Contesting Rural Futures

Political and Agrarian Change in Tanzania's Kilombero Valley during the Presidency of John P. Magufuli (2015 - 2021)

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III. List of Acronyms and Abbreviations

ACT	nzania
AFSA	lliance
AGRA	Africa
AMCOS	Society
ANSAF	Forum
ASDP	ramme
ASDP2	mme 2
ASPIRES	hening
AWF	dation
BRN	ts Now
CARE	ywhere
CCM	induzi
CCRO	ирапсу
CHADEMA	endeleo
CRC	Centre
DANIDA	Agency
DFID	pment
DLUP	se Plan
ESAFF Eastern and Southern Africa small-scale Farmers	Forum
FAO	lations
GGGI	stitute
KGCA Kilombero Game Controlle	d Area
KPL Kilombero Plantation L	imited
KSCL Kilombero Sugar Company L	imited
KVRS	ar Site
LEAT	ı Team
LTSP	ramme
LULCC	hanges
MALF	sheries
MLHHSP Ministry of Lands, Housing and Human Settlement Develo	pment
MNRT	ourism
MoA	culture
MOCOA	ciation
MoL	Lands
MOLF	sheries
	iament
MP	
MP	
	nzania

NORAD	
	Organisation for Economic Co-operation and Development
	Operation Save Kilombero Valley
	Rufiji Basin Development Authority
	Rural Urban Development Initiative
	Southern Agricultural Growth Corridor of Tanzania
	Sustainable Agriculture Tanzania
	Standard Gauge Railway
	Swedish International Development Cooperation Agency
SUMAJKT	
TALA	Tanzanian Land Alliance
	Tanzania National Parks
TAZARA	Tanzania Zambia Railway
TFC	Tanzanian Federation of Cooperatives
TIC	Tanzanian Investment Centre
TNBC	Tanzania National Business Council
TOAM	
TPDC	Tanzania Petroleum Development Corporation
UDSM	
UMNP	Udzungwa Mountains National Park
UNESCO	the United Nations Educational Scientific and Cultural Organization
URT	
USAID	
VC	
VLUP	Village Land Use Plan
WB	
WWF	World Wildlife Fund for Nature

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Ndovu wawili wakipigana, ziumiazo na nyasi.
When two elephants fight, the grass suffers.

1 Introduction: Possible Rural Futures

"For the foreseeable future the vast majority of our people will continue to spend their lives in the rural areas and continue to work on the land. The land is the only basis for Tanzania's development; we have no other." (Julius Nyerere 1967)

Like Julius Nyerere, the founder of the United Republic of Tanzania (URT), present-day governments across Africa are concerned about the future of their societies (KIKWETE 2014). At the turn of the century, several governments published development visions entitled *Vision 2025, Vision 2030* and *Vision 2050*. Over two decades ago, the Tanzanian government published Vision 2025 (URT 1999c). More recently, the government of Zanzibar published a Vision 2050 (GOVERNMENT OF ZANZIBAR 2020) and the African Union gave itself an agenda for the year 2063 (AFRICAN UNION 2021). These development visions entail ideas, pictures, graphs, concepts and development paths into different futures. JASANOFF a. KIM (2015) term these visions "Dreamscapes of Modernity". Often, these development visions entail references to pre-colonial pasts, a (light) critique of the present and the invocation of a prosperous future. National development visions range from visions that imagine African futures, what SARR (2016) calls "Afrotopia", and past-oriented visions what BAUMAN (2019) calls "Retrotopia".

Through national development visions, African governments ensure themselves and their populations that they are on the right track towards modernity, development, and wealth. Tanzania's Vision 2025 envisions the country to be a middle-income country by 2025 (URT 1999c). Sustained economic growth, foreign direct investments, the establishment of global value chains and the construction of new mega-infrastructures are parts of these visions. Often, a deregulated and neoliberal state is intended to create a conducive business environment for investments that can help unlock dormant potential. The fact that most development visions are written in English (only) instead of local languages, indicates that the target audiences are mainly the (inter)national private sector and the international development community. At times, parts of these national development visions have been written together with the latter actors. It is assumed that together with African governments, they can join forces in public-private partnerships to imagine, plan and finance 'the Africa we want' (AFRICAN UNION 2021). In many ways, this dissertation seeks to deconstruct the 'we' in 'the Africa we want' and wonders which alternative subaltern futures exist, which interests lie behind certain futures and which

conflicts of objectives emerge on different stages between imagining and implementing futures.

One of the reasons why federal governments across Africa are concerned about their collective futures is because large parts of their territories are in the middle of an accelerated social and ecological transformation (MÜLLER-MAHN et al. 2019). While some aspects of this transformation are beyond their control (e.g., global climate change), other aspects can be planned (e.g., infrastructures). In previous years, growth corridors like the Southern Agricultural Growth Corridor of Tanzania (SAGCOT) have been envisioned as new development model (MÜLLER-MAHN 2020).

Despite the existence of national development plans, in pluralistic societies imagining and planning possible futures is always partial, normative and interest laden. The materialisation of one future makes other futures less likely, or impossible. Far-reaching path dependencies may emerge. Major lines of contestation in Tanzania exist between urban and rural areas, different class interests and those of genders, generations, and livelihoods. Especially in authoritarian political systems, large parts of these societal contestations are excluded from public debate. On the surface, the dominant version of the future is portrayed as the only one ('the Africa we want'), while alternative futures are hidden in delegitimised political spaces. The aim of this dissertation is to understand power asymmetries between different actors in Tanzania who hold contesting ideas about future rural Tanzania and seeks to uncover narratives and practices that are directed towards the future, what APPADURAI (2013c) calls "future-making".

On the search for contestations about possible futures, two village leaders in Igawa village (Malinyi District) invited me, together with Grace Matemu, a Tanzanian research assistant and Esau Chengula, a local guide and assistant, to drive with them a few kilometres, to the border of their village (Figure 1). They wanted to show us where new 'beacons' were positioned in October 2018. In rural Tanzania, beacons demarcate the legal border between village land and protected land. They order space and are material representations of the ownership and property regime. Since many million rural residents in Tanzania directly depend on land, the relative position of beacons impact rural livelihoods in existential ways (SIKOR a. LUND 2009). While newly positioned beacons attract the attention and the concern of rural residents, they are often under the radar of researchers because they are small, hidden and mostly in the peripheries. MWAKA (2020) observes that in the Kilombero Valley beacons are part of everyday conversations and are among the most controversial topics that invoke frustration, despair, anger and fear. On the way to the beacon, our rented car

was stuck in a local stream (Figure 1). The long rainy season between January and May frequently turns the Kilombero Valley into an impassable, swampy area. This is true for the main roads between central villages and even more so, when driving towards the peripheries. Only slowly can bicycles, cars and trucks begin to reach the peripheries, where some communities are cut off for several months - no electricity, no roads and often no mobile phone networks. Many rural residents have learned to live without these infrastructures. The lack of these infrastructures may constitute a constraint, but may also protect from outside domination (SCOTT 2011; SCOTT 1998).

As our Nissan was stuck for more than one hour, a Sukuma (agro)pastoralist came walking from the direction, where we were heading with several heads of cattle and some of his children. A short conversation between the village leaders and the (agro)pastoralist arose in which he appeared to acknowledge the aim of our trip and offered to call motorcycle taxi drivers to take us to the beacon. The path behind the small stream, he said, had become dry enough so that motorcycles could bring us all the way. When the sun had reached its highest point, two motorcycle drivers arrived. Half an hour and a few kilometres later, we reached the landmark. The drivers stopped a few hundred meters before, so that we had to walk the rest. A bird sat on top of the beacon, watching for prey, and escaped, when we were approaching. Although the soil was hard around the beacon, it was difficult to walk to it. We needed several minutes for just one hundred meters. Large herds of cattle had grazed the area, when the soil was wet and left behind a soil surface with more hoof prints than flat surface. Several tree stumps indicate that many trees and bushes were recently cut. The beacon we visited was made of cement with size of 1.60 meters height, 50 cm breadth and length at the bottom and 10 cm breadth and length at the top. The cuboid became smaller towards the top. It was grey and seemed like an alien in the environment





Figure 1: On the way to the new village border (photos: RV)

- a) A new beacon in Igawa Village
- b) Car stuck in a local stream

because nothing indicated how the beacon had come to where it was. It seemed new and arbitrary where it was placed. Due to its weight of about half a ton, it cannot be moved. This is intentional as the beacon indicates an official border. Seeing the beacon in Igawa, I wondered who put it there, why at this position, and why now. Furthermore, I wondered what the shifting of a beacon in a remote place like Igawa has to do with national development visions, development paths and power asymmetries between different actors. The fact that beacons can be relocated indicate that borders are man-made, contingent and the result of historically grown relations between different interests. The previous relocation of the beacon in Igawa happened in 2012. This time, in 2018, the beacon was shifted several kilometres inside Igawa village, decreasing the size of the village land. In a mix of anger and despair, the two village leaders pointed to the horizon, to the shores of Mnyera River, where Igawa's old village borders were before 2018. The position of beacons, they complained, all too often is the outcome of top-down organised land use planning and characterised by an information, knowledge and power asymmetry (BLUWSTEIN et al. 2018).

Mnyera river, part of the much larger Kilombero river system, is several kilometres away from the new beacon. A few years ago, the area between the beacon and Mnyera River was covered with hundreds of trees and bushes. These days, only a handful of trees remain. The rest has been degraded to a semi-deserted bushland with hard and solidified soils due to large herds of cattle grazing the area. Within a few years, the area transformed radically. It was deforested, used for hunting, grazing and agriculture. A similar transformation is ongoing in the rest of the Kilombero Valley. Since the 1990s, large parts of the Kilombero Valley were converted from wasteland and forested land into cropland (LEEMHUIS et al. 2017; NÄSCHEN et al. 2019). Large-scale land use and land cover changes (LULCC) are the result of the everyday practices of rural residents of which more than 90 % are either peasants, smallholder farmers, fishermen, or (agro)pastoralists (GEBREKIDAN et al. 2020). As the population increases, the pressure on land and water increases. The expected population increase lies between two and five per cent annually which means a doubling of the population every two decades. Since the 1980s, (agro)pastoralists migrated into the Kilombero Valley with ten thousand heads of cattle. While some migrated voluntarily, others were evicted from neighbouring districts and regions (BENJAMINSEN et al. 2009). Whereas previously, (agro)pastoralists used lands that are more marginal, currently, (agro)pastoralist and sedentary peasants and smallholder farmers use the same land, the same water, and the same forests. When beacons are shifted inside village land all are affected and intensify already existing land use conflicts. Alarmed politicians (BALAIGWA 2018), scientists (PROSWITZ et al. 2021) and journalists (MFUGALE 2010; MFUGALE 2011) claim that a 'collapse' or the 'death' of the Kilombero Valley is imminent.

When Julius Nyerere spoke about the 'foreseeable future' in the 1960s, it remains unclear, whether the 21st century falls within what he deemed *foreseeable*. Afterall what is foreseeable is a matter of subjective judgements. While the renowned Marxist geographer Neil Smith, the author of Uneven Development (SMITH 1984), claims that the 'future is radically open' (SMITH 2013), APPADURAI (2013a) claims that different actors have different 'capacities to aspire'. What was the foreseeable future by the president in the 1960s, is different of what was foreseeable in the 1990s by the urban middle classes and what is foreseeable by rural farmers in the 2020s (HAVNEVIK a. HARSMAR 1999; EYAKUZE a. MATOTAY 2018). Currently, large parts of Tanzania are in the middle of an accelerated social, economic and ecological transformation (GRAY 2018). For most parts, this transformation is the consequence of intentional behaviour of a range of different actors, which hold different knowledge, different future visions and different interests. The future does not just happen but is made produced and reproduced in the everyday. The aim of this dissertation is to describe, capture and analyse the causal relation between material agrarian change in rural Tanzania and ideational political change in Dodoma and Dar es Salaam. This concerns the relation between rural and urban areas, between domestic markets and globalisation and between the rural working classes and national elites. In doing so, this dissertation departs from two empirical observations.

The first observation concerns sustained rapid changes in rural areas like the Kilombero Valley, including demographic changes, migration, urbanization, de-agrarianisation, depeasantization, new rural infrastructures, effects of climate change, deforestation, and conversion of wasteland and woodland to agrarian land, soil erosion and land degradation (LEEMHUIS et al. 2017). This short - and by no means complete - list indicates that a fundamental transformation in rural Tanzania is underway. In the following, the totality of these processes is summarised in the term *social-ecological transformation*. A transformation that is dialectic between *the social* and *the ecological*. As BERNSTEIN a. BYRES (2001) note, agrarian change can only be understood in a holistic approach, involving interdisciplinary perspectives from rural sociology, cultural anthropology, human geography, hydrology, ecology, history and others.

The second empirical observation is the change in national politics between the government of President Yakaya Kikwete (2005 - 2015) and the government of his successor, President John P. Magufuli (2015 - 2021). Within a few years, President Magufuli

implemented his political ideas with full force, which brought him the nick name *bulldozer* (THE ECONOMIST 2016; THE ECONOMIST 2020). While President Kikwete supported the agrarian sector under the programme *Kilimo Kwanza* (Agriculture First) and initiated the Southern Agricultural Growth Corridor of Tanzania (SAGCOT), president Magufuli disregarded these initiatives and instead proclaimed *Tanzania Mpya* (New Tanzania) and *Tanzania ya Viwanda* (Industrialised Tanzania).

The Kilombero Valley, located in the centre of Morogoro Region, was chosen as the case study area, because the valley has been highly dynamic in agrarian and political change since the middle of the 19th century (MONSON 1991; DREIER 2015; MWAKA 2020; LARSON 1976; JÄTZOLD a. BAUM 1968). At different times, different actors sought to make use of different potentials of the Kilombero Valley and foresaw different futures. Today's Kilombero Valley is the specific and contingent result of a complex agrarian and political history. On the one hand, the Kilombero Valley's futures are 'radically opened 'in Smith's sense. On the other hand, only one of multiple possible futures materialises. Several political visions for the Kilombero Valley proved to be dead ends, others were taken up again decades later, some were suppressed and forgotten and again others are currently competing to be translated into policies (JACKSON 2021b). Among the imaginations were high agrarian potential for rice, maize, cotton, sugarcane and other crops, large-scale irrigation schemes, mining concessions, high potential in environmental and wildlife protection, hunting blocs, eco-tourism and the potential for hydro-electrical power generation (PROSWITZ et al. 2021).

In this dissertation, it is argued that the relation between agrarian change and political change has so far not been adequately explained. A combination of three perspectives can analyse the empirical material, gathered during Magufuli's presidency. First, Marxist-inspired concepts which seek to reflect agrarian change amidst expanding capitalism. Second, concepts from Gramsci's political theory within the framework of Political Ecology, which can ask in which ways ideas linked to the state and power asymmetries gain and

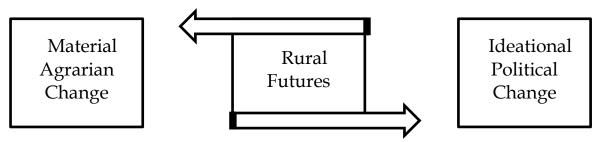


Figure 2: Theoretical Framework (own graph)

lose traction. Third, future-making, a concept from future theory helps to explain the role of future visions in agrarian and political change (Figure 2).

The following research questions structure the subsequent chapters as follows:

1) In which ways is the Agrarian Change in the Kilombero Valley causally connected to the Political Change? (Chapter 4)

- a) Which Agrarian and Political Change has the Kilombero Valley experienced on the longue durée?
- b) Which Political and Agrarian Change has happened in the Kilombero Valley during the presidency of Magufuli?

2) In which ways do different future conceptions about the Kilombero Valley compete for their materialisation? (Chapter 5)

- a) How are future conceptions about the Kilombero Valley envisioned by actors?
- b) How are specific development paths implied by these future conceptions?

3) In which ways do narratives legitimise future conceptions about the Kilombero Valley? (Chapter 6)

- a) How do different actors use narratives about the Kilombero Valley?
- b) How are these narratives fused with power?

4) To what extent do practices qualify as 'future-making practices' in the Kilombero Valley? (Chapter 7)

- a) How do different actors use different future-making practices?
- b) How are different future-making practices linked to one another?

After this introduction, in the subsequent chapter two, the theoretical orientation is explained. The methodology, overall research context, the access to the field, gathered empirical material and data analysis are introduced in chapter three. In chapter four, the Kilombero Valley is introduced and continuities on the longue durée are discussed, as current processes can only be understood against the backdrop of previous developments. In chapters five, six and seven, the empirical data is discussed, before a conclusion is drawn in the final chapter eight.

2 Theoretical Orientation

During the research process, theories, and concepts suitable to analyse the empirical material were constantly revised. In the following sub-chapters, the combination of three theoretical perspectives is introduced. They aim to broaden and deepen our understanding of how agrarian change in Kilombero Valley are linked to political change in Dar es Salaam and Dodoma through visions of possible futures.

First, political change in Tanzania and the role of the state are reflected. This is done with Gramsci's political theory in combination within political ecology. In what is called Gramscian Political Ecology, the concepts historic hegemonic bloc, intellectuals, conceptions of the world, common sense and hegemony are introduced (2.1). Second, agrarian change is theoretically framed by the classic agrarian question and Bernstein's historical materialist agrarian questions (Bernstein 1996a; Bernstein 1996b; Bernstein 2006; Bernstein 2009a; Bernstein 2016). Furthermore, in the tradition of Marx, Luxemburg, Harvey and Shivji, the concepts accumulation, dispossession, and differentiation are discussed (2.2). Third, the relevance of futures is discussed with concepts from future theory: socio-technical imaginary and future-making (2.3). The chapter ends with bringing all three perspectives together (2.4)

2.1 Political Change

The political change in 2015, from president Kikwete to president Magufuli, can be analysed by a variety of political theories. In the following, it is shown that the political theory of Antonio Gramsci (2.1.1) is analytically rich for human geographers, which can be linked to the interests of Political Ecology (2.1.2) to form a Gramscian Political Ecology (2.1.3).

2.1.1 Gramsci's Political Theory

JESSOP (2005b) and JESSOP (2014) identify Gramsci as a spatial theorist whose concepts can be imported to geography (Figure 3). Though, not turning to Jessop's critical realism and strategic-relational approach (JESSOP 2005a; JESSOP a. SUM 2016), fusing Gramsci's concept with Political Ecology can be analytically rich to make sense of political change in relation to agrarian change. Written in the 1920s and 1930s, in an Italian prison, Gramsci's political theory and analytical concepts cannot be easily transferred to

- Philosophy of Praxis
- Cultural Hegemony
- Hegemony <-> Counter-Hegemony
- Traditional <-> Organic Intellectuals
- Passive Revolution
- Ideology
- Integral State (Political + Civil Society)
- Historical Bloc
- Hegemonical Bloc
- Coercion <-> Consent
- War of Position
- Interregnum
- Conceptions of the world
- Common Sense/ Good Sense
- Translation, Translatability
- Ethico-Political Moment
- Katharsis

Figure 3: Gramscian Terminology (after Jessop 2014)

the Tanzanian context a century later. Thus, before doing so, a few words about the historical and personal background of Gramsci that better contextualize which political questions he dealt with in his life, and more importantly why.

Gramsci was born in 1891 in Ales, a small village in remote rural Sardinia. Since his father was imprisoned for several years, the family lived in poverty. "When Gramsci was four, he fell on the floor as he was being carried, and his accident led to a spinal malformation which permanently undermined his health" (BERGER 2013, 6). His physical disability affected his student life, and later, his time in prison. Gramsci, according to Nairn 1982 (cited in EKERS et al. 2013a, 3) is "a product of the west's remote periphery, and of conditions which, half a century later, it became fashionable to call 'Third World'". Gramsci left Sardinia to study geography linguistics, literature and philosophy in Turin (EKERS et al. 2013c). Coming from a poor rural setting, Gramsci realised the relevance of political identity, culture, language, and uneven development on different scales. Around 1917 Gramsci was concerned with the Russian Revolution, in 1919 he founded the weekly newspaper L'Ordine Nuovo (The New Order), and in 1921 he launched a split from the socialist/ social-democrat party Partito Socialista Italiano (PSI) to found the Communist Party Partito Comunista d'Italia (PCd'I or PCI). In 1922, Gramsci took part in meetings of the third international in Moscow. There he was in close contact with central international socialist figures of his time. In 1928, when Gramsci was sentenced to 20 years imprisonment, the public prosecution said that he wants to ensure that Gramsci's brain stops working for the next twenty years. The so called Prison Notebooks (QC – Quaderni del carcere) which comprise 33 notebooks, more than 3,000 hand-written pages (EKERS a. LOFTUS 2013b) became Gramsci's main political theory. In them, he covered sociology, politics, geography, art, pedagogics, economics and history in an inter-disciplinary way (THOMAS 2009). Due to his limited access to scientific books in prison, Gramsci relied on the information sent to him through letters and newspapers. In 1933, Gramsci went through a health crisis and in April 1937 died in a clinic in Rome (EKERS a. LOFTUS 2013b).

Through most of his life, Gramsci was concerned with what he called *the Southern Question* (GRAMSCI 1978). This question centrally evolved around the possibility of forging an alliance between the rural peasants from Southern Italy and the urban industrial workers in Northern Italy (GRAMSCI 1978; JESSOP 2014, LOFTUS 2020). To Gramsci, both groups had the same class position, but were separated, through geographical patterns of centre - periphery, and north - south. Gramsci hoped to develop a critical analysis that would both make sense of and help change the situation for the marginalised. His political theory was explicitly transformative (EKERS et al. 2009).

Due to the increasing availability of translation, Gramscian ideas were taken up in the 1970s and 1980s in what was coined the *cultural turn*. In addition, Gramsci's perspective on writing history from the margins was taken up by sub-altern studies and cultural studies. In international relations and global political economy Gramsci was used in Neo-Gramscianism approach (COX 1981; GILL 1990). Their approach to understand international politics with Gramsci was criticised as an abuse of his theory (DAVIDSON 2008). In Hegemony and radical democracy deconstruction of Marxism, LACLAU a. MOUFFE (2015) famously critiqued Gramsci for using an essentialised and unified understanding of class. According to them, Gramsci is silent about subject formation along the categories of race, gender and sexuality and the different levels of discrimination that may (not) go along with them. Through their critique, LACLAU a. MOUFFE (2015) intended to make Gramsci's theory available for emerging poststructuralism. By the 1990s, Gramsci has become a global classic widely read (BARFUSS a. JEHLE 2014). Despite DAY's (2005) declaration that *Gramsci is dead*, in *Geoforum EKERS* et al. (2009) claim Gramsci lives. Other scholars elaborated on the potentials of dealing with Gramsci in environmental conflicts (PERKINS 2011), labour union struggles (KARRIEM 2009), and in political street theatre (ASHER a. OJEDA 2009). Moreover, anthologies of EKERS et al. (2013) Gramsci, Space, Nature, Politics, as well as (KREPS 2015) Gramsci and Foucault: A Reassessment suggest that Gramsci continues to be relevant in human geography for connecting space, history, politics and nature. For similar reasons, Gramsci remained relevant for sociology, political philosophy, political economy. EKERS a. LOFTUS (2013a) argue that *space, nature* and *politics* are the three most important moments in Gramsci's political theory. History and social differentiation may be added. LOFTUS (2020) calls Gramsci's understanding of space and history *spatial historicism*, others *absolute historicism* (MANN 2009; WAINWRIGHT 2010b; JESSOP 2005b). "Space and geography were far more than a passive backdrop for intellectual reflection for Gramsci" (MORTON 2013, 55). Although believing in transient history, Gramsci, was not an evolutionary historicist, like many Marxists of his time, who believed in a teleological and predetermined history but instead, according to MORTON (2013, 55) Gramsci "did not operate with the one-dimensional, linear conception of time that have informed various kinds of progressivism". SAID (2002), cited in (WAINWRIGHT 2005, 1038) maintains,

"[M]ost of Gramsci's terminology [...] is what I would call a critical and geographical rather than an encyclopaedic or totalizing nominative or systematized terminology. The terms slide over rather than fix on what they talk about; they illuminate and make possible elaborations and connections, rather than holding down, reifying, fetishizing. The basic social contest for Gramsci is the one over hegemony, that is, the control of essentially heterogeneous, discontinuous, non-identical, and unequal geographies of human habitation and effort."

JESSOP (2014, 1) claims that Gramsci dealt with "spatio-temporal, as well as social and material perspective(s)". Especially in his writings on a counter-hegemonic "passive revolution" (see MORTON 2007) he reflects about the differences between the city and the country, centre and periphery, regional questions, comparative international relations and the formation of alliances and solidarities. He positioned himself against a positivistic sociology that applies pre-defined criteria universally. He argues for a living philology that carefully historicises and spatialises analysis (EKERS a. LOFTUS 2013b). Historicising and spatialising Gramsci requires that we explore what different contexts may mean for understanding Gramsci's work. Ekers & Loftus (2013, 25) claim that the idea of politics as "the organized practice of deliberately altering social life", was central in Gramsci's life and writings. Gramsci's belief that everyone is a philosopher means that every individual has the potential to be a philosopher, to hold subjective/ collective conception of the world, which may include visions about alternative possible futures.

2.1.2 Political Ecology

ROBBINS (2011) suggests that Political Ecology is a "community of practice" that comprises of different research agendas. Among others these include feminist approaches

(ROCHELEAU et al. 2005), Actor-Network theory inspired poststructuralist concepts (ESCOBAR 1996; ESCOBAR 1999; ESCOBAR 2010; STOTT a. SULLIVAN 2000; GAREAU 2005), urban political ecology (SWYNGEDOUW 1997; SWYNGEDOUW et al. 2002; HEYNEN et al. 2006; SWYNGEDOUW a. KAIKA 2014), Marxist approaches (MANN 2009; LIPIETZ 2000; CASTREE 2015; CASTREE 2017) and third world political ecology (BRYANT a. BAILEY 1997).

Political Ecology was first defined by BLAIKIE a. BROOKFIELD (1987, 17) who sought to explain to what extent soil erosion and land degradation are physical *and* political processes:

"Political Ecology combines the concerns of ecology and a broadly defined political economy. Together this encompasses the constantly shifting dialectic between society and land-based resources and also within classes and groups within society itself."

BLAIKIE a. BROOKFIELD (1987) were interested in *why* societies and natures are changing. In other words, to what extent soil erosion and environmental degradation are not only physical processes, but also political. In this context, SWYNGEDOUW (1996) suggested the terminology "socionatures", MOORE (2015) "web of life" and GÖRG (1999) "society-nature relations". All seek to describe how human life relies on a sustained metabolic exchange between humans and non-humans (EKERS a. LOFTUS 2013b; EKERS a. PRUDHAM 2017; EKERS a. PRUDHAM 2018). Through the introduction of capitalist relations, a metabolic rift has occurred that is characterised by different layers of alienation (FOSTER 1999a; FOSTER et al. 2011; FOSTER 2015).

According to SMITH (1984), all societies, including feudal, socialist and capitalist appropriate natures for their own purposes. Different metabolisms have brought about new injustices for marginalised groups. Political Ecology, however, has the tradition to write from the perspective of the marginalised and focus on inequalities across scales, ascribing to human rights, democracy, justice.

Instead, a dialectic relationship between political economy and society means that society is not a passive recipient of transformation, but an integral part of it. The social-ecological transformation in Tanzania's Kilombero Valley (and in other places) has no direction byitself but is the performative result of site-specific decision-making that is the result of power, hegemony, and interests. Consequently, rural realities are contingent. With the theoretical orientation of Political Ecology, it becomes possible to ask in which ways Tanzania's ecology was politicised, which actors and networks are engaging in which practices, using which frames, narratives, and visions to *engage in* and *respond to* the social-

ecological transformation. With the help of Political Ecology, Tanzania's agrarian change can be historicised, de-naturalised and re-politicised.

The main difference between descriptive approaches like LULCC and Political Ecology is the questions they ask (TURNER a. ROBBINS 2008). The former asks which physical dynamics and human decisions contribute to social-ecological transformation and which LULCC can be observed over a defined period. The latter asks politically nuanced questions concerned with decision-making processes, power asymmetries, structure and agency, and wonders how and why different actors engage in and respond to social-ecological transformation, including narratives, frames and visions about the future (TURNER a. ROBBINS 2008).

MANN (2009) asserts that scholars of Political Ecology commonly refer to Gramsci's concepts without being aware of it. He criticises how little Gramsci is cited in central works like *Liberation Ecologies* (PEET a. WATTS 1996; PEET a. WATTS 2004) *Political Ecology* (ZIMMERER a. BASSETT 2003) or *Violent Environments* (PELUSO a. WATTS 2001). However, the handbooks BRYANT (2015) and PERREAULT et al. (2015) each have several contributions in which Gramsci is cited prominently.

2.1.3 Gramscian Political Ecology

In recent years, a number of Political Ecologists have refocussed their interest on the role of the state and rediscovered the writings of Gramsci, e.g. *Gramsci – Space, Nature, Politics* (EKERS et al. 2013b), *Gramsci and Foucault: A Reassessment* (KREPS 2015) and the special issue on Gramsci in Geoforum, in which MANN (2009) asks "should political ecology be Gramscian?". A number of human geographers have suggested a Gramscian Political Ecology (MANN 2009; EKERS et al. 2009; EKERS 2009; EKERS a. LOFTUS 2013a; EKERS a. LOFTUS 2013b; LOFTUS 2020). In order to make use of Gramsci's writings within Political Ecology we need to ask how his writings might engage with politically nuanced questions and movements in the present Tanzania (EKERS a. LOFTUS 2013b).

MANN (2009) argues that Gramsci and Political Ecology have overlapping interest. First, both are *dialectical* as to political economy and ecology, nature and society, and structure and agency. Second, both emphasise site-specific histories and power relations between residents, political institutions, global markets, labour processes and identity politics on different spatial and temporal scales. Third, both have an ontological/ epistemological worldview of constructivism. Fourth, what is commonly referred to as *nature* is not an *a*historical apriori, but political and socially produced, and therefore contingent. EKERS et

al. (2009, 288) propose that the common denominator can be found in the epistemological and methodological traditions of "Marxian political economy, cultural ecology, environmental science, and in poststructuralist and postcolonial [studies]". According to Ekers et al. (2009), Gramsci's ideas of political struggles are analytically rich and have become part of the long-standing Marxist tradition in Political Ecology that includes categories class, gender, ethnicity, and cultural identity.

How to connect Gramsci's political theory with Political Ecology? Since not all the above-mentioned concepts can be made fruitful in the case study, a selection needs to be done. A selection that keeps in mind agrarian change and the connection to political change via future-making. Thus, in the following, five interlinked concepts are explained: historic hegemonic/counter-hegemonic blocs (1), organic/traditional intellectuals (2), conceptions of the world (3), common sense (4), and hegemony (5) (Figure 4).

First, according to Gramsci, in every political society actors and social groups are organised in ideological blocs (Figure 4). Along ideology (from Greek: idéā (ἰδέα, 'notion, pattern') and -logíā (-λογία, 'the study of')) these blocs hold different ideas on how the world should be organised. Ideology, LOFTUS (2013) claims, has a concrete bearing on the ways in which reality is made and environments are experienced. In each society on the one hand there is a hegemonic bloc and on the other hand, several counter-hegemonic blocs. While according to Gramsci, the hegemonic bloc is leading and in power and in Gramsci's understanding in control of the state, counter-hegemonic blocs seek to become the hegemonic bloc. The hegemonic bloc and counter-hegemonic blocs are in a constant struggle for power. In analogy to the ditch war in the First World War, these blocs seek to become hegemonic through what Gramsci calls war of positions. According to WAINWRIGHT (2005, 1037) the struggle for hegemony is "constituted on the basis of spatial relations and such relations become hegemonic as geographies are naturalised and sedimented as common sense through political and cultural practices". Gramsci talks about historic hegemonic blocs because strategic and ideological alliance of individuals and groups neither are spatially, nor historically fix. Members of the historic hegemonic blocs (re)shape the nature-society metabolism towards what they perceive as *the* right trajectory.

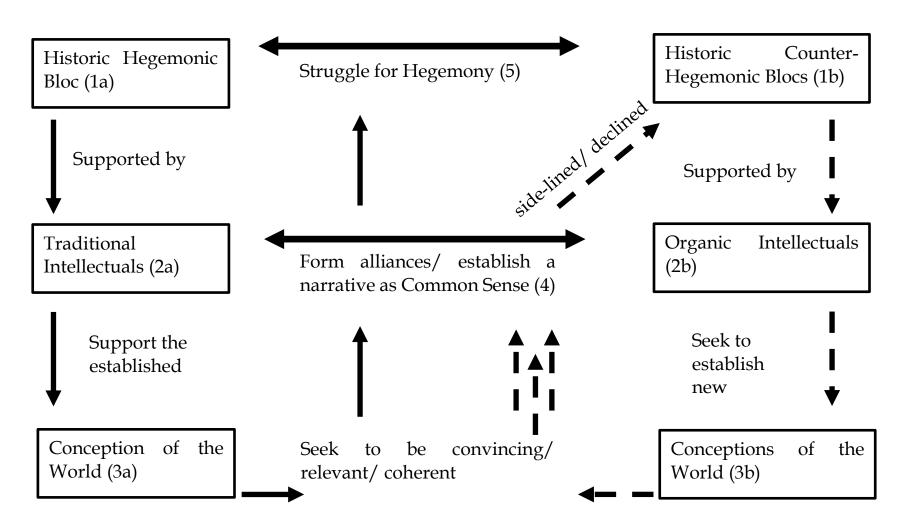


Figure 4: Gramscian Political Ecology (after JESSOP 2005b; WAINWRIGHT 2010a; BARFUSS a. JEHLE 2014)

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Second, according to Gramsci, actors called intellectuals constituted blocs (Figure 4). Whereas the historic hegemonic bloc seeks to maintain and establish its ideology with *traditional intellectuals*, the non-ruling counter-hegemonic blocs include *organic intellectuals* who hold and distribute alternative conceptions of the world and other narratives (PERKINS 2011; MOUFFE 2013; BECKER et al. 2013). Stuart Hall (1986) formulated the explicit goal to produce organic intellectuals within Cultural Studies and claimed that organic intellectuals had a double goal. On the one hand, they had to improve their theoretical insights vis-à-vis traditional intellectuals, on the other hand they had to keep close ties to labour unions, social movements, marginalised groups, and the working class, which they sought to represent. Society was therefore a studying object and the terrain of intellectual intervention on which the agency of concrete subjects was to be enlarged (BARFUSS a. JEHLE 2014).

Although this picture may seem static new alliances and regroupings of the blocs happen constantly. Especially the counter-hegemonic projects need to ensure that their organic intellectuals do not become traditional intellectuals. This may happen, when popular masses begin to lose trust in organic intellectuals and start to perceive them as corrupted elites who are maintaining their privileges, by fighting their critics (BARFUSS a. JEHLE 2014, 78). This is a matter of organising majorities and popular support. For Gramsci (cited in BARFUSS a. JEHLE 2014, 78) a "lack of initiative and responsibility at lower levels" is an indicator for "political primitiveness of the peripheral forces". However, a decade-long position of sub-alterity (vis-à-vis the hegemonic bloc), may lead to the reasonable option of passivity, acceptance, and endurance. According to Gramsci (cited in BARFUSS a. JEHLE 2014, 77),

"The elementary passions of the people (...) and link them with a higher, scientifically and coherently elaborated world view (...) one does not make political history without this passion, that is, without this emotional connection between intellectuals and the nation".

Organic intellectuals should be able to come from knowledge to understanding to feeling. If this feeling for the popular masses is missing, the quote continues, "the intellectual's relations with the nation is reduced to relations of a purely bureaucratic, formal nature; the intellectuals become a caste or a priesthood".

Third, political ideologies are what Gramsci termed *conceptions of the world* (concezione del mondo) (WAINWRIGHT 2010a; WAINWRIGHT 2013) (Figure 4). The plural form *conceptions* stress that subjects and social groups have different views of the world. The more coherent and convincing conceptions are, the better they convince others:

"A prime criterion for judging conceptions of the world is the following: can the conception of the world in question be conceived of as 'isolated', 'independent', bearing entire responsibility for the collective life? Or is that impossible, and must it be conceived of as 'integration' ['integrazione'] or perfecting of – or counterweight to – another conception of the world...?" (Gramsci Q11, § 12, cited in WAINWRIGHT 2010a, 512)

Struggles over symbols, ideas and conceptions of the world are conflicts over material relations, of consumption and production, and over the distribution of power. Gramsci demands everyone "to work out consciously and critically one's own conception of the world" (WAINWRIGHT 2010a, 509). Conceptions of the world of (agro) pastoralists, peasants, urban professionals, of children, elderly, landless, women, disabled, etc. differ. Conceptions and hoped-for-futures enter the political terrain on different terms. They are linked with power through the "historically and geographically specific terrain of ideologies over which radical ecological worldviews develop" (LOFTUS 2013, 183). CREHAN (2002) maintains that the inability of producing coherent accounts of the world is a key constituent of subalternity. FONTANA (2013, 126) agrees, "To act and to struggle within history is to engage in the transformation of the present reality, is a process which [...] involves the formation and proliferation of a way of life [...] which has become hegemonic". Gramsci demands counter-hegemonic projects to improve their conception of the world vis-à-vis the established one. As CREHAN (2002, 116) remarks, "over time counter-hegemonic accounts of reality may begin to emerge, albeit at first no more than embryonic ones". According to WAINWRIGHT (2010a), Gramsci argued that everyone is a philosopher. This is to say that in any given society pluralistic concepts of the world exist, different interests and ideas. Every individual is equipped with language, religion, ideology and practical activities, the "consciousness of what one really is, and is knowing thyself as, is a product of the historical process to date which has deposited in you an infinity of traces, without leaving an inventory" (WAINWRIGHT 2010a, 509). Conceptions of the world are a strong indicator for epistemological and ontological constructivism. According to WAINWRIGHT (2010a, 510) Gramsci "prioritises ontology over epistemology, political philosophy, ethics and aesthetics in a very particular way". Irrespective, of what might be a valid answer about history, nature, or the world, subjective ideas have material consequences, when actors believe them to be true (MANN 2009; WAINWRIGHT 2010a). Gramsci's answer to SPIVAK (1988) can the subaltern can speak would be that they have a voice to the extent to which they succeed in unifying their concerns into a coherent conception of the world. This will not be possible without organisational structures that give the movement the support it needs to achieve complete independence (BARFUSS a. JEHLE 2014).

