio-political and socio-cultural recognition. Those of the subfields of arable farming and real estate possessed bigger yam or cashew farms (as was the case of the Dokokyina community), but also bigger houses and households. Within the respective subfields, the possession of these recognizable properties underlay the powerful agents' conversion of the primary capitals, which culminated in a symbolic capital. Regarding the subfields of pastoralism, the chapter has surmised that the most powerful must have been those who secured linking social capitals to expedite their access to the communal lands. Besides these, the chapter has also identified the chieftains as the most powerful of the respective fields of land access who possessed symbolic power. This deduction was based on the relative volume and weight of their aggregated capitals as guaranteed by the institutions of chieftaincy. Consequently, the respective institutions of chieftaincy has been identified as the historical fields of power. In this regard, the chapter has further shown that the communities recognized power as the possession of institutionalized cultural capital, which encompassed legitimate socio-political and socio-cultural authority based on the recognition of the kingmakers.

Against these backgrounds, the chapter has also addressed the agents' strategies of land access, describing the underlying factors that influenced their actions, which included the sub-stakes and mechanisms of access aforementioned. To this end, it has shown that the TAs' strategies encompassed the facilitation and regulation of the users' access to maintain their authority and the sacred trees. Although the farmers' main strategy was arable farming, it encompassed routine strategies such as the selection of farmlands and soil preparation, and crop cultivation among others to gain high crop yields. Likewise, the builders' strategy was building, which involved ancillary strategies, such as the selection of lots, mobilization of materials, and the construction of houses to obtain preferable houses at preferable locations. Conversely, the herders'

strategy was nomadism, which was aimed at obtaining fodder for their cattle. Theoretically, the chapter has associated the agents' strategies with social practices and shown that they were aptly the results of the double and obscure relations between their respective habitūs and capitals, and the fields' logics, which structured them.

Based on these, the chapter has concluded the findings by describing the agents' interpretations of their historical land access. Concerning this, it has shown that all the primary agents claimed that they acquired the respective sub-stakes without any limitations. It has also surmised that the herders may have obtained the sub-stakes due to their frequent return to the area before the dam construction. Theoretically, these claims underscore the agents' social constructions of 'land access', because they relate to their achievement of the respective habitūs. In this regard, the TAs historically achieved their habitūs of the territorial and environmental values of land; the farmers and herders, the habitūs of the use value of land; and the builders, the habitūs of the use and exchange values of land. As these deductions also show that the primary agents did not socially construct 'land scarcity' historically, they support the research's argumentation that 'land access' is a social construction that embodies the achievement of certain land values (habitūs). Thus, it transcends the mere availability of land and includes other underlying factors, which expedite the agents' pursuits. In consequence of this find, the next chapter addresses the agents' experiences after the Bui Dam construction to underscore the changes that have hence occurred.

CHAPTER 6: THE ADVENT OF THE BUI DAM AND RECENT SOCIAL CONSTRUCTIONS OF 'LAND SCARCITY'

6.1 Introduction

Following the State's acquisition of the lands of the study communities in 2007 and the consequent dam construction, the people have reportedly experienced drastic changes in their land access. Thus, this chapter attempts to describe the recent experiences of the agents and those of the BPA, which has also become an active agent due to its land access strategies. Reminiscent of the previous chapter, the current chapter aims to underline the incidence of 'land scarcity' or lack thereof, but in recent times. Thus, it also begins by discussing the recent system of land access, which encompasses the new land tenure system and qualities of land as socially constructed by the agents. Subsequently, the chapter elaborates on the power relations among the agents and the factors constitutive of such differentiations. Based on these and the system of land access, the chapter goes on to explain the agents' strategies of land access and ultimately, their interpretations of recent land access experiences.

As before, the research submits to epistemological relativism by presenting descriptive and theoretical sections for each of the themes. The descriptive sections represent the intransitive dimension of knowledge; that is the agents' conceptualization of their situation. Conversely, the theoretical sections represent the transitive dimension of knowledge; that is the research's interpretation of the accounts per its theoretical framework. In this regard, the analytical description of the system of land access culminates in a preliminary theoretical knowledge of the recent field and subfields of land access. This encompasses an insight into the stake and sub-stakes of the field and sub-fields respectively, the agents' habitus or land values and the field's logic. The analytical description of the agents' power relations results in a theoretical understanding of the capitals relevant to the subfields and the respective manners by which the corresponding agents legitimize symbolic capital. It also gives a grasp of the relevant external fields, the recent field of power, and hence the holders of symbolic power in the broader field of land access. The subsequent analytical description of the agents' strategies of land access engenders a theoretical understanding of social practices and how the agents' habitus and capitals and the field's logic underlie them. At this stage, the research also attempts to foreground the recent field of land access to show its embeddedness. The chapter closes with an analytical description of the agents' interpretation of land access, which leads to a theoretical insight into their social constructions of 'land scarcity' or 'land access'. Depending on the degree of similarity, the chapter discusses the themes by community or in general to avoid monotony. Ultimately, the chapter will show marked recent developments, which as explained in the next chapters, underlie the agents' strategic responses and societal transformation occurring in the area.

6.2 The recent system of land access

As reported in Chapter 1, plans for the construction of the Bui Dam dates back to 1925 when Ghana was under British colonial rule. Following attempts to actuate the plans by the newly independent government

in 1966 and the coup d'état that disrupted them, subsequent governments engaged foreign companies in 1976 and 1995 to undertake feasibility studies that would revive the project (Darko et al. 2019, 14; Fink 2005, 64; Hensengerth 2011, 12). Respectively, these companies were the Australian Snowy Mountain Engineering Company - which proposed a dam height of 189 meters - and Coyne et Bellier of France (Darko et al. 2019, 14; Fink 2005, 64; Hensengerth 2011, 12). After another study by the latter in October 2006 (Darko et al. 2019, 14), the dam height was reduced to 185 meters with a maximum operating level of 183 meters above sea level. During an interview on 5 September 2018, the BPA's Land Administrator (henceforth Land Administrator) explained that the new design parameters consequently informed the compulsory acquisition of 1,843.71 km² or 455, 590.66 acres of land in the now Savannah and Bono Regions. The basis of the acquisition was the Executive Instrument (EI) 70 (August 2007), which was later revised to EI 158 (November 2017). The EI supersedes the Legislative Instrument (LI) 710, which facilitated the land acquisition for the Bui National Park. Thus, the acquired area partly affected the Bui National Park.

To be sure, the acquisition was consistent with Article 20 of Ghana's Constitution (1992), which underscores the State's eminent domain in the public interest. However, pursuant to Article 1[1] of the State Lands Act 125 (1962b), the State had to enact an Executive Instrument - that is the EI 70 - which among other things, specified the land of interest and the date on which it was to be surrendered. Consequently, upon publishing the EI, the State acquired the land and vested it in the President of Ghana on behalf of the people per Article 1[3] of the State Lands Act 125 (1962b). Prior to enacting the EI 70 in August 2007, the State had enacted the Bui Power Authority (BPA) Act 740



Picture 6.1: One of several signboards within the study area that publicize the acquisition (Source: E. Agyepong, 22nd September, 2018)

(2007) in July, through which it had established the BPA as a body corporate under the functional Energy Ministry (see: Ministry of Energy, Ghana 2017). As explained in Chapter 1, the objective of the BPA's establishment was to develop the hydroelectric power project and manage the land when acquired. Thus, upon publishing the EI 70, the State entrusted the acquired land to the BPA. Subsequently, as shown in the inserted picture, the BPA erected signboards at vantage locations to publicize the acquisition and ward off encroachment. As also explained in Chapter 1, the acquisition affected twenty customary lands, including those of the study communities. However, the construction of the dam between 2007 and 2013 inundated about 444km² of land, which physically and economically displaced hundreds of people. Out of the displaced, the BPA physically resettled 1,216 people from eight communities. Besides physical resettlement, the BPA compensated farmers whose crops were affected by the inundation and the construction of the dam and its facilities. Relevantly, the payments were based on the average market values of the respective crops in the previous three years. However, the Land Administrator related that,

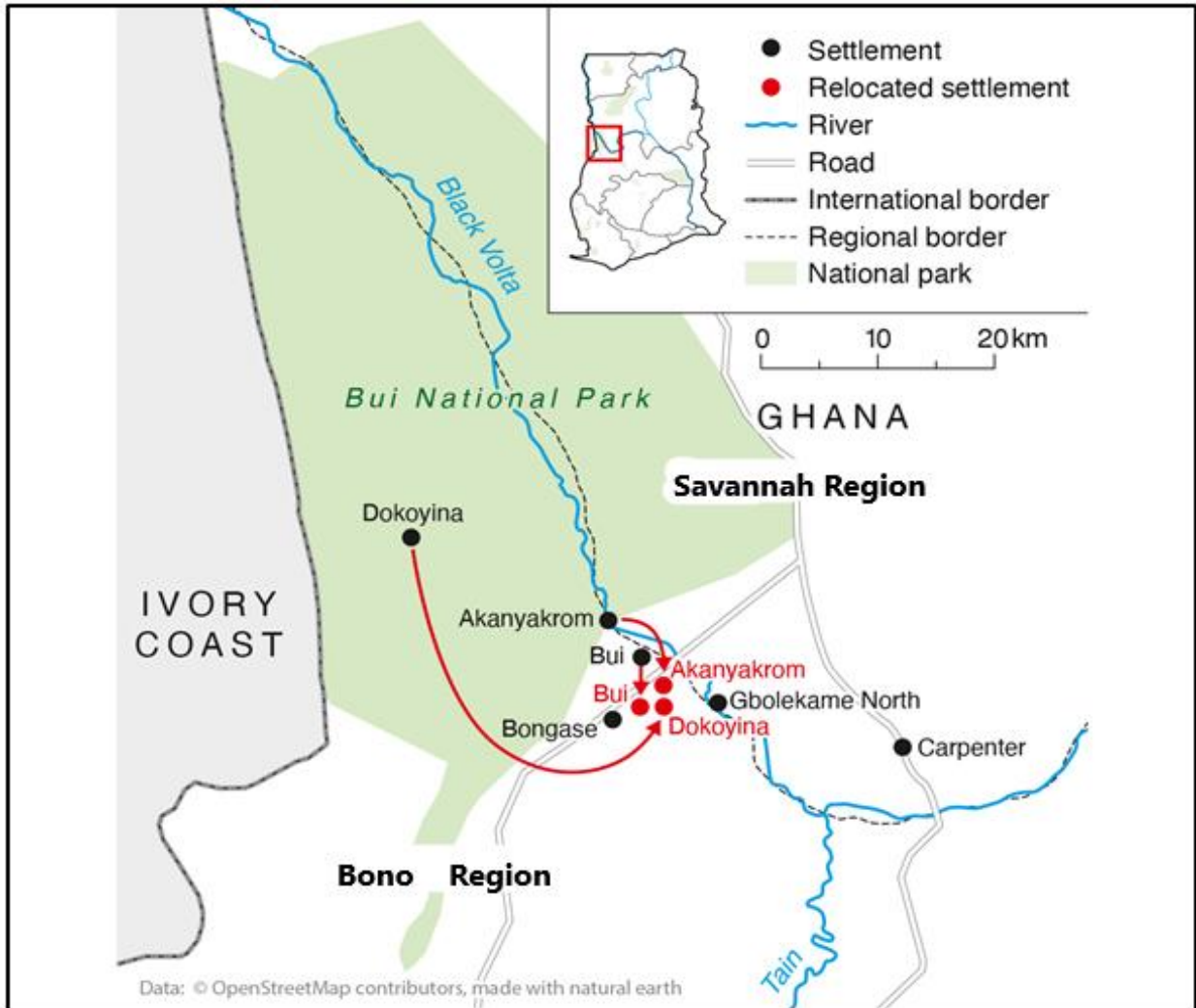
compensation payments for the lands are pending because of conflicting claims to land by some traditional authorities (TAs).

Of relevance to the research are the effects of the displacements on the study communities. As recounted in Chapter 1, the Bui, Dokokyina, and Akanyakrom communities were physically displaced and resettled. Particularly, the resettlement of the Bui and Akanyakrom communities was due to their location within the area of permanent inundation. Thus, their communities and farms – including cashew farms – were submerged. Although the Dokokyina community was not within the area of permanent inundation, the BPA relocated it because it “was going to be surrounded on three sides by the reservoir (south, east, and west) and large parts of their land ... was going to be submerged” explains a blog post on the its website (n.d.). Due to this, the resettled farmers had to abandon vast extents of cashew farms, from which they were reportedly earning a lot of money. However, the BPA promised them that they could go back to collect the seeds whenever they wanted to. Consequently, the BPA resettled them and the Bui and Akanyakrom communities farther south and about 3.5 kilometers west of the river and 2.5 kilometers east of Bongase. Upon resettlement, the registered household received houses with land titles. The communities respectively received farmlands in the east of the site towards the river. Figure 6.1 on the next page shows the current locations of the communities. The red arrowed lines show their movement from the old to the new locations.

In Bongase, the participants reported that the inundation displaced a large number of farmers as most of them preferred to farm within the fertile river valley in the north. Additionally, the resettlement of the Bui, Akanyakrom, and Dokokyina communities, as well as the Wildlife Division facilities (not shown on the map) in the east displaced farmers from the area. Given that some of them had also began cultivating cashew trees, they lost their farms to the inundation and to the resettlement of the communities. However, they received compensation for their crops. Although the fishing community of Gbolekame North was not directly displaced by the BPA given its location downstream, the inundation and the dam operation respectively affected the river flow regime by causing long and sporadic periods of fluvial flooding. These had negative effects on their fishing activities, because it washed fishing equipment away and the sediments filled up hollows that were necessary for catfish to breed. They also muddied the waters, which in turn muddied fishing nets and made them too obvious under water to trap fishes. Moreover, they displaced farmers who had until then depended on the alluvial plains for vegetable farming. Despite these, the BPA did not compensate them for their lost fishing equipment nor their affected crops. Neither did it compensate them for economically displacing them. Similarly, the Carpenter community was not affected by the inundation due to its location farther downstream and away from the river. However, the erection of four transmission towers to transmit electricity to the national grid among others, displaced the farmers from the northwestern part of the community. Incidentally, this area was the most accessible for farming, because the eastern part has been under acquisition by the Forestry Commission of Ghana since the 1970s. Subsequent to erecting the transmission towers, the BPA earmarked some acres of land within the acquired area for a solar farm, leading to further displacements and restrictions of access. Consequently, many of

the displaced farmers received compensation for their farms. However, during the fieldwork, about three farmers claimed that the BPA was yet to compensate them.

Figure 6.1: A map of the study area showing the current locations of the study communities



Source: Reproduced from multiple sources (2021)

Given these incursions, the participants recounted a new system of land access, including a new land tenure system and new qualities of land. The next sections describe these and later interpret them according to the theoretical framework. Essentially, the section tackles research questions 'a (ii)' and 'a (iv)', which are respectively, 'What are the recent land tenure systems?' and 'What are the recent qualities of land? '.

6.2.1 A descriptive analyses of the recent land tenure system

Although pockets of dissent abound among the participants of the study communities, several accounts indicated that land has become a private resource after the acquisition and the construction of the Bui Dam. During the interview referred to above, the Land Administrator authenticated this perception as follows: "The acquired lands were vested in BPA to use, free from any encumbrances subject to Section 22 of the Bui Power Authority (BPA) Act 740". A review of Section 22 [2] of the Act shows that these uses encompass the

impoundment to expedite the functioning of the dam, the development of a so-called Bui township, the resettlement of people, and any other uses that may support the functioning of the BPA. These show that the State's interest in the area was beyond the dam construction and involved plans of spatial development among others. Following the State Lands Act 125 (1962b) and Article 257 [2] of Ghana's Constitution (1992), which define the features of appropriated land, the acquisition by the State effectively makes the land a public land, which is dedicated to a public purpose or something in the public interest. However based on the BPA Act 740, the entrustment of the acquired land to the BPA as a body corporate, for the exclusive uses above makes it conceptually a private resource, whereby others could be excluded from its enjoyment (see: Hess and Ostrom 2001, 120). Given this, the BPA has instituted a land tenure system, which may at best be described as statutory due to its foundations in the State. The subsequent sections encompass the principles, procedures, and practices of control, use, and transfer of land as provided under this new tenure system and as reported by the participants.

6.2.1.1 The right of ownership and control

Given the State's acquisition of the land and its entrustment to the BPA, the latter is currently the allodial titleholder. Thus, it has the rights of ownership and control over the land, but also the water body, which following Article 257[6] of Ghana's Constitution (1992), had been "vested in the President on behalf of, and in trust for the people of Ghana". This is pursuant to the Introductory Section and Section 22 [2] of the BPA Act 740, which also gives the BPA a legal mandate to develop the Bui Dam and others at "potential ... sites on the Black Volta River ..." as well as the Bui township among others. Though oblivious to this statute, the participants of the communities generally referred to the BPA's power to displace and resettle people, and to determine access to land as key manifestations of its ownership and control over land. As emphasized by a 64-year-old woman from Akanyakrom during an interview on 11 December 2018, "*Those with power who own the land displaced us from our old community and brought us here*". In this regard, the BPA's ability to re-demarcate the area for various uses such as the inundation, dam construction, and resettlement sites among others underpin its authority over land.

Of relevance is also the BPA's control over land access through the establishment of a new land tenure system, which is statutory by nature and outstrips the pre-existent customary land tenure systems. As gathered, this new system underscores the re-demarcation of the study area and encompasses certain protocols of land access including restrictions, procedures, and practices of use, which the next subsection discusses. Reflecting on all these at an FGD with the traditional authorities (TAs) of Bui on 5 February 2019, a member in his late 70s resignedly exclaimed that, "*The fact is that the BPA owns all the land around here*". Intimating a similar notion, the Bongase Abusuapanin also related on 11 November 2018 that, "*The BPA recently approached me to seek my approval for the construction of a solar farm on some parts of the acquired land. I replied that as they have acquired all the lands, I do not have a say on how they use them*". Besides the TAs, Many commoners also accept the BPA's ownership and control of land. Underlining this view during an interview on 6 November 2018, a woman from Bongase caustically exclaimed that, "*The BPA has authority over us and our land because their name even says authority*".

Despite this general acknowledgement and the manifestations of the BPA's authority over land, some others renounce the acquisition and this authority. *"I have seen signboards that show that the land has been acquired, but I am certain that it is not real because no one has received compensation on the land"*, explains a 54-year-old man during an FGD with a farmers' association in Bongase on 17 January 2019. As mentioned previously, the BPA had still not paid the compensation on the acquired land as of the time of conducting the research. However, as Section 23 of the BPA Act 740 (2007) acknowledges the BPA's obligation to pay land compensation, this hesitancy runs afoul of Article 20 of the Constitution (1992) and the State Lands Act 125 (1962b) to which the section is subject. Categorically, Article 20[2a] of the Constitution states that, *"Compulsory acquisition of property by the State shall only be made under a law which makes provision for the prompt payment of fair and adequate compensation"*. To this end, Section 23 of the BPA Act 740 references the State Lands Act 125 (1962b), whose position on claims and compensation is found in Article 4[1]. The Article states that the affected persons should receive payments upon the submission of *"claim or interest in the [acquired] land"* and *"the amount of compensation claimed"*.

During his interview, the Land Administrator affirmed that, *"The processes include the submission of claims by the landowners and an assessment by the Lands Commission through its Land Valuation Division (LVD). After these, the LVD submits a valuation report to the government who releases the requisite funds to pay the claimants"*. He also acknowledged that the former landowners (the chieftains) have consequently submitted the particulars of their claims to the Lands Commission. However, *"there are conflicting claims and disputes between the Chieftains of Bui and Banda Ahenkro [the Banda Paramountcy], including Bongase"*, which have stalled the process. When further probed on the issue, he explained that, the BPA considers the acquired area as one and that all payments are being processed under a single block. Hence, any conflicting claims need to be resolved before the final submission can be made for the payment to be released. When asked about this on 4 September 2018, the Bui Abusuapanin confirmed that, *"The Bandas are also claiming some parts of our land that is why the compensation has been withheld"*. Of relevance, although the native cosmological idea of land included both the earth surface and water, the chieftains' claims for compensation is only in relation to the former, which underscores the delimitation imposed by Article 257[6] of the Constitution (1992) on customary land ownership.

Besides those who renounce the BPA's ownership of the land due to the delay in land compensation payment, some members of Dokokyina also reject the BPA's claim, referring to it as illegal. According to them, the BPA's claim and subsequent acts of displacement were contingent on the extent of the impoundment, which by all indications had no impact on their land. Due to this and the quality of the land at the resettlement site, the next chapter will show that some of them resisted the resettlement and have remained at the former location. While these people know of the BPA acquisition and yet renounce it, the people of Gbolekame North conversely have no knowledge of it. Their sole knowledge of the BPA and its activities is in respect of the fluvial flooding caused by the inundation and the dam operation. Thus, to them, the Bian Clan Head still owns and controls the land. Irrespective of the deferred payment and some people's lack of knowledge or renunciation of the acquisition, the BPA wields control over land access. As

the subsequent section will show, this is evident in the BPA's mammoth use of land and its enforcement of certain land use regulations. It is also evident in the BPA's role as the arbitrator of land conflicts.

6.2.1.2 The right of use

The research found that although the BPA unveiled a proposed master plan in December 2018, it has restricted use rights to certain areas since its arrival in 2007. The people related that the BPA enforced this according to a supposed spatial planning scheme for the area. For the respective resettled communities, these use rights are limited to the residential areas and an area of unknown size, which the BPA allocated to them as farmlands. Similarly, members of the other communities (including pre-existing non-natives) also have use rights to what remains of the farmlands and the respective lands on which they have already built their houses. Thus, all undeveloped lands within the built-up areas are restricted. In all cases, these use rights are irrespective of gender, age, nor local status. The research found that the BPA has incorporated the customary principle of an open access to farmlands for all communities. However, access to building lots is not as open, but predicated on some established protocols, which are explained subsequently. For all the communities and its members (including pre-existing non-natives), the use rights to farmlands and building lots relate to leasehold interests of a period of fifty years. Following Section 6 of the Land Bill, such interests are "subject to terms and conditions" and do "not exhaust the interest of the grantor in the land" (2020, 16). Accordingly, Section 13[1] of the BPA Act 740 underlines the BPA's authority to "... enter on any lands for the purposes of constructing any works, or of examining, repairing, altering, or may remain there ... (to) execute ... things (that are considered) necessary [sic]". Impliedly, while the leasehold interest facilitates use rights to some lands within the acquired area, the BPA still holds control over those lands and can regain possession of them at its discretion, thereby terminating the leasehold interests. The next paragraphs describe the use rights for arable farming and building. Per the BPA's protocol, these are the only authorized uses to which the leasehold interests apply.

Arable farming: According to the Land Administrator, the BPA's restricted areas generally include the vast expanse north of the resettlement site and the Bongase community, the reservoir and its banks, the banks of the downstream river within its concession, and the areas between the resettlement communities and their allocated farmlands. Specifically, the restrictions of the banks of the waterbodies are to prevent siltation of the reservoir and the river, which might affect electricity generation and the stability of the dam. The immediate surroundings of the resettlement site are also restricted, because the BPA has earmarked them for future residential developments. Despite the restrictions, the Land Administrator also indicated that, "*Due to the delayed land compensation payments, natives are allowed to cultivate non-perennial crops in certain restricted areas such as the lands in the north, but with our approval*". This claim was affirmed by many participants among which was a 38-year-old woman from Akanyakrom. During an interview on 11 December 2018, she stated that, "*When the BPA resettled us; it gave us the permission to access the land in the restricted area for cultivating only subsistence crops*". However, to gain the approval of the BPA, the farmers have to submit an application to the CEO. After this, a team will obtain and plot the geographic data of the area of interest in order to determine its availability before it allocates it to them. Despite this rigorous

process, the Land Administrator mentioned that access to the restricted area is insecure, because the occupants may be displaced with a three-month notice. Non-natives may also gain similar access through the BPA, but at a fee.

Besides the payments, the BPA has also established certain protocols that delimit the farmers' general use rights to even some accessible areas. For instance, although commercial cashew cultivation had proliferated before the dam construction, the BPA prohibits it and the cultivation of other perennial crops on a large-scale within the acquired area without its approval. Like the BPA, few members of the study communities acknowledged that this proscription was to facilitate their sustained access to land. However, all the participants decried the limitations it imposes on their freedom of access and their ability to obtain the maximum benefits from land. Many of them contended that the proscription is actually in the BPA's interest, because it eases its access to land for future projects. In fact, the Land Administrator confirmed this perception by claiming that the BPA intends to spearhead a rigorous spatial development of the area. Consequently, during the fieldwork, the research learnt that the BPA had served the farmers who were accessing the restricted areas a notice of evacuation to facilitate the construction of a solar farm. As further gathered, it had no plans to compensate the affected farmers for their loss. Besides this, the BPA proscribes people against tree felling in order to conserve the environment.

Despite lacking the right of ownership and control, the chieftains continue to enforce certain use conditions on all farmers including the observation of taboo days and the proscriptions against felling sacred trees. Ironically, even the resettlement communities who are detached from their ancestral lands observe these taboos. Likewise, restrictions against farming transversally, starting uncontrolled bushfires, and uprooting or destroying crops cultivated by adversaries especially during land disputes are still relevant in all the communities. Also with respect to the Dagaates and other non-native farmers who pre-existed the dam construction, the research surmises that the BPA automatically converted their customary tenancies into leasehold interests after the acquisition and the institution of the statutory system. However, the chieftains continue to wield authority over their access and expect them to adhere to the precepts of customary tenancies in order to maintain their access to land. These include making annual payments towards the celebration of the yam festival. In Carpenter, they are also under compulsion to work on the Chief's farms for free. Thus, although they hold leasehold interests, the chieftains continue to determine their access to land. Moreover, among the Dagaates, women are still unable to access land independently of men despite their guaranteed rights of use under the BPA's statutory tenure system.

Building: Per the BPA's statutory tenure system, prospective native and non-natives builders are required to apply to access real estate lots. For all the communities, the research gathered that since 2011, the BPA has banned the construction of unapproved houses. People who could consequently not build houses at the old settlements of Bui, Dokokyina, and Akanyakrom became houseless during the resettlement, because the BPA only allocated houses to previous house owners. Following this, they mounted pressure on the TAs for building lots, which compelled them to request the BPA to allocate some land to them. Subsequently, the BPA allocated ten, eight, and nine plots to the TAs of Bui, Dokokyina, and Akanyakrom respectively in 2012 for redistribution to those who were ready to build. Upon their exhaustion in especially

Bui and Akanyakrom, the respective TAs contacted the BPA in 2013 for more lots, at which the BPA announced a new protocol requiring individual applications to be made and accompanied by some payments, which are provided in Table 3 under the subsection on '*Marketability of land*'. However, the TAs and the youth of the resettlement communities resisted this protocol, prompting the BPA to release an additional eleven plots to the TAs of Bui in 2018. As of the time of conducting this research, the Akanyakrom community had still not received additional lots and the Dokokyina community had still not exhausted its first allocation. In the other communities, the BPA still enforces the protocol, which as explained in Chapter 7, has resulted in diverse reactions.

Moreover, the BPA has delimited the use rights of especially the members of the resettlement communities. According to the participants, the BPA claimed that it was establishing a Bui City during their resettlement. This quest is in respect of Section 22[2b] of the BPA Act 740, which underlines the BPA's mandate to develop "the Bui township [*sic*]". To this end, although the fishing community of Akanyakrom for instance requested to be resettled near the waterbody to expedite their artisanal fishing activities, the BPA rejected the request, explaining that the communities had to be resettled together to establish a bigger community from which the city would grow. The participants claimed that the BPA further stated its intention to facilitate 'beautification' of the city and thus prohibited the construction of mud and thatch houses and the use of firewood at the site. A 32-year-old man from Bui explained during an interview on 4 February 2019, "*The BPA informed us that unlike our primitive old settlements, we cannot use firewood nor build mud houses, because the resettlement area is intended to be like a city. We can only build concrete blockhouses and use gas or charcoal*". Relevantly, the participants' references to concrete blockhouses encompass concrete block structures with aluminum roofing sheets.

However, the Bono Regional Head of the Town and Country Planning Department (TCPD) disproved this notion during a Town Hall meeting on 11 December 2018 at the Resettlement Community Center to unveil the proposed master plan for the acquired area. Although the Land Administrator confirmed the BPA's position on beautification when asked by a native, the TCPD Head clarified that, "*There is no law against the construction of mud and thatch houses anywhere in Ghana. The idea of beautification does not refer to types of building but to the proper demarcation and location of structures*". Regardless of this clarification, the members of the resettlement communities are still under compulsion to adhere to the BPA's so-called protocol of 'beautification', which inhibits builders with preferences for mud and thatch houses, but also the whole community given their high dependence on firewood for fuel. These show that although the BPA has granted use rights to the people for the basic purposes of arable farming and residential real estate, they are in practice, restricted.

6.2.1.3 Right of transfer

Given its custodianship of the acquired land, the BPA possesses the ultimate right of transfer. Article 22[3] of the BPA Act 740 (2007) provides in part that, "... the Authority may sell, transfer, exchange, let, demise or otherwise dispose of all or any of (the acquired land) to or with a person" This explains why the BPA was able to transfer parts of the acquired land from the Bongase community to the resettlement

communities for residential and farming purposes. Though largely unaware of the BPA Act 740 (2007), the communities are aware of the BPA's sole power to alienate land due to the events of the recent past. As emphasized by a 37-year-old woman during an FGD with some women of the Akanyakrom community on 17 January 2019, "Around here, one can acquire land only through the BPA."

However, although unwritten in the BPA Act 740, the BPA has also lobbied all the chieftains to play the role of intermediaries of land access. Particularly, it has delegated its right of transfer to the chieftains of the resettlement communities by involving them in the distribution of residential lots. A sub-chief of Dokokyina acknowledged this fact as follows during an FGD with the TAs on 19 January 2019: "The BPA has given the Chief some lots for residential purposes; so anyone who wants to build a house must see the Chief and not the BPA for land". Additionally, these chieftains and those of the other communities, and the Banda Paramount Chieftains referee prospective users to the BPA. As explained by the Land Administrator, "When someone needs a land, they would have to consult a chief who would then direct them to us for consideration. The chief in question would also write a note indicating the applicant's citizenship of the community to facilitate his/her consideration by us". These support the BPA's sole authority to transfer land and show that the chieftains' general role in land access is presently limited.

However, the research found that at their levels, the chieftains are able to enforce certain procedures before redistributing lots – as is the case of the resettlement communities – or referring applicants to the BPA for consideration. Thus, the research further found that in the Bui and Akanyakrom resettlement communities, the chieftains require prospective builders to submit applications for their consideration. Particularly in the latter, they also quiz the applicants about the community's history and traditions. Following the custom, successful applicants have to present drinks to the chieftains of the respective communities as a sign of their gratitude. In a manner, these principles and procedures sustain the chieftains' domestic authority. Yet, while the roles of the landowning chieftains are nevertheless limited, the BPA's principle has elevated the non-landowning chieftains of Akanyakrom by giving them parallel authority. With respect to the Gbolekame North community, the research found that the BPA only recognizes the Jama Chieftains as the intermediaries of land access. This has effectively established their authority over all the clan lands and extinguished the authority of the Bian Clan Head who previously governed the land on which the community subsists.

The State's acquisition of the land, the BPA's imposition of a new land tenure system, and the construction of the dam and its facilities have had some implications on the quality of the land resources, which the next subsection describes. These address research question 'a (iv)' concerning the recent qualities of land.

6.2.2 A descriptive analyses of the recent qualities of land

Participants of the study communities related the manner in which the recent events have affected the qualities of land, including its extent, productivity, and marketability. During his interview, the Land Administrator also intimated that certain characteristics of the land influenced the State's decision to

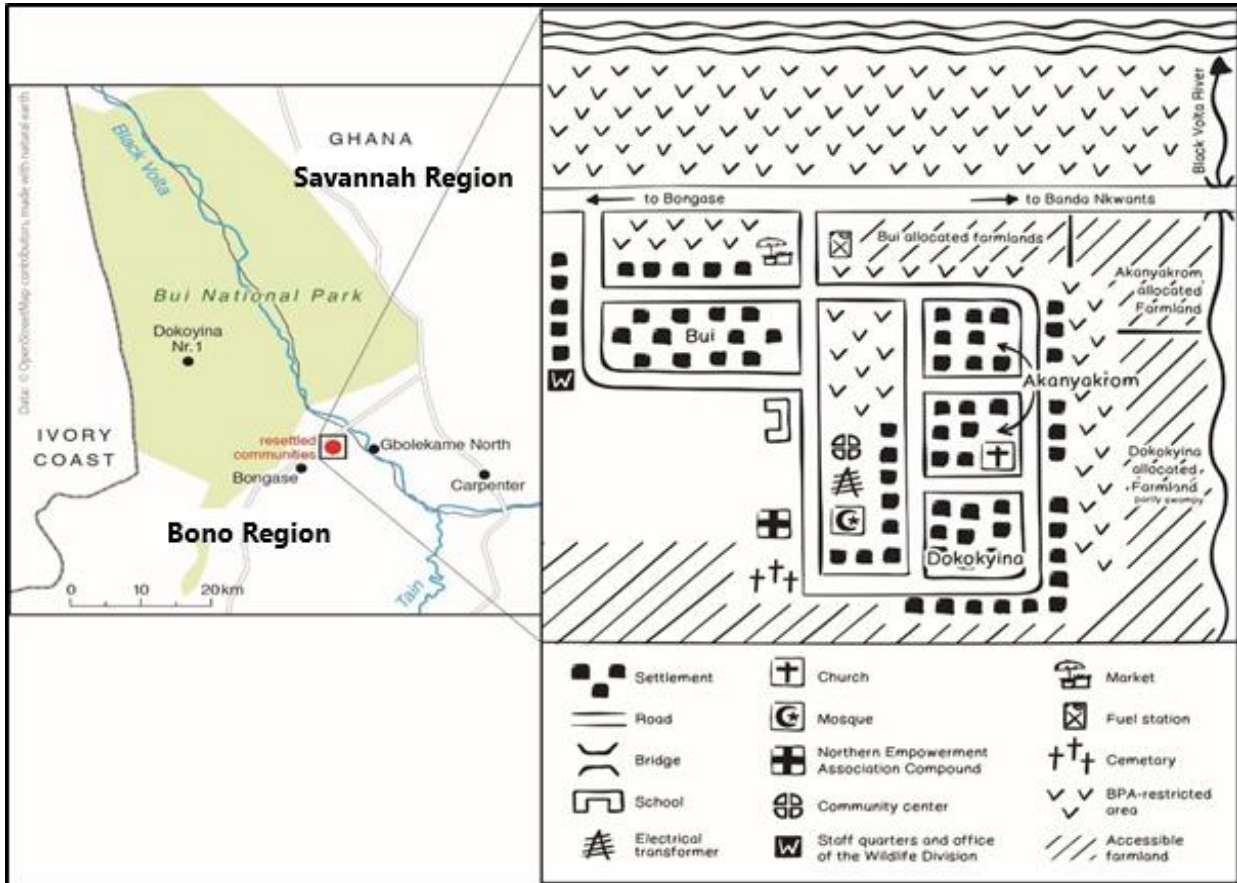
pursue the dam. These were the land's extent, but also the elevational drop of the river, as identified in 1925 by Albert Ernest Kitson. Gleaning from the primary data, the subsections recount the participants' descriptions of the recent characteristics of land. Given the unique circumstances of the communities, the descriptions are case-based in order to lay the foundation for explaining other peculiarities in the subsequent sections. Here and in other sections, the cases of the three resettlement communities are discussed together because most of their experiences are similar. Nevertheless, exceptions are emphasized where necessary.

6.2.2.1 The extents of accessible land

As previously related, the State required 1,843.71 km² of land to meet the design parameters of the dam construction. To this end, its decision to advance the plans was due to the availability of the requisite land, particularly, in proximity to the river. Besides the Bui National Park, which had conserved some parts of the land, the State was able to acquire the land, because the area was also remote and sparsely populated, and land use was mainly for subsistence farming. While this underlay the State's appreciation of the vast extent of the land, the farmers, builders, and chieftains bemoaned the current extent of accessible land. Except Gbolekame North, the members of the other communities indicated that although the acquisition meant nothing in the beginning, the subsequent inundation and the construction of the dam and its facilities (powerhouse, offices, accommodation facilities, and transmission towers) have effectively resulted in their loss of large swathes of land. As these accounts differed by study community, the next paragraphs describe the current extent of accessible land by case. Given the acquisition and the effects of the dam construction, the research could not obtain nor determine the exact sizes of the accessible communal lands. However, it relies on the participants' accounts and especially on their respective resource maps to give details about these. As mentioned in Chapter 3, the Bui community did not produce a resource map during the preliminary workshop. Nevertheless, given its shared experiences with the other resettlement communities, the research infers from their outputs to support its respective account.

The resettlement communities: Participants of the resettlement communities, including the landowning traditional authorities (TAs) of Bui and Dokokyina contended that the BPA's land allocations are generally substandard to what they had respectively lost. To the TAs of Bui, they have also lost control over the water body due to their resettlement. The commoners of the three communities also shared this opinion. Regarding farmlands, they referred to the sizes of the communal allocations to underscore the limited extent of land. During the preliminary workshop in Bui on 5 September 2018, the Abusuapanin explained that, "*The allocated farmlands are inadequate, because they are bounded on the west by our residential areas and the Bongase community and on the east by the river. The land beyond the river is also inaccessible, because the Gbolekame North community already farms there*". Thus, ultimately, the allocated farmlands are between the resettlement communities and Gbolekame North, which restricts the people's access to the extensive land needed to support their farming practices. Figure 6.2 on the next page, which is the output of the combined resource maps of the Akanyakrom and Dokokyina communities, supports this account.

Figure 6.2: A composite resource map of the resettlement communities showing the recent extent of accessible land



Source: Reproduced from the resource maps of the participants (February 2021)

Incidentally, the BPA had reversed an initial plan to assign two acres of farmland to each of the resettled households, because the TAs had resisted it by referring to the common practice of shifting cultivation. Consequently, during the early months of resettlement, all the people scrambled for farmlands at the defined areas, resulting in an unequal distribution in favor of those who had the 'strength' to claim large tracts of farmlands through first occupation. Besides this, the population of farmers has increased over time as younger members have grown up and joined the work force. The farmers are also intensifying cashew cultivation due to the proliferating market in especially Sampa and the increasing value of the seeds relative to the other crops. As later explained, the shift to cashew cultivation has also been influenced by the declining soil productivity of the allocated land for the cultivation of the traditional crop, yam. Given their perennial characteristics, cashew trees produce shade when mature, which inhibits other crops from thriving on the same piece of land. This has increased the demand for land to cultivate subsistence crops and to start and expand cashew plantations. Ultimately, this has in turn underlain the farmers' recent experiences of land shortage.

While the farmers attributed the rapid shortage to the limited extent of the allocated area, some also blamed the staff of the Wildlife Division for it. As shown on the map, the BPA relocated their offices and staff quarters near the resettlement communities. Thus, some of them have capitalized on the customary principle of an open access to land to access the allocated land for farming. During a key informant

interview on 5 September 2018, the Guantoahene (traditional ombudsman) of Bui emphasized the effects of their access as follows: *"A meal prepared for three, but shared by four is never enough"*. While this was widely reported by the participants of all the three communities, some participants from Bui also blamed the Akanyakrom community for the land shortage. In their estimation, the BPA should have allocated the farmlands of the Akanyakrom community to the Bui community as their historical host, after which it would have decided the Akanyakrom community's access. Some also failed to understand why the Akanyakrom community had ventured into farming at all, contending that they should have continued artisanal fishing, which was the main economic activity for which the Bui TAs admitted them to the area in 1919. To be sure, the members of the Akanyakrom community related that they would have been better off with fishing because it generates sufficient money throughout the year. By contrast, farming is seasonal and only pays off annually. Thus, as later explained under the section on their social constructions of land access outcomes, the community expressed their dismay over the BPA's decision to resettle it farther from the water body.

Members of the Akanyakrom and Dokokyina communities debunked the Bui community's account regarding the effects of the former's land access on the availability of land. Likewise, some members of all the three communities believed that the allocated lands would still have been inadequate without the unauthorized access by the staff of the Wildlife Division. During an interview on 18 January 2019, a 34-year-old man from Dokokyina emphasized that, *"The land would still have been insufficient without its use by the staff of the Wildlife Division. This is because unlike the Ashantis who practice crop rotation, we practice shifting cultivation, which requires access to extensive land"*. Given the land shortage, the farmers reported that they could presently access about two acres of land seasonally, which is disparate from what the members of Bui and Dokokyina accessed historically. While the men and women of the former could access at least ten and three acres of land per season respectively, those of the latter could respectively access at least twenty and five acres per season.

Besides farmlands, the participants also indicated that the availability of building lots has also declined after their resettlement. They explained that although residential lots are physically available around the site, the BPA's protocol is restrictive to their access. This is because it requires them to apply for the lots through the TAs and wait for the land to be demarcated before they can subsequently access them by further applications to the TAs. During an interview on 4 February 2019 at his residence, a beneficiary of the allocated building lots from the Bui community recalled that, *"It took about a year and half after our resettlement in 2011 and my application before I got this land to build my house"*. Even after obtaining the lot, *"I and the other beneficiaries were instructed by the TAs to build our houses within a year or risk losing them, because they did not want the BPA to see any allocated land unused, as it might affect their future requests for additional lots"*, he further recalled. As implied earlier, the allocated land was also disproportionate to the number of prospective builders in particularly Bui and Akanyakrom. Thus, in the former, the allocations were on a first-served basis. In the latter, applicants went through interviews by the TAs about the community's history and traditions as part of the selection process. However, during an interview on 12 November 2018, one of the successful applicants in Akanyakrom, a 32-year-old man whose father is a member of the TAs,

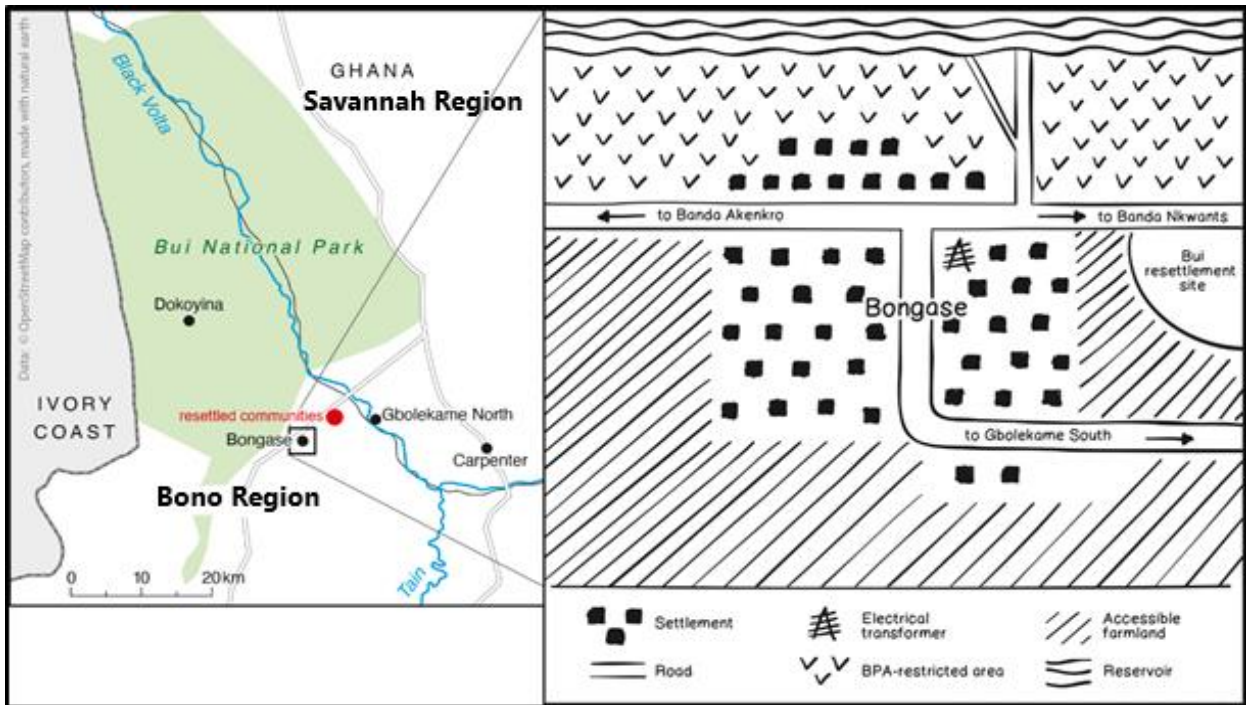
insisted that he and the others were only successful because they were related to some of the TAs. He further stated that the TAs gave them up to six (6) months to complete their buildings. When interviewed about this on 18 January 2019, a member of the TAs explained that, "*The BPA had promised to release more building plots only after the initial ones were exhausted*". Due to this, some successful applicants lost their lots to others as they were unable to meet the condition of their access.

Despite this and their exhaustion of the demarcated lots, the research gathered that the Akanyakrom community had still not received additional lots from the BPA. Conversely, after several requests, the Bui community received a second allocation in 2018. However, due to the ongoing shortage, they have also requested the BPA to allocate a reserved land for future generations, which is yet to be honored. The TAs of Akanyakrom have also requested for four acres of land to rebuild the Roman Catholic Church, which most of the members are affiliated to, but was lost to the inundation. Regarding this, the research found that the BPA has in turn requested them to pay an amount of GHC 42,000 (equivalent to €6,592) per the current protocol, because it has already compensated them for the loss of the church. To the communities, this request underscores the current shortage of land as they could previously access any lot of their choice for any purpose.

In all cases, the research found that the builders would have wished to build in proximity to family and friends given the collectivist attributes of the communities. However, the BPA's resettlement spatial plan and the location of available lots – that is on the fringes of the built up areas – have rendered this impossible. In view of all these severities, a 40-year-old man remarked at an FGD with the youths of Bui on 3 February 2019 that, "*Building lots are harder to access than cocaine around here*". Relevantly, the foregoing discussion shows that the extents of land under the control of the landowning TAs of Bui and Dokokyina have reduced significantly. Although the Akanyakrom community also has lesser land at its disposal than before, their TAs have assumed a role equivalent to the previous landowning chieftains. This is due to the BPA's communal allocation and the subsequent authority granted to the chieftains as intermediaries. Yet, due to the limited availability of land, the respective TAs are unable to grant non-natives access to farmlands nor building lots independently of the BPA.

Bongase: In the Bongase community, the TAs explained that the inundation of the river valley in the north and the resettlement of the three communities and the Wildlife Division facilities in the east have depleted the extent of land under their control. The farmers shared the same view by relating that both the inundation and the resettlement displaced them from the preferable lands in the north and east of the community. Thus, as shown in Figure 6.3 on the next page, which is a replica of their resource map, the only accessible farmlands are in the south where the farmers previously rejected for being relatively unproductive. Following their displacement, they however scrambled over those lands to sustain their agrarian livelihoods.

Figure 6.3: A resource map of the Bongase community showing the recent extent of accessible land



Source: Reproduced from the resource maps of the participants (February 2021)

Coupled with the displacement are also the growth in the population of farmers and the consequent increase in cashew cultivation. The participants related that due to the proliferating cashew market, the community has seen an influx of both native and non-native farmers. The natives are returnees from Libya and Sefwi, the largest cocoa growing area in Ghana. The returnees from Libya are mainly young men, who had attempted to reach Europe without success, while those from Sefwi are older men and women, who used to work on cocoa farms as laborers. Besides these and the non-native farmers, the participants also mentioned that the population of farmers is increasing from ageing younger natives who have been compelled to join the enterprise due to a general lack of alternative livelihoods. During an interview on 8 November 2018 with one of such young farmers, a 24-year-old man, he explained that, “After senior high school, I migrated to Kumasi to work with my brother in 2014 but I had to return in 2016, because his business collapsed. However, there is nothing here; no jobs, and no opportunities besides cashew farming. So I had to find a land to start farming to sustain myself, my mother, and three younger siblings”. Yet, another, a 22-year-old man who completed senior high school in 2017 claimed during an interview on 6 November 2018 that, although he had started cultivating cashew in 2015, he intensified his efforts after school. According to him, he realized that his hope of gaining employment with the BPA was futile and the company seemed unprepared to implement alternative livelihood programs for the affected communities. Relevantly, these accounts mirror those of several others in the community. Thus, almost all the youth and the aged are involved in farming, which has further affected the availability of land.

Besides the lack of alternative livelihood opportunities, the farmers’ interest in cashew cultivation is due to the proliferation of its industry, the increasing value of the seeds, and as later elaborated, the poor productivity of the soil for cultivating the traditional crop, yam. However, given their longevity, the

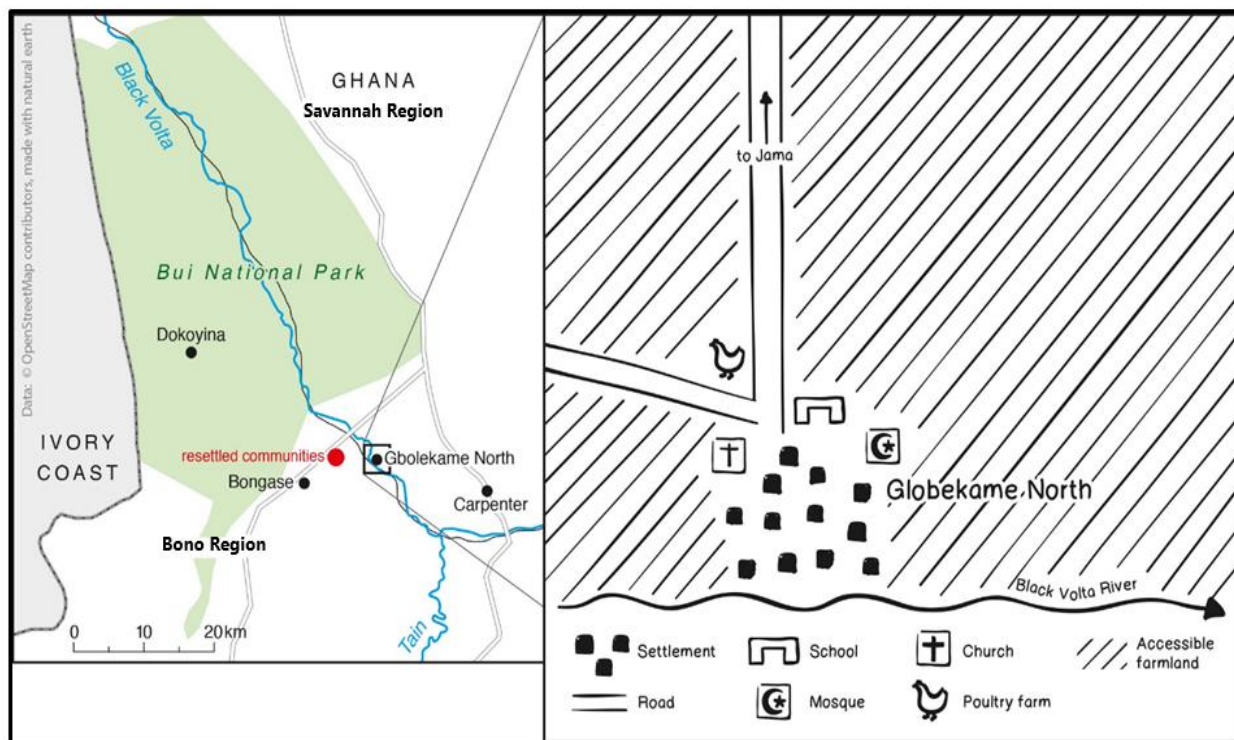
cultivation of cashew trees inhibit the farmers from cultivating other crops on the same land. Thus, it has also contributed to the land shortage. Despite these, the farmers reported that they could still make land claims. However, given the reduction, these claims are limited to a short distance from their active farms, beyond which other farmers may also lay claims. "We allow other farmers to claim some part of our lands in the spirit of brotherhood, because the land is limited and we must all eat", explained a 34-year-old farmer when interviewed on 28 November 2018. Thus, the farmers cultivate about three acres of land per season to prolong their access to the lands they have been able to claim. Evidently, this is lesser than what the men could access before the dam construction, which was at least ten acres per season. Nevertheless, the farmers also reported that their farmlands are in proximity to family and friends, which enable them to rely on each other to fend off invasive wildlife.

Regarding building plots, although they are reportedly in abundance within the community, the BPA's protocol is a major hindrance to the TAs' authority to transfer them and to the prospective builders' ability to access them. As explained previously, apart from the resettled communities, the BPA requires other natives and non-natives to pay for lots. The people consider this requirement burdensome because although the BPA has acquired and diminished their accessible lands, it has not made any efforts to enhance their livelihoods. Thus, they generally bemoaned their inability to afford the BPA's charges and the cost involved in constructing houses. Moreover, they related that even if they met the requirements, the BPA's land-use plan does not guarantee their access to preferable lots.

Gbolekame North: The sporadic fluvial flooding has reportedly led to a decline in the artisanal fishing industry in Gbolekame North. This has forced the fisher folks to venture into farming, which has also attracted many non-natives from the northern regions of Ghana due to the increasing attraction of cashew cultivation. Despite the influx, farmlands are reportedly abundant. Figure 6.4 on the next page, which is the composite resource map produced by the participants during the preliminary workshop shows this.

Given this, the participants also reported that building lots are available in and around the community. As explained previously, members of the community are unaware of the BPA's land acquisition and the protocols on accessing building lots. To them, the Bian Clan Head still owns the land and access to building lots is still open. Thus, they are able to access preferable lots in proximity to kin and friends. Although the Bian Clan Head is however aware of the BPA's protocol, he overlooks the people's informal access and sometimes facilitates it.

Figure 6.4: A composite resource map of the Gbolekame North community showing the recent extent of accessible land



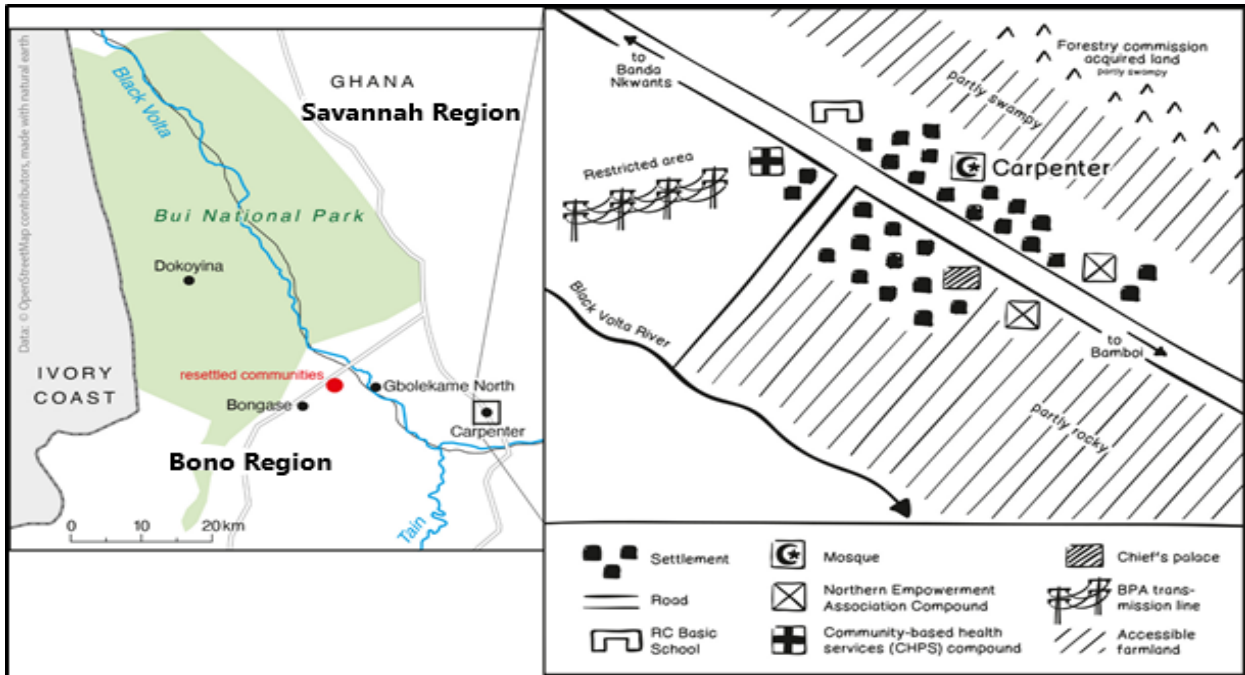
Source: Reproduced from the resource maps of the participants (February 2021)

Carpenter: Though unaffected by the inundation, the Chief of Carpenter contends that the erection of four transmission towers and the allocation of certain areas for a future solar farm have reduced the extent of land under his and the Queen mother’s control. To the farmers, the BPA’s activities have displaced them from the readily available and most fertile lands in the community. This is because the lands in the east have been under acquisition by the Forestry Commission since the 1970s and hence, are inaccessible. Following the recent events, the only accessible farmland is a strip between the acquired areas and some lands in the south-west, over which the farmers scramble to secure their livelihoods. However, as shown in the reproduced resource map in Figure 6.5 on the next page, part of the accessible areas are respectively swampy and rocky and are unsuitable for cultivating the traditional crops, including yams. However, the farmers related that they could use the rocky areas to cultivate cashew trees, which is proliferating in the area due the increasing value of the seeds and the farmers’ quest to maximize the use of the limited land.

Consequently, the farmers have had to settle for about three acres of farmland seasonally, which is less than what they men used to access in the past; that is at least ten acres. During the preliminary workshop, the Chief’s right-hand therefore remarked, “I would have wished to cultivate ten acres of land this season, but I was able to cultivate only two acres”. Actually, the farmers reported that they could still claim lands. However, due to the reduction in the extent of accessible land, they have been compelled to cultivate smaller land sizes per season to prolong their access to the claimed land. Also relevant, they are able to farm in proximity to family and friends to expedite mutual support. With respect to building lots, the participants reported that they are in abundance in the community. Although they were oblivious to the BPA’s protocol of access,

which is mainly the charges, they related that its staff frequently warns them against building new houses, which is restrictive to their access.

Figure 6.5: A resource map of the Carpenter community showing the recent extent of accessible land



Source: Reproduced from the resource maps of the participants (February 2021)

Given that farming is the mainstay of the economies of the study communities, the participants also related the recent quality of the soil in terms of its ability to support high crop yields. The next section discusses their accounts by community.

6.2.2.2 The productivity of the soil and general crop yields

The resettlement communities: The farmers of the resettlement communities reported that the productivity of the soil has declined significantly over the past years. They attributed this to the limited availability of land and their compulsion to practice crop rotation; that is cultivating diverse crops on the same land for consecutive seasons without fallowing. As emphasized by a member of the Bui TAs during an FGD with them on 5 February 2019, “In the past eight, we have each been cultivating the same pieces of land, which we acquired when the BPA resettled us”. Actually, besides being only a fraction of what they had lost, the allocated farmlands were also under cultivation by some members of the Bongase community before their re-allocation. Thus, the soil’s productivity had already deteriorated when the communities received the land as compensation from the BPA. Moreover, to the farmers of Dokoyina whose farmlands are closer to Bongase, there were reports of invasion by especially troops of monkeys. According to them, the monkeys trample on seedlings and dig out cultivated yam setts and mature yams, which affect the ability of the crops to thrive and yield as expected.

Bongase: In the case of Bongase, although farmlands are presently available in the south, they are reportedly not as fertile as the inundated river valley nor the eastern lands where the resettlement communities are presently located. Besides this, the farmers mentioned that there has been an increasing wildlife invasion of their farms. As they explained, many monkeys and grass cutters migrated to the south during the inundation of some parts of the Bui National Park. Like the Dokokyina community, they complained that the monkeys uproot and feed on cultivated yam setts and mature yams. Conversely, the grass cutters chew off the bases of maize plants, hindering their survival and ability to yield. According to the farmers, the numbers of the wildlife were fewer in the past and could be repelled by sheer human presence or scarecrows. However, besides their increasing number, there are other species that are more difficult to scare off. Reportedly, such new monkey species are unafraid of women and can even chase them out of the farms when a man is absent.

Gbolekame North: In Gbolekame North, the farmers were pleased with the productivity of the soil. They claimed that due to the large extent of land, they are able to practice shifting cultivation and leave land to fallow.

Carpenter: As reported above, the Carpenter community presently has access to some land in the southwest and a strip of land between the community and the Forestry Commission acquired land. However, parts of these areas are respectively rocky and swampy, rendering them unsuitable for cultivating their traditional crops, yam. With respect to the swampy area, the Chief observed the following during the preliminary workshop on 5 October 2018: *"The swampy area would have been good for rice farming; but we do not cultivate rice around here"*. Given this, the people mentioned that the few accessible lands are being over-cultivated, which is reducing the soil's productivity.

Other key findings: Besides the poor soil productivity and the wildlife invasions in some of the communities, the farmers recounted incidences of agricultural pests and diseases and erratic rainfall patterns. *"Pests have become a great challenge these days and largely affect maize plants. Thus, this year, many farmers did not get anything from the maize they cultivated"*, reported a 42-year-old woman from Carpenter during an FGD with some women on 7 November 2018. All the participants also related that the pests and diseases affect cashew trees and melons besides maize. Regarding the erratic rainfall patterns, a 54-year-old man from Bui observed the following during an interview on 19 January 2019: *"Although it should have rained about two months ago to kick-start yam cultivation, it has not. Thus, most of us have not even made yam mounds for this season"*. In fact, many participants claimed that they had the ability to determine whether the rain would fall or not. Pointing to the east of the Gbolekame North community during an FGD with the youths on 18 January 2019, a 38-year-old man explained that, *"We all knew that it would rain when dark clouds gathered over there. These days when they do, the clouds drift off to the north where the rain subsequently falls on the reservoir where there are no farms"*. Acknowledging this claim during an interview on 29 January 2019, a 44-year-old man from Bongase further provided the local explanation for this. According to him, *"As the mountains of the area have all been submerged by the inundation, there is nothing to break the wind that moves the clouds up north"*.

The TAs of Bui also had a different explanation for these anomalies. During the closing workshop on 14 March 2019, an octogenarian sub-chief related that, the land on which they were resettled traditionally belongs to the Bui community. Thus, it is customary for their guests, the Akanyakrom and Dokokyina communities to present goats, chickens, and drinks to them to pacify the land when they have to bury their dead. However, both communities have repudiated this ritual, because the Akanyakrom community feels emancipated by the BPA's recognition and land allocation. As an independent community, the Dokokyina community conversely does not feel obliged to follow this custom. Thus, he related that the erratic rainfall patterns are the consequences of their sacrilegious actions. Regardless of the varied explanations, the local Agricultural Extension Officer for the western communities who was interviewed on 19 February 2019 acknowledged the problems without providing any personal explanation for their occurrence. As he stated, *"The greatest challenges that the farmers are facing are drought and fall army worms, which are found all over the country and usually attack maize plants. Other pests, like millibud and fungal diseases have also been attacking cashew trees"*.

6.2.2.3 Marketability of land

As noted earlier, land has recently become fungible under the imposed statutory tenure system. Therefore, even though the TAs did not necessarily exchange land for money in the past, they are set to receive some money from the State as payment for the acquired areas. In this regard, the Land Valuation Division (LVD) of the Lands Commission, which is a public authority, determines the compensation payment for land and crops according to internally set standards. This implies that the State also imposes the amount payable to the previous landowners. During his interview on 5 September 2018, the Chief of Carpenter also stated that, *"The BPA discouraged us from engaging independent valuers, because their recommendations would make no impact on the existing statutory rate"*. Ironically, this contrasts with the mining sector, whose activities involve compulsory land acquisition, forced displacement, and resettlement. Since the mid-1980s when Ghana implemented the World Bank's Structural Adjustment Program (SAP), the sector has largely involved foreign direct investments (FDI). Thus, for incidences of displacement and resettlement, the State requires holders of mineral rights to negotiate the payment of compensation with claimants. This is enshrined in Section 7 of Regulation 1 of the Mineral and Mining (Compensation and Resettlement) Regulations, L.I. 2175 (2012). Further, in Sections 1 and 5 of Regulation 2 respectively, claimants are entitled to independent valuers and mineral rights holders are instructed to "pre-finance the costs incurred by claimants in engaging" them, particularly when a committee is subsequently formed for the negotiations.