"Knowledge is power, but the question is complicated by something else: namely that it is not enough to know a set of relations existing at a given moment as if they were a given system, one also needs to know them genetically – that's to say the story of their formation, because every individual is not only a synthesis of existing relations, but also the history of those relations, which means the résumé of all the past." (Gramsci cited in BERGER 2013, 7)

"Popular beliefs [...] have the equivalence of material force." (Gramsci cited in MANN 2009, 336)

Fourth, Gramsci's term "common sense" is important (Figure 4). Common sense refers to the sedimented and at times contradictory ideologies through which people act. Different from conceptions of the world (understood as ideologies), common sense here is understood as narratives and imaginations. As PERKINS (2011, 559) explains, common sense grants consent for proper ways of organising the social and material world. This may include coercion for opposing ideas. Common sense can be validated or opposed by dayto-day practices, including their functions in political, economic, and cultural systems. For Gramsci, common sense is incomplete, has internal contradictions and is rooted in folklore, influenced by religion, philosophy, media and science (CREHAN 2002; BECKER et al. 2013). The common sense is interwoven in the fabric of society by long-lasting historical processes. Yet, the historic hegemonic bloc is unable to dictate the common sense but relies on the infrastructures of the civil society. As KIPFER a. HART (2013, 326) maintain "from a Gramscian perspective, the chief task of politics is to engage in a practice of translating elaborating, modifying, and transforming meaning from context to context". LOFTUS (2013, 190) argues that by revealing hegemonic ideas entirely new and coherent narratives can confront the historical bloc. Thus, Gramsci was concerned how intellectuals translate their respective conceptions of the world into common sense. THOMAS (2009, 29) calls translatability in Gramscian political philosophy "the always unfinished and therefore transformable nature of relations of communication between social practices". IVES (2004) show that the concept of translation in Italian (tradurre) has roots in the Latin language, where the verb tradere both means to hand over, or to betray. Hence, KIPFER a. HART (2013, 327) argues "for Gramsci translation is not just a matter of transmission but of transformation that may well be 'traitorous' to the original (con)text" (KIPFER a. HART 2013, 327). Gramsci was interested in relational forms of comparison across time, different scales and social formations, cultures, and civilisations (ibid. 329).

Fifth, Gramsci's most often cited term "hegemony" is discussed (Figure 4). Hegemony is the historical contingent outcome of power constellations between different actors, their ideologies, narratives, and practices. According to MANN (2009, 340) hegemony describes "the mode of leadership of an historic bloc over society as a whole", whereas for THOMAS

(2009, 28) Gramsci sought to capture the "constitution of the political" through hegemony. Gramsci (cited in EKERS et al. 2009, 289) explains, "the manner in which a wide-range of popular, philosophical, economic, and cultural phenomena are articulated together in a hegemonic project illuminates the multiple axes through which hegemonic struggles are waged". Hegemony is concerned with the ways a dominant social group exerts power over the rest of society. Hegemony is about who is raising which topics, who is asking which questions and who is defining what. Among other techniques, hegemony is (re)produced through language and imaginaries that are translated into a language that is widely understood (GREEN a. IVES 2010; FROSINI 2010; LACORTE 2010). Hegemonic ideas from are communicated, narrated, legitimised top-down. The analysis of the empiric material shows how ideas are translated into agrarian change through future-making practices.

2.2 Agrarian Change

Agrarian change is a broad term that deserves further explanation. It includes rural sociology, soil fertility, integration of rural residents into global value chains, different forms of agrarian organisation, new technologies, new rural practices, and new agrarian policies. To focus on *agrarian change* in opposition to *political change* is not to say, that agrarian change is apolitical. Quite the contrary. To focus on agrarian change is a way to reflect socio-ecological transformation from the material side. In the following, first the classic agrarian question is explained (2.2.1), followed by a section on Bernstein's Agrarian Questions (2.2.2). The last part of this section reflects on the three interlinked concepts of accumulation, dispossession, and differentiation (2.2.3).

2.2.1 The Classic Agrarian Question

The classic agrarian question discusses the effects of expanding capitalism on agrarian societies. The classic agrarian question is discussed by ENGELS (1894) *Die Bauernfrage in Frankreich und Deutschland*, KAUTSKY (1899) *Die Agrarfrage* and by LENIN (1899) *The Development of Capitalism in Russia*. Having experienced the rise of industrial capitalism and the simultaneous disappearance of the European peasantry in the 19th century, they debated to what extent and how pre-capitalist modes of agrarian production (e.g. feudalism, slavery) were altered through expanding capitalism (BERNSTEIN 1996a).

In the twenty-first century, global capitalism is still expanding from its urban centres in the global northwest into its last frontiers in the rural global south. Though the classic agrarian question was solved for countries of the Global North, in Tanzania, it is among the most relevant. MAGHIMBI et al. (2011, 7) argue, "[t]he agrarian question in Tanzania is also a national question and the national economy is not likely to take off if the agrarian question is not resolved". Currently, about 75 % of Tanzania's rural population is either directly or indirectly reliant on the produce of the agrarian sector. For the past centuries, Tanzania was a deeply agrarian society, organised in small-scale farms. As Nyerere claimed in the 1960s, "for the foreseeable future the vast majority of our people will continue to spend their lives in the rural areas and continue to work on the land. The land is the only basis for Tanzania's development; we have no other".

Despite Nyerere's stance, Tanzania's political economy and macro sociological structure was changing. The classic agrarian question arises, whether and to what extent, Tanzania will remain an agrarian society, and if not, which possible futures and development paths are imaginable? (EYAKUZE 2004). The Marxist literature on the classic agrarian question was teleological in two main ways. First, many Marxists in the 19th century believed, capitalism is undermining its material foundation, will eventually collapse, and lead to communism (or to post-capitalism). Second, it was assumed that all societies follow the *English path*, analysed by MARX ((1867) 1976), at some point of their history. Since the notion that all societies follow the same development path was disproven many times, both teleologies need to be rejected. BERNSTEIN (1996a, 25) argues that the English path was exceptional,

"Not only was the English path exceptional in its historical circumstances (as the first transition to capitalist industry) and possibly its form (the 'trinity' of capitalist landed property-[tenant] capitalist farmers- agricultural wage workers), but its 'logic' (capitalist transformation of agriculture as a condition of industrialisation) may be incapable of replication elsewhere, and indeed unnecessary to industrialisation in other circumstances."

Although the processes Tanzania are different from the historical processes Marx described for the 16th century, BERNSTEIN (1996b, 22) wonders which lessons can be learned from "historical experiences of agrarian transition/ industrialisation for contemporary poor countries?". Afterall, there are multiple pathways how agrarian societies are included into the capitalist system. MAGHIMBI et al. (2011, 19) maintain,

"But there is not just one pathway through this transition – both its character and the outcomes are shaped by class relations and struggles, depending on the strength of contending interests of landed property and agrarian capital, agricultural labour in a variety of forms (including tenant peasants) and emerging industrial capital. State policies and interventions also influence agrarian transformation."

The Marxist historian HOBSBAWM (1994) claims that except for China, South-East Asia and Sub-Saharan Africa, the agrarian question was resolved during the *peasant wars* in the

twentieth century in which the peasantry was resolved (WOLF 1969). African governments have passively waited, or actively intervened, by agrarian policies and land politics (LAHIFF 2003). Tanzania is an interesting case because peasants still own most of the land and less alienation happened compared to neighbouring settler colonies. However, lately the integration of farmers at the Tanzanian peripheries has led to crisis. MAGHIMBI et al. (2011, 26) argue,

"The agrarian sector in Tanzania, as in many other developing countries where the majority of the population depend entirely on land for their livelihoods, is in crisis. Primarily, this crisis has been instigated by neoliberal economic reforms in the past decades and has intensified through the continuing forms of accumulation of capital, leaving most of local communities in a state of destitution and impoverishment, while exposing them to what can be termed massive exploitation and marginalization."

2.2.2 Bernstein's Agrarian Questions

BERNSTEIN et al. (1992) and BERNSTEIN (2010) suggest a historic-material research agenda to capture and analyse agrarian change. This agenda centrally includes four questions: Who owns what? Who does what? Who gets what? What do they do with it? Together they cover the most fundamental aspects of rural political economy. BERNSTEIN (2010, 23) suggests an implicit sequence,

"[...] social relations of property shape social divisions of labour, which shape social distributions of income, which in turn shape the uses of the social product for consumption and reproduction — which, in the case of capitalism, includes accumulation."

The first question, who owns what, refers to property and ownership regimes, site-specific historical materialism, the distribution of productive and reproductive resources among rural communities and the larger society. "Ownership and property have had different meanings in different kinds of society at different moments in history" (BERNSTEIN 2010, 22). The conversion of land as a means of subsistence into a tradeable commodity (commoditisation) was one of the defining characteristics of expanding global capitalism at its peripheries. Put differently, Bernstein's first question is about who is entitled and/ or able to use rural resources for the benefits of one's livelihood (SCOONES 2009).

The second question, who does what, points to everyday practices and the division of labour. Which individuals and social groups (called: agrarian classes of labour) perform what activities of production and reproduction? While the answer to the first question is juridical, descriptive and fix, the second question includes social relations, norms, rationalities, perceptions, and agency. Given property and ownership arrangements, may invite for cooperation or competition. Although formalised ownership regime exists, this does not

mean that all individuals ascribe to it and think that it is just. Equipped with the weapons of the weak (SCOTT 1986), the poor can react to the given property regime in multiple ways (BORRAS JR a. FRANCO 2013).

The third question, who gets what?, points to the "fruits of labour" (BERNSTEIN 2010, 22). It reflects the distribution of resources, surplus value, and wealth over time. The answer to this question can explain why the given property and ownership regime has solidified over space and time and explain why middles classes are emerging.

The fourth question, what do they do with it, is about relations of consumption, reproduction, and accumulation. It is about how social relations of production and reproduction lead to the distribution of wealth in each rural community or national economy. It addresses how surplus value and wealth is consumed or reinvested.

BYRES (1991) and Bernstein (1996) understood the agrarian question in three main ways: a) emerging capitalist relations in the agrarian sector, b) the contribution of agriculture to national economies/ global capitalism, c) the role of *agrarian classes of labour* in the struggle for democracy and socialism (COUSINS 2013; BERNSTEIN 1996b; BERNSTEIN 1996a; BERNSTEIN 2006; BERNSTEIN 2009a; BYRES 1991; BYRES 1996). MOORE (2008) adds the ecological dimension, whose historical impact is intertwined with the other three, but whose significance has not received the same attention.

2.2.3 Accumulation, Dispossession and Differentiation

Furthermore, three interrelated concepts are relevant to understand agrarian change. First, the concept *accumulation* which is among the most relevant in Marxist value theory. According to MARX ((1867) 1976), over the course of the 16th century, English commons were commodified and accumulated. Land was commodified, and privatised, enclosures and fences were erected. The forceful dispossession of most previous landowners on the one hand, lead to an accumulation of land for a minority on the other hand. Over the course of many decades and centuries, the surplus value derived from land and labour lead to differentiation. For Marx, the commoditisation of land marked the start of capitalism and a new way to organise nature. Over the course of centuries, the capitalist economic system has expanded in multiple waves from its' European centres into its semi-peripheries and peripheries (WALLERSTEIN 1986). Whereas Marx argued, "primitive accumulation" to be a singular historical process, LUXEMBURG ((1913) 1951) suggests that accumulation processes are continuous and ongoing. Global capitalism, LUXEMBURG ((1913) 1951) argues, responds

to cyclical crises by expanding into non-capitalised sectors. In this way, capitalism totalises all relations and creates a world in its own image. Thus, the expansion of capitalism include both primitive accumulation and sustained accumulation (NYAMSENDA 2018b).

An ongoing Marxist debate about accumulation is that around *metabolic rift*. Whereas in pre-capitalist societies, a dialectical relation between society and nature existed, in capitalism *nature* has become something external to *society*. FOSTER (1999b) argues that due to industrialisation a socio-ecological metabolic rift has deepened in the 19th century. Global capitalism, so FOSTER (1999b), is expanding into non-capitalised spaces and is thereby expanding and deepening the metabolic rift (SCHNEIDER a. MCMICHAEL 2010). MOORE (2011) instead argues that a metabolic rift exists since the 16th century and that ever since new metabolic rifts emerged. Capitalism is not destroying nature, capitalism is a destructive socio-ecological regime that is based on the premise of nature and labour as free gifts, or "cheaps" (MOORE 2016; PATEL a. MOORE 2018).

For the Tanzanian case, SHIVJI (2019, 259) suggests that capitalist accumulation is organised by bourgeois tendencies in centres and primitive accumulation organised at the peripheries by comprador tendencies,

"Socially, capitalistic accumulation manifests itself in the bourgeois tendency and primitive accumulation in the comprador tendency. From the side of the periphery, we may call the bourgeois tendency national bourgeois to distinguish it from the comprador bourgeois. The tension between the two tendencies translates into historically determined social struggles, with class alliances, ruling blocs, and resistances, which allows us to historicise and periodise class struggles."

SHIVJI (2019, 262) further argues that nation-building in Africa in the decades after independence was organised around capitalist accumulation. Foreign interest into Tanzania meant that as soon as national bourgeois elites emerged, they were 'compradorised' and forced to engage in primitive accumulation:

"The political economy of nation-building, whether through the agency of the state or stateaided private bourgeoisies, revolved around domesticating the process of capitalistic accumulation. Imperialist hegemony, however, ensured that whatever national bourgeois elements were born were quickly compradorised, re-imposing primitive accumulation. Even the most radical nationalist elites failed to build popular hegemonic blocks that would spearhead the national project."

In the course of the 21st century, African peripheries were primitively accumulated (SHIVJI 2009a; SHIVJI 2019). Where this happens, new social-ecological relations have emerged. In the case study area, where most village land is organised and owned communally, large chunks of land were recently converted from forestland and swamp land into cropland

(LEEMHUIS et al. 2017). These lands were primitively accumulated by rural residents who were pressured into evermore-marginal lands. The result of various waves of accumulation at the peripheries have led to a landed bourgeois on the one hand, and landlessness on the other hand (BLUWSTEIN et al. 2018). Being freed from their land (de-peasantisation), peasants were forced to sell their labour (proletarianisation), and eventually leave the agrarian sector (de-agrarianisation). For Tanzania, KAESS (2018) suggests that commoditisation and valorisation of land to be the core driving force behind primitive accumulation, rather than processes of dispossession, as HARVEY (2004) described them. Besides RODNEY (1975) and CLIFFE (1977), Shivji theorised around class formation in rural Tanzania since the 1970s (SHIVJI 1972; SHIVJI 1975; SHIVJI 1976; SHIVJI 1986). The land question became politicised during the 1980s and 1990s, when land was increasingly perceived as a commodity and speculation object. State farms became privatised in the early 2000s, some of them before the global food price crisis 2007/08 and the subsequent African Land Rush (HALL et al. 2015). Land administration became more centralised, inefficient and corrupt (GRECO 2014). Tanzanians with networks to the ruling party and the decision-makers in the land sector were able to accumulate land.

Second, processes of accumulation are inherently linked to those of dispossession and have been described for Tanzania (CHUNG 2017; CHUNG 2018; CHUNG 2019; SULLE 2017a). This dispossession can take many forms. Recently land grabbing, green grabbing, blue grabbing, identity grabbing, labour grabbing and other forms of grabbing were analysed (LI 2011; BENJAMINSEN a. BRYCESON 2012; GREEN a. ADAMS 2015; CORSON et al. 2013; FAIRHEAD et al. 2012). In the tradition of Marx and Luxemburg, HARVEY (2003) and HARVEY (2004) suggest that accumulation was sustained in a new imperialism by processes of dispossession. Harvey coined the phrase "accumulation by dispossession". Resources are accumulated (via commodities) in the hands of few, by dispossessing many.

Third, processes of accumulation and dispossession lead to different forms of differentiation. Here, the terms accumulation from above, accumulation from below and accumulation by detour were discussed (VAN DER PLOEG 2018). In addition, VAN DER PLOEG (2018) discussed three frameworks for differentiation, that he developed in earlier works (VAN DER PLOEG 2009; VAN DER PLOEG 2010; VAN DER PLOEG 2014).

First, according to VAN DER PLOEG (2018) the *market-driven framework* is connected to modernisation theories. The driving force of differentiation is seen in markets, which allocate resources, introduce new technologies, new products, seeds, and other agricultural input. Rural actors are perceived to be in a competition with each other for the better market

access, the best price and to win margins. The process of differentiation is seen as unilinear and selective. This framework argues that global value chains, new market actors and the laws of demand and supply will lead to a market-driven differentiation. Some rural entrepreneurs can succeed by out-competing others, unsuccessful farmers will have to seek for jobs elsewhere and leave their land behind for others to accumulate. The land left behind is put to more efficient use. Two consequences are land consolidation by emerging rural middle classes, and proletarianisation, de-peasantisation and de-agrarianisation. A rural reserve army would push millions to urban centres on the search for jobs. The industrial and the service sector would have to absorb this freed labour. A rapid market-induced transformation could lead to massive unemployment and political tensions.

Second, the *class differentiation framework* goes back to LENIN (1982) who wrote about the differentiation of the Russian peasantry at the end of the 19th century. He saw class struggle, capital accumulation, primitive accumulation and commoditisation as the driving forces behind class differentiation. LENIN (1982) identified three agrarian groups. First, the landless peasantry who do not own means of production and must sell their labour to make a living. Second, the landed smallholder farmers who produce enough food from their own land to feed their families and can sell surplus production on regional markets. Third, agrarian capitalists, who own medium or large pieces of land, rely solely on labour for their production and produce for markets. Through market forces, LENIN (1982) saw agrarian capitalist to become richer over time, leaving less land for the other two groups. This assumed teleology of differentiation later served as a political justification to take land away from the former group and to give it to the latter.

A third framework is that of CHAYANOV (1966) who refuses teleology and unilinear processes of agrarian transformation. He saw relationships between farmers based on reciprocity and suggested the driving force behind transformation to lie in the emancipatory aspirations and collective memories of the rural population. Chayanov's ideas were distinctly cyclical and indeterminate (VAN DER PLOEG 2018).

All frameworks believe in different relationships between producers, see different temporal patterns, and argue for different driving forces, with different actors of change and different locations of growth. Although coming from two antagonistic schools of thought, the Leninist framework shares similarities to the market-driven framework. In both, agrarian transformation is seen as inevitable, irreversible, and unilinear almost teleological process. For Kilombero Valley between 1840 and 1940, MONSON (1991, 16) suggests, differentiation happened due to "differential access to and control over

productive resources" on the inter and intra-household level, as well as between clans, ethnic groups and within and between districts and regions.

2.3 Visions of Rural Futures

In this sub-chapter, it is suggested that the link between political change (2.1) and agrarian change (2.2) are visions of the future. In the following socio-technical imaginaries (2.3.1) and future-making are discussed (3.3.2).

2.3.1 Socio-technical Imaginaries

"Men make their own history, but they do not make it as they please; they do not make it under self-selected circumstances, but under circumstances existing already, given and transmitted from the past. The tradition of all dead generations weighs like a nightmare on the brains of the living. And just as they seem to be occupied with revolutionizing themselves and things, creating something that did not exist before, precisely in such epochs of revolutionary crisis they anxiously conjure up the spirits of the past to their service, borrowing from them names, battle slogans, and costumes in order to present this new scene in world history in time-honoured disguise and borrowed language." (MARX 1852)

Past - Present - Future. These three moments of progressing time are part of the debate in future theory to which scholars from a range of disciplines have contributed. MORUS (1516) became the founding father of future-related literature, with A little, true book, not less beneficial than enjoyable, about how things should be in a state and about the new island Utopia that served as a social critique of the English society of his time. Since then, desirable futures (utopias) or dreaded futures (dystopias), were articulated in various political projects ranging from radical left to radical right. At different times, in different places, different future visions have played a role in eschatology, communist, anarchist, feminist, fascist and neoliberal ideologies. For instance, the recent trend in the international political right to imagine a golden past (e.g. Make America Great Again) is what BAUMAN (2019) calls "Retrotopia". Through the global Corona pandemic and climate change, discussions around future societies gained new momentum. Some of these visions are more concrete, others more abstract; some are more realistic, others, not so much. Through fairy tales, science fiction novels, art, movies, songs, and scientific reports like the Limits to Growth (Meadows et al. 1972), or the Intergovernmental Panel on Climate Change reports (IPCC 2021), emerging futures were discussed in different paths and scenarios. Humankind, nations, or individuals allegedly can act in concert to lower, or raise the world mean temperature, suggesting alternative futures, contingencies, and agency. Another world is *possible* is a famous slogan among the Fridays for Future activists across the globe and *The Africa we want* the slogan of the agenda 2063 of the AFRICAN UNION (2021).

Ideas about the future are embedded in decision-making that affect the fabric of societies. Ideas are articulated in songs, stories, newspaper articles, images, technologies and power, pointing to a range of possible, and therefore desirable, futures (DELINA 2018). According to JASANOFF (2015a, 4) to qualify as a *sociotechnical imaginary*, ideas have to be

"[...] collectively held, institutionally stabilized, and publicly performed visions of desirable futures, animated by shared understandings of forms of social life and social order attainable through, and supportive of, advances in science and technology."

For JASANOFF (2015a, 11) it is worth investigating the imaginative work of social actors, science and technology as to her all become "enmeshed in performing and producing diverse visions of the collective good, at expanding scales of governance from communities to nation-states to the planet". JASANOFF (2015a, 4) claims that sociotechnical imaginaries "can be articulated and propagated by other organised groups, such as corporations, social movements, and professional societies". Sociotechnical imaginaries are culturally specific and are both products and instruments of the coproduction of science, technology, and society in modernity (DELINA 2018). Desirable futures and specific sociotechnical imaginaries exclude alternatives. By realising one imaginary in a material sense, other imaginaries become less possible, or impossible. The discursive articulation and the material realisation of a certain sociotechnical imaginary are bound up in power asymmetries. Alternative visions compete to become materialised. Labelling some imaginaries more realistic than others can be a political strategy to delegitimise others. According to JASANOFF (2015a) sociotechnical imaginaries are stabilised and articulated through practices of power, networks, coalition, and technical innovation. Actors who hold certain sociotechnical imaginaries target policy-making and social mobilisation to convince others about one's own goals.

SMITH (2013) argued that the future is 'radically open' and that unknown and unforeseeable things will happen in a not all too distant future. Central in the making of the future, so SMITH (2013), is the struggle for ideas. This struggle, in turn, evokes the question of representation, democracy and the possibilities to articulate one's own needs and aspirations vis-à-vis others. According to BLOCH (1954), a common denominator between all visions of the future is what he calls the principle of hope. In a dialogue between Christian eschatology and Marxism (initially to be named *the dreams of a better life*) BLOCH (1954) negates neither antagonistic class interests, nor power asymmetries, but claims that

the hope for a better future (whatever that may be for different groups) underpins human thought and practices in substantial ways. Different from MORUS (1516) who located utopia on a distant island in the future, BLOCH (1954) claims that utopias in the 20th century have arrived in the present through the non-realisation of alternative realities. Through concerted action towards a specific future, multiple utopias could emerge in the here and now.

2.3.2 Future-Making

"Sweeping social change usually happens in stories first, and science fiction often has an agenda. What could be more political, after all, than imagining the future?" (Laurie Penney 2012 cited in JASANOFF 2015b, 338)

According to APPADURAI (2013a) two main groups stand out in future theory. On the one hand, natural scientists and neoclassic economists who theorise the future on probabilistic terms (statistics, needs, estimates, calculations, projections, choices, actions). On the other hand, constructivist social sciences, like anthropology, sociology and development geography who support an epistemology of possible future, which APPADURAI (2013c) calls future of possibility. He demands a politics of possibilities against the politics of probabilities and stresses that the future is no mere continuation of the present, something that can be rationally calculated or planned. Instead, APPADURAI (2013b) claims that the future is made by everyday practices, what he calls future-making. Inspired by Max Weber and Pierre Bourdieu's praxis theory, APPADURAI (2013b, 286) argues that social groups have specific imaginations, anticipations and aspirations in mind, when they act. According to COLONOMOS (2012), different actors are trying to sell their future to others as the best of possible other versions of the future. The more convincing a certain future is the less desirable and the less likely other futures appear. BECKERT (2016) connects imagined futures to fictional expectations that actors hold about them. Although ultimately the future remains unknown and uncertain, actors who are convinced about a future have an interest in presenting their future as a possible outcome that can be calculated and forecasted.

Appadurai does not elaborate which practices qualify as future-making practices. Thus, a systemic approach to future-making practices in nine steps is suggested along the spectrum abstract/ ideal and concrete/ material (Table 1). They are not (necessarily) mutually exclusive. The order of the nine steps from one to nine suggests a temporal sequence from suggesting new ideas until material implementation.

Table 1: Operationalising Future-Making Practices (own table)

Nr.		Practice	Modus
1		Envisioning, Imagining	Ideology, Utopia, Dystopia, Science
	Abstract/		Fiction, Art
2	Ideational	Convincing Persuading, Justifying,	Argumentation, Narration,
	↑	Legitimising, Selling, Stabilising	Discourse
3		Deciding, Networking, Institutional	Parliamentary Discussion, Board
		hedging	Meeting, Village Assembly
4		Mainstreaming, Policing, Planning,	Writing a plan, drawing a sketch
		Drafting	
5] ↓	Disseminating, Spreading,	Information Material, Propaganda,
	•	Communicating	TV show, Public Speeches,
			Documentary, Movies, Podcasts
6		Demonstrating, Exhibiting,	Props, Trials, Training,
	Concrete/ Material	Training, Testing	Experimenting
7	materiai	Implementing, Appropriating	Construction work

What comes into focus, when understanding everyday practices with the future-making concept, is the image of the good life, of a possible future in the not-yet. Although a myriad of desirable futures is actionable, only a specific future is performatively created. Through everyday practice, APPADURAI (2013a) claims, social groups performatively (re)create the material world in which they live. As soon as a critical mass of individuals implicitly or explicitly holds a vision (a socio-technical imaginary), it becomes reality through articulation and practice. Since not all futures can be realised in the same space at the same time, the realisation of a certain future means a disarticulation and derealisation of other futures. Different future projects have conflicting goals. They are articulated along the categories of class, race, gender, age, ethnicity, and livelihood. Which future is ultimately pursued, is the outcome of discourse, class struggle, power asymmetries, cross-scalar alliances, knowledge, and persuasion. Furthermore, APPADURAI (2013a, 188) argues that different social groups have different capacities to aspire: "(it) is not evenly distributed in any society. It is a sort of meta-capacity, and the relatively rich and powerful invariably have a more fully developed capacity to aspire". According to APPADURAI (2013a, 189), the poor have "a more brittle horizon of aspirations" because they have material needs and are therefore forced to think short-term. Middle classes and elites, instead, have the capacity to think and act medium- to long term. Hence, for Appadurai, the capacity to aspire hints at uneven distribution of knowledge, power, and agency. It is therefore not an essential part of a social group, but an indicator of relative class position. APPADURAI (2013a, 189–190) calls the capacity to aspire a navigational capacity:

"I see the capacity to aspire as a navigational capacity, through which poor people can effectively change the "terms of recognition" within which they are generally trapped, terms which severely limit their capacity to exercise voice and to debate the economic conditions in which they are confined. [...] the capacity to aspire [...] cannot be separated from language, social values, histories and institutional norms."

BECKERT (2016) argues that if no individual or social group can convincingly predict the future, then it depends on our imaginations, wishes, dreams, political affiliation and the level of agency towards which future social groups strive, and performatively enact through everyday practices. Since the future is unknown, different actors are trying to convince others that their vision of the future is the right and only one (there is no alternative). Powerful actors such as lobby groups, forecasters, consumer advocates, opinion leaders, influencers, media and religious groups but also school curricula, art, books, political talks, movies are part of what APPADURAI (2013b) calls "politics of hope" and BECKERT (2016) "politics of expectations". BECKERT (2016, 80) says,

"The contingency of expectations opens the way to a multitude of responses to any given situation. More than that, it is an entry point for the exercise of power in the economy. If expectations are contingent, if decisions depend on expectations, and if the decisions of others influence outcomes, then actors have an interest in influencing the expectations of other actors. How successfully actors are able to pursue this interest is an expression of the power they command."

Economic models, forecasts and other tools that try to predict the future are not neutral or objective, but embedded in institutions, norms, values, subject-theories, narratives and political ideology. This hints at political dimensions of models. "It is difficult to argue against the claim that statements about expected future developments are made at least in part with the intention to influence the events they foresee" BECKERT (2016, 84).

Likewise, APPADURAI (2013b, 299) stresses the importance of "democratic design" and thereby insinuates a Habermasean ideal speech situation (HABERMAS 1970) in which social groups are able to freely articulate their needs. However, such an ideal speech situation were not given in Tanzania under president Magufuli (NYAMSENDA 2018a). Thus, in the Tanzanian case, Gramsci's political theory written in Mussolini's fascist Italy allows analysing how future-making and sociotechnical imaginaries work under conditions of dictatorship, censorship, and widespread fear.

2.4 A Gramscian Political Ecology of Agrarian and Political Future-Making

"Without exaggeration, achieving and maintaining hegemony is about reconfiguring past, present, and consequently, the future." (MANN 2009, 341)

In the theoretical chapter, I argue that the combination of a Gramscian Political Ecology (2.1), Bernstein's Agrarian Questions (2.2) and Future-Making (2.3) provides a solid theoretical basis to pose relevant questions to the empirical material. A Gramscian Political Ecology of Agrarian and Political Future-Making can broaden and deepen our understanding of the ongoing agrarian change in the Kilombero Valley in connection to political change in Dar es Salaam and Dodoma.

The three theoretical perspectives have important things in common. First, Bernstein and Gramsci share a common interest in trying to understand what the expansion of global capitalism means for rural areas. Second, Gramsci, Jasanoff and Appadurai are concerned how actors envision, articulate, and engage in agrarian change. Gramsci is important to criticise future theory whenever it is idealistic or abstract. Fusing Gramsci's theorising around the state with the concept future-making is aware of power asymmetries. Third, Jasanoff's 'sociotechnical imaginaries' provide strong links to Gramsci's concepts 'common sense' and 'conceptions of the world' (WAINWRIGHT 2010a). It is through everyday practices, as Gramsci argued, that ideas gain material force (MANN 2009).

For the main empirical chapters four main concepts are relevant (Figure 5). First, conceptions of the world is understood as an ideological lens, a coherent set of ideas, through which a political question is seen by certain actors (WAINWRIGHT 2010a) (Chapter 5). In pluralistic societies, these conceptions are always plural. Conception A (blue), Conception B (yellow) and Conception C (green) are in an eternal struggle to become the hegemonic Conception (orange) (Figure 5). None of these Conceptions are static, but change over time, space, and scale (Figure 5). Gramsci, who had the fights of the First World War in mind when he wrote his political theory, suggested the term 'ideological trench warfare' between different political projects. All conceptions of the world, and thereby all conceptions of the future, entail narratives, imaginaries, ideologies which are shared by specific actors and networks (Figure 5). As politics in Tanzania is personality- and party-driven, rather than ideologically based, certain factions, politicians and powerful individuals may change their allegiances to gain an upper hand. Their conceptions of the world may change, including narrative, imaginaries, and ideologies.

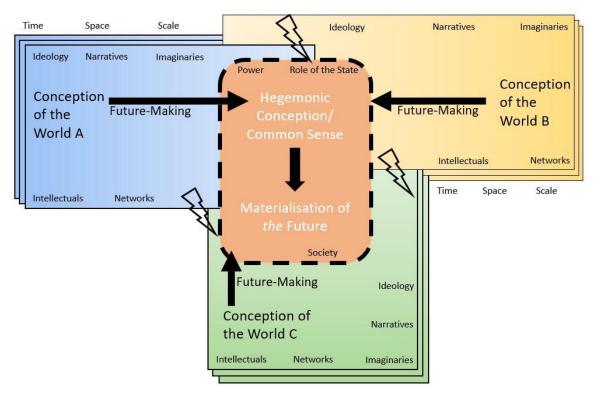


Figure 5: Politics of Future-Making (own graph after LEACH et al. 2007; STERLING et al. 2010)

Second, Narratives are stories told about the world (Chapter 6). They are ideological in the sense that no single narrative can claim to capture an objective truth. Instead, narratives stress a certain part of the truth and seek to legitimise certain policies and practices. Narratives do not necessarily rely on objective fact claims, but can function with 'alternative facts', 'fake news' and propaganda. The currency of narratives is convincing power. If other actors are convinced about a certain narrative, the narrative can be considered successful by its own standards. In a political discourse, hegemonic and counter-hegemonic narratives compete to become what Gramsci called 'common sense'. A narrative that manages to become common sense is likely to be part of the hegemonic conception of the world (Figure 5). Through narratives, some conceptions of the world and some futures are legitimised and promoted, while others are delegitimised and side-lined. Intellectuals and networks share narratives. The hegemonic narrative is supported by what Gramsci called traditional intellectuals. Counter hegemonic narratives are shared by organic intellectuals. Furthermore, narratives are shared on different media to gain broader support. Their convincing power and degree of mobilisation is connected to the strength and coherence of the arguments, and the imaginaries they invoke.

Third, *Socio-technical imaginaries* are specific articulations of narratives and of conceptions of the world. Whereas JASANOFF (2015a) suggests that socio-technical imaginaries need to be collectively-held to qualify as such, in the following in junction with Gramscian ideas, four types of *socio-technical imaginaries* are suggested (Table 3). First, a category of imaginaries that are collectively held and hegemonic is discussed. These may be called 'common sense'. Second, imaginaries that are collectively held, but not hegemonic. These imaginaries may be called 'counter-common sense'. Third, there are imaginaries that are hegemonic, but not collectively held. These may be called 'dreamscapes of hegemony'. A fourth category of imaginaries may be imaginaries that are neither collectively held, nor hegemonic. This last category may be called 'emerging counter-hegemonic Imaginaries'.

Socio-technical Imaginaries	Collectively Held	Not Collectively Held
Hegemonic	Common Sense	Dreamscapes of Hegemony
Counter Hegemonic	Counter-Common Sense	Emerging Counter- Hegemonic Imaginaries

Table 2: Conceptual Difference of Socio-Technical Imaginaries (own table)

Fourth, future-making practices are all those practices that envision, narrate, support, decline, or enact certain futures (Chapter 7). Future-making practices range from abstract to concrete and from idealistic to material. Power asymmetry between actors, unequal distribution of agency and the availability of knowledge are important aspects of future-making. APPADURAI (2013a) claims that different social groups have different capacities to aspire the future. This uneven distribution of the capacity results in different levels of political influence. Once future-making practices have resulted in materiality, a certain development path is laid.

3 Methodology

In this chapter, the approach to 'the field' (3.1), the philosophical standpoint and grounded theory are explained (3.2), followed by the applied methods, the gathered data, and the data analysis (3.3).

3.1 Approaching 'the field'

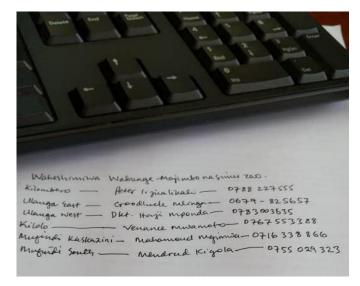
For gathering empirical material in Tanzania, I have undertaken two field trips. The first between July and October 2018, the second from February to September 2019. In 2018, I saw the need to adjust the research focus away from SAGCOT/ Green Growth, as political dynamics in Tanzania deviated from the assumption in the original proposal. Due to the election of president Magufuli in late 2015, his turn towards industrialisation and largescale infrastructures meant that Kikwete's agriculture first policies were far less relevant for ongoing social-ecological transformation, than initially assumed. The field trip in 2018 began in Dar es Salaam. The first trip was meant for establishing contacts with researchers, NGOs, and governmental institutions. Through screening websites, enrolling in newsletters, reading newspapers, and calling publicly available numbers, the author entered networks of professionals working in the agrarian sector. Through snow-balling asking interviewees for additional contacts after each interview - I soon gathered more than 100 contacts (STRATFORD a. BRADSHAW 2016, 124). This approach turned out to be particularly helpful in a Tanzanian context, where a small group of urban professionals has gone to school and university together. Many have worked in the same institutions at some point in their career. Throughout the field stays, I used travels, restaurants and museums for observations and networking. The more rural the setting, the fewer alternatives for accommodation and restaurants exist. The likelihood of personal encounters with expats, staff from ministries, international NGOs and researchers rise. *Morogoro Hotel* in Morogoro town, Mbega Resort in Ifakara town and Mbingu Sisters in Mbingu village proved to be infrastructural bottlenecks. In Malinyi village, it so happened that the MP had reserved a room in the same hotel, as only five small hotels with a total of about 50 rooms existed in Malinyi village.

In addition, in 2018, I learned about bureaucratic steps, familiarised myself with the Kilombero Valley and met a student who would become a research assistant in 2019. After networks on the *national scale* in Dar es Salaam and Dodoma, Morogoro town was the next

step for establishing networks on the *regional scale*. Towns like Morogoro fulfil important social, economic, and political functions by connecting rural residents to the national economy. Regional radio stations, devolved ministries, universities, farmer unions and NGOs have their offices here. Networking in Morogoro town became my entry ticket to project sites across the Kilombero Valley, the *local scale*.

Hence, my 'field', or study site, as it is called in human geography and anthropology, was the Kilombero Valley, as well as offices in Morogoro town, Dodoma, and Dar es Salaam. Whereas in the former, I sought to find material aspects of the social-ecological transformation, on the latter I sought to find discursive representations of the Kilombero Valley and policy discussions on how to deal with the ongoing transformation.

In my second research phase, between February and September 2019, I started with research in Dar es Salaam and Dodoma. A couple of NGOs, international organisations and governments institutions had agreed to do interviews. After about two dozen interviews, together with a research assistant, I conducted interviews in the Kilombero Valley. Among the selected sites were the villages Njage, Mbingu, Mofu, Mpofu and Mngeta (Kilombero District) as well as Itete, Malinyi, Ngombo, Mtimbira, Igawa, Majiji and Kipingo (Malinyi District). Parallel to these research activities in Kilombero Valley, a *household survey team* from our Collaborative Research Centre (CRC) conducted a quantitative survey in some of the same villages (GEBREKIDAN et al. 2020).



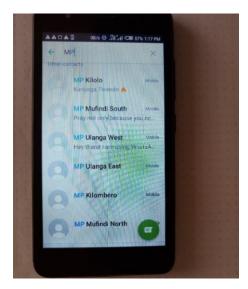


Figure 6: Access to cross-scalar networks (photos: RV)

- a) Handwritten list of private mobile numbers sent from parliament through What's App (left)
- b) Tanzanian MPs using What's App (centre)

The trip to Dodoma in mid-2019 is an indicative example on how my research was organised and how a mix of luck and bodily characteristics as a white male German have influenced my networking. In March 2019, I sent an official request to the Tanzanian parliament ('Bunge') to be allowed to talk to MPs. Two months later, a staff at the parliament sent me a message via WhatsApp to inform me that I have the permission to approach MPs. A snapshot with the handwritten numbers and names of all requested six MPs from Morogoro and Iringa region was sent later that day (Figure 6). Three of six MPs answered on WhatsApp within minutes, the others within a day.

Conducting empirical research required a lot of resources and bureaucracy. For the research a business visa, a national research permit and a residence permit were required. Application processes for the latter two were time-consuming and costly. I spent more than USD 1,000 for these applications. My research was privileged because flights, permits, travelling costs, research assistance and other materials were covered by the CRC. Being a tall, white, male, young scholar from the German middle class came with additional privileges (SULTANA 2007). Although self-reflection on these aspects remains somewhat anecdotal and speculative, I have reason to assume that my access to NGOs and international institutions was easier for me, than it would have been for a Tanzanian colleague. Appointments were easier to arrange and almost never cancelled, contacts were shared more freely with me, and the relevance and intension of my research never questioned. Another important advantage was that the gatekeepers and secretariats of the WB, Food and Agriculture Organisation of the United Nations (FAO) and embassies were more likely to let me in without an appointment, than they would have done with African colleagues.

During the Magufuli presidency the political tensions rose. The freedom of speech, freedom of press and freedom of assembly were all limited or cancelled. These severe restrictions on civil society had negative implications on data collection. Many interviewees compromised on the level of openness when talking about politically sensitive issues. On the one hand, researching about initiatives that were not in the interest of the Magufuli government (Kilimo Kwanza/ SAGCOT) was politically unproblematic. On the other hand, researching about Magufuli's so-called flagship projects (industrialisation/ Standard Gauge Railway (SGR)/ Stiegler's Gorge) became difficult to impossible. Afterall, a federal minister said in Tanzanian parliament 'anyone against Stiegler's Gorge, will be jailed' (THE CITIZEN 2018f).

Changes in the law on online content meant that bloggers and websites had to pay high registration fees to continue their activities. Under the presidency of Magufuli, many journalists and bloggers stopped working. Radio stations and newspapers were banned. Many politicians, artists, academicians, journalists were threatened, beaten, abducted, jailed, or killed. A mixture of censorship and self-censorship was constitutive of Tanzania under Magufuli. Amendments in the statistics act 2018 prohibited the publication of statistics that had not been approved by the National Bureau of Statistics (THE CITIZEN 2018k). A STAFF WB I-18 (2019) said in the context of this new law: when you go along a street and you count 20 petrol stations, then you may not publish this number, when the National Bureau of Statistics says that there are 15, or 25 petrol stations on that same street. The pressure from the WB and other international institutions began to rise. A few months later, these amendments were taken back.

My research permit was granted for a 12-months-period in July 2018 and was renewed in 2019. The permits entail a list of regions in which research activities are allowed. Initially in Morogoro and in Iringa region. Prior to research, respective regional administration must be informed by a COSTECH-introduction letter. The regional administration, in turn, needs to file an introduction letter for targeted districts in that region. This introduction letter from the regional offices must be handed to the district administration. This procedure continues with the district level writing introduction letter for villages. Only after following these permission-seeking procedures, interviews with rural residents may take place. Explorative research methodology faces legal constraints. However, the benefit of a lengthy bureaucratic process is an easier access to interviewees. Staff from government institutions, NGOs, cooperatives, and rural residents have been welcoming. Only on one occasion, a senior officer at a ministry in Dar es Salaam requested to see all permits before agreeing to an interview. On another occasion upon interview request, a junior officer from the Tanzanian Wildlife Authority (TAWA) in Ifakara town asked for the additional permission of his superior in the TAWA headquarters in Morogoro town - a six-hours-drive away. Some younger officials seemed to fear skipping the chain of command and to give out sensitive information that could cost their career.

Furthermore, four discourses have influenced my thinking during the writing-up of my dissertation. First, the Black Lives Matter (BLM) movement that gained momentum worldwide, when the Afro-American Gorge Floyd was killed by police officers in 2020 in the USA. Questions around racism, equality and justice emerged, which we also debated within the CRC. On two occasions, the author was interviewed by Deutschlandfunk, for

the program Eine Welt 2.0 Dekolonisiert Euch! (DLF 2020). Second, in recent years postcolonial groups have become more active across Germany. Like the Rhodes must fall initiative in 2015 in South Africa, and the deconstruction of the Edward Colston monument in England in 2020, post-colonial groups in Germany seek to address postcolonial traces in German cities. For several months, the author was part of the post-colonial group in Bonn. Third, the missing apology for the German genocide in Namibia was discussed in German media. Historians debated to what extent the German genocide in Namibia prepared the genocide in the Third Reich. Fourth, the provenance debate became more virulent In Germany after France's President Macron publicly announced in 2015 that cultural objects from French museums should be returned to Africa. The discourse about the provenance of cultural objects in German museums gained new momentum (SAVOY 2021). The exhibition Resist! Kultur des Widerstands in Cologne's Rauten Strauch Joost Museum in 2021 was one of many indicators that the German public has re-entered a new phase of coming to terms with their colonial past. These debates include questions concerning rightful ownership of artefacts, benefit-sharing and unlawful appropriation of cultural objects (e.g., Benin bronzes), natural objects (e.g., dinosaur bones) and human remains (e.g. skulls). When Abdulrazak Gurnah won the Nobel Prize in literature in 2021 for novels like Paradise (GURNAH 2004) and Afterlifes (GURNAH 2021), Germany's colonial past gained additional attention.

Doing research in Tanzania, a century after the German colonial period, required awareness of the colonial past and the role scientists have played therein. During my stays in Tanzania, I familiarised myself with the Tanzanian perspective on their history. Thus, I visited the National Museum, the Dar es Salaam Centre for Architectural Heritage, the German boma in Bagamoyo and in Iringa, the *Kaole ruins* near Bagamoyo and the *slave museum* on Zanzibar. On several occasions, I went to the Nafasi Art Space and the Goethe Institute. These visits were part of my reflexivity on what it means to be a white, male, well-funded German researcher in an ex-colony (Sultana 2007; Prowse 2010). During 2018, I met two Tanzanians, one of which works for the German Embassy, the other as a teacher and translator at the Goethe Institute. The latter translated chapters from the anthology *Dinosaurierfragmente: Zur Geschichte der Tendaguru-Expedition und ihrer Objekte*, 1906 - 2018 (HEUMANN et al. 2018) into Kiswahili. The anthology deals with the ways in which dinosaur bones were *discovered* in Tendaguru, how they were declared German property, dug out and transported to the Indian Ocean by barefooted semi-slaves. At the coast the dinosaur bones were shipped to a museum in Berlin, where thousands of bones and fragments were

puzzled together over the course of decades (HEUMANN et al. 2018). Up to date, the dinosaur fragments from Tendaguru constitute the biggest displayed dinosaur in German museums. Being aware of post-colonialism and previous extractive research, I wondered to what extend German-funded research in Tanzania is legitimate, who the owner of research data should be, who is benefitting from my research and how I could share the results. Since my main motivation for doing research was to receive a doctoral degree, the answers to those questions were always difficult and unsatisfactory.

3.2 Research Philosophy and Grounded Theory

Different understandings of possible futures are among the core research interest of this dissertation. This is why this dissertation project is based on an ontological/epistemological stance of critical realism and social constructivism.

Ontologically, this dissertation departs from the philosophical conviction of *critical realism* (COLLIER 1994; GORSKI 2013; GORSKI 2018; RUTZOU a. STEINMETZ 2018; JESSOP 2005a). "Critical realism assumes a transcendental realist ontology, an eclectic realist/ interpretivist epistemology and a generally emancipatory axiology" (EASTON 2010, 119). According to SAYER (2000), the fundamental claim of critical realism is that "the world exists independently of our knowledge of it"; "that there is a real world out there" (EASTON 2010, 119). Yet, the 'reality' of the world cannot be grasped in a positivistic way because social science researchers do not have the means to access an ontological truth behind phenomena (EASTON 2010; COLLIER 1994). However, what *appears* to be the social reality (truth) for individuals and social groups can be researched. Individually, or collectively held convictions become relevant in a material sense, when everyday future-making practices reaffirm these convictions (MANN 2009; APPADURAI 2013a; WAINWRIGHT 2010a).

The epistemological stance of this dissertation is social *constructivism*. According to Jung (2019, 2), constructivism is based on the assumptions that "human interaction is not shaped by material factors, but primarily by ideational ones"; second that "the most significant ideational factors in this context are intersubjective beliefs as shared collective understanding"; and thirdly that "these beliefs construct the actors' identities and interests". Every individual (re)constructs the social world in which we live in different ways.

A constructivist epistemology cannot be clearly delineated from a critical realist ontology. Both are a unit and imply a specific methodology and specific methods, which speak to the subjectiveness of worldviews. The research design of this dissertation follows grounded theory, a meta-concept that provides researchers with a theory-generating methodology that is open, pragmatic, creative and involves qualitative data (TIMONEN et al. 2018; CHARMAZ 2012; SUDDABY 2006). "The research design is the plan or strategy researchers use to answer the research question, which is underpinned by philosophy, methodology and methods" (TIE et al. 2019, 1).

Since GLASER a. STRAUSS (1967) 'founded' grounded theory many directions have emerged (BRYANT a. CHARMAZ 2007). A central feature in all grounded theory is iteration and a constant dialogue between theory and empirical data (CHARMAZ 2012; CHARMAZ 2006). In this dissertation, a constructivist and critical grounded theory approach was chosen (TIMONEN et al. 2018).

First, in a constructivist grounded theory, the researcher is generating data and theory (CHARMAZ 2006; CHARMAZ 2012). CHARMAZ (2006, 187) defines grounded theory as "a method of conducting qualitative research that focuses on creating conceptual frameworks or theories through building inductive analysis from the data". It's "methodological underpinnings focus on how participants' construct meaning in relation to the area of inquiry" (TIE et al. 2019, 2). Hence, reflexivity and positionality become central. Previous experiences and personal characteristics of the researcher are important for the choice for methods, interview partners and data interpretation.

Second, a critical grounded theory "begins with critical observations and/ or experiences of the critical issues prior to the study and seeks to enact change" (TIMONEN et al. 2018, 3). Similar to the interests of political ecology, research in critical grounded theory is intended to be emancipatory. According to TIMONEN et al. (2018, 6) "[grounded theory] must remain open to new, unanticipated findings and avoid 'hypothesis testing' style of inquiry". Although researchers need to read about their field of study before entering the field, when being in the field, researchers need to be open to emerging topics and research questions. This openness is constitutive for the entire research process and the reason why the theory generated in grounded theory is *grounded* in the data.

In the preparations, I deduced research questions from theoretical debates. When confronted with empirical data, I refined these questions. As LAMNEK (2010, 158) and DOWLING (2016, 37) demand, in qualitative studies research questions need to be constantly

revised, reformulated, or refused. MAXWELL (2005, 66) suggests that well-formulated research questions are among the core results of the research process and not a mere means to an end. Furthermore, open qualitative methodology responds better to varying interests of interviewees, their site-specific knowledge, and their levels of education.

Equally, codes and concepts should emerge from the data. They should be in a constant dialogue with already-existing concepts before, during, and after data collection. Approaches in coding range from open to theoretical coding. In this dissertation, a mix of pre-defined set of open codes (inductive) and theoretical codes (deductive) was used. In contrast to SCHREIER (2012) who proposes to use mutually exclusive codes, I follow KUCKARTZ (2016, 43) who suggests to allow codes to overlap. MAYRING (2015) proposes that some codes should be deduced from theoretical considerations and the interviews, while other codes should be (re)defined in the course of the analysis. This was done to follow the principle of openness which is supported in qualitative research (GLÄSER a. LAUDEL 2010, 201). Hence, some of the codes were defined prior to the analysis and deduced from the theory and empirical material (KUCKARTZ 2016, 176).

The final stage of coding involves theoretical integration of categories, leading to the formulation of concepts and the relationships between them that constitute the theory (TIMONEN et al. 2018). TIE et al. (2019, 3) suggest a constant comparative analysis for coding and category development, an iterative process that involves inductive and deductive thinking. CHARMAZ (2012, 5) argues,

"Codes rely on interaction between researchers and their data. Codes consist of short labels that we construct as we interact with the data. Something kinaesthetic occurs when we are coding; we are mentally and physically active in the process".

Hence, the coding procedure is an intense interaction between the researcher and the data. Neither the positionality of the researcher, nor the data itself can claim to be objective. Instead, situated and embodied knowledge, as well as many bodily characteristics of the researcher made the qualitative research process subjective (SULTANA 2007). Alternative villages could be selected, other experts interviewed, alternative theoretical orientation used, and other methods applied. Likewise, the coding was a highly subjective process. The next sub-chapter will address the collected data, the methods, and the evaluation process.

3.3 Methods, Data and Data Analysis

The gathered material from Tanzania includes more than sixty qualitative interviews, focus-group discussions, (inter)national newspapers articles, field diaries, photos and gathered *grey material*. In addition, I took part in the annual REPOA workshop in April 2019, visited the MP from Malinyi in his constituency in July 2019, and attended the Nane Nane Agricultural Show in August 2019 in Morogoro town. WINCHESTER a. ROFE (2016, 5) argue that "complex and varied research questions [...] require a multiplicity of conceptual approaches and methods of inquiry". Accordingly, a mixed methods approach was used, one that takes advantage of a single method (within-method) and among different qualitative methods (between-method) (FLICK 2015, 309). In line with the research philosophy, the grounded theory methodology, five qualitative methods were combined.

First, and most importantly, more than sixty semi-structured qualitative interviews were conducted. According to LAMNEK (2010, 308), qualitative methodology addresses the knowledge and interests of the interviewed more than standardised methods. It is these individual truths and collectively-held-imaginaries which become converted into materiality through everyday practices (JASANOFF 2015b; MANN 2009). Semi-structured qualitative interviews were used due to a maximum of openness and flexibility. This method aims at a conversation with a purpose that allows for reciprocal understanding and exchange of information (RITCHIE a. LEWIS 2006, 138; LAMNEK 2010). The interview guidelines were adjusted slightly after every interview (see Annexes). The guidelines reflected both the increasing level of information of the researcher and the specific knowledge of the interviewee. An average interview started with greetings, introductions and small-talk for a warm-up, the conversation was briefly interrupted for the consentseeking question for recording (DUNN 2016). The confidentiality and the sole use of the interviews for this dissertation was assured. Several interviewees wished to remain anonymous because they feared consequences. Thus, only those interviewees who accepted are cited with their full names, others with institution + staff + date.

All interviews took place after an informed consent that involved the estimated length of the interview and the outline of the research objective (DOWLING 2016). Three mayor *fields* of interests were predefined *politics*, *social-ecological transformation*, and *rural future-making*. Questions relating to these fields of interest were asked in no particular order (DUNN 2016, 158). Fields of interest were oriented at the methodological and theoretical considerations that preceded the field work which is why this research procedure was partially theory-based (GLÄSER a. LAUDEL 2010, 115). The researcher, engaged into dialogues by giving the

conversation a direction by strategically asking follow-up questions, paraphrasing the interviewee, inquiring details and interpreting statements (RITCHIE a. LEWIS 2006; LAMNEK 2010, 319). When conducting interviews, KVALE (2007, 81) believes the interviewer should be "knowledgeable, structuring, clear, gentle, sensitive, open, steering, critical, remembering, interpreting". These competences are of special importance when a wide range of people is interviewed. The researcher is required to show empathy and interest in various opinions (RITCHIE a. LEWIS 2006, 143). PROWSE (2010, 227) demands researchers from social sciences need to "build sincere and informative interpersonal relationships with a range of individuals differentiated by gender, race, ethnicity and class [and] engage competently with social actors". During each interview, questions were (re)formulated spontaneously and, , if necessary, the course of the interview adjusted (LAMNEK 2010; DUNN 2016). Whereas most interviews in urban areas were conducted in English, interviews in the Kilombero Valley were done mostly in Kiswahili in a team with Grace and, at times, with Esau, an experienced driver and local guide.

The selection process of the interviewees is a source of possible bias. The author used the common snowball sample technique, in which one initial interview led to several new contacts and eventually to more interviews. Hence, many interviews were arranged within the same networks. Although easier accessibility of interviewees is a key advantage of this approach, a disadvantage is an ideological closeness between individuals of the same network. While some interviews were conducted spontaneously, others were arranged before. Most interviews were done with single interviewees. Few interviews were done with groups. Although qualitative methodology does not seek and cannot claim to be representative, interviewees varied in class, race, gender, livelihood, age, and profession. This broad sampling was aimed at representing different voices. In urban areas, interviewees included NGOs, scholars, government officials, in rural Tanzania peasants, smallholder farmers and (agro)pastoralists (see Table 6 in the annexes). Yet, and by default, most interviews were done with middle-aged men. In a patriarchal society, like Tanzania, this is *male bias*. A third bias was urban, as urban professionals were interviewed more, than what SHIVJI (2017b) calls *rural working people*.

The variety of interviewees in urban and rural areas covered has strength and weaknesses. On the one hand, interviewing experts of different institutions, on different scales and in different fields is an advantage, as a broad spectrum of perspectives on rural transformation can be grasped. On the other hand, a disadvantage and another limitation of the data collection was the lack of comparability in the subsequent data analysis. In

addition, the research focus on the Kilombero Valley, as a large area with 40 times 100 kilometres, meant that doing research in a dozen sites across the Kilombero Valley within few weeks meant that less time per site was used. Moreover, interviewees were familiar with interview situations to different degrees. Staff from international organisations and government institutions tended to take interviews as a weekly routine. Answers given from STAFF WB (2019) and STAFF AGRA I-48 (2019) mostly repeated the information on their websites, so that the additional knowledge gathered through interviews, was minimal. For most respondents in rural areas, interview situations were abnormal. AGROPASTORALISTS MALINYI I-43 (2019) wondered what research is (good for) and claimed that in recent years no researcher has come to their sites. Interviews in rural settings often meant that for the duration of the interview livelihood activities could not be pursued. In certain occasions, a compensation of expenses was paid after the interview (money; local goods).

Second, qualitative participatory data collection methods were applied. Among them were transect walks, resource maps, group interviews, focus-group discussions and drawing Venn diagrams/ spider graphs (BOHNSACK a. PRZYBORSKI 2007; LONGHURST 2016; VOS et al. 2021; SCHRECKENBERG et al. 2016; ARMATAS et al. 2017). Participatory data collection methods are connected to participatory rural appraisal (PRA) and rapid rural appraisal (RRA) (CHAMBERS 1994; CAMPBELL 2002). Transect walks were done with village leaders in various occasions. These walks began at the village offices and lasted between a few minutes, to more than one hour. They were informative and gave an oversight over the social-ecological dynamics in the village, and beyond. In a subsequent qualitative interview, I could refer to the walk. Moreover, the transect walk opened the opportunity to draw resource maps, to take pictures, and to ask first questions. Furthermore, other rural residents joined the walk and added valuable information. In Chiwachiwa hamlet, where





Figure 7: Participatory Data Collection Methods (photo: RV)

- a) Spontaneous Group Interview, Chiwachiwa Hamlet
- b) Pre-arranged Focus-Group Discussion with Venn diagram, Mnegta Ward

the village chairperson was absent during our visit, a discussion with one villager transformed into a group interview that lasted for two hours (Figure 7). In three other occasions, focus-group discussions were pre-arranged. We agreed on the venue, the estimated length of the session, the topic, and the group constellation. This allowed for detailed preparations (e.g. to bring a bloc, pens, cards, pictures) and to draw spider-graphs or Venn diagrams with villagers (ARMATAS et al. 2017).

Third, I engaged in ethnographic participant observation (Vos et al. 2021; LECOMPTE a. SCHENSUL 2010). When visiting the REPOA Workshop in Dar es Salaam, the Nane Nane Agricultural Show in Morogoro, SAT's Vianzi Farm near Morogoro, or during transect walks, participant observations were a crosscutting ethnographic method. Filling three field diaries with field notes, questions, own tables, sketches, graphs, contacts, mobile numbers, etc. became an almost daily routine between April 2018 and December 2019.

Fourth, and as part of the interviews, the visual method *photo elicitation* was used (HARPER 2002; ROSE 2003). Visual methods can help to discuss abstract concepts (ROSE 2003; ROSE 2016). The usage of pictures in the research process can uncover wished and practices that otherwise remain hidden (STEPHAN 2021). Since the future is an abstract and absent terrain, it is not easy to talk about it. Through bringing printouts with different possible rural futures to the interview situation, I sought to trigger a discussion. Towards the end of each qualitative (group) interview, I handed over three different laminated print outs (Figure 8). Afterwards, I asked, which future they think is possible for the Kilombero Valley and second, which future they hoped for the Kilombero Valley. Both questions could be extended by follow-up questions. Sometimes interviewees agreed to one picture, in other instances, interviewees suggested the combination of two different pictures and once an interviewee said all three pictures were unrealistic.

On several occasions, interviewees asked, whether they could have the printouts. Photo elicitation can be highly recommended when researching possible futures. All interviewees showed an interest in discussing the future. With concrete material at hand, a controversial discussion can be triggered on what a good life and good future is. Yet again, the deductive pre-selection of three pictures by myself is another bias. A more inductive methodology was suggested by JOHANSSON a. ISGREN (2017). They hired a Tanzanian artist who together with rural residents drew three Tinga-Tinga style versions of intersubjectively shared visions of the past, the present and the future. A key challenge in the photo elicitation methodology and in the one suggested by JOHANSSON a. ISGREN (2017) is the categorical difference between two kinds of futures.

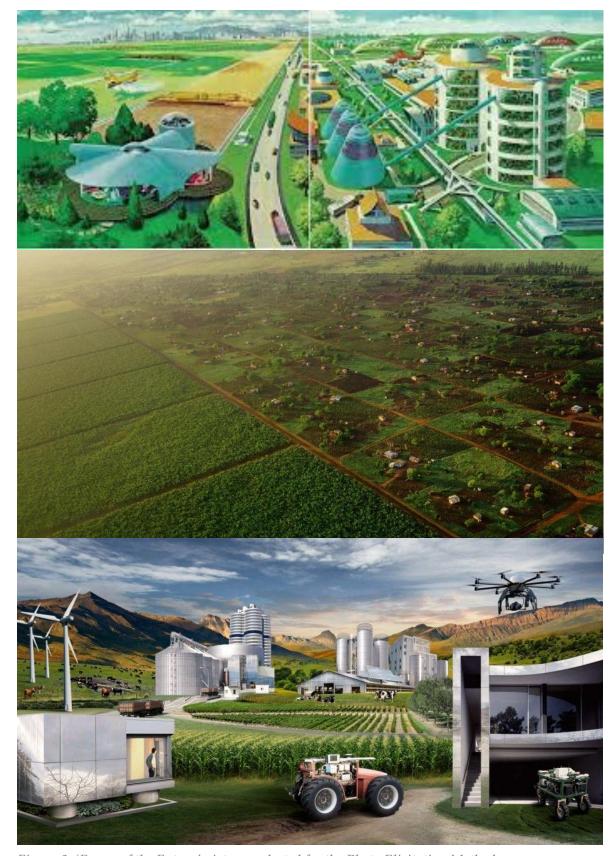


Figure 8: 'Farms of the Future' pictures selected for the Photo Elicitation Method

- a) Top: David Meltzer 1970 (SCOTT 1998, 272)
- b) Middle: Small- and Large-Scale Farming Outside Maputo, Mozambique (HAMMOND 2014)
- c) Lower: Industrial Agriculture with modern technology (GROBECKER)

On the one hand, *idealistic futures*, to be wished for *despite* social, economic, and political constraints. On the other hand, *realistic futures*, that interviewees foresee *because of* social, economic, and political constraints. Rarely, these two future conceptions were the same. Often, I asked for clarification whether the future they talked about was an ideal future, or whether it was realistic. In further qualitative research on visions of possible futures, the categorical difference between idealistic and realistic futures should receive more attention. It is the difference between the two, which mark an interesting field of study.

Fifth, the follow-the-thing method was applied. This method was suggested by COOK (2004) who followed a Papaya along its value chain, and ERMANN (2012) who followed a yogurt drink. Both followed a commodity and by doing so referred to Harvey's call to "get behind the veil, the fetishism of the market" (COOK 2004). In human geography, the followthe-thing method was used in a range of contexts. Since not only things, but also persons, policies, models and ideas travel (BEHRENDS et al. 2014). The author followed an MP from Dodoma to his rural constituency because MPs are central actors in political communication in Tanzania. After the interview in Dodoma, Haji Mponda, the MP for Malinyi Constituency, agreed to meet when he tours through villages. By following the MP from Dodoma to his rural constituency, I sought to follow the political change under Magufuli, personalised in the MP, to Malinyi. The MP, I assumed, is one of the key translators between national politics and agrarian change (FROSINI 2010; LACORTE 2010). I hoped to be able to see the interaction between the MP and rural residents, how political changes in Dodoma and how agrarian changes in his constituency were reflected in his speeches and the people's reactions. In Gramscian terms, the MP is a traditional intellectual, who incorporated the conception of the world of the Magufuli government. His speeches can be considered hegemonic. Since his speeches are performed in public, they are relevant futuremaking practices.

According to LAMNEK (2010) data analysis involves the phases transcription, single case analysis, general analysis and control. Accordingly, all interviews were transcribed (an example see in the Annexes). This was done with the support of Tanzanian students. Some meaning was lost through translation. In Kiswahili, there is no word for *future*. Instead, the phrases siku zijazo ('the coming days') or miaka ijayo ('the years to come') were used. This language barrier in translating the theoretical concepts back and forth constitute a loss in information. In the transcriptions, the focus was laid on the content relevant for the subsequent analysis. Thus, transcription was not done word by-word and does not include all features or non-linguistic behaviour (KOWAL a. O'CONNELL 2015, 438; KUCKARTZ 2016,

166). Additionally, and for better readability of the transcripts, the standard orthography of the English language was used, and grammar mistakes corrected, when the meaning of the interviews remained unchanged. In addition, the names and locations of the interviewees were made anonymous due to explicit wishes, or due to the assumption that a publication of names might be harmful (KUCKARTZ 2016, 171). Through the process of transcription and the way the interviewer understands the interviewee first preliminary conclusions are drawn (MATTISEK et al. 2013, 91). The constructivist character of transcripts should be reflected (KOWAL a. O'CONNELL 2015, 440).

For each interview, a single case analysis was undertaken after the transcription. Those single case analyses included the main characteristics of the interviewees, the contexts in which the interviews had taken place and executive summaries of the interviews. Furthermore, the results of the expert interviews were compared in a general analysis. Similarities in the interviews allowed for generalisations, differences for a critical engagement (LAMNEK 2010). For the general analysis I used the qualitative data analysis MAXQDA12 (SILVER a. LEWINS 2014; KUCKARTZ 2016). I defined codes for sentences and paragraphs of the transcripts (see Table 7 in the Annexes). The coding frame was organised hierarchically with three levels (the main codes are Socio-ecological Transformation, Politics and Rural Future-Making). In contrast to SCHREIER (2012) who proposes to use mutually exclusive codes, I follow KUCKARTZ (2016, 43) who suggests to allow codes to overlap. MAYRING (2015) proposes that some codes should be deduced from theoretical considerations and the interviews, while other codes should be (re)defined in the course of the analysis. This was done to follow the principle of openness which is supported in qualitative research (GLÄSER a. LAUDEL 2010, 201). Hence, some of the codes were defined prior to the analysis and deduced from the theory and empirical material (KUCKARTZ 2016, 176). As the single case analysis proceeded into a general analysis, additional codes (e. g. Future/ Expectations; Irrigation Schemes), were generated, changed, turned into subcodes, or deleted in an inductive way (MAYRING 2015, 69). The selection of codes was central for the subsequent data analysis. Important passages, sentences or phases in the interviews received coding. Statements like 'the central government should invest more money into large-scale irrigation schemes' received more than one code (e.g., Central Government/ Large-Scale irrigation scheme/ Investments into agriculture). All codes and coding procedure represent a highly subjective interpretation of the data.

4 The Kilombero Valley

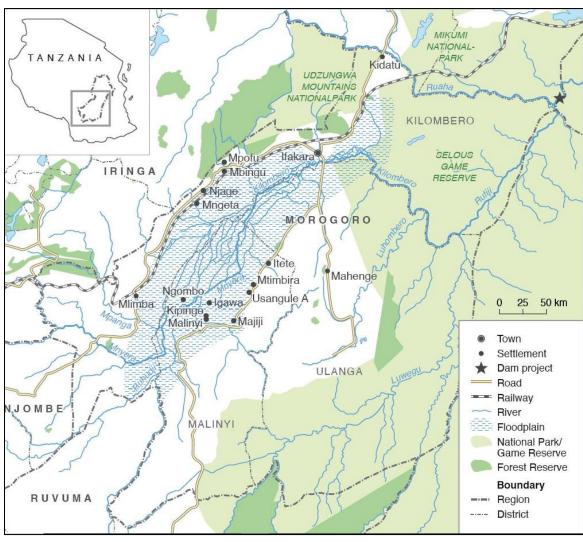
In the following chapter, the first main research question - *In which ways is the Agrarian Change in the Kilombero Valley causally connected to the Political Change?* – is posed. In the subchapter, the sub-questions - *Which Agrarian and Political Change has the Kilombero Valley experienced on the longue durée?* – and - *Which Political and Agrarian Change has happened in the Kilombero Valley during the presidency of Magufuli?* are addressed.

Seeking to understand possible futures of the Kilombero Valley requires an understanding of its present and its past. Thus, in the following, first the present is analysed through an 'ahistorical inventory' (4.1), followed by a section that looks on the Kilombero Valley on the longue durée (4.2). Both sections are then summarised in the interim conclusion (4.3).

4.1 An ahistorical inventory

The Kilombero Valley has a total land size of roughly 40 times 100 kilometres. It lies in south-western Morogoro Region, which itself lies west of the large coastal Pwani region (Figure 9). A car ride from the east coast, from Dar es Salaam to Morogoro town in the interior, along the straight Morogoro road, takes between four and six hours. The road from Morogoro town towards Kilombero Valley leads two hours southwest through the Mikumi national park. The junction to the left, directly after the Mikumi national park, to the entrance of Kilombero Valley (arguably at Kidatu village) can easily be missed. The road between Mikumi to Ifakara town, the economic, political, and geographical centre of the Kilombero Valley, takes another two hours. The duration of the latter trip depends on the rainy season and on the state of the road and its ongoing rehabilitation.

There is no single definition of the Kilombero Valley. This is why for the context of this dissertation, the Kilombero Valley is considered as a mix of three overlapping definitions. First, the Kilombero Valley is a physical landscape, e.g., a catchment area for the river system of the Kilombero. Second, the Kilombero Valley is a political/ administrative entity: Kilombero + Ulanga + Malinyi districts/ constituencies. Third, Kilombero Valley is a sociological unity, e.g., all permanent residents of Kilombero Valley between 2015 and 2021.



Population: 670,000 (2012); ca. 1

million (2022)

Population Growth: 2 - 3 %, p.a.

Urbanisation Ratio: < 10 %

Land Size: ca. 36,000 km²

Ethnic Groups: Bena, Ndamba, Mbunga, Pogoro, Hehe, Gogo, Ruguru, Chagga, Sukuma, Massai

Livelihoods: 95 % either Peasants, Smallholder Farmers, (Agro)pastoralists, Fisherwo/men

Main Crops: Rice, Maize, Sugarcane, Banana, Cocoa, Beans

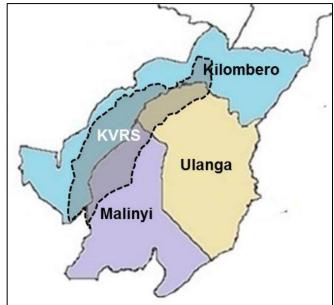


Figure 9: Maps of Kilombero Valley

- a) Top: Study Sites (map created by Irene Johannsen)
- b) Bottom: Political administration (WILSON et al. 2017, 16)

This tripartite definition tries to capture an ever more fluid empiric reality. The Kilombero Valley has gone through different *pasts*, different imaginations of *past futures* (JACKSON 2021b) and is facing several possible futures. Meanwhile, different aspects of the social-ecological transformation in the Kilombero Valley have accelerated: The rate of deforestation and land conversion has led to soil erosion and different water quantities in the Kilombero River. The split of the old Ulanga district into the new (and smaller) Ulanga district and Malinyi District meant new political representation. Waves of in-migration and internal population growth rates mean changes for the sociological structure.

Thus, the presented description and subsequent analysis can claim to be no more, than a historical snapshot of the period between 2015 and 2021. However, it is argued that historical continuities and path dependencies of rural development exist. A better understanding of the ongoing socio-ecological transformation will allow a more realistic picture of the spectrum of possibilities.

Kilombero Valley is located within *Morogoro Region*, one of Tanzania's 31 regions. The Kilombero Valley borders Iringa Region in the northwest, Pwani Region and Lindi Region in the east and Ruvuma Region and Njombe Region in the south. In 2019, three of seven districts in Morogoro Region share administrative/ political responsibilities about Kilombero Valley: In the north and west Kilombero District (headquarter: Ifakara town), in the southeast Ulanga District (headquarter: Mahenge Village) and in the south Malinyi District (headquarter: Malinyi Village).

At least 670,000 people were counted in the Kilombero Valley in the last national census in 2012 (URT 2013a). The next census is scheduled for August 2022. Given the expected population growth between 2 – 3 % p.a., one million residents are expected around 2022. In 2012, most of the residents were living in Kilombero District (408,000) and a minority in Ulanga District (265,000). In late 2015, Ulanga District was split into two districts. The southwestern part of which is henceforth called Malinyi District. The eastern part remains Ulanga District.

Kilombero Valley's population is growing fast. With more than 50,000 residents, the biggest settlement is Ifakara town. Followed by Mahenge, Lupiro, Mbingu and Mlimba villages with each more than 10,000 residents. The rest of the population is scattered in more than 100 villages with a few hundred to a few thousand citizens each. Tanzania's 12.500+ villages have officially demarcated village borders that give the village its total size. *Village*

land is managed by the village assembly (URT 1999). A Tanzanian village usually has a few thousand citizens.

Due to rapid population growth, the number of wards in Kilombero District have increased from 19 at the census in 2012, to 35 in 2022 (KILOMBERO DISTRICT 2022). On the one hand, it is likely that further splitting of regions and districts will happen. On the other hand, promotion of hamlets, villages, wards and divisions to the respective next-highest administration level is happening. During field research, residents speculated that Kilombero District (which covers an area between Kidatu village in the north and Mlimba village in the south) could soon be split into several districts (e.g., into Kidatu District, Mbingu District, Kilombero District and/ or Mlimba District).

Eventually, the Kilombero Valley could become a region and split away from the rest of Morogoro region. All three districts in the Kilombero Valley have a few divisions (Tarafa), at least a dozen *wards* (kata) and a hundred *villages* (Kijiji) each. The lowest administration level in Tanzania is a *hamlet* (Kitongoji) (Figure 10). Due to continuous population growth, *Mngeta village* is yet another example for administrative upgrading. Between the census 2012, and the census 2022, Mngeta was upgraded from of a *village*, to a

division.

Taifa	(Nation)	
Mkoa	(Region)	
Wilaya	(District)	
Tarafa	(Division)	
Kata	(Ward)	
Kijiji	(Village)	
Kitongoj	i (Hamlet)	

Figure 10: Levels of Political Administration (own graph)

Local leaders are elected at hamlet and village levels. In addition, every village, ward and district, is provided with Village Executive Officers (VEOs), Ward Executive Officers (WEOs) and District Executive Officers (DEOs). These oversee administrative affairs. They are paid by the regional and the central government, come from faraway districts and are transferred to new positions every few years. At the village level, this dynamic is important as the elected village chairperson (VC) often have more long-term site-specific knowledge and therefore more local networks and legitimacy, than the often-fluctuating position of VEOs/ WEOs/ DEOs.