Contrary to these, the BPA Act 740 (2007) only makes a curt reference to the State Lands Act, 125 (1962b) as its basis for compensations, without any detailed provision on how the rates for both land and crops would be arrived at or the claimants' entitlements thereof. Thus, with respect to crop compensation, the participants decried the BPA's payments as too meagre. As gathered, the Regional LVD used the standard rates provided by the head office in Accra, the national capital, to determine the crop compensations. According to the officer of the Bono Regional LVD who was interviewed for the research, the head office fixes the standard rates biannually based on the cost method, which involves the use of countrywide crop

price data to calculate the average rate of both perennial and subsistence crops. Relevantly, he admitted that the rates are indeed 10 to 15 per cent lower than those of mining companies, which are fixed by negotiations with the affected communities and their private valuers. Given this, the participants stated that they were not only cheated out of the actual value of the crops at the time, but also the future value of crops such as cashew trees and yams, whose setts are frequently re-cultivated. As of the time of conducting the fieldwork, some farmers in Carpenter had also not received their crop compensations from the BPA. Likewise, the landowning TAs had not received the compensations for their lands.

Despite these, the BPA has assumed ownership and control of the land and has advanced its activities with full authority. During an interview with the BPA's Deputy Director of General Services on 28 November 2018, he indicated that, "*The Constitution fails to specify whether compensations should be paid before or after land acquisition. It only underlines prompt and fair payments to the claimants and these are relative*". Retrospectively, if the Akosombo Dam resettlement program of 1965 is anything to go by, then the expected payment could take years. To be sure, a news article published in the Daily Graphic in 2014 reported that the Commissioner of Ghana's Judgement Debt Commission had confirmed that some of the affected people were yet to receive land compensation several years after the dam was commissioned (Jafaru 2014).

The research gathered that irrespective of the new protocol of access, natives can freely access land at the BPA-demarcated areas for farming. However, the BPA expects non-natives to pay an amount of GHC 3,500 for a fifty-year lease on farmlands of ninety by hundred feet. However, at the time of conducting the fieldwork, the research did not encounter any non-natives who had obtained such an interest. Regarding real estate lots, the Land Administrator related that the BPA requires the charges shown in Table 6.1 on the next page from prospective builders. Although these are for both natives and non-natives, the resettled communities are exempt from paying for residential lots. Based on the individual charges, the BPA requires natives to pay GHC450 or GHC 700 for residential lots of ninety by hundred feet within and outside fish market sites respectively. It requires non-natives to pay GHC 2,750 and GHC 3,000 for the same lot size at these respective areas. Further shown in the table, the respective charges for acquiring a lot of ninety by hundred feet for places of worship within and outside fish market sites are GHC 2,750 and GHC 3,000. Picture 6.2 on page 215 is an evidence of the latter and shows a receipt held by the Evangelical Presbyterian Church for a purchased lot at the resettlement site. The table also shows the charges for commercial and industrial lots. Respectively, commercial lots of fifty by fifty feet within and outside fish markets go for GHC 800 and GHC 1000, while industrial lots of ninety by hundred feet go for GHC 5,300 and GHC 5,500. In both cases, the BPA expects applicants to pay an annual ground rent of GHC 20 and GHC 100 for lots within and outside fish market sites respectively.

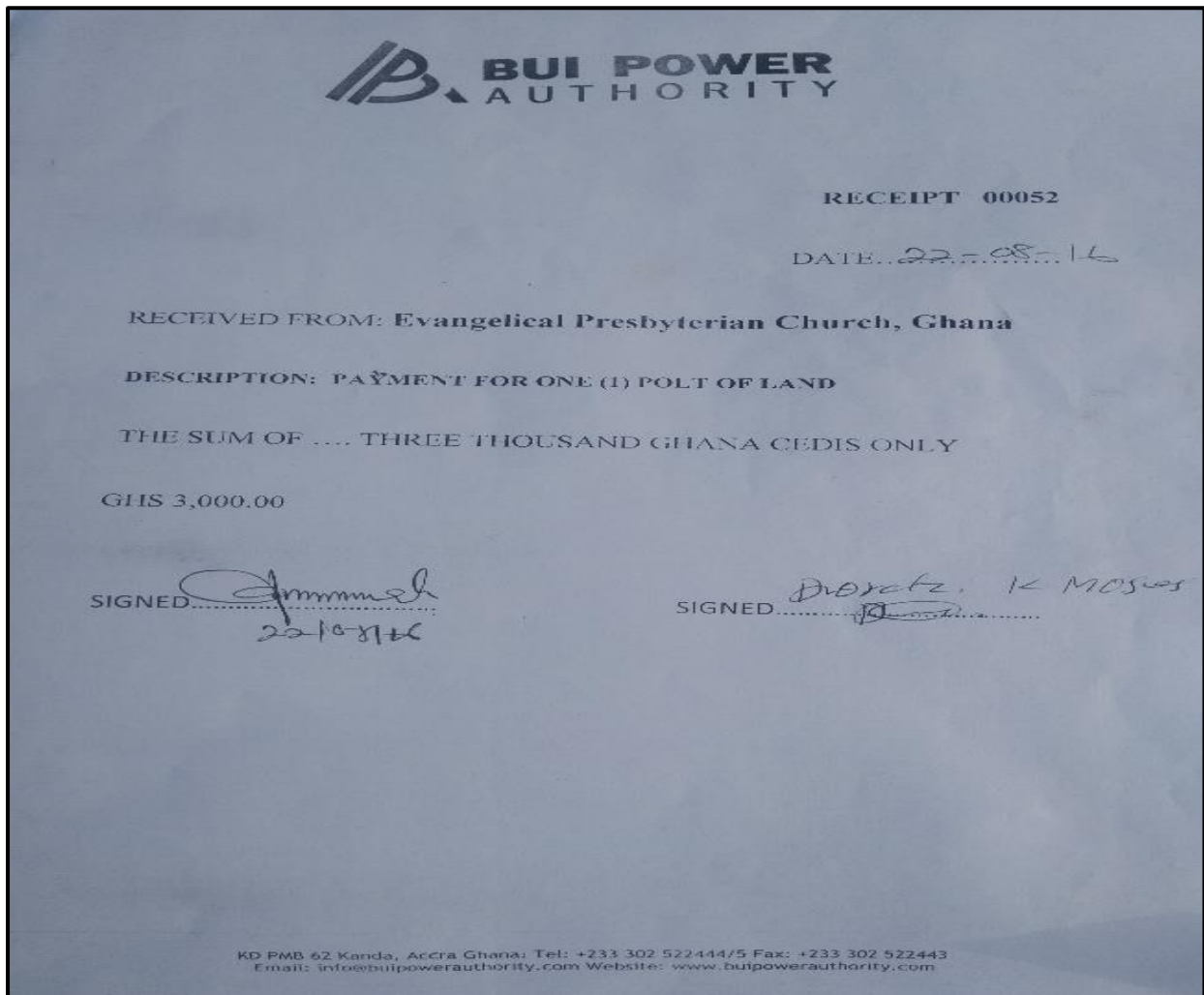
Table 6.1: The BPA's imposed charges for acquiring building lots in the study area

Purpose	Land Value (GHC)	Fish market sites						Other areas					
		Develop. Charges	Admin. Fees	District Assembly Levy	Community Development Levy	Annual Ground Rent	Total	Develop. Charges	Admin. Fees	District Assembly Levy	Community Development Levy	Annual Ground Rent	Total
Residential (90x100 ft) for 50 years lease	200/ 2,500 ⁴	100	-	-	150	-	450/ 2,750 ⁵	100	200	100	100	-	700/ 3,000
Place of worship (90x100 ft) for 50 years lease	2,500	100	-	-	150	-	2,750	100	200	100	100	-	3,000
Commercial (50x50 ft) with license renewable every 2 years	500	200	-	-	100	20	800	100	200	100	100	100	1,000
Industrial (90x100 ft) for 50 years lease	5,000	200	-	-	100	20	5,300	100	200	100	100	100	5,500

Source: Re-tabulated from data obtained from the BPA Land Administrator (27-11-18)

⁴ Respectively for natives and non-natives

⁵ Same as above



Picture 6.2 A purchase receipt issued to the Evangelical Presbyterian Church for a plot of land (Source: E. Agyepong, 3rd March, 2019)

The Land Administrator explained that the District Assembly levy and community development levy are respectively for the corresponding District Assembly and the chieftains of the community where the lot of interest is located. The latter suggests that the BPA intends for the chieftains to continue benefitting from land. The other fees, including development charges, administration fees, and annual ground rent, are for the BPA as the landowner. The Land Administrator further explained the reasons for the variations in the charges between fish market sites and other areas as follows: the development charges for commercial and industrial purposes at fish market sites are higher, because they are development areas that offer a thriving environment for businesses and from which the BPA could earn some money to offset its development expenses. Administrative fees and District Assembly levies only apply to lots outside fish market sites, because the BPA wants to create an enabling environment for businesses to thrive at the development areas by reducing the burden of acquisition. Similarly, the community development levies at fish market sites are lower for commercial and industrial purposes to ease the burden of acquiring lots by prospective entrepreneurs. Yet, they are higher for residential and worship purposes to dissuade such functions at the development areas. This is paradoxical considering that the BPA has also foregone administrative fees and District Assembly levies for the same purposes at the same sites, which effectively reduces the cost of

acquisition for builders. Despite this, the locals (of particularly the resettlement communities and Bongase) are oblivious to the individual charges and are only aware that the BPA expects natives and non-natives to pay GHC 500 and GHC 2,500 to access lots. Generally, except for their desire to live in proximity to kin and friends or establish places of worship in areas where a majority of their congregants reside, the participants claimed that they would choose low cost areas, which are the fish market sites. Thus, the research practically considers the BPA's efforts to discourage residential and worship purposes at the fish market sites as ineffectual.

Although the chieftains of the western communities – including Bongase and the resettlement communities – are aware of these payment protocols, those of the eastern communities – that is Gbolekame North and Carpenter – are not. As indicated previously, the members of Gbolekame North consider the Bian Clan Head as the landowner, because they have no knowledge of the BPA's acquisition. Thus, they still access building lots at no cost. The Bian Clan Head is conversely aware of the acquisition and the embargo on transferring building lots independently. Yet he ignores the people's access. With respect to Carpenter, the Chieftains and the locals are also aware of the BPA's acquisition. The Chief admits that the BPA has subsequently banned him and his Queen mother from transferring land independently, but they are unaware of the payment protocol. Thus, when mentioned during the preliminary workshop on 5 October 2018, he complained that, *"The BPA is hiding these protocols from us. What we have only experienced is that they warn builders to desist from building new houses. That is what is happening in Ghana; people get to know about laws after they have been penalized for violating them"*. Although lacking the right to transfer land, the research found that the TAs of Bongase, Carpenter, and Gbolekame North still require non-native farmers to make the annual presentations towards the yam festival. This is regardless of their current possession of leasehold interests.

All the above descriptions encompass the recent system of land access; that is the land tenure systems and the qualities of land as recounted by the research participants. They address research questions 'a (ii)' and 'a (iv)'. The next section interprets these descriptions based on the theoretical framework to emphasize their analytical relevance.

6.2.3 Theory-guided interpretation: The recent system of land access

This section interprets the recent system of land access according to the theoretical framework. It capitalizes on the descriptions above to provide a preliminary conceptualization of the recent field of land access. Inferring from the participants' accounts, the section also conceptualizes their social constructions of land and land values. Thereafter, it relates the imposed statutory tenure system to the recent logic and interprets its implications for the field.

6.2.3.1 A preliminary conceptualization of the recent field of land access

The descriptions show that the construction of the dam in the study area has reorganized the spatial distribution of the communities in various ways. The Bui, Dokokyina, and Akanyakrom communities for instance have new locations, while the Bongase and Carpenter communities have lost lands due to the inundation and resettlement, and the erection of transmission towers respectively. Fundamentally, these represent the new physical spaces of the communities, which besides location, underlie qualities such as the extent of land and soil characteristics (Bourdieu 1989, 16; 1996, 12; Etzold 2013, 19). Thus, they show the degree to which the dam construction has affected the communities, but also their recent economic activities and strategies of land access. Regarding this, the discussion shows that land, which is the physical space not covered by water, is foundational to the livelihoods of a majority of the people, including those of Akanyakrom and Gbolekame North, most of whom were previously artisanal fisher folks. In their case, the discussion further shows that the resettlement of the former away from the river and the economic displacement of the latter have caused them to become farmers. All the study communities are distinct and distributed across the physical space; yet, the accounts show that the State's land acquisition has unified them under the BPA's stewardship. As the BPA's activities are also land-based, it has established its own property rights, which encompass certain principles, procedures, and practices to structure its relationship with the other agents with respect to land access.

Following Bourdieu, the research conceptualizes a unified 'field of land access' for the BPA-established sector that deals with access to the acquired land (1985, 725). As deduced, this sector also has an internal interest or stake and distinguishable structures, which include a logic and objective structure of relations among the agents. Relevantly, the recent field integrates the historical fields of land access of the communities. In this regard, the field's 'internal interest' or 'stake' over which the agents compete for certain benefits is aptly land (Bourdieu 1985, 724–25). Its 'logic' (nomos) is the BPA's land tenure system, derived from the BPA Act 740 (2007) (Bourdieu and Wacquant 1992, 17; L. J. D. Wacquant 1989, 41). However, besides the written regulations, the research shows that the BPA's statutory tenure system has incorporated certain customary practices such as the farmers' open access to farmlands and has lobbied the chieftains as intermediaries of land access. As discussed in a subsequent section, there is also a social stratification among the agents of the field of land access. Conceptually, all these distinctive characteristics underlie the recent field of land access of the study area. Once again, the research acknowledges the embeddedness of the field of land access in multiple organizational scales; that is from the household to the global level. Therefore, its analysis accommodates all the multiscale drivers, which the participants implicated as influential to their social constructions of 'land scarcity'. Against this background, the next subsections expound on the theoretical interpretations of the stake and the logic and their implications for the recent field of land access. These are in line with one of Bourdieu's three steps to field analysis; that is the analysis of the agents' habitus.

6.2.3.2 Land: The stake of the recent field of land access

The discussion shows that the stake – land – is presently a private resource legally controlled by the BPA. Regardless of this, it has various meanings and values to the agents operating in the field of land access. These meanings and values correspond with the agents' respective land rights or interests and histories. Pertinently, they are based on the actual existence of the stake. Thus, while the next paragraphs interpret the meaning and value of land to the respective agent categories, it is worthy to note that each of them predicates on the primary conception of the environmental value of land.

The BPA: Following Section 22[3] of the BPA Act 740 (2007), which vests all the acquired lands in the BPA, the research deduces that the corporate body socially constructs land primarily as a territory over which it has legal ownership and control. It also socially constructs it in terms of its utility; that is to advance its purposes, which include the construction and operation of the Bui Dam and the development of the so-called Bui City among others. In line with Davy, land thus has a 'territorial' and 'use' value to the BPA, which relate to its expected benefits from it (2016, 138, 137). In this regard and subsequent to Section 22 of the BPA Act 740, the BPA seeks to retain its authority over the territory to promote its mandated use. Gathering from the foregoing discussion and from Chapter 1, these expectations or land values are not accidental, but based on its socialization in the country's history of dam construction and the logic of the field of land access. To recap the former, the historical development of large dams in Ghana involved the State's eminent domain and entrustment of the territories to a designated public water bureaucracy to administer free from any encumbrances towards performing its functions. As Davy emphasizes, the State has the power to define physical spaces as overflowing or empty, and hence is able to augment its power to determine the value of spatial purposes (2016, 142). To this end, the enforcement of the BPA Act 740 (2007), which is the recent logic sanctions the BPA's allodial title to the land. Given the structural foundations of the BPA's conceived land values, the research concludes that they relate to its habitus or embodied dispositions towards land (Bourdieu 1977, 78; 1990b, 130–31). Thus, as subsequently explained, they structure the BPA's social practices (Bourdieu 1990a, 53; Sakdapolrak 2007, 56).

The traditional authorities (TAs): Despite the acquisition, land still means authority to the TAs, because they socially construct it as foundational to their socio-political and socio-cultural authority. They also socially construct it as fundamental to their native cosmologies given that some of the trees are historic and underlie the transmission of the communities' beliefs. Following Davy, the research associates these meanings to social constructions of land as a 'territory' and an 'environment', which besides its actual presence, relate to "sentimental interpretations of nature" (2016, 138, 140). As explained in the previous chapter, the TAs' social constructions are structured by the historical link between conquests and might and beliefs in the hallowed meaning of the elements. They are also the results of the TAs' current recognition by the BPA as intermediaries of land access according to the logic. Consequently, the TAs' social constructions of land relate to conceptions of its 'territorial' and 'environmental' values (Davy 2016, 137). Concerning these, the discussion shows that despite the acquisition and their extinguished ownership, the TAs seek to maintain their authority by controlling land access. They also seek to conserve the sacred trees to support their native cosmologies. Given the nature of the TAs' land values and their foundations,

the research relates them to a collective habitus or embodied dispositions towards land, which as discussed later, structure their social practices (Bourdieu 1977, 78; 1990b, 130–31; 1990a, 53; Sakdapolrak 2007, 56).

Farmers: The research deduces that the farmers primarily socially construct land as 'capability', as they access it for crops for subsistence and commercial purposes to support their livelihoods (Davy 2016, 137). In this regard, the description shows that they cultivate cashew trees for commercial purposes and yams, groundnuts, and other domestic crops for both subsistence and commercial purposes. Relevantly, the farmers' social construction is the result of their internalization of the area's history of especially yam cultivation and a recent history of commercial cashew cultivation. To expedite their land access, the BPA has granted the farmers leasehold interests of 50 years under the logic. Following Davy, the farmers' social construction of land corresponds with conceptions of its 'use' value, which explains their expectation to gain high yields of the relevant crops to support their livelihoods (ibid, 137). However, as deduced from the descriptions, this primary expectation is subject to the farmers' access to desirable land (in quantity and quality) at desirable locations and the ability to protect their holdings from encroachment. Thus, the farmers' also conceive of the 'exchange' and 'territorial' values of land (ibid, 135-36, 138). The research relates the farmers' land values to collective habitus or embodied dispositions towards land (Bourdieu 1977, 78; 1990b, 130–31; 1990a, 53). Consistent with Bourdieu's characterization of habitus, it shows that the farmers' land values are structured by history and the logic (1990a, 53). As later explained, the land values also structure their social practices. Thus, they embody the farmers' internalization of the exterior (the field's structure) and the externalization of the interior through practices (Sakdapolrak 2007, 56).

Builders: The accounts show that the recent builders largely access land for residential purposes while a few churches access it for places of worship. In all cases, the builders aspire to acquire preferable houses at preferable locations that facilitate their senses of connection and security. As deduced from the discussion, all the builders prefer certain locations and building materials due to their respective histories and economic activities or purposes. With respect to location, the natives of Akanyakrom would have preferred the BPA to resettle them near the water body to secure their economic activity, artisanal fishing. They and the others prefer to live in proximity to kin and friends, because of the social cohesion that was historically characteristic of the communities and a consequent belief in their mutual willingness to protect each other. Churches also prefer to build their places of worship in communities where a majority of their congregants lives. Regarding their preferences for building materials, the research shows that preferences for mud and thatch grass as building materials among the natives are still due to their presumed medicinal benefits while the non-natives prefer them due to their transient stay in the area. However, all the new native residential builders and churches are building concrete blockhouses because of recent notions about their symbolism of success and sophistication. Particularly to the resettled communities, their preference for concrete blockhouses is involuntary, because the BPA prohibits the construction of mud and thatch grass houses at the site. Like farmers, native builders, have a leasehold interest of 50 years in accordance with the logic.

Given their objective to access land for preferable houses at preferable locations, the research concludes that the builders socially construct it as a 'capability' and a 'commodity', which relate to conceptions of

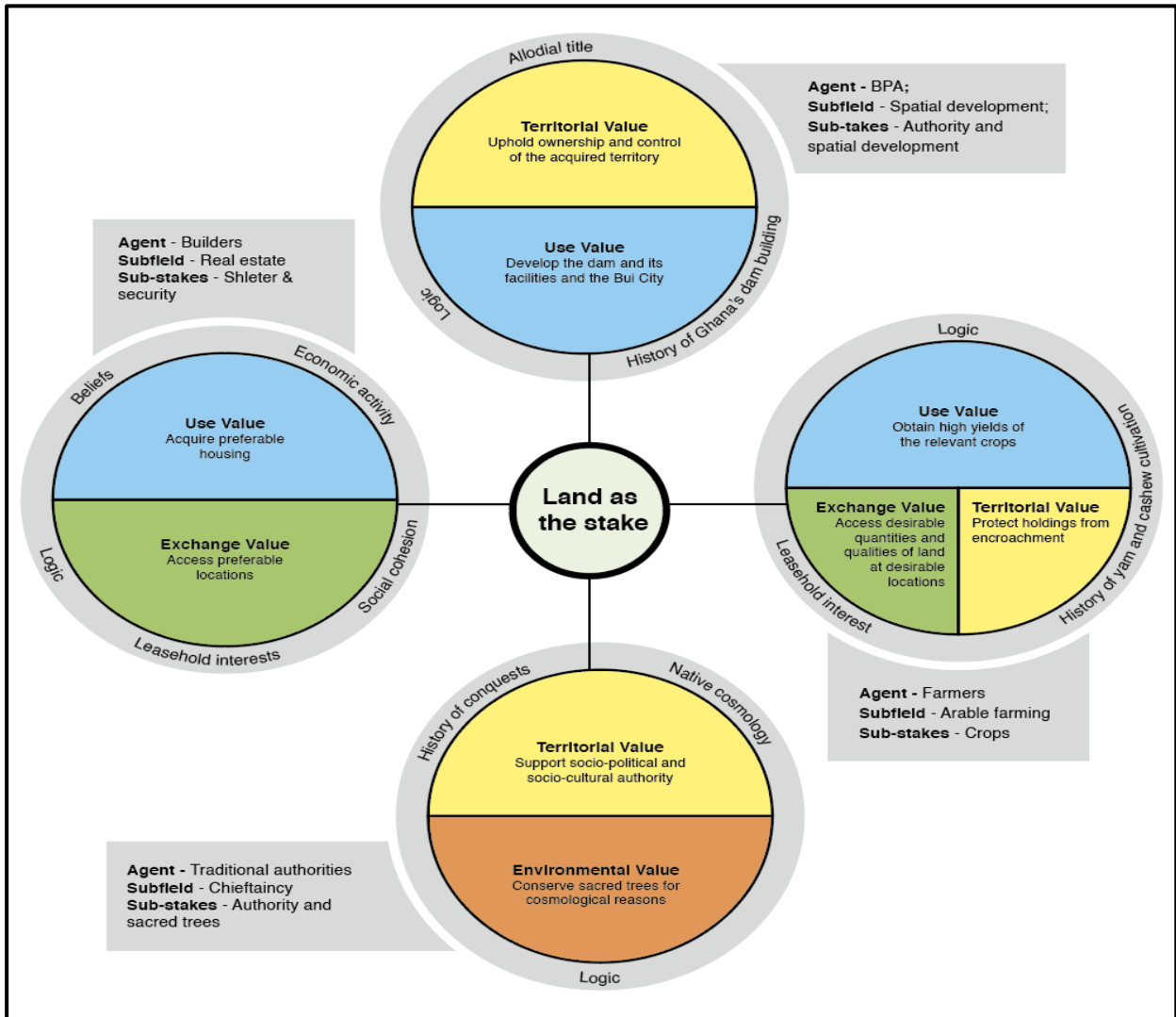
'use' and 'exchange' values of land (Davy 2016, 137, 135-36). The research relates the builders' conceived land values to their collective habitus or embodied dispositions towards land (Bourdieu 1977, 78; 1990b, 130-31). As discussed above, this analogy is supported by the foundations of the builders' land values, which include certain histories and the logic. Under a subsequent section, the research will also show that the builders' land values structure their social practices, underlying Bourdieu's description of habitus as a structured structure that functions as a structuring structure (1990a, 53; Sakdapolrak 2007, 56).

Summary: The foregoing discussions show that while the stake – land – is the same, the agents have varied objectives of access and hence, have different expected benefits or habitus (conceptions of land values). This supports the polythetic or polyrational reality of social spaces, whereby multiple meanings are often attached to the same object (Bourdieu 1990a, 112-13; Calhoun 2006, 1411-12; Davy 2016). Despite having varied expectations, Bourdieu argues that agents participate in a field based on an 'illusio' or tacit belief in the value of the stake or its ability to meet their expectations (1998, 77-78; 1990a, 65). For this, it may be said that the qualities of land – including its extent, productivity, and marketability – as related by the agents underlie their illusions. However, as deduced from the description, it also appears that besides the BPA and the Gbolekame North community, the other agents bemoaned the ability of land to meet their respective expectations. Nevertheless, as discussed later, they continue to participate in the field by undertaking the relevant strategies, which suggests an inherent belief in the ability of the stake to meet their expectations.

The research further deduces that the habitus (land values) of the agents relate to specific objects. Thus, although both the BPA and the TAs have a habitus of the territorial value of land, which is to uphold their authorities, their additional habitus of the use and environmental values of land respectively relate to different objectives. The former, which is conceived by the BPA, relates to the pursuit of spatial development, including the dam construction and the development of the Bui City among others. The latter, which is conversely conceived by the TAs is about conserving certain trees of cosmological value. The farmers and builders also have collective habitus of the use value of land; yet this respectively relates to crops, shelter and security. The research conceptualizes these objects as sub-stakes whose acquirement underlay the agents' achievement of their habitus (land values). As explained in the next subsection, the logic thus constitutes specific principles on the agents' access to these sub-stakes. Access to the respective sub-stakes also requires certain capitals and unique social practices, which together underlie the objective structure of relations among the corresponding agents. Of relevance, the agents also have different ways of legitimizing and recognizing success among themselves. Given these, the research further conceptualizes that the differentiated sectors, which relate to the agents' access to the sub-stakes, are subfields within the broader field of land access. These include 'spatial development', 'chieftaincy', 'arable farming', and 'real estate'. However, the research also acknowledges that though distinct, the subfields are in respect of the same principal stake and all the agents are part of the same primary power relations as defined by the allocated property rights. Thus, the research also conceptualizes the entire field of land access as the current 'arena' in which the agents compete over access to the stake, their social positions, and

the benefits thereof (Etzold 2013, 30). Based on these, Figure 6.6 below shows the agents' polyrational habitus (land values) with respect to the stake and the associated subfields and sub-stakes.

Figure 6.6: The polyrational habitus (land values) of the recent agents



Source: Author's construct (2021)

6.2.3.3 Statutory tenure system: The recent logic of the field of land access

Presently, the BPA's imposed statutory tenure system, which is derived from the BPA Act 740 (2007b) is the logic (nomos) of the field of land access. As mentioned earlier, this includes the stipulations of the legislation and certain incorporated customary practices of access. Following Bourdieu, the logic, which is objective and explicitly recognized may be classified as 'a rule' (1977, 27). The accommodated customary principles are mainly immanent in the practices of the agents and embody the conventional way of doing certain things on the ground. Thus, the research categorizes them as 'regularities' or 'schemes' (ibid). The varied land interests granted by the logic are non-exclusive but intersecting webs (FAO 2002, 3:7). For instance, the BPA's allodial title overrides all other interests; yet, as the BPA has also assigned leasehold interests to the same land, its allodial title, and the leasehold interests overlap (ibid). The leasehold interests

held by farmers and builders respectively are complementary, because they are shared rights to the demarcated areas.

Also relevant, the research shows that the logic involves unique principles of access for each of the subfields. For instance, although farmers may access land openly in the subfield of arable farming, the logic requires them to undergo a process to access building lots in the subfield of real estate. Moreover, while they may claim lands in the subfield of arable farming, their access to lots is limited to defined spaces in the subfield of real estate. The subfield of chieftaincy also involves unique traditional precepts, which the BPA's logic alludes to. Per these, the sub-chieftains yield to the authority of the chieftains, who have been made the intermediaries of land access by the BPA. Similarly, the BPA's activities in the subfield of spatial development are governed by certain stipulations of the logic, which are inapplicable to the other subfields. According to the Bourdieu, the agents' commitment to the logic underscores their 'doxas'; that is their acceptance of it as a natural given fact (1990a, 66; Sakdapolrak 2007, 56). Yet as later shown by other findings, besides the BPA, the doxas of the other agents are largely in respect of the extinguished customary tenure systems and not the recent statutory tenure system. To them, this is mainly due to contentions about the legitimacy of the recent logic and its ability to support the achievement of certain objectives.

Following Bourdieu's argumentation on a field's logic, it may be concluded that the principles of ownership and control, use, and transfer as defined by the logic prescribe the range of habitus (land values) available to the categories of agents (Bourdieu and Wacquant 1992, 17; L. J. D. Wacquant 1989, 41). Thus, the right of ownership and control as granted by the logic underlies the BPA's habitus of the territorial and use values of land. The right of use granted to the leasehold interest holders also underlies the farmers and builders' primary habitus of the use value of land. With respect to the traditional authorities (TAs), their habitus of the territorial value of land is partly based on their role as intermediaries of land access under the recent logic, but also based on the extinguished customary logic. Essentially, these support Davy's assertion that land values are contingent on land rights (2016, 138). The delimited range of habitus (land values) also underscores the objective relations among the agents, which maintains Bourdieu's contention that the logic defines the agents' social positions (1993, 72; Maton 2014, 52). Particularly, this explains why the BPA - in its capacity as the allodial titleholder - has a habitus of the territorial value of land, which underlies its outright ownership and control. Farmers and builders may have the same habitus; yet, theirs is limited to using a defined area for a period of fifty years and is thus devoid of outright ownership.

Related to the above is also the observation that the logic prescribes the values of the primary capitals of the field of land access (Bourdieu and Wacquant 1992, 17; L. J. D. Wacquant 1989, 41). Consequently, the allodial title is the most preeminent capital for land access. Under the recent logic, the basis of the allodial title is also institutionalized cultural capital. However, unlike the chieftains', which was historically based on their recognition by the kingmakers, the BPA has juridical recognition by the State, which underlies its overriding access to land. Due to the automatic leasehold titles assigned to natives and pre-existing non-natives, the research surmises that the logic recognizes social capital as fundamental to their access. However, it emphasizes the prerequisite of circulating economic capital (money) to their acquisition of leasehold interests to farmlands in certain areas and to building lots. These maintain Bourdieu's contention

about the influence of a field's logic on the value of capitals (ibid). The research also deduces that while the logic does not restrict access by age, gender, nor status, the Dagaates still proscribe women against accessing land independently of men. Relevantly, this is non-threatening to the existing logic, which might explain their continuous application by the Dagaates. Impliedly, despite the BPA's imposed logic, the recent field of land access is also permeable.

The logic is also the cumulative product of particular histories, which underscores Bourdieu's further characterization of a field's logic (Bourdieu and Wacquant 1992, 17; L. J. D. Wacquant 1989, 41). As deduced from Chapter 1 and the current chapter, the BPA's statutory tenure system is indeed the outcome of Ghana's history of dam building and the embodiment of an evolved version of the relevant juridical underpinnings. The logic is also only applicable to the field of land access, thereby delimiting the fields' boundaries in relation to other fields (Bourdieu and Wacquant 1992, 17; L. J. D. Wacquant 1989, 39). Bourdieu underlines that fields are sites of action where the distinctively positioned agents compete over the stake in order to gain symbolic power and hence transform or preserve the logic (1990b, 134). Thus, the next section discusses the factors underlying the objective structure of relations among the recent agents and their implications for the field of land access.

6.3 The recent agents and their power relations

As deduced from the foregoing accounts, land access presently involves diverse categories of agents who are operating in varied capacities. These agents rely on other agents within the field of land access and in other fields to achieve their objectives. Of significance to the current section, the agents employ certain mechanisms of access to achieve the respective objectives, which also define the power relations among them. Thus, in line with research questions 'b (ii)' and 'b (iv)', this section is devoted to characterizing the recent agents and their power relations. It is also concerned with addressing research question 'b (v)', which relates to the manner in which their recent legitimization of power in the respective subfields and the broader field of land access differs from the historical ones. To this end, the section encompasses three key subsections, including descriptive analyses of the characterization of the agents and their mechanisms of access, and a theory-guided interpretation of these.

6.3.1 Descriptive analyses of the recent agents of land access

Per the agents' respective roles and activities, the research characterizes them as managers, users or appropriators, and providers or contributors. As explained in the previous chapter, the managers and users are the primary agents of the field of land access, while the providers are secondary agents. However, some secondary agents are more active than others are, because they participate in many routine practices in the respective subfields. Against this background and in reference to research question 'b (ii)', this subsection describes the agents constitutive of the categories and their attributes.

6.3.1.1 Manager

The recent managers of land access are those who administer land by regulating and facilitating its access by other agents. Based on this, the research deduces that the BPA currently occupies the role. This is because of its custodianship of the land per Section 22[3] of the BPA Act 740. When interviewed on 5 September 2018, the Land Administrator affirmed that, “We [the BPA] *manage the land and the physical planning of the entire area*”. In this regard, the BPA as a body corporate is a bureaucratic structure, which constitutes people acting in specific roles with specific accountabilities.

Based on the BPA's procedure, the chieftains also have a role as intermediaries, in which they assist it to undertake its land access functions. As previously explained, they generally endorse prospective land users to facilitate the BPA's approval of their application. In particularly the case of Jama, the Chieftains occupy this role. Thus, the BPA does not recognize the Bian Clan Head as an intermediary. In addition to endorsing prospective land users, the Chieftains of the resettlement communities also have the authority to redistribute allocated building lots. Given their roles, the research considers the Chieftains of the Banda Paramountcy, Bongase, Bui, Akanyakrom, Dokokyina, and Carpenter as sub-managers to the BPA. Fundamentally, these new arrangements have undercut existing power structures, because while the Bian Clan Head has lost his authority, the historically non-landowning Chieftains of Akanyakrom have gained some authority by becoming intermediaries.

6.3.1.2 Users/ appropriators

The recent land users include the BPA, traditional authorities (TAs), farmers, and builders. The paragraphs below describe the characteristics of these respective agents.

The BPA: Although the BPA is the manager of land access, it is also an appropriator because of its use of land for the construction of the dam and its facilities, including the reservoir, transmission towers, office and accommodation facilities, and power station. It is also a user because of its ongoing spatial development of the area. Moreover, as previously indicated, the BPA uses the money from transferring land to offset some of its own expenditure on spatial development, which also supports its role as a land user. Essentially, the Introductory Section and Section 22[3] of the BPA Act 740 as previously quoted mandate these uses.

The traditional authorities (TAs): The research shows that in their capacities as sub-managers, the TAs also appropriate land for their own benefits. Particularly, they mentioned that they accept cash and in-kind payments from prospective users before endorsing them to the BPA. These material benefits are reportedly useful for maintaining the respective stools. Although not an explicit requirement, successful applicants of building lots in the resettlement communities also show their appreciation to the chieftains by offering drinks. As explained in the previous chapter, the chieftains use these drinks for libations, which underscore the preservation of the stool and hence, their authority.

Farmers: The recent farmers of the study area include the natives and pre-existing non-natives. The natives include the farmers of Bongase, Bui, Dokokyina, and Carpenter. Besides the women, the men of

Akanyakrom and Gbolekame North who were historically engaged in the more prestigious artisanal fishing have also become farmers due to the decline in the fishing industry. The pre-existing non-natives are largely male Dagaate migrants from the Upper West Region in the north. Although they live throughout the study area, many of them have lived in Carpenter since historical times.

All the farmers are from the age of fifteen. The native farmers include both men and women. However, among the Dagaates, the men are the farmers while the women only play supporting roles. Relevantly, both men and women are equally engaged in subsistence and commercial farming, cultivating crops such as cashew, yams, and groundnuts. In this regard, spouses have joint farms or separate farms, but mutually support each other. Those who have joint family farms either cultivate the crops indiscriminately or allocate their responsibilities by crop type. However, those who have separate farms cultivate all the crop types on their respective farms. With respect to the native women, their increased farming practices are due to the ongoing competition over farmlands and the increasing market value of cashew seeds. Unlike the past, the Dagaate non-native farmers are also cultivating cashew trees regardless of the BPA's proscription.

Builders: The builders consist of both natives, pre-existing non-natives, and churches. Individual builders are from the age of twenty (20) and are mainly men. The Dagaate women are customarily unable to access lots independently of their husbands nor fathers. Conversely, although the native women can access lots independently of men, they related that they largely depend on their husbands or fathers for shelter.

For both the recent managers and users, there are certain categories of agents who contribute or expedite their land access. The research characterizes these groups of agents as providers/ contributors. The next section describes their peculiarities based on the corresponding primary agent category.

6.3.1.3 Providers/ contributors

The recent providers or contributors are those who support the managers and users in their land access endeavors. As underlined in the previous chapter, the research considers them as implicated agents in line with Clarke et al. (2017, 76). In this regard, some of them are either physically present – some of whom are silenced by powerful agents – or discursively present and only referred to as important for land access or targeted by the work of the active agents. As before, although the managers may pass for providers due to their role in facilitating the land access of the users, the research excludes them from this category, because of their managerial functions. Moreover, the focal providers are only those who the participants mentioned as important for their land access. Impliedly, other providers may exist, but the research excludes them from its analytical consideration. The following paragraphs describe the providers of the managers and users of land access.

The BPA: Per Section 16 of the BPA Act 740 (2007b), the BPA cooperates with other public authorities to perform its functions. Key among them is the Bono Regional Lands Commission and its Land Valuation Division, which was central to the land acquisition process. To expedite its spatial development agenda, the BPA also works with the Town and Country Planning Departments and the Physical Planning Departments of the jurisdictional regions and districts respectively. These departments are engaged in

designing the master plan of the area. For the construction of the Bui Dam, a blogpost on the BPA website explains that the Government of Ghana “entered into an Engineering Procurement and Construction (EPC)/Turnkey Project Contract with SINOHYDRO Corporation Limited” the Chinese state-owned hydropower construction firm (2016). As indicated in Chapter 2, the Government of Ghana also procured commercial and concessionary loans of USD 292 million and USD 270 million from the Chinese Export Import (Exim) Bank for the project (Hensengerth 2013b, 290; Williams et al. 2017, 9). Given these, the research considers the Chinese Government as a provider to the BPA.

The services of the providers above contribute to the BPA’s land access endeavors. However, according to the Land Administrator, the BPA trades its main product, hydropower, with the Ghana Grid Company Limited (GRIDCo), which is a private limited liability company, involved in the power market. According to its website, GRIDCo acts as a broker between “wholesale suppliers (generating companies)” and “bulk customers” (n.d.). Thus, it buys electricity from the BPA and sells it to customers including the Electricity Company of Ghana (ECG), the Northern Electricity Distribution Company (NEDCo), and mining companies. In turn, the ECG and NEDCo sell the electricity to households. When asked why the BPA does not directly supply electricity to households, the Land Administrator explained as follows: “*We generate high voltage electricity, which can only be sold to a broker after it has been regulated at the substation. Any direct distribution to households could be fatal*”. Given its role in expediting the BPA’s transmission of electricity, which is a product of its land use, the research considers GRIDCo as the BPA’s provider.

The traditional authorities: As before, the chieftains partially derive their legitimacy from their registration by the National House of Chiefs per Section 59 of the Chieftaincy Act 759 (2008). The research gathered that the State’s land acquisition has effectively extinguished the authority of the Stool Lands Revenue Collector over the users. Thus, the Banda Paramount Chieftains only benefit from the revenues collected from lands outside the acquired area.

Farmers: The recent providers of farmers are sources of factors of production including credit, seeds or seedlings, agrochemicals, and labor. They also include extension services and crop merchants with whom the farmers trade their cash crops and the surplus of their subsistence crops. The creditors are mainly family members and acquaintances who are themselves, also farmers and lend money to others to purchase agro-inputs. Some also lend cashew seeds or seedlings to the farmers. In any case, the creditors accept cash payments with interest after harvest or buy the cashew seeds of the debtors at their own prices as payment for the loans. Besides lending, some farmers have also become vendors of seeds and seedlings (mainly yams and cashew) and only accept cash in advance. Relevantly, the research found that the declining productivity of the soil and hence the declining quality of harvests have created an ‘input gap’, whereby the farmers are unable to obtain enough seeds from their own farms for cultivation. This has been the reason for some farmers’ assumption of the roles of creditors and vendors to fill the gap while supplementing the profits from their own farms.

Besides the above, the Banda and Bole District Departments of Agriculture have recently become major providers to the farmers of their respective jurisdictional communities. As gathered, they have both deployed Agricultural Extension Officers who respectively live in Bongase and Jogboi, which is near Carpenter. Among their services are education on good farming practices such as planting and the application of agrochemicals. According to the Extension Officer of the western communities, the farmers have only recently began collaborating with him because of the increasing incidences of agricultural pests. He related that under the



Picture 6.3: A roaming agrochemical vendor in Dokokyjina (E. Agyepong, 6 September 2018)

Government of Ghana's 'Planting for Food and Jobs' program, the District Departments of Agriculture freely distributed agrochemicals to the farmers to fight fall army worms, which have for some time, infested maize plants all over the country. However, the Department also sells agrochemicals that treat other pests and plant diseases. Besides the District Departments of Agriculture, private individuals also sell agrochemicals to the farmers. They buy the products in bulk from the Departments of Agriculture and sell them to the locals by going from community to community. As the Departments of Agriculture are located in the district capitals, which are distant from the study communities, many of the participants related that they prefer to buy agrochemicals from the roaming vendors.

The sources of labor of married farmers are mainly the economically active members of the nuclear family. The research found that these members support the men (husbands) and women (wives) in their respective farm works. However, among the Dagaates, the women are the main providers of the men because they are customarily disallowed from accessing farmlands independently of men. All the farmers (both married and unmarried) may also engage wage laborers, who include landless non-natives and extended family members and friends. Relevantly, the extended family members and friends are themselves farmers who have had to adopt side jobs due to their inability to secure enough farmlands. In both cases, the farmers may engage the laborers for land preparation, planting, maintenance, and harvesting. The arrangement between the farmers and the laborers usually involve cash payment. However, for families and friends, the arrangement may also involve in-kind payments especially when they provide their services during the harvest. This is reportedly in the form of a percentage of the harvested or processed crop.

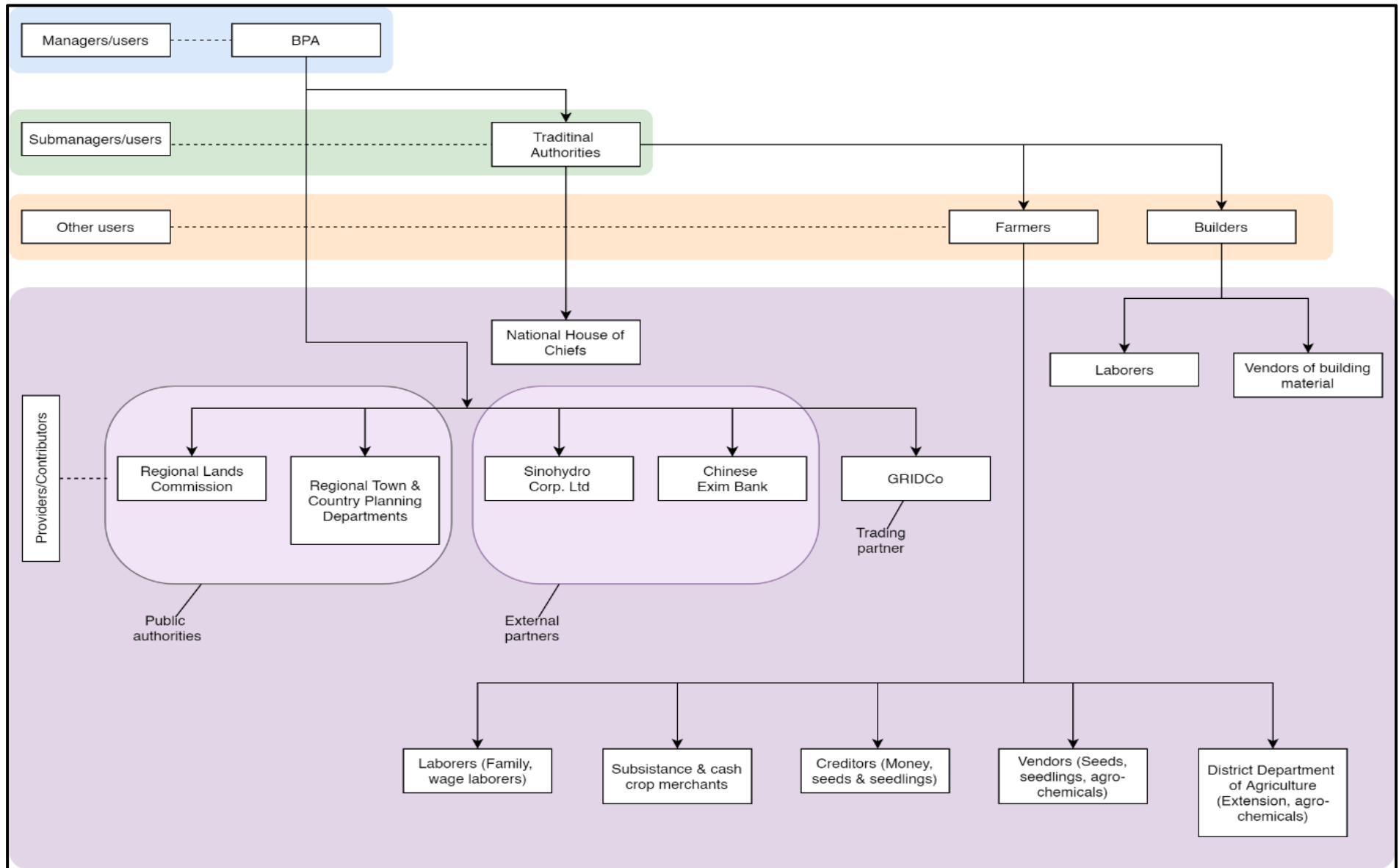
The farmers also trade their subsistence crops with domestic and external crop merchants. Particularly, the domestic merchants are also farmers. With respect to cashew seeds, the research found that all the farmers trade them with local merchants, who are also farmers. Many of the merchants work for the international buying companies that have set up offices and warehouses in Sampa. Thus, they receive money from the companies to buy and assemble the seeds, after which the companies transport them in trucks to Sampa. A few of them are independent buyers, who are also farmers and creditors of seeds and seedlings. As

explained above, they buy the cashew seeds of their debtors at their own prices and sell them to the international companies. They also buy from other farmers.

Builders: The recent providers of the builders are sources of labor and vendors of building materials. Depending on the type of housing, the former may include nuclear and extended family members, friends, or wage laborers. To the individuals and churches that prefer concrete blockhouses, the sources of labor are mainly sand winners, chainsaw operators, masons, carpenters, and steel benders among others. Conversely, the sources of labor to the non-native Dagaates who prefer mud and thatch grass houses are their nuclear and extended family members and friends. These social support networks assist them to extract and assemble the locally available building materials and construct the houses. Fundamentally, the arrangement between the builders and their extended family members and friends is based on mutual support. Regarding the vendors, the research gathered that they are more relevant to the builders who prefer concrete block and aluminum roofing sheet houses. It also found that while the western communities rely on only one vendor located in Bongase, the eastern communities rely on vendors located in Jama and Banda Nkwanta.

Figure 6.7 on the next page summarizes the primary agents and their providers. The research found that each of these agents employs certain mechanisms of access to derive their expected benefits from land. Their possession of these mechanisms underlies their social positions and power relations because they expedite the strategies of access that result in their achievement of the sub-stakes and hence their conceived land values. Given this and in response to research question 'b (iv)', and 'b (v)', the next section describes these mechanisms of access and the manner in which they underpin the agents' power relations.

Figure 6.7: Categories of recent agents and their providers



Source: Author's construct (2020)

6.3.2 Descriptive analyses of the agents' mechanisms of land access and power relations

The subsections describe the mechanisms of land access of the recent agents by category and their power relations.

6.3.2.1 The mechanisms of land access of the BPA and its providers

The BPA: The BPA's key land access objective is to retain its authority over the acquired land in order to promote its use for the dam construction and other spatial development. With respect to these, the BPA's primary mechanism of access is its allodial title, which is guaranteed under Section 22 of the BPA Act 740 (2007). As previously mentioned, the BPA thus has a mandate to use the land free from any encumbrances, as well as transfer it. Besides this, the BPA as a body corporate is an organizational structure that consists of human resources serving in varied capacities towards the achievement of the objectives. Among them are the Land Administrator who manages and monitors all activities on the land; the Engineers who are responsible for ensuring the proper functioning of the dam; and Security Personnel who are responsible for protecting the BPA's assets including the dam and land.

The relevant public authorities: The public authorities that contribute to the BPA's land access – including the Bono Regional Lands Commission, the Regional Town and Country Planning Departments, and the District Physical Planning Departments – employ their respective legal mandates. Per Article 258[1] of the Constitution (1992), the general mandate of the Lands Commission is to co-ordinate “with the relevant public agencies and governmental bodies [to] ... manage public lands and any lands vested in the President”. In this capacity, it also provides valuation services through its Land Valuation Division, which explains its key role in appraising the acquired property to facilitate various forms of compensations. The mandate of the deconcentrated Town and Country Planning Departments (TCPD) and the Physical Planning Departments derives from multiple legislations among which are the Local Government Act 462 (1993) and the National Development Planning Commission Act 479 (1994) (Town and Country Planning Department, Ghana 2021). The Departments are generally responsible for planning and managing the “development of human settlements” at the regional and district levels respectively (ibid). They are also responsible for “Providing planning services to public authorities ...” among others (ibid). As organizational structures, all the public authorities also employ their specialized human resources to fulfil their responsibilities.

The Government of China: As deduced from the discussion, the mechanism of access of the Chinese Sinohydro is its engineering expertise, which includes its staff and equipment. The research found that these were key to the construction of the dam between 2007 and 2013. On its part, the Chinese Exim Bank also contributed to the project financially through commercial and concessionary loans.

GRIDCo: Regarding GRIDCo, its mechanism of access or contribution to the BPA's land access has also been financial, because of its role as a wholesaler of the generated electricity. However, it also has access to the markets – that is the Electricity Company of Ghana – to whom it distributes the electricity it acquires from the BPA for redistribution to Ghanaian households.

6.3.2.2 The mechanisms of land access of the TAs and their providers

The traditional authorities (TAs): The TAs' land access objective is to control land access in order to maintain their socio-political and socio-cultural authority and conserve the sacred trees for cosmological reasons. To this end, they primarily apply their role as intermediaries, which the BPA has conferred on them. As explained, the BPA assigned this role to the TAs, because it recognizes their socio-political and socio-cultural roles in the communities. Consequently, the BPA's recognition underscores the TAs' legitimization, which has also enabled the historically non-landowning TAs of Akanyakrom to gain some power. Although the acquisition has extinguished the TAs' ownership rights to land, all of them continue to enforce certain customary precepts like the conservation of sacred trees and the taboo days in their respective communities. Regarding this, they capitalize on their recognition by the kingmakers as guided by the respective chieftaincy institutions.

The National House of Chiefs: As the providers to the TA, the National House of Chiefs derives its mandate from Article 271 of the Constitution (1992) and Sections 12 and 59 of the Chieftaincy Act 759 (2008). While the former underlies its establishment, the latter gives it the mandate to legitimize the chieftains through registration.

6.3.2.3 The mechanisms of land access of the farmers and their providers

Farmers: The land access objective of the farmers is to gain high yields of mainly cashew seeds, but also yams, groundnuts, and the other domestic crops for both subsistence and commercial purposes. To this end, they employ the leasehold interests guaranteed under the BPA's statutory tenure system as their primary mechanism of access. As explained previously, the usufructuary interests and pre-existing customary tenancies automatically converted into leasehold interests after the land acquisition and the institution of the statutory tenure system. Unlike the previous customary tenure system, the BPA does not expect the holders of leasehold interest to make any form of annual payment, which absolves the non-native Dagaates from the former obligation. Yet, the traditional authorities (TAs) expect them to honor the old practice or risk losing access to land. This means that the TAs still control their land access despite the BPA's assumption of absolute ownership and control. Relevantly, the research gathered that besides their lack of knowledge of the nature of their recent tenure, the Dagaates also have a sense of obligation to the TAs who facilitated their initial access.

In addition to their land interests, all the farmers employ 'strength' to access land. This encompasses the farmers' physical capability and skill, the quality of their social support networks, and their financial capability. The research found that all the communities consider men as physically stronger than women. Among the traditional farmers of Bongase, Bui, Dokokyina, and Carpenter, this is mainly because of the men's historically extensive farming practices. In all cases, the men are able to access more farmlands than the women do. At the household level, they often seek out the lands for the family farms and apportion some of their lands to their spouses if they decide to farm independently. Consequently, the men control the earnings from the joint family farms. In households where the men and women farm independently and for unmarried farmers who have their own farms, the men have larger farms than the women do and

hence earn more than them. As this was also case historically, the men received higher compensations than the women did when the BPA displaced them. They also obtained higher volumes of the requisite seeds and seedlings from their old farms with which they started new farms. Thus, during the early years after displacement, the men were able to secure larger farms, which have so far given them an advantage over the women. Regardless of these differentiations and the nature of their farms, all the members of the household support each other and constitute the main support system of the married farmers.

Among men, physically stronger and skillful ones who also have the financial means and a good support system tend to be relatively successful than others. The mark of physical strength is the farmers' personal ability to cultivate large tracts of land. In terms of skill, the research gathered that the historical traditional farmers are better off than the men of Akanyakrom and Gbolekame North who were historically artisanal fisher folks. Men who also have many economically active household members with high physical strength and skill also have better chances of success. Besides these, those with higher financial means stand better chances of hiring laborers to augment their personal 'strengths'. They can additionally buy the requisite farm tools, seeds, and seedlings to advance their farms. Also with respect to this, the research found that the traditional farmers had an early advantage over the fisher folks because they had more yam setts from their old farms and some cashew seeds to reinvest in the new farms, as well the requisite farm tools. As they also owned larger farms, they received more money in compensation with which they were able to acquire additional seeds and seedlings and hire laborers to capture more lands in the early years of their displacement. Given these, the research found that the members of Akanyakrom have lesser farms than the farmers of the other communities. These include even the members of Gbolekame North who did not receive any compensation from the BPA for their lost alluvial farms and fishing equipment. Despite being disadvantaged by this and their low farming skills, the Gbolekame North community has a large tract of land at its disposal, which gives the members an advantage over the other farmers.

Among the farmers, the benchmark of success is the extent of a farmer's cashew farms. As it was the case historically, yam farms may also be considered; however, their declining quality and relatively low market value have reportedly made them inferior to cashew. Given these, in communities like Bongase and Carpenter where farmers have had to scramble over the remaining farmlands, the people associate success with the possession of ten acres or more of cashew farms. In Gbolekame North where land is still available, farmers are considered successful if they possess fifteen acres of cashew farms. However, among the resettlement communities where the allocated farmlands are smaller, the people consider those who have been able to acquire at least five acres of cashew farms as successful. Despite this claim, the most successful farmer at the resettlement site – who happens to be the District Best farmer Awardee from Dokokyina – mentioned that he owns forty acres of cashew farms, which are scattered across the allocated area. He explained that besides the relatively high compensation he received for his extensive farms at the old settlement, he is physically strong, adept at farming, and has many economically active household members. According to him, he transported a lot of cashew seedlings and seeds and yam setts to the new site during resettlement, which additionally gave him a head start over other farmers at the resettlement site.

Relevantly, the farmers spend a majority of their earnings locally. In this regard, the men spend their money on building houses and on expanding their independent farms through additional laborers and agro-inputs (seeds, seedlings, and agrochemicals). The married ones also spend their money on paying for their children's education. Married women spend on other necessities such as soap or 'soup' (meat or fish) for the household while unmarried ones spend on their farms and on personal necessities. Given these and the division of household expenditure, the participants recounted that successful farmers have bigger concrete blockhouses, which have increased in trend due to their symbolism of success and sophistication. This is different from the historical manner of legitimizing success among farmers, which included the size of mud and thatch grass houses besides concrete blockhouses. However, as they did historically, the farmers still related that successful ones additionally have bigger households, which include the number of wives, biological children, and young relatives who are under their guardianship. Thus, the Dokokyina farmer abovementioned has extended his house into one of the biggest at the resettlement site. He also had twenty-eight (28) household members, including two (2) wives and fifteen (15) economically active children. Also in Bongase, one of the most successful farmers owns a two-storey concrete blockhouse and has about ten household members.

Some of the successful farmers like the man from Dokokyina are benefactors. In his case, the research found that he gifts yams to both the poor and the TAs of the resettlement communities. Thus, he is highly revered among the people. During the fieldwork, the research observed that the TAs of Dokokyina invited him frequently to participate in decision-making. Other community members who had benefitted from his benevolence were also willing to help him to maintain his farms and harvest the crops. Despite this, the research also observed that he and some of the other successful farmers lend money, seeds, and seedlings to other farmers or sell the inputs to them, which contribute to their financial strength and relative success among the farmers. However, regardless of their success and the recent shifts in land tenure system, the farmers are subordinate to the TAs due to the embedded socio-political and socio-cultural structures. Nevertheless, except Carpenter where the Chief has preeminent access to land, land access in the other communities is on a first-served basis without consideration of status. In the case of Carpenter, the Chief's privileged access is due to the large migrant population, which by estimation, makes up about 90 per cent of the population.

Agricultural Extension Services: As explained, Agricultural Extension Service providers have become relevant to the farmers over the past few years. The Extension Officers are civil servants associated with the Banda and Bole District Departments of Agriculture. Thus, they undertake their responsibilities on the basis of a legal mandate; that is the Civil Service Act PNDCL 327 (1993) among others. Besides this, they also apply their expertise in agricultural practices. However, as civil servants, they do not receive payment from the farmers but from the Government of Ghana.

Wage laborers: Regarding the wage laborers, the research found that they are either landless non-natives or extended family members and friends who render their services to earn some income. In this regard, their mechanism of access is physical strength and expertise. The main media of exchange between the farmers and laborers are either money or crops. While the non-native laborers accept only money, the

natives may accept money or crops depending on the stage of the production cycle in which they are engaged. Regarding the latter, the research found that native laborers who assist in crop harvest and processing receive in-kind payment, which is a percentage of the corresponding crop. Due to the media of exchange, the men are better positioned to hire laborers than women, because of their relatively higher financial capability and crop yields. Given their expectations, the farmers are also inclined to hire laborers who have high physical strengths and skill for the respective tasks. Thus, those who are skillful at making yam mounds or harvesting and processing legumes in the shortest possible time have a higher chance of being hired by the farmers.

Creditors: The mechanisms of access of the creditors are financial loans, seeds, and seedlings. They provide these to all farmers, which expedite their access to a portion of the farmers' benefit from land. As previously mentioned, some of them accept cash payment with interest while others buy the cashew seeds of their debtors at their own prices. Thus, they dictate the terms of the loans to the farmers. The research found that credit facilities have only recently become common due to the ongoing 'input gap'. Although access to these facilities is not restricted by gender, the men mainly access them due to their extensive farms and ability to afford repayment.

Vendors: The mechanisms of access of the vendors are also farm tools, seeds, seedlings, and agrochemicals, which they sell to the farmers in exchange for some of their financial benefits from land. Generally, the vendors determine the prices of these products. Thus, the farmers have no control over the prices, but are compelled to buy from them rather than journey to Banda, Wenchi, or Techiman, which involves different expenditures on transportation. The District Departments of Agriculture in particular, sells agrochemicals as part of its "backstopping activities" to promote "sustainable agricultural growth and development" (Ministry of Food and Agriculture 2020). Thus, unlike the private vendors, its endeavors are not for profit. However, the research found that both the Department and the private vendors have significantly increased the prices of their products over the past year. As related by a 48-year-old man from Dokokyina during an interview on 18 January 2019, "A bottle of poison [pesticides] and fertilizer used to be GHC 40 and GHC 120 respectively, However, this year, private vendors are selling the poison for GHC 100 and the Agric Department is selling fertilizer for GHC 810". Given this, the research further found that the men are better positioned to buy these inputs due to their relatively high financial capability.

Crop merchants: The domestic merchants of subsistence and cash crops rely on money to access the crops. However, besides money, the external merchants also possess means of transportation and access to wholesale and retail markets. Although the BPA has improved some parts of the road networks between the communities and Wenchi, the shortest roads from Wenchi and Sampa to the western communities are still poor and the farmers still lack personal means to transport their crops to the market. Therefore, the merchants continue to impose the prices on the farmers, who due to the perishability of the crops, are compelled to sell them off in order to avoid incurring losses. For farmers in Carpenter, as the roads are relatively better, they are able to transport their subsistence crops to the market independently. However, they still rely on local cashew merchants, who also impose the prices on them. Regarding this, the research found that there is a non-governmental Cashew Buyers and Exporters Association of Ghana, with a

headquarters in Sampa, which fixes the annual prices of cashew seeds based on the world kernel market prices. However, when interviewed on 3 February 2019, the General Secretary explained that, "Each buying company determines their final prices based on the distance between the originating community and Sampa, where their warehouses are located. The local buying agents may also reduce the companies' prices by buying more kilograms of seeds for the same price to save some money for themselves". Given this, the farmers of the study communities earn less than other farmers who live in relative proximity to Sampa.

6.3.2.4 The mechanisms of land access of the builders and their providers

Builders: The builders' objective of land access is to obtain preferable houses at preferable locations that facilitate their senses of connection and security. In relation to this, the research found that the resettlement communities employ the leasehold interests guaranteed under the BPA's statutory tenure system as their primary mechanism of access. As discussed above, the BPA expects all other prospective builders (including churches) to fulfil certain payment requirements in order to acquire leasehold interests. Although the builders of the resettlement communities do not pay the BPA to access lots, they are customarily obliged to show their gratitude to the traditional authorities (TAs) who facilitate their access to the lots. This obligation includes the presentation of drinks.

Besides their leasehold interests, the builders also mentioned that they require 'strength' to build their houses or churches. The research found that depending on their housing preference, 'strength' implies their physical strength and skill, social support networks, and financial capability. To the natives and churches that prefer concrete blockhouses, 'strength' is mainly their financial capability. The research gathered that in the past, the native residential builders relied on their physical strength and skills, and those of their nuclear and extended family members and friends to extract locally available building materials, including sand, timber, and grass. However, presently, the extraction of these materials has become commercialized, because it constitutes an alternative livelihood to those who have been unable to secure more farmlands nor find other livelihood opportunities to supplement their low farm earnings. Thus, the builders rely on wage laborers to extract and transport the requisite materials to the building sites. Besides this, they rely on their financial capability to acquire vended materials including cement and aluminum roofing sheets. They also use it to hire specialized laborers including masons, carpenters, and steel benders for the construction of the houses. Conversely, the idea of 'strength' to the Dagaates who prefer mud and thatch grass house is their physical strength and skill, and social support networks. To them, the latter include the members of their nuclear and extended family members and friends who assist them with their own physical strengths and skills to extract the locally available materials (sand, timber, and grass) and construct the houses. The research gathered that unlike the natives of the established communities, the Dagaates are still socially cohered because of their shared migratory status.

Despite their idiosyncratic preferences, the research found that the communities rank the success of residential builders by the type and size of their houses. In this regard, they consider successful builders as those who have bigger concrete blockhouses, which differ from the historical social construction that included bigger mud and thatch grass houses as well. Given that all their houses are made of concrete

blocks, the resettlement communities rank success by the house size. However, the other communities – Bongase, Gbolekame North, and Carpenter – rank them by both the size and type of housing. In these communities, the research found that unsuccessful builders are those who have smaller concrete blockhouses or mud houses. As the economies of these communities are primary and involve arable farming, the successes of the residential builders relate to the sizes of their cashew farms. However, other successful builders are not actively engaged in arable farming, but are staff of the BPA or the Wildlife Division. One of such builders is a retired staff of the latter who owns the biggest house in the Akanyakrom resettlement community. Additionally, the research gathered that the successful builders also have bigger household sizes, which may explain the success of those engaged in farming and their general preference for bigger houses. While the native residential builders employ these standards to measure success, the non-native Dagaates shun them, because of their transience and general preferences for mud and thatch grass houses. Despite this, the houses of the Dagaates are part of the natives' schemes of categorization. The churches also rank success by the type and size of the buildings. The research found that most successful churches such as the Evangelical Presbyterian Church at the resettlement area have wealthy congregants who supported their building endeavors. This is opposed to the Roman Catholic Church of Akanyakrom, which is still grappling with funds to purchase a lot from the BPA.