The Kilombero Valley, previously known as Ulanga Valley, has the total size of about 3.6 million hectares or 36.000 km². This figure is the added size of the three districts Kilombero District, Ulanga District and Malinyi District. The fact that different publications cite different sizes of the Kilombero Valley has to do with the fact that the valley can be further subdivided into the *Inner* and the *Outer* Kilombero Valley (MONSON 1991). Although there is no clear-cut boundary between these two, the *Inner* Kilombero is mostly referred to the

inhabited spaces in the middle of the floodplain all the way to the slopes of the mountains. The rest is the *Outer* Kilombero Valley, barely populated and characterised by steep mountains in the east (Mahenge ranges) as well as in the north and west (Udzungwa Mountains). The physical and climatic properties of these mountains have acted as natural barriers for in-migration, and as spaces of refuge since pre-colonial times (MWAKA 2020).

The Kilombero Valley is situated in the Southern Highlands of Tanzania, 200 kilometres southwest from Morogoro town. Large parts of the Kilombero Valley can be classified as water, mountains, forests, swamps and/ or protected areas. From a hydrologist's perspective, the Kilombero Valley is part of the river catchment of Kilombero river. The broad floodplain of the main Kilombero river comprises about 8,000 km² (LEEMHUIS et al. 2017). Kilombero catchment is a sub-catchment of the larger Rufiji river (NÄSCHEN et al. 2019). The Kilombero is a complex *river system* with thousands of small streams, the most important of which are the Mpanga, Mnyera, Ruipa, Ruhuji, Luhombero, Kihansi and Lumema. The flow of the river system is from southwest (Njombe) to northeast. The Kilombero floodplain is at 200 – 250 m.a.s.l. (LEEMHUIS et al. 2017).

The Inner Kilombero Valley is located between the Udzungwa Mountains in the west and northwest, which tower at 2,500 m, the Selous Game Reserve in the east and the Mahenge Mountains to the southeast. The source of Kilombero River, the *Ruhudi* River, lies south of Njombe. When Kilombero River merges with *Luwego* River, they constitute *Rufiji* River after the *Shuguli Falls* (the border between Morogoro Region and Lindi Region). The Rufiji flows eastwards into the Indian Ocean. The water of the Kilombero river system equals to two thirds of the water to the Rufiji river (NÄSCHEN et al. 2019). A large-scale hydropower project, Stiegler's Gorge (renamed Nyerere Dam under Magufuli), is currently under construction downstream the Kilombero Catchment.

The Kilombero Valley is characterised by fertile soils and year-round water availability. Yet, as the soils vary in small geographical patterns, so does their fertility (LARSON 1976). The grand claim that the entire Kilombero Valley is fertile, cannot be sustained (MONSON 1991; JACKSON 2021b). Instead, different user groups have refined their agrarian practices over the course of the decades to make the best use of different soils and geographical sites. It is required to have detailed site-specific knowledge about the Kilombero Valley to be able to get high harvests. This is especially true for the high variability of the rainy season which was described decades ago (JÄTZOLD a. BAUM 1968). Hence, when speaking about climatic changes in the Kilombero Valley, these are *additional* changes, to an already fluctuating hydrological system. While some areas of the Kilombero Valley were used for agriculture

for decades and currently show signs of exhaustion, other areas do not need much fertilizer for high yield (IGAWA WARD OFFICERS I-39 2019). Despite geographical specificities, many outsiders framed the Kilombero Valley as a fertile valley in its entirety (JÄTZOLD a. BAUM 1968, 32).

The climate in the Kilombero Valley is sub-humid tropical with an annual mean temperature between 24 C in the valley and 17 C in higher altitudes (WILSON et al. 2017). The annual precipitation is between 1,200 and 1,400 mm, with a high spatio-temporal variability since the mountainous area receive up to 1,000 mm more precipitation compared to the valley (WILSON et al. 2017; NÄSCHEN et al. 2019). The distribution of the annual precipitation is divided into a dry season (June to November) and a rainy season that can be split into short rains (November to January) and long rains (March to May) with the variability within a year being high (WILSON et al. 2017).

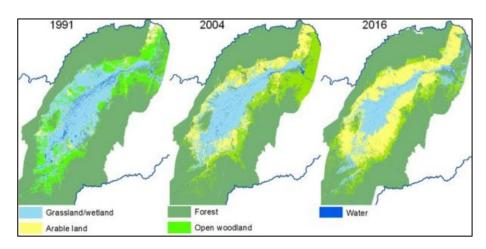
Furthermore, the Kilombero Valley is home to large populations of mammals such as buffalos, elephants, hippopotamus and Puku, of which the majority of the world's population live in the Kilombero Valley (WILSON et al. 2017). Moreover, the Kilombero Valley is home to one of the largest populations of Nile crocodile in Africa and is an important breeding ground for bird species like the African openbill, white-headed lapwing, and the African skimmer (WILSON et al. 2017). The Udzungwa red colobus monkey and three species of birds, like the Ulanga weaver are only found in the Kilombero Valley. The Kilombero river system is home to several species of fish that are caught for subsistence livelihoods (KANGALAWE a. LIWENGA 2005).

Today, many dozen groups are home in Kilombero Valley. According to the National Census in 2002 and 2012 the Pogoro, Ndamba, Bena, and Mbunga are the main ethnic groups in the Kilombero Valley (URT 2013b). They are often referred to as 'indigenous' and migrated to the Kilombero Valley from Malawi and Rhodesia in the early 19th century. Other groups who migrated to the Kilombero Valley include the Sagara (central Tanzania), Hehe (Iringa), Ndedeule (Zambia), Ngoni (Southern Tanzania), Ngindo (Rufiji), Mang'ati and Chagga (Kilimanjaro) (URT 2013b). The construction of the Tanzania Zambia Railway (TAZARA) in 1972 brought people from across Tanzania, as a result of which many local languages are spoken in the Kilombero Valley (MONSON 2009; MONSON 2012).

LULCC are ongoing in the Kilombero Valley (THONFELD et al. 2020; PROSWITZ et al. 2021). LEEMHUIS et al. (2017, 13) claim,

"Human population growth, agriculture expansion and intensification, and infrastructure development have changed Kilombero Valley over the last decades. A wildlife dominated land use combined with semi-subsistence agriculture and fisheries has been replaced by a complex and ever evolving agrarian economy, more and more integrated with national and global value chains. The preservation of key wetland ecosystems services and function will increasingly require authorities and stakeholders to choose among possible land use trade-offs and to contextualize local choices within the catchment scale."

NÄSCHEN et al. (2019) note that rainfall patterns changed in the recent past. A combination of global climatic changes and local land use changes contribute to drought periods and unusual heavy flood events. Conversion of wetland into cropland and pasture happened in previous years (NÄSCHEN et al. 2019). This conversion meant growing pressure from rural livelihood on several ecosystems in Kilombero Valley: "agricultural expansion and intensification, catchment changes, hydropower development, loss of habitats, over exploitation of grazing and aquatic habitats and loss of floodplain wildlife populations" (WILSON et al. 2017, viii). The LULCC in the Kilombero Valley between 1991 and 2016 are the result of cumulative processes of small-scale daily practices, including clearing of bushes and forests, deforestation and converting wetland or grassland to arable land or pasture (LEEMHUIS et al. 2017) (Figure 12). Although LULCC are often not obvious in the short-term locally, they can be seen on regional maps on the long-term (WILSON et al. 2017). LULCC happen gradually from dense tropical forests, to degraded forests, to open woodlands, to grasslands to arable lands. Although land categories can be defined differently, and may falsely include Teak plantations as forests, an overall trend can be observed. The land use category arable land (yellow) almost tripled from around 2,000 km² in 1990 to about 5,700 km² in 2016 (Figure 12). This growth happened at the dispense of the category grassland/wetland (light blue) from 5,500 km² in 1990 to 2,200 km² in 2016 and on the category of water (deep blue) which declined from 1,200 km² in 1990 to less than 100 km² in 2016 (Figure 12). This land use trend is likely to continue, suggesting high pressure on the ecosystem through human livelihood practices from (agro)pastoralists (WILSON et al. 2017). Together, the three categories comprise 3.6 million hectares, with 1.1 million hectares village land, 0.9 million hectares general land and the rest 1.6 million hectares belonging to the category of reserved land or the KGCA (Figure 12). Whereas in Malinyi District only 12 % of the entire land is designated as village land, in Kilombero District the village land is 35 %. The three categories General Land, reserved land and KGCA all represent different degrees of environmental protection.



LULC Class	1990 (km²)	2004 (km ²)	2016 (km ²)
Arable Land	2082	2511	5704
Wetland	5436	3809	2166
Forest	12,177	14,408	12,922
Water	1162	102	71

District	Total area (ha)	Village land	General land	Reserved land	KGCA
Kilombero	1,491,800	595,245.65	142,542.50	754,011.83	174,908.53
Ulanga	1,068,889	311,714.59	252,216.78	504,958.06	31,863.32
Malinyi	1,111,173	164,222.34	474,501.60	472,449.91	22,335.95

Figure 12: Land Use Land Cover Change (WILSON et al. 2017, 17–18)

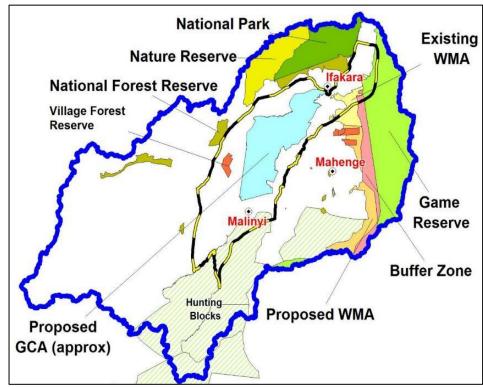


Figure 11: Complex Environmental Protection Landscape (MNRT 2018, 41)

Few large-scale schemes and many small-scale schemes produce rice, maize and sugarcane (LEEMHUIS et al. 2017). The dominant crop is rice with 55 % in Kilombero District and 72 % in Ulanga District. Furthermore, maize makes 16 % in Kilombero District and 10 % in Ulanga District of the total land use and sugarcane 19 % in Kilombero District. Less important crops are leguminous vegetables, sweet potato, cassava, oilseeds, and banana. The URT (2013b, 163–164) summarises,

"Traditionally, production in the valley operated on a fallow system with about 40 % of each family's land cultivated in any one year, the remainder being set aside as fallow to maintain soil fertility and control pests and weeds. However, agricultural officers consider this system to have been almost entirely abandoned in Kilombero District. Ulanga District is experiencing similar stresses on the fallow land system."

The main livelihood activities in Kilombero Valley are small-scale farming on less than two hectares per family, fishing and (agro)pastoralism (GEBREKIDAN et al. 2020; KANGALAWE a. LIWENGA 2005). Additionally, maize, cocoa, bananas, beans, sesame, and vegetables are grown. Whereas some families are subsistence farmers with little to no surplus production (called *peasants* here), a middle stratum of smallholder farmers are able to sell surplus to local markets (e.g. in Mbingu), district markets (e.g. Ifakara) or too far distant markets (e.g. Morogoro or Dar) (PONTE 2002).

The Kilombero Valley is a complex environmental protection landscape (Figure 11 & 13). The categories reserved land + Kilombero Game Controlled Area (KGCA) cover between 40 % and 70 % of all land in the Kilombero Valley. Some of the largest environmental protection sites are the KGCA, established in the 1950s, the Selous Game reserve in the east established in 1982, the Udzungwa national park in the north created in 1994 and the Kilombero Valley Ramsar Site (KVRS), created in 2002. In addition, the Kilombero Nature Reserve in the north, national forests in the north and west,

Reserved Land: 60 - 70 %

Land under agriculture: 30 - 40 %

- Kilombero Sugar Cane Plantation (1960s)
- Mngeta Farm since 1986
- Teak Plantations since 1992
- Agropastoralism/ Pastoralism
- Small-scale agriculture
- Large-scale Irrigation Schemes

Mining: < 1 %

- Oil and Gas (Kilosa-Kilombero Block at Ipera Asili Village, Malinyi)
- Gold (Misegese Village, Malinyi)
- Graphite (Mahenge Village, Ulanga)

Urban Areas/ Housing < 1 %

Infrastructures: < 1 %

Figure 13: Forms of Land Use in the Kilombero Valley (own figure after WILSON et al. 2017; LEEMHUIS et al. 2017)

village forest reserves, wildlife management areas (WMAs), buffer zones and hunting blocks are part of the environmental protection sites. Previously, *wildlife corridors* connected

different environmental protection sites. Due to increasing urbanisation, construction of roads, railroads and electrification, these corridors no longer exist. "Direct connectivity between the wetland along the Kilombero river and the Udzungwa and Selous protected areas is no longer existent" (LEEMHUIS et al. 2017). A wave of NGO projects suggest to restore these corridors as part of development agenda (MATEJCEK a. VERNE 2021b; VAN DER ZEE 2018). Ideas of animal migration corridors are often combined with ideas of green development, (eco)tourism, trophy hunting and creation of local jobs in hotels, transport and environmental jobs as well as improved infrastructure (MATEJCEK a. VERNE 2021b).

After introducing the characteristics of the Kilombero Valley, it is necessary to take a closer look into the history of the Kilombero Valley on the 'longue durée'. Doing so will help to contextualise current transformations and to distinguish between new trends and long-term continuities.

4.2 The Kilombero Valley on the Longue Durée

"This story of agricultural change, therefore, is [...] the story of a series of interventions, both internal and external, which shaped the development of food production and therefore the lives of the producers themselves for more than one hundred years. Small groups of people with diverse yet interconnected livelihood systems became incorporated into larger and larger economic spheres." (MONSON 1991, 23)

In the previous 150 years, modern day Tanzania has undergone several political and agrarian changes. MONSON (1991) summarises the agricultural change as a story of 'a series of interventions' which were both 'internal' to places like the Kilombero Valley, as well as 'external'. A historical tendency, she argues, was the incorporation of rural areas into 'larger and larger' economic spheres. While agreeing to the analysis of Monson, in the next subchapters it is argued that this lengthy historic process of incorporating the peripheries and semi-peripheries into the centre of global capitalism is not yet over (WALLERSTEIN 1986). It is argued that the thorough capitalisation of the Kilombero Valley is still ongoing and, among others, accompanied by the commodification of land and other means of subsistence (KAESS 2018).

To understand the most recent changes better, it is informative to take a closer look at the political continuities and discontinuities in previous eras. The French Annales school argues, that site-specific and deep historical perspectives of several decades – up to several centuries - shows persistence, ruptures and path dependencies in regional development (BRAUDEL 1995; BRAUDEL 2009). These longue durée perspectives usually include new

rulers, emerging states and state institutions, new tax regimes and bureaucracies, property and ownership relation, the roles of police and military, as well as the national economy.

Political changes were occurring in urban centres first. In the economic capital of Dar es Salaam, and what became the political capital in the 1970s, Dodoma. With some delay, political changes and political ideas were converted into reality on the rest of the Tanzanian territory. Agrarian change followed political change. One of the regions, which has attracted the interests of decision-makers throughout previous decades, was the Kilombero Valley.

For the agrarian transformation of the Kilombero Valley during the previous decades, MWAKA (2020) enlists five "discursive practices" which sought to improve agriculture: "(Re)grouping" of rural residents into villages and cooperatives, "the use of modern technology" to encourage farmers to increase productivity per acreage, to adopt an input-intensive agriculture and to apply good agricultural practices (GAP). Third, the "vertical integration of farmers into value chains" which seeks to transform subsistence farmers into agri-businesses. Fourth, the constitution of "large-scale farms and schemes" to serve as a new organizational model of farming. Fifth, "conservation" of the environment as a public good and of soils as commons.

Although MWAKA's (2020) points are valid, his analytical term *discursive practice* is misleading. In this dissertation, the three moments discourse, practice and materiality are kept apart. This is done to be able to see which discourses remain mere political ideas, which actors are engaging in which practices (among them discursive practices) and how materiality in Kilombero Valley is (not) changed. It is maintained that discourses to improve the Kilombero Valley were born in, or channelled through, Dar es Salaam and Dodoma first. This chapter will show, how the Kilombero Valley has become something that MANZINI (2003) termed a *laboratory of the future*. A laboratory in the sense that powerful actors try to sell certain futures (COLONOMOS 2012; COLONOMOS 2016) and convert their ideas into agrarian change without necessarily taking the interest of less powerful actors into account.

The analytical terms agrarian change and agrarian transition are debated in the field of Peasant Studies (BERNSTEIN 1979; BERNSTEIN a. BYRES 2001; BERNSTEIN 2010). Both seek to capture social-ecological transformations in a given territory that are relevant for the lives and livelihoods of what SHIVJI (2017b) calls *working people*. In this dissertation, the terms

agrarian change and agrarian transformation are used interchangeably. In distinction, agrarian transition according to BYRES (1977, 258) describes,

"A central episode in the history of all advanced capitalist countries [...] in which the agrarian question was resolved. One of the most fascinating problems in the field of social and economic history is the delineation of the complex and varied means whereby capitalism became the dominant mode of production in agriculture: growing out of simple commodity production, here via the landlord class and there via a peasantry which gradually became differentiated (so providing, at the extremes, a stratum of rich peasants who ultimately became capitalist farmers and a stratum of poor peasants who were transformed into agricultural labourers or who joined the urban proletariat); slowly penetrating the countryside; developing the forces of production in manifold ways and raising agriculture's productiveness; eroding feudal and semi-feudal relations of production and replacing them with the stark opposition of a class of capitalist farmers and one of wage labourers. This, the agrarian transition to capitalism (which, to be brief, we may call the agrarian transition), represented a conditio sine qua non for the resolving of the agrarian question."

The *agrarian transition* as described by BYRES (1977) has a twofold meaning in Tanzania. First, to what extent the agrarian sector has become capitalistic (transition to capitalism). Second, to what extent the agrarian economy of Tanzania is replaced by a post-agrarian economy, based on industries and service sector (transition into a post-agrarian society).

Although agrarian changes are a necessary precondition for an agrarian transition in the above sense, agrarian changes may happen without transition. This chapter seeks to show two things. First, agrarian change was the *modus vivendi* of the Kilombero Valley. Second, that Magufuli's call for a transition towards a post-agrarian society (industrialisation) is unprecedented and meant reopening several important agrarian questions.

What is relevant to the analysis of agrarian change is the change of class position for different rural residents and working people. Besides landless, agrarian wage workers, business people and large-scale farmers, the conceptual differentiation between *peasants* on the one hand and *smallholder farmers* (or smallholders, small-scale farmers) on the other hand is key in peasant studies (LENIN 1982; BERNSTEIN 2009b). Whereas the farmers in the former category only produce food for themselves, the latter produce for themselves *and* sell their surplus on rural markets. Thus, the latter category may constitute an emerging rural middle class, which is included in the regional and ultimately the national economy. Depending on the speed of the agrarian change, a certain amount of the working people will change from one category, to the other, with huge sociological implications for the Kilombero Valley. Wherever possible, this dissertation seeks to differentiate between landless, wageworkers, peasants, smallholder farmers and (agro)pastoralists, the latter of which engage in agriculture and pastoralism. When such a social differentiation is either impossible, or irrelevant, the more general term *farmers* is used.

The agrarian change in Kilombero Valley is the result of external and internal dynamics. Only focusing on external interests into Kilombero Valley, would miss the relevance of highly diverse and complex internal dynamics. As much as rural residents in Kilombero Valley are at the receiving end of decision-makings, they have not only been the victims of their circumstances. Instead, they can be considered *survivors* who have used their agency to subvert and resist external domination (MONSON 1991).

This chapter follows BRAUDEL's (1995) call for in-depth site-specific histories. In five historical phases, first political change is introduced, before we zoom in on agrarian change in the Kilombero Valley. A first *pre-colonial phase* (2.1) until 1880s is followed by a section on German East Africa (GEA) from the 1880s until 1918 (2.2). The next section is about Tanganyika under British rule between the 1920s until 1960 (2.3), followed by the first decades after independence from 1961 – 1985 (2.4). A fifth *neoliberal phase* (2.5) begins in the mid-1980s and lasts until October 2015.

The historization of agrarian change in the Kilombero Valley establishes the fundament for the empirical work on the era of Magufuli, presented in chapters 5, 6 and 7. By so doing, this dissertation adds a chapter on the list of previous monographies on Kilombero Valley, among them "A history of the Mahenge (Ulanga) District C. 1860 - 1957" (LARSON 1976), "Agricultural transformation in the Inner Kilombero Valley of Tanzania, 1840 - 1940" (MONSON 1991), "Agricultural improvement? Persistence and change in agricultural development ideas and farmers' responses in Kilombero Valley, Tanzania (1900 - 2015)" (MWAKA 2020), and latest, "Past Futures: Histories of Development in the Kilombero Valley, Tanzania" (JACKSON 2021b).

4.2.1 Until 1880s: Migration and New Ecologies

Before the 1880s, the political change in today's Tanzania was concentrated at the Swahili coast and its trade regime into the interior. Caravans by Arab, Shirazi (Omani) and Swahili traders in the late 18th and 19th century, penetrated the interior until the great lakes on the search for rice, ivory, and slaves. These coastal trade regimes have affected Kilombero Valley. MONSON (1991, 175) claims,

"Territory was important not because of the value intrinsic in the land itself, but because of the labor value represented by subject populations. In addition, regional power brokers struggled for control over the lucrative trade routes and the fertile river valleys such as the Kilombero. The conflict and discord that accompanied the establishment of territorial boundaries in this period had a profound effect on agricultural land use."

The agrarian history of Kilombero Valley reaches back as far as the 17th century. Bantuspeaking groups migrated to Southern Tanzania in different waves from the south (earlier Rhodesia), most prominently among them, the Ngoni, the Bena, Pogoro, Ndamba, Ngindo, Mbunga and other groups (LARSON 1976; JÄTZOLD a. BAUM 1968). Since first written sources only become more frequent in the middle of the 19th century, according to MONSON (1991, 6) the time periods before can only be reconstructed by oral sources and archaeology:

"In late nineteenth century East Africa, a group of highland agro-pastoralists known as the Wakinamanga are believed to have migrated from the grasslands of the Iringa plateau to the alluvial floodplain of the Inner Kilombero Valley. According to most historical accounts of this migration, the Wakinamanga [...] were forcibly ejected from their upland pastures by the Hehe in a great battle at Mgoda Mtitu in 1874-5. As a result, the Wakinamanga gave up livestock keeping and took up wetland rice production."

Since Kilombero Valley has different types of soils and different geography, equal agrarian exploitation is difficult. Upland agriculture on the Ulanga plateaus, lowland agriculture on the slopes of the Udzungwa mountains or agriculture in the lower floodplain have required different seeds, different crops and different techniques and knowledge (LARSON 1976). MONSON (1991) mentions that several dozen types of rice were used across Kilombero Valley in the 19th and early 20th century. Most farmers have used flexibility, diversification and risk-averse strategies in an ecological system that is characterised by highly fluctuating rainfalls. Thus, families and clans, which during the 19th century were more centralised and consolidated into ethnic groups (tribes) developed agrarian practices that were suitable to the specificities of different areas in Kilombero Valley. In the 19th century, agriculture in the Kilombero Valley has mostly been done for subsistence and for engaging in local trading networks.

Due to unfavourable environmental conditions, herding large numbers of cattle has not been an option in the 19th century. Lack of pasture, cattle diseases, poisonous plants, wild animals, and frequent floods were high risks for cattle keeping. Until the second half of the 20th century, pastoralism or cattle herding has not been done in Kilombero Valley in any substantive way (MONSON 1991; LARSON 1976).

4.2.2 1880s – 1918: German East Africa, Warfare and Rubber Ecologies

The years 1880 – 1918 changed today's Tanzania in radical ways. Long-distance trade regimes and the emerging constitution of the colonial state, German East Africa (GEA), under German rule in the 1880s resulted in increasing interest into the potentials of the territory, e.g., as providing food, labour, and taxes. As was the case throughout Africa, the

colonial state in Tanzania brought about new racist division of labour (BRYCESON 1990; ILIFFE 1969). The in-migration of Indians during the German colonial period meant an emerging new middle class, which slowly replaced the Arab, Omani and Swahili traders. Furthermore, new land policies and the category of private property were introduced. Large-scale infrastructures like harbours, bridges, roads and railroads (e.g. Usambarabahn, Tanganyikabahn) were built. MONSON (1991, 244) claims,

"In most areas German rule lasted effectively only two decades in East Africa. In that space of time, however, the implementation of specific colonial policies enabled the creation of lasting institutions, in particular the economic and administrative infrastructures upon which modern Tanzania was constructed."

Through the German colonial power, new ecologic, economic and political relations emerged in the territory of GEA (MONSON 1998; ILIFFE 1969). Slave trade was prohibited in the 1870s, the rinderpest in 1892 reduced cattle in many areas dramatically and ivory trade became more difficult through hunting restrictions after 1903. In addition, according to MONSON (1991, 181) new cash crops like sisal, cotton, rubber and coffee aimed at fostering export and became part of a new trade and taxation regime,

"As 'legitimate trade' began to replace the external slave trade throughout the continent, European powers sought new products needed to fuel industrialization. [...] By the end of the nineteenth century rubber had replaced both slaves and ivory as the major export product from the Mrima and Kilwa coasts."

German colonizers used the already-existing trade routes and networks to maximise their profitability for taxation. In 1898 a hut-tax was introduced and in 1905 a much higher poll taxes (for every adult man 3 rupees) (LARSON 1976). Whereas former taxes were paid in rice (or other crops) and wage labour, head tax was supposed to be paid in cash only (MONSON 1991, 202). Instead of forcing peasants to cultivate what colonialists demanded, German colonisers thought it to be more efficient to persuade African farmers to grow what they wanted (STAFF TALA I-01 2019). Under colonial rule, smallholder farmers "were growing maize, bananas, sorghum, millets, rice, cassava, potatoes, beans and other legumes, fruits, vegetables and nuts" (COULSON 2015). Cotton was introduced to mainland Tanzania before the first world war (ILIFFE 1979). New diseases like the rinderpest, Jiggers, and smallpox in 1890 and the following years brought thorough changes. The loss of livestock often resulted in famines and high levels of poverty (COULSON 2013 [1982]).

With the advent of the Germans, the henceforth elites and middle classes of Arab and Swahili origin were confronted with their loss of power and legitimacy (LARSON 1976). Consequently, the first uprising was the al-Bushiri uprising in 1888 - 1889 along the coast.

The German *Schutztruppe*, constituted by a couple of hundred Sudanese fighters, and a few thousand locally recruited *Askaris* were able to suppress the uprising. What followed were the uprising of the Wahehe under chief Mkwawa 1891 - 1898 in Southern central Tanzania, the Maji-Maji war in Southern Tanzania 1905 – 1907 and the first world war 1914 – 1918.

In all three armed conflicts, the Kilombero Valley became site of the battle. MONSON (1991, 228) argues, "For rural peoples in southern Tanzania, the history of the region between about 1880 and the end of the First World War was a history of continuous disturbance, as first one group and then another fought for political and economic supremacy." The period between 1880s and 1920 was a struggle for hegemony. Most casualties were not caused by fighting, but by the German (and later British) demand for carriers, enforced military service, enforced food provisioning and the German tactics of scorched earth in the course of which granaries were plundered, fields and villages destroyed and famines the likely outcome (MONSON 1991, 286). In this way, uprisings that did not take place in Kilombero Valley itself had severe indirect impacts. Both sides of the battle attacked and destroyed villages in Kilombero Valley whom they thought were siding with the opponents. Entire villages fled to the forests, which added to the reoccurring famines in the entire period. Populations were decimated, uprooted and dispersed. MONSON (1991, 233) maintains,

"Any villages believed to have assisted Mkwawa were destroyed. The Uzungwa escarpment forest was the locus of an extensive 'scorched earth' campaign by von Prince, who attempted to eliminate any possibility of shelter or sustenance for the Hehe chief."

Henceforth, agricultural settings were interrupted and political authority reorganised. The Maji-Maji war (vita vya ukombozi) in southern Tanzania between July 1905 and 1907 was fought in Kilombero Valley (Monson 1998). In late August 1905, the largest battle of the war was fought in the *battle of Mahenge* around the boma and military station that the Germans had built in 1899 (Monson 1991, 230; Monson 1998). Several hundred Maji-Maji fighters lost their lives through machine guns installed at the boma. The Maji-Maji war subsequently turned into a guerrilla war and was led by the Germans through the tactics of *scorched earth* yet again (BEEZ 2003; BECKER a. BEEZ 2005). In the aftermath of the Maji-Maji war, many hundred thousand people across southern Tanzania died of starvation. Monson (1991, 284)

"Throughout the war and its aftermath, the inner Kilombero appears to have been the eye of the storm, remaining calm and untrammelled as battles were waged in Mahenge, Songea, highland Ubena, Ifakara and Uzungwa."

During WW1, the only fighting that happened within Kilombero Valley was at Mahenge area in September and October 1917, when Belgian-Congolese units fought against German units. Mahenge was eventually captured, on 9th October 1917, with the Germans retreating to the southeast. At the end of GEA, Kilombero Valley was exploited, burned down, deforested, depopulated and characterised by recurring famines (MONSON 1991). During WW1, about one million carriers were deployed on all sides of the battle. When adding several ten-thousand African fighters on the German, and several hundred-thousand fighters on side of the allies, it is estimated that around 600.000 – 700.000 Tanzanians have died. Around half of the casualties were carriers in the carrier corps (where the term Kariakoo comes from), who died from labour, diseases, malnutrition, or famine. The pandemic of the Spanish flue between 1918 and 1920 added another 60.000 – 80.000 deaths. Around 10 – 15 % of Tanzania's total population had died within few years.

Agrarian change came to Kilombero Valley in the early 1880s, after first German expeditions and explorations were done. The Deutsch-Ostafrikanische Gesellschaft (DOAG) was part of the rubber economy in Kilombero Valley that lasted from the late 1890s up to around 1914 (MONSON 1993). "Built upon the long-distance exchange networks of the late nineteenth century, the rubber trade provided a link between precolonial and colonial economies" (MONSON 1991, 227; MONSON 1993). The existing trade relations between Kilombero Valley and the rest of the territory intensified. Colonial crops disrupted local ecologies and new plantations resulted in deforestations. "[In] the Luhombero Valley, the destruction of forest resources had lasting impact" (MONSON 1991, 186). Rural and urban elites were able to benefit from these new colonial sources of wealth. The accumulation of surplus value resulted in differentiation along class, race, ethnicity, and geography. Rural residents with access to farms with better soils were able to pay increasing taxes easier. "By the time of German rule, there was already enough intra-regional differentiation in the Inner Kilombero to create a division in the population - those who were able to meet their cash needs through the sale of rice and those who were recruited for plantation labor" (MONSON 1991, 258).

4.2.3 1920s – 1960s: Boundary-making and the Invention of Tribes

After the end of WW1, present-day Tanzania became part of the British Empire. The Tanganyika territory became a Trust Territory under the League of Nations, to be administered by the British Empire. Many German settlers decided to move to Kenya, Zimbabwe and South Africa in the 1920s, but were allowed to return to Tanganyika in the

1930s (ILIFFE 1979). The Land Ordinance No. 3 1923 regulated that all "ungranted land" becomes public land, "at disposition and control of the governor" (STAFF TALA I-01 2019; FAO 2022). The British engaged in border-making and reordering space according to their interests (MONSON 2000; KELEMEN 2007). Borders were drawn between village settlements, agricultural cropland, communal forests, and areas for conservation. Since the complexity and fluidity between and among local groups and clans was more difficult to rule for the British, ethno-pluralistic families and clans were reordered into stable quasi-homogeneous ethnic groups (e.g. 'the Bena', 'the Ngoni') with fixed identities with a unique language, culture and settlement area (KELEMEN 2007). New political authorities were installed along these newly-created ethnic identities (MONSON 1998; MONSON 2000; KELEMEN 2007). Local chiefs had powers over tax collection and controlled the access to land. Furthermore, the British administration introduced new rules. They tried to regulate the entire life of its subjects by introducing new rules for migration, movement, marriage, prohibition of certain agrarian practices (e.g., construction of slopes, shifting cultivation) deemed primitive and backward, and the mandate to use certain crops (e.g., cotton). "Shifting cultivation was therefore a 'dangerous evil' of backward native custom which had to be eradicated and replaced with a more rational, permanent form of agriculture" (MONSON 1991, 310).

World War two affected the Tanzanian territory far less, than WW1. However, the fight of Tanzanians for the British against the Germans increased the awareness that Tanzanians were not only fighting for the British, but their own freedom, and eventually for independence (WESTCOTT 1986). Meanwhile, the British government wanted to create employment in Tanzania by the establishment of a large groundnut scheme in the three sites Kongwa (Dodoma), Nachingwea (Mtwara) and Urambo (Tabora) (RIZZO 2005). The scheme was a failure at all sites, both technically and economically (RIZZO 2005; COULSON 2013 [1982]; WESTCOTT 2020). Up to date, the failed groundnut scheme is cited as an example, how central planning can lead to failure, when it is based on flawed assumptions. The many million British Pounds invested into it, have never paid off.

COULSON (2013 [1982]) argues that the new Tanzanian colony was of minor interest, because the British Empire had already invested much into their Kenyan settler colony. In fact, in the 1930s more Germans, than British citizens lived in Tanzania, so that the British government considered giving the colony back to the Hitler regime. This lack of interest, so COULSON (2013 [1982]), resulted in a relative neglect in terms of economic activities and infrastructural development under British rule for several decades. In the years around independence, the agricultural production of smallholder farmers increased (COULSON

2015). In 1950s, Tanzania was a stable peasant based agriculture (BRYCESON 1988), a system which was continued after independence in 1961, albeit under new role of the state.

For the agrarian change in Kilombero, the British era brought about a reintroduction of cotton between Ifakara and Kidatu and a manual cotton gin at an estate at Msolwa in 1923 (Monson 1991, 334). In the 1925 Report of the East Africa Commission Kilombero Valley was described as "a great alluvial plain which could – with drainage and irrigation – be turned into one of the finest cotton, sugar, and rice producing areas in the world" (Jackson 2021a). Rice remained the main crop in Kilombero Valley due to better harvests, better market prices and the possibility of using rice as a stable crop for subsistence. After the road between Ifakara and Kilosa was built in 1926, rice exports from the Kilombero Valley increased from 500 tons in 1926 to 1,800 tons in 1928 (Monson 1991, 328). Larson (1976, 234) describes two major rice trading networks in Kilombero Valley for the 1920s and 1930s. One of which is the 'Ifakara system' in and around Ifakara controlled by Indian merchants, the other was called 'regional system', in which rice was traded along routes to the south, which had already existed during WW1. With improved regional infrastructure, both trading systems became more feasible and profitable and contributed to a growing regional economy. Monson (1991, 291) maintains,

"[b]etween 1920 and 1940, as rural African economies such as those of the Inner Kilombero became more closely linked to international capitalism, economic specialization and differentiation accelerated."

Despite small herding of livestock between 1840 and 1940, pastoralism has not been practiced in large scale in Kilombero Valley before the 1940s (MONSON 1991; URT 2013b; JACKSON 2021b). For the period between 1840 and 1940 MONSON (1991, 1) claims that "the overall processes of rural transformation were consistent from decade to decade". Additionally, MONSON (1991, XIV) claims,

"Internal differentiation took place as some groups were able to gain access to and control over new sources of wealth and power during this period, while others were marginalized. Differentiation occurred along lines of space, ethnicity and gender. Yet Kilombero farmers were never simply victims of processes outside their control. By taking a variety of actions, in particular non-compliance and migration, Kilombero producers struggled to resist the usurpation of control over themselves and their environment."

Migration and non-compliance were two major strategies on how rural residents could subvert central planning that was not in their interest. JACKSON (2021b) provides a detailed timeline of important events for the Kilombero Valley between 1880s and 1960s (Figure 14).

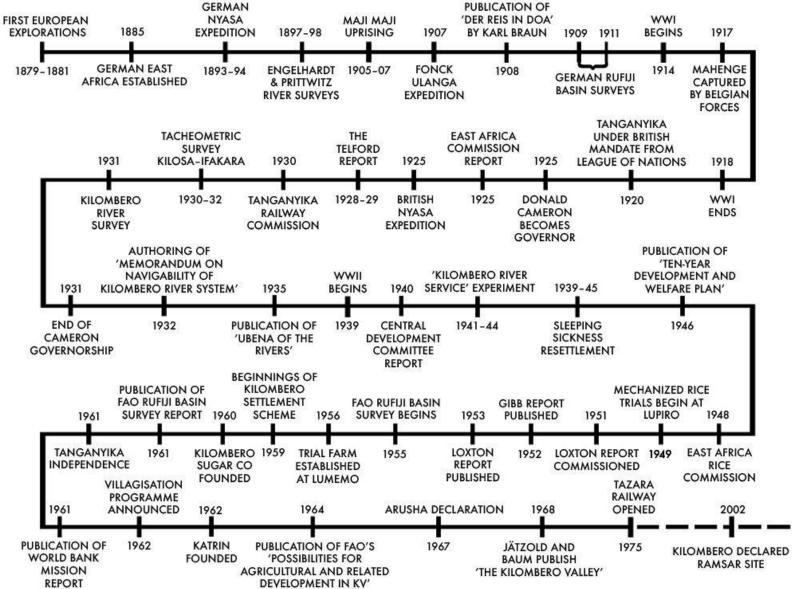


Figure 14: Timeline of the Kilombero Valley 1880s -1960s (Jackson 2021b)

4.2.4 1961 - 1985: Nation Building, Arusha Declaration, Villagisation

Major political change took place in Tanzania in 1961 and in 1963. In December 1961, Tanganyika gained independence from the British. In 1963, a union was formed with Zanzibar which resulted in the new name *United Republic of Tanzania* (URT). The era of the first president Julius Nyerere (1961 - 1985) was characterised by nation building (AMINZADE 2013b), African Socialism and the Leninist-Marxist state doctrine *Arusha Declaration* (NYERERE 1967). According to the Arusha Declaration, Tanzania was supposed to become a socialist country whose national economy is based on a strong state that owns all industries and companies. Furthermore, the Arusha Declaration speaks about national pride, hard work and self-sufficiency (NYERERE 1967). SHIVJI (2017a) suggests to subdivide the Nyerere era into four phases: the contradictions of nation-building (1961 - 1966), the militant mellowed (1967 - 1974), demagogy sets in (1975 - 1979) and the crisis (1980 - 1985).

Although Nyerere's politics played out primarily on the national level, he was a vocal internationalist and Pan-Africanist who argued for South-South cooperation (Shivji 2019). According to Shivji (2010, 2) "Nyerere was an ardent and militant African nationalist and an equally convinced and persuasive Pan-Africanist (...) (and] saw an irresolvable tension between nationalism and pan-Africanism, which he perceived as a 'dilemma of the pan-Africanist'". Whereas a full-fledged capitalist post-colonial Tanzania could have resulted in rapid economic growth with a newly emerging black middle class, a rapid opening to global markets could have torn the young nation apart. The Tanzanian nation of the 1960s had not consolidated in terms of national identity and consisted of many hundred ethnic groups and a similar number of languages. Therefore, Nyerere created a narrative of a common course and common identity as Tanzanians with Kiswahili as a common language to raise a new generation in schools and universities. Unlike neighbouring Kenya, Nyerere was against an "ideologisation and politicisation of ethnic group" and saw the state as a tool for "nation-building and economic development" (Shivji 2010, 2).

A major change in governance in the 1960s was that traditional leaders, elders and chiefdom lost all their political powers and were replaced by state bureaucrats at the district, wards and village level (HAVNEVIK a. HARSMAR 1999; BRYCESON 2010; STAFF TALA I-01 2019). Nyerere did not allow for opposition against the state by bottom-up initiatives. A Leninist understanding of the state and the role of an avant-garde party meant that Nyerere ruled *for*, rather than *with* the people. His honourable title *Mwalimu* (English: *teacher*) indicates the kind of relationship he has had to the common people who were

perceived as to-be-educated *Wanafunzi* (English: *pupils*). "The result was that Nyerere's politics became typically authoritarian on the one hand, and destructive of people's organisational capacity, on the other" (SHIVJI 2010, 4).

Different from turning to mining or industrialisation after independence, Nyerere (cited in BRYCESON 2010) favoured an agricultural development path, "For the foreseeable future the vast majority of our people will continue to spend their lives in the rural areas and continue to work on the land. The land is the only basis for Tanzania's development; we have no other." During the first years of independence, a high modernist ideology was followed (SCOTT 1998; SCHNEIDER 2007). According to SCOTT (1998) this ideology was the belief among governments and planners in the course of the 20th century, that through rationality and calculations, a modern way of life could be implemented. In Tanzania, this belief led to planned Ujamaa villages across the country. Many million rural residents were resettled into planned villages voluntarily, or forcefully. According to Ujamaa politics, household level subsistence farming and smallholder farming were backward and needed to be transformed into large-scale schemes, in which work is done communally. "The view that peasants are primitive, backward, stupid - and generally inferior human beings dominates the rural chapters of both the 1961 World Bank (WB) report and the Tanganyika First Five Year Plan" (COULSON 2013 [1982], 199). Additionally, the nationalisation of banks, plantations, insurances had impacts on the private sector and on co-operatives who had gained political power throughout the 1950s and 1960s. To avoid parallel power structures, Nyerere took away the asset base of all cooperatives in Tanzania, including land, buildings, banks, schools, fleet of transport and wholesale. Up to date cooperatives are perceived with suspicion by many rural residents due to previous waves of expropriation, mismanagement, political pressures and corruption (MWAKA 2020).

The land tenure system under Nyerere did not change. Although the land tenure system of the colonial regimes was created to serve hegemonic purposes, it did not change much under the Nyerere administration. As STAFF TALA I-01 (2019) claims "(...) for Tanganyika it was left as it was, so when we acquired independence nothing changes in terms of the land tenure framework, the legal framework. The only thing that changes is that the Queen or the governor is replaced with the president. The president becomes the custodian." The early Nyerere administration promoted the *improvement approach* for smallholder farmers, as well as the *transformation approach* of large-scale mechanised production on either colonial farms, or in settlement schemes (COULSON 2015).

The Arusha Declaration (1967) may be considered Tanzania's first national development vision. Together with two other ideological texts of the late 1960s, the declaration reveals socialist and egalitarian ideals about a utopian future society. After centuries of external domination, for a first time African elites had the chance to create a nation according to their own ideals. Besides Nyerere, other charismatic political leaders, like Nkrumah and Lumumba, a little later Sankara, made a utopian future vision of their society their main political programme. Since Stalinism and Maoism became negatively connoted in the 1960s and 1970s, Nyerere who thought of himself as an internationalist and pan-Africanist, sought to interpret socialism in a distinct African and Tanzanian way. Genuine African concepts like Ubuntu and Ujamaa became a core part of his state ideology. Nyerere envisioned how a utopian agrarian society could look like. Much later, in the 1990s, Nyerere commented that the Arusha Declaration was more a legitimising ideology, than one with practical potential (SHIVJI 2017a). According to SHIVJI (2017a) Nyerere had the opinion in the 1960s that the young nation was about to fall apart due to internal pressure (e.g., national unity, tribalism, independence, poverty) and due to external pressure (e.g., West-East conflict, global capitalism). Consequently, Nyerere saw that a declaration was needed that could give "hope which would preserve peace both for the 'capitalists and the socialists'" (SHIVJI 2017a, 220).

The Nyerere era brought some distinct agrarian change to Kilombero Valley. In the 1950s and 1960s, Nyerere sought to undo colonial structures and development model in which Tanzanians were reduced to supplying cheap labour (JACKSON 2021a). After years of experimentation, e.g. in the Kilombero Settlement Scheme (KSS) from 1959, Ujamaa politics and Villagisation were state ideology in the late 1960s (JACKSON 2021a). Despite shortcomings, failures and open questions on their efficiency, Ujamaa Vijijini policies required many million Tanzanians to resettle from their home villages to socialist planned villages of 250 - 300 families each, all across the country (LOFCHIE 1978). In Kilombero Valley a dozen Ujamaa villages were formed (MWAKA 2020). The approach envisioned a wealthy agrarian society organised in nucleus villages in which the state could easier provide services like education and healthcare (BRYCESON 2010). The ideals of Kilimo and Ujamaa were intertwined with communal land ownership, common field work and self-dependence (BRYCESON 2010; KAMATA 2010; BRYCESON 2015). While the resettlement to Ujamaa villages was voluntary in the beginning, it became mandatory throughout the 1970s, when police and military were used to enforce the policy (COULSON 2013 [1982]). The Nyerere government abandoned Ujamaa politics in the 1980s, as the economic feasibility was far behind expectations and the social acceptability declined with deteriorating living standards and livelihood security. Despite some minor successes in the 1970s, the result of the Ujamaa politics had mostly negative effects on the rural residents who had resisted central policies with the weapons of the weak (LOFCHIE 1978; SCOTT 1986).

4.2.5 1985 – 2015: Multiparty Politics & Corruption Scandals

Political changes between 1985 and 2015 can be characterised with post-socialism and neoliberalism. In the 1980s the Tanzanian political economy took a sharp U-turn from socialism to capitalism. "Mwinyi's government represented a transition between Nyerere's radical nationalism and Mkapa's full-blown neo-liberalism" (SHIVJI 2020, 398). In the early 1980s, Tanzania's second President Ali Hassan Mwinyi (1985 - 1995) asked international monetary institutions for help. Through what became known as structural adjustment programmes (SAPs) and the Washington Consensus, Tanzania was pushed to comply with good governance and privatisation of previously state-owned industries and companies. The Tanzanian political economy entered a phase of privatisation and accumulation in which members of the (inter)national private sector, the development community and party cadres from the CCM took part (SHIVJI 2017a). "Liberalisation of the economy and easing of the leadership code had both opened up new avenues of corruption and amassing of wealth by apparatchiks through corrupt means" (SHIVJI 2020, 373). The privatisation of the National Bank of Commerce in 1997 meant that the Tanzanian state began to lose control over the financial sector. Furthermore, neoliberal reforms after 1980s increased anti-foreign hostilities in Tanzania (AMINZADE 2003). Although these reforms allowed for expression of antagonistic positions, emerging opposition parties mobilised support through anti-Asian sentiments that questioned the protection of minority rights (AMINZADE 2003).

In the 1990s through official develop aid, the international development community contributed between 20 - 30 % to the national income of Tanzania (KHAN a. GRAY 2006). Thus, WB, United States Agency for International Development (USAID), Department for International Development (DFID) and other powerful institutions and actors of the international development community gained considerable influence in policy-making (KHAN a. GRAY 2006; STAFF GROW AFRICA I-51 2019). After a decade of neoliberal adjustments and to meet the needs of global capitalism and the demand for more democratic politics, both domestically and by the international development community, multi-party politics were introduced in 1992 (SHIVJI 1990). At the same time networks between CCM members and (inter)national business elites began to emerge. Especially the

Benjamin Mkapa (1995 - 2005) and the Jakaya Kikwete (2005 - 2015) presidencies conflated party politics and business opportunities. Former prime minister Frederick Sumaye (1995 - 2005) was quoted in a public meeting saying "If you want to do well in business you should join the CCM" (THERKILDSEN a. BOURGOUIN 2012, 17). Any person who seeks for a successful career in politics, private sector, military, judiciary and the like has to relate to networks in the CCM (COLLORD 2021).

The Arusha Declaration (1967) demanded that members of the ruling party should not engage in private businesses (COULSON 2013 [1982]; GREEN 2015). This *Leadership Code* (mwongozo) was lifted by the *Zanzibar Declaration* 1991 (KHAN a. GRAY 2006; MBUNDA 2016b; AMINZADE 2013b; TANZANIAN AFFAIRS 1991) which resulted in economic opportunities increasingly being fused with party politics (KHAN a. GRAY 2006; THERKILDSEN a. BAK 2019). SHIVJI (2020, 406) opines, "Mwinyi's Zanzibar Resolution blunted Nyerere's Ujamaa by reinterpreting the Leadership Code out of existence. Mkapa's 13th Amendment buried Ujamaa by banishing it from the material to the metaphysical world."

The multi-party system was in need for funding for election campaigns. Especially the successful domestic business community started funding political campaigns (THERKILDSEN a. BAK 2019). The domestic business sector in Tanzania is characterised by a few hundred influential business families. Because of racist colonial politics that divided the colonial society into 'black' labourers, 'brown' bureaucratic middle classes and 'white' rulers, families of European descendent, from the Arab Peninsula (Oman and Yemen), from Iran, Lebanon, India, and Pakistan became the upper Tanzanian middle class. Many of this middle class hold senior political positions within the CCM, have become judges, top military, or founded companies in various sectors (real estate, retail, media, transport, telecommunication, import/ export, mining, etc.). Many of the top business people (mostly men) in Tanzania like Rostam Aziz, Said Salim Bakresha, Subash Patel, the Seif brothers and Mohammed Dewji, the first USD billionaire from Tanzania in 2014, are from families with origins outside Tanzania (THERKILDSEN a. BAK 2019). Likewise, in the rest of the thin urban middle class Tanzanians with family roots in other parts of the world are overrepresented. This class structure has implications for politics. On the one hand, the CCM understands itself as a revolutionary party that represents the will and the voices of the marginalised, mostly black rural Tanzanian who engage in the agricultural sector. On the other hand, the CCM relies on the middle class and elites to finance their election campaigns. THERKILDSEN a. BAK (2019) argue that there is a strong relationship between tax exemption and years of election. Especially companies with their capital vested in Tanzania

have an interest in funding the party, which they think is most likely to win. This results in the CCM having about ten times more funds available, than all opposition parties together (THERKILDSEN a. BAK 2019). Although there are strict regulations about party funding, neither the CCM, nor the opposition parties have an interest in enforcing them. The opposition, THERKILDSEN a. BAK (2019, 9) maintain, fears that stricter regulations could expose their financiers to retribution by CCM.

A faction within the CCM is called *Mtandao* (network) and *Mafisadi* (Mafia) around *Edward Lowassa*, a close friend of *Kikwete* who became prime minister under him, gained attention in the 1990s (TSUBURA 2017). Lowassa's faction was involved in the Richmond corruption scandal 2006 - 2008 after which Lowassa stepped down (TSUBURA 2017). Further grand corruption scandals with high party cadres emerged. GRAY (2015, 391) claims,

"While the Richmond and IPTL case involved just a handful of business people, another major corruption scandal in 2007, involving illegal payments from the External Payments Arrears account under the Bank of Tanzania, exposed a much wider set of links between the ruling party and businesses in the country."

For a first time since the transition from socialism to capitalism, the leadership position by the CCM was in questions. This point is relevant, as the hegemony of the CCM was in danger for the first time. In the general elections in 2010 and 2015, the opposition came close to beating the CCM at the polls. Up to date, the ideals of Nyerere, Arusha Declaration, the Leadership Code, Ujamaa and Pan-Africanism remain influential in public debates (FOUÉRÉ 2014; FOUÉRÉ 2015). Most adults of present-day Tanzania who are heads of households, decision-makers in villages, district officers, organised in co-operatives or private companies were raised and educated under Nyerere. Many have internalised the ideals, invoke his political rhetoric (BECKER 2013) and have kept Nyerere as a relevant popular image (CHACHAGE 2009). Nyerere remained an image of integrity, humility and incorruptibility as a caring father of the nation (baba wa taifa) (FOUÉRÉ 2014). Thus, Nyerere's successors have promised to live up to his standards.

The agrarian change of Kilombero Valley since the 1980 was characterised by high rates of population growth and in-migration. Due to *Ujamaa Vijiji* schemes in Kilombero Valley in the 1970s and 1980s, in-migration by Massai and Sukuma in the 1980s and 1990s from Mbeya, Singida and Shinyanga Regions as well as in-migration of seasonal workers, the population in Kilombero Valley more than doubled between 1988 until 2010 (BLACHE 2018). Especially after the 2006 evictions of agro-pastoralists from Ihefu and conflict between Massai and crop farmers in Kilosa District, the number of Massai, Sukuma and Barbaig

increased (URT 2013b). Most (agro)pastoralists migrated to Kilombero Valley due to pressures on grazing elsewhere. Additionally, the privatisation of rice farms in Mbarali District, Mbeya Region in 2006 led to the eviction of (agro)pastoralists and pastoralists to Morogoro Region (GRECO 2014, BLACHE 2019) as well as environmental destruction and effects of climate change in Shinyanga, Mwanza, Simiyu and Mara regions.

National and regional politicians are playing a key role in migration to the Kilombero Valley. Whereas Steven Mashishanga, former Regional Commissioner of Morogoro invited (agro-)pastoralists, his successor Stephen Kebwe publicly stated the opposite (BLACHE 2019; THE GUARDIAN 2017a; THE GUARDIAN 2019c). This has left many (agro)pastoralists in a state of uncertainty and suspicion against the state. BLACHE (2019, 15) says,

"They came to Morogoro region on the advice of the former Regional Commissioner, Mr. Steven Mashishanga, himself a Sukuma. The evictions of 2012 - 2014 in the Kilombero Valley have not been forgotten and people mistrust or are tired of the ruling party."

In previous decades, the absolute number of (agro)pastoralists living in the Kilombero Valley steadily increased through in-migration and high birth rates. Their arrival brought new cultures, languages, and livelihoods to Kilombero Valley. (Agro)pastoralists moved into previously uninhabited areas, into marginal lands of Kilombero Valley in the 1970s to 1990s. Their presence was associated with increasing pressures on forests, land, and water. There were persistent conflicts between farmers and pastoralists over land use in Kilombero Valley, with overlap in areas suitable for both activities and limited land availability as most villages are surrounded by protected areas (URT 2013b). Although the relationship between (agro)pastoralists and sedentary peasants in Kilombero Valley is often tense due to complaints that cattle causes damage to the soil and crops, URT (2013b) observes that Sukuma (agro)pastoralists were successfully integrated, renting land, growing crops and had positions in community governance structures and community organisations.

4.2.6 2015 - 2021: Infrastructures, Agro-Processing, and Industrialisation

With the election of Magufuli as president in October 2015, Tanzania's long neoliberal phase from the mid-1980s ended abruptly. With disinvestment in the agrarian sector on the one hand, and large investments into industrialisation, agro-processing, and infrastructures on the other hand, Magufuli discontinued many central policies of his predecessor Kikwete. This U-turn in political priorities included new ideas of rural development. In a timeline, the most relevant events during Magufuli's presidency are enlisted (Figure 15). The red entries indicate direct implications for the Kilombero Valley.

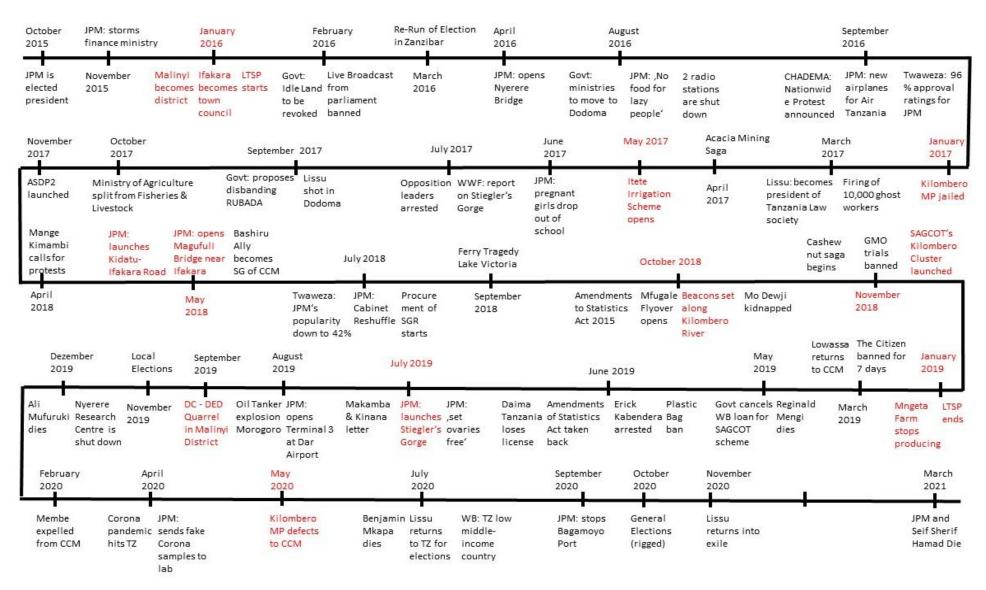


Figure 15: Timeline of Magufuli's Presidency 2015 - 2021 (own graph after JACKSON 2021b)

Between 2000 and 2015, especially during the presidency of Jakaya Kikwete (2005 - 2015), the CCM was associated with several grand corruption scandals (GRAY 2015; TSUBURA 2017). Several federal ministers, prime ministers, attorney generals and other high ranking politicians and CCM cadres were involved in them (GRAY 2015). GRAY (2015) mentions four grand corruption scandals. First, the purchase of a civil aviation radar system by the British company British Aerospace Engineering (BAE) in 1999 in the course of which a lower level businessman was evicted but "the Tanzanian Prevention of Corruption Bureau was hindered from pursuing cases against other political figures implicated in the affair" (GRAY 2015, 389). A second case is known as the Escrow scandal (NYANG'ORO 2017). Independent Power Tanzania Limited (IPTL) engaged in a flawed tender process of a large power supply contract signed in 1995 between the IPTL and the Tanzanian government that was not in the economic interest of the Tanzanian public. GRAY (2015, 390) argues: "Controversy surrounding IPTL erupted again in 2014 when the Public Accounts Committee (PAC) was asked to investigate alleged fraudulent payments from an escrow account set up by TANESCO to the energy firm and to a number of senior CCM politicians". A third corruption scandal in 2007 was connected to the bank of Tanzania and illegal payments from the external payments arrears account (GRAY 2015). Fourth, and arguably the biggest scandal between 2005 and 2008 was the Richmond scandal, in the course of which the prime minister at the time, Edward Lowassa, stepped down in 2008 (THE CITIZEN 2015a; GRAY 2015). After years of corruption, the race for presidency in 2015 was expected with some concerns. Due to these scandals, the integrity of the CCM as an honest party with a good record on leadership suffered. Being faced with the possibility of losing an election at the polls in late 2015, the CCM leadership was looking for a presidential candidate who had no connection to corruption (TSUBURA 2017). It is likely that Magufuli would not have become president without previous corruption scandals. With Magufuli as their candidate however, the CCM could distance itself from corruption by the slogan Umoja ni Ushindi (Unity is Victory) (TSUBURA 2017).

In early 2015, Lowassa was among the first who published his bid for the presidential candidacy for the CCM (THE CITIZEN 2015a). In a study from November 2014, Lowassa's popularity was supposedly much higher, than that, of other potential candidates. Federal minister of work, John Magufuli, who declared his interest, ranked at only five per cent (THE CITIZEN 2015a). Kikwete and others were not siding with Lowassa and his Mtandao (network), called Mafisadi (Mafia, corrupt group) (TSUBURA 2017).



Figure 16: Magufuli, 'the Bulldozer' (The Economist 2016)

In July 2015, Lowassa who was a close friend of Kikwete since the 1990s, was declined by the National Security and Ethics Committee (NSEC), a board constituted to check the ethical conduct of presidential candidates (TSUBURA 2017). After the ruling of NSEC, there was considerable conflicts within the other party bodies, the National Executive Committee (NEC) and in the Central Committee (CC). Lowassa had loyal members in both. After being excluded from the presidential race, Lowassa and his network voted against the other powerful candidate Bernard Membe, who was Lowassa's main rival within the CCM for many years (TSUBURA 2017). The two strongest factions within the CCM (Lowassa/Membe) ended up in a stalemate by July, a few months before the general election in October. This stalemate came to the advantage of Magufuli who, albeit without larger networks within the CCM was considered hard working and incorruptible. Magufuli had seemed an unlikely candidate until July 2015.

Magufuli came to power in late October 2015 from the CCM's second row. He began to solidify his power by nominating loyalists in key positions, breaking with the previous government (BREWIN 2016c). His advantages were his public perception as a hard-working man of integrity with a good record fighting corruption. According to his nickname, on a famous cartoon, Magufuli was portrayed as a *bulldozer* (Figure 16) (THE ECONOMIST 2016; BBC 2020a; BBC 2020b; PFAFF 2016; PFAFF 2020; THE ECONOMIST 2018a; THE ECONOMIST 2018b; THE GUARDIAN 2019e). In the middle of the cartoon, Magufuli sits in the driving seat of a yellow bulldozer. On the right side, he pushes an investor with a bag of money outside the cartoon, a metaphor for scaring away investors and eventually pushing them outside

the country. While pushing the investor to the right, the only palm depicted on the cartoon cracks on the left. Additionally, a house and streetlights fall apart. Two citizens are running away from the bulldozer in disbelief and despair as their environment is left devastated by the bulldozer. Magufuli, it is argued in this cartoon, is destroying the country. However, his nickname bulldozer can be interpreted in two ways: approvingly as an unstoppable, thorough cleaner, or disapprovingly as a ruthless, chaotic leader. Whereas his supporters saw Magufuli in the line as charismatic African leaders like Lumumba and Sankara, his critics put him in the authoritarian line with Mugabe, Museveni, and Kagame.

In the first months in office a Magufulimania was seen on social media and throughout the African continent (BREWIN 2016a). The hashtag #WhatwouldMagufulido? became prominent on social media (TAYLOR 2017). Many observers had high hopes in his measures of fighting corruption, cutting down unnecessary public spending (DEHMER 2016).

In early 2016, the government announced that they would revoke idle land that has not been properly developed by private owners. In February 2016, the Magufuli government banned live broadcasting from parliament, something that was popular before. In August 2016, Magufuli ordered all ministries and embassies to move from Dar es Salaam to Dodoma, to make the designated capital city, the real capital. In late 2016, Magufuli ordered new airplanes, to equip and restart *Air Tanzania*, Tanzania's national airline company. Additionally and until mid-2017, several 10,000 *ghost workers* were erased from the public pay role (TAYLOR 2017; TAYLOR 2019b). These workers, so the Magufuli administration, did either not exist, or had died.

In early 2017, Magufuli stopped the export of raw material at the port of Dar es Salaam. A saga around Acacia Mining developed during which Magufuli said, he will not allow that Tanzanians are robbed of their minerals without proper taxation and compensation. In the following, Magufuli presented himself as a deal maker who would protect the interest of Tanzanians against external enemies and imperialists. In June 2017, Magufuli controversially decided that pregnant girls have to leave school and may not return afterwards (TAYLOR 2018c). Moreover, Magufuli's view that there is no need for birth control, caused outrage (THE GUARDIAN 2019b). In September 2017, an assassination attempt on Tundu Lissu, an MP, opposition leader and president of Tanzania Law Society, marked another turning point. Up to date, no suspects were arrested in the Lissu-case, nor any substantial investigations done. Lissu lives in Belgian exile ever since. Political tensions began to rise (TAYLOR 2018c; SCHAAP 2020; TAYLOR 2018a; TAYLOR 2018b).

In May 2018, Bashiru Ally, a former lecturer at the USDM became secretary general of the CCM. Furthermore, a cabinet reshuffle was done in mid-2018. In June 2018, Twaweza published a report that claimed Magufuli's popularity ratings had dropped to 42 %. In the following, the Twaweza report was banned. In October 2018, controversial amendments to the statistics Act were done. A STAFF WB I-18 (2019) comments,

"Essentially the Act itself just says that the government is the only official statistics that can only be given out by the government. And on our side, it is one of the things that makes it impossible for us to get the job done (...) so it curtails even just your basic ability to verify what the government is saying and you holding your end of the bargain of that contract with the government. So, it's just impossible to work just by the nature of this institution."

The act prohibits the publication of any statistics that have not been approved by the Tanzanian government. This for the WB 'makes it impossible for us to get the job done'. In November 2018 SAGCOT's Kilombero Cluster is launched in Morogoro and the so-called *cashew nut saga* begins. Magufuli orders the military to collect the entire cashew nut harvest from farmers and guarantees a prices per kilo that his government is later unable to paid.

In early 2019, the biggest English-speaking newspaper, *the Citizen*, is banned for one week. Other radio stations, websites, and newspapers had already lost their licenses by then. In March, Lowassa returns to the CCM. In May 2019, the government returns a TSH 100 billion loan from the WB that was supposed to be for the SAGCOT schemes (THE CITIZEN 2019f). In July 2019 Magufuli launches the construction of the Stiegler's Gorge. When ready built, it is one of the biggest hydroelectric power stations in Africa. In November 2019, local elections take place, with most observers commenting lack of democratic standards. In December 2019 the government shuts down the Nyerere research centre. In February 2020, Membe is expelled from the CCM, so that he cannot run against Magufuli.

The Corona pandemic hits Tanzania in March and April. Magufuli intentionally sends fake Corona samples to an official lab, imports an herbal drink from Madagascar as a cure (which the WHO later criticises), suggests praying and steam baths as cure against Corona/Covid-19 and declares Tanzania Covid-free by mid-2020. In July 2020 the WB officially declares Tanzania to be a lower middle-income country. In the same month, Lissu returns to Tanzania from Belgian exile for the general elections. The general elections in October result in more than 95 % of all seats in parliament for the CCM. Again, undemocratic procedures were observed. Lissu seeks refuge at the house of the German ambassador after the elections before he returns to exile. In March 2021, Magufuli dies in a hospital in Dar es Salaam. The exact circumstances of and the reasons for his death are not clear up to date.

It is key to understand Magufuli's presidency on a political, a governance and a policy level. First, on a political note, since Magufuli came to office, the Tanzanian political landscape changed within a short time (COLLORD 2021). Magufuli restructured the state and the CCM, and thereby consolidated his position of power. PAGET (2017a, 154) characterises Magufuli's era as "ruling-party hegemony", "sharp authoritarian turn" and cautions about a "threat of dictatorship". Tanzania, so PAGET (2017a, 155), "continued to use and abuse state power to preserve its hegemony". PAGET (2017a) argues that the authoritarian turn belongs to the CCM as a party who passed the repressive Cybercrime Act 2015 before Magufuli was nominated presidential candidate. The Cybercrime Act, passed in May 2015, has "narrowed online space for partisan mobilization" (PAGET 2017a, 156; PAGET 2020a; PAGET 2020b; TAYLOR 2017). "Online information has also been reined in since the adoption of a draconian law under which websites and blogs have to pay exorbitant fees to register and get accreditation" (RSF 2021). PAGET (2017a, 165) argues that "CCM's actions are consistent with those of a party hoping to avoid the need to fix elections". RSF (2021) comments,

"Tanzania has become increasingly authoritarian since John Magufuli's election as president in 2015. None of the 180 countries ranked in RSF's World Press Freedom Index has suffered such a precipitous decline in recent years. Nicknamed the 'Bulldozer', Magufuli tolerates no criticism of himself or his policies."

Under Magufuli, the freedom of speech, the freedom of press and the freedom of assembly, as well as other human rights were violated, suppressed or suspended (KIMBUNGA 2018). Magufuli fought critical voices from academia, media, civil society and from within the CCM (NYAMSENDA 2018a; NYAMSENDA 2020; LISSU 2020b; LISSU 2020a). Live broadcasting of parliamentary sessions was stopped in April 2016 (THE CITIZEN 2016h; BREWIN 2016b). In the first years of Magufuli's presidency several newspapers like The Citizen in 2019 and Daima in 2020 and, as well as local radio and TV stations were shut down temporarily or permanently and/ or censored (TAYLOR 2018c) because their content was perceived as "potentially to cause a breakdown of law and order" (MOSENDA 2020). Most of articles published in The Citizen during Magufuli were published anonymously. When Samia Suluhu Hassan became president in March 2021, articles began carrying authorship again. Journalists and/ or activists like Ben Saanane, Azory Gwanda, Mdude Nyagali, Tito E. Magoti, Eric Kabendera, Maxence M. Mubyazihave, Joseph Gandye, Haruna H. Mapunda, and many others have vanished, been abducted and/or killed under Magufuli's presidency (AMNESTY INTERNATIONAL 2019; THE EAST AFRICAN 2019; AMNESTY INTERNATIONAL 2020a; AMNESTY INTERNATIONAL 2020b; EVELEENS 2020a; TAYLOR 2020d). The surveillance by the state led to both censorship and self-censorship among media, opposition parties, academia and parts of the population (PAGET 2017a, Amnesty International 2019, NTAHONDI 2019). COCHRANE a. MNGODO (2019) mention that WhatsApp group chats have become potentially dangerous and argue that the surveillance and instilled fear is "beyond a physical newspaper, (it) is beyond your phone, it is that space that we share on a daily basis". Likewise, TAYLOR (2017) observed this, one year into Magufuli's presidency.

This feeling of fear had implications for the quality of the interviews the author could engage in (see chapter 5). The topics that I could address were compromised. In many instances, interviewees spoke in such a low voice that it was impossible for me and Grace to hear their voices further than a meter. With concern, some interviewees looked over their shoulders and around themselves, trying to see, if someone was listening. The fear under Magufuli had reached the bodies of Tanzanians. A retired professor from UDSM compared this atmosphere to the former German Democratic Republic (GDR). Instead of meeting for interviews in offices, many interviewees insisted to meet in public places like shopping malls, restaurants, and cafés. Peter Lijualikali, the Member of Parliament (MP) from an opposition party who spent many months in prison requested to meet in a fast food restaurant (MP KILOMBERO I-47 2019). A senior staff of the German embassy stated that fear is widespread among Tanzanian staff from administrator to federal ministers (German Embassy, May 2019). No one wants to be caught taking wrong decisions which is why many decisions were postponed, making it difficult to impossible to partner with Tanzanian ministries under Magufuli. Especially staff members in their 30s and 40s, with a career ahead of them, feared to give out information that could negatively affect them.

Additionally, the CCM banned movies, books and music artists, including content that is related to critique against the government. The National Arts Council (BASATA) banned music artists like Diamond Platinumz, Sugu, Shilole, Snura, Elibariki lyrics and/ or music videos (THE CITIZEN 2018h). Two of the most popular musicians in Tanzania, *Diamond Platnumz* and *Harmonize*, have re-interpreted their songs into affirmative versions of Magufuli's presidency. Diamond has renamed his song *Number One* into *CCM number one* (DIAMOND PLATNUMZ 2020). Diamond and Harmonize together have renamed their controversial song *Kwangwaru* into *Magufuli* (HARMONIZE 2020). Although both re-named songs did not gain the same popularity, both have many million clicks on YouTube. This ideological coalition between artists and politics points to how cultural hegemony and a

new common sense is consolidated and reaffirmed through popular culture. Gramsci argued that cultural hegemony is built through popular culture, which he called *folklore*.

The CCM's ideology and publicity secretariat, Humphrey Polepole, stated in 2018 'there is no way the ruling party could be defeated in any election'. Ally, a lecturer for political science at the University of Dar es Salaam (UDSM), who became the Secretary General (SG) in 2018 (THE CITIZEN 2018g) publically stated in 2020 "ruling parties which fail to use state apparatus to consolidate their stay in power should blame themselves because they have everything at their disposal" (THE CITIZEN 2020b). He continued to say, "owning the state is a privilege to remain in power [...] you are supposed to use the state to remain in power". This self-perception of one of the central intellectual figures in the CCM indicates that the CCM sees itself as the only legitimate party in Tanzania and as the 'owner' of the Tanzanian state. In Ally's view, the CCM should seek complete control over the state, including its bureaucracy, judiciary, and the executive. Ally's assumption that the opposition parties, if in power, would seek to use the state apparatuses against the CCM, turns multi-party politics and the democratic struggle for a majority of parliamentary seats into a relentless authoritarian power struggle for 'owning' the state. This is precisely the difference between antagonistic politics and what MOUFFE (2013) in reference to Gramsci calls agonistic politics.

Magufuli publically warned that any kind of protest against his politics would face tough measures (THE GUARDIAN 2018a). Although by the constitution Magufuli was only supposed to be serving two terms, some party members suggest, he should stay longer to fulfil his development agenda (THE CITIZEN 2019k). Magufuli himself said that his party will rule forever (THE EAST AFRICAN 2018).

Despite this authoritarian rule, Magufuli was a popular president. These contradicting characteristics need to be understood in a dialectical way. His authoritarian style was justified by his populist claim, that he knew the *real interests* of the Tanzanian people. Magufuli saw himself as protecting the interests of common people against internal opposition (e.g., lazy, and incompetent bureaucrats) and external agents (paid by imperialists to sabotage his efforts). To execute the will of the people, Magufuli presented himself as an uncompromising dealmaker who resorted to authoritarian means, if needs be. In the first week of his presidency, Magufuli visited the federal ministry of finance without prior notice and entered offices with live cameras on, making his visit into a public performance (YOUTUBE 2015; THE CITIZEN 2015b). When Magufuli saw that only a few staff were at their desks in early working hours, he raised concerns about the work ethics of

bureaucrats in government institutions. In the video footage one sees staff "panicking, hiding, freezing and trembling" (PAGET 2020b). PAGET (2020b) argues that Magufuli divided the society into three groups: an elite, the common people, and government officials and bureaucrats. By trifurcating the Tanzanian society, Magufuli does not turn against CCM cadres to fight corruption, but instead labels the middle strata corrupt, inefficient and lazy. Ministry staff and bureaucrats are the ones preventing the common people from state services and development.

Second, on a governance note, it seemed more important for Magufuli to be popular, than to be economic, democratic, or scientific. The way Magufuli and his administration dealt with the Corona pandemic, shows how his authoritarian and populistic politics were intertwined (Dahir 2020; Dörries 2020; Eveleens 2020b; Misser 2020; Mutahi 2020). It can be assumed that Magufuli, who had a doctor degree in chemistry, understood public health requirements in a global pandemic. However, after the Corona virus had spread around the globe in 2020, Tanzania was declared Corona-free in June 2020 while neighbouring Kenya had reported more than 50,000 cases. Tanzania's official statistics remained at 509 cases until early 2021. Praying to god, using hot water steams and drinking herbal medicine shipped to Tanzania from Madagascar were the official strategy of Magufuli against the pandemic (FISCHER 2020; TAYLOR 2020a; TAYLOR 2020b; TAYLOR 2020e). In April 2020, Magufuli (allegedly) sent fake samples (motor-oil, goat and a fruit) to the only national laboratory that could test for the virus (NYAMSENDA 2020). After these samples (allegedly) turned positive, Magufuli claimed that foreign agents were sent to Tanzania to sabotage his development efforts. Consequently, he sacked the vice minister for health and said that the Corona virus cannot survive in the body of Jesus. In a religious country like Tanzania, it was far more popular to keep the churches open and to suggest praying, instead of a lockdown, social distancing, wearing facemasks, widespread testing, and a vaccination campaign. Because of Magufuli's rhetoric, in early 2022, Tanzania has one of the lowest vaccination ratios worldwide with less than a million vaccinated persons out of 60 million citizens.

Third, on a policy note, Magufuli's slogans hapa kazi tu (here, we just work) and Tanzania Mpya (New Tanzania) both signalled that Magufuli wanted to leave a distinct legacy for which he distanced himself from the policies of his predecessor(s). Kikwete's presidency was characterised by corruption scandals, neoliberal policies, foreign direct investments, a turn to global market integration and large investments in the agrarian sector like the Southern Agricultural Growth Corridor of Tanzania (SAGCOT). Magufuli instead, wanted

to industrialise Tanzania, facilitate domestic value addition, and stop deals that in his eyes were not in the interest of Tanzania. Under Magufuli, Tanzania experienced a U-turn in policy priorities, which had implications on the agrarian change. PAGET (2020b) called Magufuli's politics restaurationist development nationalism that was conservative and progressive at the same time. On the one hand, Magufuli envisioned a Tanzania as rich and prosperous industrialised nation, a part that may be called progressive. On the other hand, Magufuli sought to return to the golden past, invoking nationalism, and economic protectionism with authoritarianism, which may be called conservative and reactionary. NKOBOU a. AINSLIE (2021) call Magufuli's politics of large-investments developmental nationalism JACOB a. PEDERSEN (2018) call it resource nationalism and NYAMSENDA (2018a) calls it authoritarian populist and fascist.