In terms of location, the research found that the residential builders prefer to live in areas that enhance their senses of security and connection. These are areas in proximity to kin and friends, because of their collectiveness and a general belief in their mutual willingness to provide security and support for each other. The churches also prefer to build in communities where a majority of their congregants lives in order to facilitate their access to church.

Labor: With respect to the wage laborers who support the builders with preferences for concrete blockhouses, they employ their skills and physical strength as their mechanisms of access. The sand winners and chainsaw operators also employ their personal means of transportation. With these, they are able to render their services to the builders to earn money. Regarding the nuclear and extended family members and friends who support the Dagaates to build their mud and thatch grass houses, the research found that their mechanism of access is physical strength. Through this, the nuclear family members support the heads of households to provide housing for them. The extended family members and friends are also able to achieve their own building objectives when the builders reciprocate their support.

Vendors: Regarding the vendors, they sell building materials, including cement, aluminum roofing sheets, and iron rods to the builders for money. As gathered, the builders are particularly compelled to buy from the local vendors because of their proximity to them.

Following the theoretical framework of the research, the respective mechanisms of access outlined above ultimately correspond with the 'capitals' that facilitate access to the profits of the field (Bourdieu and Wacquant 1992, 97). Thus, they are also foundational to the objective relations among the respective categories of agents in terms of domination, subordination, or homology (ibid). In line with the theoretical

framework, the next section interprets the descriptions to explain the agents' recent social positions and power relations in the field of land access. These are in respect of research questions 'b (ii)' and 'b (iv)'.

6.3.3 Theory-guided interpretation: The recent agents and their power relations

In line with Bourdieu, the managers, users, and providers identified above are aptly the agents of the recent field of land access, because they possess the requisite properties (capitals) that make them effective and produce effects (1992, 107). Primary agents such as the Bui Power Authority (BPA), traditional authorities (TAs), farmers and builders and their corresponding providers, who constitute secondary agents are respectively active in the subfields of spatial development, chieftaincy, arable farming, and real estate. Rather than being exclusive, some of the primary agents participate in several subfields simultaneously. Thus, their movement between the subfields requires a "a genuine qualitative leap" or an adjustment to the respective principles of the destination subfield (Bourdieu and Wacquant 1992, 104; Etzold 2013, 18). The accounts show that the agents have a stratified relationship based on their possession of certain mechanisms of land access. In line with Bourdieu, these are characterized as the capitals that facilitate access to the specific profits of the subfields and determine the agents' social positions and power relations (1992, 97). Against this background, this section interprets the descriptions above to draw analytical conclusions that are pertinent to understanding the recent field of land access. Fundamentally, the analyses address the last two of Bourdieu's three steps to field analysis: (a) the demarcation of the field of power and the relative positions of the (sub) field to it; and (b) an analysis of the objective structure of relations between the agents competing in the field. Thus, it builds on the previous theoretical interpretation of the recent system of land access.

Reminiscent of the previous chapter, the section tries to achieve logical consistency by addressing Bourdieu's latter step first. This involves an interpretation of the agents' capitals and their objective power relations in the corresponding subfields. The results of the analysis will complement the agents' habitus identified in the previous section. Following the theoretical framework, the field's logic(s) and the agents' habitus and capitals constitute the frames of action of the field of land access that influence the agents' social practices, which are described in the next broad section. In turn, the social practices underlie their social constructions of 'land access' or 'land scarcity'. Ultimately, the interpretation of the agents' objective power relations in the subfields will be the foundation for interpreting the recent field of power in the next subsection. However, prior to identifying the field of power, the research will attempt to explain the power relations among all the agents of the field of land access, regardless of their objectives. From this, it identifies the dominant agents as a yardstick to defining the field of power or the space where they struggle for dominance over the field of land access.

6.3.3.1 The objective structure of relations of the recent subfields of land access

The current subsection interprets the power relations among the agents of the respective subfields. It interprets their mechanisms of access as capitals, with which they pursue their land access objectives and assume certain social positions in the subfields. Besides this, it shows how the respective agents legitimize

and recognize success or power in the subfields. As mentioned, the results of this subsection will feed into the next subsection, which seeks to identify the field of power of the recent field of land access.

The subfield of spatial development: The BPA is the main agent of the subfield of spatial development. Its habitūs are the territorial and use values of land, which represent its expected benefits from land. As explained, these are in respect of upholding its authority over the acquired territory to promote its mandated use according to Section 22 of the BPA Act 740 (2007). Following Bourdieu, these quests constitute the sub-stakes of the subfield of spatial development and relate to gaining symbolic power and an objectified cultural capital (the dam, its facilities, and the Bui City) (1983, 185; 2004, 218 cited in Etzold 2013, 22, 23). Towards these, the research shows that the BPA primarily employs its allodial title to land, which per Bourdieu's classification of capitals, relate to circulating economic capital (1983, 185; 2004, 218 cited in Etzold 2013, 22). Its legal recognition by the BPA Act 740 (2007), which also underpins its custodianship of land represents an institutionalized cultural capital (Bourdieu 1986, 247; Etzold 2013, 23). Besides these, the BPA relies on its human resources who contribute to its achievement of the habitūs (land values) with their expertise. Thus, they represent the BPA's embodied cultural capital (Bourdieu 1986, 244; Etzold 2013, 23)

Relevant to the BPA are also the public authorities that contribute to its land access and spatial development. These are the Bono Regional Lands Commission, the Bono and Savannah Regional Town and Country Planning Departments, and the Banda and Bole District Physical Planning Departments. Together with the BPA, these authorities are part of the organizational structure of the State and are in a horizontal network of institutionalized relationship with the BPA. Thus, they typify another bridging social capital to the BPA. Like the BPA, the key mechanism of access of these public authorities are their legal mandates, which following Bourdieu, relate to institutionalized cultural capitals (1986, 247; Etzold 2013, 23). They also rely on their human resources, whose specializations may underscore the authorities' embodied cultural capitals (Bourdieu 1986, 244; Etzold 2013, 23). As a social capital to the BPA, the capitals of the public authorities augment the BPA's own capitals and facilitate its achievement of its habitūs. This maintains Bourdieu's assessment of social capital as a multiplier of the capitals of the holder (1986, 249; Etzold 2013, 23). The research conceptualizes that these public authorities belong to the field of public administration.

Besides the public authorities, the BPA's social capital includes its relations with the Chinese Government through the involvement of the state-owned Sinohydro and the Exim Bank. Specifically, the former represents a bridging social capital to the BPA because they have a relation of exchange whereby the BPA (through the Government of Ghana) paid the company for their embodied and objectified cultural capitals (engineering services). With the latter, the BPA has a linking social capital because they depended on them for the circulating economic capital with which the dam was constructed. Given that these Chinese agencies compete internationally with other investors under certain logics, the research conceptualizes that they belong to the autonomous field of foreign direct hydropower investment, which overlaps with the field of the spatial development and the field of land access. Besides them, the BPA's bridging social capital also includes GRIDCo, with whom it exchanges its generated electricity for money. As a private limited liability

company, the research conceptualizes that GRIDCo operates in the distinct field of electricity commerce where it competes with other companies over access to the generated electricity and bulk consumers such as the Electricity Company of Ghana (ECG). Due to its relations with the BPA, the research further conceptualizes that this field and the field of spatial development overlap.

The subfield of chieftaincy: The research has previously deduced that land has territorial and environmental values (*habitus*) to the traditional authorities (TAs) who operate in the unified subfield of chieftaincy. This is fundamentally due to their quest to maintain their socio-political and socio-cultural authority and conserve the sacred trees by controlling land access. In line with Bourdieu, the TAs' quests or the sub-stake of the subfield of chieftaincy relate to gaining symbolic power (authority) and maintaining an objectified cultural capital (the sacred trees) (1983, 185; 2004, 218 cited in Etzold 2013, 22, 23). For these, the descriptive analyses show that they primarily capitalize on the chieftains' recognition by the BPA as intermediaries of land access. This recognition, which is also underpinned by those of the kingmakers and the National House of Chiefs relate to an institutionalized cultural capital (Bourdieu 1986, 247; Etzold 2013, 23). Essentially, this underscores a shift in the legitimization of the TAs' power from the sole recognition of the kingmakers and the possession of allodial titles to a recognition by the BPA. It also underscores the elevated status of the Akanyakrom TAs, who though historically non-landowners, have gained equal powers as the historical landowners due to the BPA's recognition. The National House of Chiefs also possesses an institutionalized cultural capital by virtue of its legal mandate per Article 271 of the Constitution and Sections 12 and 59 of the Chieftaincy Act 759 (2008) (*ibid*).

The research also shows that while the acquisition has extinguished the chieftains' absolute authority over land, they all continue to regulate land access by enforcing certain customary precepts like taboos and annual payments by non-native farmers. In this case, the chieftains employ their socio-political and socio-cultural authorities. As explained in the previous chapter, the chieftains' socio-political and socio-cultural authorities also relate to institutionalized cultural capital, because they are based on their selection by revered kingmakers per the respective institutions of chieftaincy. Fundamentally, the chieftains apply these capitals in further attempts to undergird their symbolic power (authority) and maintain the relevant objectified cultural capital (sacred trees) to support their native cosmologies. Of relevance, their relatively higher institutionalized cultural capitals undergird their distinct authorities among the TAs, which gives them a provincial symbolic capital.

The subfield of arable farming: The farmers' collective primary *habitus* is the use value of land, which is subject to the subsequent *habitus* of the exchange and territorial values of land. Their basic quest is to gain high yields of the relevant crops to support their livelihoods. Following Bourdieu, this objective, which is also the sub-stake of the subfield of arable farming typifies a circulating economic capital (1983, 185; 2004, 218 cited in 2013, 22, 23). Towards this end, the research shows that the farmers employ their property rights and 'strength', which encompasses their physical capability and skill, the quality of their social support networks, and their financial capability as their primary land access mechanisms. Both natives and pre-existing non-natives possess leasehold interests to land, which the BPA has guaranteed by virtue of its perception of their citizenship of the respective communities. Thus, the research surmises that the agents'

bonding social capital – that is kinship ties – underlies their property rights (Etzold 2013, 31). Practically, the leasehold interest is devoid of outright ownership and the right of transfer, and is underlain by certain use conditions such as proscriptions against cultivating perennial crops without the BPA's authorization.

Theoretically, the farmers' 'strength' relates to certain capitals. In line with Bourdieu, their physical capabilities and skill are characteristic of an embodied cultural capital, while their financial capability relate to circulating economic capital (1986, 244; Etzold 2013, 22, 23). Their social support networks, which primarily encompass their nuclear family members relate to bonding social capital (Bourdieu 1986, 248; Bourdieu and Wacquant 1992, 119; Etzold 2013, 31). Based on these capitals and following the previous description of the farmers' mechanisms of access, the following paragraphs interpret the power relations within the recent subfield of arable farming. The research acknowledges their diversity in terms of citizenship, gender, and status. Hence, the interpretations are done accordingly, but also with respect to the household, communal, and provincial levels where the competition among them takes place.

As explained above, both natives and the non-native farmers hold leasehold interests under the logic. However, the non-natives are additionally subject to the TAs condition of making annual payments towards the yam festival, which effectively reduces their gross crop yields. Thus, while the natives' leasehold interests are interminable, the non-natives', which is more like a customary tenancy agreement is terminable by the TAs. Conclusively, the natives still have an advantage over the non-natives in the subfield of arable farming despite the recent changes.

The research also shows that regardless of citizenship, 'strength' primarily underlies the power relations among members of farming households. In this regard, the research shows that men possess a higher volume and weight of embodied cultural and circulating economic (money, seeds, and seedlings) capitals than the women do. In all the communities, this is mainly due to the relative physical strength of the men. In the historical traditional farming communities of Dokokyina, Bongase, Bui, and Carpenter, this is additionally due to the men's advanced skills from their extensive practices in the past. It is also due to the high compensations they received from the BPA for their relatively large historical farms. Thus, in native households where the spouses have joint or separate farms, the men acquire the farmlands and apportion some to their spouses if they desire to farm independently. Given their circulating economic capital (money), they were also initially better placed to hire additional social capital (laborers) and purchase the requisite objectified cultural (farm tools) and circulating economic (seeds and seedlings) capitals, which gave them a head start over women after the displacement. Consequently, they control the circulating economic capital (money) that accrues from the family farms and earn higher circulating economic capitals (money) than the women who have independent farms. Given these, they have been able to expand their farms over the years by obtaining additional circulating economic capitals (agro-inputs) to augment their existing capitals towards achieving their objectives. These have also contributed to the men's relatively high economic capitals in general. The research also shows that although creditors are available to all, the men largely patronize them because of their extensive farming practices and ability to repay the credits. Due to the division of expenditure in households, the men are also responsible for providing shelter (fixed

economic capital). This and their possession of higher volumes and weight of the relevant capitals give them a domestic symbolic capital at the household level.

At the levels of the respective communities and the entire province, the power relations among the farmers are also determined by the possession of the embodied and objectified cultural capitals, circulating economic capital, and bonding social capitals. Thus, the men dominate the subfields of arable farming due to their possession of relatively higher volumes and weight of these capitals. While these also underlie the power relations among the men, they are also differentiated by the quality of their bonding social capital (the size, strength, and skill of nuclear family members). Fundamentally, those who had higher volumes and weight of these capitals in the early years after the displacements have had an advantage over those who did not. These privileged ones are mainly the farmers of the traditional farming communities, who besides their bonding social capital, had higher volumes and weight of the requisite capitals to start new farms. This explains why the Dokokyina farmer who won the District Best Farmer Award has for instance been relatively successful among the farmers of the resettlement communities. It also explains why the members of Akanyakrom have been relatively unsuccessful among the resettlement communities and among all the other communities of the province, including Gbolekame North. Regarding Gbolekame North, the research shows that although they initially had relatively low volumes and weight of the relevant capitals, they conversely had access to large tracts of land, which gave them a relative advantage over all the others.

The research also shows that besides possessing the relevant capitals, some successful farmers like the one from Dokokyina are also benevolent, which generates a linking social capital to them when their beneficiaries reciprocate their kindness (Etzold 2013, 31). With this, they are able to augment their embodied cultural and social capitals towards advancing their achievement of their habitus. Besides the commoners, the Chief of Carpenter also capitalizes on his symbolic capital in the subfield of chieftaincy to achieve relative success among the farmers of his community. As discussed, he has preminent access to farmlands and uses his position to establish a linking social capital with his tenants, which enable him to obtain their services at no charge. Thus, he possesses larger farms and has relative success among the farmers of Carpenter, which also augments his position among the farmers of the province.

Ultimately, the marks of the farmers' success are their economic and bonding social capitals gained from the conversion of the capitals above. These include their fixed economic capital; that is the sizes of their cashew farms and the sizes and type of their houses (concrete blockhouses). They also include the size of their bonding social capital, which is their household. As deduced, the sizes of their cashew farms determine their circulating economic capital (money) and underlie their ability to build perceptibly distinct houses and increase their household sizes through additional marriages, childbirth, and guardianship. Relevantly, the farmers' recent legitimization of success based on cashew farms and concrete blockhouses is distinct from the historical fashion, which was the size of their yam farms and any type of housing. By possessing these relevant capitals and being benevolent, farmers like the Dokokyina farmer aforementioned have gained symbolic capital among the people. The research shows that the TAs thus frequently invite him to participate in decision-making. As mentioned, he also receives voluntary offers of

assistance from the beneficiaries of his benevolence (linking social capital), which supplements his personal capitals towards even greater success in the subfield. This and the Chief of Carpenter's symbolic capital sustain Bourdieu's conclusion about symbolic capital being the most valuable form of capital that is easily convertible to economic capital (1977, 179, 183, 195). Also relevant, the research deduces that despite possessing joint or independent farms, married women benefit from the success and symbolic capital of their spouses due to the relations of dependence between them.

Besides the farmers, the subfield of arable farming also constitutes the wage laborers who are both landless non-natives and landed natives. To the Dagaates, it also constitutes the women who customarily cannot own independent farms but have to assist the men on the farms. The research shows that the activities of these laborers are socially, spatially, and functionally limited to those of the farmers, which explains their placement within the subfield of arable farming. Primarily, the research deduces that the objective of land access of the wage laborers is to gain circulating economic capitals in cash and/ or in-kind. To the Dagaate women, their objective is to support the men to acquire the circulating economic capital (crop yields) for the benefit of the household. For these, all the laborers employ their embodied cultural capitals (physical strength and skill). Given their relations of exchange with the farmers, the research surmises that the wage laborers represent a bridging social capital to them (Etzold 2013, 31). However, the relations between the Dagaate farmers and the women represent a bonding social capital due to the inherent kinship ties (ibid).

The farmers also have relations with the District Departments of Agriculture, which supply them with agrochemicals and deploy Extension Officers to help them in their activities. As a decentralized statutory agency, the main capital of the Departments of Agriculture is institutionalized cultural capital; that is their legal mandates. The Extension Officers additionally employ their embodied cultural capital (expertise) to undertake their responsibilities. Although the Departments also sell agrochemicals (circulating economic capital), their objective is non-economic, but geared towards promoting sustainable agricultural growth and development. Given their statutory characteristic, the research conceptualizes that they situate within the field of public administration. Further, the Departments represent a linking social capital to the farmers, because the latter depend on them for the requisite services and support.

Also linked to the Departments of Agriculture and the farmers are independent vendors of agrochemicals who buy from the former and sell to the latter. They also sell farm tools to the farmers. The research conceptualizes that they operate in the field of agro-input commerce where they compete with other agents over access to the products and are subject to certain corresponding logics. Due to their dual relationship with the farmers and the District Department of Agriculture, the research further conceptualizes that this field overlaps with the field of public administration and the subfield of arable farming. The Department of Agriculture represents a bridging social capital to the vendors due to their relations of exchange. However, the vendors represent a linking social capital to the farmers, because irrespective of the relations of exchange between them, the vendors have a monopoly of the local market and hence, have the power to impose the prices of their products on the farmers. In this regard, the research also deduces that the farmers are compelled to buy from the vendors due to their relative proximity.

Moreover, the farmers also rely on creditors to obtain circulating economic capitals including money and agro-inputs. The accounts show that the creditors are themselves farmers who are taking advantage of the 'input gap' to provide these loans in order to earn higher circulating economic capitals (money) when the debtors repay them. Thus, these exchanges supplement the circulating economic capitals gained from their own farms and augment their relative social positions in the subfield of arable farming. Some of them are also vendors who sell agro-inputs (mainly seeds and seedlings) for cash up front. Like the creditors, they use the earned economic capital to supplement the economic capital gained from their farms and hence their social positions in the subfield. In this regard, the research deduces that their activities are spatially, socially, and functionally limited to the subfield of arable farming. Thus, the research conceptualizes that although they belong in the field of agro-input commerce, they are also constituent of the subfield of arable farming where they especially compete with other farmers over the principal stake and sub-stakes. Due to their extra activities, such farmer-creditors and farmer-vendors are more successful than those who are only farmers. Thus, they dominate the subfield of arable farming by dictating the values of their products and hence constitute a linking social capital to the other farmers. Despite this, they do not influence the broader logic, because it is preserve of the BPA.

The description also shows that the farmers have relations with domestic and external merchants with whom they exchange their subsistence and cash crops for money, which both represent forms of circulating economic capital. Particularly, the domestic crop merchants are also farmers. Those who trade in subsistence crops are usually independent and sell the acquired crops to external merchants to reproduce their circulating economic capital (money) with profit. This improves the circulating economic capital gained from their farms and hence, underlie their social progress in the subfield. In turn, the external merchants also sell the crops at various market hubs to reproduce their circulating economic capital (money) with profits. Regarding the domestic cash crop merchants, the research shows that most of them work for international companies at a commission. Thus, they receive money from the companies to buy and assemble the cashew seeds for regular pickup. Others too are independent, some of whom double as creditors. They also buy and assemble the cashew seeds and sell them to the companies. As the domestic merchants are also farmers, their supplementary activities augment their circulating economic capitals, which enable them to have a competitive edge over other farmers in the subfield of arable farming. Thus, they easily attain higher social positions than the others do.

However, the activities of the external crop merchants are socially, spatially, and functionally unlimited to the subfield, because they compete with other agents in other fields, where they are also bound by the respective logic. Thus, the research conceptualizes that the subsistence and cash crop merchants are respectively active in the fields of subsistence and cash crop commerce. As there is a direct flow of exchange between them and the farmers, the research further conceptualizes that the respective fields overlap with the subfield of arable farming of the field of land access. Although relations of exchange exist between the farmers and the merchants, their power relations are asymmetrical, because the latter impose the crop prices on the former. As discussed, this is because the latter possesses a more durable circulating economic capital (money), which the farmers require to be successful and gain symbolic capital in the subfield of

arable farming. By contrast, the farmers' circulating economic capitals (crops) are perishable; thus, they are compelled to sell them off to avoid incurring loss. Additionally, while the merchants possess the requisite objectified cultural capital (means of transportation) to transport the crops to the various market hubs, the farmers do not. Given these, the farmers have a relation of dependence with the merchants, which typify a linking social capital (Etzold 2013, 31).

The subfield of real estate: The accounts show that land has use and exchange values (*habitus*) to the builders, because they access it to obtain preferable houses at preferable locations that expedite their senses of connection and security. Fundamentally, the builders' quests – shelter and security – are the sub-stakes of the subfield of real estate and relate to fixed economic capital and bridging social capital (Bourdieu 1983, 185; 2004, 218 cited in 2013, 22, 23). To this end, the builders employ their property rights, which is the leasehold interest as their primary mechanism of access. The research shows that the prospective builders of the resettlement communities obtain such interests from the BPA at no cost due to their citizenship, which relates to a bonding social capital (Bourdieu 1986, 248; Etzold 2013, 31). Yet, the TAs who distribute the lots have certain expectations of them. In addition to submitting applications, the TAs of especially Akanyakrom expect the prospective builders to be knowledgeable about the community's history; a mechanism, which typifies embodied cultural capital (Bourdieu 1986, 244; Etzold 2013, 23). All successful applicants are also expected to make drink offerings as a sign of their gratitude, which relate to circulating economic capital. Apart from the residential builders of the resettlement communities, the BPA expects all other builders to expend circulating economic capital (money) in order to obtain leasehold interests to lots (Bourdieu 1983, 185; 2004, 218 cited in Etzold 2013, 22).

Subsequent to these capitals, the research shows that the builders employ 'strength', which depending on their housing preference, may encompass their physical strength and skill, support system or financial capability. The native residential builders and churches that prefer concrete blockhouses largely rely on their financial capability, which relates to a circulating economic capital (Bourdieu 1983, 185; 2004, 218 cited in Etzold 2013, 22). With this, they acquire bridging social capitals (laborers) to extract the locally available circulating economic capitals (building materials) and to construct the houses (Etzold 2013, 31). They also use it to acquire other requisite circulating economic capitals (including cement and aluminum roofing sheets). Conversely, the non-native Dagaates who prefer mud and thatch grass houses largely rely on their physical strength and skill, which relates to embodied cultural capitals (Bourdieu 1986, 244; Etzold 2013, 23). They also rely on the embodied cultural capitals of their social support networks, which generally include the members of their nuclear and extended family members and friends. As discussed above, these groups of agents assist the builders to extract the locally available materials and construct the houses. In line with Etzold, the nuclear family members relate to bonding social capital, while the extended family members and friends relate to bridging social capitals due to the inherent arrangement of exchange (mutual support) (2013, 21).

The research shows that the non-native Dagaates do not measure success among themselves, because of their transience and preferences for mud and thatch grass houses. However, the natives rank success in the subfield of real estate based on the type and size of housing. Thus, in Bongase, Gbolekame North, and

Carpenter, successful residential builders have bigger concrete blockhouses while unsuccessful ones have smaller concrete block or mud houses. This is relevantly different from the historical manner of assessing success, because it was only based on the size of the houses irrespective of the type of building materials. Given that the houses of the resettlement communities are all concrete block, the basis of success only depends on the house size. Among the churches of the respective communities, success is also ranked by the housing type and size of the places of worship. In all cases, the successful residential builders have symbolic capital by virtue of the type and size of their houses and its perception as distinct by the other members of the communities (Bourdieu and Wacquant 2013, 297). A majority of such builders are farmers who own large cashew farms from which they acquire the circulating economic capital (money) to build large concrete blockhouses (fixed economic capital). This explains why they are all men. Deductively, there is a direct link between gaining symbolic capital in the subfields of arable farming and real estate.

Regarding this, the research also surmises that besides underling their preferences for bigger houses, the characteristically bigger household sizes of the successful residential builders explain their success in the subfield of arable farming. However, it also conjectures that although some unsuccessful residential builders may have bigger household sizes, they require additional embodied cultural (physical strength and skill) and circulating economic (agro input and money) capitals to excel in the subfield of arable farming through which they can earn the requisite circulating economic capital to be successful in the subfield of real estate. Also relevant, although the non-native Dagaates shun any categorization of success in the subfield of real estate, they are part of the natives' schemes of ranking, because they live among them in the established communities. Given that the Dagaates prefer mud and thatch grass houses and live in clusters, the research deduces that the natives associate such clustered areas with people of lower social positions. This thus relate to Bourdieu's idea of 'appropriated social space' (1989, 16; 1996, 12). On the other hand, the research shows that the successful churches who have bigger concrete block places of worship have wealthy congregants, which correspond with a high bridging social capital.

Besides the builders, the subfield of real estate also constitutes the non-native builders' social support networks, which theoretically include bonding (nuclear families) and bridging social capitals (extended family members and friends) (Etzold 2013, 31). It also includes the natives' hired bridging social capitals, which are the wage laborers who either assemble the building materials or construct the houses (ibid). The research positions these agents in the subfield of real estate because their activities are socially, spatially, and functionally limited to those of the builders. To the bonding social capital of the non-natives, their objective is to assist the builders to provide shelter (fixed economic capital) for the household. This could in turn enable the household to gain symbolic capital. Conversely, the bridging social capitals (extended family members and friends) contribute to the non-native builders' objective with hopes of gaining their support (bridging social capital) when they pursue their own objectives. The wage laborers who win sand, fell timber, and build the houses of the natives with preferences for concrete blockhouses also aim to earn circulating economic capital (money). Towards these objectives, all the laborers employ their skills and physical strength, which correspond with embodied cultural capital (Bourdieu 1986, 244; Etzold 2013, 23).

The sand winners and chainsaw operators additionally employ their means of transportation, which relate to an objectified cultural capital (Bourdieu 1986, 246; Etzold 2013, 23).

The research shows that the builders also have relations with vendors of building materials. It conceptualizes that the vendors are active in the separate field of hardware commerce where they compete with certain agents over access to the vended products and its benefits under specific logics. Given their social, spatial, and functional relations with the builders, the research further conceptualizes that the field of hardware commerce overlaps with the subfield of real estate. Relevantly, the mechanism of access of the vendors are the building materials, which represent circulating economic capitals due to their consumable and exchangeable attributes (Bourdieu 1983, 185; 2004, 218 cited in Etzold 2013, 22). With these, they earn money as another form of circulating economic capital from the builders. As the vendors have monopoly of the markets, they have asymmetric power relations with the builders. Thus, they represent a linking social capital to the builders (ibid, 31).

Summary: The above show the objective structure of relations among the agents of the respective subfields of the field of land access. Based on the discussions, the next subsection identifies the powerful agents of the unified field of land access to delineate the recent field of power. With reference to Chapter 2, the research defines the field of power as the meta-field where the powerful agents of the unified field of land access struggle to gain symbolic power, by which they systematize the logic, social differentiation, and struggles within the field. Consequently, an analysis of the recent field of power will show the relations of struggle between the dominant agents of the recent field of land access and the origin and meaning of power. These will underlie a further explanation of the field's current logic and the relative positions of the subfields to the field of power as a yardstick to illustrating their relevance to the recent holder(s) of symbolic power.

6.3.3.2 The field of power of the recent field of land access

Besides the subfields, there is an objective structure of relations among the primary agents of the broader field of land access. In this context, the research deduces that the manager – the BPA – dominates the field of land access because it possesses the highest volume of economic, cultural, and social capitals. The BPA's circulating economic capitals, which encompass its allodial title to land and money, outweigh the other agents' who only hold leasehold interests and have less money. Derived from its institutionalized cultural capital (legal recognition and mandate), the BPA's allodial title gives it the right of ownership and control over the acquired lands, which the other agents lack. Its access to a higher volume of money from its linking social capital (the Chinese Exim Bank) through the Government of Ghana underscores its relatively mammoth and distinct use of land. This is manifest in the dam structure, which as an objectified cultural capital, symbolizes the BPA's paramount authority and is the source of its relatively higher recurrent circulating economic capital (money). In addition to its paramount institutionalized cultural capital, the BPA also has the highest embodied cultural capital in the field, which is its human resources. It also has a bridging social capital with other relevant public authorities that use their own institutionalized (legal recognition) and embodied cultural capitals (human resources) to augment its land access endeavors.

Principally, these substantial and weightier capitals underscore the BPA's dominance over the other primary agents of the field of land access.

In this regard, the meta-field in which the BPA's capitals are concentrated and underscores its dominance is the State, which also constitutes the objective organizational structures of the public authorities that have become part of the recent field of land access. Thus, the research conceptualizes that the subfield of spatial development and the field of public administration situate within the field of power. Although the State encompasses a wide array of public agencies, the BPA has the symbolic capital and symbolic power in the field of land access due to its institutionalized cultural capital (juridical mandate) per the BPA Act 740. Due to this, the research deduces that the relevant statute is the origin of power. To the commoners, power then implies land ownership and the ability to control access, which the BPA has evinced through what Bourdieu calls "physical and symbolic violence over a definite territory and over the totality of the corresponding population" (1998, 40). In context, the BPA's re-demarcation of land, displacements, and resettlement of people exemplify its use of physical violence. Through this, it has perpetuated symbolic violence by imprinting its authority on the minds of the people. The woman from Akanyakrom who as cited above sums this up as follows: "*Those with power who own the land displaced us from our old community and brought us here*". Relevantly, this underlies the BPA's symbolic power because it exemplifies its ability to "impose recognition" and graft visions of social divisions on the minds of the other agents (ibid 1990b, 138). This is different from the historical perception of power, which was mainly about having legitimate recognition by the kingmakers.

Bound up with this is the imposition of a new logic, which grants the BPA the exclusive right to use land free from any encumbrances and enables it to define the values of the relevant capitals with respect to land access. Accordingly, the logic gives preeminence to institutionalized cultural capital (juridical recognition) for land access. It also emphasizes the relevance of social capital to the natives and pre-existing non-natives' land access by granting leasehold interests to farmlands based on citizenship. For new non-natives, the logic establishes the relevance of circulating economic capital (money) for obtaining leasehold interests. All these accentuate the BPA's authority over the conversion rates of the species of capitals and hence its symbolic power (Bourdieu 1990b, 138). In addition to this, the research deduces that of all the subfields of the field of land access, the subfield of spatial development is the most important to the BPA, because it is the space in which it pursues its land access objective. Thus, the subfield is relatively proximate to the field of power than the others are.

As an integrative space constituted by dominant agents, the research ascertains that the field of power is also host to the subfield of chieftaincy in which the traditional authorities (TAs) operate due to their sub-managerial roles. The research shows that in these capacities, the TAs have become part of the field of power where they struggle for symbolic power by enforcing certain principles and procedures of land access. The TAs of the resettled communities particularly exemplify this by the stringent application procedure involved in accessing building lots. The research argues that although the procedure potentially ensures a fair allocation of limited lots among many prospective builders, it also supports the authority of the TAs by maintaining their relevance and the historical social structure.

6.3.3.3 Summary and implication for the recent field of land access

This far, the research has capitalized on the data to conceptualize the recent field of land access. It has identified the field's stake as land, and its logic as the statutory tenure system. By arguing that the stake has multiple objectives with unique logic, the research has further conceptualized that the field constitutes subfields including spatial development, chieftaincy, arable farming, and real estate. The subfield of pastoralism, which was historically constitutive of the fields of land access is absent, because it lacks recognition under the recent logic. Consequently, the research has identified the respective agents of the subfields, their habitus (land values), and the respective capitals, which facilitate their achievement of set objectives and their relative social positions. Through this, the research has identified the field of power as the integrative domain where the dominant agents struggle to obtain symbolic power. Of significance, the foregoing analysis has also shown the embeddedness of the agents in the subfields as most of them participate in more than one subfield. In this respect, they transmit their capitals between the subfields towards the corresponding sub-stake. Besides this, the subfields and field are not exclusive but also embedded in a 'broader situation' where other fields exist. The exchange between the agents of the field of land access and those of the other fields contribute to the functioning of the latter and particularly, to the agents' achievement of their habitus (land values or expected benefits from land).

As deduced, the agents' habitus (land values) and capitals are the inputs that facilitate their acquirement of the varied sub-stakes or ultimate capitals through certain strategies (Bourdieu 1992, 101). To this effect, the strategies of land access are actually the thrust of the agents' relative social positions in the subfields and in the field in general (ibid). Fundamentally, the agents' acquirement of the sub-stakes correspond with their achievement of the habitus (land values) or expected benefits from land and hence result in social constructions of 'land access' and 'land scarcity'. Given this, the next section discusses the agents' strategies of land access in the recent subfields as a yardstick to understanding their interpretations of recent experiences.

6.4 The recent strategies of land access

As explained above, this section recounts the strategies of land access by which the primary agents pursue the respective sub-stakes and hence their land values. The primary agents include the BPA, traditional authorities (TA), farmers, and builder. Like the previous sections, the current section has descriptive and theoretical parts. Ultimately, the section addresses research question 'c (ii)', which is '*What are the recent strategies of land access?*'

6.4.1 Descriptive analyses of the land access strategies of the BPA

As related previously, the BPA seeks to retain its authority over the acquired land to promote its use for the dam construction and other spatial development. Thus, when interviewed on 5 September 2018, the Land Administrator indicated that, "*We [the BPA] manage the land and the physical planning of the entire area*". Relevantly, the BPA's land management encompasses land administration and infrastructure

development; that is the construction of the dam and its facilities, but also other spatial development of the acquired area. For these, it mainly employs its allodial title, which is its primary land access mechanism to the acquired land as granted to it under Section 22 of the BPA Act 740 (2007). With its allodial title, the BPA has a mandate to use the land free from any encumbrances, as well transfer it on terms, which it considers necessary for undertaking its functions (ibid). It also relies on its relationship with the other relevant public authorities, foreign partners, and merchants to expedite the achievement of its objective. The subsections elaborate on the respective strategies of land access of the BPA.

6.4.1.1 Land administration

The research found that with its allodial title, the BPA administers land to retain its authority over the acquired territories by protecting the liminal boundaries from unwanted access. This encompasses the adjudication of land interests, regulatory, and fiscal functions. Regarding its adjudication of land interests, the foregoing discussion shows that the BPA has allocated the relevant rights of ownership and control, use, and transfer of land. To this end, it holds the allodial title to land, which gives it the right of ownership, control, and transfer. It has also delegated some of its right of transfer to the chieftains and allocated use rights for recognized land uses (arable farming and building) in the form of leasehold interests. Besides this, the BPA has also mapped out the areas where the allocated rights are applicable. In this regard, its own rights are all encompassing; yet, those of the chieftains are delimited to their respective communities. The use rights of arable farming are also limited to the demarcated areas, which explains why farmers have the liberty of independent access to such areas but are unable to access so-called 'restricted areas' without authorization. Although builders may also exercise their use rights, they cannot access the open farmlands for building but have to secure lots at the appropriate places after undergoing the specified protocol.

Concerning its regulatory functions, the research gathered that the BPA has primarily specified the protocols under which it allocates use rights. Thus, it has granted the natives and the pre-existing non-natives leasehold interests by virtue of their citizenship of the respective communities. New non-natives may however obtain leasehold interests through applications and payments of the charges previously outlined in Table 6.1. The research also found that although the BPA unveiled a proposed master plan in December 2018 with the help of the Regional Town and Country Planning Departments, its Land Administration Unit has been enforcing a supposed spatial planning scheme for the area since its establishment in 2007. This scheme is the basis of the land demarcations above, but also underlies the demarcations for the reservoir, dam structure, transmission towers, power station, BPA office and residential facilitates. Per this scheme, the BPA has been restricting land access to the specific uses to achieve its spatial development agenda and expedite the operation of the dam. This explains why it declined the request by the Akanyakrom community to be resettled near the reservoir in order to assemble the resettlement communities towards its Bui City agenda and protect the reservoir from siltation. Moreover, the BPA has long earmarked certain areas for purposes such as solar farms and restricts their access by the other agents.

Besides these, the BPA has also delimited the scope of certain rights in an effort to achieve its land access objectives. For instance, although it has delegated some rights of transfer to the chieftains, their exercise of the rights is subject to the BPA's approval through its Land Administrator. Regarding the chieftains of the resettlement communities, their right to transfer building lots is contingent on the BPA's allocation of the lots. While all the chieftain of the affected communities also have the right to endorse prospective users, the latter's access to land is ultimately based on the BPA's consideration of their application. The BPA has also delimited the rights of the farmers to crop cultivation by proscribing against the cultivation of perennial crops. Although this is supposedly to extend the farmers' access to the land for subsistence farming, the BPA believes that it will ease its access to the lands for future projects. The BPA has also restricted property development at the resettlement site to concrete blockhouses by banning the construction of mud and thatch grass houses. This is in furtherance of a so-called 'beautification' agenda with respect to the creation of Bui City. In all cases, the BPA has also proscribed the users against felling economic trees and relies on its Environmental Officer and security personnel to enforce the ban. Relevantly, this ban is in respect of environmental conservation; however, it also supports the BPA's control over the land. Additionally, the BPA adjudicates land conflicts between users, which underscores its authority.

The BPA also administers land by undertaking fiscal functions. These include its land leases and the collection of revenues such as development charges, District Assembly and community development levies, and annual ground rents. As explained previously, the BPA keeps the development charges and annual ground rents to defray some of its own expenditure. However, it distributes the District Assembly and community development levies to the jurisdictional District Assembly and chieftains to support their respective functions. Particularly with respect to the chieftains, the research conjectures that the allocation may enable them to maintain the stools as they did in the past.

6.4.1.2 Infrastructure development

In addition to its land administration strategies, the BPA is also using land to develop the requisite infrastructure to underpin its functions. Evidently, these uses include the construction of the dam structure and its facilities, which encompass the reservoir, buffer zones, powerhouse, transmission towers, office, and residential facilities. It also includes its use of certain areas for the resettlement project and those restricted for future projects such as the solar farms. Towards these projects, the BPA engaged the Regional Lands Commission who facilitated the acquisition of the land by valuing the affected properties and intermediating the payment of compensation to the affected persons. As explained, eight communities – Bui, Akanyakrom, Dokokyina, Brewohodi, Agbegikuro, Dam Site, Lucene, and the camp of the Wildlife Division – were hence resettled. Those who lost their farms in these communities as well as Bongase, Carpenter, and Jama were also compensated accordingly. However, compensations for the acquired land are pending due to an ongoing dispute over boundaries between the Chieftains of Bui on one hand, and the Chieftains of Bongase and the Banda Paramountcy on the other hand. The BPA received loans (a commercial export buyer's credit and a concessional loan) from the Chinese Exim Bank and contracted

Sinohydro to expedite the construction of the facilities. Subsequent to its successful development of the project, it relies on its human resource to operate the dam and sells the generated electricity to GRIDCo to earn money recurrently for sustaining the infrastructure and its functions as a body corporate.

6.4.2 Descriptive analyses of the land access strategies of the TAs

Despite the recent changes, the research gathered that the traditional authorities (TAs) still seek to control land access in order to undergird their socio-political and socio-cultural authority and conserve the sacred trees for cosmological reasons. Towards this objective, the TAs primarily employ their recognition by the BPA as intermediaries of land access and invoke their socio-political and socio-cultural authority to promote certain customary practices. In all cases, the research found that the TAs' key strategy of land access is land administration, which encompasses the facilitation and regulation of access. The subsections provide descriptive analyses of these strategies.

6.4.2.1 Facilitating land access

With their recognition by the BPA, each of the traditional authorities (TAs) of interest in some way facilitates land access to the users of the respective communities. Fundamentally, the TAs of the resettlement communities – Bui, Dokokyina, and Akanyakrom – capitalize on their recognition by the BPA to facilitate access to building lots by prospective builders. In this context, they represent the communities by requesting lots from the BPA and redistributing them according to their own conditions of access. Together with the TAs of the other communities who are recognized by the BPA, including Bongase (and the Banda Paramountcy), Carpenter, and Jama, the TAs of the resettlement communities also have the mandate to endorse prospective land users to the BPA for approval. In this capacity, all the TAs practically lack control over land, because the BPA allocates them directly to the successful applicants. However, their endorsements facilitate the prospective users' access to land.

6.4.2.2 Regulating land access

The research found that except the Bian Clan Head, the traditional authorities (TAs) use their recognition by the BPA to regulate land access as a means to undergird their socio-political and socio-cultural authorities and to conserve the sacred trees. In this regard, those of the resettlement communities who received building lots from the BPA for redistribution enforced their own protocols of access on the prospective builders. As discussed previously, they required all prospective builders to submit applications, after which the TAs of Bui and Dokokyina distributed the lots on a first served basis. However, the TAs of Akanyakrom further subjected the applicants to interviews, during which they questioned them about the traditions and history of the community. They and the TAs of Bui subsequently required the beneficiaries to build their houses within a given period to enable them to request for more lots from the BPA. Although not explicitly required, the successful applicants of the three communities showed their appreciation to the TAs by offering drinks. Relevantly, this latitude and the benefits support the TAs' authorities and enable them to maintain the stools.

In addition to this, the TAs of the resettlement communities and those of the other communities capitalize on their role as intermediaries to regulate the land access of prospective users by codifying their own principles of access before endorsing them to the BPA. Although they lack control over the farmlands, all of them (including the Bian Clan Head) use their socio-political and socio-cultural authorities to regulate the users' access by enforcing the historical taboos. Among them are the taboo days and the restrictions against farming transversally, felling sacred trees, starting uncontrolled bushfires, and uprooting or destroying the cultivated crops of adversaries, especially during land disputes. The TAs of the communities that were not resettled, including Bongase (and the Banda Paramount Chieftains), Gbolekame North, and Carpenter also capitalize on these mechanisms to enforce the old condition of access on pre-existing non-native farmers despite their current possession of leasehold interests. Regarding this, the farmers are still under compulsion to make annual presentations of foodstuffs among others to maintain their access to land. Ultimately, all the above strategies are measures towards undergirding the TAs' authority, but also towards supporting the cosmological beliefs of the people.

6.4.3 Descriptive analyses of the land access strategies of the farmers

As indicated above, the land access objective of the farmers is to gain high yields of mainly cashew seeds, but also yams, groundnuts, and the other domestic crops for both subsistence and commercial purposes. Towards this objective, the farmers deploy their mechanisms of access to their main strategy, farming, which also encompasses routine strategies. The primary mechanism of access is the respective property rights. Other secondary mechanisms of access include 'strength', which encompasses their physical capability and skill, social support networks, and financial capability. Of relevance to the current section, the farmers' routine strategies are comparable with the historical practices and include the selection of farmlands and soil preparation, crop cultivation and farm maintenance, and crop harvesting, processing, use, and reinvestment. As these have been described in detail in the previous chapter, the following subsections only give a summary of them. Moreover, the research found marked similarities in the strategies of the farmers of all the study communities. Thus, although the descriptions are without consideration to case, exceptions are underlined where necessary.

6.4.3.1 Selection of farmlands and soil preparation

The research found that at the level of the household, the men seek out farmlands. However, in single households, the men and women seek out their own farmlands. As it was historically, the farmers select farmlands based on a general desire to be in proximity to family and friends to protect their farms mutually. They also select farmlands that are extensive enough for them to access the requisite acres of land per

season for about three years. Upon selection, the farmers leave cutlass marks on some of the trees on the land as a sign of their claim. Consequently, they 'pump' (prepare) the land by slash-and-burn or by applying weedicide particularly between the months of October and November. This is to enable them to capitalize on the harmattan season to dry out the weeds for burning and to cultivate yams in time before the rainy season. Subsequent to this, men whose spouses desire to have separate farms apportion some of their lands to them. After 'pumping' the land, the farmers prepare the mounds and ridges that are necessary to cultivate the relevant crops. In all cases, the farmers employ their physical strength and skill, rely on their nuclear families, and may expend money to hire additional labor or acquire the requisite agrochemical for these.



Picture 6.4: A farmer 'pumping' land in Bongase by the slash method (E. Agyepong, 7 November 2018)

6.4.3.2 Crop cultivation and farm maintenance

As they did historically, the farmers undertake different strategies to cultivate their preferred crops. They invariably cultivate cashew trees seasonally because of the seeds' increasing market value. To this end, they practice agroforestry by intercropping the trees with subsistence crops – especially yams – to maximize their use of the limited land and protect the farm from unwanted weeds. The research gathered that the cashew seedlings usually become mature after about four seasons; thus, the farmers are unable to intercrop them further. Conversely, the farmers cultivate groundnuts and cassava separately while they may cultivate the other minor crops such as okra, melons, beans, and maize on the same land with the groundnuts or cassava or with the yams and cashew trees.



Picture 6.5: A typical agroforestry farm in Bongase consisting of cashew trees and subsistence crops (E. Agyepong, 7 November 2018)

In all cases, the research found that the farmers adhere to the historical plan and cultivate yams between November and December or between late February and April in order to take advantage of the major rainy season. They cultivate groundnuts and melons in March for the same reason and beans between June



Picture 6.6: A farmer weeding around a farm in Dokokyina with a cutlass (E. Agyepong, 29 November 2018)

and July. However, they mentioned that they could cultivate cassava and cashew at any time of the year. Given the current events and the importance of cashew trees to them, most of the farmers have been able to acquire about five acres of cashew farm from accessing new lands seasonally and intercropping them with yams. Specifically, the farmers of the resettlement communities cultivate about two acres of farmlands per season while those of Bongase cultivate about three acres seasonally. The farmers of Gbolekame North and Carpenter respectively cultivate at least five and three acres seasonally. Regarding farm maintenance, the research found that the farmers use simple farm tools such as cutlasses or hoes or apply weedicide to get rid of unwanted weeds. They also apply pesticides to the cashew trees when they experience pests or other plant diseases. Of relevance too, all the farmers reported that they employ their physical strength and skills to plant the crops and maintain the farms. Married ones also engage their nuclear families. Depending on their personal savings or ability to secure credit, they may also spend money on additional seeds, farm tools, labor, and agrochemicals.

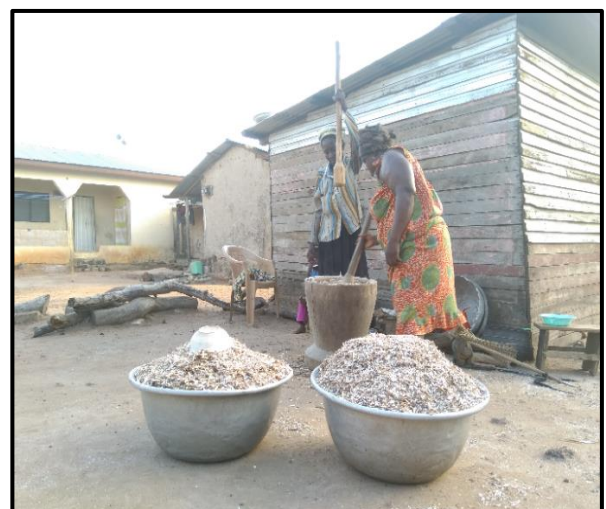
6.4.3.3 Crop harvesting, processing, use, and reinvestment

As they did historically, the farmers harvest yams, groundnuts, and melons between August and September and beans between October and November. However, they may harvest cassava after six months of planting. Cashew on the other hand fruits after a year of planting; however, they begin harvesting after two years when it fruits more. Usually, this is between December and May when the markets are active. Irrespective of having joint or separate farms, the male household members normally harvest the yam, cassava, and groundnut, while the women and children harvest the other minor crops such as beans and melons. In single households, the farmers harvest all the crops by themselves.

Due to their weight, the farmers prefer to store harvested yams in trench silos or on heaps on the ground surface and transport the crops home in bits. In married households, the women and children are responsible for processing crops like melons, cassava, groundnuts, and beans, while unmarried farmers undertake this task by themselves or by engaging wage laborers. Regarding this, the research found that like the past, they process the melon and sometimes



Picture 6.8: Stored yams and yam sets on the ground surface in Dokokyjina (E. Agyepong, 29 November 2018)



Picture 6.7: Some women processing beans in Bongase (E. Agyepong, 7 November 2018)

cassava on the farm due their weight. Together with groundnuts and beans, they may also transport cassava home for processing. Specifically, they process groundnuts by shelling and beans and melons by podding. Cassava is usually processed by peeling and chipping after which it may be sun dried on the farm and subsequently ground into powder or freshly grated in dough. Cashew on the other hand is processed by all the household members or with the help of wage laborers on the farm by detaching the seeds from the fruits. Afterwards, the farmers transport the seeds home for sale.

As deduced, the farmers consume most of the subsistence crops and sell the rest and the cashew seeds to crop merchants. They sell the subsistence crops to either domestic or external crop merchants who frequent the communities during the harvest season. They however, sell the cashew seeds to domestic cash crop merchants. As explained previously, some of these merchants are independent or contractors of the cashew seed buying companies in Sampa. Given the imposed conditions attached to their maintenance of land access, the non-native farmers make the requisite annual payments to the respective TAs towards the yam festival. After harvest, both the natives and non-natives also preserve some seeds for re-planting the following season. With respect to yams, the harvests typically include both edible yams and setts (seeds), which are replanted. Portions of groundnuts, beans, melon seeds, and cashew seeds are also reserved for the next season. Particularly, the farmers nurse the cashew seeds in plastic bags and transplant the seedlings on their farms when they secure the land.

6.4.4 Descriptive analyses of the land access strategies of the builders

For all builders, the objective of accessing land is to obtain preferable houses at preferable locations that facilitate their senses of connection and security. Although the BPA avails building lots for different purposes, the research shows that the builders access lots mainly for residential purposes and in a few cases, for places of worship. To achieve their objective, all the builders employ their property rights as their primary mechanism of access. They also employ their 'strength', which depending on their preference, may include the social support networks or financial capability, or both. Although the broad strategy of access is building, the builders undertake subsidiary strategies such as the selection or acquisition of the lots, mobilization of building materials, and the construction of the houses. Like the farmers, these routine strategies are similar across the communities and comparable with the historical ones. Thus, the section only gives a summary of them.

The research shows that the builders' choice of location is based on a desire for connection and security. However, as holders of leasehold interest, the members of the resettlement communities acquire lots from the TAs upon the BPA's allocation and their successful application. Other residential builders and churches are also required to access lots by obtaining leasehold interest from



Picture 6.9: Hired laborers winning sand near Bongase (E. Agyepong, 13 November 2018)

the BPA. As natives and churches prefer concrete blockhouses, they rely on their financial capability to obtain the needed materials and build their houses. With it, they hire wage laborers to extract and transport locally available materials such as sand and timber and purchase vended materials such as cement and aluminum roofing sheets. They also use it to hire specialized laborers including masons, carpenters, and steel benders to construct their houses. Conversely, the non-native Dagaates who prefer mud and thatch grass houses rely on their physical strengths and the support of their nuclear and extended family members and friends to mobilize the materials, which are locally available and to construct the houses.

The foregoing descriptions show that the agents engage in different strategies to achieve their objectives, which include authority, high crop yields, and shelter and security. As deduced in the previous chapter, the agents' strategies of land access correspond with Bourdieu's social practices, because they are based on their respective habitus, capitals, and the field's logic (Bourdieu and Wacquant 1992, 101). Against this background, the next section presents the theoretical interpretation of the agents' strategies of land access.

6.4.5 Theory-guided interpretation: The recent strategies of land access as social practices

Following Bourdieu's thesis and the discussion thus far, it is deduced that the agents undertake the strategies of land access or social practices in order to acquire the sub-stakes of the respective subfields and hence, achieve the associated habitus (land values) (Bourdieu and Wacquant 1992, 101). Specifically, this feat safeguards or improves their relative social positions in the subfields and generally, in the field of land access (ibid). This supports Sakdapolrak's characterization of social practices as "habitual and routinized actions informed by practical knowledge and an implicit 'practical sense'" (2014, 22). Based on this, the subsections interpret the agents' strategies of land in the corresponding subfields.

6.4.5.1 The social practices of the BPA in the subfield of spatial development

The research shows that the BPA manages the stake, land, as its social practice in order to retain its authority over the acquired area and promote its use for the dam construction and other spatial development. Particularly, the BPA's social practice encompasses land administration and infrastructure development. Inferring from the theoretical framework, the research has previously associated the BPA's land access objectives to gaining symbolic power (authority) and an objectified cultural capital (the dam, its facilities, and the Bui City) (Bourdieu 1983, 185; 2004, 218 cited in Etzold 2013, 22, 23). Relevantly, these are the sub-stakes of the subfield of spatial development. Based on these expectations, the research has previously conjectured that land has territorial and use values to the BPA, which represent its habitus, and structure the specific social practices above.

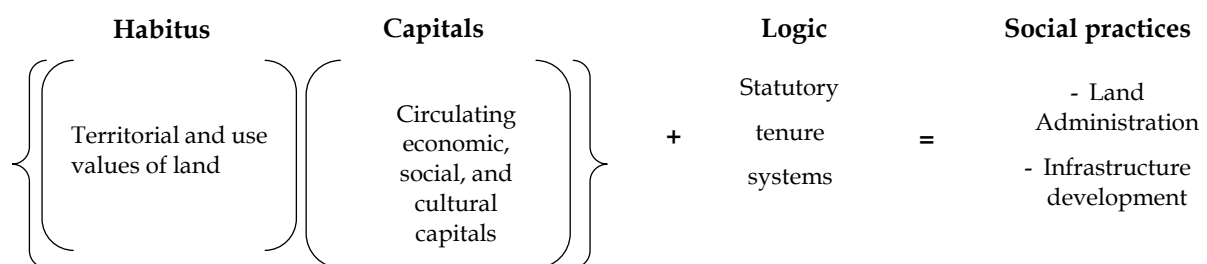
To obtain the sub-stakes and hence, achieve its habitus (land values), the BPA deploys the relevant capitals discussed in the previous section. Specifically, with its primary capital – circulating economic capital (allodial title) –, the BPA administers land by adjudicating land interests in order to retain its authority over the territory and expedite its use of the land. As explained, this social practice thus encompasses the

allocation of land rights and the demarcation of the physical spaces where the rights are applicable. With this circulating economic capital, the BPA also regulates access through specific protocols of application to delimit the scope of the other land interests while retaining its authority and advancing the use of desirable areas to support its functions. It further uses its embodied cultural capital (human resources) in addition to the circulating economic capital to enforce its current spatial planning scheme towards achieving its spatial development agenda and the functioning of the dam. Regarding the same objective, the BPA has engaged its bridging social capital (the Regional Town and Country Planning Departments) besides its circulating economic capital to propose a definite master plan for the area. Likewise, it uses its circulating economic and embodied cultural capitals to adjudicate land conflicts between users and undertake its fiscal functions, which both underscore its authority over the territory and support its land use.

The accounts also show that the BPA benefitted from its bridging social capital (the Regional Lands Commissions) during the land acquisition. Through it, the BPA was able to pay crop compensations to facilitate the displacement and consequently the resettlement of the eight affected communities. It relied on its linking social capital (the Chinese the Exim Bank) to obtain the requisite circulating economic capital (money), and another bridging social capital (Sinohydro) to achieve its use objective. Ultimately, these bridging and linking social capitals support the BPA's infrastructure development, which contribute to its achievement of the use value of land. The BPA depends on its embodied cultural capital (human resources) to operate the dam. Subsequently, it sells the generated electricity to another bridging social capital (GRIDCo) to earn circulating economic capital (money) recurrently in order to sustain its use of the stake and functioning as a body corporate.

As related, the logic structures the BPA's habitus (land values) and the value of its basic capitals. Thus, the BPA holds its ultimate circulating economic capital (the allodial title) by virtue of the logic, which also underscores its institutionalized cultural capital (recognition). This conferment explains the BPA's habitus of the territorial value of land, corresponding with Davy's reasoning that land values are contingent on land rights (2016, 138). Given this, the research concludes that the BPA's habitus (land values), capitals, and the logic are the frames of action that structure its social practices. This conclusion aligns with Bourdieu's, who argues that social practice are the double and obscure relations between habitus, capital, and a field's logic (Bourdieu and Wacquant 1992, 101; Maton 2014, 51). Thus, referring to his proffered equation (1984, 101), the research submits Figure 6.8 below as a summary of the BPA's social practice.

Figure 6.8: A summary of the social practices of the BPA



Source: Author's construct (2021)

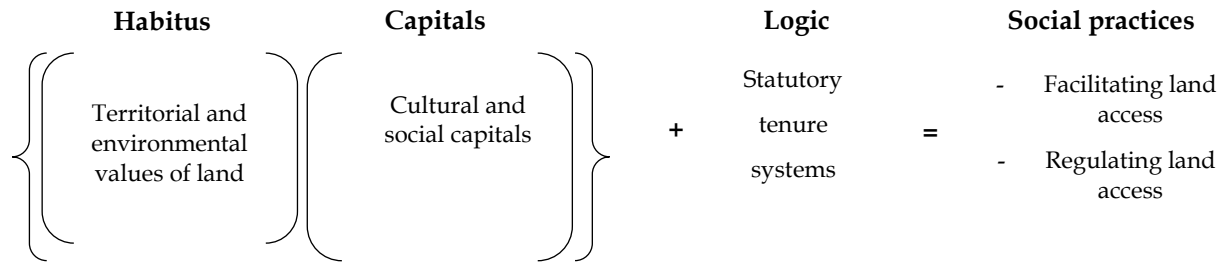
6.4.5.2 The social practices of the TAs in the subfield of chieftaincy

The description shows that despite the recent changes, the traditional authorities (TAs) continue to administer land by facilitating and regulating access to undergird their socio-political and socio-cultural authority and conserve the sacred trees. As concluded previously, these objectives relate to gaining symbolic power (authority) and an objectified cultural capital (sacred trees) (Bourdieu 1983, 185; 2004, 218 cited in Etzold 2013, 22, 23). These capitals are ultimately the sub-stakes of the subfield of chieftaincy and underlie the TAs' collective habitus of the territorial and environmental values of land (Davy 2016, 137). Thus, they structure their social practices.

The research also shows that to acquire the sub-stakes and hence, achieve their habitus (land values), the TAs of the respective communities (except the Bian Clan Head) deploy their institutionalized cultural capitals (the BPA's recognition as intermediaries). In this regard, they facilitate land access by endorsing prospective users for the BPA's consideration. The TAs of the resettlement communities also exploit this capital to facilitate access to building lots by their respective members. Moreover, the recognized TAs also regulate the land access of users by deploying the same capital. With respect to this, they capitalize on their role to codify and enforce specific principles of access on prospective users before endorsing them to the BPA. Likewise, the TAs of the resettlement communities also enforce certain principles of access on prospective builders before granting them access to lots. Besides this, all the TAs, including the Bian Clan Head employ their other institutionalized cultural (local recognition by the kingmakers) to regulate land access by enforcing the historical taboos and proscriptions on especially farmers. These include those on the taboo days and the ban against felling sacred trees among others. Apart from the TAs of the resettlement communities, the others use this capital to enforce the historical condition of access on non-native farmers; that is the annual presentation of foodstuffs and other items towards the yam festivals. Relevantly, the TAs undertake these social practices to undergird their symbolic power (authority) and maintain an objectified cultural capital (sacred trees).

Inferring from the previous sections, the field's logic structures the TAs' collective habitus (land values) and the values of the primary capitals, which they deploy to their social practices. Thus, by it, the TAs have institutionalized cultural capital; that is a recognition by the BPA as sub-managers. Fundamentally, this is based on their local institutionalized cultural capital, which is their selection and recognition by the kingmakers as the socio-political and socio-cultural leaders of the communities. This explains why other members do not have the same recognition. Given this recognition, the TAs are also able to enforce other historical principles of access in their attempts to underscore their authority and maintain the sacred trees for cosmological reasons. Thus, the logic underlies the TAs' collective habitus of the territorial and environmental values of land, because they grant them authority over the users. Consequently, it is safe to say that the TAs' habitus, capitals, and the field's logic are the frames of action that structure their social practices. Of relevance, this is consonant with Bourdieu's description of social practice as the double and obscure relations between habitus, capital, and a field's logic (Bourdieu and Wacquant 1992, 101; Maton 2014, 51). On this basis and inferring from Bourdieu (1984, 101), the research sums up the TA's social practices in Figure 6.9 on the next page.

Figure 6.9: A summary of the recent social practices of the traditional authorities



Source: Author's construct (2021)

6.4.5.3 The social practices of the farmers in the subfield of arable farming

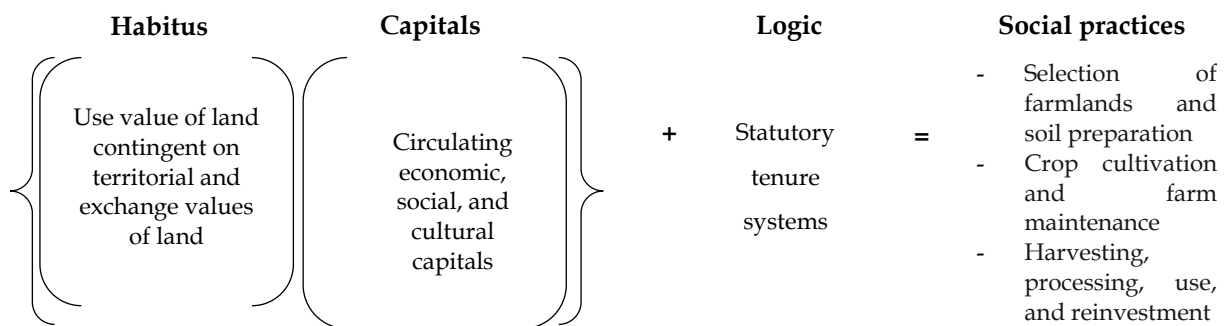
The objective of the farmers is to gain high yields of the relevant crops for both commercial and subsistence purposes. The description shows that the farmers undertake mainly arable farming as a social practice to achieve this objective. However, their social practice encompasses “habitual and routinized actions” (Sakdapolrak 2014, 22), including the selection of farmlands and soil preparation, crop cultivation and farm maintenance, and harvest, processing, use, and reinvestment. Following Bourdieu, the research has earlier associated the farmers’ objective with gaining a circulating economic capital (1983, 185; 2004, 218 cited in Etzold 2013, 22), which also represents the sub-stake of the subfield of arable farming. Based on this, the research has further concluded that the farmers’ collective habitus is primarily the use value of land. Subject to this are ancillary habitus of the exchange and territorial values of land due to their expectation to access desirable quantities and qualities of land at desirable locations and protect their claims from encroachment. Given these, the research argues that the sub-stake of the subfield and the farmers’ collective habitus (land values) underlie their social practices.

Besides their habitus, the farmers’ capitals also expedite their social practices. They are the forces behind their ability to undertake the social practices. Thus, as described, all of them primarily hold leasehold interests by virtue of their citizenship of the respective communities, which constitute a bonding social capital. With this, the farmers have initial access to the stake, land, to select locations of their choice. Subsequent to selecting farmlands, the farmers employ their ‘strength’, which as explained, encompasses their embodied cultural (physical strength and skill) and bonding social (nuclear families) capitals to prepare the soil, cultivate the crops, maintain the farms, harvest, and process the crops when the time comes. They may also expend their saved circulating economic capital (money) or rely on their linking social capitals (farmer-creditors or farmer-vendors) to obtain additional circulating economic capital (money, seeds, or seedlings) to support the crop cultivation. Likewise, they may use their circulating economic capital (personal savings or loans) to obtain bridging social (hired labor) and other forms of circulating economic (agrochemicals) capitals to support the respective social practices. Moreover, all the farmers may spend their circulating economic capital (money) on objectified cultural capital (farm tools) for the relevant social practices. The discussion also shows that besides consuming the sub-stake domestically when acquired, the farmers rely on their linking social capitals (crop merchants) to sell them and earn other circulating economic capital (money) for other basic livelihood needs. The pre-existing non-

natives also present some of their circulating economic capital (crop yields) to the traditional authorities to keep their access to the stake open.