The document, which seemed to have influence Magufuli, was the monography *Tanzania's industrialisation journey*, 2016 - 2056. From an agrarian to a modern industrialised state in forty years (MUFURUKI et al. 2017) which lays out a distinct path to an industrialised Tanzania (COULSON 2018). Different from a protectionist standpoint favoured by Rodney (RODNEY 2012 [1972]), MUFURUKI et al. (2017) see globalisation and free trade as a chance for the political economy of Tanzania.

The historic hegemonic bloc and its respective counter-hegemonic blocs changed considerably between president Kikwete and president Magufuli. Soon after his election, in late October 2018, Magufuli exchanged several ministers, regional commissioners and security personnel (THE GUARDIAN 2016b; THE GUARDIAN 2016c; THE GUARDIAN 2018b; CHACHAGE 2016). Cabinet reshuffles, hire and fire politics and unannounced sacking were characteristic of the Magufuli administration. Among the most prominent reshuffling of the cabinet were the sacking of the Union Affairs and Environment Minister, January Makamba, in July 2019 shortly after a phone call between January Makamba and his father, Yusuf Makamba (TAYLOR 2019a). The phone call was leaked and in it they had allegedly criticised Magufuli (THE CITIZEN 2019g; THE CITIZEN 2019l; THE CITIZEN 2019h). The minister for home affairs, Kangi Lugola, was sacked during an official ceremony in January 2020 (THE CITIZEN 2020a). The deputy minister for minerals, Francis Ndulane, was not able to read his oath of office during an official ceremony in December 2020, which is why Magufuli said he could not take the position (THE CITIZEN 2020f). Furthermore, Faustine Ndugulile, who was the deputy minister for health, was sacked in May 2020 without official reason (THE CITIZEN 2020c).

Since multi-party politics in early 1990s, defections have become a prominent characteristic of Tanzanian politics. Between 2015 and 2021, at least 21 MPs have defected to the ruling party; many hundred politicians in lower ranks defected too. RAKNER a. VAN DE WALLE (2009) argue that opposition parties throughout Africa are weak because individuals are using parties as a means for private gain and careerism, rather than engaging in ideological debates along stable party lines. In the following, the two examples of Edward Lowassa and Peter Lijualikali are discussed.

First, the most prominent example for defection, and thereby changing hegemonic blocs, is Lowassa, one of the most controversial Tanzanian politicians. After Lowassa was declined the nomination of the presidential ticket of the CCM, in early 2015, he and many of his network, defected to Tanzania's biggest opposition party, Chama cha Demokrasia na Maendeleo (CHADEMA). Lowassa and his network left the historic hegemonic bloc. Although Lowassa was heavily criticised for corruption by CHADEMA and other opposition parties while he was with the CCM, the newly constituted opposition coalition *Umoja wa Katiba ya Wananchi* (UKAWA) nominated Lowassa as their presidential candidate. At the elections in 2015, UKAWA represented the most solidified, newly reconstituted, historic counter-hegemonic bloc. In the general elections, in late October 2015, Lowassa received about 40 % of the votes, Magufuli 60 %. This was the closest result in Tanzanian elections thus far. Keeping a low profile as an opposition figure after the elections, Lowassa defected back to the CCM in March 2019. He publically showed regret to have left (TAYLOR 2019c). This defection back to the CCM meant yet another reconfiguration of historic blocs. It becomes apparent, that blocs are dialectically intertwined, as defection *from* a bloc, means a defection to another bloc. Magufuli who could have rejected the return of his former rival, instead commented "a son has returned to CCM" (THE CITIZEN 2019c). Lowassa's return to the CCM damaged the trust of Tanzanians in the opposition, in the integrity of politicians and in the parliamentary system.

Second, and linked to the empirical example of the Kilombero Valley, is the case of Peter Lijualikali (ca. 35 years), the MP for Kilombero Constituency 2015 - 2020 from CHADEMA. Being the democratically elected representative for Kilombero Constituency, the alliance of Lijualikali to the counter-hegemonic bloc was particularly relevant for the ways in which he could represent the will and the needs of his constituency. Like many opposition politicians under Magufuli, Lijualikali was jailed (The Citizen 2017a), released on bail (The Citizen 2019d) and confronted with questionable allegations (The Citizen 2016f). In an interview, in August 2019, in Dar, Lijualikali stated that parliamentary democracy under

Magufuli is impossible and that he would not run for office again in the upcoming general elections in October 2020 (MP KILOMBERO I-47 2019). Instead, he applied for a scholarship in the UK (MP KILOMBERO I-47 2019). Yet again, in May 2020, Lijualikali surprisingly defected to the CCM in parliament (THE CITIZEN 2020d). In June 2021, after Magufuli's death, Lijualikali became District Commissioner for Nkasi District.

After discussing the Agrarian Change in Kilombero Valley from the 19th century until 2015, in this sub-chapter the question which Agrarian Change was ongoing in Kilombero Valley during the presidency of Magufuli? is discussed. Having seen Agrarian Change in Kilombero Valley for the previous decades, certain changes would have continued irrespective of governmental change. Thus, answering the question on Agrarian Change during Magufuli's presidency, does not necessarily claim causality. This is especially true for Magufuli's first months in office. Given his increasingly authoritarian leadership towards the local elections in 2019 (AL JAZEERA 2019; KABWE 2020) and the general elections in 2020 (VAN NIEKERK 2020; TAYLOR 2020c; TAYLOR 2021), the agrarian change in Kilombero Valley became increasingly influenced by Magufuli.

In recent years, a couple of scholars were concerned with differentiation in Tanzania. Among the central works are Chachage a. Mbunda (2009), Baha (2011), Sulle a. Dancer (2020). Additionally, Gmür (2020) and (Bryceson) have looked at gender related topics, Greco (2014) has analysed Mbarali District, Isager et al. (2016), Sulle (2017b) Chamwali (2000) and Gebrekidan et al. (2020) Kilombero Valley.

GRECO (2014) suggests that differentiation should be reflected against the backdrop of state-led dispossessions since independence. Between peasant-driven accumulation from below and elite-driven accumulation from above, Nyamsenda in a conversation suggested the process as de-peasantisation by wamachinganisation, meaning the loss of rural livelihood (depeasantisation) and new informal urban jobs like guarding houses (wamachinga). MBUNDA (2016b, 267) claims that influential institutions have advocated for de-peasantisation and warns that "there are too few non-agricultural sector jobs that could accommodate the uneducated and poverty-stricken rural population". Contrary to that, a policy advisor claims that rapid transition is possible and that in few decades only 20 per cent of Tanzania's population is working in the agrarian sector (STAFF ASPIRES I-16 2019). Those debates have an underlying normative dimension. Depending on whether an agrarian, or industrialised Tanzania is envisioned, state interventions are judged timely, adequate, successful, or the exact opposite. Both argue around the extent to which the Tanzanian state can manage ongoing Agrarian Change.

4.3 Interim Conclusion

In this chapter, the first main research question - *In which ways is the Agrarian Change in the Kilombero Valley causally connected to the Political Change?* – was posed. Three conclusions can be drawn.

First, different patterns of agrarian change have emerged. Over the course of the decades, different rulers had different spatial access to and knowledge about the Kilombero Valley. This has led to different speeds and patterns, at which political ideas were converted into agrarian change. While caravans in the 19th century came to the Kilombero Valley for labour and food supplies, the German colonial period saw plantations, rubber ecologies and devastated villages. In the Ujamaa period, the reordering of village space and agricultural land meant new dynamics along regional trade routes that were simultaneously created for them. At all times, the establishment of infrastructures, as regional roads and railways have allowed for deeper spatio-temporal penetration of the national economy and the state. The potentiality of the state to convert ideas and policies into reality has increased with new public infrastructure, including village and district offices, hospitals, schools, irrigation schemes and bridges, electrification efforts and the construction of village markets.

Second, a top-down politics is constitutive. For the most part, rural populations are at the receiving end of national politics that is decided in urban centres far away from them. It is fair to say, that residents in the Kilombero Valley have never experienced democracy (BECKER 2020). Since 1961, the same political party rules in Tanzania. Although the TANU (later CCM) allowed for internal discussions, often referred to as one-party-democracy, the ruling party was organised in a hierarchical way. It has become difficult to differentiate between what is the party, the government, the state and its' bureaucracy. A vast majority of Kilombero Valley's population has never been involved in democratic decision-making processes on the district, regional or national level. There is a negligible rural middle class in Kilombero Valley and almost no civil society through which popular demands could be channelled or articulated. PAGET (2018) argues that in recent years CHADEMA has become a well-organised political party across rural Tanzania in the early 2000s. Kilombero Valley was known as a stronghold for the opposition in 2010 and 2015.

Third, the belief in development, progress, modernity and modernism dominated political ideas and how they were tried-out in Kilombero Valley (SCHNEIDER 2007; SCHNEIDER 2014). In all eras, rulers and decision-makers believed in a unilinear development path, along which Tanzania's political economy should evolve. This

continuity stands in contrast to discontinuities of colonialism/ independence, socialism/ capitalism, Pan-Africanism/ nationalism, agrarian society/ industrialised society, and from parliamentary democracy towards an authoritarian regime (MAKULILO 2016; MAKULILO 2007; MAKULILO 2012; SHIVJI 2009b; KELSALL 2003).

In recent years, Kilombero Valley has seen rapid agrarian change. High natural population growth and/ or migration mean a doubling of population every twenty years. In 2022, more than 95 % of Kilombero Valley's ca. one million residents are (in)directly reliant on the agricultural sector. About 75 % of all land in Kilombero Valley remained under some sort of environmental protection. Rates of deforestation, soil erosion and soil depletion increased, the effects of climate change are felt in every village. The Kilombero Valley faces massive environmental degradation through human activities (LIGANGA 2017a; THE GUARDIAN 2017b). The need for land, water, firewood, bricks and timber is increasing with every new resident. Adding to historic land-related conflicts that remain unresolved, new land conflicts are emerging. The bureaucracies on different levels are confronted with increasing demands for rural infrastructures and public services. New crops, seeds, agrarian practices, NGO projects, private investments, value chains and new markets are emerging.

5 Contesting Rural Futures

In this chapter the second main research question – *In which way do different future conceptions about the Kilombero Valley compete for their materialisation?* – is posed. This question is further subdivided into the sub-questions - *How are future conceptions about the Kilombero Valley envisioned by actors?* and *How are specific development paths implied by these future conceptions?*

On the way to possible rural futures, the Kilombero Valley is currently at crossroads. PROSWITZ et al. (2021, 7) identify four narratives for the Kilombero Valley: "the conservation narrative, the agricultural intensification narrative, the livestock intensification narrative as well as the hydropower and dams narrative". These narratives imply different development paths and different futures. Since many aspects of these futures are mutually exclusive, they compete for materialisation. The realisation of one future inhibits the realisation of others. Since not all futures can materialise in the same space, at the same time, a conflict of objectives arises.

Different actors envision futures with different conceptions and narratives. They are therefore normative, ideological, interest-laden and contested. MANN (2009) argues that ideas become materialised in the everyday through practices. In Gramscian terminology, a narrative becomes common sense, when it manages to sediment into popular and widely unquestioned belief. Neither a conception of the world, nor a common sense can be complete or coherent, but it is naturally historically contingent. Counter-narratives constantly challenge the hegemonic common sense.

According to Gramsci, conceptions of the world are specific ontological-ideological perceptions of how the world is and ought to be (WAINWRIGHT 2013). Different conceptions are linked to networks of actors, power, and interests. Traditional and organic intellectuals hold certain conceptions, formulate narratives to convince larger groups through a range of future-making practices that their future is desirable (BECKERT 2016; APPADURAI 2013a) (Chapter 7).

In the following, it is argued that during Magufuli's presidency, the previously hegemonic conception for the Kilombero Valley, that is *Agrarian Intensification*, was replaced by *Infrastructure and Industrialisation*. On the one hand, this was a shift in state ideology, on the other hand the target audience for this conception changed. Whereas under president Kikwete, (inter)national elites and domestic middle classes were the target

audience for policies such as Kilimo Kwanza/ SAGCOT, under president Magufuli, the target audience for industrialisation/ mega-infrastructures became popular masses (MAKULILO 2017; NYAMSENDA 2018a).

For describing and analysing different conceptions of the Kilombero Valley, a heuristic of conceptions of the world, narratives/ common sense and socio-technical imaginaries is applied. Each conception of the world (e.g., environmental protection) is stabilised through narratives that seek to become the (only) common sense (e.g., deforestation needs to stop) (Chapter 6). Furthermore, conceptions of the world are underpinned by positive-utopian and negative-dystopian socio-technical imaginaries (e.g., a healthy-conserved Kilombero Valley vs. a destructed-deserted Kilombero Valley). What may be a utopian Kilombero Valley for some actors may be a dystopian Kilombero Valley for other actors. Thus, it is important to understand the (counter-)hegemonic class position from which conceptions of the world are articulated. As the civic spaces for articulation shrank under Magufuli, social-technical imaginaries were communicated top-down by the state (e.g., Stiegler's Gorge). While some conceptions existed for decades, others were recently (re)introduced. The latter relates closely to what BAUMAN (2019) calls *Retrotopia*, a utopia that lies in the future, but refers back to a golden past.

In the following, eight future conceptions of the Kilombero Valley are juxtaposed in four pairs (Figure 17). These pairs describe extremes of a spectrum (see arrows) of possible futures. Between each of these pairs, there are various centre positions, ideological compromises, and inconsistencies. Examples for such centre positions are community

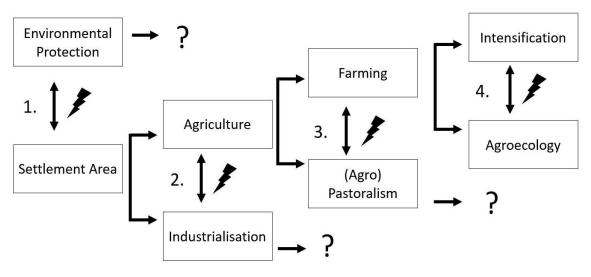


Figure 17: Development Paths for the Kilombero Valley (own figure)

based natural resource management (Pair 1), agro-industrialisation (Pair 2), irrigation schemes (Pair 3) and sustainable intensification (Pair 4).

The order of the four pairs suggested is not meant in a discursive-chronological way: First, and most fundamentally, the Kilombero Valley as a site of environmental protection or a site for settlement area is analysed (5.1). Second, the Kilombero Valley as an interest space for the national economy for agriculture or industrialisation is explained (5.2). Third, the discussion around village land designated for farming or (agro)pastoralism is portrayed (5.3). Fourth, the debate between intensification or agroecology is introduced (5.4). In the last sub-section, an interim conclusion is drawn (5.5).

This four-part juxtaposition suggests an overlap between the eight conceptions. Often, conception of the world, narratives/ common sense and socio-technical imaginaries overlap because they remain ideologically incoherent. Furthermore, they point to different futures upstream, or downstream. Should, for example, the Tanzanian central government decide to engage more in environmental protection, than in turning conserved land into settlement areas (juxtaposition 1), the 'downstream competition', whether the remaining village land is used for agriculture or industrialisation (juxtaposition 2) or for sedentary farmers (peasants and smallholder farmers) or (agro)pastoralists (juxtaposition 3), will turn out differently. The four question marks indicate development paths, which have not been envisioned or articulated further for the Kilombero Valley, as of now.

5.1 Environmental Protection or Settlement Area?

"There are cases of expansion of the reserved land to the village land category." (STAFF HAKIARDHI I-50 2019)

A first juxtaposition of competing conceptions is the one between the Kilombero Valley as a site of environmental protection *or* as a site for settlement (including various rural livelihood activities such as farming). This is arguably the most fundamental competition in the Kilombero Valley. The introductory quote that 'there are cases of expansion of the reserved land to the village land category' implies that contestations between and within villages in the Kilombero Valley about where borders between different categories of land should run are underway. Especially along borders between village land and sites of environmental protection, conflicts of objectives emerge. Thus, in the first sub-chapter, the question to what extent the Kilombero Valley is conceptualised and imagined as a site of *Environmental Protection* or *Settlement Area* is addressed.

Although environmental protection and human settlements are thought together in concepts such as community-based natural resource management (CBNRM) (BLUWSTEIN 2017; BLUWSTEIN 2018), environmental protection policies under the presidencies of both President Kikwete and President Magufuli have suggested a return to fortress conservation. This concept suggests fortifying the to-be-protected environment (e.g., with fences), because conservation is (allegedly) more successful without human settlements (within the protected area) and without harmful human interaction. Environment is envisioned to be secured from interference from people; often under violent conditions (WELDEMICHEL 2020; WELDEMICHEL et al. 2019). Hence, a conflict of objectives between conservation or settlements emerges.

Kilombero Valley's population is increasing, while its' total land size remains the same. Although this Malthusian constellation does not necessarily lead to shortages and conflicts, this dynamic brings about new demands for rural livelihoods. Rural agency, redistribution of (protected) land and agrarian policies remain possible solutions to emerging land-related dynamics in the Kilombero Valley (LAHIFF 2003). In 2022, about one million citizens live in the Kilombero Valley, by 2040 possibly two million. Kilombero Valley's population is growing at a stable rate of about 3 % per year (URT 2013a). With increasing population, the need for settlement areas, arable land, construction material, pasture, and other means of subsistence increase. Environmental degradation, deforestation and soil erosion is happening at a large scale, and at a rapid rate (LEEMHUIS et al. 2017). Consequently, the Kilombero wetland may collapse in the next years (PROSWITZ et al. 2021).

In the first juxtaposition, one set of actors demands that environmental degradation needs to stop and environmental protection upheld, while others stress the need for fostering rural livelihoods, job creation, economic development, and new settlement areas. In the following, the case studies of the villages Ngombo (5.1.1) and Mwanangasa (5.1.2) are discussed. After that, the hegemonic materiality of beacons is addressed (5.1.3). They all discuss how concerns of environmental protection are articulated vis-a-vis popular demands for more settlement areas.

5.1.1 Ngombo – legal village or illegal settlement?

On our first days in Malinyi District, Grace, Esau and I drove to different villages, among them Mtimbira, Usangule A, Sofi, Majiji, Ngoheranga, Kipingo, to name just a few. In each of these villages, the CRC's household survey team sought to do a household survey with sedentary rural residents, mostly peasants and smallholder farmers.









1900s - first permanent settlements in Ngombo by Wandamba (Monson 1991)

1977 - First registration of Ngombo village

1979 - Ngombo is declared an illegal settlement in a conservation area

1980s - Villagers lobby to become a village

1993 – Registration of Ngombo as a village, election of village government, construction of village infrastructure (primary schools and village office)

2000s - Ngombo is declared an illegal settlement for a second time. Now within the newly constituted KVRS after 2002

2012 - Investors come to Ngombo for a rice plantation, but the investment does not materialise

2014 – Villagers of Ngombo and neighbouring villages organise a self-financed bus trip for their elected village leaders to Dodoma, to meet the Federal Minister for tourism

2015 – Eight federal ministers of Tanzania visit Ngombo village to talk to the local people and take their concerns to the president.

2022 - no final decision about the village status communicated with the village leadership

Figure 18: Ngombo – legal village or illegal settlement? (Photos: RV)

- a) Ferry across Mnyera river between Biro village and Ngombo (left)
- b) Agropastoralism in Ngombo Area (top right)
- c) Signpost of Ngombo Primary School (bottom left)
- d) Ngombo village office (bottom right)
- e) A short history of Ngombo Village (own figure after (NGOMBO VILLAGE LEADERS 2019)

Once we reached a village by car, we contacted elected village representatives and learned which village and hamlet is situated where, which administrative changes were ongoing, and how accessible certain parts of the villages are. On the list of villages, we were given by the National Bureau of Statistics in Dodoma, *Ngombo village* was enlisted as part of Biro ward. Since there was no direct road between Malinyi village and Biro village (ca. ten kilometres), we took a detour (through Tanga village). When we realised that only a small ferry leads across Mnyera River to Ngombo village, we decided to reach Ngombo on another day (Figure 18).

According to the last census about 2,500 people lived in Ngombo village (NATIONAL BUREAU OF STATISTICS 2012). Ngombo has a primary school, village offices and elected village leaders who are reporting to Malinyi district administration on behalf of the villagers (Figure 18). At first sight, Ngombo fulfils all criteria of a Tanzanian village. Most residents in Ngombo wish that Ngombo remains a site for settlement and for rural livelihoods. This future vision includes bridges to both sides of their village, better roads to reach local markets, electrification, better housing, schools, health facilities, better harvesting machinery, cars, train stations and irrigation schemes (JOHANSSON a. ISGREN 2017; NGOMBO VILLAGE LEADERS I-34 2019).

This wish Ngombo to be a future site for settlement is not self-evident. Ngombo has no village certificate. The villagers could be evicted in future to make space for the KVRS. Only a village certificate renders village borders official. Local leaders seek these certificates for better tenure security, funding, and public services. Not all settlements have received these village certificates, as only about 20 % of Tanzania's mainland was surveyed (KANDOYA 2019). JÄTZOLD a. BAUM (1968, 69) report,

"In Ngombo we find a form of communal herding: several cattle- owners, usually related, combine their animals to form a sizable herd, which has to be tended for a certain time by each of them in turn. In this way the herds are made up to an economic average size of 20-100 head".

Historical sources mention crop cultivation and animal keeping as previous major livelihood strategies in Ngombo area. For the early 20th century MONSON (1991, 91) writes,

"There are very few optimal grazing areas in the Inner Kilombero. Ngombo, considered to be the best area, is located on the northern side of the junction of the Mnyera and Ruhuji rivers. Because Ngombo is characterized by treeless savannah, tsetse flies are not a problem there. Yet annual flooding is a problem".

In recent years, the population in Ngombo has increased by internal population growth and in-migration. 'People from Mbeya, Dodoma, Ifakara and all over the country' were

interested in renting land to do rice farming and to sell their harvest to Mlimba Village (NGOMBO VILLAGE LEADERS I-34 2019). In the rainy season, Ngombo becomes inaccessible. In the dry season, small ferries can reach Ngombo. Despite infrastructural constraints, the main challenge of rural residents is that the claim of the federal government that Ngombo lies within the KVRS. NGOMBO VILLAGE LEADERS I-34 (2019) maintain,

"The government says this is reserved areas, but the people know that this village is for living, human living [...] But the main challenge in this village is that the government is saying that this land is a reserve area. But the people know that this village is for living beings, human beings. So this contradiction makes people to feel undermined, or to feel like they can be moved at any time from here to somewhere else".

What 'the government says' and what 'the people know' about the status of Ngombo does not match. While the central government argues that Ngombo lies within a 'reserve area', rural residents claim, Ngombo is for human beings. These opposing opinions about the future of Ngombo village are perceived as a 'contradiction'. Although Ngombo's residents have requested to be registered as a village for many decades, no final decision was made. Neither the village borders of Ngombo village, nor those of neighbouring villages were demarcated. Villagers from neighbouring villages frequently come to Ngombo for farming on village land set aside for livelihood activities of (agro)pastoralists. This has caused conflicts over land. According to NGOMBO VILLAGE LEADERS I-34 (2019), people in Ngombo are living in fear, as eviction can happen any time; 'they can be moved at any time from here to somewhere else'. This fear comes along with social, psychological and economic effects (NGOMBO VILLAGE LEADERS I-34 2019). Whereas people from outside invest money in Ngombo, villagers hesitate to invest, because the future of the village remains uncertain.

According to NGOMBO VILLAGE LEADERS I-34 (2019), first permanent houses were built in the Biro/ Ngombo area around the 1900s, when it was known to be suitable for animal keeping. Ngombo was officially registered as a village for a first time in 1977 (NGOMBO VILLAGE LEADERS I-34 2019). A few years afterwards, in 1979, Ngombo was declared an illegal settlement within a protected wetland. After years of lobbying for the village registration in the 1980s, Ngombo was re-registered as a village for a second time in 1993. Consequently, elections of a village government, the construction of the village office and Ngombo primary schools happened. However, in the early 2000s, Ngombo was declared an illegal settlement for a second time. It was now argued that their village land lies within the newly constituted KVRS.

Because of this back and forth, village leaders of Ngombo and leaders from surrounding villages with similar histories, tried to lobby for their interests. According to NGOMBO

VILLAGE LEADERS I-34 (2019) they collected money in 2014/2015 to rent a bus, to drive to Dodoma, to speak with the ministry for natural resource and tourism (MNRT). Before driving to Dodoma, village leaders had the impression that their concerns were not listened to on the ward and the district level. Their trip to Dodoma can be termed *scale jumping* (COX 1998). When villagers do not get help on the ward, district, and regional scale, they may jump several scales to talk to decision-makers on the national scale. Villagers sought to mobilise higher-ranking decision-makers for their interests, as local and regional power constellations have not been in their favour. One year later and as a result of the trip, eight federal ministers from the MNRT, agriculture, livestock, regional administration and local government authority, water, internal affairs, land and security visited Ngombo (NGOMBO VILLAGE LEADERS I-34 2019). Despite their visit to Dodoma and the return visit of eight federal ministers, no final decision about Ngombo was made as of today. The central states' slow decision-making and bureaucracy keeps the future of Ngombo uncertain and in a state of in betweenness. Thus far, there is neither a full commitment of the central state to grant a village certificate for Ngombo, nor is there full force used by the state for eviction and turning the Ngombo area into a protected area. STAFF CARE I-49 (2019) explains:

"Rural village in Tanzania from my experience are divided into different categories. In villages, where they are used to conflicts, in villages where they have lost their land and in villages where they are not sure how their tomorrow will look like, they are very active. They will search for information, they will hold meetings, they will travel to Dodoma if needs be, they will travel to Dar if needs be, they will look for NGOs, they will look for support [...] that's one groups that we have. [...] And then, you have other villages, where they have more investors, they are more active [...] that for Iringa, Morogoro, Mbeya [...] they are really really active. Of course, it's not all of them. And then, you have other villages, where nothing is going on, no investors, nothing. They haven't lost anything, so they just know we are here. So those are the villages that don't even seek for information. It's not the villagers you'll find in Dodoma. That's why during parliamentary sessions, you are more likely to find pastoralists roaming around in Dodoma, than any other. You are more likely to find people from Morogoro, from Iringa, coming to Dodoma, roaming around without even appointment [...] it's common, to just have a group of pastoralists saying 'we are here, we don't know anyone, but we want to see this minister' and they are going to make sure they see this minister. But those are villages of people who have been affected, so they have learned in a hard way, [...] but then you have other villages who have also gone through a lot in all these conflicts, they have fought, and now they are tired".

To her, different villages were politicised to different degrees. Villages fall within different categories. First, there are villages with previous conflicts, in which village leaders hold meetings regularly and 'will travel to Dodoma if need be'. Second, there are villages 'where nothing is going on, no investors, nothing'. These villages are not yet aware of their rights, are not seeking for information, and are more vulnerable to exploitation from higher administrative levels, or investors. In other villages, villagers 'have also gone through a lot in all these conflicts, they have fought, and now they are tired'. Thus, resignation on the

side of villagers when seeking conflict resolution on higher levels is a common characteristic in Tanzania. Furthermore, STAFF CARE I-49 (2019) mentions that one is more likely to find pastoralists to push for their agenda: 'you are more likely to find pastoralists roaming around in Dodoma'. She adds 'you are more likely to find people from Morogoro, from Iringa'. This ethnic and regional divide in the represented villagers in Dodoma trying to advocate for their rights reflects a different level of self-awareness in Tanzania. Where previous evictions, land grabbing cases, land related conflicts and investors were, the awareness of potential losses, is much more nuanced (LOCHER a. SULLE 2013; LOCHER 2016). The villagers 'where nothing is going on, no investors, nothing' have not lost anything yet. This is why 'they just know we are here'. STAFF CARE I-49 (2019) continues:

"When it comes to land and land administration and management and who owns what, the state is there, legally, they have to be there. When one party is saying we want to have this area for conservation and then the other side is saying this is our land where we live and where we cultivate. Then they need a state in there to say: 'this is where the border is'. So, this is your land, this is your land. And then at that point the state needs to back off and let communities do the planning [...] but one of the challenges is, the more state interventions you have, the more abuse people experience because in most cases [...] they [the state] don't side with the people [...] its easier to say the government, but sometimes its individuals. Because if you are going to some other places you will find government officials that are really acknowledging there is an issue we really need to address and then you go to another official, they have all these ready-made responses. It's like - have you even been there? [...] the more state interventions you have, the more politicised the issue becomes. So it becomes a political ball or agenda, so during election someone will just come and promise you everything and after election, they back off [...] I think we should be able to trust our people that they know what they are doing and I don't think the state can even afford to be everywhere [...] the District Commissioner was coming there, but he came with a position that was very confusing. On one side he said you guys should stop cultivating, doing any farming activities in this area [...] and then he told them, but don't leave. Stay there, until when I say so. You can't tell me stay there and not cultivate, cause I need to eat. So, which means he is telling them 'stay there' because he wants to make the villagers happy, because that's what they want to hear. But when he tells them, do not cultivate this area he is also trying to make the natural resource department happy [...] so both of them gets nothing [...] the other side always has access to the state, villagers don't have access to the state [...] the people know the state can support them, but they also know, the state sometimes is compromised and they also understand that most of the time the state is not on their side."

The role between the central state, its' rural bureaucrats and rural residents is complex. Villagers it is argued 'don't have access to the state' and are often not involved in central decision-making that is relevant to their livelihoods. On the one hand 'people know the state can support them', on the other hand, 'they also know, the state sometimes is compromised'. In a tendency, rural residents understand 'that most of the time the state is not on their side'. STAFF CARE I-49 (2019), argues 'the more state interventions you have, the more abuse people experience because in most cases [...] they [the state] don't side with the people'. She explains that saying 'the state', or 'the government', is too broad of a category, because 'sometimes its individuals'. In rural areas you may find 'government

officials that are really acknowledging there is an issue we really need to address' and 'you go to another official, they have all these ready-made responses', so that it is questionable if they have 'even been there'. Likewise, BLUWSTEIN a. LUND (2018) observe district-level loyalty conflicts of district commissioners who may side with the central government, investors, or rural residents.

However, the communication can be 'very confusing'. On one occasion, a District Commissioner said that rural residents should 'stop cultivating' protected land but added that rural residents should not leave the area either. Although the District Commissioner knows that most rural residents are reliant on the produce on these lands and can neither leave, nor stop cultivating, he, like many other government officials wants to please both rural residents and environmentalists alike. In the end, 'both of them get nothing'. On the one hand, decision-makers are 'trying to make the natural resource departments happy'. On the other hand, they want 'to make the villagers happy'. The result of this may be a confusing and ambiguous communication. With every state intervention into village matters, things become more politicised. The questions of environmental protection or settlement becomes 'a political ball and agenda'. In this regard, STAFF WWF I-10 (2019) said:

"All the regimes, I would say, they follow the same pattern. Except the intensity of trying to implementing some of the changes, differs. Currently Magufuli is so tough. Of course, he speaks about creating a conducive business environment for the private sector, but really, he is not into that really much. Kikwete embraced private sector, he was so supportive and he was a little of liberal, but if you go deep into the decision-making mechanism, things are not happening, as you see. I will give you an example: Kikwete once went to Rufiji and we had a very big project from Sweden, it was called SECAD [Selous Ecosystem Conservation and Development]. And he [Kikwete] was before public meeting and said: 'I want you to give land to this company. They are big investors and they are in here to develop our country, give them land, why don't you give them land?' he was dictating before the land officers who are making decisions [...] And then, we went in for an internal meeting. They were asking: 'Heshimo Rais, we have policies, we have pieces of legislation. How do you advice, should we contravene?' and he [Kikwete] said: 'you know he is a big investor, he is here in the country, what do you expect me to say before him? That we have to follow policies and lay down procedures and legislation?' You see, what they [politicians] say before public, and what goes into decision-making is really different."

According to the recollection of STAFF WWF I-10 (2019) what is said in public (e.g. to rural residents) and what is said behind back doors, are often two different things. In this way, both the decision-making mechanisms and the implementation are mystified. STAFF WWF I-10 (2019) gives the example of how president Kikwete spoke in front a 'very big project from Sweden'. In a public meeting, Kikwete said to district-level decision-makers, 'I want you to give land to this company. They are big investors, and they are in here to develop our country, give them land, why don't you give them land?'. In an internal meeting with land right experts, he was confronted with the reminder 'we have policies, we have pieces

of legislation. How do you advice, should we contravene?'. Apparently, what Kikwete had demanded in public and what is in the legislation were two different things. Kikwete justified his position by saying: 'you know he is a big investor, he is here in the country, what do you expect me to say before him? That we have to follow policies and lay down procedures and legislation?'. Hence. although STAFF WWF I-10 (2019) maintains that 'all the regimes [...] follow the same pattern', they do so with varying 'intensity of trying to implementing some of the changes'. He further cautions, 'what they [politicians] say before public, and what goes into decision-making is really different'.

A conflict of objectives between environmental protection, settlement areas and private actors arises. The public communication of decision-makers all the way to the president may have double meaning. What is said in public may have the function to please international investors and NGOs and what is decided in internal meetings, may differ. In addition, Blache (2019) shows how political rhetoric during general elections frequently favours village settlements over conservation zones. This is because politicians in rural constituencies involve in vote bank politics to be elected to regional and national parliaments. Despite supportive rhetoric, village leaders of Ngombo prefer an official registration document, to verbal promises. Other villagers have come to wonder 'how come others are selling our land' (LOCHER 2016). When asked, when the final decision about Ngombo village would be announced, NGOMBO VILLAGE LEADERS I-34 (2019) said laughingly in disbelief that the District Executive Officer in Malinyi said, he would announce the decision before the next general elections. Up to date, he did not.

To sum up, access to and ownership of land in Ngombo and many other sites in Kilombero Valley continues to be politicised (SIKOR a. LUND 2009). This creates uncertainties for villagers who are on the receiving end of national politics that are often beyond their control and beyond their understanding (Blache 2019). Ambiguous communication on all levels contributes to further confusing, a perception of an arbitrariness of the states' action and powerlessness on the side of rural residents. Although the success of the Dodoma trip points towards another direction, the trip is an expression of rural agency. The trip has brought village leaders from different parts of Malinyi District together and has increased the self-awareness of villagers that they are not alone in their struggle to be recognised as legal land users. Even if the central government increasingly frames their land to belong to the KVRS.

5.1.2 Mwanangasa Hamlet – Future village, or Looming Eviction?

Starting from Kidatu village in the north, to Ifakara town (centre), further to Chita village (southwest), Malinyi village (south) or Mahenge village (southeast), from the roadside, the Kilombero Valley is mostly inhabited by peasants and smallholder farmers. Occasionally, large sugar cane farms, or teak plantations appear for a couple of kilometres. Otherwise, all other arable land is subdivided into small plots. Although many interviewees mentioned the presence of (agro)pastoralists and their numerous cattle in the Kilombero Valley, we had neither seen, nor interviewed (agro)pastoralists, in several weeks of research. As the research continued, we realised, how much our research was biased towards village centres. With limited resources, we had only done research in places we could reach. Sedentary peasants, smallholder farmers and businesspeople usually dominate village centres. Most economic activities are happening in and around village centres. Levels of poverty are likely to increase with distance from the village centre. Most (agro)pastoralist communities live in areas that are more peripheral and less accessible.

A couple of days before we learned about Mwanangasa Hamlet, Grace and I visited Majiji, the *mother village* of Mwanangasa, with a total of 8,500 citizens (NATIONAL BUREAU OF STATISTICS 2012). Like other village centres, Majiji was on our route between Ifakara town, in the centre of the Kilombero Valley, to Malinyi village, in the south of the Kilombero Valley. On a five hours car drive, every few kilometres another village appeared along the rural road. The market square, the primary school, village offices, shops, milling machines and houses are all positioned near the main road. The rural road is the aorta for the rural economy. Majiji village is no different. While the village centre is near the road, some of its hamlets are in the interior, where no (paved) road leads. Travelling from Majiji village centre to the village border could have taken us many hours by foot, motorcycle, or car. Thus, we decided against a trip into the interior.

After three weeks of research in the Kilombero Valley, Grace and I attended an event of the federal minister of water in Malinyi village. He had come from Dodoma to remote Malinyi, to address the problem of water infrastructure (Figure 19). The village community was eager to hear, what the federal minister had to say. Visits of federal ministers in this part of the Kilombero Valley are rare and therefore perceived as something special. According to the minister, a few years ago, a local company had won the tender for establishing and maintaining the water supply in Malinyi. Allegedly, the company had received government funding to do the necessary but left Malinyi without running water.

The federal minister assured that the CCM, he, and the government were not to blame, and that water connection would soon be realised.

After the meeting, Grace and I talked to individuals who had raised questions to the minister on that event. We had identified them as local opinion leaders (Figure 19). One of them, Samora, appeared to be the elected representative of (agro)pastoralists in Malinyi District. As we learned later, he lives in Mwanangasa hamlet, Majiji village. In the conversation that turned into a semi-structured interview, we discussed the challenges of (agro)pastoralists in Malinyi District and the Operation Save Kilombero Valley (OSKV) in the course of which several (agro)pastoralists were killed and up to 100,000 heads of cattle forcefully evicted from the Kilombero Valley (BABUK 2013; CHIDAWALI 2011). Later, Samora invited us to Mwanangasa hamlet that, like Ngombo (see 4.1.1), borders with the KVRS.

On the following day, Grace and I went on what turned out to be a difficult drive from Malinyi village to Mwanangasa hamlet. No official road leads to Mwanangasa, few rural residents from Malinyi district were there, but many have heard about it. Mwanangasa is known as a place, where only (agro)pastoralists live. It is said that they have recently migrated into the Kilombero Valley. Samora, the (agro)pastoralist representative, had taken a motorcycle for more than one hour to reach Mwanangasa. Since the rainy season was over for a few weeks now, Samora told us that the path to Mwanangasa was accessible for cars again. With little more information than the rough direction, we started driving. Several times, we had to ask for the way. Ultimately, we needed three hours for a 20 kilometres ride (and about the same time for the return). Once we reached Mwanangasa, we searched for our contact person and arranged an interview in a large, unfinished building (Figure 19). The interview turned into a small gathering, as 20 villagers took part in the conversation. It lasted for three hours, because many villagers were interested in the reason of our visit. This interest ranged from suspicion to speculation, fear, and hospitality. In many years, no researcher was in Mwanangasa. Talking to us was a gesture of wanting to share the (agro)pastoralist point of view.

Some (agro)pastoralists have moved to the Kilombero Valley in the 1980s, many younger residents moved to the area in previous years. Through in-migration, Mwanangasa hamlet has grown to the size of more than 1,000 residents. As AGROPASTORALISTS MALINYI I-43 (2019) argue this number would qualify as a village:









Figure 19: (Agro)pastoralists in Mwanangasa Hamlet, Malinyi District (photos: RV)

- a) Federal Minister for Water in Malinyi Village, July 2019 (top left)
- b) Elected Representatives for (Agro)pastoralists in Malinyi District (top right)
- c) Hamlet centre, Mwanangasa, July 2019 (bottom left)
- d) Group interview situation, Mwanangasa Hamlet (bottom right)

"The population has increased so much! There is a rapid population growth and that's why we are asking the government to bring other social services nearby us. Also, the polling station should be brought near, because there are some people who are unable to reach the polling station. So, we should get a polling station within our hamlet. For the area being further, it makes other people like old ones who are unable to walk to the polling station to lose their right of voting for the leader they want during the election period. [...] Generally, the population is very high. If it reaches evening, it resembles Dar Es Salaam, the way people run for the public buses. From here the population is very high. But this moment the pastoralist are in forests and farms, that's why you see a population is low now. Even other tribes have started to shift to the other places. Therefore, we can see that there are rapid changes taking place here compared to 2015. During 2015, you could find a single bar, single shop or rice seller. But now there is a rapid increase because it is a top area for producing these crops, like rice."

The population growth leads to an increase in need for social services. In the evening, Mwanangasa allegedly becomes as busy as Dar es Salaam, 'the way people run for the public buses'. Other reasons mentioned to become a village were a wish for a primary school close to their centre, which would allow their children to go to school. Furthermore, polling stations are mentioned as a reason to become a village. Polling stations are a symbol for democratic decision-making, recognition, and legitimacy. Due to population growth, the lowest administrative unit, a hamlet, can become as large as the rest of the mother village (BLACHE 2018). Hamlet leaders may start the process of registering their hamlet as a village. Becoming a village, means a split from the mother village and a subdivision of the new village into new hamlets. To upgrade a hamlet to a village implies the right for a village executive officer (VEO), the right for a primary school, better access to government services and funding, for dispensaries and hospitals, connection to the national power grid and political representation in the regional or national assemblies. Administrative upgrading is politically sensitive, as it involves access to public resources for personnel and public infrastructure. Villages and wards compete for limited government resources and private investments (VILLAGE LEADER MPOFU I-32 2019). So far, decision-making processes in villages were criticised for being biased towards rural middle classes and sedentary farmers and business people living near village centres. STAFF TALA I-01 (2019) explains,

"Depending on how Land Use Plans are conducted, they can be either a blessing, or they can also be a curse [...] the different groups in the area have to be part and parcel of the process. Pastoralists, women, all these and then let us agree. Which land is for public use? Schools? Dispensaries? You name it, whatever public use. And since they are the one agreeing, then obviously, there will be a problem in terms of some of the land will be alienated [...] obviously you'll effect land holding structures in the area of course the law says either they will be compensated or they will be given alternative land. Most of the cases that I have seen nothing of that sort has taken place. That means that is already a conflict that has already been created by the land use plan. Secondly, it's when other land users, like pastoralists, you know normally they are in the forest, within the village, but when are doing your meetings in the urban centres, these guys are enjoying themselves with monkeys and their cattle. They are deep in the forest. You have not taken good time to go there to convince some of them to come and sit in the meetings, but you just find one side – the farmers - because they are settled. You conclude everything with

this. Women are supposed to attend, but women have not attended, or few women have attended, but they have not spoken anything. But certain decisions over land are reached out of this process and then they cite these other group of land users and you'll come out they'll say this was a village meeting and the quorum was there [...] but you leave out certain interests, that is the conflict that are being created."

It is explained that land use planning procedures can be either contribute to solve conflicts or can enhance them. Since different groups need to be included in the process, it is crucial to look at how village meetings are held. Pastoralists are known to be 'in the forest, within the village', when others are doing a village meeting 'in the urban centres. This criticism raised here is that village leaders 'have not taken good time to go there to convince some of them to come and sit in the meetings, but you just find one side – the farmers - because they are settled'. A village meeting may have agreed on further steps in the village land use planning, but neither (agro)pastoralists, nor women were present: 'women are supposed to attend, but women have not attended, or few women have attended, but they have not spoken anything. The result is that only interests of certain individuals and groups are represented in the land use plan while others are excluded. Same can be said about the district land use plan, in which all village land use plans are supposed to be included. STAFF HAKIARDHI I-50 (2019) adds,

"Ordinary people are not aware of their rights to land and even their leaders also, they are not aware [...] a lot of decisions are made uninformed and some of these decisions people are not actually involved. Their participation to village assembly meetings are very poor. They never really realise the importance of attending village meetings [...] people are disappointed to attend this kind of meetings, but then they never knew that through these meetings that land matters are debated, and decisions are made. So, you'll find very few people attending the village assembly meeting. Any time decisions are made, and it effects their whole village."

He claims that 'ordinary people are not aware of their rights to land' which may include 'their leaders' too. Many rural residents 'never really realise the importance of attending village meetings'. Although the legislation are clear on the mandate of village assemblies (URT 1999a; URT 1999b; URT 2007), vast parts of rural residents do not know that 'through these meetings [...] land matters are debated and decisions are made'. According to the Village Land Act (URT 1999a), every village has a village land board which decides over the commonly held village land. The consequence of this lack of awareness is that 'very few people attend [...] the village assembly meeting'. Hence, the knowledge about legal procedures, land rights, legislation becomes a powerful tool on the village level. Additionally, the further villagers live away from the village centre, the less likely it is for them to get informed about assemblies. And the more costly it is to go to the centres. Leaders of Mwanangasa express they feel marginalised within Majiji village. Often,

(agro)pastoralists are either not informed about meetings, are not aware of their importance, or cannot afford to travel. Village level decision-making processes become exclusive. AGROPASTORALISTS MALINYI I-43 (2019) explain:

"The processes for application of this hamlet to be a village have already started. Instead, our president had already declared that no village, or district, will be added by now, so we are waiting for his official declaration. Because the process of asking for a village have been done, that's why we prepared to find more than three hamlets. Because there is no village that starts with a single hamlet. A village starts with three hamlets [...] The clans which are around are sufficient to be a village. And it has been asked by the villagers and the letters have been taken to the village offices then to the district. Instead, again they have asked to get also the Ward Executive Officer so that he can be reached in a simple way. All these are in progress. These processes are continuing, but the big problem is when the president said that there should not be any village or ward that is to be added, until he declares himself."

The application process for becoming a village has started. It is explained that the main constraint in that process is that the Magufuli administration does not engage in territorial reform: 'the president had already declared that no village or district will be added by now'. Although it was not explained, why Magufuli decided that way, the villagers voice their powerlessness. The statements 'the big problem is' and 'until he declares himself' points to the power relations decision-making between the village and the national level. A split away from the mother village Majiji would mean sharing resources. As GRECO (2016) observes, not all local elites easily accept this. Instead, the non-granting of village status, is used as a political tool. GRECO (2014, 11) claims, the delay of village registration is,

"[...] a not-so-veiled political threat to curb local political opposition in an area where opposition parties enjoy considerable support. In fact, if a village is not registered it has no right to have an autonomous village government and administration and, given the land dispute between the village and the estate, it carried overtones of potential threats of eviction against the residents."

The non-granting of village certificates pushes the crossroads between environmental protection and settlement areas further into the unknown future. As long as no final decision was taken, uncertainty about land use rights prevails. Many rural residents hope that in future, the central state will grant them more settlement areas, when their needs are rising. Currently, most residents in Mwanangasa hamlet wonder, how environmental protection is contributing to their livelihoods. Thus far, environmental protection is perceived as locking away resources from rural residents. Like the rural residents in Ngombo village, their future conception of the Kilombero Valley is a settlement area in which they can pursue livelihood activities that are contributing to what they consider a good life. However, this local perception is challenged by the central government that claims that Mwanangasa (partially) lies within the KVRS.





Figure 20: New Public Infrastructures in Malinyi District (photos: RV)

- a) New District Hospital under construction in 2019 (left)
- b) New District Level Administration Offices (right)

Villages can be registered at the regional administration and local government authority (BLACHE 2018). To register as a village, villagers have to elect a village council (BLACHE 2018). Together with the village assembly (all adult members of a settlement), the village council has to agree on a village land use plan (VLUP) which, in turn, needs confirmation by district officers who include the VLUP into the district land use plan (DLUP). Only when the VLUP is accepted by the district level, the village council can start to allocate customary rights of occupancy (CCROs). The administrative status of a village (or ward) may change, once the requirements for the next highest administration category are met. In 2016, Ifakara town has become upgraded to a town council, and Malinyi *division* was upgraded to Malinyi *district* (KILORWEMP 2018). For many residents in today's Malinyi district, the old district headquarters, in Mahenge village, was up to 100 kilometres away; more than a days' trip. The recent constitution of Malinyi district has shortened the distance to the district administration headquarters drastically. In addition, with a new status, Malinyi has become a constituency to elect a MP and has received funding for a district level hospital and new district offices (Figure 20).

In October 2018, new beacons were set at new positions along the village border of Majiji and neighbouring villages. With the new positioning of landmarks, livelihood activities beyond the beacon have become illegal. Although many thousand villagers are required to retreat behind the new landmarks, it is common knowledge that few villagers have retreated. Many villagers have not accepted that the central state claims parts of their previous village land for environmental protection. They continue their land use practices, waiting for border patrol that has not been established. For the time being, beacons are warning signs, indicators of potential future state control. Beacons indicate where borders

between different categories of land run. In the case of Ngombo and Mwanangasa, between *reserved land* and *village land*.

In 2000, Tanzania became a signatory to the *Convention on Wetlands of International Importance especially as Waterfowl Habitat*, agreed upon in 1971, in the city of Ramsar. In 2002, the KVRS was constituted by setting beacons along Kilombero swamp. Since then, certain livelihood practices, like cattle herding, permanent agriculture and permanent settlements have become restricted beyond beacons. Ramsar, a term closely linked to *beacons*, evokes strong feelings among AGROPASTORALISTS MALINYI I-43 (2019):

"The whole village has been swallowed. If they forbid people to cultivate the whole village will be destructed. This is the cry which has faced all of us in this village. All people depend on those areas being swallowed. If the beacon won't be moved far back, it will be a cry to all people. This will no more be a district. All people depend on these areas to take their children to school, get their food and other basic needs. There are some people who cultivate for the old people, we give them food and care for them by using those farms. But these areas have been swallowed, where will they go? How shall we live? If we cultivate this side, they tell you that you have invaded the reserve and if you go to cultivate in the mountains, they tell us that we destruct the source of water, with all these troubles where can we go? Now, if you were the government official and you were told to go and eye-witness on whether you just let the people live, or keep it as a reserve, you would definitely feel sorry for us and you will make a decision that we can just remain here, as it is. We are surprised that the government says that this is a reserved area, when it is difficult to even come across a rabbit. Then why is it called a reserve area?"

The central fear raised is that 'if the beacon won't be moved far back, it will be a cry to all people', because 'the whole village has been swallowed' by the recent relocation of beacons. Since village land is the foundation of the (agro)pastoralists' livelihood, the relocation of beacons is perceived as an existential threat. If the village land is taken, (agro)pastoralists wonders, how 'to take their children to school', or 'where to get their food and other basic needs'. The rhetorical questions, 'where will they go?' and 'where can we go?' indicate that relocation is difficult in an area with high and increasing pressure on land. The comment 'we are surprised that the government says that this is a reserved area, when it is difficult to even come across a rabbit. Then why is it called a reserve area?' shows that the priority of rural residents for settlement areas (grazing, arable land, etc.) is different, from that of the central government. Additionally, (agro)pastoralists question the common sense, what an environmental protection site should be like. The comment that the government would 'feel sorry' for them, if they had eye-witnessed their situation indicates that so far, no government representative has come by. The comment, 'if we cultivate this side, they tell you that you have invaded the reserve and if you go to cultivate in the mountains, they tell us that we destruct the source of water' reflects previous confrontations and evictions with different reasons given as to why their land use is prohibited. 'They' is the central

government, identified as being involved in decision-making and relocation of beacons. STAFF CARE I-49 (2019) comments on the claim that the government acts for environmental protection,

"When you say, this is for environmental protection. Protecting who? Against who? [...] Every time we talk about environment, climate change, land, we don't put people first, or their lives first. We put everything first and then them come next and I think that is one of the challenges we are facing [...] when we need land for investments, for industries and all that who's voice, who's priorities is going to count."

STAFF CARE I-49 (2019) wonders, which priorities count in environmental politics. The questions 'Protecting who? Against who?' points to the conflicts of objectives between environmental concerns and that of rural livelihoods. She suggests that in Tanzania 'we don't put people first, or their lives first'. In other words, concerns of environment, climate change and land are ranked higher, than needs of rural residents. STAFF HAKIARDHI I-50 (2019) explains the reserved land is expanded on the village land:

"That is what is happening to a lot of areas, how the reserve expands. They will always come and say, I think we need to resurvey our boundaries to verify and in the surveying process, they are shifting from one place to another. For instance, there is this debate on saying leave 500 meters from the boundaries. But then, 500 meters from where? Going in the park or going, or in the villages. The law is silent about that. But now, what they do is, getting 500 meters in the villages [...] The reserve authority will not care for that, all their interest is conservation and expansion of their areas. [...] What they will say that is: This is a conserve area, whether it has trees, or it doesn't have trees, they will call it reserve area. So that's it. And this will create a lot of conflicts, whether now or in the future. Now you are seeing people may continue doing whatever activities, but there will come a day, where eviction will be done on the same piece of land and they will be moved to squeeze back to a certain position. And it will take some time, before that eviction will happen. But then, when it happens, people will be told that if you think you have a right, go to a court of law. How many can they afford going to court of law? They may hire an advocate, can they really go through ten years court battles to win over their land? They cannot. But then their land is gone just like that. [...] Those are the cases, where the reserve authorities have tried to expand over years. And there are even instance, where reserve authorities is in conflict with the ministry of land. There is a forest reserve [...] near Dar, the ministry of land and the ministry of natural resources and tourism are fighting. Those guys have got their different maps. But then, the ministry (of Land) says, it is us who are map custodian in this country. How do you have your own map? Where did you get that? So, you'll find cases like that [...] you see the interests of those people who are conserving to expand. They just expand, they don't really care, whether there is anything to conserve, or not, they just expand. That's it. They don't really care, if there are issues, or not."

According to the land expert, several legal questions have not been defined well. He mentions the regulation on the prohibition of land use 500 meters from the boundaries of a conserved area. 'The law is silent', he argues, whether these 500 meters are inside the village land, or inside the conserved land. The statement, 'whether it has trees, or it doesn't have trees, they will call it reserve area', indicates that abstract categories and national policies often do not match the material realities on the ground. The fact that actors supporting

conservation 'will call it reserve area' irrespective of whether trees are there, indicates why rural residents cannot always understand why a certain area is defined as a conserved area (e.g. one without rabbits). AGROPASTORALISTS MALINYI I-43 (2019) recall that the central government has changed its opinion about the position of the village borders several times:

"In 1982, when we shifted to this Mkovero valley, which is in Ulanga, that time the village, in what I believe, they did not know where it ends. They believed the village started from Malinyi or Sofi to Mtoni. What I know, when we shifted in 1982, there was no boundary indicating whether this is a village or a reserve, surely it was not there. We have stayed, I remember in 2006, is when they started demanding people to shift to Kilombero River. In 2012 is when they brought a ridge. It was crossing and going in this way and that way. I think in 2016, is when they came back in villages, to set the beacons [...]. This measurement has not yet ended. This program [LTSP] just came within these few years. Means that it has come while the reserve people already have set the boundary, they are saying that the end is here. Historically, when we came, they said that the whole area to Malinyi was a reserve, and the end was that colonial road that goes to Songea. They said the whole valley going to this side (to the Kilombero) was a reserve. Now that is what we are surprised of today, that people were given permission by the government to live at Malinyi [village]. Today you claim that the whole area is a reserve. Why did they start setting the beacon claiming Malinyi to be a reserve? Why should it be a reserve?"

In their recollection, when first (agro)pastoralists moved to Ulanga District and settled in some distance to already existing villages, the central government 'did not know where it (village) ends'. The land governance in the 1980s has become a central point of reference for (agro)pastoralists living in the Kilombero Valley when discussing the legality or legitimacy of their land claims. Furthermore, they wonder why previously, it was communicated to them 'that the whole area to Malinyi was a reserve and the end was that colonial road that goes to Songea. They said the whole valley going to this side (to the Kilombero) was a reserve', while currently entire villages were built on land that was originally meant for conservation.

Frequently, root causes of elder land-related conflicts are not addressed. Instead, reoccurring waves of evictions of (agro)pastoralists and farmers were spatio-temporal fixes (JESSOP 2004). STAFF HAKIARDHI I-50 (2019) claims,

"There are also challenges related to conflicts between pastoralists and farmers. Those are the common conflicts you will find around. And a lot of factors are contributing to that, which to some extent, they are not actually acknowledged by the state. For instance, you'll hear stories here about farmers are just migrating from one place to another, but then why are they migrating? That is a very important question to ask. There has been expansion of the reserved land to the areas that here used to be grazed, grazing land. And then these pastoralists are evicted from this place. And they are not given alternatives."

For him it is important to ask the question why 'farmers are just migrating from one place to another'. A partial answer to the question lies in the 'expansion of the reserved land to the areas that were used to be grazed'. (Agro)Pastoralists and farmers who are evicted from

one site and who are not given alternative land, have only the two options of either remaining on the brink between legality and illegality, or to migrate to other places.

To sum up, the new position of beacons along the KVRS is a governmental response to the demand for environmental protection. A demand that is related to claims made by international organisations. In large parts of the Kilombero Valley, beacons have become the source of new land-related conflicts. Central topics in Mwanangasa and neighbouring villages are decision-making processes, opposing interests and power asymmetries between and among rural residents, district officials and the central government (BLACHE 2018; BLACHE 2019). In addition, STAFF TALA I-01 (2019) and STAFF HAKIARDHI I-50 (2019) use the term 'land right illiteracy' to describe the lack of knowledge of a vast majority of rural residents about their land rights. The legal status of land use practices is unknown to many and in some cases not even known by those enforcing the law. Many rural residents perceive legalistic explanations for the exclusion from means of subsistence insufficient. While the positions of beacons appear arbitrary, the fear of further beacon shifts inside the village land is imminent and widespread.

5.1.3 Beacons - Hegemonic materiality along Kilombero River!?

Although direct state action has not been observed along the new beacons, they are warning signs for future state action. In this section, it is shown that the new border regime within Kilombero Valley is linked to the emerging hegemony of the mega-project Stiegler's Gorge downstream of the Kilombero Valley. It is argued that the setting of beacons along the Kilombero river represent future-making practices, cementing a new hegemony in a material way.

While colonial borders *between* African states have gained public interest and critique in the past decades, this was less the case for borders *within* African states (NOE 2019). In many cases, colonially constructed land use patterns have continued after independence and have become the basis for drawing official maps, law cases and land claims up to date (NEUMANN 2001; AMINZADE 2015; NEUMANN 2004). Borders in Tanzania have continued to be expressions of interests and power (BLUWSTEIN 2018; BLUWSTEIN a. LUND 2018).

Two thirds of the Kilombero River water are feeding into the Rufiji River that meets the mega-dam Stiegler's Gorge (now called Nyerere Dam). The government under president Magufuli had an interest in reregulating water-intensive agriculture, water consumption and other livelihood practices upstream in the Kilombero Valley. In early 2018, the minister

from the MNRT, Kingwangalla, "formed a 20-member team to investigate and recommend how best the government could run the Kilombero River Basin" (THE CITIZEN 2018a). Little later in 2018, the District Administrative Secretary from Malinyi opened a LTSP-funded capacity building workshops for village land council members mandated to self-manage land



Figure 21: New Beacons in Igawa, October 2018 (Photo: RV)

conflicts (KANDOYA 2018c; KANDOYA 2018b). In October 2018, new beacons made from concrete were set every few kilometres along the Mnyera River (part of the Kilombero river system). The beacons demarcate the border between the two categories village land and protected land.

Cemented beacons and metal signposts are often the only physical indicator of borders in rural Tanzania (Figure 21). Two village officials from Igawa ward stand next to a beacon pointing to the horizon, to the shore of the Mnyera River, where the positions of the old beacons were. The village officials complain that the new beacons at the border between Igawa Village and the KVRS mean a reduction of the size of their village land by a few square kilometres. They further claim, they have neither been involved in the process, nor were they informed about the new beacons (IGAWA WARD OFFICERS I-39 2019). A few years before, in November 2012, the MRNT had revised the boundaries of the KVRS/ KGCA and had placed new beacons, which caused the KGCA to be much smaller than before. URT (2013b, 193) claims

"This was done to reconcile the presence of 74 villages within the boundaries of the existing KGCA that was established in 1974 and to legalise some 400,000 residents whose presence inside a GCA is inconsistent with the Wildlife Conservation Act 2009."

If 400,000 rural residents (out of 670,000) in Kilombero Valley were legalised through new beacons in 2012, this means that before 2012 a majority – by Tanzanian law - were living in illegal settlements. Making the boundaries of the KGCA much smaller than before, shows the contingency of borders. New livelihood realities on the ground or new national

legislation can result in new borders. DISTRICT OFFICERS MALINYI I-44 (2019) explain how the Wildlife Conservation Act 2009 (URT 2009) meant changes in land governance:

[...] many people from outside came into the area for farming, but also for livestock keeping. So majority livestock keepers are not really the people of this area, are not indigenous. So they are coming from other areas mainly the tribes of Sukuma, Nyamwezi, Maasai, etc. So these people came from outside and really they keep livestock in a large number and because of this, the same area again, also is a conservation area. These areas in which they are conducting their activities, are the conservation area under the category called 'game controlled area'. [...] The wildlife conservation act number 12, 1974 [...] allowed the people to carry out activities within a conservation area called game controlled area, it was permitting human activities within. [...] But because of the growing human population and increasing activities, then the law was revised in 2009. So that is the wildlife conservation act number 5, 2009. And that one was prohibiting human activities within the Game Controlled Areas. Because the previous weakness or the loophole, the previous regulation, the previous act, most of the game controlled areas in Tanzania were already encroached by massive human activities and therefore, the law of the 2009 act required to release the areas to see how much potential for wildlife conservation still. Therefore, studies were done, and new boundaries were proposed, so that the areas which were much used, encroached by the people, were left outside for human activities. And the remaining part had to be protected by the new act. So, this is where the problem started. And therefore, re-survey was done and the new boundary was proposed including the Kilombero Game Controlled Area. So Kilombero Game Controlled Area in 2012 until 2015, there has been transformations, establishing a new boundary. Therefore, in 2015 the area was proposed and gazetted into another new boundary of Kilombero Game Controlled Area. So, in recent the people were doing activities from the village land, the village boundaries are well known like here we can see villages, like this side (showing on the map), and here Kilombero Game Controlled Area. And far beyond here you can find the Kilombero river."

This quote shows that current border-making activities in the Kilombero Valley are connected to legislations in the 1970s, to massive in-migration to the Kilombero Valley in the 1980s and 1990s, especially by (agro)pastoralists and a new legislation passed in 2009, 'the wildlife conservation act number 5'. While before 2009, human activities in GCA were allowed, the new legislation prohibits the same. A new legislation was justified because 'most of the game controlled areas in Tanzania were already encroached by massive human activities' so that their status as protected area were in danger. New legislation meant that livelihood practices of many ten-thousand rural residents across Kilombero Valley suddenly became illegal. A new border regime would have to resettle, evict and or compensate many livelihoods at the borders. The district officials' comment 'the remaining part had to be protected by the new act. So, this is where the problem started'. Furthermore, the process of setting beacons was complicated as the boundaries of new villages had not been officially gazetted and often VLUPs extend outside official land boundaries into the Kilombero floodplain (URT 2013b).

A series of new legislation, new governments and new political priorities reconfigured the internal borders in the Kilombero Valley. In the case of neighbouring Igawa Ward, new beacons were set in 2012 and again others in October 2018, this time relocated inside the village land. DISTRICT OFFICERS MALINYI I-44 (2019) explain,

"The new beacons are the new re-surveyed boundary of the Kilombero Game Controlled Area [...] we are supposed to carry out patrols and prevent encroachers from getting into this new resurveyed boundary. But you know, this is a floodplain. Normally they do patrol the protection activity they are more active during the dry season, where they can drive and get into there. But during the wet season, where they cannot even reach these areas marked with the boundaries, because always the area is flooded, it is mud. So, this is the time when more people just get in and do the farming. So, this is because the pressure is still very high outside for the land uses, especially agriculture, but also livestock. Because these areas most of the time have been already farmed, so there are pastoralists who take their livestock inside, but also the people who need more land to farm, they go inside to farm during the wet season, when they know the patrolling units do not reach these place [...] but if it was possible to take them to fly over here, we could stop them, which is not possible yet. So, the challenges are still really high."

This quote indicates a few things. First, that new beacons in 2018 were set after new survey data was available, partially done through the LTSP. Second, that patrolling the old and the new borders of the KGCA is difficult in rainy seasons due to the characteristic of the flood plain, when 'the area is flooded, it is mud'. The wish by officials to be able to fly over the area for better border patrol shows the current inability to enforce the law, 'people just get in and do the farming'. Third, rural residents apparently know when, where and the extent to which the state can patrol the area: 'they know the patrolling units do not reach these place'. The reason why rural residents go into the swampy area to do farming and livestock keeping is because the 'pressure is still very high'. Resisting the patrols by using the swampy area in rainy seasons for livelihood activities are future-making practices that subvert existing laws and regulations. A considerable number of rural residents are not willing to accept that wildlife and environmental protection is prioritised over their daily needs. This is especially so when rural residents have not been involved in border-making arrangements. What seems to matter more than the knowledge about current land regulation in the Kilombero Valley is the site-specific knowledge about the capabilities of the state to patrol and thereby enforce new laws. The fact that beacons were relocated severally over the previous years has left some people wonder to what extent the new borders were set arbitrarily. Many rural residents fear that the beacons can be relocated again in the years to come. The implications of the beacons for rural residents in the Kilombero Valley will depend on the extent to which the devolved state agencies like Tanzania National Parks (TANAPA) are able to enforce the law.

When we heard that several thousand peasants and smallholder farmers continued working the land beyond the beacons, we sought to interview them. Ward officers in Igawa only needed few minutes to find farmers who are engaging in (illegal) farming beyond the

beacon. Two of these farmers were willing to talk to us. Ward officials said up to a thousand farmers in Igawa ward have continued their practices after the new beacons were set (IGAWA WARD OFFICERS I-39 2019). This incident showed that law enforcement along the new beacons is weak, that staff on the ward and village level is sympathising with rural residents. Long-established livelihood practices have remained legitimate after beacons were relocated. A SMALLHOLDER FARMER KIWALE I-41 (2019) comments

"I know because I was born at Igawa village. In the year the beacons were set [in 2012], the information was given, the citizens where involved and we went to set them, and every citizen was agreed and comfortable because large portions were given to citizens. The second setting of beacons [in 2018] we just got rumours that the TANAPA leaders will come to speak to every village, so that they can make new demarcations but unfortunately to us, in our village, the TANAPA did not arrive. The chairman, and other leaders in our village government were called to the ward they made negotiations and they said they would come to speak to every citizen in the village (...) they did not come. When we stayed for one week, then we saw them coming and they told the chairman with his government that let us go to set new beacon. Then the chairman said he cannot go to set new beacon because my citizens have no information. Then they [TANAPA] went to the ward and took the Diwani [land councillor] then they went together to the site to start setting the beacon. I as a constructor, I know the way they passed."

Different from the 'the year the beacons were set', when the information was given, in October 2018 villagers were not informed, but 'just got rumours. Besides the TANAPA, the village chairperson, the village government and the Diwani are mentioned as local decision-makers who are all involved to a different degree in the process of setting the new beacons. In the example of Igawa, the TANAPA and the Diwani 'went together to the site to start setting the beacon'. The village chairperson, the village government and the citizens did not have prior information and rejected to set the beacons before informing the village community. However, the TANAPA and Diwani proceeded. SMALLHOLDER FARMERS IGAWA I-37 (2019), from the same ward, add

"I don't feel good about this [new beacon] and I don't agree with this situation because am not free anymore, like I was in the beginning. I am just cultivating beyond the beacon, because I don't have any other option."

The comment 'I am just cultivating beyond the beacon, because I don't have any other option' shows that poverty is the main driver behind land use practices beyond beacons. This is true for both (agro)pastoralists and farmers. The comment 'I don't agree with this situation because am not free anymore' indicates the frustration on the side of many farmers. Previous experiences of undemocratic, paternalistic, and top-down governance made many rural residents suspicious against the good intentions of the central government and district officials. Few residents engage in a dialogue with decision-makers on higher administration levels, but instead passively wait. Rural agency is mentioned,

when village leaders refused to comply with TANAPA, which is why 'Then they (TANAPA) went to the ward and took the Diwani (land councillor) then they went together to the site to start setting the beacon'. Personnel on higher administrative levels was asked because village leaders refused. Additionally, one interviewee mentioned that initially he got the tender to construct a beacon. Yet, when he saw that the beacons would lead to conflict, he decided against constructing it and the tender was given to another villager.

Current border-making processes are often in line with colonially constructed spaces, techniques and discourses (NOE 2019). Expansion of conservation areas often happens against the will and without prior and informed consent of the local population (KITABU 2012). STAFF CARE I-49 (2019) demands

"The government [needs to] sit down with these people [...] and talk about all these borders, talk about all these beacons. Just talk about them and make sure you are all on the same page and agree and sign some form of agreement between the two groups, because you can't have the beacon shift today the beacon is here, tomorrow the beacon is here, the next day the beacon is here. You can't just keep moving the beacons because you need more areas for reservations. There are people living there. And the truth of the matter is, it doesn't matter how many times you are going to chase them away, because they are already living there, they will always come back. Which means you are going to have this issue forever, because they are not leaving, they have nowhere to go, so they'll come back. So, the best thing will be let's sit down and talk."

This quote confirms the dynamics observed in Malinyi District. The state has limited capacity to be successful on the long-term with top-down organised land use planning. The statement 'It doesn't matter how many times you are going to chase them away, because they are already living there, they will always come back (...) they are not leaving, they have nowhere to go, so they'll come back' shows that on the long-term rural residents have the upper hand, when they sabotage, undermine or subvert policy implementation. A solution would be 'to sit down and talk', which points to democratic decision-making that includes the needs and perspective of rural residents. In this regard, DISTRICT OFFICERS MALINYI I-44 (2019) explain

"The decision and sensitisation were done in 2012. We had done also the cattle eviction because the number of cattle was too much in this time. Even in the villages, everywhere, so there was livestock census was done and it was estimated that, there was a large number of cattle compared to the areas required for livestock keeping. So, some livestock were forced to be evicted, people were selling livestock to accommodate this. So, during this time is when most meetings were done, but in the next three or four years, a lot of changes happened [...] the government processes were taken slow sometimes, so the pressure was becoming high, many people were very ambitious that there is land. New people came in, so the demand was already different from the past four years. So, today if you come and say, okay we have agreed we put a boundary here, the beacon here, the demands is already different. People want the beacon here to accommodate their demands. So, this is what actually happened. So now if you go to them they say, okay we were not involved because these meetings were done in the past four or five years back. And we have already the minutes of the decisions where people were involved, but these people probably even

their leaders are not same in the villages, they have changed already. So, you can find these challenges which actually have been happening. But in all stages there is a legal requirement that the local people should be involved. And involvement should stay in the council meetings, and go to the public meetings and do the agreement. And in the surveying you have representatives from them, and then you can go and show them the areas that we think this is enough for now, and then that's where the beacon is put. And all these areas which were left aside were also part of the Kilombero Game Controlled Area, but for the accommodation of people's demands decided to leave them out. Well, even where the task is not yet ended, of putting the beacon I think there will be the same complains in the next villages like Lupunga, further down to Mabanda, and some three villages further."

Although the district officials claim that enough 'sensitisation have been done in 2012', fast population growth and the subsequent rising pressure on land meant that agreements reached with villages in 2012 a few years later have already become obsolete. 'New people came in, so the demand was already different from the past four years.' With in-migration, the population structure changed, new demands arise, new livelihood practices and new village leaders were elected. Both theoretically and practically, even under the most democratic circumstances, long-term land use planning in the Kilombero Valley would be a challenge. How often should villages decide afresh about their changing demands? How often should VLUPs be updated? Who should be allowed to vote on the village level? Which implications do changes on the village level have for districts?

Although no direct law enforcement has resulted from the new position of the beacons in the case of Igawa village, beacons have changed the legal status of the land and livelihood practices. While some have continued their livelihood practices, others have retreated behind the new border. STAFF HAKIARDHI I-50 (2019) explains

"Every [land] claim has to be done within twelve years. That's the time span. And that's why I'm telling you, the beacons have been moved, but they will not chase them right away. They will wait. In some year, they will chase them, they will evict them. And then, if that conflict arises, you are being told, go to court. And when they go to court, the first thing the offence does is a primary objection that this claim has been arised the time span."

Villages must challenge the position of the new beacons in court within twelve years. This quote indicated that village representatives at times become active when their legal claim has already expired. The Tanzanian state can carry out long-term land planning without having to enforce new borders immediately. Although the new land survey in the Kilombero Valley, done by the Land Tenure Support Programme (LTSP) is intended to secure land rights, the reverse is the case in Kilombero Valley, when new positions of beacons result in new insecurities. Since many villagers have not been sufficiently consulted about the borders between agriculture and conservation, many enact subjective borders through their everyday practices on the ground (BLUWSTEIN a. LUND 2018). There is a huge

gap between the realities presented on maps of NGOs, on official maps by different ministries and de facto land uses (BLUWSTEIN a. LUND 2018). The district level plays a key role as the mediator between the Tanzanian central state, members of the development community and the local population. In the case of Malinyi, District officials were regarded parting with the interest of the central state, rather than with local interest. BLUWSTEIN a. LUND (2018) show how an alignment of international conservationists, actors from the development community and the federal ministry were legitimising their actions through maps and rendering the definition of land a technicality (LI 2007). Often, conflicting ideas and understandings exist between local communities, district officials, federal ministries and NGOs on where borders are, or where they should be (BLUWSTEIN et al. 2018). Data loss at computers, inaccuracies in the past, lack of information on many sides has resulted in a patchwork of land uses and understandings of where the actual borders should be. To resolve the issues beacons are set to indicate the claim for conservation which BLUWSTEIN et al. (2018) term "territoriality by conservation". By drawing or redrawing maps and by setting beacons, the territoriality of the Tanzanian state is re-enacted. BLUWSTEIN a. LUND (2018) understand territorialisation as acts of boundary-making. One may add, hegemonic future-making, because alternative development paths, become delegitimised, narroweddown and foreclosed through top-down decision-making for conservation, instead of agricultural development (SCOONES a. THOMPSON 2011; SNYDER et al. 2020). The consequence for rural residents is uncertainty about the status of their village land and their livelihood. The lack of information about land rights leaves room for speculations about why beacons were relocated. AGROPASTORALISTS MALINYI I-43 (2019) speculate,

"We think these white men are the main source for us being shifted from these areas. These reserve people are still present and once they come, they chase us from these beacon areas. Their cars have red number plates. And we know some of their names one is Salome and another is called Teddy. These are the one owning this whole valley [...] if you want to know the source where this problem came, just follow them and ask."

It is claimed that foreign investors by the name Salome and Teddy would be interested in the land: 'Two white men' and 'cars with red number plates' are behind the relocation of beacons. Yet again, others commented that the United Nation Educational Scientific and Cultural Organisation (UNESCO) had decided to change the borders, and again others that beacons were relocated away from Mnyera River so that more water could reach Rufiji River, which meets Stiegler's Gorge. Irrespective which of the above narratives about the actual reasons behind the beacon's shifts are true, the shift is perceived as a one-sided decision made by the central government that sides with either UNESCO and international

conservationists, or with 'white people' and investors who are interested in the land. Independent from the truth of these believes, the consequences of the shifted beacons have become a reality. Ideas about the world gain material force through everyday practices (MANN 2009), here the practices of speculation, rejection and fear.

The question to what extent the Kilombero Valley is a future site of environmental protection, or whether it is a site for 'human beings', as the village leaders in Ngombo put it, will remain fundamental in the decades to come. No final decision for the one or the other is in sight. Whereas a strict law enforcement along the protected area would be costly and extremely unpopular, declaring large parts of protected areas available for agriculture, could on the medium- to long-term undermine the ecosystem Kilombero Valley and could speed-up the already ongoing degradation processes (LEEMHUIS et al. 2017).

A downstream question that gained momentum during Magufuli's presidency was, to what extent the already-utilised parts of the Kilombero Valley should be used either for the agrarian sector, or for the (emerging) industrial sector. Ideas of agro-processing, hydroelectric power generation and small-scale mining were new perspectives on rural development. The discussion between agriculture and industrialisation is the second juxtaposition, to which we now turn.