Of relevance, the research shows that the field's logic structures the farmers' habitus (land values) and the values of their primary capitals. Thus, by it, the farmers hold leasehold interests due to their bonding social capital (citizenship of the respective communities). This delimits their interest to use, which explains their primary habitus of the use value of land. It also explains their subsidiary habitus of the territorial and exchange values of land, which are both guaranteed by the logic. Given these, the research concludes that the farmers' collective habitus (land values), capitals, and the field's logic underlie their social practices. This conclusion aligns with Bourdieu's description of social practice as the double and obscure relations between habitus, capital, and a field's logic (Bourdieu and Wacquant 1992, 101; Maton 2014, 51). Based on his subsequent depiction of social practice, the research summarizes the ongoing discussion with Figure 6.10 below.

Figure 6.10: A summary of the recent social practices of the farmers



Source: Author's construct (2021)

6.4.5.4 The social practices of the builders in the subfield of real estate

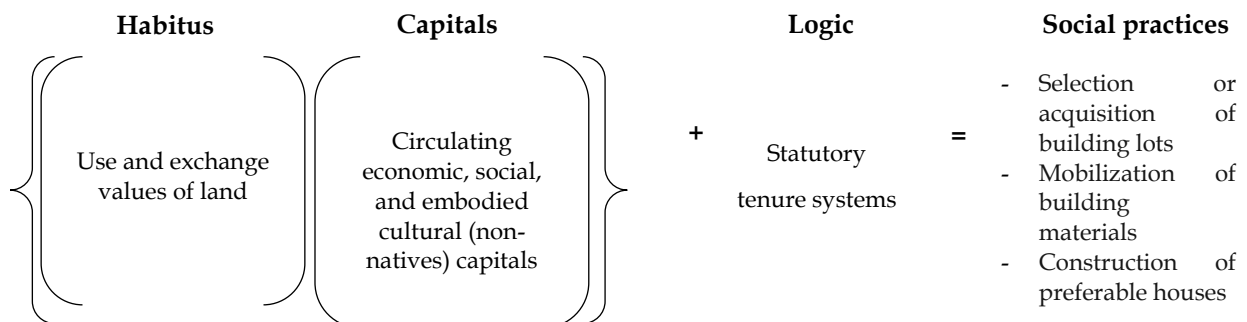
The objective of the builders (individuals and churches) is to obtain preferable houses at preferable locations that facilitate their senses of connection and security. As deduced previously, these (shelter and security) relate to gaining a fixed economic capital and a bridging social capital (Bourdieu 1983, 185; 2004, 218 cited in Etzold 2013, 22), which are also the sub-stakes of the subfield of real estate. Given these, the research has further deduced that the stake, land, has use and exchange values (habitus) to the builders. Towards these, the builders' main social practice is building. However, this constitutes actions such as the selection or acquisition of building lots, mobilization of building materials, and construction of the houses. Ultimately, the research shows that the sub-stakes of the subfield and hence, the builders' habitus (land values) structure their social practices. Like the other agents, the research shows that the builders deploy the relevant capitals previously discussed to undertake their social practices. All of them (including the natives, pre-existing non-natives, and the churches) primarily rely on leasehold interests from the BPA to expedite their acquisition of lots. To obtain these, they employ circulating economic capital (money and/or drinks) to establish a linking social capital (a relationship of dependency) with the BPA or the traditional authorities (TAs) as it is the case of the resettlement communities. The members of Akanyakrom

additionally employ embodied cultural capital (knowledge about the community's history) to expedite their access to the lots.

In addition to these capitals, the builders also use 'strength', which encompasses either their embodied cultural capitals (physical strength and skill), circulating economic capital (money) or bonding (nuclear families) and bridging (extended families and friends) social capitals to mobilize the requisite materials for constructing the houses. Specifically, the natives and churches that prefer concrete blockhouses rely on circulating economic capital (money) to obtain other circulating economic capital (building materials) through bridging (unskilled laborers) and linking (vendors) social capitals. They also use it to obtain additional bridging social capital (specialized laborers) to construct the houses. On the other hand, non-native Dagaates who prefer mud, straw, and makeshift houses mainly rely on their embodied cultural capitals (physical strength and skill) and those of their bonding (nuclear families) and bridging (extended families, friends, and acquaintances) social capitals. With these, they obtain the requisite circulating economic capital (building materials) from the surroundings and build the houses.

Ultimately, the logic of the field of land access structures the builders' collective habitus (land values) and the values of their primary capitals. In this regard, the logic has limited their land interests (the leasehold interest) to use, which explains their habitus of the use value of land. The logic has also underlined the conditions of obtaining such interests. Thus, the members of the resettlement communities have leasehold interests based on their bonding social capital (citizenship), whereas the BPA requires all the other builders to expend some specified amounts of circulating economic capital (money) to obtain it. Given these, the research concludes that besides the builders' habitus (land values) and capitals, the field's logic also underlies their social practices. Ultimately, this maintains Bourdieu's idea about social practices being the double and obscure relations between the three components (Bourdieu and Wacquant 1992, 101; Maton 2014, 51). Based on this conclusion, the research further infers from Bourdieu (1984, 101) to summarize the social practices of the builders in the subfield of real estate with Figure 6.11 below.

Figure 6.11: A summary of the recent social practices of the builders



Source: Author's construct (2021)

6.4.5.5 Summary: Foregrounding the recent field and subfields of land access

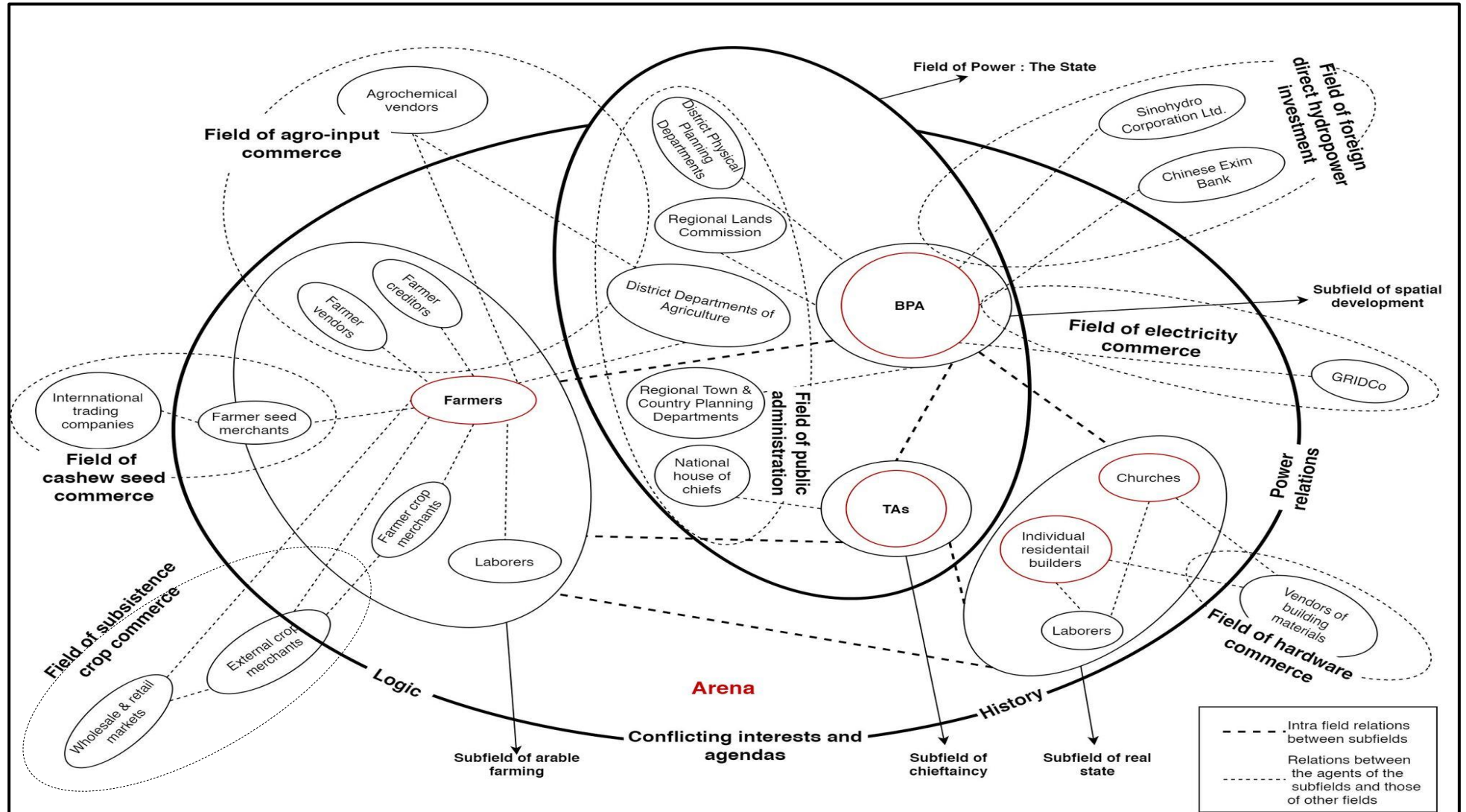
By discussing the agents' social practices, the research has approached a comprehensive conceptualization of the recent field of land access per the theoretical framework. Thus, before it proceeds to the succeeding

section, which describes their interpretation of their land access, this section attempts to foreground the recent field of land access in its broader context (Clarke, Friese, and Washburn 2017, 4, 16, 17). By this, the research summarizes the ongoing discussions and shows the embeddedness of the field in order to augment knowledge about it. It will also show the relative positions of the subfields to the field of power, which will underscore their relevance to the holders of symbolic power and the subsequent efforts made towards their preservation.

The foregoing discussions have successfully conceptualized the recent field of land access and its subfields, which are the land uses and agents recognized by the BPA. They include spatial development, chieftaincy, arable farming, and real estate. The discussions have shown that the field has diverse agents acting from different social positions based on their possession of certain capitals. With these, they pursue varied sub-stakes associated with the subfields and hence varied *habitus* (land values). Corresponding with the subfields, the agents are the BPA, traditional authorities (TAs), farmers, and builders. The sub-stakes of the subfields of spatial development and chieftaincy are both symbolic power and objectified cultural capital. However, while the BPA and TAs' quests for the former both relate to authority, their quests for the latter are respectively in relation to the dam and the spatial development of the area and the conservation of sacred trees. The sub-stake of the subfield of arable farming is circulating economic capital, which relates to crops. Conversely, the sub-stakes of the subfield of real estate are fixed economic and bridging social capitals, which relate shelter and security.

Besides the primary agents, the field also constitutes certain providers who contribute to their land access objectives and their relative successes in the subfields. Some of these providers are spatially and socially limited to the subfields while others operate in both the field of land access and other external fields. Thus, there are flows of exchange between the subfields and the relevant external fields. There are also internal flows of exchange between the subfields because the agents transmit their capitals between them to expedite their corresponding competition. Relevantly, these flows of exchange underscore the embeddedness of the agents, the subfields, and field of land access. Of importance is also the field's logic; that is the BPA's statutory tenure system, which structures the agents' *habitus* (land values) and the values of the relevant primary capitals. Together with the agents' *habitus* and their capitals, the logic also structures the agents' social practices. Based on this summary, the research foregrounds the recent field of land access in Figure 6.12 on the next page. As before, the diagram is simplified and excludes the agents' *habitus* and capitals, and the field's logic, which structured them.

Figure 6.12: A diagrammatic representation of the recent field of land access



Source: Author's construct (2021)

6.5 The agents' interpretations of their recent land access

As before, the agents' interpretations of their recent land access were largely about their achievement of the respective objectives. However, they generally related the manner in which the qualities of land, land tenure systems, and other mechanisms of access underpin the accounts. On these bases, the subsections describe the respective interpretations of the agents' recent land access while further explaining their accounts of how the factors influenced the results. These are with respect to research question 'd (ii)', which is, '*How do the agents interpret their recent land access?*' Similar to the other sections, the current section has descriptive and analytical parts.

6.5.1 Descriptive analyses of the BPA's interpretations of its land access

The research has shown that the BPA seeks to retain its authority over the acquired land to promote its use for the dam construction and other spatial development. Towards this objective, the BPA capitalizes on its allodial title to manage land by administering it and using it for the purposes that expedite its functions. According to the Land Administrator, the BPA's allocation of the relevant rights to land has enabled it to retain its authority, which is the right of absolute ownership and control (the allodial title). It has also delimited the role of the chieftains to intermediaries to underscore its control of the territory and expedite its access to certain areas for planned uses. The BPA also has recognition as the arbitrator of land access, which supports its authority. Besides this, it has successfully developed certain infrastructures, which are fundamental to its functioning. These include the dam and its essential facilities, which the BPA constructed with the support of the Chinese Exim Bank and Sinohydro. So far, the BPA operates the dam with its human resource, generating electricity from which it earns money to sustain its functioning as a body corporate.

Despite these successes, the Land Administrator recounted that the BPA has also encountered certain limitations in its pursuit of the sub-stakes. According to him, the BPA has demarcated the spatial limits of the allocated land rights, which allows natives to cultivate only subsistence crops on the restricted land around the resettlement communities and Bongase. However, some farmers from the immediate communities have accessed the restricted area without permission, cultivating cashew trees on a large scale. Moreover, despite the proscription, all the farmers are cultivating cashew trees and felling trees, which have grossly depleted the stock. Relevantly, the Land Administrator explained that these resistances underscore land scarcity because they undercut the BPA's authority over the territory, its access to key areas for planned uses, and generally frustrate its plans such as those related to environmental conservation. He particularly attributed the problem to the BPA's inadequate capability (in terms of security personnel) to effectively monitor and restrict unwanted access.

6.5.2 Descriptive analyses of the TAs' interpretations of their recent land access

Despite the construction of the dam and the recent changes in land tenure, the traditional authorities (TAs) still aim to undergird their pre-existent socio-political and socio-cultural authority and conserve the sacred

trees by controlling land access. To this end, they capitalize on their recent recognition by the BPA as intermediaries to administer land by facilitating and regulating the users' access. With reference to these strategies, the subsections discuss the TAs' interpretations of their recent land access. Relevantly, the research found many similarities among the experiences of the TAs. Thus, it generalizes the descriptions, but also emphasizes exceptions where necessary.

6.5.2.1 Facilitating land access

The research shows that all the TAs facilitate land access to undergird their authority. When asked to give an account of their recent land access, all of them except those of Akanyakrom responded that the recent events have undermined their authorities. To the TAs of Akanyakrom who were previously non-landowners, the BPA's recognition and subsequent mandate to redistribute lots and endorse prospective land users have effectively augmented their statuses by giving them the same authority as the historical landowners. Regardless of having the same latitude, the TAs of Bongase (and the Banda Paramountcy), Bui, Dokokyina, and Carpenter, and the Bian Clan Head who lacks such recognition decried the land take, the new land tenure system, and their extinguished allodial titles. It would be recalled that land underpinned the TAs' sovereignty and their allodial titles gave them absolute rights of ownership and control under the customary tenure systems. Thus, in reference to these, the historical landowning TAs claimed that *"Asaase ho aye na"*, which is translated as *"Land has become scarce"*. According to them, this is because besides the extensive depletion caused by the project, the acquisition has expunged their ownership of even the physically available areas. The Bian Clan Head additionally considers land scarce because of his absolute lack of control to facilitate land access. To those whom the BPA recognizes as intermediaries, their restricted mandate is also akin to land scarcity, because it disallows them to facilitate land access independently of the BPA. In this regard, all the historical landowning TAs reported that they have lost the power to adjudicate land interests and codify the principles of land access, which has reduced them to mere titular rulers. Given this, the Bongase Abusuapanin related the following during his interview on 11 November 2018: *"It is not as if the land is completely gone. However, the fact remains that it is scarce, because although we can see it, we do not have any control over it, which is demeaning to our traditional statuses"*.

Despite these, the research found that the recognized intermediaries of land access continue to earn some material benefits from land, which enables them to maintain their stools. However, when asked about this, they claimed that their restrictive mandates have prevented them from earning the full range of material benefits from land. Even to the TAs of Bui and Dokokyina who redistribute building lots, their earnings from the beneficiaries are lesser than what they historically gained from native builders and non-native farmers and builders. Together with the other TA, they also claimed that they found it contemptible to charge natives before endorsing them to the BPA who also requires the applicants to fulfill its own stringent payment obligations. Besides these, the TAs of the Bui and Dokokyina resettlement communities also perceived the BPA's protocol, which requires them to request for lots before it allocates some to them as a subversion of their authority. Likewise, they claimed that the BPA's tendency to allocate a few building lots at a time reflects poorly on their ability to represent the communities or negotiate on their behalf. The

Bui TAs additionally contended that the BPA's hesitance to honor their request for a reserved land has augmented land scarcity by affecting the present and future generations' access, but also by inciting doubts about their ability to lead. Thus, during an FGD with the TAs of Dokokyina on 19 January 2019, a 74-year old man summed up their sentiments as follows: *"We all feel enslaved by the BPA, because it has caused land scarcity, which has undermined our authority. While we had vast lands before its coming, we have respectively been limited to smaller lands with guidelines attached to their access. Even non-natives had greater access to land in the past than we currently do"*.

Besides their loss of ownership and control, the TAs of Carpenter also decried their extensive loss of sacred trees. They explained that the loss aside, the BPA also failed to compensate them fully for the sacred trees, which the four transmission towers had affected. According to the Chief, although he only received one Form F (the legal asset registers issued by the Lands Commission to claimants for compensation) for the four transmission towers, the TAs of the neighboring communities received forms per the number of erected transmission towers. He further related that the BPA apologized to him and promised to rectify the mistake; yet, he never heard back from them and was unable to pursue the case due to a long-term ailment. Moreover, the Chief related that the BPA demarcated a thousand acres of land in 2017 for a solar farm. Although it has subsequently paid crop compensations to the affected farmers, the LVD failed to issue him with the requisite Form F for the sacred trees on the affected land, which has denied him and the entire TAs the corresponding compensation. Given this, he claimed that their corresponding social construction of 'land scarcity' encompasses the loss of the sacred trees and the pending compensation on the sacred trees. On a related note, all the historical landowning TAs agreed that they would also have had some closure if the BPA had compensated them for the acquired land, because it would have enabled them to maintain the stools and keep up appearances. Thus, they related that the deferred payment has amplified 'land scarcity' by doubly undermining their authority.

6.5.2.2 Regulating land access

Except the Bian Clan Head, the other traditional authorities (TAs) who act as intermediaries of land access recounted that the BPA's recognition enables them to regulate land access to some extent. Particularly, the Bui, Dokokyina, and Akanyakrom TAs mentioned that they have been able to enforce their own protocols on prospective builders, which has undergirded their authority and the inherent social differentiation between them and the members of their respective communities. The TAs of the other communities also reported that their recognition by the BPA gives them the power to enforce their own principles of access on prospective users before endorsing them. All of them, including the Bian Clan Head were additionally satisfied that they have been able use their socio-political and socio-cultural authorities to uphold the historical taboos such as those related to days of farming and felling sacred trees. According to them, this has not only supported their authority and their recognition as the repository of custom, but has also enabled them to conserve what is left of the sacred trees.

Despite these and their receipt of compensation for the loss of sacred trees, the TAs of Bongase, Bui, and Dokokyina decried their respective losses, stating that they have affected the transmission of culture and

the shared spirits and souls of the communities. The TAs of Carpenter also complained about their past and recent loss of the sacred trees on the affected lands. Relevantly, they acknowledged that the loss of the trees was underlain by the loss of land, which invariably affects the historical perceptions of their might. However, while they would not have been able to control access to land even if it were available, they would have been able to control access to the trees to maintain their native cosmologies if they had not been destroyed. All of the historical landowners, including the TAs of Carpenter and the Bian Clan Head also complained about their extinguished authority as the arbitrators of land disputes due to the BPA's ownership and control of land. The TAs of Bui also criticized the BPA's decision to grant the TAs of Akanyakrom equal mandate as them and the members an independent access to land. It would be recalled that the Bui community hosted the first settlers of the Akanyakrom community in 1919. Thus, the Akanyakrom community was subject to their allodial titles and adhered to their taboos and other rituals. Yet, given the new tenure system and the recognition, the Akanyakrom community feels emancipated and resists their authority over them. Thus, they also shun rituals such as those that required them to present goats, chicken, and drinks to the Bui TAs before burying their dead. The Bui TAs additionally expects the same submission from the Dokokyina community as they claimed that they own the land on which they were all resettled. Yet, the Dokokyina community claims to be subject to only the Banda Paramountcy and hence, defies this imposition. Given these, the Bui TAs related that their stool and hence authority is being derogated and mainly blamed the BPA for not emphasizing the concessions of the respective communities, which would have established their authority over the two communities. Regarding this, the research found that the TAs of Bui and the other communities had thus fallen out, compelling the BPA to meet them separately on relevant matters, while it could have met them jointly.

The BPA's Land Administrator confirmed the TAs perceptions during his interview on 5 September 2018. As he related, "*Before the acquisition ... the chieftains commanded enormous power, because they owned the land and had unrestrained access to it. However, the acquisition has suppressed their freedoms and leverages, because they have had to submit to some regulations and procedures*". Effectively, this acknowledgement supports the fact that the State's acquisition of the land and the subsequent impositions have significantly debilitated the TAs' power.

6.5.3 Descriptive analyses of the farmers' interpretations of their recent land access

As emphasized, the land access objective of the farmers is to gain high yields of cashew seeds, but also yams, groundnuts, and the other domestic crops for both subsistence and commercial purposes. Towards this objective, the research shows that the farmers undertake certain routine strategies by using their property rights and 'strength', which encompasses their physical strength, skill, social support networks, and financial capability. The subsections analytically describe their interpretations of their recent land access. Given their distinctive accounts, the descriptions are case-based. The cases of the resettlement communities are combined, because of their shared experiences of displacement and resettlement. Yet, the corresponding subsection also addresses relevant exceptions where necessary.

6.5.3.1 The resettlement communities

Based on the objective above, all the farmer participants of the resettlement communities – Bui, Dokokyina, and Akanyakrom – claimed that the yields of their subsistence crops have sharply declined over the years. Most of the men and women of Dokokyina who historically owned at least thirty and ten acres of cashew farms respectively also decried their recent inability to acquire just ten acres of cashew farms while the members of the other communities claimed that their cashew yields have fallen short of expectation. Relevantly, all the farmers associated these outcomes with 'land scarcity'. According to them, this encompasses the limited extents of the allocated farmlands and their poor soil productivity, land tenure insecurity, insufficient mechanisms of access to exploit the limited land, incidences of pests and diseases, and climate change.

Regarding the extent of the land, all the participants related that although the BPA was aware of their extensive farming practices, it allocated them with very limited lands, which were soon exhausted due to the population growth, the additional access by some staff of the Wildlife Division, and the increasing cashew cultivation. In this regard, they also acknowledged that extensive pristine lands are available just north of the site; yet, the BPA has restricted their access to the lands and even the allocated ones for only subsistence farming, which is an affront to their liberty. Besides the limited allocation, the members of Dokokyina bemoaned their involuntary abandonment of extensive lands at the former settlement despite the minimal impacts of the inundation on the area. Although the members of the Bui and Akanyakrom communities conceded that they had to be resettled because of the inundation, they complained about the BPA's restriction of their access to the alluvial plains downstream, claiming that it would have augmented the demarcated land. The Bui community also blamed their shortage of land on the BPA's misjudged allocation of farmlands to the Akanyakrom community independently. The Dokokyina community also reported that part of their allocation is swampy and unsuitable for cultivating their traditional crops.

Regardless of their varied explanations, most of the farmers claimed that their land access has been reduced to only two acres per season, which is disparate from what they historically accessed. As previously explained, the males and females of Dokokyina could respectively access at least twenty and five acres of land per season while those of Bui could access at least ten and three acres respectively. The women of Akanyakrom who used to be the historical farmers of the household only accessed about two acres of land per season, which is similar to their recent access. However, together with the men, they related that their recent access to the same amount of land is restrictive to their livelihoods, because farming has become their only economic activity following the latter's inability to continue artisanal fishing. Related to this, they also indicated that they have been disadvantaged by their relatively low farming skills, less agro-inputs, and less crop compensation from the BPA. Due to these, they have been unable to claim as much land as the members of the other communities who are traditionally farmers. Ultimately, the above limitations explain the farmers' inability to accumulate larger cashew farms, because they intercrop the seedlings with yams on the land, which they manage to acquire seasonally.

Of relevance too, the limited extent of available land has affected the land access of women. The research gathered that due to their limited 'strengths', the unmarried women were unable to compete with the men

over the land during the initial months of their resettlement. The married ones also claimed that it has become increasingly difficult to farm independently of their spouses, because they are unable to find enough land and apportion some to them. Thus, during an interview on 4 February 2019, a 34-year old married woman from Bui despairingly asked, *"If the man cannot find land for himself, how much more can he find some for his wife?"* Given the limited extent of available land, the farmers claimed that they have been unable to practice the conventional shifting cultivation, which has contributed to the poor crop yields. They have also been unable to fallow land due to the limitations and increasing cashew cultivation.

Besides the limited extent of land, all the participants attributed the undesirable outcomes to the poor soil quality of the demarcated land. They explained that the farmlands have been over cultivated, because they were previously tilled by the Bongase community before the BPA allocated them. Thus, the characteristically rich soil has become too sandy over time and traps heat, making it unsuitable for cultivating root crops such yams. Consequently, yam yields have declined in quality and quantity. While the farmers could harvest more than a hundred tubers of yams per acre of land at their former settlements, they reported that they are unable to obtain the same



Picture 6.10: A farmer showing the poor quality of yam yields to support claims of the deteriorated soil productivity (Source: E. Agyepong, 13 September, 2018)

amount on even two acres of land. During the preliminary workshop in Dokokyina on 13 September 2018, a 44-year-old man showed the yams in Picture 6.10 to support claims of the poor yield quality. He related that, *"Our yam harvests are smaller and have holes, rash-like and dead skins"*. Likewise, the yields of yam setts have reportedly decreased over the past years. While an acre of land yielded enough yam setts to cultivate an acre and a half the next season, an acre is unable to yield even the quantity of setts that were cultivated on it. The participants further reported that their groundnut yields have also declined. The farmer from Bui, who historically harvested a bag of unshelled groundnuts from an acre of land, noted that, *"This year and in the past years, I have barely harvested a bag of groundnuts from two acres of land, because the 'fat of the soil' has been exhausted"*.

Other farmers including the Guantoahene (traditional ombudsman) of Bui also bemoaned the yield of maize. During his interview on 5 September 2018, he explained that, *"When I cultivate maize, the stalks grow nicely but the fruits on the cobs are scanty"*. Others like a man from Dokokyina, who was interviewed on 11 December 2018 claimed that, *"Over the past seasons since we were resettled, the growth of my maize plants have been stunted due to the soil's lack of 'fat'"*. Many of the participants also reported that cassava yields have become stringy. Pointing to a small bowl of shriveled melon seeds during an interview on 11 November 2018, an elderly woman from Dokokyina also lamented, *"These are from my farm. The seeds are scanty and unappealing even for domestic consumption"*. Given these, the farmers reported that they are already experiencing food insecurity. Additionally, they claimed that except beans, groundnuts, and sometimes

melon seeds, many of them are unable to trade the other subsistence crops for money due to the poor quality of the yields. Even with respect to beans, a 34-year-old woman from Akanyakrom explained during an interview on 8 November 2018 that, *"Although the yields are scanty, we sell our bean harvests anyway, because they are short-lived"*. Regarding yams and cassava, when a 56-year-old man from Dokokyina was asked about his preferred traders during an interview on 11 November 2018, he exclaimed, *"Oh no, no, no! Like most farmers, I do not sell my yams anymore. The yields are low and are very unappealing to offer them even as a gift to a poor person. In any case, the traders hardly come here to buy yams and cassava anymore, because the qualities are poorer than the yields of the other communities"*.

The research also found that some farmers of Dokokyina whose farms are farther west of the allocated area are experiencing increasing invasion by monkeys, which as explained earlier, migrated to the south of Bongase when their habitat was inundated. Thus, besides the poor soil quality, the monkeys have also affected the thriving of the crops and the consequent yields. All the women of the communities also claimed that due to the land exhaustion at the site and the depletion of sacred trees, they are unable to find shea nuts and African locust bean fruits for even domestic consumption. Likewise, wild herbs, and broom straws have become scarce. Additionally, the farmers related that their intensive farming activities have driven out game such as grass cutters, affecting their access to bush meat.

The participants also bemoaned their tenure insecurity, claiming that it amounts to 'land scarcity' to them. Generally, they were unaware of the fifty-year lease of their holds. However, they referred to the BPA's restriction of their cultivation of perennial crops as a strategy intended to expedite its repossession of the land in future for other purposes. Regarding this, some including the Best Farmer Awardee from Dokokyina reported that the Land Administrator has personally accosted them about their cultivation of cashew trees at the demarcated area and warned them about its repercussions without much explanation. Thus, the farmers were generally anxious about the security of their tenure. During an interview on 20 January 2019, a 42-year-old man from Akanyakrom accented these angsts as follows: *"Although the BPA has demarcated the land to us for farming, our tenure is very insecure, because the BPA's use restrictions imply that it has plans to repossess the farmlands and turn them into residential areas or for some other infrastructures"*.

Moreover, the farmers were also anxious about the security of their tenure, because some farmers from Bongase have started reclaiming some lands and cashew farms within the allocated farmlands. One of such cases involved some women from Akanyakrom and another from Bongase. According to the former, they found and nurtured some cashew seedlings on a piece of land when the BPA allocated the area to them in 2011. However, in 2018 when the trees were mature and bearing fruits, the latter confronted them and claimed that she owns the trees, because the BPA never compensated her for them. When the parties lodged the case with the BPA, its officials initially evaded it until it escalated and drew the attention of the elected Assembly member of the Bongase Constituency and a former appointed member who comes from Akanyakrom. However, upon its involvement, the BPA denounced the natives of Akanyakrom for accessing the land, arguing that they should have avoided the land when they discovered the cashew seedlings on it. Based on this pronouncement, the land reverted to the Bongase native even though it is located within the allocation of the Akanyakrom community. This has dampened the resettlement

communities' confidence in the BPA's concern for their situation, but more importantly, about their tenure security. Additionally, the farmers claimed that although the BPA gave them access to the restricted area, it has recently served them with an eviction notice without plans of compensating them for their subsistence crops and cashew trees. Although they admitted that the BPA had warned them against cultivating cashew trees in the area, they also claimed that they did not expect it to reclaim the land in the near term. Thus, to some farmers who claimed that they only accessed the area because they could not find any available land at the allocated area, the eviction has made them landless and poor. This is because they invested their crop compensations in the farms at the area by starting cashew farms.

In addition to the above, the research gathered that due to the recent changes and resultant hardships, the social support, which was freely accessible in the past, has become commercialized. In their scramble for farmlands, the people became more focused on securing their own farmlands and cultivating cashew trees. Thus, the family and friends who were historically prepared to support each other have become disarticulated. According to the farmers, the available ones only offer their support for a fee, because they are mainly those who were unable to acquire enough farmlands. Given this, farmers who have nuclear families largely rely on them for support while those without such relations rely on their own physical strength and skills. Although laborers are available for hire, many of the farmers reported that they do not always have the financial means to engage them. As they reported, their financial limitations have been caused by the poor yields of the subsistence crops and their inability to extend their cashew farms to make the venture profitable. They further claimed that although they earn relatively higher from cashew seeds, the earnings are only one-off every year and thus insufficient to cater for even the basic household needs before the next harvest. Thus, many of them claimed that they have been unable to mobilize the requisite support to access and claim bigger farmlands and intensify their activities to gain sufficient yields.

Moreover, the farmers complained that pests and diseases have also affected the yields of their cashew trees, maize plants, and melons. They recounted that although they received some chemicals freely from the Banda District Department of Agriculture to treat fall armyworms on maize, they have had to purchase other chemicals by themselves for other pests and diseases. Regarding this, they also claimed that they have been unable to purchase the requisite chemicals frequently due to financial limitations. Others also denounced the use of chemicals on their plants, claiming that it is untraditional and poisonous for human consumption. Thus, they related that they would rather gain less yields than apply chemicals on the crops. The farmers also reported that drastic changes to the rainfall patterns have affected their ability to follow the traditional timeline of cultivating subsistence crops and obtaining high yields. While many attributed the changes to the inundation of the mountains and trees, the Bui TAs as well attributed them to the Akanyakrom and Dokokyina communities' disdain for their authority and rituals. Given the changes, a 67-year-old man from Bui stated during an interview on 19 January 2019 that, although they should have made mounds and ridges two months ago, many of them have not been able to do so, because of uncertainties about the rain.

6.5.3.2 Bongase

The farmers of Bongase claimed that they have been unable to acquire sufficient cashew farms and the yields of their subsistence crops have been disappointing. Primarily, they also attributed this to 'land scarcity', which they relate to the reduced area of land and the relatively poor soil productivity of the available land in the south. They further referred to the inadequacy of certain mechanisms of access, pests and diseases, increasing wildlife invasion of their farms, and unfavorable environmental factors as additional thrusts of 'land scarcity'. Fundamentally, the farmers of Bongase contended that the inundation of the farmlands in the north and the resettlement of the four communities in the east have significantly reduced their farmlands to only the land in the south. Coupled with this, the availability of land has been further limited by the increasing cultivation of cashew trees and the population growth of farmers due to ageing youngsters and native returnees from Libya and Sefwi. As explained earlier, the youngsters have been attracted to farming and particularly to cashew cultivation because of a general lack of alternative livelihood opportunities, while the returnees have been lured back by the prospects of cashew cultivation. Consequently, the farmers claimed that they have been unable to access desirable land sizes as they did in the past. Although they can generally claim lands to expedite shifting cultivation and in proximity to family and friends, their claims only extend to a short distance from their active farms, beyond which other farmers have also laid claims. Thus, they cultivate about three acres of land seasonally, which is less than the ten acres of land that the men accessed in the past.

Given this, some married women claimed that although they would have wished to farm independently in order to benefit from the booming cashew enterprise, they have been compelled to share their husbands' farms. Together with the men, the unmarried women who farm independently also complained that the recent accessible land is inadequate for profitable cashew cultivation. Regarding this, the research further inquired about the possibility of planting cashew trees on all their claims at the same time in order to make the venture more profitable. To this, the farmers responded that besides their inability to purchase the requisite number of seedlings, they have been unable to plant the trees at once, because they inhibit the cultivation of other crops on the land. Thus, by intercropping them with yams seasonally, they prolong the use of the land for subsistence crops while gaining some seedlings from their own farms to expand the cashew farms. However, regardless of practicing shifting cultivation, the farmers could not leave their lands to fallow, because of the cashew trees. Thus, they also related that they foresee food insecurity in the near future.

Besides the land shortage, the farmers also mentioned that the soil of the land in the south is less productive than the inundated area and the land in the east. Thus, they reported that their crop yields have reduced significantly in the past years. Unlike the resettlement communities, the farmers claimed that the quality of their subsistence crop yields is satisfactory. However, the respective quantities have fallen short of their expectations, affecting their earnings from them. During an interview on 5 November 2018, a 52-year-old man related that, *"For the past six or seven years, it has increasingly become difficult to obtain even a hundred tubers of yam from two acres of land."* Given this, the yield of yam setts has also declined considerably. The farmers also claimed that the yields of groundnuts, beans, melons, and cassava are also lower in quantity

than their historical yields. However, given the good quality of the yields, the farmers can sell some of their harvests to the domestic subsistence crop merchants to earn some money.

Moreover, like the resettlement communities, some of the farmers also reported that the commercialization of social support has affected their ability to access the requisite support for their farm work. Fundamentally, they also claimed that the race for farmlands has disarticulated their social networks, compelling some of them to sell their services in order to supplement their meagre earnings from their relatively smaller farms. Some of them related that despite the availability of wage laborers, their crop earnings are insufficient to engage their services throughout the crop production cycle. Besides this, they also recounted that the inundation has driven many wildlife to the south; thus, they are encountering increasing invasion by monkeys and grass cutters, which affect their crop survival and yields. They also reported incidences of pests and diseases on especially their maize plants, cashew trees, and melons. Like the resettlement communities, they claimed that besides the chemicals that were freely distributed by the Banda District Department of Agriculture to treat fall armyworms on maize, they have been financially incapable of acquiring other chemicals to treat other pests and diseases regularly. Some however decried the use of chemicals on plants, making the same claims as those of the resettlement communities who also denounced it.

The farmers also complained about the drastic changes in the rainfall pattern, stating that they have affected their crop production cycle and their ability to capitalize on certain seasons for certain activities. Like many members of resettlement communities, they all attributed the changes to the inundation of the mountains and trees. Ultimately, most of the farmers said that all these factors have diminished their interests in farming. As a 50-year-old man who was previously one of the most revered farmers of the community related when interviewed on 6 November 2018, *"The situation has killed my passion for farming. I could previously not afford to miss a day without going to the farm. Yet, today, I can avoid my farm for about a week or more, because all our efforts seem pointless"*. The women of the community also explained that due to the scramble for land, all the remaining sacred trees have become part of people's claims. Thus, they have been unable to gather enough shea and African locus bean fruits for domestic and commercial purposes. Yet, they can still access some wild herbs and broom straw.

6.5.3.3 Gbolekame North

As earlier discussed, the natives of Gbolekame North have recently taken up arable farming as their main livelihood due to the decline in the artisanal fishing industry. In this enterprise, they also aspire to obtain high yields of cashew seeds, as well as yams, groundnuts, cassava, and maize among others for subsistence and commercial purposes. To this end, when asked about the outcomes of their land access, they claimed that their yields have been generally middling. According to them, although they have a vast land with good soil productivity at their disposal, they have been unable to exploit it due to certain limitations. Firstly, they claimed that they have had to contend with securing agro-inputs for their farms. As discussed above, the people only farmed as a secondary activity. Thus, they had neither cashew seedlings nor enough yam setts to invest in their farms when they ventured into arable farming. Coupled with this was the BPA's

refusal to compensate them for their lost fishing equipment and alluvial plain farms. Consequently, they claimed that they could not take advantage of the vast lands at their disposal to propel their farming activities in order to gain enough food, and earn sufficient money for other necessities and to support subsequent farming activities. Some of the members also bemoaned their inability to use the alluvial plains because of the incessant fluvial flooding caused by the dam operation. This has affected their acquisition of certain crops, including vegetables to which the plains are well suited.

The farmers also reported that their cashew trees, maize plants, and melons have been attacked by pests and diseases over the past years. They stated that besides fall armyworms, the Bole District Department of Agriculture does not donate chemicals for the other pests and diseases. Due to financial limitations, they have also been unable to purchase the requisite chemicals on a regular basis. Additionally, they related that the drastic changes in the rainfall patterns have affected their ability to cultivate the subsistence crops in time to expedite their survival. Like the others, they attributed this to the inundation of the mountains and trees. This and the incessant pests and diseases have debilitated their efforts to obtain high yields of the relevant crops. Some also admitted that as they were previously fisher folks, they have relatively low farming skills, which may have contributed to their inability to tend to their farms in order to boost the crop yields. On this, they recounted that although skilled laborers are available for hire in Jama, they have been unable to engage them regularly due to their financial limitations.

6.5.3.4 Carpenter

The farmers of Carpenter related that their crop yields have been generally poor in quantity. Like the resettlement communities and Bongase, they attributed this to 'land scarcity'. It would be recalled that, the eastern part of the community has been under acquisition by the Forestry Commission of Ghana since the 1970s. Thus, the farmers only had access to the land in the west, which has also been recently acquired for the dam project. Following the BPA's erection of transmission towers in the northwest and the demarcation of the remaining land for a solar farm, the farmers have been restricted to a thin strip of land between the acquired lands and the southwestern land. Respectively these are partly swampy and rocky and hence, unsuitable for cultivating the traditional crops. However, the farmers related that the rocky land is adequate for cultivating cashew trees. Although this imposed limitation was fundamental to their idea of 'land scarcity', the farmers also mentioned that the increasing cultivation of cashew trees has been a major contributing factor to the land shortage because it hinders their future access to exploited land. Consequently, they related that they are able to claim land to expedite shifting cultivation and access land in proximity to family and friends. Yet, they have had to settle for only three acres of land seasonally in order to extend their use of the claims. This is very different from what they accessed historically, which was at least ten acres of land. Although they also practice shifting cultivation, they are unable to leave land to fallow because of the cultivated cashew trees. Ultimately, the drastic changes and the farmers' access to smaller land sizes explain their low crop yields. In this regard, they claimed that their farm earnings have declined significantly in the past years. They also foresaw that they would experience food insecurity in the near future due to the cashew cultivation.

Besides these, the farmers also bemoaned the commercialization of social support and related it to the limited extent of land and some farmers' inability to secure adequate land for themselves. According to them, this shift has become a major hindrance to their farming activities, because it entails an additional use of their meagre farm earnings. They also complained about pests and diseases. Although they received free pesticides from the Bole District Department of Agriculture to treat their maize plants of fall armyworms, almost all the interviewed farmers claimed that they do not 'believe' in the use of chemicals, because it is untraditional. They further blamed the changes in the rainfall pattern for their poor crop yields, explaining that they have affected their ability to follow traditional patterns of crop cultivation. Relevantly, they also conjectured that this was due to the BPA's inundation of the mountains and trees, and its felling of the trees around the community for the erection of the transmission towers. Of relevance too, the Dagaate women who are customarily banned from accessing land independently of men complained about the custom. According to them, their independent access could have augmented the household's recent farms and the generated profits. Despite this, they were unwilling to oppose the custom, because it predicated on their submission and willingness to sustain their marriages.

6.5.4 Descriptive analyses of the builders' interpretations of their recent land access

To all the builders of the study communities, the objective of their land access is to obtain preferable houses at preferable locations that facilitate their senses of connection and security. To achieve this, the research shows that the builders deploy their respective property rights and other mechanisms of access (social support networks and financial capability) to strategies including the selection or acquisition of lots, mobilization of materials, and the construction of the houses. Capitalizing on their anecdotal experiences, the subsections give case-based descriptive analyses of their interpretations of recent land access. Like the previous section, the current section describes the cases of the resettlement communities together due to their common experiences of displacement and resettlement. Nevertheless, it highlights exceptions where necessary.

6.5.4.1 The resettlement communities

According to the participants of the resettlement communities, their access to land for building has been disappointing. They mainly attributed this to the BPA's protocol, which allows them to access lots through the traditional authorities (TAs) only after they have received certain allocations for redistribution. In this regard, the participants deplored the waiting time for the initial allocations, which according to them was more than a year and a half after their resettlement. Consequently, most of them had long exhausted their crop compensations and had difficulties constructing their houses. Coupled with this, the TAs of Bui and Akanyakrom had instructed the successful applicants to build their houses within a year and six months respectively to enable them to request for more lots from the BPA. Given the BPA's restrictions of the construction of mud and thatch grass houses and their poor financial situations, some of them could not build their houses within the timeframe and hence lost their lots to other applicants. In all cases, the builders also bemoaned the stringent application processes. While they could previously access lots by

simply informing the TAs and making some minor donations, requirements that are more stringent underlie their access today. In Bui, the builders' access was on a first-served basis; meaning that their success depended on their timely application. However, in Akanyakrom, the builders' success depended on their application, but also on their knowledge of the community's history. These stringencies explain why someone from Bui exclaimed that, "*Building lots are harder to access than cocaine*", which to wit, implies that building lots are scarce. The research also found that subsequent to exhausting the initial allocation in 2013, the BPA only demarcated additional lots to the Bui community in 2018. At the time of conducting the research, the Akanyakrom community had however, not received additional lots. In both cases, the research observed that due to their expectations of receiving additional allocations, the prospective builders had molded concrete blocks, some of which had been weathered by their long exposure to rain and sunlight.

In addition to the rigors of accessing lots, the participants were also displeased with the BPA's ban on the construction of mud and thatch grasses and the use of firewood at the site. As explained, the BPA seeks to develop a so-called Bui City and has instituted this ban with hopes of 'beautifying' the built-up areas. Although the Bono Regional Head of the Town and Country Planning Department debunked this idea of 'beautification', the BPA still enforces it. To some of the builders, this ban is an affront to their preferences, which as explained, is based on a belief of the medicinal benefits of mud and thatch grass. Their access to even the locally available building materials (sand and timber) has become difficult due to the commercialization of social support, which as previously explained, is the result of some people's failure to secure enough farmlands for their livelihoods. Their access to the vended materials (cement and aluminum roofing) and specialized laborers (masons, carpenters, and steel benders) has also become difficult. Reportedly, the latter are capitalizing on the increasing preferences for concrete blockhouses to hike their wages. In all cases, the research gathered that the builders find it difficult to access these materials and services because of their poor crop yields and hence their deteriorating financial situations.

Also regarding location, the builders reported that as the BPA's allocations are on the fringes of the existing communities, they separate them from their families and friends and hence, undermine the desired security and connection. The members of Akanyakrom and Dokokyina were also aggrieved by the BPA's decision to resettle them at the present location, because it has so far inhibited their traditional livelihoods, which were respectively artisanal fishing and extensive arable farming. The churches also bemoaned the BPA's protocol, which requires them to pay huge amounts of money for lots. One of such churches was the Evangelical Presbyterian Church, whose receipt for purchasing a lot from the BPA was previously shown. However, despite the high cost of acquiring the lot, the church was pleased to have obtained a lot within the resettlement community, where all its congregants live. On the other hand, given the high cost, other churches such as the Akanyakrom Roman Catholic Church has hitherto been unable to mobilize the requisite funds to acquire a lot. Relevantly, they complained about the BPA's failure to consider that their predicament is mainly due to their displacement.

6.5.4.2 Bongase

According to the natives of the Bongase community, their land access for building purposes has deteriorated. They associated this with 'land scarcity' and explained that while lots are physically available in and around the community, the BPA restricts their access unless they meet its payment requirements. Besides differing from their historical experience, the natives also found this protocol appalling, because the BPA has made no efforts to enhance their livelihoods despite impairing their main economic activity, farming. Thus, they bemoaned their ability to afford the BPA's requirement due to their low farm earnings. Related to this is also their financial inability to afford the construction of concrete blockhouses, which have become popular in lieu of mud and thatch grass houses because of their symbolization of success and sophistication. In this regard, the natives referred to the commercialization of social support to extract and assemble the locally available materials and the high cost of vended materials and specialized labor, who as explained above, have raised their wages due to the increasing preferences for concrete blockhouses. Regarding location, the builders also bemoaned their inability to select preferable locations as they did in the past. According to them, the BPA allocates lots in accordance with its land use scheme. Hence, their access to preferable lots is least guaranteed, which sabotages their quest for security and connection by living in proximity to family and friends.

6.5.4.3 Gbolekame North

To the builders of Gbolekame North, their land access has not changed, because lots are readily accessible in the community. As recalled from the previous discussions, they still consider the Bian Clan Head as the landowner, because they are generally unaware of the State's acquisition of the land and the BPA's current protocol on accessing lots. Thus, they still invoke the repealed usufructuary interests to access preferable lots. However, like the members of the other communities, the natives of Gbolekame North bemoaned the commercialization of social support and the cost of extracting locally available materials. They also related that the costs of vended materials and specialized labor are high. According to them, their financial situations have worsened ever since the decline in the fishing industry forced them to venture into arable farming. Thus, although they can easily access preferable lots, they have had difficulties affording the construction of their preferred houses.

6.5.4.4 Carpenter

The members of Carpenter deplored their recent access to building lots by claiming that they have become scarce. According to them, although lots are physically available, the BPA restricts their access to them. However, unlike the Bongase community, they were unaware of the payment requirement and related that the BPA only warned them against building new houses. Besides this, the natives who prefer concrete blockhouses complained about the commercialization of social support and its toll on their access to locally available materials. Likewise, they bemoaned the cost of building materials and specialized laborers. Like the other communities, they claimed that their poor farm earnings have inhibited their ability to afford these. Conversely, the non-native Dagaates who constitute about 90 per cent of the population claimed that

they can count on their nuclear and extended families and friends to support the extraction of the requisite materials and the construction of their preferred houses.

All the above represent the agents' interpretations of their recent land access in the respective subfields. As they relate to different social constructions of 'land access' or 'land scarcity', the research infers from the theoretical framework to interpret their accounts. Ultimately, this will serve as the springboard for the next chapter, which discusses the agents' strategic responses to their land access outcomes.

6.5.5 Theory-guided interpretation: The agents' recent social constructions of 'land access' and 'land scarcity'

The analytical descriptions show that all the agents' linked their interpretations of land access to their acquirement of the respective sub-stakes. Per the theoretical framework, these interpretations underlie their social constructions of 'land access' or 'land scarcity'; that is their achievement or failure to achieve their conceived land values (*habitus*). The discussion also shows that the agents' social constructions are underlain by the adequacy of their capitals in respect of facilitating their acquirement of the target sub-stakes. Accordingly, the subsections interpret their accounts of the recent land access.

6.5.5.1 The BPA's social construction of 'land access' and 'land scarcity'

As discussed, the BPA operates in the subfield of spatial development whose sub-stakes are symbolic power (authority) and objectified cultural capital (the dam, its facilities, and the Bui City). These respectively underscore the BPA's *habitus* of the territorial and use values of land. To achieve these, the BPA manages land by administering it and using it for the purposes that expedite its functions. Deducing from its accounts, the BPA appears to have only partially acquired its desired sub-stakes. Hence, its interpretations relate to social constructions of both 'land access' and 'land scarcity', which respectively embody its achievement of some of its *habitus* (land values) and its failure to achieve others. Particularly, the former relates to the BPA's successful use of its circulating economic capital (allodial title) to retain its authority through the allocation of the relevant rights, the delimitation of the chieftains' role to intermediaries, and its establishment as the arbitrator of land access. The research surmises that by these, the BPA has acquired its sought symbolic power and hence, achieved its *habitus* of the territorial value of land. In the same vein, the BPA's circulating economic capital (allodial title) has been the thrust of its successful development of the dam and its requisite facilities. These successes underscore the BPA's acquirement of the desired objectified cultural capitals and thus, the achievement of its *habitus* of the use value of land.

Despite these, the BPA has also failed to realize some facets of the sub-stakes, which underlie the Land Administrator's reference to its experience of 'land scarcity'. As explained, these failures include the encroachment by some members of the resettlement communities and Bongase on some restricted areas and their cultivation of cashew trees in the area. It also includes the increasing cashew cultivation and incessant tree felling. In this regard, the research associates the Land Administrator's account of 'land

scarcity' with social constructions of 'spatial power' and 'capability' scarcities, which respectively are its failure to achieve its habitus of the territorial and use values of land (Davy 2016, 138, 137). Inferring from the descriptions, the former explains the BPA's inability to protect the liminal boundaries of its territories from unwanted access, while the latter explains the consequent obstruction to its achievement of planned land uses such as environmental conservation. The research shows that the BPA's limitation relates to its inadequate security personnel, which following the theoretical framework, relates to a deficiency of its embodied cultural capital (Bourdieu 1984, 206). Of relevance, these show that although the land is physically available and could be reclaimed, the BPA's deficient embodied cultural capital and the consequent encroachment have obstructed its immediate use of the affected areas, which underscore its social construction of 'land scarcity'.

6.5.5.2 The TAs' recent social constructions of 'land access' and 'land scarcity'

The sub-stakes of the subfield of chieftaincy in which the traditional authorities (TAs) operate are also symbolic power (authority) and objectified cultural capital (the sacred trees). Respectively, these relate to habitus of the territorial and environmental values of land. Towards these targets, the TAs administer land by facilitating and regulating the users' access. Regarding symbolic power, the TAs' accounts show that only those of Akanyakrom have fully acquired it through their institutionalized cultural capital (the BPA's recognition). In this regard, although they were historically non-landowners, they have been elevated to a status equal to those of the historical landowners. Per the theoretical framework, the research relates their interpretation to the achievement of their habitus, the territorial value of land, and hence, their social construction of 'land access'. However, the accounts of the historical landowners show that they have acquired the sub-stakes and achieved their habitus of the territorial and environmental values of land only partially. Hence, their social construction encompasses both 'land access' and 'land scarcity'. Regarding the former, the research shows that those who have similar institutionalized cultural capital as the TAs of Akanyakrom have capitalized on that to regulate land access to some extent, which has undergirded their symbolic power among the members of the respective communities. They and the Bian Clan Head have also capitalized on the local institutionalized cultural capital (recognition by the kingmakers) to enforce some historical proscriptions, which has also supported their symbolic power and the conservation of some desirable objectified cultural capitals (sacred trees). These underpin their partial achievement of their habitus and hence their social construction of 'land access'.

They also claimed that they have experienced 'land scarcity'. Specifically, their references to 'land scarcity' encompass their suppressed circulating economic capitals (allodial titles) and their loss of some objectified cultural capitals (sacred trees). They also pertain to the withheld circulating economic capital (money), which is due them as compensation for their loss of the ultimate circulating economic capital (allodial titles) and objectified cultural capitals (sacred trees) as it is the case of the TAs of Carpenter. With respect to the first, the TAs' accounts show that despite the BPA's extensive activities, some lands are still available. Yet, the land take and the new logic preclude their spatial power, which has inhibited their full acquirement of symbolic power and hence the achievement of their habitus of the territorial value of land. This obstruction

has thus underlain their social construction of 'spatial power scarcity'; that is the dysfunction of absolute rights over land and a consequent inability to fully animate the liminal functions of land by determining its access by the BPA, but also by commoners independently (Davy 2016, 138). In turn, the TAs' powerlessness to freely determine – and arbitrate – the commoners' access has debilitated their symbolic power by overturning the historical power relations and their ability to earn the requisite circulating economic capital (material benefits) to maintain the stools. The research shows that this concern is utterly true for the Bian Clan Head who lacks any recognition by the BPA as an intermediary of land access. However, it is also the case for even the TAs of Bui and Dokokyina, who though have the opportunity to request for land, socially construct spatial power scarcity due to the degrading effects of the protocol and the BPA's subsequent allocation of insufficient lots. To the TAs of Bui, their social construction of spatial power scarcity additionally encompasses the repression of their symbolic power due to the BPA's facilitated autonomy of the two other resettlement communities and its hesitance to allocate the requested reserved land to them.

Besides the above, the TAs' references to land scarcity with respect to the withheld circulating economic capital (land and crop compensation) also relate to spatial power scarcity due to its crippling effects on their ability to uphold their symbolic power. Some TAs additionally reported experiences of 'land scarcity' with respect to their loss of some objectified cultural capital (sacred trees) due to the BPA's quest for its own targeted objectified cultural capitals (the dam and its facilities). Although the TAs' losses relate to a depletion of land, which invariably affects their symbolic capital (perceived might), the research shows that the loss principally relates to the objectified cultural capitals through which they transmitted culture and maintained the shared spirit and soul of the respective communities. As explained, the TAs acknowledged that while they would not have had any control over land even if it were available, they would have been able to control access to the sacred trees and used them for their respective native cosmologies. Thus, the loss has affected their acquirement of the corresponding sub-stake and hence their achievement of the collective habitus of the environmental value of land. Following Davy, the TAs' reference to 'land scarcity' in this regard relates to social constructions of 'ecological scarcity' (2016, 140). Relevantly, the foregoing shows that rather than a physical lack of land, the historical landowning TAs' social constructions of 'land scarcity' is especially related to their expunged allodial titles, their withheld land compensations, and their loss of sacred trees. These are underlain by the land take and imposed logic, and the BPA's social practices, which include their resettlement strategies (compensation) and infrastructure development.

6.5.5.3 The farmers' recent social constructions of 'land access' and 'land scarcity'

The sub-stake of the subfield of arable farming in which the farmers operate is circulating economic capital; that is the subsistence and cash crops. Deducing from this, the research has associated their collective habitus with the use value of land, which based on their social practices, is contingent on their achievement of the territorial and exchange values of land. To achieve their primary habitus, the research shows that the farmers' main social practice is farming, which encompasses certain routine practices. The farmers' interpretations of their recent land access show that they have collectively failed to acquire the sub-stake

and achieve their primary habitus; that is the use value of land. Relevantly, they all associated this failure with 'land scarcity', which per the theoretical framework pertains to social constructions of 'capability scarcity'; that is their lack of capability to gain high crop yields (Davy 2016, 137). The research shows that the factors underlying the farmers' social construction of capability scarcity are diverse and dependent on their communal experiences. Thus, following the theoretical framework, the next paragraphs attempt to interpret the respective factors by case.

The resettlement communities: The research shows that the resettlement communities' social construction of capability scarcity is generally with respect to the small sizes of the allocated farmlands, poor soil productivity, land tenure insecurity, limited access to social support networks, incidences of pests and diseases, and climate change. To the members of Akanyakrom, this is additionally with respect to the deficiencies of their farming skills, agro-inputs, and financial capability. To the members of Dokokyina, it is also with respect to the wildlife invasion of some parts of their farmlands. Regarding the inadequate sizes and poor productivity of the stake (land), the research shows that rather than a mere physical lack, the farmers perceive the limitations as mainly the result of the BPA's social practices (displacement and resettlement strategies) and logic. The former explains the BPA's allocation of substandard lands (in size and quality) despite the availability of rich pristine lands just north of the resettlement site. It also explains the Dokokyina community's grievance against their involuntary abandonment of extensive lands despite the minimal effects of the inundation on their former settlement. The BPA's logic additionally underlies the farmers' restricted access to the land in the north and the alluvial plains downstream. It is further the reason for its allocation of land to the Akanyakrom community independently of the Bui community, which to the latter, has affected their own land allocation. Moreover, the discussion shows that the farmers perceive the limited land as the subsequent result of the increasing cashew cultivation due to the influence of the field of cashew seed commerce. Ultimately, all these account for the farmers' inability to carry on their routinized social practices such as accessing desirable farmlands, practicing the conventional shifting cultivation, and fallowing lands, which has inhibited the achievement of their habitus of the exchange and territorial values of land (Davy 2016, 135–36, 138). Consequently, these have impaired their attainment of the sub-stake and the achievement of their habitus of the use value of land. Hence, it underlies their social construction of capability scarcity. To the women, this social construction is also in relation to the effects of the exhausted land on their access to products such as shea nuts, African locust bean, broom straws, and wild herbs. To all the members, it is also with respect to their lack of access to game.

Besides the stake, the research also shows that the farmers' social construction of capability scarcity relates to land tenure insecurity. This also represents obstructions by the BPA's logic and social practices. The former relates to the BPA's restrictions to their cultivation of perennial crops at the demarcated and restricted areas and the consequent angst among the farmers about the certainty of their hold against future evictions and their eligibility for compensations. The account shows that rather than being a mere apprehension, the BPA had indeed served evictions notices to those who had accessed the restricted areas without plans of compensating them, making some of them landless and destitute. The BPA's social practices have incited a similar angst; yet, it is about its poor resettlement strategy, which is its oversight

in compensating the previous users from Bongase, and its apathetic adjudication of land disputes. Deductively, the farmers' land tenure insecurity has circumscribed their primary capital (property rights) and ability to maximize the benefits from the stake by pursuing preferable social practices such as the cultivation of profitable crops. As these have hindered their access to the stake and their gaining of the sub-stake, they have also prevented the achievement of their habitus of the use value of land, which has contributed to their social construction of capability scarcity.

The farmers' social construction of capability scarcity is additionally associated with their inability to access the support of their families and friends as freely as they did historically. This represents a limitation of their bridging social capital. Inferring from the accounts, this limitation is due to the inadequate size of the allocated land (stake) and the consequent social disarticulation caused by the individual struggles to secure claims. It is also due to some farmers' inability to secure extensive portions of the stake to cultivate cashew trees profitably. Due to this, the historically free bridging social capital has become commercialized. Following these claims, the farmers have had challenges patronizing the commercialized support because of their generally low circulating economic capital (earnings from the sub-stake). This has in turn affected their ability to attain the expected quantities of the sub-stake and obstructed their achievement of the habitus of the use value of land, which contributes to their social construction of capability scarcity. As mentioned above, the social construction of capability scarcity by the members of Akanyakrom is additionally with respect to their low farming skills, less agro-inputs, and less crop compensation from the BPA. These are respectively associated with deficiencies of their embodied cultural capital and circulating economic capitals. As deduced from their accounts, these limitations have also repressed their social practices and acquirement of the expected sub-stakes and hence, affected their achievement of the habitus of the use value of land.

Moreover, the research shows that the farmers' social construction of capability scarcity is in reference to pests and diseases and climate change. To the Dokokyina community, it is additionally with respect to the increasing wildlife invasion. Following the previous chapter, the research relates these to limitations of environmental capital. Particularly the research shows that the participants blamed the BPA's social practice (inundation) for the climatic changes and the migration of the wildlife to the south. Some also related that due to the above problems and consequently their poor circulating economic capital (money), they have been unable to afford the necessary chemicals to treat the pests and diseases regularly. Ultimately, they claimed that these limitations have inhibited their social practices and their ability to gain the expected quantities and quality of the sub-stake. In turn, this has hindered the achievement of the habitus of the use value of land, which entrenches social constructions of capability scarcity.

Bongase: Following the discussion, the Bongase farmers' social construction of capability scarcity encompasses the reduced area of land, poor productivity of the soil, their limited access to social support networks, pests and diseases, increasing wildlife invasion, and climate change. Regarding the reduced land (stake) size and poor soil productivity, the discussion shows that the farmers blamed the BPA's social practices – especially the displacement and resettlement – for their restricted access to the less desirable lands in the south. They additionally blamed the BPA for its poor resettlement strategy in respect of

implementing an alternative livelihood program for the youth. According to their accounts, these and the external influence of the field of cashew seed commerce have spurred an interest in cashew cultivation, which has further reduced their access to land. Their accounts also show that they have been able to achieve their habitus of the territorial value of land and partially, the exchange value of land by respectively claiming land with desirable locational qualities to expedite shifting cultivation (Davy 2016, 135-36, 138). However, they have generally been unable to access desirable extents of land to expedite their acquirement of expected quantities of the sub-stake, which underlie their inability to fully achieve their habitus of the exchange value of land (ibid, 135-36). This has restrained the achievement of their habitus of the use value of land and underlie their social construction of capability scarcity. To the women, this is also with respect to their inability to access wild fruits such as shea nuts due to the exhausted land.

Besides this, the farmers' social construction of capability scarcity is with respect to their inability to access social support networks as they did historically. Following the discussion thus far, this represents limitations to their bridging social capital. Like the resettlement communities, they blamed it on the limited extent of the available land and the resultant social disarticulation due to the race to secure holdings. Some of them also claimed that despite the availability of bridging social capital (wage laborers), they have had challenges accessing them due to their limited circulating economic capital from the meagre earnings of the sub-stake. Deductively, the farmers have generally been unable to gain the requisite bridging social capital to support their social practices and increase their earned sub-stakes. This has inhibited the achievement of their habitus of the use value of land and has hence, resulted in their social construction of capability scarcity. Moreover, the farmers' social construction of capability scarcity relates to their experiences of wildlife invasion, pests and diseases, and climate change. In line with the previous discussion, these may represent challenges associated with environmental capital. As discerned from their accounts, the farmers charged the BPA's social practice (inundation) for the migration of the wildlife to the south and the climate change. Although they did not provide any explanation for the pests and diseases, they claimed that their limited circulating economic capital (money) due to their poor earnings from the sub-stakes has inhibited their ability to obtain the requisite chemicals to treat them regularly. Fundamentally, their claims show that all the challenges have affected their social practices, contributing to their limited gains of the sub-stake and the achievement of their habitus of the use value of land. Thus, it also underlies their social construction of capability scarcity.

Gbolekame North: The research shows that the farmers of Gbolekame North socially construct capability scarcity in terms of their limited agro-inputs, poor financial capability, low farming skills, the incessant fluvial flooding, pests and diseases, and the changing rainfall patterns. As gathered from the discussion, the Gbolekame North community still has access to its vast historical lands. Yet, due to their previous economic activity, they lack sufficient circulating economic (agro-inputs) and embodied cultural (skill) capitals to fuel their current social practices in order to gain the expected sub-stakes. Besides these, their references to poor financial capability aligns with low circulating economic capital, of which they charged the BPA's social practices (dam operation and resettlement) for it. As explained, although the BPA's dam operation had caused incessant fluvial flooding and damaged their fishing equipment and alluvial plain

farms, it overlooked them in the compensation payments. According to them, this has debilitated their ability to access the requisite circulating economic capital (agro-inputs) and bridging social capital (wage laborers) to support their social practices and hence, their acquirement of the expected sub-stakes from the vast lands at their disposal. Generally, all these limitations have thus foiled the achievement of their habitūs of the use value of land and hence contribute to their social construction of capability scarcity.

In addition to these, the farmers' social construction of capability scarcity also relates to the fluvial flooding, pests, and diseases, and climate change, which following the previous discussions may generically be associated with limitations of environmental capital. As explained above, their reference to fluvial flooding is with respect to the BPA's social practice (dam operation). According to their accounts, this limits their access to the alluvial plains, which are reportedly better for cultivating vegetables. Much like the other communities, they also blamed the BPA's social practices (inundation) for the recent climatic changes, relating that they have frustrated their routinized social practices such as the cultivation of crops. Although they did not provide any explanation for the pests and diseases, their accounts show that, the main hindrance to their acquisition of the necessary chemicals to treat their plants has been their limited circulating economic (money). All these have affected the farmers' ability to gain the expected sub-stakes and have underlain their failure to achieve their habitūs of the use value of land, which underlies their social construction of capability scarcity.

Carpenter: The farmers of Carpenter's social construction of capability scarcity relates to the limited extent of land, difficulties in accessing social support, pests and diseases, and changing rainfall patterns. To the Dagaate women, their social construction is mainly about the customary ban against their independent access to land. Regarding the limited extent of land, the farmers' account show that they largely associate it with the BPA's social practices. These are its erection of the transmission towers and demarcation of areas for a future solar farm. They also associated it with the increasing cashew cultivation, which like the communities above, has been influenced by the external field of cashew seed commerce and limits their ability to follow the land. These have in turn affected their social practices by inhibiting their access to desirable land sizes and hence the full achievement of their habitūs of the exchange value of land. Thus, although they have achieved their habitūs of the territorial value of land by being able to claim land to practice shifting cultivation, they have only partially achieved the habitūs of the exchange value of land by their ability to access land at desirable locations. Consequently, they have failed to acquire the expected quantity of the sub-stake to achieve the ultimate habitūs of the use value of land, which underlies their social construction of capability scarcity.

In addition to this, the farmers' references to difficulties in accessing social support relates to deficiencies in their bridging social capital. According to their accounts, this is due to the limited extent of land (the stake) and some farmers' inability to secure enough lands for themselves. Consequently, the farmers claimed that, their access to the services rendered by them has reduced their earned circulating economic capital and their successive social practices. The farmers' complaint about pests and diseases and climate change relate to limitations of environmental capital. While they offered no explanation for the pests and diseases, they blamed the BPA's social practices (inundation and erection of transmission towers) for the

climate change. The discussion shows that these have also inhibited the farmers' social practices and their acquirement of desirable quantities of the sub-stake. In turn, these have debilitated the achievement of their habitus of the use value of land and hence, contribute to their social construction of capability scarcity. Besides these, the research also shows that to the Dagaate women, the socially constructed capability scarcity is mainly in relation to the enduring customary logic, which bans their access to land and hence their ability to undertake the social practices independently and acquire the sub-stake.

6.5.5.4 The builders' recent social constructions of 'land access' and 'land scarcity'

In the subfield of real estate in which the builders operate, the sub-stakes are fixed economic and bridging social capital; that is shelter and security. Theoretically, these relate to collective habitus of the use and exchange values of land. The research shows that the builders' main social practice is building, which encompasses secondary social practices towards the sub-stakes. Deducing from their accounts, the builders' interpretations of their recent land access are disparate. Thus, by case the next paragraphs attempt to interpret their accounts according to the theoretical framework.

The resettlement communities: The accounts of the resettlement communities show that their recent land access has been disappointing. They collectively associated this with 'land scarcity', which following the discussion, is theoretically related to social constructions of capability and locational scarcities. Relevantly, these social constructions are with respect to the rigors of acquiring lots, building preferable housing, and accessing preferable locations. Concerning the acquisition of lots, the discussion shows that although lots are physically available at the resettlement site, the builders' socially construct capability scarcity because of the restrictive effects of the logic. Fundamentally, this relates to the BPA's protocol, which allows individual builders to access lots through the traditional authorities (TAs) only after it has allocated them with some lands. This explains why they had to wait for more than a year to access lots in the early years of resettlement and why the research observed many weathered concrete blocks around the site in anticipation of the BPA's allocation. Their social construction of capability scarcity also relates to the stringent application processes established by the TAs, but also by the TAs of Bui and Akanyakrom's established deadline on the construction of houses. Deducing from the accounts, these stringencies have affected the builders' acquisition of lots as a social practice. Besides those who have utterly failed to acquire lots, some who were initially successful lost their acquisitions after failing to meet the deadline. Consequently, they have failed to acquire shelter as a sub-stake and hence failed to achieve the habitus of the use value of land, resulting in their social construction of capability scarcity. To the churches, their related social construction of capability scarcity is also with respect to the BPA's logic and the corresponding charges. Although some, including the Evangelical Presbyterian Church have nevertheless achieved the habitus of the use value of land by acquiring lots, others such as the Roman Catholic Church of Akanyakrom have consequently failed to achieve their habitus because of their lack of the requisite circulating economic capital (money).

All the individual builders also linked their social construction of capability scarcity to their inability to build preferable housing due to the BPA's logic. Regarding this, the research shows that the BPA has

banned the construction of mud and thatch grass houses at the site. Besides restraining some personal preferences, the builders' accounts show that the ban has impeded the ability of many to acquire shelter due to the relatively high cost of constructing the sanctioned houses. Inferring from the discussion, the builders' poor circulating economic capital (money) from the subfield of arable farming has abated their ability to obtain the requisite capitals (economic and social) to construct houses. This is partly due to the commercialized support of their bridging social capital (family and friends) and hence, the cost of acquiring the locally available circulating economic capital (building materials). It is also due to the high cost of acquiring other circulating economic capital and the specialized bridging social capital (masons, carpenters, and steel benders) for the construction. These explain why some builders lost their initial acquisitions. Ultimately, the BPA's ban and the builders' poor circulating economic capitals have hindered many builders' ability acquire shelter, which has repressed their achievement of the habitus of the use value of land and hence, contribute to their social construction of capability scarcity.

The research also shows that the individual builders' social construction of capability scarcity is in reference to their inability to access preferable locations. They mainly attributed this to the BPA's social practice, which is its land administration through the land use scheme under implementation. Given this, the allocations are farther from the builders' bridging social capitals (families and friends), which incapacitates them from acquiring security. This has in turn, inhibited their achievement of the habitus of the exchange value of land and hence, underlie their social construction of locational scarcity. To the members of the Akanyakrom and Dokokyina, the discussion shows that their social construction of locational scarcity is also with respect to the BPA's land use scheme and its influence on their resettlement away from their sources of livelihoods. Despite these, the Evangelical Presbyterian Church, which has successfully acquired a lot with desirable locational properties (in proximity to its congregants) has achieved land access because it has achieved the habitus of the exchange value of land. Ultimately, all the above show that the builders' of the resettlement communities' social constructions of 'land scarcity' relates to the logic, the BPA's obstructive social practices, and their limited social capitals rather than a physical lack of land.

Bongase: The accounts of the builders of Bongase show that their land access has deteriorated. Their attribution of this to 'land scarcity' theoretically relates to social constructions of capability and locational scarcities. Like the resettlement communities, their social constructions are with reference to the difficulties of acquiring lots, building preferable housing, and accessing preferable locations. Concerning their acquisition of lots, the builders' accounts indicate that while lots are physically available, the BPA's logic and the associated charges inhibit their access to them. Coupled with this is their limited circulating economic capital (money) to meet the BPA's requirement due the impacts of the BPA's social practices on their own social practice, farming. Specifically, the BPA's obstructive social practices include the inundation of their farmlands and the consequent displacement, but also their negligence to implement alternative livelihood programs to ease their reliance of farming. Consequently, their poor earnings from the subfield of arable farming has debilitated them from meeting the BPA's payment protocol to acquire lots, which has in turn affected their ability to acquire shelter. This has compromised their achievement of the habitus of the use value of land and hence, underpin their social construction of capability scarcity.

The discussion shows that their limited circulating economic capital (money) has also inhibited their construction of preferable houses. As recounted earlier, the builders have become more interested in concrete blockhouses due to their symbolization of success and sophistication. Yet, due to the limitation, they have generally been unable to access the locally available circulating economic capital (sand and timber) as their bridging social capital (families and friends) has become commercialized. They have also had difficulties accessing other circulating economic capital (cement and aluminum roofing sheets) and the specialized bridging social capital (masons, carpenter, and steel benders) due to their increased wages. Thus, the builders' limited circulating economic capital (money) has generally hampered their acquisition of shelter, thereby foiling the achievement of the habitus of the use value of land, which has contributed to their social construction of capability scarcity.

Besides capability scarcity, the builders' accounts show that they also socially construct locational scarcity. They attributed this to the BPA's logic; that is its land use scheme. Consequently, they have been unable to access areas with desirable relational and positional features, which obstructs them from acquiring the sought security from their bridging social capital (families and friends). This has affected their achievement of the habitus of the exchange value of land and hence, underlie their social construction of locational scarcity. Ultimately, the foregoing theoretical interpretations show that the builders' references to 'land scarcity' are by no means associated with a physical lack of land but rather, related to the oppressive logic and their poor economic capital.

Gbolekame North: To the builders of Gbolekame North, the research shows that their acquisition of lots has not changed, because they are unaware of the recent logic and still invoke the old usufructuary interests to access them freely. Impliedly, they have been able to achieve the habitus of the exchange value of land because they can access preferable lots with ease. Despite this, their accounts show that they also socially construct capability scarcity. This is mainly due to the challenges of constructing their preferred houses, which as explained, have increasingly shifted to concrete blockhouses due to their symbolism of success and sophistication. In this regard, the discussion shows that the builders' circulating economic capital (money) has been abated by their recent switch to farming due to the decline of the fishing industry. It would be recalled that, the decline is the result of the BPA's social practice (dam operation) and the consequent downstream fluvial flooding. As a result, the builders have had difficulties accessing the locally available circulating economic capital (sand and timber) through their bridging social capital (families and friends), which has also become commercialized due to the recent economic hardships. They have also had troubles affording other circulating economic capital (cement, aluminum roofing sheets), and the specialized bridging social capital (masons, carpenters, and steel benders), whose wages have skyrocketed due to the increasing preferences for concrete blockhouses. Given these, the research deduces that the builders have had challenges acquiring shelter, as the ultimate sub-stake. This has hampered their achievement of the habitus of the use value of land and hence, largely underlie their social construction of capability scarcity.

Carpenter: The accounts of the builders of Carpenter show that their recent land access has been unsatisfactory. As related, they attributed this to 'land scarcity', which following the theoretical framework,

mainly relates to capability scarcity. Regarding this, all the builders referred to their inability to access lots as freely as they did historically, blaming it on the BPA's imposed logic. The research shows that although the builders are unaware of the payment protocol, the BPA has warned them against building new houses, which affects their acquisition of shelter and hence their habitus of the use value of land. This thus underlies their social construction of capability scarcity.

To the natives whose preferences have shifted to concrete blockhouses, their social construction of capability scarcity is additionally related to their poor circulating economic capital (money). This is due to the negative impacts of the BPA's social practice (the erection of transmission) on their ability to earn sufficiently from their social practice in the subfield of arable farming. Consequently, their accounts indicate that they have had difficulties accessing the requisite bridging social capital (families and friends) whose support in respect of extracting the locally available circulating economic capitals (sand and timber) has become commercialized due to the ongoing dynamics. They have also had difficulties accessing other circulating economic capitals (cement and aluminum roofing sheets) and the specialized bridging social capitals (masons, carpenters, steel benders) to build the houses. Their limited circulating economic capital (money) is therefore an additional cause of their failure to acquire shelter and hence achieve their habitus of the use value of land. Accordingly, it upholds their social construction of capability scarcity. By contrast, the non-native Dagaates do not socially construct capability scarcity in this respect. As deduced from the discussion, they still prefer mud and thatch grass housing due to their transience. For this, they continue to rely on the support of their bonding (nuclear families) and bridging (extended families and friends) social capitals to access the locally available materials and construct the houses. Thus, their accounts imply that they stood a chance of achieving their habitus of the use value of land had it not been for the BPA's restrictions on access to lots. Conclusively, the builders' references to 'land scarcity' is not related to a physical lack of land but the suppressive effects of the logic and the poor circulating economic capital.

6.6 Summary of the chapter

Following the research questions, this chapter has categorically described the agents' recent social constructions of 'land scarcity'. Charting the temporal course, it has extended the previous chapter by discussing the developments ensuing from the State's acquisition of the lands of the study area and the BPA's assumption of absolute ownership and control. Thus, through analytical descriptions and corresponding theoretical interpretations, the chapter has comprehensively given insight into the focal themes, which include the system of land access, the agents' power relations, their strategies of access, and consequent interpretations of their land access. Regarding the system of land access, the chapter has shown that the BPA has imposed a new land tenure system, which is statutory by nature and re-defines the rights of ownership and control, use, and transfer. Consequently, its activities have significantly changed the historical characteristics of land by reducing the communal parcels, restricting many farmers' access to lands with less productive soil, and making it fungible. These findings have relevantly underlay the preliminary conceptualization of the recent field of land access and per the BPA's recognition, its subfields, which include spatial development, chieftaincy, arable farming, and real estate. They have also paved the

way for identifying land as the stake of the field and the statutory tenure system and the enduring principles of the customary tenure systems as the logic. Moreover, they have resulted in the identification of the primary agents and their habitus (land values) and the sub-stakes of the subfields.

Subsequent to these, the chapter has discussed the agents' power relations by identifying the roles of the primary agents and the relevant mechanisms of access by which they undertake their strategies towards achieving the sub-stakes. In this regard, the chapter has identified the BPA as the recent manager, showing that the TAs have been demoted to sub-managers. It has also identified the users of land as the BPA, TAs, farmers, and builders. For each of these primary agents, the chapter has identified the key providers whose contributions support their achievement of the sub-stakes. Successively, the chapter has thoroughly discussed the primary agents' key mechanisms of access in the subfields and how they legitimize power. Theoretically, the chapter has interpreted the agents' mechanisms of land access as capitals and used them to portray the power relations in the entire field, but also in the subfields of arable farming and real estate where the corresponding struggles among the agents are largely dependent on individual efforts rather than defined arrangements. It has shown that the power relations among the agents of these latter subfields is based on the possession of large cashew farms and concrete blockhouses, which underlie the possessors' symbolic capital. However, in the entire field of land access, the BPA holds the symbolic capital and symbolic power by virtue of the volume and weight of its capitals. From the narrative, the chapter has identified the State as the field of power where the BPA's capitals are concentrated. Contrary to the historical period, the chapter has shown that the BPA's symbolic power is legitimized by statute.

Based on these, the chapter has proceeded to give insight into the agents' varied strategies of land access, which retrospectively, are underlain by the target sub-stakes and their possessed mechanisms of access. Theoretically, it has associated the strategies with social practices by justifying that they are the double and obscure relations between the agents' habitus, their capitals, and the field's logic, which structures them. Following these, the chapter has described the agents' interpretations of their recent land access, which generally underscore social constructions of 'land scarcity'. Thus, inferring from the theoretical framework, the chapter has related that although the BPA socially constructs 'land access', it also socially constructs spatial power and capability scarcities due to its failure to achieve the habitus of the territorial and use values of land. The TAs also socially construct 'land access'; yet, except those of Akanyakrom, all the others also socially construct spatial power and ecological scarcities due to their failure to achieve the habitus of the territorial and environmental values of land. The farmers largely socially construct capability scarcity due to their failure to achieve their collective habitus of the use value of land, while the builders also socially construct capability and locational scarcities due to their failure to achieve the collective habitus of the use and exchange values of land.

Ultimately, these findings sustain the research's contention that 'land access' and 'land scarcity' are social constructions and pertain to the achievement of certain land values (habitus). In this regard, the social constructions are more than just the availability of land, because they hinge on the efficacy of the other factors that facilitate the agents' quests. Based on the above synopsis, the next chapter details the agents' strategic responses to their social constructions of 'land scarcity'. Recalling from the theoretical framework,

these responses correspond with Bourdieu's idea of symbolic struggles, which as explained, may spur processes of societal transformation.

CHAPTER 7: STRATEGIC RESPONSES TO RECENT SOCIAL CONSTRUCTIONS OF 'LAND SCARCITY'

7.1 Introduction

The previous chapter has shown that due to the Bui Power Authority's (BPA) establishment and its despotic activities, the pre-existing agents have socially constructed different types of 'land scarcity' in the recent past. Likewise the BPA, because its inability to protect the liminal boundaries of the acquired territory has engendered encroachments and other social practices that inhibit its land use plans. Rather than being passive about their respective social constructions, the research found that the agents have adopted certain strategies to counter 'land scarcity' as understood by them to achieve their land access objectives. Accordingly, the present chapter details these strategic responses, which theoretically, correspond with Bourdieu's submission on 'symbolic struggles' (1990b, 134; 2000, 187) Like the previous chapters, this has descriptive and theoretical parts on the focal themes per the research's allusion to critical realism and epistemological relativism.

To this end, the immediate section sequentially addresses the strategic responses of the traditional authorities' (TAs), farmers, and builders by community, and those of the BPA. It begins with the TAs, because the research found that their strategic responses have additionally influenced those of the other agents. Likewise, the strategic responses of the farmers and builders have also influenced the BPA's and vice versa. Given these, the section refers to the underlying reasons for the agents' strategic responses where necessary to enliven the discussion and deepen understanding of the ongoing incidences. After these, the next section provides the interpretations of these strategic responses according to the theoretical framework. Ultimately, the chapter will underscore the agents' disposition of resistance, particularly when their expectations are frustrated. This addresses research question 'e (i)', which is '*How are the agents responding to the changes in land access?*'

7.2 The agents' strategic responses to their recent social constructions of 'land scarcity'

As reported earlier, this section addresses the strategic responses of the agents to their recent social constructions of 'land scarcity' by category. Apart from the BPA, it discusses the cases of the traditional authorities (TAs), farmers, and builders by community to underline their particularities. As a precursor to the descriptions, each of the subsections will summarize the agents' social constructions of 'land scarcity' as discussed in the previous chapter to deepen understanding of their strategic responses.

7.2.1 The strategic responses of the TAs

The previous chapter has shown that, except the traditional authorities (TAs) of Akanyakrom, the others who were historically landowners have constructed 'land scarcity' in the recent past due to the BPA's strategies of land access. Relevantly, land underpins their sovereignty and the chieftains' historical allodial

titles gave the bodies of TAs an absolute ownership and control under the customary tenure systems. Thus, their social construction of 'land scarcity' has encompassed the depletion of their communal lands, the annihilation of their allodial titles and absolute mandates, the pending land compensation payment, and their loss of large numbers of sacred trees that supported the transmission of native cosmologies. Other reasons that underlie their social construction are unique to some of them. Thus, the subsections summarize these unique explanations by case, but more importantly, detail the respective strategic responses of the TAs to their social construction of 'land scarcity'.

7.2.1.1 Dokokyina

As historical landowners, the TAs of Dokokyina have socially constructed 'land scarcity' in the recent past due to the BPA's strategies of land access. Specifically, their social construction has been in respect of the factors above mentioned. Thus, they have adopted certain strategic responses to some of them. Regarding their loss of sacred trees, the TAs recounted that as the BPA has already compensated them, they only enforce the historical taboos on felling to salvage the available ones at the resettlement site. They also mentioned that they continue to enforce other taboos such as those on sacred days, which undergirds their authority. However, with respect to their extinguished allodial titles and withheld land compensation payments, the research gathered that the TAs have resigned themselves to the situation. According to them, their disinterest in pursuing any strategic response is mainly due to their subjection to the Banda Paramount Chieftains who will be the ultimate recipients of the land compensation when it is released.

7.2.1.2 Bui

To the Bui TAs, their social construction of 'land scarcity' encompasses those above-mentioned, but also the BPA's hesitance to allocate the requested reserved land and their lack of authority over the Akanyakrom and Dokokyina communities as the original landowners of the resettlement site. With respect to the pending reserved land, the research gathered that the TAs have not undertaken any strategic response, because the BPA claims to be considering their request. However, they have adopted specific strategic responses to the other factors that underlie their social construction of 'land scarcity'. Like the TAs of Dokokyina, the Bui TAs have received compensation for the lost sacred trees. Thus, they only enforce the taboo on felling to conserve the trees on the allocated land. Likewise, they continue to enforce taboos such as those related to sacred days, which enable them to assert their authority. However, of relevance to the research are the TAs' strategic responses to the withheld land compensation and their lack of authority over the two other resettlement communities. Regarding these, the research found that the TAs have resorted to lawsuits and imposing their authority. The next paragraphs elaborate on these.

Legal actions: With respect to their withheld land compensation, the research found that the Bui TAs have had recourse to the law courts to compel the State to compensate them for the expropriated land. Data gathered from the High Court of Justice of the then Brong Ahafo Region, which is presently the Bono Region, shows that they filed the lawsuit on 22 October 2012. The accused include the Attorney General as the legal representative of the Government of Ghana (GoG), the BPA, and the Brong Ahafo Regional

Coordinating Council, which is the decentralized body of the GoG. Relevantly, the lawsuit is not only in respect of the land expropriated for the dam, but includes claims to compensation for lands that were reportedly encroached upon by the Wildlife Division before the recent acquisition. Regarding the latter, the lawsuit notes that although the expropriated land was originally 1,821 km², the Wildlife Division took control of more lands, thereby restricting access by the subjects of the stool to their legal lands. Given that this purported encroachment was prior to the recent take-over, the research deduces that the TAs' claim to compensation is a bid to increase their entitlement. As related by the Land Administrator of the BPA during his interview on 5 September 2018, "*The chieftains are concerned about land sizes, because the compensation is paid by land size*".

Of relevance, the Bui TAs are aware that the compensation payments have been delayed by their conflicting claims with the Bongase TAs and the Banda Paramountcy in general. Thus, their lawsuit includes a request to the court to compel the State to appoint a surveyor to demarcate and access their lands. Ultimately, the Bui TAs are the only ones among the focal TAs who have filed a lawsuit in respect of the land compensation payments. The research gathered that this is because of the recent restrictions to their mandate, but also their limited extents of land and consequent inability to earn adequate money from transferring land to especially non-natives. As explained subsequently, unlike the Bui TAs, the other historical landowning TAs are capitalizing on the extents of their remaining land and location to earn money from granting land access to non-natives. Thus, by their lawsuit, the TAs of Bui intend to expedite the land compensation payment to gain money to maintain their stools and keep up appearances as the socio-political and socio-cultural leaders of the community.

Imposition of authority: Besides their lawsuits, the TAs of Bui are compelling the Akanyakrom and Dokokyina communities to observe their rituals related to burials. It would be recalled that the Akanyakrom community was historically subject to Bui. Although the Dokokyina community is conversely only subject to the Banda Paramount Chieftains, the Bui TAs consider them as their subjects because of claims of owning the land on which the BPA resettled them. Consequently, the research gathered that the Bui TAs have been sending representatives to accost grieving families in the two communities and coerce them to present the requisite materials for burying their dead on the land. Although this appears to be a bid to recover their custom, it is particularly underlain by a desire to redeem their authority by establishing their dominance over the two communities.

7.2.1.3 Bongase

Like the historical landowning TAs above, the TAs of Bongase, and the Banda Paramount Chieftains to whom they are subject have recently socially constructed 'land scarcity' due to the BPA's strategies of land access. Inferring from the previous chapter, their social construction also encompasses the extensive land depletion, the annulment of their allodial titles and absolute mandates, the withheld land compensation payment, and the loss of sacred trees due to the inundation of large swathes of land. Consequent to their social construction, the research found that the Bongase TAs and the Banda Paramount Chieftains have also adopted certain strategic responses. Like the TAs of Bui and Dokokyina, the BPA has compensated

them for their loss of sacred trees; hence, they only enforce the taboo on felling sacred trees as a strategy to conserve the remaining ones. They also enforce other taboos and require non-natives to honor the annual presentation of foodstuff in order to assert their authority. However, with respect to the annulment of their allodial titles and the withheld land compensation, the TAs have capitalized on the remaining extent of land, their proximity to the reservoir, the recent influx of prospective non-native land users, and the BPA's oversight in recognizing the land use of herders to redeem their authority and earn some material benefits from land. Specifically, their key strategic response has been the creation of an illicit property market through which they lease land to non-natives for farming, fishing, and herding.

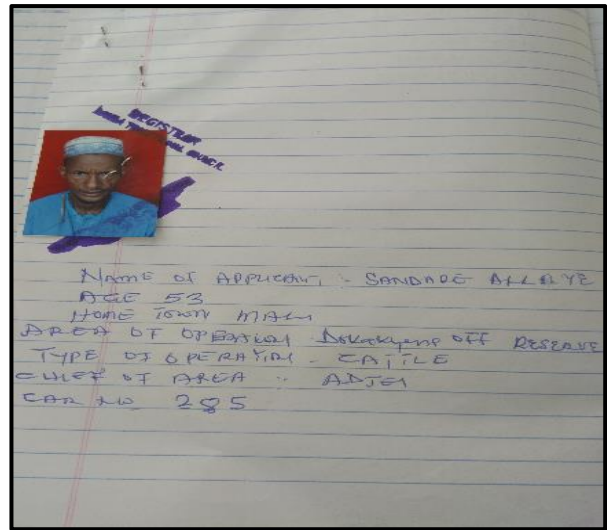
Relevantly, the research found that the non-native farmers have been attracted to the area by the increasing cashew cultivation and its proximity to Sampa, the market hub for the seeds. The fisher folks have also been attracted to the area on hearsay about the high population of domestic fishes in the reservoir including basses, catfish, and tilapia. Conversely, the herders, who are largely nomads, have been influenced by the vast extent of land and the abundance of water due to the BPA's creation of the reservoir. Although their high influx to the area primarily explains the TAs' circumvention of the BPA's land access protocols, the research also found that many of them were unaware of the acquisition and the BPA's protocol and hence, naturally consider the TAs as the rightful landowners through whom access may be gained. During an interview on 27 November 2018 with one of the earliest comers who is a 54-year-old non-native fisher folk, he related that, *"When we first arrived here, we were not aware that the BPA owns the land. We were just strangers who wanted to make a living so we did not bother ourselves with such issues. However, as every land is somehow owned by a chief, we had to see the Chief of Bongase whose community was closest to the reservoir to gain the requisite permission to settle here and access the lake"*. Some farmers were conversely aware of the acquisition; yet, they preferred to gain illicit access through the TAs because they considered the BPA's protocol bureaucratic and relatively costly. They also explained that the BPA only gives access to a fixed land size for a period while the TAs give them an open access to land, which enables them to access any size of land indefinitely. The research also conjectures that the TAs' own charges before endorsements to the BPA for the recognized land uses (farming and building) adds on to the transaction cost of accessing land, which may additionally explain the non-natives' desire to gain access only through them.

Given the above, the TAs of Bongase and the Banda Paramount Chieftains have jointly begun a process of registration and issuing permits that requires prospective non-natives to make undisclosed cash payments before accessing land. This contrasts with the historical practice whereby they mainly accepted a pittance and drinks from prospective individual land users. During his interview on 9 December 2018, the Banda Paramount Chief referred to their initiative as *"entering into a tenancy agreement"*. Subsequently, he showed some documents on the recent process, which included a registration book and samples of the permit. The images below are examples of these. He further explained that, besides the initial payment, they expect especially non-native farmers and fisher folks to make annual presentations of foodstuff and fish towards the yam festival. Relevantly, his appellation of the process mirrors the land interest that was historically permissible under the revoked customary tenure systems. This implies that they have resorted to the historical customary tenure system to carry out their strategic response. To be sure, he justified their actions

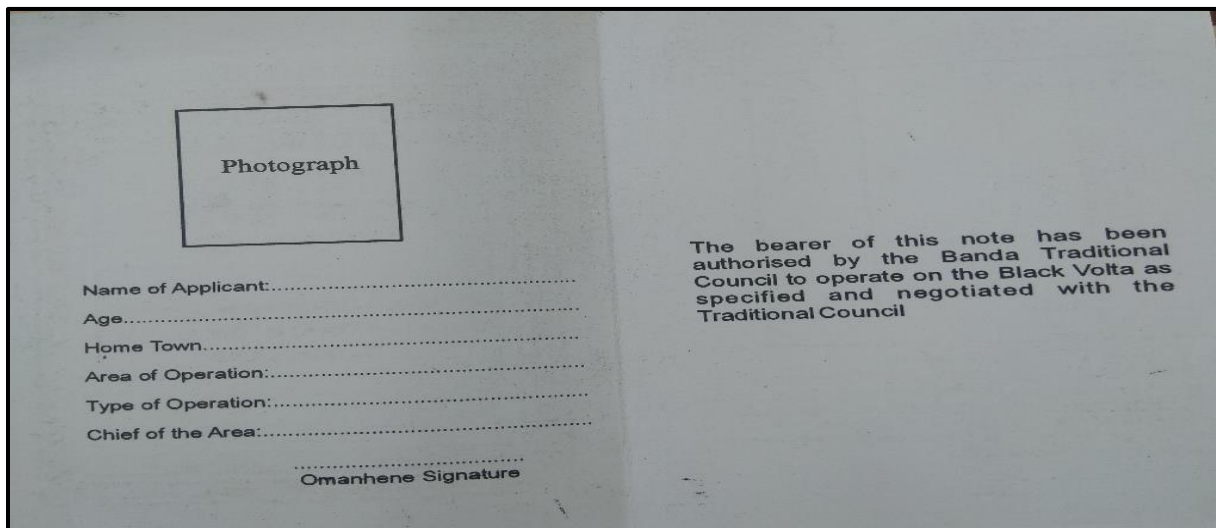
by arguing that they retain the right to transfer land despite the acquisition. "When the State acquires land, it doesn't repudiate the power of the previous owners entirely", he stated during the interview. "The acquisition implies that the State can carry out a project on the land at any time in the future and that is why it pays compensation on the land. Therefore, before the State undertakes its project(s), the chieftains have the authority to give the land out to anyone who needs it temporarily for activities like subsistence farming," he further explained.



Picture 7.1: The cover page of the permit issued to fisher folks (Source: E. Agyepong, 9 December 2018)



Picture 7.2: A page of the registration book showing the information of a herder (Source: E. Agyepong, 9 December 2018)



Picture 7.3: The information page of the permit (Source: E. Agyepong, 9 December 2018)

Consequently, during the fieldwork in 2018, the BPA Land Administrator mentioned that their security personnel had discovered about sixty squatter settlements along the banks of the reservoir with ties to both the Bongase and the Banda Paramount Chieftains. Reportedly, the inhabitants were largely commercial fisher folks from Ghana and other West African countries, but also illegal miners whose land access has been renounced by the TAs due to the government's recent crackdown on illegal mining activities. Among other things, the settlements had schools, churches, and mosques and some of the squatters were farming actively. The Head of the Wildlife Division in charge of the Bui National Park also reported that the patrol

staff had encountered several herders with thousands of cattle in the area towards the international border with Cote d'Ivoire. According to him, when they accosted them, they confirmed that the Banda Paramount Chieftains had granted them access to the area. As gathered, these activities affect those of the BPA and the Wildlife Division negatively. However, the Bongase TAs and the Banda Paramount Chieftains consider their permission of the activities as key to regaining their authority and earning adequate money to maintain their stools.

7.2.1.4 Gbolekame North

As a historical landowner, the Bian Clan Head on whose land the Gbolekame North community subsists has also recently socially constructed 'land scarcity' due to the BPA's strategies of land access. Specifically, his social construction relates to his extinguished allodial title, the pending land compensation, and the BPA's snub with respect to his lack of recognition as an intermediary of land access like the other chieftains. Accordingly, he has also adopted certain strategic responses to maintain his authority and earn some material benefits from land. As mentioned previously, the Gbolekame North community is largely unaware of the State's acquisition and the BPA's consequent ownership of the land. Thus, the Bian Clan Head continues to control the natives' land access. Like the other TA, he also continues to enforce the historical taboos on land access, which include the ban against felling sacred trees and the observation of sacred days among others. However, of significance is his enforcement of the extinguished customary tenure system to admit non-native farmers and an increasing number of herders to the area due to the BPA's misrecognition of their activities.

The research found that the farmers and herders have both been attracted to the area by the vast extent of available land and its location. As discussed in the previous chapter, the land area is still vast, because it was least affected by the BPA's strategies. In terms of location, the farmers consider the area's proximity to Sampa, the cashew seed market hub, as convenient for their endeavors. On the other hand, the herders appreciate the area's location with respect to their ability to move freely about and access the downstream river. Given these and their widespread ignorance of the shift in landownership, the incoming land users have sought the permission of the Bian Clan Head to access land. On his part, the Bian Clan Head has capitalized on the influx and the BPA's infrequent monitoring of the area downstream to admit them to advance his personal interest. Of interest too, while he and the other chieftains historically confined the herders to the uncropped areas of the land, they have in recent times given them an open access to the land, which has affected the farmers' land access.

Consequently, as shown in Picture 7.4, the research observed that some of the herders and their families have established sturdy villages around Gbolekame North and are actively practicing subsistence farming. When asked about their decision to settle in the area during an FGD with the head herders on 14 December 2018, one of them responded as follows: *"We came here from Ivory Coast on hearsay about the dam and how it has led to an abundance of fodder and water. At the time, we were experiencing a dry spell so we moved to the area beyond the lake. However, after a few days, some government officials chased us out of the area. Eventually, we found this area and upon consulting the landowner, he gave us permission to settle here and even cultivate crops in order to*

ease the burden of moving about to find fodder and water". As shown in Picture 7.5, the research also observed that while some of them have built straw or mud houses, which are customary of the transhumance herders of the region, others are building concrete blockhouses, which suggest a long-term or permanent stay.



Picture 7.4: One of the herders' sturdy villages near Gbolekame North (Source: E. Agyepong, 14 December 2018)



Picture 7.5: A concrete blockhouse under construction within one of the herders' sturdy villages near Gbolekame North (Source: E. Agyepong, 14 December 2018)

Relevantly the research noticed that unlike the squatter settlements around the reservoir, the pre-existing Gbolekame North community provides a cover for the sprawling sturdy villages, which may explain the BPA's lack of attention to the ongoing developments. Like the Bongase and Banda Paramount TAs, the Bian Clan Head charges the prospective farmers and herders before admitting them. According to him, farmers – excluding Sissalas, Gonjas, Grusies, and Wangalas who they traditionally consider as relatives – pay an undisclosed amount of money as well as present foodstuff for the annual celebration of the yam festival. Nomads who only stay for a period pay two cows, one of which the clan sacrifices to the gods and sells the other to maintain the stool. Transhumance herders on the other hand pay initial and annual fees. The former also consists of two cows while the latter consist of a bull or its equivalence in cash. Ultimately, the Bian Clan Head claimed that these counter strategies have enabled him to redeem his honor by gaining the requisite recognition and maintaining his stool.

7.2.1.5 Carpenter

The TAs of Carpenter were also historically landowners. Thus, they have also socially constructed 'land scarcity' in the recent past due to the land acquisition and the BPA's strategies of land access. Their social construction of 'land scarcity' encompasses the sizable depletion of land, the invalidation of their allodial titles and absolute mandates, and the withheld compensation for the acquired land and the sacred trees affected by the impending solar farm. It also encompasses their general loss of sacred trees due to the erection of the four transmission towers and the upcoming solar farm. Following their social construction, the TAs have also implemented certain strategic responses. Like the others, they continue to impose some

historical taboos including the observation of the sacred days and require non-natives to make annual presentation of foodstuff towards the yam festival. The Chief also requires the non-natives to continue to work on his farms at no charge. As explained previously, the non-natives who constitute about 90 per cent of the community's population still believe in the chieftains' authority over land despite the recent shifts. This is mainly because the chieftains' facilitated their initial land access in the past.

Of relevance to the research are however, the chieftains more radical attempts to compel the BPA to pay especially the compensation for the sacred trees and to assert their authority over the acquired land. With respect to the former, the research found that the TAs have retained a legal counsel and have subsequently resorted to the media to name and shame the BPA for its fraudulent conduct. However, regarding the latter, they have emulated the TAs of some of the communities by transferring land illegally, claiming that the recognition and material benefits enable them to undergird their authority. They also rent out abandoned houses to incoming non-natives to earn some money. The next paragraphs elaborate on these strategic responses.

Seeking legal counsel: During his interview on 5 September 2018, the Chief of Carpenter recounted that the TAs have been disinterested in pursuing lawsuits against the BPA over the delayed land compensation, because the problem is non-exclusive to them. However, he made efforts to oblige the BPA to compensate them for the sacred trees within the area demarcated for the solar farm because of their experience regarding the partial compensation for the sacred trees affected by the erection of the four transmission towers. In this regard, he related that he wrote a letter to the Land Valuation Division (LVD) of the Lands Commission on the matter, who referred him to the BPA. However, upon contacting the BPA, they also referred him to the LVD, which compelled him to seek legal counsel. In his words, "*Because we are illiterates, the BPA disregarded us till we resorted to legal counsel before it took us seriously*". Following this and several correspondences between the BPA and their legal counsel, the BPA conceded that the Form Fs were issued in its name and per its request, the LVD reissued them to reflect the appropriate claimants. Despite this, the BPA has been reluctant to compensate them for the sacred trees, claiming that it will compensate them when the project takes off. However, the BPA has compensated the farmers who were also affected by the demarcation. The Chief stated that their legal counsel has thus levelled several threats to file a lawsuit against the BPA but to no avail. As he reasoned during the interview aforementioned, "*The BPA is unafraid of lawsuits, because it knows that the court, which is also filled with public officials, will side with it*". Consequently, he resorted to the media to name and shame the BPA for its fraudulence.

Public declarations: According to the Chief, he chose to air his grievance on the 'Dwa so nsem Fabewoso program' on Adom FM, which is the one of the popular anti-corruption programs in Ghana and has a nation-wide coverage. However, on 21 November 2018 when the program was due (see: Agyeman 2018), he received a call from a high ranking official of the Strategic Security Systems International Limited (SSSIL), a Ghanaian company involved in the pending solar farm project, who implored him to rescind the radio interview. He claimed that the official explained that the interview may scare off their investors and promised to resolve the issue immediately. Consequently, an official of the BPA also called to assure him of its willingness to resolve the issue. Following this, the SSSIL submitted proof of paying GHC 80, 594.21

as compensation for the sacred trees to the BPA in 2017. However, despite the assurances, the BPA was yet to give the money to the TAs at the time the research wrapped its fieldwork in March 2019.

Facilitating illegal logging and charcoal production: In addition to transferring land illegally, the research also found that the TAs of Carpenter are facilitating illegal logging on the thousand acres of land, which the BPA has demarcated for a solar farm. According to the Chief, they got involved, because some members had started felling the sacred trees for commercial purposes. While some sold them as timber, others burned them for charcoal, which has made the community one of the biggest charcoal producers of the area. Consequently, the TAs considered these activities an opportunity to earn some money to replace the withheld compensation for the sacred trees. As gathered by the research, they thus charge both natives and non-natives GHC 300 (equivalent to €47) to access an acre of land for logging.

Illegal land transfers: Besides the above, the research also gathered that the TAs of Carpenter are capitalizing on their distance from the dam and the BPA's infrequent monitoring of the area to transfer land illegally to non-native farmers and herders. Like the other communities above, the farmers have been attracted to the community by the proliferating cashew industry. The herders have conversely been attracted by the vast extent of land – including the areas where the BPA and the Forestry Commission have restricted access – and the downstream river. As they are unaware of the recent shifts in land ownership, all of them solicit the TAs to approve their land access. Consequently, the TAs have invoked the defunct customary tenure systems to facilitate their access to land rather than endorsing especially the former whose activities are acceptable under the new tenure system to the BPA. Like some TAs, they have also capitalized on the BPA's lack of recognition of the activities of herders to grant them access. The research observed that some of them are nomads, while others are transhumance. Some of the latter have settled in a pre-existing village along the downstream river called Jabo, while others have established a new one called the Grusie village. Relevantly, some Dagaate farmers used to occupy the Jabo village but have abandoned it because of the conflicting activities of the herders. Like the Bian Clan Head, the TAs of Carpenter have given the herders an open access to land, which contrasts with the historical practice whereby they confined them to the uncropped areas.

As they did historically, the TAs charge the prospective land users before granting them access. To this end, they still require non-native farmers to present a goat, two chickens, and between GHC 50 to 100 as entry fee. They also expect them to make annual presentations towards the yam festival according to the number of land acres they access. Concerning the herders, the Chief explained that, unlike the historical practice whereby they charged them a standard fee, the TAs determine their charges per the size of the 'gariji'; that is the group. For transhumance herders, the group includes the household size of the head and the hired caretakers. Accordingly, he estimated that those with bigger households, large herds of cattle, and hence many hired caretakers may be charged between GHC 500 and GHC 1000 as well as a sacrificial goat as entry fees. Besides this initial payment, they expect each head herder to make an annual in-kind payment of a cow towards the yam festival. For nomads who reportedly frequent the area in the dry season and stay between three to six months until the rainy season, the charges may either be in cash or in-kind depending on their preference. However, the TAs expect cash payments to be equivalent to the price of a

full-grown cow. Additionally, nomads who only pass through the area may willingly offer kola nuts, some cash, or a calf to lobby the youth to assist them to avoid destroying farms. Relevantly, the Chief acknowledged that the TAs are displeased with the impacts of the increasing number of herders on farmers; yet, they have been compelled to admit them, because they receive a lot of money from them to preserve the stool. He also related that the recognition accorded by the non-natives undergirds their authority.

Leasing abandoned houses: Recalling from the previous chapters, the Chief assumed ownership of the houses of the non-natives when they left the community. Thus, the research gathered that he presently capitalizes on the BPA's ban on building to lease out the houses under his control to incoming non-natives. Through this, he earns some money to maintain his stool.

7.2.2 The strategic responses of the farmers

As explained in the previous chapter, the farmers of all the study communities claimed that they have experienced 'land scarcity' in the recent past, because of their deficient crop yields. They largely attributed this to the effects of the BPA's strategies of land access, but also to other factors such as the increasing cashew cultivation and pests and diseases. Some communities also had exceptional reasons for their social constructions, which the subsections refer to before elaborating their respective strategic responses.

7.2.2.1 Dokokyina

To the farmers of Dokokyina, their social construction of 'land scarcity' relates to the low crop yields resulting from the limited size of the allocated land, the poor soil productivity, land tenure insecurity, incidences of pests and diseases, climate change, and the commercialization of social support. Given the Bian Clan Head's recent admission of herders, their social construction of 'land scarcity' also includes encroachment by the herds of cattle on their farms and the herders' indiscriminate bushfires to spur grass regrowth. Particularly due to the limited size of the allocated farmlands, about ten out of the thirty-six households of the community resisted the BPA's resettlement. Consequently, they have remained at the former Dokokyina community. The research found that those who yielded to the resettlement and encountered the above-mentioned deficiencies also adopted strategic responses that encompass changes to their farming practices and other individual actions, as well as the formation of associations. The next paragraphs elaborate on these while a subsequent section discusses the peculiar case of the households that resisted resettlement. As mentioned in Chapter 3, the research refers to the breakaway community as Dokokyina No. 1 to distinguish it from the Dokokyina resettlement community.

Changes to farming practices: Due to the limited extent of the allocated farmland, the resettled farmers of the Dokokyina community have been unable to access the requisite land to practice their extensive farming and shifting cultivation. As recalled from the preceding chapter, the community farmed more extensively than the others did, because the men and women respectively farmed at least twenty and five acres of yam per season and owned at least thirty and ten acres of cashew farms. Thus, faced with the current situation and their inability to access desirable quantities of farmland, the farmers recounted that they practice crop

rotation and intensive farming, whereby they cultivate multiple crops on the same piece of land seasonally. As explained previously, this involves the cultivation of subsistence crops with cashew trees until the trees are mature and produce shade. Afterward, those who have successfully protected some uncultivated lands advance to them, while those who lack them seek out new areas to begin the cycle.

Given the land shortage, some of the latter and new farmers (young natives) have resorted to encroaching on the claims of other farmers within the communal allocation, which is unusual in respect of their history of longitudinal farming. Others have also accessed land in the allocation of the Akanyakrom community, which is between theirs and that of the Bui community. Some have also attempted to access land in Bongase. Although reminiscent of the open access to land that was historically characteristic of the Banda Traditional Area, the members of Bongase have challenged such attempts and sometimes expelled them from the area. However, during an interview on 19 January 2019, a 42-year-old man explained that, *"The land is exhausted by claims to cultivated and uncultivated areas. To some of us, the communal demarcations and claims to uncultivated lands are irrelevant under the current situation. Thus, if the need arises, we find any vacant land and possess them by violence"*. As gathered, others find such lands during the active seasons and entrust them to their wives and elderly children to cultivate either cashew or subsistence crops. Some, including unmarried ones, may also mark their claims with a few cashew trees or give them to other farmers on a share-cropping agreement, which involves the cultivation of only subsistence crops. The farmers explained that, they do not allow their tenants to cultivate cashew trees, because they prefer to keep the full benefits of the crops within the household. Consequently, they benefit from the share of the yields of the subsistence crops and may access the land for cashew cultivation whenever the need arises.

As expected, the ongoing encroachments have separated the farms of relatives and friends, which some attributed to their inability to ward off monkeys from their farms. More importantly, they have also ignited land disputes among the farmers, leading to social disarticulation. Thus, reticent ones who are reluctant to fight others over land are usually those who seek land from fellow farmers and have become customary tenants. To be sure, this is uncommon given that the farmers only entered into customary tenancy agreements with non-natives who could not access land as easily as the natives did.

Besides the above, the farmers of Dokokyina are diversifying their crops. Cashew trees have naturally surpassed yams as the main crop. This is due to their long history of cultivating the trees, the increasing market value of the seeds, the limited extent of the land, and the poor soil quality. Cashew cultivation has also become the major strategy for the farmers to maintain their hold on land. However, the farmers' earnings from cashew seeds have declined significantly because of their limited access to land. Additionally, the proceeds are seasonal and fall short of meeting the farmers' needs all year-round. Thus, to supplement them, some farmers have begun to cultivate other non-traditional crops in-between seasons. The District Best Farmer Awardee from the community has in particular pioneered watermelon cultivation in the area. When interviewed about this venture, he explained that besides the suitability of the soil, he settled on the crop, because it is fast selling and could be cultivated twice every year. He related that communities like Nkoranza, Akumsa Dumase, Bawku, and Agogo are notable for producing the crop. Thus, to be competitive, he cultivates the crops in the dry season and harvests them when they are out of

season and pricier. He further explained that he plants them in the dry season because of experiences with pests and diseases in the rainy season. According to him, these decisions have partly underscored his success despite the current challenges. Given his achievement, some other farmers have also started cultivating watermelons in the community.

The research also found that the most of the farmers are using agrochemicals to clear their farmlands, control weed growth on the farm, boost the soil productivity, and treat pests and diseases. Regarding the first, the farmers explained that due to the adjacency of their farms in recent years, they resort to weedicides out of fear of starting bushfires that may spread to other farms. Besides this, they related that their use of weedicide enables them to apply chemical fertilizers simultaneously to boost the productivity of the soil. In this regard, the farmers mix the weedicides and chemical fertilizers, believing that the combination and concurrent application are more potent and timesaving. However, others have been resolute by avoiding the use of agrochemicals. In addition to citing the historical practice as the reason for their decision, they also acknowledged that the chemicals leave residues that are harmful to the soil and affect the taste of yams when cultivated on the land.

Other individual strategic responses: Besides changing their farming practices, some farmers have also adopted individual strategic responses. Particularly, some who have amassed more farmlands but have been unable to farm them give portions to others on a share-cropping agreement to protect the land from encroachment and earn additional crops from their tenants. As mentioned above, the agreement involves the cultivation of only subsistence crops on the land and the distribution of the crop yields between the parties. A few like the District Best Farmer Awardee have capitalized on the principle of an open access to land within the Banda Traditional Area to access land outside the acquired area. When interviewed, they claimed that the land exhaustion at the site and the Bongase community's recent hostility towards them have influenced their decision to seek lands in distant Banda communities such as Banda Boasi, where the land is reportedly vast. Others have also accessed land in Banda communities in Core d'Ivoire. However, they also acknowledged that such enterprise was only reserved for the affluent, because it involves frequent expenses on caretakers and transportation.

As explained in the previous chapter, some farmers have also become farm laborers while others have become creditors, vendors, and cash crop merchants. Relevantly, the laborers are those who have been unable to find adequate land and include both men and women. The men render their services for soil preparation and farm maintenance while the women mainly render theirs for crop harvesting and processing. The research found that some of the women have consequently formed a group that offers such services. As further gathered, those who provide services for soil preparation and farm maintenance receive payment in cash while the others receive a percentage of the harvested and processed crop as payment, which they can consume domestically or sell for cash. However, besides the study area, individual laborers also migrate to Cote d'Ivoire during the cashew harvest season to render their services to the farmers. Such ones also receive a percentage of the cashew seeds, which they sell for cash. According to the laborers, their earnings supplement their farm proceeds and enable them to cope with the current hardship. Some farmers like the Best Farmer Awardee have also capitalized on the ongoing challenges to

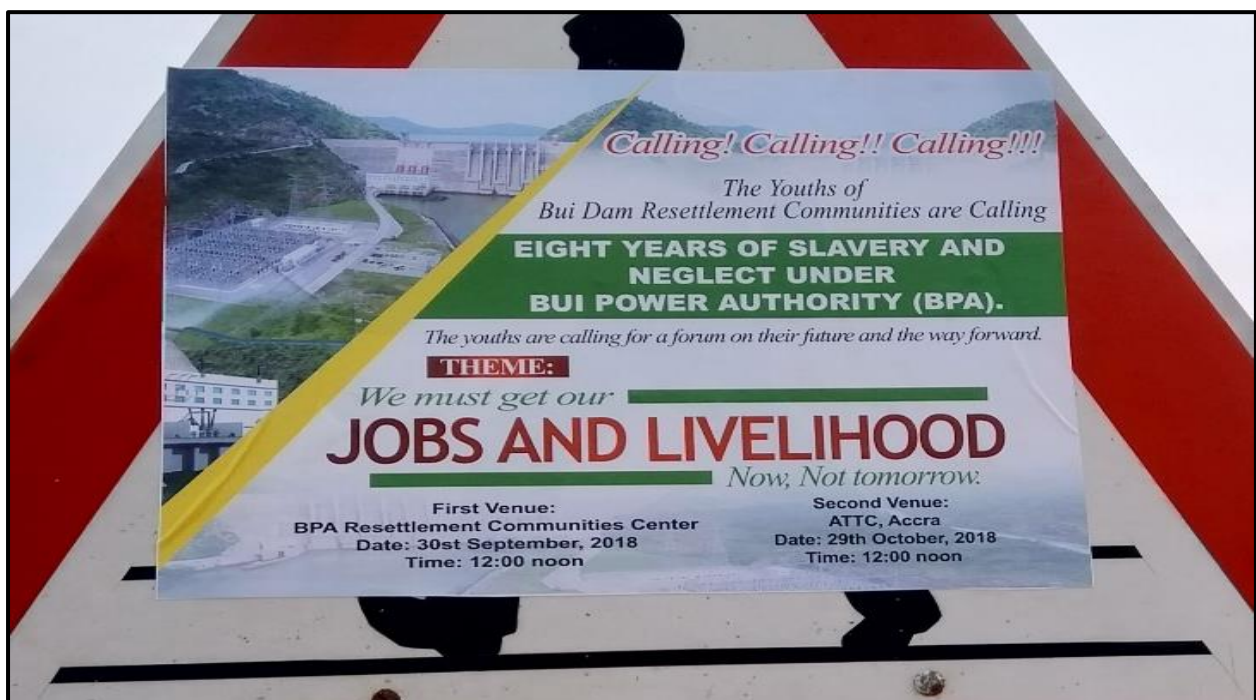
become creditors, vendors of agro-inputs, and crop merchants. They sell or offer seeds and seedlings on credit to other farmers, lend money, and buy cashew seeds from other farmers, which they subsequently sell to the external merchants. Ultimately, the proceeds from these ventures enable them to augment their farm earnings and hence sustain their livelihoods.

Formation of associations: Besides the above, the research found that the Dokokyina community has established farmers and youth associations to enable the members to deal with some of the challenges. According to them, the formation of the associations was on the advice of a non-governmental organization (NGO) known as Ghana Dams Dialogue, which engaged them in several meetings before their resettlement. Information gathered from the organization's website shows that it was funded by the erstwhile Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) with a primary aim to build capacities and provide tools for improved decision-making on dam related issues (Ghana Dams Dialogue n.d.). To this end, the members reported that they established the 'Bre Nye Kwa' Farmers' Association' (interpreted as 'toiling is not in vain'), whose main objective is to facilitate community development. During an FGD on 1 February 2019, the research gathered that all the economically active natives were members of the association and that the BPA facilitated its registration with the Registrar General's Department with hopes of supporting the community's adjustment to resettlement. Among others, their activities include rendering farm services to each other and non-members at a fee. Thus, for an acre of land, members pay GHC 50 while non-members pay GHC 150 for their labor services. Members who are unable to join the team on such occasions pay GHC 10 as penalty. The members also related that men and women have different tasks during such ventures: while the men weed, the women provide them with food and water. Besides this, members of the group pay a monthly due of GHC 2. When asked about the purpose of the accumulated money during the FGD, a 55-year-old man explained that, "*We save the money at the bank. Out of it, we give loans to members at no interest for purposes such as paying their children's school fees and supporting their farming activities*". Concerning the loan repayment, a 42-year-old man stated the following during the FGD: "*Our repayment policies are flexible. Beneficiary students repay the loans after they have graduated from school and secured jobs. Farmers also repay theirs during or after the harvest season*". According to the farmers, these latitudes have augmented their access to social support and the requisite agro-inputs to exploit the limited land.

Besides the above, the research found that the youths have established an association, which was conversely not registered. As mentioned in Chapter 3, although the participants and those of the other resettlement communities have named the respective groups as youth associations, the ages of the members ranged between 15 and 49 years. This contrasts with the definition of Ghana's Ministry of Youth and Sports, which is between the ages of 15 and 35 (2010, 5). While its membership includes both men and women, the leaders were all men. The men also participated in the independent meetings more than the women did. According to the men, the women always made excuses with household chores whenever there was a meeting. The women confirmed this; however, they also claimed that they were confident in the men's decisions. Consequently, during an FGD with the so-called Dokokyina Youth Association on 2 February 2019, the members reported that the BPA continued to engage them in meetings after their

resettlement. However, their most significant endeavor was to unite with the other communities to question the traditional authorities' (TAs) commitment to pressuring the BPA to resolve some of their livelihoods challenges. They related that among other things, they expected the TAs to compel the BPA to allocate them with more farmlands, hire them on the project, and implement other livelihood programs. Thus, after years of their seeming indifference and disunity, particularly following attempts by the Bui TAs to impose their authority on the others, the combined youth associations penned letters to them in July 2018 to announce their assumption of power and willingness to confer with the BPA on behalf of the resettlement communities.

Together with the Akanyakrom community, they subsequently planned a forum and a demonstration against the BPA in the study area and Accra, the national capital. As shown in Picture 7.6 below, they posted public announcements about their plan to notify the BPA and garner the support of other members of the communities. However, at this stage, the Bui Youth Association withdrew from the plans for reasons explained in a related section. Following this notification, the BPA met with the youths and sanctioned their access to the farmlands at the former Dokokyina community. Thus, in January 2019, representatives of the youth associations went to the area to survey the land and expel the nomadic herdsmen who have flooded to the area on the permission of the Bongase and Banda paramount TAs. Acknowledging their mutual challenges, they invited representatives of Bui and the other resettlement communities in Jama to join them on the expedition and share in the fortune. Relevantly, they also invited the Assembly member of the Bongase Electoral Area to give their quest some form of legitimacy. However, at the time, the Dokokyina No. 1 community, which is contesting the BPA's land ownership, frustrated their plans to access the land. Despite this, the youth acknowledged their success, claiming that the BPA would not have acted without their involvement.



Picture 7.6: A poster of the public announcement on the forum and demonstration against the BPA (Source: E. Agyepong, 4 September 2018)

7.2.2.2 Dokokyina No. 1

In 2011 when the BPA embarked on resettling the communities affected by its operations, about ten households from the Dokokyina community resisted its attempts. They cited the limited effects of the inundation on their land, the small size of the allocated land, and their fear of being subjugated by the host community as reasons for their defiance. Before this, a non-resident native who lives in Sunyani, the regional capital, had convinced the community that he could assist them to avoid resettlement and maintain ownership of the land. Despite this, a majority of them acquiesced to the BPA's plan and resettled. Subsequently, the man enstooled himself as Chief of the remaining households and presented himself to the Banda Paramount Chieftains for endorsement, despite his lack of support of the kingmakers of the community. During his interview on 9 December 2018, the Banda Paramount Chief recalled that when he and the other TAs questioned his legitimacy, the man claimed that he had discovered large gold deposits in the area and attempted to bribe them with shares in the finds. However, given his illegitimacy and the government's ban on illegal gold mining, the TAs considered him a criminal and fined him for attempting to usurp power and conduct felonious acts in the traditional area. Undeterred by their decision, the man urged the ten households to remain at the former settlement, which following the recent land acquisition, came to be located on the border between the Bui National Park and the BPA's concessions. Afterward, he led them in a lawsuit against the BPA. Besides this, the members of the community adopted other strategies for their survival. The following paragraphs detail the lawsuits, the other strategies, and the reasons behind them.

Legal actions: Backed by the professed chief, the Dokokyina No. 1 community filed a lawsuit against the BPA over ownership of the land and its unlawful attempt to relocate them. During the preliminary workshop with the community on 3 October 2018, they explained that when they initially declined the resettlement, the BPA agreed that they could stay in the area but later reversed its decision. Consequently, in 2013, it bulldozed their houses and chased them out of the land upon which they settled on the international border between Ghana and Cote d'Ivoire. However, the BPA engaged the army to expel them from the area, causing them to relocate to Cote d'Ivoire. Thus, under the leadership of their 'Chief', they filed a lawsuit at the Sunyani High Court to reclaim their land and contest the BPA's action. Interestingly, the 'Chief' compelled them to mobilize the funds for the lawsuit. Thus, as explained later, they resorted to illegal lumber trading and poaching within the Bui National Park as well as extortions of the illegal miners and squatter fisher folks who live near the former settlement. However, despite their claims, the court ruled against them and requested their immediate resettlement. Given their resistance, the BPA had neither valued their houses nor provided shelter for them at the resettlement site. Thus, the court granted them temporary access to the former settlement to await the BPA's completion of their houses at the resettlement site. The resultant incidences are discussed in the next broad section.

Appropriation of cashew farms: As explained previously, the members of Dokokyina were historically more avid farmers and owned large acres of cashew farms, which were unaffected by the inundation. Relevantly, those who owned larger farms were among the resettled. Thus, during resettlement, the BPA assured them that they could return to collect the seeds. However, after resettlement, the Dokokyina No. 1

community took over all the cashew farms, arguing that the others would not have agreed to the resettlement if they valued them. Given this, when some of the resettled farmers attempted to access their old farms, they chased them away with guns and machetes and burned down their farm huts to deter them from returning. The District Best Farmer Awardee and some TAs had also encouraged others to agree to the resettlement. Thus, they claimed that the Dokokyina No. 1 community had put a price on their heads, which compelled them to abandon their farms altogether. Moreover, despite the BPA's recent permission, the Dokokyina No. 1 community prevented the youths of Dokokyina from accessing the available farmlands. They explained that, they would allow the youths of the other communities to access the land but not those of Dokokyina, because they want to punish them for abandoning them. They also related that their action was a counterclaim to the BPA's claim of landownership. Concerning the seized cashew farms, the members related that they collect the seeds and sell them across the border in Cote d'Ivoire, because they suspected that the Dokokyina community had badmouthed them to the merchants in Sampa. Due to their frequent expulsion, they also mentioned that they have been unable to farm in the area. Thus, they depend on the abandoned farms for food.

Illegal lumber trading, poaching, and extortions: To finance their lawsuits, the community has resorted to illicit timber trading and poaching within the Bui National Park. As gathered, they log and sell rare timber such as mahogany and iroko. They also poach wild game in the Park and ferry them to a weekly fish market in Jama to sell. Besides these, they extort money from the squatter fisher folks and illegal miners who operate or live near their settlement. Regarding the latter, the research found that they flooded to the area after the alleged discovery of gold deposits. Given their numbers and profitable activities, the youths of Dokokyina No. 1 request them and the fisher folks to pay weekly rent on the land and further expect the latter to give them fish regularly. When interviewed on 3 January 2019, one of the fisher folks mentioned that they have been unable to resist the extortions, because the Dokokyina No. 1 youths once attacked some defaulters with guns and machetes. They also dismantled their laid fishing nets and assigned their territories to other fisher folks. Although the fisher folks have subsequently reported them to the Bongase and Banda paramount TAs, they claimed that the TAs have taken no action, because the extortions are ongoing. When asked about it during his interview, the Banda Paramount Chief corroborated the fisher folks' story. He however claimed that the representatives of the Dokokyina No. 1 have refused to honor the TAs' invitations for a meeting, which has affected their ability to address the problem. Consequently, the Dokokyina No. 1 community continues to extort the squatters, which has supported their livelihoods and other strategic responses to their recent experiences.

7.2.2.3 Bui

Like the Dokokyina community, the Bui farmers' social construction of 'land scarcity' is in respect of the low crop yields due to the limited size of the allocated land, the poor soil productivity, land tenure insecurity, incidences of pests and diseases, climate change, and the commercialization of social support. It also relates to the incessant encroachment by the herders who have been admitted to the area by the Bian Clan Head and the rampant bushfires they frequently start to stimulate grass regrowth. Thus, due to their

shared location with the Dokokyina community and the consequent flow of information, they have also adopted similar strategic responses to expedite the achievement of their land access objective. These are changes to their farming practices, individual actions, and the formation of associations. Given their similarity with those of the Dokokyina community, the next paragraphs only touch on the strategic responses without further elaboration to avoid monotony.

Changes to farming practices: The preceding chapter showed that due to the limited size of the allocated land, the farmers of Bui have been unable to access their usual sizes of farmland to expedite high crop yields. Whereas the men and women respectively accessed ten and three acres of land per season in the past, they can now access only two acres of land seasonally. Consequently, they have also changed their farming method from shifting cultivation and extensive farming to intensive crop rotation. Farmers who lack uncultivated land have also resorted to encroaching on claims within the communal allocation and that of the Akanyakrom community, arguing that they own the farmlands, because they were originally their hosts. Like the farmers of Dokokyina, such ones may find the land at the end of or during the active farm seasons and entrust them to their wives and economically active children to cultivate either cashew or subsistence crops. Some, including unmarried ones may also plant a few cashew trees on the land to symbolize their claim or give the land out to other farmers to cultivate only subsistence crops on a share-cropping agreement. As explained, the farmers disallow the cultivation of cashew trees by the tenants, because they prefer to keep the full benefits of the farms within the household. The encroachments within the communal allocation have led to disputes and social disarticulation among the natives of Bui. However, the natives of Akanyakrom have been unable to dispute their appropriations due their frequent claims of being the original landowners. Non-combative ones also prefer to rent the land from others than encroaching and fighting others over claims.

Additionally, the Bui farmers are diversifying their crops by intensifying cashew cultivation against the BPA's protocol. However, the research observed that unlike the Dokokyina farmers, they were not cultivating any other non-traditional crops. Many of them have also begun using agrochemicals due to the incidences of pests and diseases and the poor soil productivity. Like the Dokokyina farmers, such farmers prefer to use weedicides than slash-and-burn because of the adjacency of their farms and the possibility that the bushfires may destroy nearby farms. In this regard, they also prefer to mix weedicides with chemical fertilizers in a misguided attempt to increase the chemicals' potency and save time. However, those who have refrained from using agrochemicals also cited their historical farming practices and the effects of the chemicals on the soil and yams as the reasons for their decision.

Other individual strategic responses: In addition to the shifts in their farming practices, the research also found that the farmers of Bui have individually adopted strategies to deal with 'land scarcity' as socially constructed by them. As deduced from the above, some have become 'landlords' who rent land to other natives on a share-cropping agreement. Yet, others – including both men and women – have also become farm laborers, rendering their services to other farmers within the study area or in Cote d'Ivoire, especially during the cashew harvest season. Within the study area, the men usually provide their services for soil preparation and farm maintenance, while the women harvest and process crops. In this regard, based on

the nature of the work, the former receive payment in cash, while the latter receive a percentage of the harvested or processed crop as payment, which may be sold for cash or consumed domestically. Those who render their services to farmers in Cote d'Ivoire during the cashew harvest season also receive a percentage of seeds, which they subsequently sell for cash.

Capitalizing on the current challenges, some successful farmers have also become creditors and vendors of certain agro-inputs. In this regard, they sell or credit seeds and seedlings to other farmers and lend them money on request, which ultimately earns them money besides their farm proceeds. Others have also become cash crop vendors who buy cashew seeds from fellow farmers and sell them to the external merchants to supplement their farm earnings.

Formation of associations: Like the Dokokyina community, the Bui community also formed farmers and youth associations on the advice of the Ghana Dams Dialogue. Relevantly, the former, which is the Abotare Ye (interpreted as 'patience is good') Farmers and Marketing Society, is currently dysfunctional. During an FGD on 4 February 2019, the research found that the members were between the ages of 15 and 45. When asked about this, they related that the elderly were disinterested in joining the association because of the 'youthful' leadership and their inability to participate actively in the activities. Regarding the history of the association, the members reported that they formed and registered the association in 2011 to provide mutual support to members in their farming activities. However, they became more active when a former Agricultural Extension Officer began to engage them in activities and promised that an NGO was interested in supporting them. Thus, he began to link them up with crop merchants and taught them the best standards of crop cultivation, which helped them to reduce wildlife invasion and increase yields. With his encouragement, they also began to collect monthly dues, which they saved at the Baduman Rural Bank. Thus, they could provide low-interest loans to members to support their farms and other needs. The members related that few years after this, the bank collapsed and they lost the saved money. The Agricultural Extension Officer also transferred out of the district, undermining their efforts to track the bank and retrieve their money. Following this, the members lost interest in the association. The leader claimed that given their worsening situations, some had wanted to revive the association in recent years. However, the succeeding Agricultural Extension Officer has only met with them once in 2016, which has further demoralized the members.

The Bui community also has an unregistered youth association, with members ranging between the ages of 15 and 49 years. As mentioned previously, this contrasts with the national definition of youth by the Ministry of Youth and Sports (2010, 5). Although it is also made up of both men and women, the men occupy leadership positions and are more active in the group than the women are for the same reasons provided by those of the Dokokyina community. The research found that the BPA continues to engage with the association. However, the association was primarily animated by the rapid deterioration of their livelihoods in recent years. Consequently, they were part of the combined youth association of the resettlement communities that penned a letter to the TAs, requesting them to bow out and allow them to deal with the BPA by themselves. However, the TAs of Bui reacted to the letter by threatening court action against them for attempting to usurp their authority. Thus, the youths could not pursue the planned forum

and demonstration with the other youth associations. However, as explained above, the joint efforts of the youth associations prompted the BPA's permission to access the land at Dokokyina No. 1, which to the youth, is a success that has inspired them to continue their collaborative work.

7.2.2.4 Akanyakrom

Given their shift from artisanal fishing to farming, the Akanyakrom community has also socially constructed 'land scarcity' due to the effects of the recent events on their crop yields. As related in the previous chapter, this encompasses the inadequate size of the BPA's allocated land, the poor soil productivity, land tenure insecurity, incidences of pests and diseases, climate change, and the commercialization of social support. Due to the recent influx of herders on the permission of the Bian Clan Head, their social construction of 'land scarcity' also encompasses encroachments by the herds of cattle and the frequent bushfires started by the herders to spur grass regrowth. Consequently, they have also adopted some strategic responses to counter land scarcity. These include changes to their farming practices, the adoption of individual strategies to supplement farm earnings, return to artisanal fishing, and the formation of associations. Largely, some of their strategies are similar to the strategic responses of the two resettlement communities above. Thus, the next paragraphs provide a cursory description of the comparable ones while elaborating on those that are unique to the community.

Changes to farming practices: Members of the Akanyakrom community have also made critical changes to their farming methods. As explained in the preceding chapter, they can also access only two acres of land seasonally on the allocated land, which is inadequate for extensive farming and practicing the conventional shifting cultivation. To be sure, the recent land accessible by them is similar to what the women accessed historically for subsistence cropping. However, given the decline in the fishing industry, the members related that they needed more land for subsistence and commercial farming to sustain their livelihoods. Therefore, they have also resorted to practicing intensive crop rotation. All the farmers are also diversifying their crops to cashew cultivation despite the BPA's protocol, which prohibits it. Subsequently, when they exhaust their lands, some of those who lack uncultivated lands trespass on the claims of other farmers within the communal allocation and that of the Dokokyina community. As deduced, the Akanyakrom farmers are unable to encroach on the farmlands of the Bui community out of fear of losing their farms to them. Naturally, the research found that the encroachments have engendered land disputes and social disarticulation among the people.

Thus, to avoid such disputes, some obtain land on a share-cropping agreement with fellow farmers at the resettlement site who have untitled claims. Ironically, some have even rented land within their own communal allocation from natives of Bui. Like the others, such ones may only cultivate



Picture 7.7: A proliferating industrial cassava processing business in Akanyakrom (Source: E. Agyepong, 1 February 2019)

subsistence crops and share the yields with the landowners. Thus, the women among them are particularly increasing cassava cultivation on such lands. According to them, despite the stringy nature of the yields, they are able to process them into dough and transport the product to Accra where they sell it to retailers. In view of this rising trend, one of the farmers has acquired a cassava-processing machine, which he uses to earn some money from the women to supplement his farm proceeds. Picture 7.7 on the previous page shows him and some women processing cassava in Akanyakrom.

Given the poor soil productivity and the recent incidences of pests and diseases, the farmers are increasingly using agrochemicals. Like the others, most of them also use weedicides to control weed growth on the farm and prepare their farms out of fear of starting uncontrolled bush fires that may affect adjacent farms. Such ones also believe that they can achieve the best results and save time by combining and using weedicides and chemical fertilizers. Yet, others have also resisted this trend and mainly explained that it is an unusual practice and has negative effects on the land.

Other individual strategic responses: The farmers of Akanyakrom have also adopted some individual strategic responses. The research found that some women have become farm laborers. As shown in Picture 7.8, some of them have formed a group that offers services such as crop harvesting and processing. During an interview with the group on 4 March 2019, they explained that they mobilized themselves, because it enables them to work faster and secure many offers. The research gathered that they frequently receive payment in in-kind; that is a percentage of the harvested or processed crop. Thus,



Picture 7.8: A group of women farm laborers from Akanyakrom processing melons (Source: E. Agyepong, 13 September 2018)

the women share their portion or sell it and share the proceeds. Through this, they earn either crops or money to supplement their meagre farm proceeds. Besides this group, all the other women who have also become laborers prefer to work at illegal mining sites, where they assist the miners by transporting the potential gold-bearing sand to the washing areas. When asked about how they discovered the opportunities, they explained that they learned about the mining sites from some men who journey upstream frequently to fish. They related that they were aware that working at illegal mining sites poses risks of accidents and death. However, they have been forced into it by the recent events and the need to earn some money for themselves and their households.

Return to artisanal fishing: Regarding the men, the research found that their inability to work as farm laborers is due to their limited skill and lack of competitive advantage relative to those of the other communities who are traditionally farmers. Thus, given the recent events, some of them attempted to access land in Gbolekame South for cashew cultivation. Despite being kins with the community, and despite the community's lack of ownership of the land, the youths of Gbolekame South compelled the Akanyakrom natives to pay money for access, threatening to overlook all attacks on their farms if they

refused to pay them. However, after honoring the payments, the youths of Gbolekame South claimed that the lands were already claimed by some local members. Given this and the other incidences, most of the men of Akanyakrom have returned to artisanal fishing. In this regard, they continue to grieve over the BPA's decision to resettle them away from the reservoir and its lax approach in dealing with the non-native squatter fisher folks along its banks. However, they also admitted that even if the BPA had resettled them there, they would have been unable to fish in the reservoir, because they only have skills for fishing in rivers. To support their claim, they reported that during the early months of their resettlement, five community members drowned when they attempted to fish in the reservoir. Despite this, they further related that the skill of lake fishing is masterable; yet, the enterprise requires motorboats, which they have been unable to afford given their lack of savings and their receipt of less money in compensation from the BPA. Besides this, their shift to farming has worsened their financial situations mainly because of the 'land scarcity' problem. Thus, they have gone back to fishing in the river, to support their livelihoods.

As observed, the Akanyakrom community is nearest to the dam, where the river downstream is reportedly teeming with high and diverse fish populations due to the structure's obstruction of the fishes' movement upstream. However, the fisher folks have been unable to access it, because the BPA has banned all activities in the area. Thus, they journey upstream beyond the reservoir, which requires money for transportation and materials to set up camp in the forest. The fisher folks related that even when they successfully make the journey, they have to compete over productive areas with others, some of whom are from other West African countries. Regarding this, they explained that the competitions have frequently ended in deadly altercations. During an FGD with some of them on 16 January 2019, an 18-year-old man narrated how some Malians had tortured him and nearly drowned him in the river for encroaching on their territory. Besides competing over territories, they also related that they have had to avoid detection by the security patrols of the BPA and the Wildlife Division who hunt them down and burn their camps and fish catches. Given these impediments, some of them ignore the BPA's ban by trying to fish in the pool after the dam structure. However, these daring ones have also faced attacks by the BPA's security guards. As gathered by the research on 5 September 2018, the security guards had accosted and shot some of them the previous night, injuring a young man. Despite these setbacks, the youths claimed that they still preferred artisanal fishing to farming, because it is more profitable. Given this and following their request, the research observed that the BPA had begun to build fishponds in the community in December 2018, which were to be shared by the community. However, when questioned about them, many of the fisher folks denounced the ponds. They explained that besides being too shallow and unsuitable for fish farming, the BPA's plan to allocate a pond to two people was irrational due to their small capacities.

Formation of associations: Like the other communities, the Akanyakrom community formed farmers and youth associations after resettlement to support each other. The former constitutes members of 15 years and above. Although the BPA also facilitated its registration with the Registrar General's Department, the research found that the association has been dormant because of a lack of activities and a general disinterest by members. Thus, of interest are an informal credit union and the youth association. The membership of the credit union is fifteen natives. According to them, they formed the association to support each other

financially to begin or bolster alternative livelihoods. Thus, they collect monthly dues and give the money to members on rotation, who repay it over a period. As gathered, some of the fisher folks aforementioned benefitted from this arrangement by obtaining the money for transportation and purchasing the requisite camping materials.

Of relevance too is the Akanyakrom Youth Association, which involves both men and women also ranging between the ages of 15 to 49. Unsurprisingly, the research also found that the men held the leadership positions and were more active than the women were for reasons similar to those of the other communities. As explained above, the Akanyakrom Youth Association was part of the combined youth association that challenged the TAs' commitment to pressuring the BPA to resolve their livelihood issues. Consequently, after the withdrawal of the Bui Youth Association, they proceeded with the Dokokyina Youth Association to organize the forum and demonstration against the BPA, which ultimately gained them the BPA's attention and permission to access the land at Dokokyina No. 1. During an interview with one of the leaders of the association on 5 November 2018, he recounted that, *"We were ready to fight the BPA to the point of death if they had failed to respond favorably to our requests. In any case, we considered ourselves already dead from the persistent hunger and destitution"*.

7.2.2.5 Bongase

As described in the previous chapter, the farmers of Bongase have also socially constructed 'land scarcity' in the recent past due to the low crop yields. Their social construction is mainly with respect to the reduced area of land, the relatively poor soil productivity of the available land, the commercialization of social support, pests and diseases, increasing wildlife invasion of their farms, and climate change. Given these, the farmers have also adopted some strategic responses, which also include changes to their farming practices, individual actions, and the formation of associations. The next paragraphs expound on these.

Changes to farming practices: As explained in the previous chapter, the inundation and resettlement of the four communities have significantly reduced the farmlands of the Bongase community. Consequently, although the farmers can still claim some lands and practice shifting cultivation, their claims only extended to a short distance, causing them to cultivate three acres of land seasonally. These are less than the ten acres of land, which the men historically accessed per season. Given this, the poor soil quality, and increasing market value of cashew seeds, the farmers have intensified the cultivation of cashew trees against the BPA's protocol. This has also affected their ability to fallow lands and access them for future crop cultivation. Subsequently, some of those who have exhausted their lands and new farmers are trespassing on the claims of other farmers. Some encroachers make counterclaims to the land based on a previous occupation individually or by a relative. Mostly, they back their claims with an existing perennial crop such as a cashew tree, which they allege to have planted during their holdship. Some also support theirs with the remnants of farm huts.

Ultimately, this emerging pattern contrasts with the historical practice whereby abandoned lands became open to all, including accepted non-natives. The research found that the encroachments have ignited

disputes even among relatives, some of which have turned deadly. During an interview on 11 November 2018 with a 53-year-old sub-chief, he related how a man had cursed him over a similar situation. As he explained, *"I accessed a piece of land, which the man counterclaimed, because his brother had tilled it in the past. However, my uncle had also farmed the same area, which was the basis of my initial claim. Although none of us had any mark to prove our claim, he invoked a deity to curse me during our altercation. I have since then been feeling unwell and would have died if a priest had not interceded on my behalf"*. To be sure, there were many similar cases in the community. However, besides curses and verbal abuses, others have experienced physical attacks, some of which have led to injuries and near manslaughter. Fundamentally, the increasing land disputes are mainly related to the lack of alternative livelihoods and the farmers' quest to own cashew farms or expand them to secure their livelihoods. Yet, some also avoid such disputes by renting land from others. Like the resettlement communities, the rent is a share-cropping agreement between the tenant and the landowner and involves the cultivation of only subsistence crops. Besides the above, the farmers have intensified their reliance on agrochemicals. This rage is mainly due to the increasing incidences of pests and diseases. Yet, few farmers have resisted the trend by referring to the historical practice and the harmful effects of the chemicals on human health.

Other individual strategic responses: The research found that besides the above, the farmers are individually adopting additional strategies to counter their experiences of land scarcity. As gathered, some have migrated to especially the Banda communities in Cote d'Ivoire to access land. Interviews with two of such farmers revealed that they chose to move to Tambi, which is across the international border, because of the land shortage and increasing disputes in the area. Despite this opportunity, some farmers related that they have not been able to access lands in other Banda communities due to the cost of transportation and hiring caretakers. Besides this, some farmers are also capitalizing on the land shortage to rent out portions of their claims. As explained above, the rent involves a share-cropping agreement and the cultivation of only subsistence crops, because the farmers prefer to keep the benefits of cashew cultivation within their households. Through this, the farmers gain supplementary yields of subsistence crops from their tenants.

Some farmers have also become laborers, rendering their services for soil preparation, farm maintenance, harvesting, and crop processing. Like the other communities, the men mainly provide services for the first two, whereas the women render their services for the others. In this regard, the research found that based on the nature of the work, the men usually receive payment in cash while the women receive payment in in-kind, which is a percentage of the harvested or processed crop. Consequently, the men are able to augment their farm earnings with the money, while the women may supplement their farm yields with their share for either domestic consumption or sell them to earn money for household needs. Others too have become vendors, creditors, and cash crop merchants, which earns them additional benefits.

Moreover, the research found that some farmers are selling the sacred trees on their farms to particularly a mortar carver. As explained in Chapter 5, the TAs allowed the farmers to fell the trees only when they obstructed their crop cultivation. Thus, given the increasing cashew cultivation, the farmers are exploiting this leeway and have contracted a mortar carver from Sunyani, the regional capital, who shares the profits

from his products with them. When interviewed, the implicated farmers related that the stream of money received from the carver helps them to supplement their livelihoods even after the cashew season. The research also found that some farmers are burning the sacred trees for commercial charcoal production. As gathered, this enterprise is increasingly becoming an alternative livelihood, which according to the farmers, also earns them money throughout the year.



Picture 7.9: The contractor carving mortars out of shea timber in Bongase (Source: E. Agyepong, 6 November 2018)

Formation of associations: Some members of the Bongase community also rely on some associations to deal with their experiences of 'land scarcity'. Like the communities above, these are youth and farmers' associations. Regarding the former, the research gathered that the community formed religious youth associations some years before the dam construction with membership ranging between the ages of 15 and 45. According to the youths, the Christians and Muslims had individually formed their associations for unity and development. However, due to some internal disagreements, the respective associations split into two, resulting in four religious youth associations. Although the Muslims refused to discuss the reason behind their split, the Christians related that some members were discontent with the founder and leader of the original association, who was a woman. *"Some members were uncomfortable with the woman's leadership because of the characteristic perception of women as subordinate to men"*, explained a 34-year-old man who is one of the current leaders during an interview on 28 January 2019. However, due to the dam construction and the related challenges, the four youth associations currently work together. Relevantly, the research found that concerning the land shortage, the combined association had written to invite the CEO of the BPA to a meeting. Although the meeting did not materialize during the fieldwork, they mentioned that they intended to petition him to allow them to access the land at Dokokyina No. 1 with the resettlement communities. When interviewed on 31 January 2019, the Assembly member for the area, who is also a native of Bongase, recounted that, *"The BPA has been attending to the resettlement communities more than us, which is breeding resentment. Thus, when we heard about its recent permission to the resettlement communities to access the land at the former Dokokyina settlement, we banded together to request the CEO to give us an equal consideration, because the problem is not unique to the resettlement communities"*.

Under the leadership of the Assembly member, some farmers have also formed the Bongase Plantation and Animal Rearing Association to access external support to deal with 'land scarcity'. As gathered, there were many associations in the past, which all became defunct, because some members embezzled the dues. However, during an FGD with the association on 17 January 2019, the Assembly member recounted that before his election in 2015, he frequently visited the Banda District Assembly where he learned about the opportunities for associations to gain the support of NGOs. He further related that his ability to frequent the District Assembly was due to its proximity to the community after the split of the Banda District from the Tain District. Thus, through persistence, he persuaded some farmers to join him and form the association in 2013, which they subsequently registered with the District Assembly. When asked about the

reason for their consent, many of the members responded that they were convinced by the possibility to obtain credit to expand their cashew farms. In turn, the Social Welfare and Community Development Department of the District Assembly published the association on its website, which consequently gained the attention of the United Nations Development Program (UNDP) in 2017.

Relevantly, the members, who were between the ages of 32 and 45 mentioned that they did not seek support to increase their land sizes, because they were aware that only the BPA could grant them access to more lands. However, they applied for assistance to deal with the poor soil productivity, climate change, declining crop yields, and the proliferating cashew industry. Thus, as shown in Picture 7.10, the UNDP supports it through the Global Environmental Facility/ Small Grant Program (GEF/SGP). During an interview with the National Coordinator on 19 February 2018, he explained that the GEF/SGP focuses on assisting registered community groups concerned with sustainable land management, tree planting, and other innovative activities within the Black Volta Basin. As also shown in the Picture, its agreement with the association in Bongase is thus to support the members "to invest in innovative Climate-Smart Agroecology Community Landscape Conservation practices ...". To this end, when interviewed on 28 November 2018, the Social Welfare Officer of the Banda District Assembly, who doubles as the UNDP Desk Officer also related that although the project initially advocated for the cultivation of acacia trees, the farmers opted for cashew trees, because they explained that the trees have monetary value to them.



Picture 7.10: A signpost of the UNDP-backed project in Bongase (Source: E. Agyepong, 29 November 2018)

Consequently, the UNDP provided training on sustainable land management, which included crop planting and compost production from livestock droppings to discourage them from using chemical fertilizers. It also gave the association some money to nurse cashew seedlings, out of which the members received forty seedlings each to cultivate on their farms. Presently, they sell the seedlings to other farmers to generate additional income. Per their objective, the members recounted that they used the proceeds from

the initial sales to purchase livestock for each member to rear as an alternative livelihood. The UNDP also engaged the members in a 'village savings credit scheme' whereby they pay monthly dues and distribute the savings among themselves every six months. It also works with the District Department of Agriculture through which it has engaged the Agricultural Extension Officer to assist the members on sustainable crop cultivation regularly. Thus, the members related that unlike other farmers, they continue to cultivate subsistence crops on even mature cashew farms, which secures their access to food. They also mentioned that the Agricultural Extension Officer has taught them how and when to plant varieties of wide-leafed beans to protect and rejuvenate the soil. According to the Desk Officer, these successes have motivated other members of the community to form and register similar associations. Despite these, the research found that the UNDP does not liaise with the BPA. Thus, it was unaware of the inadequate land nor the BPA's ban on cashew cultivation, which raises questions about the project's sustainability.

7.2.2.6 Gbolekame North

The previous chapter has shown that the farmers of Gbolekame North who were previously fisher folks have also socially constructed 'land scarcity' despite their advantageous access to vast lands with productive soil. Their social construction relates to the low crop yields due to the challenges of securing agro-inputs, accessing the alluvial plains, pests and diseases, climate change, and low farming skills. However, of significance to them is the increasing presence of nomadic and transhumance herders who have



Picture 7.11: A herd of cattle grazing around Gbolekame North
(Source: E. Agyepong, 19 January 2019)

recently been admitted to the area by the Bian Clan Head. During the preliminary workshop on 2 October 2018, they mentioned that the herders have impaired the soil productivity and further reduced crop yields with their activities. According to them, the frequent cattle movement has hardened the soil, rendering it unsuitable for cultivating subsistence crops including yams. As explained by a 37-year-old man during the workshop, "When we cultivate yams, the seeds germinate in the loose mounds but the roots are unable to penetrate the soil further to support the plants' survival". The research gathered that, even when the plants survive, the herders deliberately herd their cattle through the farms to enable them to graze on the cultivated crops. Likewise, when yam and cassava harvests are stored on farms, the herders dig out trench silos or uncover ground surface heaps for their cattle to feed on them. Interestingly, the transhumance herders also cultivate especially subsistence crops. However, the research found that they herd their cattle away from their farms or fence their farms with barbed wire to prevent stray cows from trespassing on them.

Besides subsistence crops, the farmers also related that the cattle reduce cashew yields. As gathered, although the cattle do not feed on cashew seedlings, they trample on them and inhibit their survival. Additionally, when the cashew trees mature and bear fruits, the herders herd their cattle through the farms,

where they feed on the fruits while the bulls break off the fruiting branches with their horns. To the chagrin of the farmers, the cattle swallow the seeds when feeding on the fruits and expel them in their droppings, which the herders collect and sell to merchants. Thus, during the preliminary workshop, a man in his mid-forties retorted that, *"We have an extensive and fertile land at our disposal but we are unable to farm as we would have wished because of the cattle"*. A 28-year old woman also exclaimed that, *"We take weeks to nurture a farm, but the cattle destroy it in just a day!"* Moreover, the farmers also bemoaned the adverse impacts of the cattle on the availability of shea nuts, grass, and game. According to them, the cattle feed on shea nuts, which reduces their availability to the women who collect and sell them. As they also feed on grass, the people are presently unable to find enough to roof their houses nor make brooms from which the women earned additional income. The reduced grass cover and the cattle movement have also driven out wildlife like grass cutters, affecting the farmers' access to game meat, which gained prominence after the fluvial flooding led to a decline in the fishing industry. Aside these, some farmers also reported that some herders have appropriated their active farmlands and destroyed their cashew seedlings to plant maize; an act, which is considered sacrilegious.

Consequently, they initially reported the herders to the Bian Clan Head. However, they alleged that despite the perceptible damages and desecration, he always ruled in favor of the herders by dismissing the farmers for having a weak case or lacking enough witnesses. In this regard, the farmers further claimed that the Bian Clan Head's prejudice was due to the money he receives from the herders to access land and in brides. Recalling from the previous chapters, the pre-existing inhabitants of Gbolekame North had gained citizenship statuses by virtue of their prolonged stay in the area. Thus, they did not pay to access land nor made any annual contribution to maintain their land access. Conversely, there are non-native farmers who paid the Bian Clan Head to access the land and present foodstuff annually for the yam festival. Yet, they also claimed that the Bian Clan Head frequently rules against them, because the money they pay is less than what he receives from the herders. Thus, the farmers began to lodge complaints with the local police, who referred them back to the Bian Clan Head. As a result, they formed an informal association to fight against the herders. They explained that although the herders fight among themselves over territories, they always present a united front whenever one of them disputes with a farmer. Hence, with the association, they intended to support each other by attending hearings and pressuring the Bian Clan Head to act in a conscionable manner. Following their unity, the Bian Clan Head and the other clan heads of the Jama community decreed that all the herders must pay for farm damages especially if the culprit is not found. Accordingly, the herders have begun to guard against encroachments and report offenders to the farmers or the Bian Clan Head to avoid incurring personal costs. The farmers relate that this development has reduced encroachment significantly.

7.2.2.7 Carpenter

To the farmers of Carpenter, their social construction of 'land scarcity' is also in respect of the low crop yields due to the reduced land size, commercialization of social support, pests and diseases, and climate change. Due to the TA's recent admission of herders and their open access to land, the farmers' social

construction of 'land scarcity' also includes the herders' incessant encroachment on farmlands and their subsequent destruction of cultivated and harvested crops. Like the farmers of Gbolekame North, the farmers of Carpenter also recounted that the herders deliberately herd the cattle to their farms where they trample on seedlings, break off fruiting branches of mature cashew trees, and feed on cultivated crops, yam harvests, and cashew fruits. The Dagaate women also socially construct 'land scarcity' due to their inability to access land independently of men. Based on these, the research found that the farmers have adopted certain strategic responses. Specifically, the natives and non-native men who are the farmers are increasingly diversifying their crops to cashew cultivation against the BPA's protocol. They have also adopted other individual strategies such as violence and watch keeping to protect their farms from the herders. Some non-native men have become farm laborers to earn some money on the side to supplement their farm earnings. Capitalizing on the BPA's demarcation of the thousand acres for the solar farm, some men have also started illegal lumber trading while they and the women have further begun charcoal production and trading as supplemental livelihoods. The next paragraphs describe these strategic responses.

Changes to farming practices: As mentioned in the previous chapters, the farmers of Carpenter historically accessed at least ten acres of land seasonally. However, the current land shortage caused by the BPA's erection of four transmission towers and its subsequent demarcation of one thousand acres of land for a solar farm has compelled them to settle for only three acres of land seasonally. As gathered, the farmers can still claim some lands and practice shifting cultivation; yet, they have had to reduce their seasonal land sizes to prolong their access to claims. Given this and the rocky nature of some parts of the available land, the research found that the farmers have intensified their cultivation of cashew to maximize their land access. They related that this has also affected their ability to fallow the lands for future uses. Consequently, those who have exhausted their claims have resorted to encroachment, which has also incited disputes among even relatives. The research also found that despite the increasing incidences of pests and diseases, the farmers have refrained from using agrochemicals, because they believed that they impair the taste of yams.

Other individual strategic responses: Besides diversifying their crops, the farmers have also adopted other individual strategies in response to their social constructions of 'land scarcity'. Regarding the herders, the natives and non-native men related that during the early months, they reported them to the Chief whenever they encroached on their farms. However, the Dagaate non-natives claimed that the Chief dismissed their complaints, because he makes more money from the herders than them. Although he charges them for entry and maintenance of access, the herders pay more than they do. Consequently, they resorted to violence, which led to the fatal shooting of a cow on one of their farms. Following this, the Chief encouraged the herder in question to report the case to the local police, upon which the farmer was arrested. The Chief and the police further compelled the farmer to pay for the full price of the cow without restituting him for the damages the cattle had inflicted on his farm. Given this experience, the farmers have become wary of the herders and have turned to spending most of their day and nights on the farm to ward them off. Relatives and friends who have adjacent farms have also collaborated to alternate their watch keeping. The

farmers reported that this recent strategy has significantly reduced the herders' encroachment on their farms without the need for violence.

The research also found that due to the declining crop yields and earnings, some non-native men have become farm laborers who render their services locally to earn some additional money. With the permission of the Chief but to the chagrin of the BPA, some of them and the natives have also begun logging the sacred tress illegally and lumber trading. Consequently, the BPA's Health, Environment, Safety, and Security Officer attempted to restrain them by deploying some security men to patrol the area. However, the loggers related that he eased the patrols after they bribed him. Thereafter, he requested them to pay him GHC 500 per truck of



Picture 7.12: Trucks loading bags of charcoal in Carpenter
(Source: E. Agyepong, 10 November 2018)

timber. During an interview with a 35-year-old man on 10 November 2018, he recounted that, "When I once defaulted on the payment, the officer called me on phone and harassed me for days. He then sent some soldiers to my house for the money. Thus, I had to pay him to avoid further pestering". The loggers also mentioned that besides this demand and the TAs' fees, they also have to bribe the Assembly member and some officers of the Forestry Commission to facilitate a safe passage at a checkpoint in Bamboi. Thus, the venture has become less profitable, forcing most of them to focus more on charcoal production. Besides them, almost all the other members of the community are burning charcoal, which as previously explained, also involves some payment to the TAs. Relevantly, the research gathered that even the Dagaate women who are unable to farm independently of men can acquire concessions from the TAs and burn charcoal. Thus, the venture has become foundational to their livelihoods. Given the leeway, the research also gathered that the community has become one of the leading charcoal producers in the area and attracts buyers from especially the southern parts of the country.

7.2.3 The strategic responses of the builders

The previous chapter has shown that the builders of the study communities have also socially constructed 'land scarcity' due to the recent events. Specifically, their social constructions relate to a general inability to obtain preferable shelter and security because of the BPA's land access strategies and their knock-on developments. Accordingly, the research gathered that they have respectively adopted certain strategic responses, which the next sections discuss by case. Like the previous chapter, the section discusses the cases of the three resettlement communities together because of their shared experiences.

7.2.3.1 The resettlement communities

To the individual members of the resettlement communities, their recent social construction of 'land scarcity' relates to their inability to access lots easily and at preferable locations due to the BPA's protocol. It also relates to the TAs' established protocols of access and the BPA's ban on the construction of mud and thatch grass houses and the use of firewood at the site. Moreover, it relates to the commercialization of social support and the financial challenges associated with accessing it, but also vended building materials and specialized labor. The previous chapter has also shown that the Akanyakrom Roman Catholic Church socially constructs 'land scarcity' due to its inability to mobilize the requisite money to acquire a lot from the BPA. Consequent to these, the research found that the agents have adopted strategic responses to some of the challenges. Generally, the builders have been unable to resist the BPA and TAs' protocols on accessing lots. However, the individual members are defying the BPA's restrictions on the type of housing and the use of firewood. Prospective builders have also adopted individual strategies to earn additional money to construct their houses. Following the BPA's refusal to grant them free access to land due to its payment of compensation for their loss, the Akanyakrom Roman Catholic Church has also resorted to the Regional Peace Council to compel the recipient of the compensation to provide the said money for their cause. The next paragraphs discuss these strategic responses.

Resistance to the BPA's ban: The research found that the members of the resettlement communities are defying the BPA's ban on the construction of mud and thatch grass housing and the use of firewood at the site. Although their main houses are concrete block, most of them have additionally built mud and thatch grass or wooden houses as kitchen and storage. Moreover, almost all the households use firewood. The builders related that although they do not mind building concrete blockhouses due to their symbolism, they preferred to build a detached block with mud and thatch grass or wood for kitchen and storage because of their relatively low cost of construction. Regarding their persistent use of firewood, they further explained that they could easily access the materials from their own farms or in the surrounding forests at no cost. However, with respect to charcoal, they have to invest some money to fell the trees and make the mounds that are used for burning them. Likewise, they have to pay to access other fuels such as liquefied petroleum gas. These and their recent financial situations have underlain their defiance and use of firewood at the site.



Picture 7.13: A woman roasting cassava flakes over a hearth in Akanyakrom (Source: E. Agyepong, 10 December 2018)

Regarding their persistent use of firewood, they further explained that they could easily access the materials from their own farms or in the surrounding forests at no cost. However, with respect to charcoal, they have to invest some money to fell the trees and make the mounds that are used for burning them. Likewise, they have to pay to access other fuels such as liquefied petroleum gas. These and their recent financial situations have underlain their defiance and use of firewood at the site.

Other individual strategic responses: Besides resisting the BPA's ban, the research also gathered that the members of the communities have adopted individual strategies to deal with 'land scarcity'. As most of them are farmers, their diversification of the traditional crops enables them to earn additional money to construct their preferred houses. As mentioned earlier, others too have engaged in share-cropping agreements or become laborers, vendors, creditors, and cash crop merchants, which also earn them money

to pursue their housing preferences. Some members of the Akanyakrom community also make money from their fishing activities to support the construction of their houses.

Involvement of the Regional Peace Council: The research also found that the Akanyakrom Roman Catholic Church has adopted a strategic response to mobilize the requisite money to purchase a lot from the BPA. This follows the BPA's refusal to freely allocate a lot to them due to its previous compensation payment for the loss of the church. Consequently, the leaders of the church demanded the payee of the compensation to provide the money for the lot. However, their attempts were futile, because he declined their invitations and requests. Given his defiance, they reported the matter to the Bono Regional Peace Council. When asked about the reason behind this, they explained that they did not want to involve the police and law courts, because they are related to the man by birth or marriage and that such an action may fracture their relationship with him. Following their report, the Head of the Regional Peace Council and some executives, including Christian and Islamic heads invited the parties to a meeting at the Akanyakrom community. As gathered, during the meeting, the man claimed that he had bought plastic chairs and canopies for the community with some of the money and offered to hand them over to the petitioners. However, they declined the offer, claiming that they would only accept the items if the man added the remainder of the money to them. The man reportedly agreed to honor their request; yet, towards the end of the fieldwork, the research found that the community had still not heard from him.

7.2.3.2 Dokokyina No. 1

Following the court's order, the BPA has built the residential quarters of the households of Dokokyina No. 1 that had initially resisted resettlement. However, the research gathered that they have largely refused to settle in them. When asked about their reason, some related that the resettlement and related issues had incited conflicts between them and the resettled households. At the onset, the differences in their decisions regarding the resettlement had led to infighting. As explained previously, they also took over the cashew farms of the resettled households, which deepened the rift between them. Given these, they feared that the resettled community may not welcome them to the resettlement site. Others also stated that they were still reluctant to resettle because of the limited land at the site. Thus, as shown in Pictures 7.14 and 7.15 on the next page, the BPA constructed houses have been made desolate and show signs of damp, peeling, and cracked walls, exposed electrical wires, and collapsed manholes among others.

As explained above, their reluctance to relocate provoked both the BPA and the Wildlife Division to carry out offensive attacks against them, leading to abuses of their basic human rights. Due to these and the ongoing attempts to expel them, the members have been unable to rebuild their houses. Thus, they live in makeshift houses made of straw and polyethylene materials. Despite their destitution, the 'Chief' continues to request money from the community, claiming that he is appealing the court's ruling. The research gathered that he wields great control over the community and has to approve of all visitors - including researchers and journalists - before the community grants them entry. However, for some reason, he had gone into hiding and declined all requests for an in-person or phone interview.



Picture 7.15: An abandoned house at the Dokokyina resettlement community showing a collapsed manhole and exposed electrical wires (Source: E. Agyepong, 3 March 2019)



Picture 7.14: An abandoned house at the Dokokyina resettlement community showing a damp, peeling and cracked wall (Source: E. Agyepong, 14 December 2018)

7.2.3.3 Bongase

To the Bongase community, the research shows that their social construction of 'land scarcity' is in relation to the BPA's payment protocol and land use scheme, the commercialization of social support, and financial challenges to access such support, purchase building materials, and hire specialized laborers. Thus, they have adopted some strategic responses to their recent experiences, which include resistance to the BPA's protocol. The succeeding paragraphs elaborate on these strategies.

Resistance to the BPA's protocol: The research found that many new builders are defying the BPA's protocol by accessing lots without due authorization. As related by a 42-year-old man during an interview on 8 January 2019, "We do not see the sense in the BPA's request for money before granting us access to building lots. To our knowledge, the land is our inheritance and the BPA cannot stop us from accessing it". However, besides the BPA, the builders are also accessing lots even without the TAs' permission. They explained that they sidestep the TAs, because initial attempts to gain their blessings were futile. When asked about this, the Bongase Abusuapanin and Kurontihene attributed their declination to the BPA's protocol. However, the research considered this ironic, because they were also defying the BPA by granting access to non-natives to access the areas around the reservoir. Regarding this, they further related that unlike the land around the reservoir, the BPA plans to use the available spaces within the community for projects, which has influenced their decision to reject the builders' requests. Thus, in their defiance of both the BPA and TAs, the builders are using vacant lots indiscriminately, which provoked the BPA to attack the workers on the respective sites by seizing their equipment. A case in point was a man who was building on a land that had been demarcated for a hospital due to its desirable locational properties. However, following the BPA's attack on the workers, the youths supported him and counterattacked the BPA's officers with arms. Thus, at the time of completing the fieldwork, the research observed that the building had advanced without further attempts to halt its construction and was near completion.

Other individual strategic responses: Besides the above, the builders are also adopting some individual strategic responses to their situations. Firstly, they are capitalizing on their diversification to cashew cultivation to earn money to build the desired concrete blockhouses. Others have also become farm laborers, vendors, creditors, and cash crop merchants, which supports their financial aspirations. Of

relevance too, the research found that the builders borrow building materials from each other. In this regard, some who possess molded blocks and other materials were eager to lend them to other builders to avoid losing them to expiration. On their part, the borrowers were willing to take the materials because of the high cost involved in accessing them. Subsequently, they pay for the materials in installments, which is reportedly flexible and allows the lenders to build their own houses within their preferred timeframe.

7.2.3.4 Gbolekame North

As explained previously, the Gbolekame North community still has access to vast lands. They also rely on the repealed customary tenure system to access them, because they still consider the Bian Clan Head as the landowner. However, they have also socially constructed 'land scarcity' due to the commercialization of social support and the financial challenges to afford such support, purchase building materials, and hire specialized labor. Regarding these, the research found that they are mainly counting on their diversification to cashew cultivation to earn enough money for their preferred houses. They recounted that they do not pursue any other economic activity besides farming because of the limited options. Although some expressed a desire to journey upstream like some members of the Akanyakrom community, the research gathered that they were hindered by financial challenges.

7.2.3.5 Carpenter

The Carpenter community also has vast building lots. However, the previous chapter has shown that the members socially construct 'land scarcity' due to the BPA's ban on accessing them and building new houses. In this regard, the chapter has also shown that unlike the Bongase community, they were unaware of the BPA's payment requirement but that the BPA always warned them against building new houses. Like the other communities, their social construction of 'land scarcity' additionally relates to the commercialization of social support and the financial challenges associated with accessing it, vended building materials, and specialized labor. Given these, the builders related that they have been unable to build new houses. However, while prospective native builders have been waiting indefinitely for the BPA to announce further protocols of access, incoming non-natives have resorted to renting abandoned houses from the Chief.

7.2.4 The strategic responses of the BPA

Despite owning the land, the BPA also socially constructs 'land scarcity' mainly due to the encroachment of the resettlement communities and Bongase on some restricted areas for farming, the widespread cashew cultivation, and the incessant tree felling. Its social construction also encompasses the effects of some strategic responses of the other agents. Hence, it includes the illegal land transfers by the TAs of Bongase and the Banda Paramount Chieftains, the TAs of Carpenter, and the Bian Clan Head. Regarding these, the Land Administrator related that the squatters around the reservoir are hindering the full functions of the buffer zones by causing siltation, which may consequently affect the performance of the dam. He also stated that the activities of the herders in Gbolekame North and Carpenter also affect the BPA, because

they graze their cattle and start bushfires around the transmission towers, which tapers with their functions and durability. Besides these, the BPA's social construction of 'land scarcity' also includes the resistances by the Dokokyina No. 1 and Bongase communities to resettlement and the protocols of accessing building lots respectively. As gathered, the former does not affect the BPA as much as it does the Wildlife Division because of the members' poaching and illegal logging. However, the community's resistance and subsequent lawsuit challenge the BPA's landownership and blemishes its spatial development agenda, particularly with respect to the establishment of the Bui City. Similarly, the resistance by the Bongase builders frustrates the BPA's spatial development agenda, which includes its access to advantageous areas for projects such as the planned hospital. Moreover, the illegal logging and charcoal production by especially the Carpenter community affect the BPA's conservation agenda and hence, underlie its social construction of 'land scarcity'. Given these, the BPA has also adopted some strategic responses including frequent policing, forced displacements, and territoriality. The subsequent paragraphs elaborate on these.

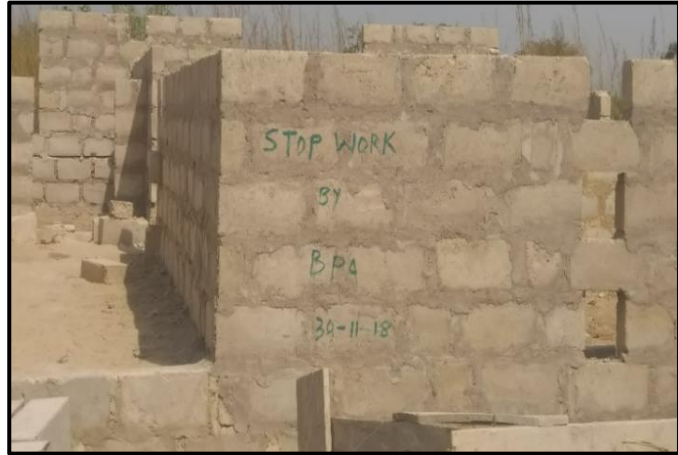
Forced displacements: In view of the Dokokyina No. 1 community's resistance to resettlement and the encroachments by the fisher folks and illegal miners, the BPA has resorted to forced displacement. Regarding the Dokokyina No. 1 community, the research found that the BPA initially worked with the Wildlife Division to displace the members. However, following their failed attempts, it engaged the army, which destroyed all the houses of the community and chased the resistors away. As gathered, the army stayed in the area for some time to prevent the community from returning. However, after exiting the area, the community returned. Subsequently, the staff of the Wildlife Division dismantled the pump of the only borehole in the community, thereby cutting off their water supply. Although they intended to force the people out of the area with this strategy, the research considers it an affront to their basic human rights to life as provided in Article 3 of the Universal Declaration of Human Rights. Despite this, the community stayed on in the area and adopted the strategies discussed previously to survive.

With respect to the herders, the research gathered that the BPA has also collaborated with the Wildlife Division to chase them out of the concessions. As recounted by the Head of the Wildlife Division during an interview on 5 October 2018, "*In our mutual attempt to forcibly displace the herders, we usually shoot and kill some of the cows, which is a major loss to them. Therefore, most of them have exited the National Park and the BPA acquired areas*". However, regarding the fisher folks and illegal miners living around the reservoir, the BPA engaged the Operation Vanguard Squad after its in-house security guards failed to displace them. Relevantly, Ghana's current President established the Operation Vanguard Squad in 2017 to fight illegal mining, which explains the BPA's ability to engage it (Ministry Of Defence n.d.) . Consequent to its engagement, the squad stormed and burned down some squatter settlements along the banks of the reservoir. However, attempts to displace those who live near the Bongase community failed, because they successfully entreated the Member of Parliament for the area and the District Chief Executive to speak on their behalf. Thus, at the end of the fieldwork, the research gathered that further negotiations were ongoing to demarcate a permanent place for their settlement.

Militarization and frequent policing: During his interview, the BPA Land Administrator stated that the displaced fisher folks and illegal miners returned to the respective areas after the campaign by the

Operation Vanguard squad. Consequently, the BPA established a military attachment made up of the army, navy, and police to help it monitor the area and prevent the squatters from settling permanently in the area. Moreover, the BPA relies on the military attachment to control illegal logging and charcoal production. However, as gathered, its officers are susceptible to bribery, which explains the ability of the communities to persist in both ventures.

Territoriality: The research gathered that the BPA has adopted expressions of territoriality to deter encroachments. As mentioned in the previous chapter, it has erected signboards at vantage locations to publicize the acquisition and ward off trespassing. As also shown in the inserted picture, the BPA has moreover resorted to inscribing on the houses under construction in Bongase in a bid to halt them. Thus, as gathered, it only started to seize the equipment of the construction workers when the builders ignored its warnings to stop work.



Picture 7.16: A house under construction in Bongase with an inscription by the BPA to stop work (Source: E. Agyepong, 13 December 2018)

The above descriptions ultimately show the strategies that have been adopted by the respective agents in response to their social constructions of 'land scarcity'. The research relates these strategies to Bourdieu's idea of symbolic struggles (Bourdieu 1990b, 134; 2000, 187). Thus, the next section attempts to interpret them per the theoretical framework.

7.2.5 Theory-guided interpretation: Strategic responses as symbolic struggles

In his collection of work, Bourdieu acknowledges that the agents of a given field are subject to frequent struggles over knowledge (conceptions and representation of the social world) and recognition (capital, social positions, and social practices) (1990b, 134; 2000, 187). Hence, he underlines that they are inherently disposed to resisting attempts by powerful ones to suppress them and frustrate their aspirations (1990b, 134; Bourdieu and Wacquant 1992, 81, 103). To this end, he coined the idea of 'symbolic struggles' to capsule such resistances, explaining that they may be characterized as objective or subjective symbolic struggles (1990b, 134; Bourdieu and Wacquant 1992, 81, 103). As explained in Chapter 2, objective symbolic struggles are individual and collective strategies that agents undertake to emphasize certain realities by imposing as legitimate the principles most favorable to their own social being (Bourdieu 1990b, 134; Bourdieu and Wacquant 1992, 81, 103). Conversely, subjective symbolic struggles are attempts by individual agents to change their categories of perception (social construction) and evaluation of the field in order to persevere in it. Practically, symbolic struggles are also social practices, which the agents undertake to achieve their habitus (land values). Hence, the agents' habitus and capitals, and the field's

logic structure them. Against this background, the subsections provide a theory-guided interpretation of the strategic responses of the agent categories to their social construction of 'land scarcity'.

7.2.5.1 The symbolic struggles of the TAs

The discussion shows that the traditional authorities (TAs) who socially construct 'land scarcity' in the subfield of chieftaincy have adopted strategic responses to achieve the territorial and environmental values of land by regaining their symbolic power (authority) and conserving the objectified cultural capital (sacred trees). Following Bourdieu, these strategies may be characterized as both objective and subjective symbolic struggles (1990b, 134; Bourdieu and Wacquant 1992, 81, 103). Accordingly, the successive paragraphs interpret them by category. Given the similarities among the symbolic struggles of the TAs, the research generalizes the interpretations. However, it indicates unique cases and the respective TAs where necessary.

Objective symbolic struggles: Deducing from the description, the strategic responses of all the historical landowning TAs fall within the category of objective symbolic struggles. These include their enforcement of the historical taboos, which is squarely intended to undergird their symbolic power and conserve the objectified cultural capital. Thus, despite the recent shifts in landownership and land tenure system, the TAs' power to determine when farmers may access land, their proscription against the felling of sacred trees, and their expectation of non-native farmers to make annual presentations among others, cements their authority within the respective communities. Their proscription against the felling of sacred trees also enables them to conserve the remaining sacred trees. Besides this, the other individual strategies of the TAs' of Bui, Bongase (and the Banda Paramountcy), Carpenter, and the Bian Clan Head also represent objective symbolic struggles. Regarding the TAs of Bui, the ongoing legal action against the BPA and the Government of Ghana on the land compensation payment is an undeniable resistance to the suppression of their ability to maintain the stools. It is thus an attempt to compel them to honor their constitutional duty to enable them to keep up appearances and preserve the palace paraphernalia, which both contribute to their symbolic power. Likewise, their persistent imposition of authority on the other resettlement communities is with the intention to emphasize their alleged historical ownership of the land on which the BPA resettled them. Ultimately, the aim is to increase their communal holding, which was historically basal to the symbolic power of the chieftains.

Regarding the TAs of Bongase, the Banda Paramountcy, Carpenter, and the Bian Clan Head, their blatant defiance of the BPA's protocol by illegally transferring land is an overt effort to regain their symbolic power. Thus, through this, they earn money as a circulating economic capital to maintain the stools – particularly given the BPA's withholding of the land compensation payment –, which underlies their symbolic power. They also gain reverence by their patrons, which underpins their dominance over them. The TAs of Carpenter's additional recourse to legal counsel and public declarations are also attempts to assert their right to compensation for the sacred trees affected by the BPA's social practices. Like the TAs of Bui, they seek to use the money to foreground their symbolic power by maintaining their appearance and the necessities of the palace. Their authorization of illegal logging and charcoal production are also

deliberate endeavors towards similar objectives. Although their leasing of abandoned houses to incoming non-natives is an additional way to earn money, it also underpins their symbolic power, because they gain social recognition as the socio-political and socio-cultural leaders of the community.

Subjective symbolic struggles: Besides being objective symbolic struggles, the research characterizes some of the TAs' strategic responses as subjective symbolic struggles. This is because they represent individual attempts to persevere in the field by changing their habitus (land values). Of relevance to this characterization is the commercialization of the stake by the TAs of Bongase (and the Banda Paramountcy), Carpenter, and the Bian Clan Head through illicit tenancy agreements. In principle, these illegal land transfers mirror the legitimate historical practice. However, the foregoing discussions show that instead of mere in-kind payments, the TAs have adjusted the charges to higher cash payments to earn money on hand to advance their objectives. Thus, although the transfers are still exclusively leases and devoid of outright allocation of ownership rights, which the TAs presently lack, the increased cash requirement exemplifies the conceptual incorporation of the use value of land to their existing habitus. In this regard, the research deduces that the TAs' strategy underlies a dilatation of their valuation of the stake to expedite their survival in the field of land access.

Besides the above, the facilitation of logging and charcoal production by TAs of Carpenter may also be characterized as subjective symbolic struggles. This is in view of the historical social construction, whereby they considered some trees sacred and exempted from felling. As the discussion shows, the TAs have presently revoked this taboo primarily because of the BPA's demarcation of the area for a solar farm and the opportunity to use the stream of circulating economic capital (financial benefits) to uphold their symbolic power. Consequently, the research concludes that their strategy aptly embodies a conceptual shift from the habitus of environmental value of land to the habitus of use value of land in a bid to persevere in the field of land access.

Summary: Relevantly, the research deduces that the TAs' objective and subjective symbolic struggles are not baseless but structured by their habitus and capitals and the logic of the field of land access. In this regard, it is evident that their habitus of the territorial (to undergird their authority) and environmental (conservation of the sacred trees) values of land underlie their endeavors. Besides this, it appears that they all employ the capitals at their disposal to advance their objective symbolic struggles. These are mainly their institutionalized cultural capital, which is the recognition by the BPA, but also the kingmakers and National House of Chiefs. Consequently, the Bui and Carpenter TAs' abilities to take legal actions against the BPA is due to their recognition by the kingmakers and community as the social-political and social-cultural leaders, who have the legitimate right to seek redress for the appropriated land and affected sacred trees respectively. The audacity of the TAs of Bongase (and the Banda Paramountcy), Carpenter, and the Bian Clan Head to transfer land despite the current dynamics is also due to a similar recognition and explains why the incoming non-natives seek their consent to access land.

As discussed in the previous chapter, the recent logic, which is the statutory tenure system imposed by the BPA partly structures the TAs' habitus and the value of their capitals as it underlies their sub-managerial

roles and hence, their tenacious aspirations and abilities. However, as further deduced, the revoked historical logics, which are the customary tenure systems, also structure the TAs' habitus and capitals, because some of their symbolic struggles breach the BPA's protocols. Particularly, with respect to the TAs of Bongase (and the Banda Paramountcy), Carpenter, and the Bian Clan Head, the discussion intimates that they invoke the historical logics and their institutional cultural capital (recognition by the kingmakers) to support their illegitimate land transfers and logging. They and the other historical landowning TAs also use the historical logics to enforce the land access proscriptions. Accordingly, the TAs seem to have used their symbolic struggles to achieve some facets of their habitus, thereby repelling some circumstances that contributed to their recent social constructions of 'land scarcity'.

7.2.5.2 The symbolic struggles of the farmers

Following the discussion, the farmers' strategic responses are with respect to increasing crop yields and achieving their collective habitus of the use value of land. Per Bourdieu's characterization of symbolic struggles, the research associates the farmers' strategic responses with both objective and subjective symbolic struggles (1990b, 134; Bourdieu and Wacquant 1992, 81, 103). Thus, the next paragraphs interpret them by category. As above, the research generalizes the interpretations but emphasizes unique cases where appropriate.

Objective symbolic struggles: Inferring from the description, the research characterizes most of the farmers' strategic responses as objective symbolic struggles. These include the changes to their farming practices, some individual strategic responses, the formation of associations, and the corresponding group activities. They also include the Akanyakrom community's return to artisanal fishing and the strategic responses of the Dokokyina No. 1 community, which are the legal actions against the BPA, the appropriation of cashew farms, and the illegal lumber trading, poaching, and extortions. With respect to the shifts in farming practices, the research particularly associates the farmers' diversification of crops, encroachment, share-cropping arrangements among natives, and the distinct method of applying agrochemicals with objective struggles. Consequently, it deduces that except Dokokyina No. 1, the intensification of cashew cultivation by the farmers of the other communities emphasizes the reality of the current situation, which include the land shortage, declining soil quality, and the increasing value of cashew seeds. As the BPA has also banned cashew cultivation, the farmers' defiance exemplifies an imposition of their own principles to advance their social wellbeing.

The research also relates the increasing encroachments to objective symbolic struggles, because they embody a resistance to the norm of accessing farmlands, whereby the communities customarily regarded claims to uncultivated lands. In this regard, the encroachments demonstrate the reality of the land shortage that has recently afflicted the communities. Moreover, the research considers the share-cropping arrangements that have been introduced among the natives of Dokokyina, Bui, Akanyakrom, and Bongase as objective symbolic struggles. This is because such arrangements were historically only between natives and non-natives. Thus, the current strategy reflects the recent land shortage and involves the imposition of certain principles most favorable to the 'landlords'. The method by which some farmers of the same

communities apply agrochemicals represents objective symbolic struggles as it emphasizes the poor soil quality and the adoption of an unconventional technique, which supposedly counters the problem and saves time.

Besides the shifts in farming practices, the research links some of the farmers' individual strategic responses to objective symbolic struggles. These include the provision of credits and markets to other farmers, the sale of sacred trees by some farmers of Bongase, and the violence and farm security strategies adopted by the farmers of Carpenter. The research deduces that the credit services and vending of seeds and seedlings adopted by some capable farmers of especially Dokokyina, Bui, and Bongase underline the declining crop yields and the patrons' general inability to obtain the inputs from their own farms. Consequently, the discussion shows that the supplying farmers have imposed associated principles of accessing the services that undergird their own interests. Likewise, some farmers have become cash crop merchants, which the research relates to objective symbolic struggles. In this regard, the discussion shows that some farmers such as the creditors and vendors are independent buyers while others are agents of the international companies. In relation to the former, the discussion further shows that they have imposed their own principles on the trade, whereby they buy the crops of their debtors at exacted prices to their benefit.

Although the latter largely follow the principles of the mother companies, the previous chapter has shown that some of them buy more kilograms of seeds for the same price to increase their benefits. In addition to these, the sale of sacred trees by some farmers of Bongase to the mortar carver exemplify an objective symbolic struggle, because it underscores the effects of the increasing cashew cultivation and the farmers' defiance of the historical taboo against felling such trees. With respect to the farmers of Carpenter, the research also associates their adoption of violence and security measures with objective symbolic struggles. Illustratively, the former was an attempt by the farmers to establish a norm of dealing with the herders after failed attempts to secure the attention of the TAs. The latter, which involves spending the night on the farm and was subsequently established due to the repercussions of the former, also represents the initiation of an uncustomary farming practice to secure their farms from further invasions by the herders.

The formation of formal and informal associations by the farmers of all the communities except Carpenter and their related activities also represent objective symbolic struggles. This is because they implicate the ongoing challenges faced by the farmers and their quest to motivate collective responses. Of importance is the revolt by the youth associations of the resettlement communities, which underscores a collective decision to overturn the customary authorities of the respective TAs. Effectively, their actions exemplify an attempt to impose alternate social structures in the communities, which they believed would pressure the BPA to respond favorably to their requests for livelihood support. The research also considers the Akanyakrom men's return to artisanal fishing as an objective symbolic struggle, because it emphasizes the reality of the land shortage and their inability to compete with the other traditional farming communities. Consequently, although they fish upstream, which is beyond the protected reservoir, their temporary settlement along the banks of the water body is a resistance to the BPA's ban.

The strategic responses of the members of the Dokokyina No. 1 community may also be characterized as objective symbolic struggles. Relevantly, their legal actions against the BPA is intended to legitimize their supposed ownership of the land and hence their permanent stay in the area. Besides this, their appropriation of the cashew farms belonging to the members who have been resettled is an assertion of control over the physical space. It also emphasizes their inability to farm due to the frequent attacks by the BPA and the Wildlife Division. Thus, by assuming control over the farms, the natives also earn some circulating economic capital to support their livelihoods. Likewise, their extortion of the commercial fisher folks and illegal miners underscores their usurpation of control over the area from the BPA and their need to earn additional circulating economic capital to assuage the ongoing hardship. Moreover, their recourse to illegal lumber trading and poaching within the Bui National Park substantiates their recent livelihood challenges and represents a resistance to the proscriptions of the Wildlife Division.

Subjective symbolic struggles: The research also typifies some of the farmers' strategic responses as subjective symbolic struggles, because they are individual attempts to change their categories of perception (social construction) and evaluation of the field to expedite their perseverance in it. These include some strategic changes to farming practices and some individual strategic responses. The former include the adoption of intensive crop rotation by the three resettlement communities, the widespread encroachment in all the communities, the increasing share-cropping arrangements, the diversification of crops, and the use of agrochemicals. It would be recalled that all the farmers of the study area had been socialized in the practice of shifting cultivation due to their extensive yam cultivation. Thus, they claimed lands and advanced their farms longitudinally every season. However, given the current land shortage at the allocated area, the farmers of the resettlement communities have had to give up their customary idea of farming by resorting to intensive crop rotation to facilitate their survival in the field of land access. Besides this, the ongoing encroachments in the study area also relate to subjective symbolic struggles, because it underscores a shift in the farmers' traditional regard for claims. Despite being an affront, it enables the farmers to access land to expand old farms or obtain new ones.

The share-cropping arrangements among the natives also exemplify individual attempts to obtain farmlands. To the 'landlords', the arrangements are similar to the historical practice, whereby the parties shared the crop yields per the agreement. However, the practice is queer to the tenants who are largely natives, because the historical practice was only between natives and non-natives as all the natives had an unfettered access to vast lands. Moreover, the adoption of share-cropping arrangements by some 'landlords' to protect their claims is a subjective symbolic struggle, because it underlines a shift in their confidence in the norm, whereby other farmers respected and stayed away from the claims of others. The research considers the farmers' diversification of the traditional crops to cashew (and water melons as is additionally the case of the Dokokyina community) a subjective symbolic struggle, because it underlines a significant shift in their historical perception (social construction) of large-scale yam cultivation and the need to fallow land. It also underlines their adjustment to the land shortage, declining soil productivity, and increasing value of cashew seeds in a general bid to survive in the field of land access. Their increasing

reliance on agrochemicals is also a subjective symbolic struggle, because it represents an adjustment to the situation in an attempt to persevere in the field.

The research further associates some of the farmers' individual strategic responses to subjective symbolic struggles as they embody marked changes in their categories of perception (social construction) and evaluation of the field to expedite their survival in it. Among these are the migration of some farmers of the western communities to other Banda communities in Ghana and Cote d'Ivoire. They also include some farmers' engagement in wage labor and some communities' illegal logging and charcoal production activities. With respect to the migrating farmers, the research deduces that, although they could historically access land in other Banda communities, they hardly invested in such long distance endeavors, because they had vast lands at their disposal in their respective communities. Given this, their recent quest represents a change in their perception of the domestic opportunities and a willingness to do the unusual, however laborious, to persevere in the field. The research also considers some farmers' adoption of wage labor as an additional livelihood a subjective symbolic struggle, because it represents a shift in their perception. As recalled from the previous chapters, the laborers were historically landless non-natives who migrated to the area seasonally. Thus, the natives' recent assumption of similar work to foster their subsistence in the field of land access underpins a growing perceptual shift. Moreover, the research relates the rampant felling of sacred trees by the Bongase and Carpenter communities to subjective symbolic struggles. This is because it exemplifies a changing perception of the cosmological value of the trees to support their survival in the field by facilitating cashew cultivation and/or using the trees for purposes that fetch circulating economic capital.

Summary: Relevantly, the research deduces that the symbolic struggles of the farmers are founded on their habitus, capitals, and the field's logic. As recounted earlier, their ultimate habitus, which are conceptions of the use value of land, underpin their endeavor to obtain high yields of the relevant crops. To some farmers, their habitus of the territorial value of land further underlie their adoption of share-cropping arrangements to protect their claims from encroachment. The encroachers and customary tenants also seek to achieve their habitus of the exchange value of land by accessing preferable locations rather than embarking on the arduous and costly journey to other parts of the traditional area. The habitus of the Dokokyina No. 1 community, which are also the use, territorial, and exchange values of land explain their related efforts to remain at the old settlement. Besides these, the discussion indicates that the farmers' capitals fuel their symbolic struggles. To all the communities except Dokokyina No. 1, these include their embodied cultural capitals (physical strength and skill), bonding social capital (nuclear families), and linking social capitals (relationship between 'landlords' and customary tenants, farmers and creditors, vendors, and crop merchants). They also include the bridging social capitals (the associations), which the farmers have established to support themselves. In retrospect, these associations are reminiscent of their historical access to free social support. Thus, they underscore the farmers' belief in the efficacy of collective action. Regarding the Dokokyina No. 1 community, the research deduces that it mainly relies on its bonding (citizenship) and linking (relation with the self-acclaimed 'Chief') social capitals to undertake its symbolic struggles.

Besides these, the discussion also indicates that the field's logic influences the farmers' symbolic struggles. In this regard, the BPA's imposed statutory tenure system underlines the limits of their habitus to the use value of land, which is exclusive of outright claims of ownership. It also supports the natives and pre-existing non-natives' access to land by virtue of their bonding social capital. As explained in the previous chapter, the BPA's logic also supports the farmers' habitus of the territorial value of land, because it has incorporated the customary principle of claims to extensive lands to expedite shifting cultivation. Despite these, some of the farmers' objective symbolic struggles imply the imposition of counter principles. Among these are their cultivation of cashew trees despite the BPA's ban and its representation of outright land ownership. Although the defiance of the ban suggests an allusion to their historical freedom of land access, the consequent claims of outright ownership defies both the recent and the historical logics. Similarly, their disregard for claims through the incessant encroachments also repels both logics. The claims by the Dokokyina No. 1 community of outright land ownership predicates on the repealed customary logic, which is also a resistance to the BPA's imposed logic. Thus, besides the recent logic, the farmers' symbolic struggles are also structured by significant inferences to the annulled principles of the former logic and other ones established independently to expedite the achievement of their habitus. Conclusively, by undertaking symbolic struggles such as crop diversification, share-cropping, and wage labor, some farmers have been able to achieve their habitus, thereby tempering some conditions that underlay their recent social constructions of 'land scarcity'.

7.2.5.3 The symbolic struggles of the builders

The builders' strategies are in response to their recent social constructions of 'land scarcity', which generally encompasses their inability to acquire preferable housing at preferable locations to enhance their senses of security. Like the agents above, the research associates their strategic responses with both objective and subjective symbolic struggles (Bourdieu 1990b, 134; Bourdieu and Wacquant 1992, 81, 103). The ensuing paragraphs elaborate on these. Although the paragraphs generalize the interpretations of the cases, they indicate exceptions where appropriate.

Objective symbolic struggles: Fundamentally, the research characterizes most of the strategic responses of the builders as objective symbolic struggles. These include the resettlement communities' resistance to the BPA's ban on the construction of mud houses and the use of firewood. They also include the Bongase youths' resistance to the BPA's protocol on obtaining lots and all the individual attempts to raise circulating economic capital (money) to construct preferable houses. Further, they encompass the Dokokyina No. 1 community's defiant stay at the former settlement despite attempts to resettle it. Relevantly, the research characterizes the resettlement communities' resistance to the BPA's ban on the construction of certain houses and the use of firewood as objective symbolic struggles, because it emphasizes the reality of their financial challenges and their willingness to capitalize on locally-available resources to advance the achievement of their objectives. It is as well a counter imposition of principles, which they deem to be more favorable to their agenda. Regarding the resistance of the Bongase youths to the BPA's protocol, the research also considers it as an objective symbolic struggle, because it underlines their perceived rights to

access lots freely and at preferable locations. It is further an attempt to establish a consequential principle that promotes this perception. The defiance of the Dokokyina No. 1 community is also an emphasis of their right of ownership of the land despite the court's ruling and the BPA's subsequent attempt to relocate it.

Moreover, the research associates the builders' individual endeavors to raise circulating economic capital (money) as objective symbolic struggles. These include their diversification of the traditional crops, their engagement in share-cropping arrangements, their adoption of wage labor and the provision of credit and market services as additional livelihoods, and the Akanyakrom community's return to artisanal fishing. As explained previously under the section on the farmers' symbolic struggles, these strategies exemplify objective symbolic struggles as they generally underscore the reality of their recent livelihood challenges and subsequent attempts to impose principles that advance their individual and collective interests. Likewise, the research characterizes the strategic borrowing among the builders of Bongase as an objective symbolic struggle. This is because it underscores the financial challenges of acquiring building materials and the subsequent introduction of a principle that expedites the builders' quest and their achievement of the objectives.

Subjective symbolic struggles: The research also associates some of the builders' strategic responses with subjective symbolic struggles. These are the Akanyakrom community's recourse to the Regional Peace Council, the Bongase builders' borrowing of building materials among themselves, the renting of houses by the new non-natives of Carpenter, and some of the builders' individual strategies to earn circulating economic capital. The research considers the Akanyakrom community's strategic response as a subjective symbolic struggle, because it underlines a shift in the evaluation of their ability to resolve the dispute with the payee of the church compensation domestically. Consequently, their invitation of the Bono Regional Peace Council as an arbitrator was an attempt to compel him to repay the money to enable them to secure a lot for the church. Besides being an objective symbolic struggle, the internal borrowing among the builders of Bongase is also a subjective symbolic struggle, because it represents a shift in their perception of acquiring vended building materials. Lastly, some of the builders' individual strategies to earn circulating economic capital are subjective symbolic struggles, because as explained in the previous section under farmers, they embody a perceptual shift in their traditional livelihoods.

Summary: The research deduces that the builders' habitus and capitals, and the logic of the field of land access underlie their symbolic struggles. Relevantly, their habitus of the use and exchange values of land explain their endeavor to obtain preferable houses at preferable locations. To this end, the research deduces that the recent capitals at their disposal, which include their embodied cultural capital (physical strength and skill to undertake alternative livelihoods), circulating economic capital (money), bridging social capital (social networks), and the resettlement communities' bonding social capital (citizenship) enable them to carry out their symbolic struggles. Of relevance is also the Bongase builders' reliance on their bridging social capital (youth networks and relations of exchange) to advance the achievement of their habitus, which in hindsight, mirrors the historical social support.

Besides these, the builders' symbolic struggles are also informed by the field's logic. In this regard, the BPA's restrictive protocol explains the inability of some prospective builders of Carpenter to build houses. It also explains the combative strategies of the Bongase youths and the Akanyakrom community's recourse to the Regional Peace Council to secure the withheld money to purchase a lot. However, the research conjectures that some of the builders' symbolic struggles underline the initiation of alternate logics. These include the Bongase youths persistent allusion to the historical logic, which facilitated their free access to land. Likewise the resettlement communities' defiant construction of banned housing types underlie their application of the historical logic, which sanctioned their liberty to build preferable houses. Moreover, the Bongase builders' commencement of domestic borrowing represents the introduction of an additional principle, which supposedly expedites their achievement of the objectives. The research concludes that some of the builders' symbolic struggles, such as the resistance of the Bongase youths and their domestic borrowing, the resettlement communities' defiant construction of banned houses, and all the builders' alternative livelihoods have enabled them to alleviate some of the circumstances that underlay their recent social constructions of 'land scarcity'.

7.2.5.4 The symbolic struggles of the BPA

Despite its ownership and control of the land, the discussion shows that the BPA has also experienced 'land scarcity' due to the social practices and symbolic struggles of the other agents. Consequently, it has failed to achieve some facets of its habitus of the territorial (upholding its authority) and use (building and maintaining the dam, its facilities, and the Bui City) values of land. As discussed, the BPA has thus adopted its own strategic responses to expedite the achievement of its habitus. These include forced displacements, undertaking frequent policing, and expressing territoriality. Following Bourdieu, the research characterizes these as objective symbolic struggles (1990b, 134; Bourdieu and Wacquant 1992, 81, 103). Relevantly, the BPA's forced displacement of the Dokokyina No. 1 community and the squatter fisher folks, illegal miners, and herders who live around the reservoir is a pronounced attempt to reclaim the respective areas. With respect to the Dokokyina No. 1 community, the research shows that its resistance hinders the BPA's achievement of its territorial and use values of land, because it respectively counters the BPA's claim of landownership and defeats its planned spatial development agenda. Regarding the others, the research also shows that their activities around the reservoir affect the BPA's achievement of the same habitus, because they respectively underscore its inability to protect the liminal boundaries of the acquired land and impede the functions of the buffer zones. Thus, the BPA's commencement of forced displacement also represents its assertion of legitimate ownership to achieve its habitus. The research also relates the BPA's resort to using a military attachment to frequently police the area and its expression of territoriality with objective symbolic struggles, because they both emphasize its control over the acquired area.

Summary: Like the others, the research deduces that the BPA's symbolic struggles are social practices that are structured by its habitus and capitals and the field's logic. In this regard, its habitus of the territorial and use values of land underlie its attempts to displace the squatters and exercise its control over the territories. Its capitals, which include its institutionalized cultural capital (legal recognition) and the

resultant circulating economic capital (allodial titles), but also its bridging social capital (human resources) are the resources that expedite its endeavors. Moreover, the field's logic, which gives preeminence to the BPA's absolute ownership and control, structures its habitus and the value of its capital. Consequently, the BPA has achieved some aspects of its habitus through the symbolic struggles above. These include the inability of the members of Carpenter to build new houses. However, as also deduced from the discussion, it appears that the BPA's symbolic struggles have been inadequate to curb some undesirable accesses. These include the intractable access by the Bongase builders, the Dokokyina No. 1 community, and the loggers and charcoal producers of Carpenter. Given these, the research concludes that the BPA's symbolic struggles have been moderately effective.

7.3 Summary of the chapter

This chapter has discussed the agents' strategic responses to their recent social constructions of 'land scarcity'. Building on the previous chapter, it has shown that the agents have been disposed to resistances and certain perceptual changes to expedite their achievement of land access objectives, regardless of the obstructions created by the BPA and other agents. In this regard, the chapter has detailed the strategic responses of the traditional authorities (TAs), farmers, and builders of the respective communities. It has also elaborated on those of the BPA, which though the recent landowner, has also experienced 'land scarcity' due to the social practices and strategic responses of the other agents. Following the theoretical framework, the chapter has further associated these strategic responses with symbolic struggles, characterizing them as objective or subjective based on their flagrancy and perceptiveness.

To be sure, the ongoing symbolic struggles are not unique to the study area. Drawing from various cases, Peluso and Lund report that a major land grab frequently incites processes of gaining (or grabbing) access by multiple agents, some of which may challenge the "authorities, sovereignties, rights, and hegemonies of the recent past" (2011, 667-69). The research found that these responses are changing the frames of action, including the habitus, capital, and logic, which have recently structured the agents' endeavors in the field of land access. Following the theoretical framework, it characterizes such changes as societal transformations. Thus, the next chapter details the consequential societal transformations to underscore the extensive implications of 'land scarcity' in the study area.

CHAPTER 8: ONGOING SOCIETAL TRANSFORMATION IN THE STUDY AREA

8.1 Introduction

As recounted in the previous chapter, the agents' strategic responses to 'land scarcity' have spurred processes of societal transformation in the study area. This societal transformation is akin to what Peluso and Lund refer to as "new frontiers of land control" (2011, 667–69). In line with their conclusions and those on dams (see: Oliver-Smith 2001, n/a) and land access (see: Ribot and Peluso 2003, 160), the research found that the societal transformation occurring in the study area is extensive. It encompasses new land tenure systems, qualities of land, agents, networks, and power relations. Relevantly, most of these changes were indicated in the previous chapter. However, this chapter emphasizes and interprets them according to the theoretical framework to underline their implications for the field of land access. To this end, the frames of reference for the discussion follows the research questions on the frames of action and include the systems of land access, agents, and their power relations. The point of reference for underlining the transformations is the recent past when the BPA established a new system and constructed the Bui Dam. Given the similarity among the study communities, the chapter describes the corresponding transformations in general but emphasizes unique cases where appropriate. Categorically, this chapter addresses research question 'e (ii)', which is *'What have been the outcomes of the agents' responses on existing frames of action?'*

8.2 Transformations in the system of land access

The research found that due to the strategic responses of the agents, the system of land access, which includes the qualities of land and land tenure system has changed significantly. The subsections describe the respective changes and subsequently interprets them according to the theoretical framework.

8.2.1 Descriptive analyses of the transformations in the land tenure system

The research shows that following the State's acquisition of the lands of the study area and their entrustment to the BPA, the latter has imposed a statutory tenure system on the customary tenure systems of the affected communities. As explained in Chapter 6, the statutory land tenure system is derived from the BPA Act 740 and underscores the BPA's ownership and control of the lands without any encumbrances. Thus, the acquisition represents a modern-day conquest of the study area with legal arsenal. However, the discussion also shows that the BPA's tenure system has incorporated the customary tenure principle of an open access to farmlands to expedite the pre-existent practices of the farmers. Besides this, the research found that the traditional authorities (TAs), farmers and builders are also enforcing some principles of the repealed customary tenure systems, which has engendered a pluralistic tenure system. Referring to the principles, procedures, and practices of ownership, control, and transfer, and use of land, the subsections describe the transformations that have occurred in the recent land tenure system. The chapter combines

the transformations in the rights of ownership and control and the rights of transfer, because thus far, the research has shown that those who hold the former automatically hold the latter.

8.2.1.1 Transformations in the right of ownership, control, and transfer

The research shows that traditional authorities' (TAs) absolute control of land (allodial titles) has been effectively extinguished by the BPA's entrustment with the acquired lands and the imposition of the statutory tenure system. Despite this demotion, the TAs are invoking the repealed customary tenure systems to undertake strategic responses to their recent social constructions of 'land scarcity'. Among others, they are evoking their historical custodianship to enforce the historical taboos such as the sacred days and the proscriptions against felling sacred trees. Even the TAs of Akanyakrom, who were historically non-landowners and have not socially constructed 'land scarcity' in the recent past have been assimilated into these traditions. Hence, they are also enforcing the historical principles, which besides upholding the native cosmologies of the area, also undergird their local authorities. The TAs of Bongase (and the Banda Paramountcy), Carpenter, and the Bian Clan Head are also capitalizing on their historical authorities to expedite illicit land transfers to incoming non-natives for pastoralism, commercial fishing, and farming.

Moreover, the research found that due to the communities' general lack of confidence in the BPA, all the TAs –except the Dokokyina No. 1 'Chief' – have taken over the adjudication of land disputes, which they carry out in accordance with their respective customs. In effect, although most of the primary agents' land access is based on the statutory tenure system, they resort to the TAs and custom to settle disputes over access. Through its 'Chief', the Dokokyina No. 1 community is also making parallel claims of land ownership based on the annulled customary tenure system, which underlay its historical rights according to the principle of first occupation or conquest. This also underlies the community's violent extortion of the immediate squatter fisher folks and illegal miners. Though illegitimate, the agents' resort to the customary tenure system represents a new way of possession and challenging the BPA's hegemony of the recent past. Consequently, the research concludes that the rights of ownership, control, and transfer of land are currently competitive, which differs from the situation of the recent past, whereby the BPA held the absolute right. Ironically, it also differs from the historical situation, whereby such rights were customarily defined and noncompetitive.

8.2.1.2 Transformations in the right of use

With respect to the right of use, the research found that the BPA-approved users, which are the farmers and builders who have leasehold interests are also invoking some principles of the annulled customary tenure systems to catalyze their land access. As discussed in the previous chapter, all the farmers are invoking the freedom they enjoyed historically to cultivate cashew trees, which contrasts with the BPA's

permissible uses for farmers. Thus, although their leases are for 50 years, their actions legitimize outright land ownership or allodial titles, which contradicts even the principles of the historical customary tenure systems. Due to the increasing cashew cultivation, the farmers, like the illegal loggers and charcoal producers, are felling and/or burning trees (including the sacred trees) brazenly, which violates the BPA's protocol, but also the taboos of the traditional authorities (TAs). Some farmers of Dokokyina,



Picture 8.1: An incense tree on fire on a cashew farm in Dokokyina (Source: E. Agyepong, 29 November 2018)

Bui, Akanyakrom, and Bongase have also begun share-cropping arrangements as practical means of protecting their claims. Fundamentally, these are synonymous with customary tenancies, which were only licit under the past customary tenure systems. The illicit land transfers of the TAs of Bongase (and the Banda Paramountcy), Carpenter, and the Bian Clan Head have additionally engendered unauthorized users, including herders, squatters, and non-native farmers whose accesses are also based on customary tenancies. Unlike historical times when they confined the herders to the uncropped fringes of the communal lands, these TAs have also granted the herders an open access to land, which has affected the farmers' land access.

Besides these, the research shows that the builders of Bongase are also inferring from the former customary tenure system to exercise their right to an open access to lots. Unaware of the BPA's recent land ownership and protocols of access, the builders of Gbolekame North still access lots openly per the abolished customary tenure system. Likewise, the builders of the resettlement communities are capitalizing on their past freedom of choice to build mud and wooden structures, which the BPA has banned at the site as part of its beautification agenda. Conclusively, these perverted use rights and the unauthorized users are at variance with the BPA's principles, procedures, and practices of land access. Like the TAs and the Dokokyina No. 1 community who were discussed previously, the users' recourse to the former customary tenure system represents 'new' but illegitimate means of gaining access. Particularly, the actions of the farmers and the builders of Bongase and the resettlement communities challenge the BPA's recent control over land. These and the above transformations ultimately augment the pluralistic tenure system that has been established in the study area.

Moreover, the research found that although the BPA had demarcated some areas for farming to the respective communities, its principles failed to specify the openness of the communal allocations to natives of the other communities as they were in the past. Additionally, its allocation of building lots to the resettlement communities was devoid of a similar specification. Thus, reminiscent of their historical use rights and open access to land, the research found that some members of the western communities of Bongase, Bui, Akanyakrom, and Dokokyina, which are part of the Banda Traditional Area attempted to access farmlands in some immediate communities. However, due to the recent land shortages and

increasing cultivation of cashew trees, some communities have barred the members of other communities from accessing their lands. A case in point is the Bongase community's ousting of some farmers from Dokokyina from its farmlands. Another instance is the Bui community's refusal to allow the Akanyakrom community to access its demarcated farmland although its members are brazenly encroaching on the demarcation of the Akanyakrom community. Consequently, in contrast to the past, the use rights of the farmers of the western communities have been limited to their respective communal allocations. Thus, besides the general land shortages, this redistribution of use rights explains why some farmers are migrating to distant Banda communities, where land access is still open to natives of the Banda Traditional Area.

8.2.2 Descriptive analyses of the transformations in the qualities of land

Regarding the qualities of land, the research found that the extent, productivity, and marketability of land have also changed drastically. Thus, the subsections describe the respective transformations.

8.2.2.1 Transformations in the extent of land

The BPA's strategies of land access and the imposed tenure system have reduced the land available to the traditional authorities (TAs), farmers, and builders. To the TAs of especially Bui and Dokokyina who owned land historically, the displacement and resettlement have reduced the land under their control, which has in turn affected their might as traditionally perceived. The inundation and erection of transmission towers (including the planned solar farm) have also reduced the respective lands of the TAs of Bongase (and the Banda Paramountcy) and Carpenter and their might. Although the BPA's conspicuous strategies have least affected the lands of the Bian Clan Head, the research shows that the imposed statutory tenure system has invalidated his control over the land. Likewise, the statutory tenure system and the ruling by the law court have undermined the claims of the 'Chief' of Dokokyina No. 1 to the land area of the former Dokokyina community. Despite these, the research shows that the TAs of Bongase (and the Banda Paramountcy) and Carpenter, but also the Bian Clan Head and the 'Chief' of Dokokyina No. 1 have capitalized on their respective locations to control access to the water body, its surroundings, and the hinterland, which earns them money and expedites their land access.

Regarding the farmers, the research shows that the displacement and resettlement of the communities of Bui, Dokokyina, and Akanyakrom have reduced the farmlands available to the respective members. Although the BPA allocated them with farmlands, they are smaller than what the farmers had at their disposal in the past. Coupled with this are the conflicting activities of the herders who have been admitted by the Bian Clan Head to Gbolekame North. Besides competing with them over the limited farmlands, the farmers reported that the herders start bushfire indiscriminately in certain areas, which has further reduced the extent of available land by reducing their willingness to farm in those areas. To the farmers of Bongase, the inundation and the resettlement of the three communities above have also reduced their accessible farmlands. Their accessible lands and those of the resettlement communities have further been reduced by the limitations on their use rights to the respective communal allocations. To the farmers of Carpenter, the erection of transmission towers and the planned solar farm by the BPA, but also the increasing number of

herders and new farmers have reduced their farmlands. With respect to the Gbolekame North community, the research shows that the dam construction and the consequent fluvial flooding affected the alluvial plains on which the farmers historically cultivated vegetables. Although they still have vast farmlands at their disposal, the Bian Clan Head's increasing admission of herders and their consequent open access to land have reduced the farmers' unbridled access to them. In all cases, the research also found that the increasing cultivation of cashew trees has additionally contributed to the reductions in the land, because it hinders the farmers from cultivating other crops on the same land and leaving it to fallow for future uses. Besides the communities above, the research also found that although the Dokokyina No. 1 community still occupies the area it is contesting with the BPA, its members have been unable to access it actively for farming. Basically, this is because of the frequent attempts by the BPA and the Wildlife Division to expel them from the area.

The BPA's strategies and imposed tenure system have also reduced most builders' access to lots. In this regard, the research found that lots are physically available in all the communities despite the recent displacements and resettlements. However, the BPA's land use plan and its established protocol of access has limited access to lots by the builders of the resettlement communities, Bongase, and Carpenter. Although the protocol also applies to the Gbolekame North community, they conversely enjoy an open access to lots due to their ignorance of the recent changes in landownership. Also to the BPA, which is legally the custodian of the lands, the research found that the extent of the acquired lands has reduced because of the TAs' blatant land transfers for strategies that conflict with its land use plans and the encroachments by both the authorized and unauthorized users.

8.2.2.2 Transformations in the productivity of soil and the general crop yields

In addition to the reduced extents of land, the farmers of all the communities also related that there have been transformations in the productivity of the soil and the general crop yields. As gathered, the soil, which was historically suitable for yam cultivation has been largely overused, rendering it marginal. This has been caused by the limited lands and the farmers' general shift to practicing crop rotation. To the farmers of Gbolekame North, the problem has particularly been caused by the indiscriminate land use of the herders. However, beside these, the research also deduces that the excessive application of chemical fertilizers by the farmers of the resettlement communities and Bongase has contributed to the declining soil quality as it causes acidification and reduces organic matter and humus content in the soil (see: Solomon et al. December 2012; Sönmez, Kaplan, and Sonmez 2007). Moreover, when interviewed, the Agricultural Extension Officer of the Banda District explained that the farmers' inappropriate application of a mixture of chemical fertilizer and weedicides is not only hazardous to them, but also the living things that are beneficial to the soil's productivity. The farmers of the resettlement communities, Gbolekame North, and Carpenter also blamed the activities of the herders for this. Thus as discussed in the previous section, the yields of the traditional crops including yam and groundnut have declined significantly. However, besides the above, all the farmers attributed the declining crop yields to the erratic rainfall patterns and agro pests and diseases, which have reportedly become rampant in recent years.

8.2.2.3 Transformations in the marketability of land

The research found that unlike the past, the recent events have rendered land fungible. Relevantly, the BPA's principles and procedures of access require prospective users to pay to access land. To the native farmers, this applies to their access to farmlands outside the demarcated areas. However, other builders besides the individual builders of the resettlement communities and all non-natives are required to pay the BPA to access land. Besides the BPA, the research also shows that the TAs of Bongase (and the Banda Paramountcy), Carpenter, and the Bian Clan Head have also commercialized land by requiring prospective users to pay huge amounts of money instead of the traditional in-kind payments. The research deduces that this commercialization has contributed to the major transformations in the quality of the land.

The descriptions above show the transformations that have occurred in the system of land access, which encompasses the land tenure system and the qualities of land. Per the theoretical framework, the next section interprets them to underscore their implications for the recent field of land access.

8.2.3 Theory-guided interpretation: Transformations in the system of land access

Inferring from Chapter 6 as the point of reference, this section interprets the accounts above to conceptualize the preliminary transformations in the recent field of land access. It further conceptualizes the transformations in the agents' social constructions of land and land values and the logic.

8.2.3.1 Preliminary transformations in the recent field of land access

As recalled from Chapter 6, the State's acquisition unified the distinct physical spaces of the study communities under the BPA's stewardship. Consequently, the BPA imposed a statutory logic (statutory tenure system) on land access, which effectively contributed to the research's conceptualization of a unified field of land access. In this regard, the research also conceptualized land, which is the physical space not covered by water, as the stake of the field. Despite these, the foregoing discussion shows that the TAs and the Dokokyina No. 1 community's competitive control of certain physical spaces threatens the BPA's integration of the physical space. They and the other agents' recourse to the extinguished customary tenure systems has also affected the recent logic. Moreover, their actions suggest a shifting social construction of land and land values. Therefore, the next subsections emphasize the research's deduced transformations in the agents' social constructions and the logic of the recent field of land access.

8.2.3.2 Transformations in social constructions of the stake

The research shows that the stake (land) has effectively changed from a common pool resource to a private resource after it was entrusted to the BPA. However, the historical agents' social constructions of the stake and its values (*habitus*) were initially least affected by this transformation, which underscores the enduring characteristic of *habitus* (Bourdieu 2002, 43 cited in Etzold 2013, 21). While the BPA and the builders' *habitus* are still steadfast, the foregoing discussion shows that the TAs and farmers' symbolic struggles to

their recent social constructions of 'land scarcity' underlie alterations to theirs. Thus, with reference to their respective categories, the next paragraphs interpret the transformations in their understanding of the stake and its values.

The traditional authorities (TAs): Since historical times, the landowning TAs have socially constructed land as authority, because its holdership is traditionally foundational to their socio-political and socio-cultural authorities. They have also socially constructed it as fundamental to their native cosmologies because of the symbolism of the sacred trees and their role in transmitting the communities' beliefs. Based on these and in line with Davy, the research has deduced that the TAs socially constructed land as a territory and an environment (2016, 138, 140). It has further associated these social constructions with the habitus of the territorial and environmental values of land (Bourdieu 1977, 78; 1990b, 130-31; 1990a, 53; Davy 2016, 137). However, besides the historical landowning TAs, the research shows that the TAs of Akanyakrom who have recently gained the BPA's recognition as intermediaries of land access have also embraced these habitus.

Moreover, the TAs of Bongase (and the Banda Paramountcy), Carpenter, and the Bian Clan Head have recently commercialized land as part of their symbolic struggles against 'land scarcity'. The TAs of Carpenter have also granted a franchise to felling sacred trees as timber and for charcoal production. Primarily, the TAs seek to earn circulating economic capital (money) through these actions to maintain their respective stools and undergird their authority. Given these recent land uses, the research deduces that these TAs also socially construct of land as capability, which has augmented their habitus to include the use value of land (Davy 2016, 137). Despite this, the TAs' actions underlie cultural disarticulation, because they embody a collapse of the cultural integrity of the communities. Particularly, the research argues that the extended habitus of the TAs of Carpenter undermines their habitus of the environmental value of land, because their licensing of logging and charcoal production conflicts with the conservation of sacred trees. Besides the pre-existing TAs, the 'Chief' of Dokokyina No. 1 has also become a relevant TA in the field. Fundamentally, his quest to maintain ownership and control over the community's land relates to the habitus of the territorial value of land. Moreover, his illegitimate extortion of the squatter fisher folks and miners to earn money for the lawsuits represents a habitus of the use value of land.

Farmers: With respect to the farmers, the research shows that they have socially constructed land as capability since historical times because of their intent to obtain crops from it for subsistence and commercial purposes (Davy 2016, 137). Fundamentally, their social construction has also been hinged on social constructions of land as a location and a territory as they expect to access desirable (quantity and quality) areas and protect their holdings from encroachment. Thus, the research has related their primary habitus to the use value of land, which is subject to the habitus of the exchange and territorial values of land respectively (Bourdieu 1977, 78; 1990b, 130-31; 1990a, 53; Davy 2016, 135-36, 138). However, the research shows that due to the land shortages and increasing cashew cultivation, the farmers are fortifying their claims by planting cashew trees and renting them to other farmers in share-cropping arrangements. The people of Dokokyina No. 1 are also expressing territoriality by claiming outright ownership of their historical lands, preventing the youths of Dokokyina from accessing them, and charging non-native

entrants for use. Accordingly, the research deduces that the farmers' habitus of the territorial value of land is gaining eminence, because besides preventing encroachments, their varied actions cement their claims to holdings, which contradicts the conditions of lease granted by the BPA.

Summary: Ultimately, the discussion shows that despite the transformations, all the agent categories still have varied habitus (expected benefits) with respect to the unified stake. These underscore the specific sub-stakes of the recent subfields, which were identified as the subfields of spatial development, chieftaincy, arable farming, and real estate. However, besides these subfields, the research deduces that some TAs' admission of herders and the underlying logic surrounding their entry into the field, but also their expectations have engendered a subfield of pastoralism. In this regard, the herders socially construct the stake as capability as they access it for nourishment (fodder and water) for their cattle (Davy 2016, 137). Thus, their habitus relates to the use value of land (ibid). As some of them are transhumance herders, they and the commercial fisher folks have become active in the subfield of real estate, where they exhibit social constructions similar to those of the pre-existing agents, but under the logic of the enabling TAs. Besides the new non-native farmers, they have also become active in the subfield of arable farming as they cultivate crops for subsistence. In both subfields, the research deduces that the new agents' primary habitus also pertain to the use value of land (ibid). Thus, as farmers, the habitus of the new non-natives also include conceptions of the exchange and territorial values of land. However, as builders, the transhumance and fisher folks' additionally have habitus of the exchange value of land in respect of accessing areas with desirable locational properties.

Besides this, the discussion also shows that due to the transformations in the quality of the stake, the illusiones (belief in the ability of the stake to meet expectations) of all the pre-existing agents besides the BPA have declined (Bourdieu 1998, 77-78; 1990a, 65). To the TAs, their illusiones have declined because of the reduced land sizes. Although this also underlies the decline in the illusiones of the pre-existing farmers', theirs also relate to the deteriorating soil productivity. To some farmers, the overlapping uses with herders also contributes to the decline in their illusiones. However, to the pre-existing builders of the resettlement communities, the decline in their illusiones relates to the extent of the BPA's allocation, while the decline in the illusiones of the builders of the other communities mainly concerns the marketability of lots. Regardless of this, the discussion thus far shows that some TAs have boosted their illusiones by commercializing the stake. Some farmers have also boosted theirs by applying agrochemicals and securing 'permanent' holdings. Although the builders of the resettlement communities have not made any attempt to contest the BPA's allocation of lots, the successful resistance by especially those of Bongase against the BPA's protocol of payment underlies an improvement in their illusiones. Besides the pre-existing agents, the research also deduces that the new agents' (the herders and squatter fisher folks) participation underlie their illusiones despite the TAs' stringent protocols of access and the reduced land sizes.

8.2.3.3 Transformations in the logic

The discussion shows that although the BPA has established a statutory logic in the recent field of land access, the other agents' symbolic struggles based on the extinguished customary logics have effectively

made it pluralistic. In this regard, the 'rule', which is the objective and explicitly recognized aspects of the logic has become diffused, encompassing the BPA's principles, procedures, and practices, but also those of especially the pre-existing TAs, the 'Chief' of Dokokyina No. 1, and the farmer 'landlords', which are widely known by their respective patrons. Fundamentally, the research deduces that apart from the BPA, the informal establishment of a pluralistic logic gives the other agents the opportunity to choose the principles, procedures, and practices most favorable to their achievement of the sub-stakes. Consequently, as briefly implied in Chapter 6, their doxas are largely in respect of the customary logic. To the pre-existing agents and some new agents, this is mainly due to contentions about the ability of the statutory logic to support their endeavors. Some pre-existing agents also have contentions about the legitimacy of the statutory logic, while many new agents are largely ignorant about it.

Besides being pluralistic, the field' logic has also become discordant. Subsequently, the actions of some pre-existing TAs and the 'Chief' of Dokokyina No. 1 underscore claims of ownership and control that compete with the BPA's. Their allocation of customary tenancies also conflict with the principles established under the BPA's statutory logic. Particularly, those granted by the TAs compete with the BPA-approved leasehold interests, because they are different interests to the same stake with different principles under different logics. Likewise, the evocation of the customary logics by the farmers and some builders contradicts with the principles of use of the statutory logic. Although the rampant felling of trees is conversely not predicated on the annulled customary logics, it relevantly contrasts with the BPA's current principles. Ultimately, these transformations evince the porosity of the statutory logic, which underlines the BPA's failure to bind the field. Of relevance too, although Ghana's land access is also marked by a pluralistic logic, the research deduces that it is less discordant because of its statutory recognition and subsequent demarcations. In effect, the ongoing friction in the study area is due to the BPA's perceived illegality of the customary tenure system.

8.3 Transformations in the agents' diversity and power relations

The foregoing discussion shows that some symbolic struggles have engendered additional agents in the recent field of land access. Similarly, they have also redefined the relevance of the mechanisms of access and the agents' social positions and power relations. Thus, the immediate subsections describe the respective transformations. Subsequently, a third subsection refers to the theoretical framework to interpret them.

8.3.1 Descriptive analyses of the transformations in the agents' diversity

The research found that the agents' symbolic struggles have diversified the category of managers, users, and providers. Accordingly, this section highlights the relevant transformations.

8.3.1.1 Transformations in the category of managers and sub-managers

As recalled from Chapter 6, the BPA became the manager of land access after it was entrusted with the acquired lands under Section 22[3] of the BPA Act 740. Subsequently, apart from the Bian Clan Head, it made the other chieftains sub-managers, which underpinned their roles as intermediaries between it and the agents of the respective communities. By this, it elevated the chieftains of Akanyakrom to a position comparable to those of the recognized historical landowners. However, the research deduces that the illicit land transfers and authorization of logging by the TAs of Bongase (and the Banda Paramountcy), Carpenter, and the Bian Clan Head have established them in competitive roles as managers. Similarly, it deduces that the self-acclaimed 'Chief' of Dokokyina No. 1 has become a manager due to his counter-claims of land ownership and subsequent extortion of the new agents. In this regard, the research acknowledges that the pseudo managers lack legal allodial titles to the respective lands under their control. Yet, their assumed roles and allodial titles have effectively put them in competition with the BPA over land control and the benefits that are generated thereof.

8.3.1.2 Transformations in the category of users

The research also found that there have been transformations in the category of users. Due to the recent incidences, some agents have joined the pre-existing categories of traditional authorities (TAs), farmers, and builders. Herders have also become active land users as a result of some TAs' symbolic struggles. Thus, with reference to each of them, the next paragraphs describe the identified transformations.

The traditional authorities (TAs): The research found that the historical landowning TAs continue to appropriate land for their own benefit. However, due to the BPA's recognition of the Akanyakrom chieftains as sub-managers, its TAs have also become appropriators of land. Likewise, the 'Chief' of Dokokyina No. 1 due to his extortion of the non-natives living in proximity to the former settlement.

Farmers: The research found that the category of farmers has also been diversified by the recent events. Relevantly, due to the land shortages and increasing value of cashew seeds, the native married women who largely cultivated accompanying crops in the past have taken on more active roles as farmers. Thus, like the men, they cultivate the major crops including yams and cashew trees. The men of Gbolekame North and Akanyakrom who used to be artisanal fisher folks have also become active farmers due to the decline in the fishing industry. Besides the pre-existing non-native Dagaates, new non-native farmers have joined the sector mainly because of the proliferating cashew industry. Other non-natives such as the squatter fisher folks who live around the reservoir and the transhumance herders have also become active farmers, cultivating mainly yams, maize, and other minor crops for subsistence.



Picture 8.2: The chapel of the Calvary Baptist Church in Bui (Source: E. Agyepong, 4 February 2019)

Builders: The category of builders has also become diverse in recent years due to the ongoing symbolic struggles. In this regard, the research found that besides the natives and non-native Dagaates, the transhumance herders, squatter fisher folks, and illegal miners who have been admitted by the TAs are also accessing land for housing. Consequently, during the fieldwork, the research gathered that about sixty squatter settlements of fisher folks and illegal miners have been identified by the BPA security operatives in September 2018. Moreover, the research also found sprawling settlements of transhumance herders around Gbolekame North and Carpenter. Particularly in the latter, the research found that the herders have taken over a pre-existing riverine village called Jabo from some non-native Dagaate farmers who established it. They have further established a nearby village called Grusie due to their growing population. In addition to these, the research gathered that churches have also become active appropriators of land. Although a few of them existed in the past, most of them used classrooms for services. However, due to the growth in the population, they and some proliferating churches are accessing land to build distinct chapels. Among them are the Presbyterian and Calvary Baptist Churches, which have built new chapels at the Bui resettlement community.

Herders: The research found that herders have become active land users despite the BPA's misrecognition of their activities. As recounted, their proliferation has been incited by some TAs' symbolic struggles against their recent social construction of 'land scarcity'. Consequently, the research gathered that some of the herders are only nomads who frequent the area seasonally. However, some of them are transhumance herders who have settled in Gbolekame North and Carpenter. Although the housing of the transhumance herders are mainly made of temporary materials, some are building concrete blockhouses, which suggests an intent of a long-term stay. Relevantly, the herders' extensive activities and their subtractive effects on the other users have qualified them as active land users.

8.3.1.3 Transformations in the category of providers

Besides the primary agents above, the research also found that there have been transformations in the categories of providers of the BPA, TAs, farmers, and builders. The next paragraphs refer to each of them to describe the identified transformations.

The BPA: The research shows that the BPA's main providers have been the Bono Regional Lands Commission and its Land Valuation Division, the Town and Country Planning Departments and the Physical Planning Departments of the jurisdictional regions and districts, the Chinese Export Import (Exim) Bank, Sinohydro, and GRIDCo. However, as deduced, the work of Sinohydro on the dam is presently complete. The research found that due to its recent symbolic struggles to secure the liminal boundaries of the acquired land, the BPA has also engaged the Ghanaian President's own Operation Vanguard Squad to assist its security guards to displace the squatter fisher folks and illegal miners from the banks of the reservoir. Besides this, it also engaged the Ghanaian military and police by setting up a military attachment to monitor the acquired land and prevent further encroachments.

The traditional authorities (TAs): With respect to the traditional authorities (TAs), the research found that besides their conventional provider, that is the National House of Chiefs, all the others – except the Bian Clan Head and the ‘Chief’ of Dokokyina No. 1 – rely on recently-established Land Dispute Resolution Committees to expedite their land access. Relevantly, the BPA is responsible for arbitrating land disputes because of its custodianship of the acquired land. Yet, due to its perceived apathy, the communities prefer to lodge their grievances with the TAs, who in turn, capitalize on their knowledge of custom to resolve the cases. However, due to the increasing number of cases, the TAs have been compelled to establish the committees as their representatives. In this regard, the committees constitute some TAs and other persons of standing in the respective communities. Although their roles mainly benefit the farmers, the research gathered that their activities also undergird the TAs’ authorities, because it sustains their reverence by the people. Moreover, they charge the disputing parties before arbitration and give a greater percentage of the acquired money to the TAs while they remunerate themselves with the rest.

To the TAs of Bui and Carpenter, the law courts have also become relevant providers given their resort to lawsuits to compel the BPA to pay them for the acquired land and affected sacred trees respectively. Also to the latter, their resort to broadcasting networks to name and shame the BPA for its reluctance to pay the compensation has effectively made the media a provider to them.

Farmers: As recalled from Chapter 6, the recent providers of the farmers include nuclear family members, wage laborers, crop merchants, creditors, the District Departments of Agriculture (including their respective Agricultural Extension Officers), and other vendors of seeds, seedlings, and agrochemicals. However, given the recent dynamics, others including youth and farmers’ associations and Land Dispute Resolution Committees have also become relevant providers to all the farmers. To the farmers of Bongase and the resettlement communities, farmers acting as ‘landlords’ and the Assembly member of the Bongase Electoral Area have also become providers to them. Particularly the research gathered that the latter is not a member of the Land Dispute Resolution Committees of the respective communities and does not have the requisite mandate for settling disputes. Yet, some farmers prefer him to the established committees, because his services are gratuitous and he facilitates an agreed solution between disputing parties through mediation rather than arbitration. To legitimize their actions, he also accompanied the combined youth associations of the resettlement communities to the former Dokokyina settlement to secure the land from encroachers.

Due to its role in facilitating the connection between the farmers’ association and the UNDP, the Banda District Department of Social Welfare and Community Development has become an important provider to the farmers of Bongase. Likewise the UNDP, which provides the beneficiary farmers with capacity building and financial support to expedite their land access. The research also considers the mortar carver as a provider to the farmers of Bongase, because his activities enable them to cultivate cashew trees without the obstructing effects of the towering trees, but also earn money to support their livelihoods. To the resettlement communities the industrial agro-processor has become an additional provider. Some of those of Akanyakrom rely on the self-established credit union to expedite their land access, while those of Dokokyina also rely on merchants of watermelons to dispose of their crops. The farmers of Carpenter who

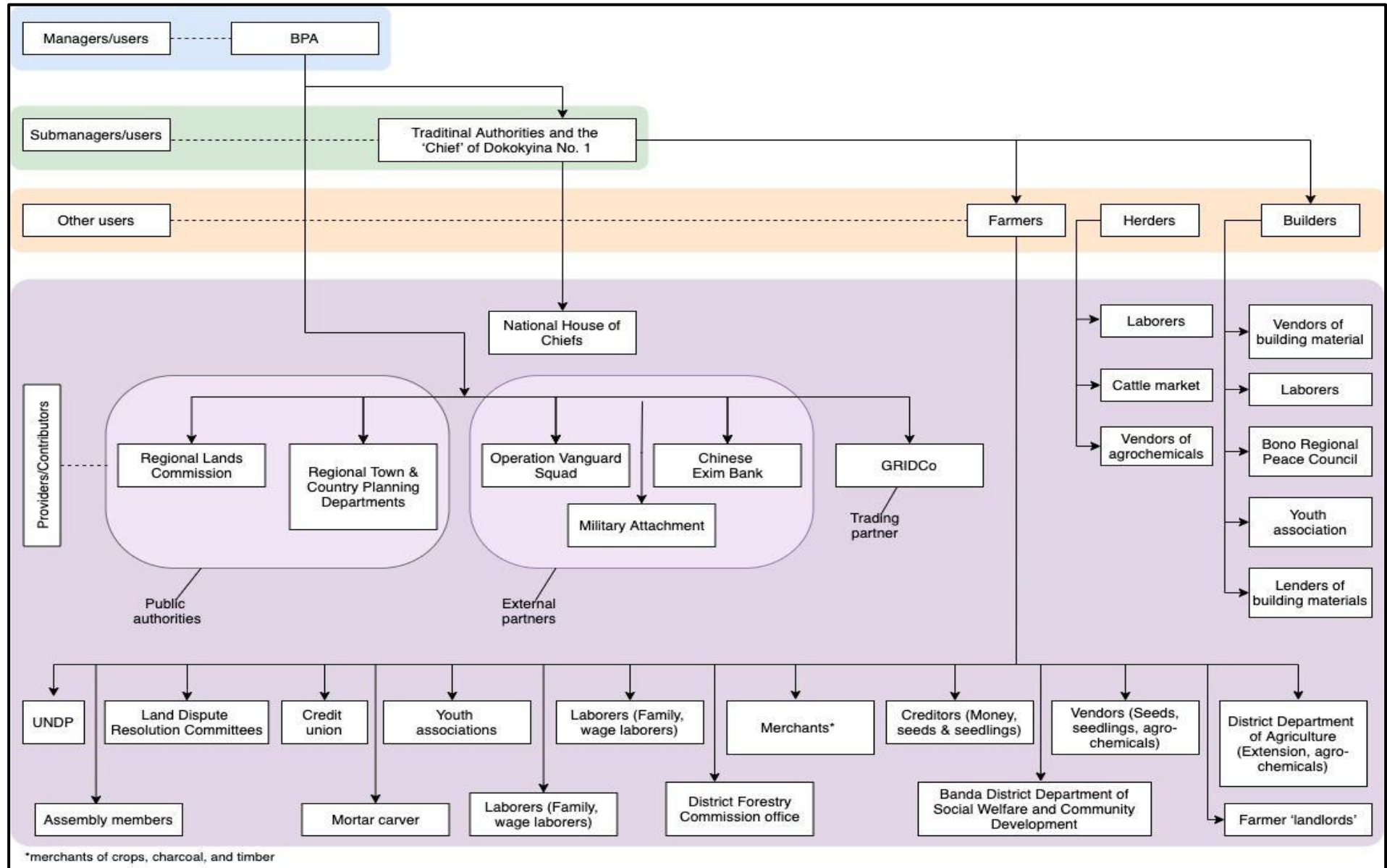
are increasingly felling trees and producing charcoal also rely on charcoal and timber merchants to vend their products. However, the loggers also rely on the Assembly member of the Teselima Electoral Area, who lives in the neighboring community of Teselima and the district office of the Forestry Commission to ensure a safe passage for their goods at the checkpoint.

Builders: The recent providers of the builders include sources of labor and vendors of building materials. As explained, the former may include nuclear and extended family members, friends, or wage laborers depending on the type of housing. However, given the recent dynamics, the providers of particularly the Akanyakrom Roman Catholic Church also include the Bono Regional Peace Council. Regarding the Bongase builders, their providers also include the youth association, which mobilized itself against the BPA's restriction of their access to lots. They also include other builders from whom they borrow materials to expedite their building objectives.

Herders: The transhumance and nomadic herders who have joined the field of land access also rely on some providers to expedite their land access. Particularly, the former rely on laborers, which include their economically active sons and hired caretakers to take the cattle out to pasture. They also rely on a cattle market in Banda Nkwanta to trade their livestock with other herders, but also with butchers. Moreover, they and the nomads rely on the vendors of agrochemicals to obtain the requisite chemicals for treating cow ticks. In this regard, all of them related that they patronize the roaming vendors rather than the District Department of Agriculture because of the former's proximity to the communities

The discussions above show that there have been transformations in the composition of land agents who have been categorized as managers, users, and providers. Thus, Figure 8.1 on the next page summarizes the identified transformations in the composition of primary agents and their respective providers. However, besides their composition, the research finds that the agents' mechanisms of land access have also changed. Consequently, the next section discusses the identified transformations.

Figure 8.1: Transformations in the categories of recent agents and their providers



Source: Author's construct (2021)

8.3.2 Descriptive analyses of the transformations in the agents' mechanisms of land access

The research finds that the pre-existing agents' recent land access mechanisms and hence, their power relations have been transformed by the ongoing incidences. The herders who have been admitted by the TAs have also initiated their own mechanisms of land access, which have implications for the other agents. Fundamentally, the research identified that the new mechanisms are characteristically legal, structural, and relational. The next sections discuss the transformations by primary agent category and their corresponding providers.

8.3.2.1 Transformations in the land access mechanisms of the BPA and its providers

The BPA: Despite the recent dynamics, the BPA still has an objective to retain its authority over the acquired land in order to promote its use for the dam and other spatial development. Recalling from Chapter 6, the BPA's key mechanism of land access is its allodial title, which is granted by the BPA Act 740 (2007) under Section 22. Its other mechanisms include its human resources. However, regarding this, the ongoing discussion shows that the BPA has also engaged the President's Operation Vanguard Squad and formed a permanent military attachment to help it recapture its land from squatters and protect the boundaries of the acquired area from further encroachment. Relevantly, such additions underlie transformations in its mechanisms of land access.

The providers: The research found that the land access mechanisms of the BPA's pre-existing providers, which include the public authorities and GRIDCo have not been affected by the recent dynamics. However, the BPA's engagement of the Operation Vanguard Squad and the military attachment represents another legal mechanism of land access (see: Ministry Of Defence n.d.). In this regard, the works of both units are backed by statute, which underscores the BPA's efforts to protect the liminal boundaries of its territory (ibid).

8.3.2.2 Transformations in the land access mechanisms of the TAs and their providers

The traditional authorities (TAs): The research found that the TAs still have an objective to control land access in order to maintain their socio-political and socio-cultural authority and conserve the sacred trees for cosmological reasons. The foregoing discussion shows that except the Bian Clan Head and the 'Chief' of Dokokyina No 1, the others' recent mechanism has been their recognition by the BPA as intermediaries. However, following their social construction of 'land scarcity' and the consequent symbolic struggles, the TAs are additionally invoking their socio-political and socio-cultural roles to enforce the historical taboos. Of relevance is however, the exploitation of these roles by the TAs of Bongase (and the Banda Paramountcy), Carpenter, and the Bian Clan Head to assume allodial titles that facilitate the transfer of land for unauthorized uses. Although the 'Chief' of Dokokyina No. 1 lacks traditional legitimacy due to his rejection by the Banda Paramount Chieftains, the research found that he is also capitalizing on an assumed socio-political and socio-cultural role to exercise his allodial title. With this, he facilitates the land

access of his community and extorts money from the squatter fisher folks and illegal miners who operate in the area.

Consequently, although the pre-existing TAs are inherently structured by the respective chieftaincy institutions of the communities, they are presently, additionally structured at the provincial level by their ability to earn money from illegal land transfers to maintain their stools. In this regard, the TAs of the resettlement communities have become relatively powerless due to their limited land and inability to admit non-native land users. Thus, besides complaining about their land sizes and inability to subjugate the TAs of the other resettlement communities, the TAs of Bui were also aggrieved by their loss of control over the water body. As deduced, the water body presently expedites the authority of the TAs of Bongase (and the Banda Paramountcy) through the patronage of the non-native fisher folks and herders. The research also gathered that in addition to losing face over their inability to earn money from illegal land transfers, the experiences of resettlement by the TAs of Bui, Dokokyina, and Akanyakrom have effectively reduced their respect within the communities. Thus, as further gathered, disputes between farmers from the resettlement communities and Bongase – even over a land located at the resettlement site – are lodged with the committee of the latter. The members of the resettlement communities explained that they have had to overlook their own committees in such disputes, because the members of Bongase disregard their invitations for arbitration. The research deduces that the abasement of especially the TAs of Bui and Dokokyina, who were historically landowners may be the result of the other communities' perception about their lack of outright land ownership, which is traditionally related to historical conquest.

Besides exploiting their historical socio-political and socio-cultural roles for the purposes aforementioned, the TAs of Bui and Carpenter are also capitalizing on them to access the law courts to compel the BPA to effect the payment of compensations. The latter is additionally using the same mechanisms to access the media for a similar purpose.

The providers: Regarding the TAs' conventional provider, which is the National House of Chiefs, the research found that its mechanism of access has not changed. However, as new providers, the Land Dispute Resolution Committees of the relevant communities employ the mandate conferred on them by the TAs to carry out their responsibilities. As statutory institutions, the law courts to which the TAs of Bui and Carpenter are appealing obtain their mandate from Articles 125 to 143 of the Constitution (1992), which undergird their responsibility to protect the constitutional rights of citizens. Likewise the media, which per Articles 162 and 173 of the Constitution (1992) have journalistic independence to disseminate factual information. However, the media also relies on its audiences to expedite its work.

8.3.2.3 Transformations in the land access mechanisms of the farmers and their providers

Farmers: All the farmers of the study area – including the natives, pre-existing non-natives, and new non-natives – aspire to gain high yields of the relevant crops. The native and non-native traditional farmers seek to obtain mainly cashew seeds, but also yams, groundnuts, and the other domestic crops for both subsistence and commercial purposes. However, the transhumance herders and squatter fisher folks are

mainly focused on gaining high yields of yams and maize among others for subsistence. To this end, the research has shown that the natives and pre-existing non-natives have recently employed the leasehold interests granted by the BPA as their primary land access mechanism. However, due to the land shortages, some have assumed ultimate ownership or 'allodial titles' by cultivating cashew trees. Others have also entered into customary tenancy agreements with other farmers to access land. In this regard, both the so-called 'landlords' and tenants benefit by obtaining a portion of the crop yields, while the former are also able to secure their holdings from encroachment or take-overs through it. The TAs have also granted customary tenancies to the new non-natives to expedite their land access.

The research found that besides their land interests, the farmers still require 'strength' to access land. This encompasses their physical capability and skill, the quality of their social support networks, and their financial capability. However, the research further found that the traditional connotations of these qualities have been transformed by the recent circumstances. Thus, while the farmers' reference to physical capability was in respect of the ability to farm extensively under conditions of abundance, it relates to the ability to claim or possess lands through legal, extra-legal, and violent means under the present shortage. Skill was about possessing the knowledge of cultivating the traditional crops. Conversely, it is presently about having the knowledge of cultivating cashew trees and combating pests and diseases to effectively obtain high yields per acre of land. It is also about the knowledge of successfully intercropping cashew trees and subsistence crops, but also about having the expertise to diversify the traditional crops.

Following the dam construction, the farmers' primary social support networks, which historically included their nuclear and extended family members and friends was largely reduced to their nuclear families. However, presently, they generally include farmers and youth associations and relations with creditors, vendors, 'landlords', the Agricultural Extension Officers, and Land Dispute Resolution Committees. To some farmers of Bongase, they additionally include the UNDP, which provides them with training and financial support among others to expedite their land access, but also the Assembly member and the Banda District Department of Social Welfare and Community Development who facilitated their relationship. They also include relations with the carver who fells the trees on their farmlands and gives them a share of the proceeds from his products to advance their work. To those of Akanyakrom and the entire resettlement communities, they respectively include the credit union and the industrial agro-processor, while those of Carpenter further rely on the Assembly member, the Bole District Forestry Commission, and merchants of charcoal and timber to expedite their land access. Although the farmers' financial capability is still about their ability to hire laborers, buy the requisite farm tools, seeds, and seedlings to advance their farms, it presently includes their ability to access land in distant communities that were least affected by the dam construction. Given their present situation, the farmers of Dokokyina No. 1 also refer to financial capability in terms of their ability to take legal actions against the BPA over land ownership. However, as explained earlier, their efforts in this respect have been largely unsuccessful.

Consequently, the research gathered that farmers who have obtained large tracts of land (either tilled or untilled), have advanced skills for cultivating cashew and non-traditional crops, such as watermelons, belong to active associations, have good social relations with the relevant providers and/or have the

financial means to obtain the requisite inputs and access lands elsewhere are more successful than their peers. In this regard, the research deduces that farmers who are members of the relevant associations for instance, have better chances of succeeding than those who are not. Illustratively, those of Bongase who are benefitting from the UNDP through the association have better chances of success because of the financial assistance, trainings, and frequent access to the Agricultural Extension Officer. Likewise, those of Dokokyina and Akanyakrom who are respectively members of the farmers' association and credit union obtain labor and loans, which expedite their success. Interestingly, the research gathered that even farmers who have good relations with the members of the respective Land Dispute Resolution Committees stand better chances of winning in a dispute and acquiring the rights to a contested land. A case in point was a woman in Bongase who lost to a member of the Unit Committee after lodging a complaint against him with the Land Dispute Resolution Committee. During personal interactions with the head of the committee on 7 November, 2018 when the case was arbitrated, he mentioned that they had to help the defendant, because "he was one of them (an elder of the community)". Similarly, a defendant in a complaint, which was lodged with the Bui Land Dispute Resolution Committees confided in the researcher that he got away with encroaching on another farmer's land, because he was related to the Abusuapanin who led the arbitration.

Ultimately, success is still measured by the sizes of the farmers' cashew farms. When asked about the reason behind this, the farmers generally explained that besides being durable properties, cashew farms rake in money and secure one's future. Thus, farmers who lack them are generally regarded as poor. However, given the farmers' inability to claim lands longitudinally, most of their farms are scattered within the demarcated areas and in other communities, limiting their knowledge of individual farm sizes. Consequently, as they spend a majority of their earnings locally, the ultimate mark of success among them is the type and size of their respective houses. In this regard, the natives, who largely own big concrete blockhouses are still deemed more successful than the non-natives, who due to their transience, mainly prefer mud and thatch grass houses. As men usually build the houses, they are considered more successful than women farmers. Besides housing, success among the men is still determined by their respective household sizes. Although these representations ultimately mirror those of the recent past, the underlying influences discussed above characterize relevant structural and relational transformations in the farmers' mechanisms of land access. The research also observed that, while the communities considered some farmers successful, some had a reputation for being uncharitable. Due to the ongoing hardships, such ones expedite their land access by selling or lending items to less fortunate farmers rather than handing them out.

Providers: As related, the farmers' providers of the recent past included nuclear family members, wage laborers, crop merchants, creditors, the District Departments of Agriculture (including their respective Agricultural Extension Officers), and other vendors of seeds, seedlings, and agrochemicals. Given the recent dynamics, others including the UNDP, the Banda District Department of Social Welfare and Community Development, the Assembly members of the Bongase and the Teselima Electoral Areas, and the Bole District Forestry Commission have also become relevant providers to the farmers. In addition to

these, youth and farmers' associations, a credit union, Land Dispute Resolution Committees, 'landlords', an industrial agro-processor, merchants of watermelon, charcoal, and timber, and a mortar carver have as well become the farmers' providers.

Relevantly, the pre-existing providers still employ the mechanisms of access discussed in Chapter 6. However, the research finds that as a new agent, the UNDP employs its specialized staff and finances to support the Bongase farmers' land access through capacity building and other cash and in-kind provisions. The Banda District Department of Social Welfare and Community Development also employs its legal mandate under the Local Governance Act 936 (2016) to support the farmers' associations to acquire external support. The Assembly members of the relevant Electoral Areas operate under the same legislation, which mandates their participation in communal and development activities. Hence, the Assembly member of the Bongase Electoral Area refers to this as the basis of his involvement with the youth and farmers' associations of his jurisdiction, but also his mediation of land disputes; although the latter deviates from this legal mandate. Although the Assembly member of the Teselima Electoral Area also capitalizes on his legal role, the research deduces that his extortion of money from the loggers of Carpenter is as well extra-legal. In this regard, the research further observed that both Assembly members were employing the respective mechanisms to undergird their reverence by the people. However, as deduced, the latter also earns money from the loggers through his actions. The key mechanism of access of the decentralized Forestry Commission is also based on statute, which is the Forestry Commission Act 571(1999). Yet, its collection of bribery also runs afoul of the same legislation.

The research found that the mechanisms of access of the youth and farmers' associations, but also the credit union are their respective members, whose cooperation and shared objectives are the ultimate thrusts of their actions. The respective Land Dispute Resolution Committees employ the mandate conferred on them by the TAs to support the farmers' land access. The mechanism of land access of the 'landlords' who enter into share-cropping arrangements with some farmers is their assumed allodial title, whereas the industrial agro-processor employs his machinery and skill to expedite the activities of the farmers. Like the pre-existing crop merchants, the new ones who trade in watermelon, charcoal, and timber use their money, means of transportation, and access to markets as their mechanisms of land access. Conversely, the mortar carver employs his physical strength and skill to fell and use the relevant trees, which fetches money for him and the farmers to advance their respective livelihoods. Conclusively, as the farmers grapple with the current circumstances, these new mechanisms have become important thrust to advance the achievement of their land access objectives.

8.3.2.4 Transformations in the land access mechanisms of the builders and their providers

Builders: Inferring from the previous chapters, the builders' land access objective is to obtain preferable houses at preferable locations that facilitate their senses of connection and security. Regarding this, the research shows that the resettlement communities primarily employ the leasehold interests granted by the BPA to access land. While these are practically gratuitous, the TAs' request for applications represent a new mechanism of land access. With respect to the builders of the other communities and even institutions

in the resettlement communities, the research shows that the BPA requires them to pay for leasehold interests to lots. However, the foregoing discussion shows that those of Bongase and its environs, Gbolekame North, and the hinterland of Carpenter employ extra-legal interests to access lots. In this regard, the natives of Bongase and Gbolekame North continue to apply the repealed usufructuary interests that were historically provided under the customary tenure system. The non-natives of these communities and Carpenter who have recently been admitted by the TAs employ customary tenancies to access lots. As explained in Chapter 5, all the landowning TAs except Carpenter historically granted the non-natives usufructuary interests to access lots, because they believed that their stay would expedite the communities' growth. However, given their current limitations in land control, the insecurity surrounding the non-natives' access to lots, and the conditions attached to it, the research characterizes the related land interests as customary tenancies. Besides being extra-legal in the current context, these re-instated interests underscore the plurality of the tenure system that is currently operational in the study area.

The research further found that in addition to land interests, the builders still require 'strength' to achieve their objectives. Depending on their housing preference, this still encompasses their physical strength and skill, social support networks, and financial capability. While the implications of these are largely reflective of the historical ones, the research found that the social support networks of some builders have been extended by the recent events. Particularly in Bongase, the coalition of the youths to fend off the BPA's attacks on unauthorized access represents a new social network to the builders. Likewise, the builders' establishment of a system that allows them to borrow building materials from each other underlies a new social network that expedites their land access. Also to the Roman Catholic Church of Akanyakrom, the Bono Regional Peace Council has become a relevant social network as it is at the forefront of their efforts to recover the BPA's compensation from the man who received it. Despite these transformations, the research found that the builders of the respective communities still defined success by the size and type of housing. However, when considered generally, it appears that those of Bongase have an advantage over the other communities because of the support of the youth coalition and their established system of reciprocity. Essentially, these enable them to access preferential locations and built their houses to expedite their land access objectives.

Providers: Deducing from Chapter 6, the recent providers of the builders include laborers and vendors. However, as discussed above, the providers of the Bongase builders have also come to include the youth association and other builders from whom they borrow building materials. Relevantly, the youth association capitalizes on its members and their tenacity to support the builders, while the lending builders support them with building materials. The Bono Regional Peace Council, which is mediating the stalemate between the Akanyakrom Roman Catholic Church and the recipient of its compensation from the BPA is conversely capitalizing on its legal mandate, which is provided in Article 3 of the National Peace Council Act (2011). All these have become additional stimuli to the builders' land access and underlie relevant transformations in their respective land access mechanisms.

8.3.2.5 The land access mechanisms of the herders and their providers

Herders: The research found that the transhumance and nomadic herders' primary mechanism of land access is the customary tenancy agreements, which they obtain from the TAs of Bongase (and the Banda Paramountcy), Carpenter, and the Bian Clan Head. Besides these, the former also rely on their economically active sons and employ caretakers to take the cattle out to pasture daily. Conversely, the nomads employ their physical strength and skill to expedite their land access.

Providers: As related previously, the providers of all the herders are the vendors of agrochemicals who provide them with the requisite chemicals for treating ticks on the cattle. The land access mechanism of these vendors are hence the chemicals, which they sell to the herders for financial benefits. The providers of the transhumance herders also include the sources of labor, who employ their skill and expertise to put the cattle to pasture. In this regard, the hired caretakers in particular receive cash or in-kind payments for their services. Besides these, the research shows that the cattle market in Banda Nkwanta is an additional provider to the transhumance herders. Relevantly, it constitutes other herders and butchers who trade with the herders of the study communities. While they both exchange money for cattle with the herders of interest, the former also exchanges their cattle for money.

Ultimately, the descriptions above show the transformations in the categories of agents and their land access mechanisms. The next section interprets these per the theoretical framework to show their implications for the recent field of land access. As previously explained, the agents mechanisms of land access relates to Bourdieu's capitals, which facilitate access to the profits of the conceptualized field of land access and underpin the objective relations among the agents.

8.3.3 Theory-guided interpretation: Transformations in the agents' capitals and power relations

The discussion shows that there have been transformations in the categories of agents of the recent field of land access. Consequently, besides the pre-existing agents, the subfields of land access now constitute new primary and secondary agents who possess certain capitals that make them effective and produce effects (Bourdieu and Wacquant 1992, 107). While some of the new agents are socially part of the subfields, others belong to autonomous fields with which the subfields have flows of exchange. Following the theoretical framework, the subsections interpret the descriptions above to underscore the transformations in the objective structure of relations of the subfields and the field of power.

8.3.3.1 Transformations in the objective structure of relations of the subfields

Reminiscent of the previous chapters, this section associates the agents' mechanisms of access with capitals, which facilitate their achievement of land access objectives and the attainment of social positions in the subfields. Based on this, the next paragraphs underline the theoretical interpretation of the transformations in the objective structure of relations of the respective subfields. As discussed, these are the subfields of spatial development, chieftaincy, arable farming, real estate, and pastoralism.

The subfield of spatial development: As the primary agent of the subfield, the BPA's habitūs are the territorial and use values of land, which are in respect of upholding its authority over the acquired territory to promote its mandated use per Section 22 of the BPA Act 740 (2007). Thus, as related, the sub-stakes of the subfield relate to gaining symbolic power and objectified cultural capitals. For these, the BPA primarily employs its allodial title and human resources, which respectively represent circulating economic and embodied cultural capitals (Bourdieu 1983, 185; 1986, 244; 2004, 218 cited in Etzold 2013, 22). It also continues to have relations with the relevant public authorities, GRIDCo, and the Chinese Exim Bank, which as previously explained, respectively belong to the fields of public administration, electricity commerce, and foreign direct hydropower investment with their corresponding capitals. Of relevance is however, the BPA's new relations with the Operation Vanguard Squad and the established military attachment, which is supporting its achievement of the sub-stakes by securing the boundaries of the acquired territory. Regarding these, the research deduces that both units are part of the Ministry of Defence, which as a statutory body, may be conceptualized as belonging to the field of public administration. The Ministry of Defence thus represents a bridging social capital to the BPA because of the relations of exchange between them. Like the public authorities aforementioned, the ministry's key capital is institutionalized cultural capital (statutes), which gives it the legal mandate to operate.

The subfield of chieftaincy: As deduced, the subfield of chieftaincy now includes the TAs of Akanyakrom and the 'Chief of Dokokyina No. 1', who were historically non-landowners. Particularly, the former has become part of the subfield because of their recognition by the BPA as intermediaries of land access. However, the latter's involvement is based on his assumed role as the socio-political and socio-cultural leader of the community, and his subsequent social practices. Together, the pre-existing TAs and those of Akanyakrom have habitūs of the territorial and environmental values of land. These relate to their quests to maintain socio-political and socio-cultural authority and conserve the sacred trees by controlling land access. The 'Chief' of Dokokyina No. 1 has habitūs of the territorial and use values of land; however, unlike the other TAs, the former is related to his quest to maintain ownership and control over his supposed land. Following Bourdieu, the research relates all the TAs' habitūs of the territorial value of land to a quest for symbolic power (authority) (1983, 185; 2004, 218 cited in Etzold 2013, 22, 23). Conversely, it associates the habitūs of the environmental and use values of land to quests for objectified cultural capital (the sacred trees) and circulating economic capital (ibid).

To achieve their respective habitūs, the discussion shows that all the TAs – except the Bian Clan Head and the 'Chief' of Dokokyina No. 1 – employ their institutionalized cultural capital, which is their recognition by the BPA as intermediaries of land access (Bourdieu 1986, 247; Etzold 2013, 23). As explained, this recognition is contingent on their endorsement by the respective kingmakers of the communities and the National House of Chiefs, which also represents an institutionalized cultural capital. However, of relevance to this section is the exploitation of this institutionalized cultural capital by the TAs of Bongase (and the Banda Paramountcy), Carpenter, and the Bian Clan Head to invoke their extinguished allodial titles as circulating economic capital, which is based on the repealed customary logics (Bourdieu 1983, 185; 1986, 244; 2004, 218 cited in Etzold 2013, 22). As discussed, the TAs use this extra-legal capital to commercialize

land towards achieving their original habitus of the territorial and environmental values of land, but also the use value of land, which has consequently become an additional objective to them. Although the 'Chief' of Dokokyina No. 1 lacks institutionalized cultural capital, the research shows that he has nevertheless also assumed an allodial title as a circulating economic capital to expedite his achievement of his habitus.

Consequently, the discussion shows that the ability to exercise this extra-legal circulating economic capital (allodial title) has become a major determinant of the TAs' power relations at the level of the subfield. This is because it underlies their subsequent ability to maintain their stools. In this regard, those who are able to wield the capital by admitting non-native land users and earning other forms of circulating economic capital (money) are considered more powerful. This has effectively, suppressed the power of the TAs of the resettlement communities. Besides this, the discussion shows that due to their experiences of resettlement and subsequent inability to claim outright ownership of their respective communal lands, the TAs of especially the Bui and Dokokyina resettlement communities, who were formerly landowners, have also become less powerful than their historical peers. This explains why their community members prefer to lodge complaints with the committee of Bongase when they experience a dispute with a native of Bongase over land, which is even located at the resettlement site. In addition to capitalizing on their institutionalized cultural capital for the above, the TAs of Bui and Carpenter are also using it to access the law courts and the media to compel the BPA to pay the withheld land compensations.

With respect to the TAs' providers, the descriptive analysis shows that the National House of Chiefs continue to employ its institutionalized cultural capital (legal mandate) and belongs to the field of public administration. Given the lawsuits by the TAs of Bui and Carpenter and the latter's resort to public announcements, the field of chieftaincy now has relations of exchange with the law courts and the media. In this regard, the law courts represent a linking social capital to the relevant TAs, because they depend on them to expedite their land access (Etzold 2013, 31). Conversely, the media represents a bridging social capital to the TA of Carpenter because of their shared interest and cooperation to expose the BPA (ibid). The research further conceptualizes that the law courts are part of the field of public administration while the media is part of an autonomous field. Following the descriptive analysis, they both employ institutionalized cultural capitals (legal mandates) as their primary capital (Bourdieu 1986, 247; Etzold 2013, 23). However the media additionally capitalizes on its audience, which may conceptually be related to a bridging social capital. Besides these, the TAs also rely on the newly established Land Dispute Resolution Committees, which the research conceptualizes to be socially part of the subfield of chieftaincy. As agents, the committees use their recognition by the TAs to expedite their work, which relates to an institutionalized cultural capital (Bourdieu 1986, 247; Etzold 2013, 23). Given this dependency, the research characterizes the relations between the TAs and the committees as a linking social capital (Etzold 2013, 31). Theoretically, these underscore the transformations in the capitals of the subfield of chieftaincy.

The subfield of arable farming: Following the descriptive analysis, it is deduced that the category of farmers has grown to include new non-native farmers, the transhumance herders, and the squatter fisher folks. Collectively, the farmers have habitus of the use value of land, which is to obtain high yields of the relevant crops to support their livelihoods. As explained, this is contingent on the habitus of the exchange and

territorial values of land, because the farmers aim to achieve it by accessing desirable (quantity and quality) areas and protecting their holdings from encroachment. The primary capital of the native and pre-existing non-native farmers is the leasehold interest that has been granted to them by the BPA based on their bonding social capital (citizenship of the respective communities). However, following their recent experiences of 'land scarcity' and consequent symbolic struggles, some have also assumed allodial titles by claiming outright ownership of land, which relate to a circulating economic capital. Relevantly, this new capital underlie their intensification of the habitus of the territorial value of land, which underlies their advanced social positions in the subfield. As Bourdieu implies, an agent's habitus portrays his/her social position in the field (1996, 17; 1989, 19). Besides this, other agents have also established customary tenancy agreements with fellow farmers who possess land. Principally, such arrangements involve payments of circulating economic capital (crops) to the 'landlords'. Likewise, the new non-native farmers employ customary tenancy agreements, which they obtain by spending circulating economic capitals to establish a linking social capital with some TAs.

The farmers still require 'strength' as a supplementary capital. While this still encompasses embodied cultural capital (physical capability and skill), bonding social capital (nuclear family members), and circulating economic capital (financial capability), their recent symbolic struggles have transformed the traditional connotations of these capitals. Hence, as discussed, physical embodied cultural capital is not about the ability to farm extensively under conditions of abundance, but about the ability to claim or possess lands by whatever means under the present conditions of shortage. The possession of an intrinsic embodied cultural capital (skill) is also not about having the knowledge of cultivating the traditional crops, but about having the knowledge of cultivating cashew trees and diversifying the traditional crops. Although bonding social capital is still relevant to the farmers' success, the discussion shows that the farmers additionally require other forms of social capital to advance their objectives. These include bridging social capital (membership of farmers and youth associations, and credit union) and linking social capital (relations with creditors, vendors, 'landlords', the UNDP, and even the Land Dispute Resolution Committees etc.). Similarly, the farmers require circulating economic capital (money) to advance their farmers. However, under the present conditions, they also require it to access available land in distance communities.

The power relations among the farmers of the respective communities and the entire subfield is still determined by their ability to transform the capitals above into a fixed economic capital (housing). Thus, natives and men are still considered more successful than non-natives and women respectively. However, among men, success is also still determined by the sizes of their bonding social capital (households). Although successful ones may consequently gain symbolic capital by possessing these, the research deduces that such achievements are regardless of the means of acquisition. In this regard, some farmers may have achieved success through violent takeovers and yet garner the respect of the communities. Of relevance too, the discussion shows that some farmers with symbolic capital are not as benevolent as Bourdieu argues in his thesis (2013, 299). As explained, this is due to the ongoing strife among them to achieve success with the limited resources at their disposal.

Regarding the farmers' providers, the discussion shows that besides the pre-existing ones – nuclear families, wage laborers, crop merchants, and creditors among others –, the subfield of arable farming now constitutes the farmers' associations, 'landlords', the industrial agro-processor, and the mortar carver whose activities are limited to its social and functional boundaries and hence are part of the broader subfield. However, the farmers' associations may also be conceptualized as part of the autonomous field of communal associations. As deduced, the primary capital of the farmers' associations is their bridging social capital, which is their membership (Etzold 2013, 31). The 'landlords' capital is the assumed circulating economic capital, which is their extra-legal allodial titles, while the industrial agro-processor and carver both employ their objectified and embodied cultural capitals, which respectively relate to their machinery/ tools and skills (Bourdieu 1983, 185; 1986, 244; 2004, 218 cited in Etzold 2013, 22). Relevantly, the relationship between the farmers and the respective associations, but also the industrial agro-processor and carver may be characterized as a bridging social capital due to their interdependence (Etzold 2013, 31). Conversely, their relations with the 'landlords' may be considered as a linking social capitals due to their characteristic dependence on them (ibid).

The other relevant providers whose participation has contributed to the transformations in the subfield include the Land Dispute Resolution Committees, the youth associations, credit union, the UNDP, the Banda District Department of Social Welfare and Community Development, the Assembly members of the Bongase and the Teselima Electoral Areas, the Bole District Forestry Commission, and the merchants of watermelons, charcoal, and timber. Concerning the Land Dispute Resolution Committees, the discussion above shows that they belong to the subfield of chieftaincy due to their membership and social activities. Thus, they underscore the relations of exchange between the subfields of arable farming and chieftaincy. As also explained, the committees' main capital is institutionalized cultural capital, which is the TAs' recognition (Bourdieu 1986, 247; Etzold 2013, 23). Like they have with the TAs, the farmers' relations with the committees may be described as a linking social capital due to their dependence on them for dispute resolution (Etzold 2013, 31). Although relevant to the subfield of arable farming, the youth associations and credit union are not socially and functionally limited to it. Thus, the research conceptualizes them as part of the autonomous field of communal associations. Based on the discussion, the primary capital of both associations is their bridging social capital, which is the respective membership (ibid). Accordingly, the farmers' relations with them may also be described as a bridging social capital (ibid).

The UNDP may also be conceptualized as part of the autonomous field of global development network. Its primary capital is its bridging social capital (human resource) and circulating economic capital (money). Given their benevolence to the farmers, the research characterizes its relationship with them as a linking social capital. Despite having the same relations with the farmers, the Banda District Department of Social Welfare and Community Development, the Assembly members of the relevant Electoral Areas, and the Bole District Forestry Commission conversely belong to the field of public administration due to their statutory foundations. Particularly, the first are part of the District Assembly structure. In this regard, they and the Bole District Forestry Commission employ institutionalized cultural capital (legal mandates) as their key capital (Bourdieu 1986, 247; Etzold 2013, 23). However, as also explained, some like the Assembly

members and the Bole District Forestry Commission are exercising this wrongfully. Lastly, the research deduces that the merchants of watermelon belong to the pre-existing field of subsistence crop commerce, while those of charcoal and timber may be assigned to the independent field of forest product commerce. In both fields, the research further deduces that the merchants employ their circulating economic capital (money) and objectified cultural capital (means of transportation) and have linking relations with the farmers due to their dependence on them to dispose of their products (Bourdieu 1986, 247; Etzold 2013, 23, 31).

The subfield of real estate: As described, the builders of the subfield of real estate have also grown to include the transhumance herders, squatter fisher folks, and illegal miners. Collectively, the builders' habitus are the use and exchange values of land, which respectively represent their quest to obtain preferable houses at preferable locations that expedite their senses of connection and security. For these, the primary capital of the builders of the resettlement communities is their leasehold interests, which they obtain from the BPA by virtue of their bonding social capital (citizenship) (Bourdieu 1986, 248; Etzold 2013, 31). However, as related, the TAs request for applications, which represents an objectified cultural capital, underlies a major transformation in the subfield (Bourdieu 1986, 246; Etzold 2013, 23). Per the BPA's statutory logic, all the other builders are required to spend circulating economic capital (money) to obtain a leasehold interest to lots. Yet, as discussed, those of Bongase and Gbolekame North access lots by employing the extinguished usufructuary interests. Likewise, the new non-natives and those of Carpenter employ the annulled customary tenancies through the TAs. Subsequently, these have contributed to the pluralism of the field's logic.

Like the farmers, the builders still require 'strength' to achieve their habitus. Depending on their housing preference, this still encompasses embodied cultural capital (physical capability and skill), social capital (social support networks), and circulating economic capital (financial capability). Although similar to the historical capitals, the descriptive analysis shows that the builders' social capital has been transformed by the recent events. Relevantly, those of Bongase now rely on the youth coalitions to expedite their access to lots. Theoretically, these coalitions represent a bridging social capital due to their cooperation for a mutual benefit (Etzold 2013, 31). In addition to this, the builders lend building materials to each other, which also represent a bridging social capital (ibid). To the Akanyakrom Roman Catholic, their dependence on the Bono Regional Peace Council also represents a linking social capital. Regardless of these transformations, the discussion shows that the builders still defined success by the type and size of housing. Consequently, those with bigger concrete blockhouses are deemed more successful. Considering their additional social capitals, the research conjectures that the builders of Bongase are more successful than those of the other communities because of their access to preferential locations and building materials.

Regarding their providers, the discussion shows that the subfield still constitutes the laborers and has relations of exchange with the vendors who operate in the field of hardware commerce. However, given the support of the youth association, the subfield of real estate currently has a relations of exchange with the conceptualized field of communal associations. As interpreted above, the youth association capitalizes on its bridging social capital, which is its membership to expedite its activities (Etzold 2013, 31). The

subfield has also developed relations of exchange with the Bono Regional Peace Council, which is mediating the ongoing dispute among the members of the Akanyakrom Roman Catholic Church. As a statutory body, the research conceptualizes that the Peace Council operates in the field of public administration and employs its institutionalized cultural capital, which is its legal mandate to expedite its role (Bourdieu 1986, 247; Etzold 2013, 23).

The subfield of pastoralism: The subfield of pastoralism has become an additional subfield in the recent field of land access due to the TAs' symbolic struggles. As related, the herders' collective habitus encompass the use value of land, which underlies their quest for nourishment for their cattle. For this, both the transhumance and nomads employ customary tenancy agreements, which they obtain from the TAs by expending circulating economic capital (cash and in-kind payments) to establish a linking social capital with them (Bourdieu 1983, 185; 1986, 244; 2004, 218 cited in Etzold 2013, 22, 31). In addition to these, the transhumance herders rely on their bonding (economically active sons) and bridging (caretakers) social capitals while the nomads employ their embodied cultural capital (physical capability and skill) to expedite their land access.

As deduced, the providers of the transhumance herders include the laborers, which are the economically active male family members and paid caretakers. Given that they are socially, spatially, and functionally limited to the subfield, the research situates them within the subfield of pastoralism. Relevantly, the laborers employ their embodied cultural capital (physical capability and skill) to tend to the herds. The research conceptualizes that the wage laborers have a bridging social capital with the transhumance herders due to their relations of exchange (Etzold 2013, 31). In this regard, they earn circulating economic capital (cash or in-kind payments) by rendering their services to the herders. Besides the laborers, the herders also rely on vendors of agrochemicals, who the research has already conceptualized as belonging to the autonomous field of agro-input commerce. As explained, the vendors use their products, which typify circulating economic capitals, to earn money, as another form of circulating economic capital from the herders. Their relations with the herders may also be characterized as a linking social capital due to the latter's dependence on them (ibid). Moreover, the transhumance herders also rely on the cattle market in Banda Nkwanta to trade their cattle. The research conceptualizes the market as part of the autonomous field of cattle commerce. The relations between the herders and the other patrons of the market may be characterized as a bridging social capital as it involves an exchange based on a mutual agreement (ibid). In this regard, they all exchange money and cattle, which both relate to circulating economic capital (Bourdieu 1983, 185; 1986, 244; 2004, 218 cited in Etzold 2013, 22).

Summary: The foregoing is theoretical interpretation of the transformations that have occurred in the agents' capitals in the respective subfields and the field of land access in general. Relevantly, it also underlies the transformations in the objective structure of relations among the agents. Based on this, the next section attempts to highlight the transformations that have also occurred in the recent field of power. As explained in the previous chapters, this field is the sphere where the powerful agents of the field struggle to gain symbolic power in order to systematize the logic, social differentiation, and struggles within the field.

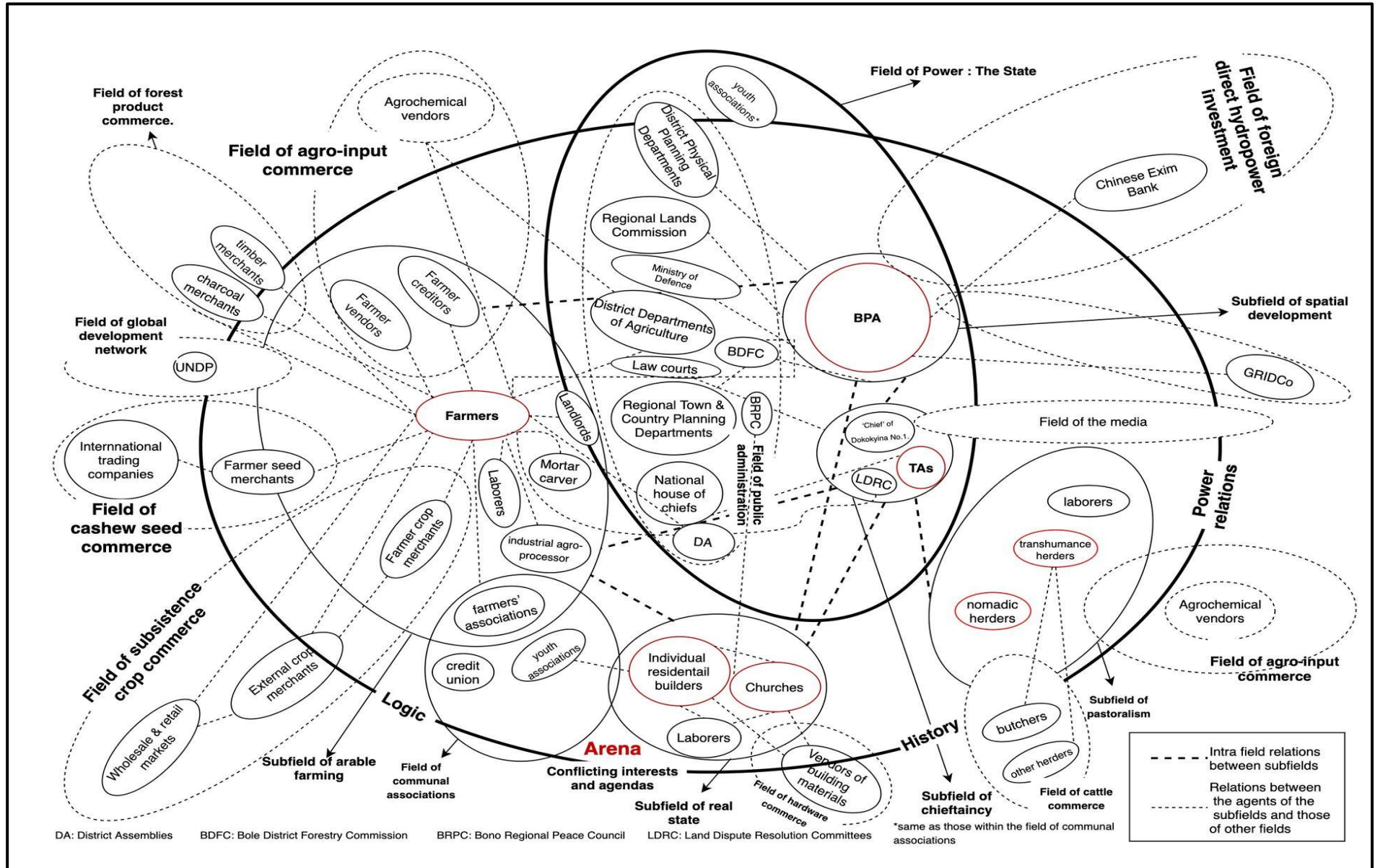
2.4.1.2 Transformations in the field of power of the recent field of land access

The research deduces that the field of power, which is the field of the State, has also been transformed by the recent events. As explained in Chapter 6, the recent field of power is host to the BPA and the TAs due to their collection of capitals and roles in the field of land access. However, following the TAs' symbolic struggles, the Land Dispute Resolution Committees have effectively become part of the field of power. Thus, in their capacity, they effect the logic most suitable to them when they mediate land disputes, which in turn determines people's primary access to land and the consequent social differentiation in the subfield of arable farming. The field of power presently also includes the illegitimate 'Chief' of Dokokyina No. 1 who has assumed an allodial title to some lands and is enforcing his own logic to facilitate the land access of his community and earn money from the unauthorized users living around it. Likewise, it includes the 'landlords' who have also assumed allodial titles and are granting access to other farmers based on their own established logics. Besides these, the field of power also constitutes the youth associations of the resettlement communities and Bongase who struggled with the BPA to secure land for the farmers and builders respectively.

From these primary transformations, the research deduces that the origin of power has also become diffused, encompassing not only the possession of an institutionalized cultural capital (legal mandate) as the BPA does, but also a social or economic capital, however obtained. Regarding especially the youth associations, the former, which relates to their membership, explains their power and ascent to the field of power. The latter also explains the rise of the 'Chief' of Dokokyina No. 1 and the 'landlords' to the field of power as it underlies their possession of illegal allodial titles. Consequently, the research shows that the new additions to the field of power are also enforcing certain principles most favorable to their own social positions, which conflict with the BPA's logic. Of relevance is also the TAs' stimulation of the subfield of pastoralism. The discussion shows that while the subfield of pastoralism was historically relegated to the others and recently misrecognized by the BPA, the TAs have capitalized on their symbolic capital to elevate it by giving the herders an open access to even cropped lands.

Based on the foregoing discussions, Figure 8.1 foregrounds the field of land access by showing the new subfield and relevant fields, but also the flows of exchange among them. As before, this diagram is simplistic and thus, excludes the agents' habitus and capitals, but also the field's logic, which structures them.

Figure 8.2: A diagrammatic representation of the transformations in the recent field of land access



Source: Author's construct (2021)

8.4 Summary of the chapter

In response to research question 'e (ii)', this chapter has shown that the agents' symbolic struggles, which were discussed in the previous chapter are not the final upshot, but have rather resulted in transformations in the frames of action that structure their social practices in the field. Thus, referring to the relevant research questions, the chapter has related the ongoing transformations associated with the systems of land access, the agents, and their power relations, which have all culminated in theoretical interpretations of their implications for the recent field of land access. Rather than being the ultimate outcome, the research conjectures that the societal transformations may also launch new social practices as they pertain to changes in the agents' habitūs, capitals, and the field's logic. Given this, the research conjectures that the bearing of the field of land access is cyclical, which underscores its changeability and/or reproduction. Relevantly, the foregoing shows the manner in which the Bui Dam has unsettled the field of land access by engendering 'land scarcity', symbolic struggles, and societal transformations in the study area. Thus, to round off the discussion, the next chapter presents the highlights of the research to emphasize the profundity of the 'land scarcity' problem around large dams. Based on this, the chapter invariably underlines the reasons behind the failure of especially land-for-land resettlement strategies and make key recommendations for policy and further studies on the livelihoods of dam-affected populations.

CHAPTER 9: CONCLUSIONS AND FUTURE PERSPECTIVES

9.1 Introduction

Thus far, the research has attempted to provide a causal explanation of the incidence of 'land scarcity' around Ghana's Bui Dam and its implications for societal transformation. Towards this objective, it has taken recourse to emerging discourses on the social construction of land scarcity to explain the prevalence of the phenomenon in the study communities despite the dam's implementation of a land for land resettlement strategy. In this regard, the research has argued that the idea of land scarcity transcends a mere physical unavailability, but is about the failure to achieve socially constructed land values or expected benefits from land. Consequently, it has inferred from Davy to identify four key land values, including territorial, environmental/ existence, exchange, and use, which correspond with social constructions of territorial, environmental, locational, and capability scarcities (2016, 135). Considering the denotation of 'land scarcity', the research has also inferred from Ribot and Peluso to submit the concept of 'land access' as its antithesis, which explains the ability to achieve expected benefits from land (land values) with property rights and other structural and relational mechanisms (2003, 155). Davy underscores that the social construction of land values are contingent on land rights and involves political processes and asymmetric power relations among differently positioned agents (2016, 138, 142). Relevantly, conceptions of land values underlie differentiated strategies undertaken with certain mechanisms towards their achievement, the failure of which results in social constructions of 'land scarcity'.

From these underpinnings, the research has expedited the problematization of 'land scarcity' by employing Bourdieu's *Theory of Practice* to deconstruct the underlying factors. Consequently, it has harnessed his concepts of habitus, capital, social space (including field and logic), and social practices to respectively explain land values, mechanisms of land access and hence, power and power relations, land tenure, which defines land rights, and strategies of land access. Specifically, it has characterized habitus, capital, and logic as the frames of action of the relevant fields that underlie social practices and hence, social constructions of 'land access' and 'land scarcity'. Besides these, the research has adopted Bourdieu's concept of symbolic struggles to explain the strategic responses that are naturally triggered when expectations are frustrated. This has expedited its conceptualization of societal transformation or changes in the frames of action as the outcome of 'land scarcity'. Ultimately, the above has resulted in the research's theoretical framework, which has effectively guided the analyses of data towards the achievement of its objective.

Based on this, the research has engaged in a detailed analysis of the communities' historical experiences as the keyhole to understanding their recent experiences of 'land access' and 'land scarcity' in the wake of the dam construction. Following their recent experiences, the research has also discussed their symbolic struggles and subsequently, the societal transformations that have been triggered by them. This chapter culminates the research by highlighting its key findings to show how they have addressed the main question, which is '*To what extent has the Bui Dam engendered 'land scarcity' in its immediate communities and how and with which demarcations is this process causing societal transformation?*' Besides underscoring the significance of the research to knowledge and resettlement policy and practice, the highlights will serve as

the springboard for making relevant recommendations. Accordingly, the immediate section focuses on the highlights of the findings, while the succeeding section reflects on them to discuss the general implications of the research. These are followed by sections on key recommendations and final remark.

9.2 Highlights of the research's key findings

This section provides key insights into how the research has addressed its main question, which encompasses a causal explanation of the incidence of 'land scarcity' around the Bui Dam and its implications for societal transformation. Given the question's duality, the section discusses the research findings under two corresponding sub-sections. Of relevance, the sections bound up the discussions with the research's theoretical interpretations to deepen understanding of how the main research question has been addressed.

9.2.1 A causal explanation of the incidence of 'land scarcity' around the Bui Dam

Following the main question, the research has shown that the Bui Dam has engendered 'land scarcity' in the study communities in various ways. Inferring from relevant literatures, which as reported in Chapter 2, have attempted to explain the failure of resettlement programs in general (including: M. Cernea 1997; de Wet 2004; Scudder 2005), this section characterizes these 'ways' as regulative and administrative encumbrances, imposition of spatial changes, and changes in patterns of access to resources. In addition to expediting the causal explanation of how the Bui Dam has engendered 'land scarcity' in the study communities, these characterizations provide the scope for grounding the general implications of the research findings. Although they subsequently form the themes of the sub-sections, the corresponding discussions relate their implications for the varied habitus (land values), capitals (and the stake), and logic which amount to the frames of action that expedite the agents' social practices. Thus, they also invariably relate the implications for social practices, and hence, the agents' social constructions of 'land scarcity'.

9.2.1.1 Regulative and administrative encumbrances

The research shows that the Bui Dam has engendered 'land scarcity' in the focal communities through its accompanying regulative and administrative impositions. To expedite its construction, the State primarily exercised eminent domain on the basis of the 1992 Constitution and other pertinent legislations, which annulled the land rights of the pre-existing agents of the communities, including the chieftains, farmers, and builders. Subsequently, per the BPA Act 740 (2007), it entrusted the acquired land to the Bui Power Authority (BPA) to oversee the dam construction and its subsequent management. The research shows that while the fields of land access were historically distinguishable by the respective landowning communities, the land take and the administrative oversight of the BPA subsumed them into one. They also changed the pre-existing power relations of the field by conferring the BPA with symbolic power. This entailed a dissolution of the allodial titles of the historical landowning chieftains and their abasement to mere titular rulers. Accordingly, the chieftains and the entire bodies of the respective traditional authorities (TAs) were

deprived of the ability to transfer land and earn circulating economic capital (money) to maintain their stools. This has affected their achievement of the habitus of the territorial value of land (symbolic power). Thus, despite the availability of land, the Bui Dam has engendered spatial power scarcity to the historical landowning TAs, which denotes a loss of territorial sovereignty or a dysfunction of absolute land rights.

Besides the TAs, the impositions have also affected the land access of farmers by restricting their historically unfettered use rights. As explained, the farmers' historical use rights gave them an open access to land without restrictions to the extent, period of use or occupation, and purpose. However, following the BPA's administrative oversight and new logic (land tenure system), farmers have been limited to areas demarcated for farming with leasehold interests, which only span fifty years. They have also been proscribed against cultivating perennial crops, including cashew trees on a large scale. Thus, although land is physically available in some areas, the BPA's restriction of the farmers' open access has relevantly affected their achievement of the collective habitus of the territorial and exchange values of land, which relate to their ability to claim extensive lands and access areas with desirable properties. The restrictions to their cultivation of perennial crops have also impeded their social practice of cashew farming, which has particularly become desirable following the Bui Dam' debilitating effects on the stake and the proliferating market for cashew seeds. All these have combined to undermine the farmers' ultimate achievement of the use value of land, which has resulted in their social construction of capability scarcity or the lack of capability to obtain high yields of the desirable crops.

To the builders, the impositions have also restricted their historical open access to lots. As related, the BPA's logic encompasses certain imposed charges, which have generally affected the abilities of some builders to acquire building lots. As the logic also involves the BPA's imposed land use plan, it has affected the builders' freedom to access lots with desirable locational properties. Although the individual builders of the resettlement communities of Bui, Dokokyina, and Akanyakrom are exempted from these charges, the imposed demarcations have also had the same effects on them. Likewise, the proscriptions against mud and thatch grass houses have affected their freedom to build preferable houses. Thus, although lots are also physically available, the builders have generally been unable to achieve their collective habitus of the exchange and use values of land, which relate to their access to desirable land and ability to acquire preferable shelter. This has in turn engendered social constructions of locational and capability scarcities.

Besides these agents, the research conjectures that the BPA's misrecognition of pastoralism as a viable land use has engendered capability scarcity to the herders by restricting their access to land and fodder. In addition to the regulative and administrative encumbrances, the research shows that the Bui Dam has caused spatial changes in the area, which has contributed to the incidence of 'land scarcity'. The next section presents the related highlights.

9.2.1.2 Imposed spatial changes

The Bui Dam construction, which embodies a key aspect of the BPA's social practice has induced spatial changes in the focal communities through physical violence, contributing to the incidence of 'land scarcity'.

With its symbolic power, the BPA's construction of the dam, together with its reservoir and some facilities resulted in the physical and economic displacement of the Bui, Dokokyina, and Akanyakrom communities, which were subsequently relocated near Bongase. The inundation, but also the physical resettlement of the communities above caused the physical and economic displacement of some farmers in Bongase, who subsequently shifted their activities to the remaining land sanctioned by the BPA for farming. Moreover, the erection of transmission towers to transport the generated electricity and the planned solar farm displaced the farmers of Carpenter physically and economically from their farmlands, forcing them to settle for a thin strip of land within the community for farming. Besides the farmers, these spatial rearrangements have had consequences on some TAs and the builders and contributed to their social constructions of 'land scarcity'.

Regarding the historical landowning TAs of Bui and Dokokyina, the research shows that the resettlement of their respective communities has led to their social marginalization or loss of social statuses. As explained, this is especially due to the abated perception of the Bongase community about their power over the lands of the resettlement site, which has affected the TAs' achievement of their habitus of the territorial value of land. This has in turn resulted in their social construction of spatial power scarcity, which also relates to an impaired symbolic power. The resettlement of the Bui community farther from the reservoir has also affected the spatial power of TAs over it and their ability to earn circulating economic capital (in cash and kind) from it by facilitating its access by non-native fisher folks. Inferring from Chapter 7, this has particularly become an issue following the exploitation of the reservoir by the TAs of Bongase (and the Banda Paramountcy) to undergird their symbolic power in recent years. To the Bui TAs, this loss of control has additionally underlay their social construction of spatial power scarcity. Impliedly, although land is physically available, the physical resettlement has further robbed the Bui and Dokokyina TAs of their symbolic powers, which has in turn, given rise to their social constructions of 'land scarcity'.

To the farmers of the respective communities, the imposed spatial changes have also limited the extent of land at their disposal. With respect to the Dokokyina community, their displacement and resettlement have separated them from the unaffected vast lands available at the former settlement. Although the BPA has allocated farmlands to the community, but also to the Bui and Akanyakrom communities, which were also physically displaced, the farmlands are reportedly smaller and relatively less productive, which limits their farming practices. Moreover, the joint resettlement of the communities (also with the staff of the Wildlife Division) has resulted in a larger settlement, which has further limited the availability of farmlands. Coupled with this is the displacement and resettlement of the Akanyakrom fishing community from the water body. The research shows that these have compelled the members to shift their economic activity to farming, which has contributed to the pressure on available farmlands. Regarding the farmers of the Bongase and Carpenter communities, the research also shows that their respective displacements have pushed them to less desirable lands, where the pressure of the influxes is also affecting availability. All the cases show that the spatial rearrangements have reduced the farmers' access to land with desirable quantities and qualities that support their traditional social practices. In hindsight, the inadequacy of the land is particularly due to the communities' extensive farming practices and affinity for cultivating yams,

which reportedly require pristine and extensive lands to be productive and profitable. It is also due to their recent desire to cultivate cashew trees, which also require extensive lands to be profitable. Thus, the lands' inadequacy has debilitated their achievement of the *habitus* of the territorial and exchange values of land, and ultimately, the use value of land. This has contributed to the farmers' social construction of capability scarcity or a lack of capability to obtain the expected yields of the relevant crops.

To the builders, the spatial rearrangements also entail the BPA's land use plans, which as earlier explained, have inhibited their access to lots with desirable locational properties. This has incapacitated their achievement of the *habitus* of the exchange and use values of land and hence, underlie their social constructions of locational and capability scarcities. Relevantly, the above also underscore changes in the patterns of access to resources, which besides the stake, land, include other capitals that are important to the agents' land access. The next section outlines these changes and how they underlie the incidence of 'land scarcity' in the study communities.

9.2.1.3 Changes in patterns of access to resources

The foregoing discussions imply that the Bui Dam has changed pre-existing patterns of access to land. Besides land, the research also shows that it has changed the patterns of access to other resources, including social and economic capitals, which has contributed to the prevalence of 'land scarcity' among particularly, the historical landowning traditional authorities (TAs), farmers, and builders. As discussed above, the dam's accompanying logic has repealed the allodial titles of the TAs and hence, their ability to earn from land, resulting in their social constructions of spatial power scarcity. However, besides the logic, the Bui Dam construction has also led to the destruction of forests, which constituted certain trees of cosmological value to the TAs. Relevantly, this effect underscores the BPA's symbolic power and the eminence of its *habitus* of the use value of land over the TAs' collective *habitus* of the environmental value of land. Consequently, the dam construction has resulted in social constructions of ecological scarcity among the TAs, which relates to their inability to access the trees for cosmological purposes. In addition to the loss of their allodial titles and the sacred trees, the research also shows that the TAs are yet to receive financial compensations for the acquired land. As reported, an ongoing dispute over boundaries between some chieftains has hampered the release of the block payment for distribution. Coupled with their powerlessness to transfer land, this has affected the TAs' ability to maintain their respective stools and contribute to their social constructions of spatial power scarcity.

To the farmers, the discussions above also show that the Bui Dam has affected their access to desirable quantities and qualities of land through its consequent physical violence, but also the restrictions of the logic. Besides this, the research shows that the dam has also affected the farmers' access to social and economic capital, which has affected their ability to obtain the expected benefits from land. Regarding the former, it is deduced that the limitations caused by the dam on the availability of land have resulted in an unequal distribution, which has disarticulated the pre-existing networks of social support by reducing them into sets of economic relationships. Consequently, while the farmers could historically rely on their social networks for free labor and agro-inputs, they presently have to pay for them. In addition to this, the

research shows that the farmers have been unable to earn as much circulating economic capital (money) from their farms as they did historically due to the limited sizes of the farmlands and their less productive soil qualities. Thus, many of them have also been unable to access labor and other inputs to support their land access. Moreover, while all the farmers reported that the crop compensations were inadequate, the research shows that the members of Akanyakrom were particularly disadvantaged by their historically smaller farms. The members of Gbolekame North were also left out of the compensation although they lost their alluvial plain farms and fishing equipment to the fluvial flooding. As related, both communities were also disadvantaged by their lesser agro-inputs. Thus, their efforts to access land for farming have been generally impaired by these. In addition to their social and economic capitals, the research also deduces that the limited lands and the proliferating cashew industry have necessitated new farming skills, which most farmers lack to expedite their land access. These include the skill of cashew cultivation (either by monoculture or polyculture), but also the skill of cultivating other suitable non-traditional crops, such as watermelons, dealing with pests and diseases, and applying fertilizers expediently. Ultimately, these changes have contributed to the farmers' inability to achieve their collective habitus of the use value of land, which also underscores their social construction of capability scarcity.

With respect to the builders, the research shows that the Bui Dam has generally affected their access to lots through the restrictions of the logic, including the charges and land use plan. Besides this, the dam has also affected their access to social and economic capitals, which historically expedited their acquisition of lots and the construction of houses. Illustratively, the consequences of the dam on farmlands have affected the native builders' access to free social capital, which supported their extraction of locally available building materials. Thus, presently, they have to hire laborers for the task. As related above, this has also become challenging because of the effects of the limited farmlands on earnings. Besides affecting their access to labor, the builders' limited earnings have also affected their ability to purchase other vended building materials, and ultimately their access to lots. Together, these have affected their achievement of the habitus of the use value of land, which contributes to their social construction of capability scarcity.

9.2.1.4 Other key highlights

Fundamentally, the above highlights encapsulate the causal explanation of how the Bui Dam has engendered 'land scarcity' in the study communities. Although the factors above were perpetuated by the BPA, the research shows that it has not been immune to 'land scarcity'. As explained, the BPA's failure to maintain the demarcated land uses of the stake and enforce certain proscriptions of the logic have led to encroachments on restricted areas and widespread cashew cultivation, which have affected its access to certain areas for immediate use. In this regard, the BPA has failed to achieve its habitus of the territorial and use values of land, which underlie social constructions of spatial power and capability scarcity. In addition to these, the research also shows that the knock-on social practices of some traditional authorities and farmers, including their extra-legal assumption of ownership and control have threatened the BPA's achievement of its habitus of the territorial value of land, which has contributed to its social construction of spatial power scarcity. Likewise, the Bongase and resettlement communities' defiant access to lots and

the construction of banned houses respectively contribute to the BPA's social construction of spatial power and capability scarcities. Following the theoretical framework, the research also shows that the agents' social constructions of 'land scarcity' have incited their adoption of certain symbolic struggles, which have in turn spurred processes of societal transformation in the study area. The next section presents some key highlights of these as a yardstick to the research's response to the second part of its main question, which relates to the implications of 'land scarcity' for societal transformation.

9.2.2 A causal explanation of the implications of 'land scarcity' for societal transformation

The research shows that the agents' social constructions of 'land scarcity' have underlain certain symbolic struggles towards the achievement of the respective habitus. Key among these symbolic struggles are some traditional authorities (TAs), farmers, and builders' resort to the revoked customary logic (tenure system) to access land. Regarding the TAs, the research shows that except those of the resettlement communities, the others have consequently created property markets that are parallel to the BPA's and facilitate land transfers to non-native commercial fisher folks and herders for money. The Bui TAs have conversely resorted to the law courts to compel the BPA to pay the land compensation. Likewise, the TAs of Carpenter have resorted to legal counsel and the media to compel the BPA to compensate them for the sacred trees affected by the upcoming solar farm.

In addition to invoking the repealed customary logic to support their unfettered access to land, the research shows that the farmers are also undertaking other symbolic struggles to augment their land access. Generally, their limited access to land has affected their ability to practice shifting cultivation and driven them to adopt crop rotation, increase the use of agrochemicals, and adopt new application methods. It has also stimulated their involvement and dependence on the wider political and economic environment through an increasing cashew cultivation, the introduction of non-traditional crops, the formation of associations, and connections with the local government structures. In this regard, the planned demonstration by the resettlement youth associations against the BPA resulted in their authorized access to the lands at the former Dokokyina settlement. Conversely, through their connections with the Banda District Assembly, a newly-formed farmers' association in Bongase has successfully received support from the UNDP. Besides these, some farmers have become creditors and vendors to fill the input gap and augment their land access, while others have become industrial agro-processors, laborers, and charcoal and timber producers. Invariably, the social practices of the charcoal and timber producers underlie the increasing deforestation of some areas, which contribute to the disintegration of existing cultural values and integrity regarding the preservation of sacred trees for cosmological purposes.

With respect to the builders, the research shows that most of them are undertaking some of the symbolic struggles above to earn money for their housing objectives. Of relevance is however, some builders' resort to the annulled customary logic to access land. Among them are the resettlement communities' resistance to the BPA's ban against certain housing types and the Bongase youths' revolt against the BPA's attacks on builders who have illegally accessed lots. Also relevant is the Akanyakrom Roman Catholic Church's resort

to the Bono Regional Peace Council to resolve an issue concerning the money needed to purchase a lot from the BPA for its chapel. Besides these pre-existing agents, the research shows that the BPA is also undertaking certain symbolic struggles to augment its land access. These include its belligerent displacements of squatters and other illegal land users, its use of militarization and frequent policing, but also expressions of territoriality to curb encroachments.

As mentioned, the agents' symbolic struggles have spurred societal transformation in the study area by further modifying the recent qualities of land and creating new property regimes, agents, networks, and power relations. The sub-sections highlight these transformations to underscore the research's response to the implications of 'land scarcity' for societal transformation. As before, the sub-sections bound up the discussions with the theoretical framework to deepen understanding of the relevant issues.

9.2.2.1 New qualities and social constructions of the stake

The research shows that although the BPA's social practices affected the availability of the stake, the other agents' symbolic struggles in respect of their social constructions of 'land scarcity' have further reduced it. These include some TAs' acceptance of herders, whose consequent open access to land and frequent bush fires have affected the land access of farmers. They also include the farmers' increasing cashew cultivation, which though relatively profitable, has limited their access to the stake for cultivating subsistence crops. Besides affecting the extent of the stake, the research also shows that the farmers' increasing practice of crop rotation and improper use of agrochemicals, but also the unrestrained use by herders have reduced the productivity of the soil. The TAs' recent property markets, including the authorization of logging by some, have conversely made the stake fungible. Relevantly, the research shows that the TAs' establishment of property markets and their commercialization of the stake and sacred trees have underlain a new habitus, which relates to the use value of land. As conjectured, these underlie cultural disarticulation, because they embody a disintegration of the communities' cultural values and integrity in respect of preserving the stake and its elements to support the stool and native cosmologies. The research also shows that the farmers' cultivation of cashew trees has legitimized their land ownership, which underscores the evolvement of their habitus of the territorial value of land. This has resulted in the creation of new enclosures and territorializations, which differ from the BPA's sanctioned benefits of leasehold interests. Ultimately, these new qualities and habitus partly demonstrate the ongoing implications of 'land scarcity' for societal transformation in the study area.

9.2.2.2 New property regimes

The research also show that some agents' resort to the annulled customary logic has resulted in a pluralistic logic and jurisdictional ambiguities. This has given rise to new ways of claiming land, which challenges the BPA's spatial power. As deduced, these include extra-legal means such as the practices of some TAs, which suggest outright claims of ownership and functional overlaps regarding land transfers. The farmers' increasing cultivation of cashew trees also legitimizes outright ownership, which is extra-legal and differs from both the historical and recent latitudes guaranteed for farming. The extra-legal means also include

some builders' reference to the historical customary logic to access lots and build preferable houses. In addition to these, the use of violent means by some farmers and builders to encroach on land also underscores their incorporation of new schemes, which contributes to the logic's current pluralism and the societal transformation occurring in the study area.

9.2.2.3 New agents, networks, and power relations

The symbolic struggles have transformed the composition of the relevant agents. As deduced, the TAs' symbolic struggles have introduced squatter fisher folks and herders as new primary land users involved in farming and building. They have also ushered in the law courts and media as supporting agents. The farmers' symbolic struggles have integrated the local government structure, UNDP, Land Dispute Resolution Committees, an industrial agro-processor, youth and farmers' associations, and a credit union as supporting agents. Likewise, some builders' symbolic struggle has brought in the Bono Regional Peace Council as a supporting agent. Regarding the BPA, the research shows that its quest to secure the liminal properties of the acquired territory has effectively resulted in the participation of the military and police. Besides highlighting the new agents of land access, these also show that the agents' symbolic struggles to 'land scarcity' have resulted in new networks of exchange.

The symbolic struggles have also transformed the attributes of power among some categories of agents. Among the TAs, the research shows that the ability to transfer land in the current situation to maintain the respective stools has become a major determinant of power and influence. Thus, the TAs of Bongase, Carpenter, and the Bian Clan Head have become more powerful than the others due to their ability to admit non-native fisher folks and herders to the water bodies and available land within their jurisdictions. This has also underlain the stereotyping and marginalization of the Bui and Dokokyina TAs by especially the Bongase community. Also among the farmers, the current determinant of power is the ability to claim or possess lands by whatever means under the present conditions of shortage. It is also about possessing the skill of cultivating cashew and other non-traditional crops, and having a strong social capital, including membership of a farmers and/ or youth association, good relations with creditors, vendors, the Land Dispute Resolution Committees, and even the UNDP. Ultimately, these underlie the possessor's ability to own large cashew farms and build distinguishable houses, which give him/her a symbolic capital.

At the higher level, the agents' symbolic struggles have also transformed their power relations. As related above, the BPA's imposed logic and capitals primarily upset the existing traditional organizations and power relations by giving it the symbolic power over the historical landowning TAs. By elevating the historically non-landowning chieftains of Akanyakrom to intermediaries of land access, the BPA has incited animosities between them and their historical host and landowner, the Bui TAs. Besides these, the symbolic struggles of the Dokokyina No. 1 community, including the assumption of an extra-legal allodial title, has given its self-acclaimed 'Chief' some form of symbolic power, with which he has imposed symbolic violence on the community. Likewise, through violent means among others, some farmers have gained symbolic power by acquiring tracts of land, which they give out to other farmers on share-cropping arrangements based on their own schemes. The leaders of some youth associations have also gained

symbolic power with the support of their members. Relevantly, their increasing power and recognition in the communities challenges those of the TAs, who were historically venerated for their socio-political and socio-cultural authority. As explained, these new arrangements also underlie the societal transformation occurring in the area.

The above societal transformations show that the incidence of 'land scarcity' has not been the end result of the Bui Dam construction. Although the transformations are presented as the outcome, the research infers from Bourdieu and Wacquant (1992, 99), but also Peluso and Lund (2011) to conjecture that like other cases, the agents' evolving habitus and capitals (and power relations), but also the new logic may underlie further transformations in their social practices, which may yet produce new social constructions of 'land access' and 'land scarcity', and hence symbolic struggles and other forms of societal transformation. Given these, the research considers the situation as processual and cyclical with implications for the general characteristics of the locality and the livelihoods of the populace. Ultimately, the highlights above show that the research has effectively answered its main question by providing a casual explanation of the incidence of 'land scarcity' around the Bui Dam and its implications for societal transformation. Based on these, the next section discusses the research's implications.

9.3 Implications of the findings

Contextually, this research was limited to providing a causal explanation of the incidence of 'land scarcity' around the Bui Dam and its implications for societal transformation. As explained in Chapters 1 and 3, this interest was fundamentally encouraged by the prevalence of the problem regardless of the implementation of the touted land-for-land resettlement strategy. Thus, by uncovering the underlying reasons of the problem and its outcomes, the research has satisfied a personal curiosity. Relevantly, its findings also have disciplinary, methodological, policy and practical implications, which this section discusses in sequence.

9.3.1 Disciplinary implications

The research has fundamentally contributed to Human Geography through its application of the emergent discourse on 'land scarcity', Bourdieu's *Theory of Practice*, and focus on dam-induced displacement and resettlement. Pertinently, it is one of the few studies, such as those conducted by Gausset (2005) and Mehta (2003; 2007) that have empirically applied the fledgling argumentation on the social construction of 'land scarcity'. Thus, with its findings, the research has substantiated the conception and hence contributed to its advancement in Human Geography and other relevant fields, including Development Planning. Regarding Bourdieu's *Theory of Practice*, the research has effectively joined a host of others that have recently applied it to empirical studies on livelihoods in various contexts (see: Etzold 2013; Sakdapolrak 2014). Like them, the research's recourse to the theory stemmed from its inclination to a social theory that ontologically grounds practice by emphasizing the co-construction of structure and agency and encapsulating all relevant material and immaterial elements and arrangements that underlie social reality (Everts et al. 2011).

Accordingly, it has underlined the implications of the frames of action – including habitus (land values), capital (and power), and logic – for social practice and its consequences on experiences, but also on the reproduction and/or transformation of the frames of action. By this, the research has validated the theory's expediency for applied and explanatory research on livelihoods in general. Moreover, its use of the theory to particularly deconstruct the incidence of 'land scarcity' and its implications is fairly inventive and lays the foundation for related studies in the relevant fields. Also noteworthy, the research has uncovered a shortfall in Bourdieu's conception of capital, which is his omission of environmental factors that may contribute as properties or inputs to the acquirement of the profits of a relevant field. Subsequently, its conception of environmental capital is registered as an important contribution to the theory.

On dam-induced displacement and resettlement, the research's results have added on to a multitude of works that have sought to chronicle related incidences worldwide (see: M. M. Cernea 1997; McDonald-Wilmsen and Webber 2010; Oliver-Smith 2001; Stanley 2004). Of significance, it has supplemented studies conducted by Cernea (1997) and Terminski (2015) among others, which underline the preeminence of 'land scarcity' to the risk of impoverishment associated with development-induced displacements and resettlements. As related, such impoverishment risks include homelessness, food insecurity, social and cultural disarticulation, marginalization and so forth (M. Cernea 1997). However, unlike these previous studies, the research has revolutionized the debate by drawing attention to the problem as a social construction. By this, it has aptly redirected the focus from a strict physical and economic characteristic, which has subsequently accounted for how 'land scarcity' underlies non-economic risks such social and cultural disarticulation. Additionally, its extended focus on the implications for societal transformation has closed in the discourse by illustrating the problem's consequences on existing frames of action.

9.3.2 Methodological implications

Methodologically, the research has foregrounded the advantage of adopting critical realism (CR) as a paradigm to study a phenomenon that encapsulates both structure and agency. Having premised on the ontology of land and 'land scarcity' as a social construction, the research's adoption of CR has expedited its achievement of the objective by providing deeper insights into the incidence of the problem and its implications without reducing them to mere cognitive processes nor events. In this regard, CR has reinforced the research's application of Bourdieu's *Theory of Practice* by epistemologically guiding its consideration of subjective meanings, but also independent entities (frames of action) and actual events that are the objects of meanings and interpretations. By this, CR has further enlivened the research's eventual ontology by underscoring the emergent, relational and transformational characteristics underlying the incidence of 'land scarcity' and its implications in a given context.

Coupled with the above, the research has also substantiated the usefulness of Situational Analysis (in the interpretive turn) (SA) as an approach for studying complex phenomena. In lieu of the Grounded Theory approach, the research's adoption of SA has sustained the application of CR and Bourdieu's *Theory of Practice* as the paradigm and social theory respectively. Like them, SA has enabled the research to account for the enduring arrangements and relationalities among different material and immaterial objects that

underlay the incidence of 'land scarcity' and its implications in the study area. These included the frames of action aforementioned, but also other non-human objects such as the dam, its facilities, and cashew seeds among others. It has also enabled the research to incorporate the varied accounts of its participants, as well as acknowledge the volatility of power relations and the social context as a whole. Relevantly, SA has also underscored the embeddedness of all the pertinent elements in the broader socio-cultural, economic, and political situation, which has enabled the research to draw in other fields that appeared irrelevant but were consequential to the incidence of 'land scarcity' and societal transformation in the study area.

The research's use of qualitative instruments for data collection also expedited its acquisition of data encompassing a wide range of cross-cutting issues that were relevant to achieving its objective. Particularly, its use of resource and social mapping and transect walks at the preliminary stages was prudent, because it provided a foreknowledge of the problem and guided the adjustments for the main fieldwork, which subsequently expedited the acquirement of useful data. In this regard, the research's subsequent adoption of other instruments, including semi-structured interviews, FGDs, and participant observation facilitated the accumulation of data on the participants' experiences. These divulged their habitus and capitals, the logic, and their resultant social practices through the six-stage explanatory model proposed by Danermark et al. for conducting social science research from the perspective of CR (2002, 74).

9.3.3 Policy and practical implications

The research findings have shown that 'land scarcity' is indeed contrived, because it concerns the achievement of certain land-related values rather than a mere physical unavailability. Thus, although land may physically exist, its failing to satisfy the expected benefits of patrons may result in their social constructions of 'land scarcity'. As related, such failure may be related to the land's poor soil quality, the patrons' lack of property rights and other important inputs to access the expected benefits, and inadequate or unresponsive tenure systems to facilitate and secure access among others. For policy and practice, this empirical finding is eye-opening, because it sets the stage for correcting the widespread yet amorphous strategies on involuntary resettlement. Particularly, these relate to the international, regional, and national policies that promote general land-for-land resettlement strategies without underlining the need to tailor responses to the intricate meanings and values of land to the categories of affected people. Accordingly, the research demonstrates that mere land allocations are inadequate without attempts to address the social, cultural, political, and economic consequences that invariably affect land access and livelihoods in general. With this in mind, the next broad section outlines the research's recommendations for policy and practice, but also for further studies.

9.4 Recommendations

The research findings show that 'land scarcity' prevails around the Bui Dam regardless of its implementation of a land-for-land resettlement strategy. As is the case of other dam projects, the strategy was primarily aimed at curbing the problem to restore the agrarian livelihoods of the affected communities.

Given this, the prevalence of the problem makes the strategy seem like a performative action or made for show. Thus, considering the unabated construction of large dams, including Ghana's upcoming Pwalugu multipurpose dam, the research infers from its findings to submit the following as helpful suggestions for policy and practice to prevent 'land scarcity' around existing and planned large dams. Subsequently, it presents recommendations for further studies.

9.4.1 Recommendations for policy and practice

9.4.1.1 Legislative and policy reforms on land expropriation and resettlement

The research shows that the land expropriation and Resettlement Planning Framework (RPF) for the Bui Dam were based on the World Bank's Operational Policy on Involuntary Resettlement (OP 4.12) and Ghana's domestic regulations. The latter included the Constitution (1992), the Land Title Registration Act (1986), the State Lands Act (1962), the Administration of Lands Act (1962), the State Property and Contracts Act (1960), and the Public Conveyancing Act (1965). Following its findings on how the imposed legislations primarily activated 'land scarcity' in the area, the research conjectures that the prevention and/or solution to the problem should begin with legislative and policy reforms on land expropriation and resettlement. In this regard, it infers from the established Minerals and Mining Act 703 (2006) to recommend a specific law for the construction of dams and other infrastructures. Among other things, the law should encompass the conditions of land expropriation and the timeframe for compensation payments to restrain the State, developer, or managing authority from taking undue liberties by ignoring crucial responsibilities. The law should also contain clauses that allow the affected populations to retain an independent valuator who would negotiate in their behalf towards acceptable compensation rates. Of relevance too, the law should deviate from the extant laws of the country by requiring the collaborative participation of the affected population. This will expedite their contribution to resettlement decisions and implementation. Besides the law, the State should develop a national involuntary resettlement policy, which would encompass best practices for resettlement, including requirements of ESIA and the incorporation of downstream and host communities in resettlement considerations. It is believed that the above would guide dam and other development-induced land takes and resettlement practices in a manner that reduces the incidence of 'land scarcity' and other adverse impacts on the livelihoods of host communities.

9.4.1.2 Rationalize resettlement planning and implementation

Inferring from the inadequacies of the land allocations and the relocation of some communities to undesirable locations, the research conjectures that a revamp of the usual resettlement planning approach would contribute to attenuating the incidence of 'land scarcity' in host communities. Primarily, this recommendation also alludes to the usefulness of collaborative participation, which though recommended by the firm that carried out the ESIA and designed the RPF for the Bui Dam, was somehow ignored by the BPA (Hensengerth 2018, 18). Accordingly, an effective resettlement approach should include a comprehensive needs assessment that facilitates the identification of pertinent issues encompassing

gender, human rights, culture, affiliations, and the power relations at stake within the 'social situation'. These would include conspicuous issues, but also obscure sociological ones, which invariably influence the routine lifestyles of the affected people. They would also include social, economic, cultural, and political issues that are ongoing in the larger context but have the potential to influence the host communities. Regarding land, the focal issues may encompass its varied meanings and values to the various categories of affected people and the principles of existing tenure systems and how they facilitate access. In consequence of these, resettlement plans could for instance endeavor to match farmland allocations with lost ones by satisfying the quality and latitudes of access among others. For indigenous communities, such as those of the study area, traditional authorities (TAs) with historical control over land could be given substantive roles in land administration as the BPA has done. However, inferring from the extra-legal symbolic struggles of some TAs, the research further recommends that dam authorities should strive to engage them frequently and direct their benefits accordingly to avert such undertakings. Also with respect to indigenous communities with symbolisms of land, considerations of human rights would highlight the need to respect indigenous rights and their native cosmologies. These could in turn encourage the protection of key areas in order to uphold the communities' cultural integrity and values, while meeting organizational objectives related to environmental conservation among others.

9.4.1.3 Combine land allocations with alternative livelihood programs

The research also conjectures that the implementation of livelihood programs together with the standard land allocations would contribute to alleviating 'land scarcity' around large dam projects. Fundamentally, this recommendation aligns with the World Bank's Involuntary Resettlement Policy, and the WCD's Strategic Priority 5 on "*Recognizing entitlements and sharing benefits*" (2000a, 242). Regarding this, the research recommends that the livelihood programs should encompass agriculture and land access, enhancement of general and non-agricultural livelihoods, and empowerment of associations and vulnerable groups. Inferring from the approach of Newmont Ghana Gold Limited, the agricultural and land access programs could target the provision of extension services to help farmers to transition from extensive farming to intensive farming practices that are more suitable for smaller land sizes. They could also encompass the provision of fixed amounts of start-up inputs, including improved but suitable and high yielding seedlings. Moreover, the program could include agribusiness initiatives that connect farmers to microcredit, equip them with technical and managerial skills, and facilitate their primary access to markets. Relevantly, dam authorities could collaborate with existing and specialized public institutions such as the District Department of Agriculture. They could also capitalize on existing organizations involved in development cooperation and global development networks, including the German Corporation for International Cooperation (GIZ) and the UNDP respectively to expedite the programs' effectiveness.

Programs on general and non-agricultural livelihoods could encompass trainings and start-up provisions on relevant income generating activities, such as animal husbandry and artisanship. The former may include crafts on soap making, carpentry, and masonry, while the latter may include poultry and pig

farming among others. As related in Chapter 7, the BPA had only begun to build fishponds in Akanyakrom in December 2018, which the community denounced for their unsuitable structural attributes and the planned allocation strategy. Besides this, the research observed the BPA's staff collecting data on the communities' alternative livelihood preferences in December 2018, which though commendable, is also considered overdue. In point of fact, such endeavors would have been more effective had they been commenced before the displacements to help the people adjust and cope with the new situation, as well as facilitate socio-economic development. Finally, the research recommends community empowerment programs for organized and vulnerable groups to build their capacities and facilitate their abilities to solve problems independently and forge their own development pathways. The programs may include frequent community engagements to obtain information about upcoming issues in order to design and/or re-design and implement responsive measures. They may also include tailor-made trainings for groups to boost their participation in the resettlement programs, as well as expedite their understanding of requisite processes, such as the registration of community organizations and the formation of groups.

9.4.2 Recommendations for further studies

In light of its findings, the research makes the following recommendations for further studies:

- a. It recommends related empirical studies on the incidence of 'land scarcity' in other contexts to accentuate the causal explanation of the problem. Results that compare with those of the current research would effectively cement the conceptual position of the social construction of 'land scarcity' in particularly human geography, but also development planning.
- b. It also recommends a comparative study of the incidence of 'land scarcity' around large dams and mines in Ghana, which are considered one of the largest causes of displacement in the country. As the two are respectively undertaken by the State or public authorities and private companies, the comparison may explain the differences in outcomes, which may effectively be the grounds for specific recommendations on the reformation of ill-defined and amorphous laws and policies on infrastructure development in Ghana.
- c. Lastly, the research recommends further studies around the Bui Dam to ascertain the ongoing implications of societal transformation for land access. It conjectures that this knowledge would be helpful for designing and implementing the recommended livelihood programs in a manner that responds to the current situation.

9.5 Final remarks

Per its objective, this research has provided a causal explanation of the incidence of 'land scarcity' around the Bui Dam and its implications for societal transformation. As related in the foregoing, the research's findings have diverse implications for especially Human Geography, methodology, and policy and practice. While touting these contributions, the research also acknowledges that its findings were made within specific geographic, temporal, sociocultural, economic, and political contexts. Thus, although they may be generalized on the basis of the theoretical framework, the research issues a general disclaimer about the findings by emphasizing their peculiarity to the specific context. Moreover, although the research has proffered certain recommendations for preventing or alleviating the incidence of 'land scarcity' around

large dams, it acknowledges the impracticality of satisfying all needs and aspirations. Nevertheless, the research hopes its findings will pave the way for responsive resettlement strategies that reduce the incidence of 'land scarcity' and hence, the adverse impacts of large dams on the livelihoods of affected communities.

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APPENDICES

Appendix A: Data on research participants

Table 1: Categories of participants

Sources of primary data	Name	Categories of participants	Corresponding number
Study communities	Bongase host community (including Bongase Toko)	Traditional Authorities	5
		Farmers (including the Bongase Plantation and Animal Rearing Association)	76
		Non-native squatter fisher folks in Bongase Toko and other satellite communities	19
		Cash crop merchants	2
		Subsistence crop merchants	2
		Native laborers	3
		Non-native laborers	5
	Bui Resettlement Community	Traditional Authorities	7
		Farmers (including the Abotare Ye Yam Farmers and Marketing Society)	31
		Builders	3
		Cash crop merchants	1
	Dokokyina resettlement community	Traditional Authorities	5
		Farmers (including Bre Nye Kwa Farmers' Association)	42
		Builders	2
		Cash crop merchants	2
		Vendors of agro-chemicals	1
	Dokokyina Nr. 1	Farmers	18
		Herders	1
	Akanyakrom resettlement community	Traditional Authorities	11
		Farmers (including fisher folks)	52
		Builders	3
	Gbolekame North	Clan heads / landowners	3
		Appointed community leaders	5
		Farmers (including fisher folks)	35
		Transhumance Herders	3
		Nomadic herders	2
Carpenter	Chief	1	
	Farmers	22	
	Transhumance herders	2	

		Nomadic herders	2
	Banda Traditional Area	Paramount chief	1
		Customary Land Secretariat	1
Public authorities and decentralized bodies	Bui Power Authority (BPA)	Land Administrator	1
		Deputy Director of General Services	1
	Lands Commission, Bono Region	Designated staff of the Land Valuation Division	1
	Banda District Agriculture Directorate	Agricultural Extension Officer	1
	Wildlife Division, Bui National Park	Head of Division	1
		Field staff	2
	Banda District Assembly	Assembly member, Bongase Electoral Area	1
		Head of the Physical Planning Department	1
Peace Council, Bono Region	Regional Director	1	
Trade association	Cashew Buyers' Association of Ghana, Sampa	President	1
		Staff, Greenland Commodities cashew company, Sampa	1
International development assistance organization	UNDP - GEF/SGP	Country Coordinator, Ghana	1
		Desk Officer, Banda District	1

Table 2: Details of the preliminary workshops by community

Study community	Date of preliminary workshop	Total number of participants	Categories of participants		
			TAs (men & women)	Other men	Other women
Bui	5 th September, 2018	5	3	1	1
Bongase Toko	6 th September, 2018	11	3	4	4
Akanyakrom	12 th September, 2018	11	4	5	2
Dokokyina	13 th September, 2018	6	4	1	1
Jama	13 th September, 2018	22	6	10	6
Bongase	14 th September, 2018	18	4	9	5
Jama Newtown	15 th September, 2018	17	4	9	4
Gbolekame North	2 nd October, 2018	19	5	4	10
Gbolekame South	2 nd October, 2018	16	3	4	9
Dokokyina No. 1	3 rd October, 2018	18	0	8	10
Carpenter	5 th October, 2018	11	1	8	2
Banda Nkwanta	9 th November, 2018	24	5	19	0

Table 3: Categories of individual participants of the study communities

Study community	Categories of individual interviewees by gender		Total
	Males	Females	
Bui	10	6	16
Bongase (including Bongase Toko and other satellite squatter fishing settlements)	34	15	49
Akanyakrom	14	9	23
Dokokyina (including Dokokyina Nr. 1)	14	6	20
Gbolekame North	2	0	2
Carpenter	8	5	13
TOTAL			123

Table 4: FGDs by community, participating groups, and gender

Study community	Date	Group	Categories of participants		Total number of participants
			Males	Females	
Bui	5 th February, 2019	Traditional Authorities	5	0	5
	3 rd February, 2019	Youth Association	5	5	10
	4 th February, 2019	Farmers' Association: Abotare ye Farmers' Association	6	5	11
	20 th January, 2019	Women	-	6	6
Bongase (including Bongase Toko)	19 th January, 2019	Joint Youth Association	7	1	8
	17 th January, 2019	Farmers' Association: Cashew Farmers and Animal Rearers Association	6	3	9
	3 rd February, 2019	Women	-	7	7
	8 th February, 2019	Fishermen from Bongase Toko and neighboring fishing villages	6	0	6
Akanyakrom	10 th December, 2018	Traditional Authorities	7	3	10
	16 th January, 2019	Youth Association	11	0	11
	17 th January, 2019	Women	0	6	6
		Harvesters/ laborers	0	4	4
Dokokyina	19 th January, 2019	Traditional Authorities	3	0	3
	2 nd February, 2019	Youth Association	8	0	8
	1 st February, 2019	Farmers' Association: Bre Nye Kwa Farmers' Association	6	0	6
	2 nd February, 2019	Women	-	6	6
Gbolekame North	12 th December, 2018	Landowning clan heads	3	0	3
	19 th January, 2019	Appointed community leaders	6	1	7
	18 th January, 2019	Youth group	6	4	10
	18 th January, 2019	Women	-	6	6
	14 th December, 2018	Herdsmen	3	0	3
Carpenter	7 th February, 2019	Women	-	4	4

Appendix B: Semi-structured interview guide (intermediate questions)

- a. What has been your experiences of land scarcity?
- a. When did you first experienced land scarcity?
- b. What were/are the factors behind your experience?
- c. How was the experience like for you?
- d. How has the experience affected you?
- e. How does the experience differ from your previous experiences?
- f. Could you describe how you deal with land scarcity?
- g. Who (individual, organizations) has influenced your actions and how?
- h. What lessons have you learnt through your experience and actions?