5.2 Agriculture or Industrialisation?

"The Future rice granary [said Dr. Arning on the Ulanga Valley 1908]. [...] One must see with one's own eyes the astounding fertility and inexhaustible productive potential of this region, which has been favored by its abundant water supply, in order to be able to say without exaggeration, 'The Ulanga will become our Nile, if we wish it.'" Capitain Fonck 1908 (MONSON 1991, 247)

"The possibility of reorganizing Kilombero development along these lines was explored by A.M. Telford, who proposed that the 461,000 arable acres of the Kilombero floodplain be leased in tenacre parcels to tenants." (MONSON 1991, 312)

Since the first colonialists saw the Kilombero Valley, they wondered how and to what extent, it could be connected to the emerging national economy. While 'Dr. Arning' in 1908 saw a 'future granary', Fonck in the same year spoke about an 'astounding fertility and inexhaustible productive potential of this region'. Especially his comment 'The Ulanga will become our Nile, if we wish it' speaks to what SCOTT (1998) called legibility and LI (2007) the will to improve. A century ago, the Kilombero Valley became a site of utopian thinking and projection. To date, the will to transform the Kilombero Valley has not ebbed. Telford,

according to MONSON (1991, 331) proposed 'that the 461,000 arable acres of the Kilombero floodplain be leased in ten-acre parcels to tenants'. Besides exploring the agrarian potentials of the Kilombero Valley, Telford asked the Bernsteinian agrarian questions: Who owns what? Who does what? Who gets what? And what do they do with it? He wondered which production model is suited to transform the Kilombero Valley. Whereas the colonial logic about the Kilombero Valley aimed at extracting resources, the neoliberal logic of the Kikwete era was similar. The phrase 'to unlock Kilombero Valley's dormant agrarian potential' is the postcolonial continuity the way the state sees the Kilombero Valley (SCOTT 1998).

Over the course of decades, colonial plantation systems were tested (rubber), US-inspired large-scale farms implemented (Mngeta Farm), irrigation schemes suggested (OTNES 1961a; OTNES 1961b), large-scale teak plantations planted, forestland converted into agrarian land (LEEMHUIS et al. 2017), farmers groups, associations and cooperatives founded and dissolved, Ujamaa villages established and destructed and subsidies offered and withdrawn. Besides dystopian 'countdown to the death of the Kilombero Valley' (MFUGALE 2011), also utopian thinking continued.

The second juxtaposition is the discussion between Kilombero Valley as a site for agrarian production or industrialisation. The results of the first juxtaposition (5.1) are important to bear in mind, as the total amount of land available for economic activities has implications for the dynamic in the second juxtaposition. In the following, first Tanzania's transition from agriculture to industrialisation is analysed (5.2.1). Second, the Kilombero Valley's land question is discussed (5.2.2). Third, three different agrarian development models are contrasted (5.2.3).

5.2.1 Tanzania's Transition from Agriculture to Industrialisation

WUYTS a. KILAMA (2016) observe that in recent years different visions of economic transitions underpinned national politics in Tanzania. While president Kikwete envisioned an economic transition with the help of foreign capital, public-private partnerships and a raise in agrarian productivity, Magufuli envisioned a transition to be initiated best by large-scale infrastructures and industrialization (ENGSTRÖM a. HAJDU 2018; CHUNG 2019). Both transitions imply different development paths.

MAGHIMBI et al. (2011) and COULSON (2015) remind that Marx and Engels (1848) argue in the Communist Manifesto that peasant farming would not survive on the long-term and would be destroyed either by capitalist agriculture, industrialisation and processes of proletarianisation. In Tanzania, where most of the land is owned, managed and worked communally, processes of privatisation, commoditisation, accumulation and proletarianisation did not unfold as Marx had analyzed for the English path. The question in the transition from agriculture to industry is to what extent 18th century Europe can be compared with Tanzania's agrarian path of the 21st century. MAGHIMBI et al. (2011, 17) caution,

"But there is not just one pathway through this transition – both its character and the outcomes are shaped by class relations and struggles, depending on the strength of contending interests of landed property and agrarian capital, agricultural labour in a variety of forms [including tenant peasants] and emerging industrial capital."

There is not just one pathway, or short cut to industrialization and wealth creation. The decision for one development pathway is the contingent and specific historic outcome and the result of class struggles, meaning between different interests.

In the 19th century, when a national colonial economy began to emerge in present-day Tanzania, the Tanzanian population was rural and agrarian. The political project to transform Tanzania into an urban and industrialised nation therefore implies a massive social-ecological transformation. STAFF TALA I-01 (2019) comments,

"They key defining character of the Tanzanian society is that it is agrarian in nature. A majority of our people are still peasants. They depend on their land, on agriculture for their livelihood, all these sort of activities. So, if you [...] bring in the idea of industrial revolution that idea has to resonate with transforming these people [...] and this should be the driving force."

He demands that visions about industrial revolution in Tanzania should start with reflections on history. Transforming most Tanzanians implies transforming peasants into something else. In his view, the peasant way of agrarian production has no future in an industrialized Tanzania. STAFF TALA I-01 (2019) adds,

"There is no future for those smallholder farmers, in this kind of system. It's a trap. It's a trap in a sense that in the near future maybe you won't find them. But then, where will they be? Because, again, we don't see where these people will be accommodated in a country, where you don't have strong industrial base [...]. It was easier for the English to do the enclosure and push people, push poor peasants, criminalise some of them and take them to Australia, to Latin America, to the US, because they had places to settle these other problems. Now, what do you do in the case of Tanzania? Where do you take these? India, they are also chasing. China, their ways of resolving is to bring their people here to work [laughs] and they don't want to go back, they learn Swahili they do all these things and they become Tanzanians [...] so other countries have ways of taking care of their increasing population. If it is to Africa and other less developed areas of the world, where opportunities are immense, you just present yourself as an investor. So, if we are not restructuring well, this will be the end."

On the search for historical examples for the upcoming transition, STAFF TALA I-01 (2019) and others have the British development paths in mind. Yet, previous transitions have had possibilities to deal with the surplus population that was freed from their land. During the English enclosures in the 16th century (Marx's primitive accumulation), many rural peasants were pushed to 'Australia, to Latin America, to the US'. STAFF TALA I-01 (2019) wonders about what would happen to large parts of the Tanzanian society who would lose their means of production after a potential Tanzanian enclosure: 'Now, what do you do in the case of Tanzania? Where do you take these?'. While India was 'chasing' some of their people outside the country, China resolves their 'population problem' by bringing workers abroad. He observes that 'they don't want to go back; they learn Swahili they do all these things and they become Tanzanians'. He concludes his historical analysis by saying that although 'other countries have ways of taking care of their increasing population', Tanzania and other African states need to restructure well, because otherwise, 'this will be the end'. A possible radical transition of rural agrarian areas is articulated by the presidential candidate LISSU I-52 (2020),

"I envision a situation, where you will not leave the villagers as it is today, the village will have to go. The village is not sustainable. Therefore, the rural population that is currently engaged in agriculture will have to be absorbed elsewhere. It is the same process perhaps and I am borrowing liberally from the history of the western world. It is perhaps similar; it is going to be similar to the process of industrialisation of the western world. The rural peasantry will have to be resettled in more urban areas. You cannot sustain the rural population as it is now with all the small, small pieces of land. They are simply not productive enough to feed us. And therefore, a massive transformation means: Getting people off the land. Unfortunately, that has always been the ways of history."

He argues for a radical social-ecological transformation of rural Tanzania in the decades to come. In his view 'the village is not sustainable' and therefore 'will have to go'. To him, 'the rural peasantry will have to be resettled in more urban areas'. This implies the state to facilitate this change. LISSU I-52 (2020) envisions a dual process of urbanisation and industrialisation. The size of the plots 'small, small pieces of land' is allegedly not 'productive enough to feed' the Tanzanian population. He suggests that people need to get 'off the land' and that the population currently engaged in agriculture 'will have to be absorbed elsewhere'. He thinks that this process is like the historical process in the western world, because 'that has always been the ways of history'. Since this understanding suggests teleology, LECTURER UDSM I-09 (2019) argues the opposite,

"There is a whole talk about industrialisation in this country, which is a good thing, but the problem is, what is the mode of industrialisation? [...] If you have a state who thinks that is the way to go [...] you have an industrial revolution in Tanzania, a replicate of 19th century British industrial revolution, we are going to experience a very serious crisis, because you have to clear

the rural areas, you have to free labour from the rural areas like the British did. And what is going to happen?"

One of the main development questions about possible futures of the Kilombero Valley and the Tanzanian political economy at large is, how and to what extent the country can and should industrialise. Especially under the presidency of Magufuli, there was 'a whole talk about industrialisation'. On the one hand, this was widely perceived as 'a good thing'. On the other hand, it was controversially debated, what the 'mode of industrialisation' could be in Tanzania. At what point is a sector, a value chain, a country industrialised and what does this industrialisation imply for the rural population? One of the major critiques here articulated by LECTURER UDSM I-09 (2019) was that the vision of transition could be 'a replicate of 19th century British industrial revolution'. For Tanzania such a transition would lead to 'a very serious crisis' in the rural areas, because 'you have to free labour from the rural areas like the British did'. Many tens of millions of peasants, smallholder farmers, (agro)pastoralists, fishermen and other rural livelihoods would find themselves in growing urban centres looking for a job in the industry, or service sector. This is what Marx called 'proletarianisation', 'surplus population' and 'reserve army'. On a possible transition from peasantry to industrialisation, a STAFF MVIWATA I-04 (2019) comments,

"I don't see peasantry as an awkward thing, I won't do that. What I wish, if only I could dictate [laughs] I would like the things to flow as they are. I haven't seen a place where they have forced drastically they have forced people to have to move from agriculture to industry, or to mining industry or to tourism industry. So, if the economy grows nationally, the people automatically would shift from one sector to another. The share of agriculture would drop drastically and the share of the industrial sector would rise. So, to me peasantry is more than an activity it's a cultural thing [...] it's a way of life. So, if, and only if, we can invest in this peasantry or if I can dictate and invest in this peasantry with the right information, the right markets, the right policies and the involvement at large. Then I would still let the economy to still depend on agriculture. The peasantry way of agriculture, so if there is a need, the economy feels a need of pushing itself or moving itself from agriculture into another sector, then it will automatically appear. Yes, there is no need for you to force, like only want 20 % of people to remain in agriculture and the rest to shift to another sector. This to me is producing few rich and a majority in excessive poverty. Like what are you going to do with the 80 %? This 80 % is going to depend on 20 % for food, for everything. [...] We don't see the potential of agriculture in Tanzania, simply because most of the farmers in Tanzania are smallholder farmers, but look at the poverty decreasing initiative or whatever, they don't target the smallholder farmers, they see it as a cursed profession. If you are going to farm, you are going to remain poor [...] you are not putting enough effort into studying, you are going to be a farmer. Like farming is a cursed profession, farming is something like a person is going to engage in, when he/she has failed in life or in other sectors."

He does not oppose industrialisation as a possible Tanzanian rural future but criticises the way of reaching that goal. He assumes that people would 'automatically [...] shift from one sector to another. The share of agriculture would drop drastically, and the share of the industrial sector would rise'. Furthermore, he comments that he has not 'seen a place where

they have forced drastically, they have forced people to have to move from agriculture to industry, or to mining industry or to tourism industry'. The vision of a top-down organised semi-industrialisation by the Magufuli administration is compared to an industrialisation that would be 'natural' and 'automatic'. According to STAFF MVIWATA I-04 (2019), 'there is no need for you to force, like only want 20 % of people to remain in agriculture and the rest to shift to another sector'. In the agrarian politics of Tanzania, peasants and smallholder farmers are not targeted, but perceived 'as a cursed profession'. Farming as a way of life, or as a profession, was devalued in recent years. Farming is presented as 'something a person is going to engage in, when he/ she has failed in life or in other sectors'. STAFF MVIWATA I-04 (2019) demands that the Tanzanian state and other relevant actors in the agrarian sector should look for the potential of peasantry and smallholder farming before suggesting a premature transition to industrialisation. STAFF TOAM I-20 (2019) reflects on a controversial debate among two leading Tanzanian universities on the matter,

"We had some discussions [...] where we had professors from SUA what will be the role of industrial agriculture and private sector. Dar University [UDSM] presented on social change and whether this transformation of agriculture may benefit or may implicate the social capital. Surprisingly, the two were contradicting. Because as much as the SUA-report supported that this is the way to go [industrial agriculture], but the study of the university of Dar, it said no, this is not the way. We still have to build the capacity of the smallholder famers who are the majority. There is no sector that is ready to take all this population, [...] because even now we see challenges of unemployment. So, any consideration of transforming this agrarian community of 80 % to any industrial work is not feasible in the short run, or even in the medium term."

In a society in which 80 % of the population are reliant on agriculture, the period within which this transition is possible 'in the short run or even in the medium term' is controversial. While the 'SUA-report' supported industrial agriculture as 'the way to go', scholars from UDSM were more sceptical and suggested to first 'build the capacity of the smallholder famers who are the majority'. A rapid transition could be a challenge for employment, which already is a problem in today's Tanzania: 'There is no sector that is ready to take all this population, (...) because even now we see challenges of unemployment'. LECTURER UDSM I-09 (2019), a lecturer from UDSM adds,

"So far, I don't see a very clearly articulated vision of agriculture which is national, [...] thinking in terms of building a national economy [...] we don't have national economies, we have dependent economies [...] building a national economy which is internally articulated, which has been a challenge and this has been a debate for a long long long long time in countries like in Africa, to build economies which are internally articulated. That has not happened yet."

Thus, although Tanzania's political economy should become less dependent on the world market, he argued 'that has not happened yet'. In addition, he does not see a 'clearly articulated vision of agriculture' that is able to build the national economy without being a

'dependent economy'. For him the main goal of African national economies is to find a way to internally articulate these visions before basing the entire political economy on global value chains, tourism, exports and mineral extractivism (KAMATA 2012). STAFF HAKIARDHI I-50 (2019) comments,

"This government is promoting industrialisation, but we have had debates here what kind of industries do we really want to see. We have examples, for instance, when you go to Mkurangwa. The land that used to cultivate Cassava was taken to build an industry and now that industry is producing tyres. The industry has no connection with what is being produced. So, it doesn't really help the farmers with whatever they do. So, what kind of industries do we really say that we want to come to Tanzania? Are we speaking of the industry that has connection with what people are producing, industry that will add value to their product, industries that will help to transform agriculture, because, in any way, you will never wake up in the morning and say, this is an industrialised nation. It's still farmers dependence nation, so what are you doing to help the farmers grow? [...] The likes of Kilimo Kwanza that was typically dominated by investors, whatever they introduced, it was not really helpful, it never said anything to the small-scale farmers. And they are doomed. [...] It never really helps them."

The example of Mkurangwa shows how on a piece of land, where before Cassava was planted, now tyres are produced. According to STAFF HAKIARDHI I-50 (2019) there is no connection between what was produced on the land before, and what is produced now. He argues that 'it doesn't really help the farmers with whatever they do' and wonders 'what kind of industries do we really say that we want to come to Tanzania'. The quote 'you will never wake up in the morning and say, this is an industrialised nation' speaks to the fact that Tanzania has always been a 'farmers dependence nation'. Kilimo Kwanza is criticised as a typical agrarian policy that was dominated by investors, which was 'not really helpful' to 'small-scale farmers'. STAFF ASPIRES I-16 (2019), a key senior agrarian expert for the Tanzanian government under Magufuli argues that a rapid transition is possible,

"If you look at the statistics. In 2000, 80 per cent of the labour force was in agriculture; 2017 65,5 per cent. So, rural population is already starting to move out of agriculture. So where do they go? To none-farm occupation [...] some of them, have changed instead of farming, especially the youth one, into being service providers. You'll find for example a young farmer may be owning a tractor which maybe he got through leasing finance [...] and who is just specialising in land preparation or cultivating land [...] carrying a maize thresher with his motorbike [...] and just move from one farm to the other threshing maize, but not growing maize himself. Some may be having a crop spraying company. So, we see also a high level of specialisation. Others involve in trade."

By quoting statistics between the years 2000 and the year 2017 that indicate a decline of labour force in agriculture from 80 % to 65,5 %, he suggests that the transition is both inevitable and has already begun. The 'none-farm occupation', e.g., becoming 'service providers' to him is a possible path how rural residents may live through this transition. A 'young farmers', he argues, 'may be owning a tractor' through leasing. Through rural

'specialisation', e.g., in 'land preparation or cultivating land', a class of young highly specialised service providers could emerge in rural areas, which could carry 'a maize thresher with his motorbike and just move from one farm to the other threshing maize'. This agrarian service provider does not necessarily need to grow maize himself.

Another perspective on the transition comes from AGRICULTURAL EXTENSION SERVICE OFFICER I-36 (2019),

"[...] we can just still end here, just keep talking that we have to change agriculture by words. We have to do changes, and the changes which I am speaking of, is transformation in infrastructure. The big thing is transformation in infrastructure."

To him, the precondition for a transformation is new infrastructure. This statement reflects the turn of president Magufuli to construct infrastructures across Tanzania. Besides the Stiegler's Gorge project downstream from the Kilombero Valley, Magufuli started the construction of the SGR between Dar es Salaam and Dodoma, planned a deep-sea port at Bagamoyo with Chinese investors, relaunched Air Tanzania and constructed new roads, bridges, flyovers and airports. Despite these efforts, according to STAFF TALA I-01 (2019), it is not certain what industrialisation in Tanzanian could mean:

"What is the definition of this, so that we can have the basics? What is it that you guys are talking about? [...] Even SAGCOT, instead of saying Kilimo Kwanza, they are saying we are also promoting industrialisation [...] they just realised that the president was not in favour of the slogans they are using. So, they say 'SAGCOT for industrialisation' [...] I think the majority of the ministers under the government of Magufuli have not understood what is at stake. Which means, he [Magufuli] has not been able to articulate what is it, that he wants, when he says 'industrial revolution'. What are the necessary infrastructures? What are the skills needed for that idea to materialise? Which social group is supposed to be the driver of that? Which sector should be the driving force of this industrialisation agenda? And once you have a clear vision for this, then you set everything in motion, and everybody understands. So, this minister was asked, how can we define [industrialisation and he said] [...] whenever there are three sewing machines that is industry [...] and we will count that."

When a federal minister was asked what industrialisation is, he said that 'three sewing machines' are counted as industrialisation. This examples is used by STAFF TALA I-01 (2019) to point at the unaddressed questions, which infrastructures are a precondition for industrialisation, which skills are needed which social groups to take part in industrialisation, which sector should be the driver of the transformation. Overall, STAFF TALA I-01 (2019) comes to the conclusion that Magufuli has not been able to articulate his vision on an industrialised Tanzania well. Institutions like SAGCOT, which were constituted under the slogan Kilimo Kwanza under Kikwete, started to change their slogan to 'SAGCOT for industrialisation', when they 'realised that the president was not in favour of the[ir] slogans'. This suggests that institutions and NGOs started to use new branding,

instead of supporting this new conviction. STAFF NLUPC I-21 (2019) problematises the times spans in which new ideas are articulated and mainstreamed into policies and into their implementation,

"In our country we ask, the [CCM] party manifesto, what would they say? That's what leads the country [...]. For example, the manifesto now focusses at industrialisation. Now we have to make sure that all the plans we prepare must accommodate that party manifesto. [...] We had the national land use planning framework of 2013 under Kikwete [...] it was approved by the cabinet in 2013, two years later, we changed from focus on agriculture, to industry. It was a two years' experiment, we therefore implemented that for two years. After two years we have to review it, so it can accommodate issues related to industrial development."

The Tanzanian agrarian policies and the future visions of Tanzania are linked to what is written in the current most version of the CCM party manifesto, because 'that's what leads the country'. Since his election in late 2015 President Magufuli focussed much of his energy at industrialisation. Working for a state institution, STAFF NLUPC I-21 (2019) adds that 'now we have to make sure that all the plans we prepare must accommodate that party manifesto', a process called policy mainstreaming. What is criticised, is the short time span between the old framework that was approved in 2013 and changed its' focus from agriculture to industrialisation two years later.

STAFF SAT I-14 (2019) envisions how a possible transition could look like,

"We have organic farmers, small-scale farmers, they send their kids to SUA, to university [...] that's how the transition should look like [...] and when their kids are educated, they will go to the cities. They will migrate; a lot of them [...]. There is more rural-rural as rural-urban in Tanzania still. It's still a big trend. [...] The youth are burning, they want to go for more, but you need good education. Actually, you cannot say 'bam industrialisation is here now' and everything, no. It has to go smooth. This farming as a transition tool, as something, where you can gain when you modify and you intensify a little bit, when you get secured markets, it's the springboard for economy to shift there, but it's a soft transition. And it's not the transition where small-scale farming is collapsing and then you have to send your kids to Dar es Salaam where they wash the windows of the cars. Probably they need two generations until they get out of this poverty cycle."

The entire transition, he argues, could take several generations. He argues that 'you cannot say 'bam industrialisation is here now', but instead that you need a 'smooth transition'. In his view, one of the most important factors is 'good education'. A dystopian transition that needs to be avoided is one, where 'small-scale farming is collapsing and then you have to send your kids to Dar es Salaam where they wash the windows of the cars'. Furthermore, he sees 'farming as a transitional tool' that can function as a 'springboard for the economy to shift'.

To sum up, while under president Kikwete, the terminology was 'green revolution' with Mexico and India being role models, under president Magufuli the wording became 'industrial revolution' with the four Asian tigers (Singapore, Taiwan, South Korea, and Hong Kong) becoming role models. Magufuli's slogans, 'industrial revolution', 'industrialised agriculture' and 'agricultural sector for industrial development' (URT 2017) were discussed controversially among actors in the agrarian sector. Although many actors were in favour of some future industrialisation and domestic value addition, they argued that President Magufuli did not articulate his vision well enough to convince them. Consequently, three key discussions emerged. First around the potential timeframe, in which such a transition is possible. Whereas some argue that such a transition is possible until 2050, others talked about several generations and yet others thought an industrialisation to be impossible. A second line of discussion was around the preconditions of such a transition. On the one hand, infrastructures were mentioned as lacking, on the other hand it was remarked that Tanzania will remain a dependent economy on the world market after a potential industrialisation. Third, it was discussed what would happen to tens of million rural residents in such a transition. Both the capabilities of urban areas to host many more millions and the capabilities of other sectors to absorb the freed labour was questioned.

5.2.2 Kilombero Valley's land question of the 21st century

"[...] There will be negative impact in the coming days because we do not have enough land. It is small [...] the population increases as the land becomes small. That is the negative impact because we shall not have a place to go to cultivate later on. That is why we are asking the government to add us the demarcation area for cultivation, so that the coming generation can continue getting the land and can continue cultivating because we are much dependent on land for cultivation. We are not businessmen; we are agriculturalists. So if they continue taking the areas, where do they expect us to go?" (SMALLHOLDER FARMER KIWALE I-41 2019)

The rhetorical questions 'if they continue taking the areas, where do they expect us to go?' poses the central land question of many rural residents in the Kilombero Valley. Many who were born in the villages live in uncertainty about the future availability of land and other means for rural livelihoods. Should the central state 'add us the demarcation area for cultivation', then 'coming generation can continue getting the land'. He wishes for an agrarian future in which the rural residents 'can continue cultivating because we are much dependent on land for cultivation'. The statement 'we are not businessmen; we are agriculturalists' speaks to the self-perception of many peasants and smallholder farmers in the Kilombero Valley who are sceptical about the promises of the market economy and the promise to be transformed into agrarian businessmen. Should land be commodified and

become a transferable resource, Tanzania's social-ecological transformation would accelerate (LI 2017). STAFF GROW AFRICA I-51 (2019) observes,

"The average smallholder farmer, who is growing the average calory that's consumed anywhere in the country is over 50 years old [...]. A lot of the producers are ten years away from being too sick to farm. They will be sitting on the eight acres that they hope to retire on, but with no young muscle to actually till it and to put it to work. And even if they did have it, they might not be growing the chillies and okra that can keep them comfortable. It would still be just a subsistence lifestyle. I mean that is kind of a demographic collapse, a threat of actual producers not being replaced by a new generation of producers. The question remains, is whether or not a younger generation [...] can really shift the business model of how these eight acres are managed. [...] How many of those tired elders are going to invite their children from town to come back. [...] *Now, the eight acres* [...] *can't just be suddenly liquidated and be merged into another hundred* other plots to make an eight hundred acres plantation. The all live on the side of a mountain, where their brother is buried. Not everything is ready to be scaled up until a mechanised commercial plantation investment. [...] The economies of scale that could come from mechanised production or industrial large-scale production can't necessarily happen with a fragmented land base that smallholder own and in areas where they own them. There will always be that artisanal restriction as to how you invest in such small-scale resources."

According to him, a generational transition is part of the discussion about Tanzania's land question. Many smallholder farmers are 'over 50 years old' and therefore only 'ten years away from being too sick to farm'. He wonders whether the eight acres, which a retired farmer holds can be kept productive if the new generation is living in town and is not ready to till the land. Many farmers will have 'no young muscle to actually till it and to put it to work'. The question he poses, is whether the young generation can 'shift the business model of how these eight acres are managed' away from 'a subsistence lifestyle'. Many small plots in rural Tanzania 'can't just be suddenly liquidated' to be merged into one big farm or plantation. STAFF GROW AFRICA I-51 (2019) argues that 'not everything is ready to be scaled up until a mechanised commercial plantation investment' because there are certain restrictions in an areas with fragmented land ownership.

GEBREKIDAN et al. (2020) suggest categorising rural residents in the Kilombero Valley in three groups: monocrop rice producers, diversifiers and (agro)pastoralists. According to GEBREKIDAN et al. (2020), the first group comprises of about 70 % of all households, tends to own less land on average and uses more than 90 % of their land for rice cultivation and sells half of their produce on regional markets. A second group of about 25 % of all residents is classified as diversifiers who besides rice, plant maize, vegetables, and other crops for home consumption and for regional and national markets. The third group (agro)pastoralists make about 5 % of the population in the Kilombero Valley. They tend to own (and work) more land per capita, than farmers.

The survey conducted by GEBREKIDAN et al. 2020 does not show class formation. It does not include seasonal or daily labourers, landless peasants and (agro)pastoralists who have recently migrated to the Kilombero Valley. Only a second household survey in a few years would be able to show, how certain classes and social groups have emerged historically, have moved from one category to the other. Hence, it remains difficult to draw a conclusive picture about class formation in the Kilombero Valley. In recent years, urban business elites have invested into land in the Kilombero Valley into real estate and agro-processing. They too contribute to ongoing class dynamics and social differentiation (HÖLLERMANN et al. 2021).

While the population in the Kilombero Valley is increasing by around three per cent per year, the total land size remains the same. These two figures are widely observed and discussed in the Kilombero Valley. With increasing rural population, the land availability per capita is declining. Plots tend to be subdivided into ever-smaller pieces. In future, many fields are going to be too small to sustain current livelihoods. MBINGU SISTERS I-33 (2019) remarks,

"I think there will be medium and large-scale, because the way I see the government is changing. Everybody now has to have land lease, land certificates. So that land certificate is going to increase little by little until villagers will not be able to pay land lease. So, this is going to be like in Europe, because the industrial revolution in England happened the same. People could not afford the land and give it to rich people. That's what I can see from now to twenty years to come, maybe ten years to come, I don't know. That's how I see it because even ourselves, when you pay land, the amount of money we are paying is increasing every year, so that means people cannot afford to have land. So that means, rich people will come to hold the land, so land holder will be fewer, and people maybe will just have their apartments and will have small [...] Maybe they are going somewhere else, I don't know. The first thing that I see is that people will not be able to afford land [...] life will change completely, and they have to cope with the environment."

In future, in ten or twenty years to come, she sees 'medium and large-scale' schemes in the Kilombero Valley. This prognosis is partially linked to the way the 'government is changing', and how everyone nowadays has a land certificate. The land rent, she thinks, will 'increase little by little until villagers will not be able to pay land lease'. The effects will be like in Europe during 'the industrial revolution in England'. She thinks that in future 'rich people will come to hold the land, so land holder will be fewer'. Poorer farmers who are unable to pay land rent will be 'going somewhere else'. If that happens, 'life will change completely, and they have to cope with the environment'.

To find the right balance between small-scale subsistence farming on the one hand and commercial large-scale farming on the other hand was debated at length by the WB/ FAO, the development community, and African governments. Some actors favour smallholder

farming, here termed the 'small is beautiful' approach. Other actors favour large-scale production. Recently three production models suggest a combination of these two extreme positions: a) irrigation schemes, b) nucleus-outgrower schemes and c) bloc farms. A RETIRED STAFF MALF I-22 (2019) explains,

"The intention of our president is that to raise the small-scale farmers from the small-scale rank to the medium scale. That is the intention. And that is the intention of the ASDP2, to bring them from small-scale to the medium-scale, to commercialise them. And that's why the president said we need this medium size industries in between, because if you have raised the farmers level of production, you will be able to get their produce into the industries."

The rhetoric of transforming smallholder farmers to commercial medium-scale farmers was used during the presidencies of Kikwete and Magufuli: 'The intention [...] is that to raise the small-scale farmers [...] to the medium scale'. The hope is that if the smallholder farmers are raised to the medium-scale, then their produce could go to medium scale industries. However, in each society with 40 million smallholder farmers owning one hectare each, raising them all to medium-scale farmers with four hectares each would mean that 30 million smallholder farmers will become landless, when the total amount of land remains unchanged. Should medium-scale farmers be the future model in Tanzanian agrarian policies, answers need to be found on how to absorb tens of millions of future landless, wage labourers and urban dwellers.

After the end of socialist politics and the introduction of neoliberal capitalist policies in the late 1980s, with privatisation capital accumulation became possible in Tanzania (SHIVJI 2009a; SHIVJI 2017c). Especially landed upper and middle classes were better able to consolidate their class position vis-à-vis poorer peasants and (agro)pastoralists. As the post-socialist land laws from 1999 (URT 1999b; URT 1999a) have kept a socialist core of communal ownership, land redistribution, land accumulation and processes of differentiation were slow. Tanzanian middle classes are still comparably small, a majority of rural residents in the Kilombero Valley continues to belong to the category of smallholder farmers (GEBREKIDAN et al. 2020). GRECO (2015, 16) argues that "gradually and over time, village land allocations have become a silent way of privatising village commons to individual residents". GRECO (2016, 31) argues,

"[...] petty corruption is a consequence of the wider trend of primitive accumulation and class dynamics in the countryside. Different sections of the rural capitalist class bribe village committee members to appropriate village land."

MAGHIMBI et al. (2011) argue for a Tanzanian land reform that includes minimum and maximum land ownership that leads to land consolidation by rural middle classes who are

then able to create employment opportunities. Smallholder farming within irrigation schemes can make significant contributions to rural development, employment and poverty reduction (COUSINS 2013).

In recent years, three connected processes have led to accelerated differentiation in the Kilombero Valley: First, the recent land survey done by the LTSP, second village and district land use planning, and third the formalisation and individualisation of communal land titles into certificates of customary rights of occupancy (CCROs). These processes have contributed to a different perception of land and have increased land rents (WINEMAN a. JAYNE 2018) as well as increased the tendency of privatisation and commercialisation of land (KAESS 2018). The quasi-commodification of land via CCROs could lead to an accelerated differentiation in Tanzania. In line with what HARVEY (2003) termed "accumulation by dispossession", this process in rural Tanzania may be called differentiation through formalisation (STEIN a. CUNNINGHAM 2017; STEIN et al. 2016; GREEN 2018; CHACHAGE a. BAHA 2010; PEDERSEN 2016; SCHLIMMER 2016; SCHLIMMER 2017; STEIN a. MAGANGA 2017; ODGAARD 2002; ODGAARD 2006).

Through graphs, maps, narratives, media reports, political speeches, etc. land is (re)framed and rendered investible (LI 2017). Land becomes a resource, a financial asset that can be traded like any other good. Its formalisation, commodification and individualisation has manifold implications how states, investors and rural residents relate to land. In the process of commodification, ideas of underutilised land seek to justify that land should change owners to put it into more efficient use for the common good of the national economy. (Agro)Pastoralist communities, peasants and smallholder farmers have come under pressure in the recent African land rush (MOLLEL 2014; AGROPASTORALIST REPRESENTATIVE MALINYI I-42 2019; HALL et al. 2015).

During the Kilimo Kwanza policy (including Big Results Now (BRN) and the SAGCOT), the Kikwete government invited investors to Tanzania by declaring large parts of the Kilombero Valley idle, free, open, unoccupied, underutilised or otherwise available for investment (URT 2013b). The SAGCOT covers a third of the country from Zambia in the West to Dar es Salaam in the East and suggests that large pieces of land are unoccupied. On the website of the Tanzanian Investment Centre (TIC), some of these lands are called *virgin land* and asserted that only 25 % of the arable land was used thus far. These claims were countered by scholars (Chachage & Baha 2010; SULLE 2015; LOCHER a. SULLE 2014), NGOs (STAFF HAKIARDHI I-50 2019) and media (AFRICAN ARGUMENTS 2018). Up to date, less than 20 % of Tanzania's land was surveyed. Reliable information about the historical and the

current land use is often missing (STAFF HAKIARDHI I-50 2019). Many lands that were declared free were occupied for many years without the official data recognising it. Many investments failed because land was not as abundantly available, as initially declared (STAFF MOL I-06 2019; STAFF TIC I-07 2019). COULSON (2015) cautions that myths around the availability of arable land in Tanzania are quoted in many policy documents. The most misleading, he argues, is the assertion that 55 % of the land in Tanzania can be used for agriculture. Especially in areas with high agricultural potential like the mountains of the north and the northwest, the area around Lake Victoria, the coastal areas and most of the Southern Highlands the most suitable lands have already been taken (COULSON 2015). The rest of the country is either too dry for agriculture, protected, semi-arid pastoral areas, steep hills with erosion or areas left fellow for shifting agriculture. COULSON (2015, 57) demands,

"Donors and government spokespeople should be extremely careful before they claim without qualification that Tanzania has large areas of surplus land that can be used for agriculture, because, at very least, this underestimates the problems."

A solution to define available pieces of land in the Kilombero Valley was suggested through the processes of a) land surveys, b) VLUPs/ DLUPs and c) titling. Land surveys done with Global Positioning System (GPS), drones, satellite images and other modern technology promise to deliver an up-to-date map that can be the basis for land use planning which is done in several steps (Reuters 2016; the Guardian 2016a). So far, only few among the 12,500+ villages in Tanzania have undergone all six stages of village land use planning (NLUPC 2011; Staff NLUPC I-21 2019) (Figure 22). Areas that promise high potential for

Stages of Village Land Use Planning

- 1. Preparation
- 2. PRA for Land-Use Management
- 3. Mapping Existent Village Land Uses
- 4. Participatory Village Land Use Planning
- 5. Implementation of Village Land Administration
- 6. Village Land Use Management

Land Tenure Program

- Feed the Future Land Tenure Assistance (LTA), Iringa & Mbeya Region (USAID); lead USAID
- Land Tenure Support Program (LTSP), Morogoro Region (DANIDA; SIDA & DFID); lead MLHHSP through local partners like AWF
- Mobile Application for Secure Tenure (MAST)
- Technical Register for Social Tenure (TRUST)
- Amazon Cloud (Cloudburst US)

Figure 22: Stages of Village Land Use Planning and Land Tenure Program

- a) Land Tenure programmes and technologies in SAGCOT clusters (Msigwa et al. 2018)
- b) Six stages in Village Land Use Planning Process (NLUPC 2011)

agrarian investments like the Kilombero Valley, Iringa Region, Mbeya Region and Njombe Region were prioritised.

Through the SAGCOT initiative, two of their six clusters were selected for pilot land surveys. One was conducted under the lead of USAID Feed the Future - Land Tenure Assistance (LTA) in Iringa and Mbeya Region (MSIGWA et al. 2018) and a second one in Morogoro Region lead by the Ministry of Lands, Housing and Human Settlement Development (MLHHSP) through local partners like the African Wildlife Foundation (AWF). Financed by Danish International Development Agency (DANIDA), Swedish International Development Cooperation Agency (SIDA) and DFID, the programme in Kilombero Valley was called LTSP (MATEJCEK a. VERNE 2021a). Although SAGCOT claimed several thousand hectares to be investible in Kilombero cluster, there was little official data available to support such statements, because the category *land available for investments* had not been part of previous VLUPs (STAFF HAKIARDHI I-50 2019). URT (2013b, 193) remarks

"There are widely differing opinions over how much land is available for commercial farming. It is likely that the majority is currently defined as Village Land. To make it available it will either have to be leased to investors directly by Village or District Councils or reclassified as General Land and allocated on behalf of the State. In the Kilombero Valley, there are the additional complications of widespread land purchase by speculators, and the presence of a variety of protected areas - wetlands, game reserves, forest reserves - with boundaries undergoing revision, together with important unprotected habitats. Land category boundaries have yet to be accurately mapped across much of the Kilombero Valley, and although a number of Village Land Use Plans (VLUPs) are in place there is limited awareness of them on the ground."

A land survey that leads to new VLUPs and a land bank that lists available plots for investments is suggested. The degree implementing VLUPs varies. Many 'VLUPs were lying in the drawers of the village government and have not been implemented' (STAFF NLUPC I-21 2019). Although ideally, VLUPs should be revised every few years stage five and six are rarely concluded. Especially in areas with rapid population growth, the need for renewal of VLUP is high, as their legitimacy decreases with every year in which it is not implemented. GRECO (2016, 26) argues,

"To date, few Tanzanian villages have a VLUP, not least because of the high costs and the complex technical aspects of drafting the plans, among which are the use of GPS and satellite mapping of village boundaries. Given the context, it becomes possible only through donor money, and villages often seek sponsorship, usually from environmental agencies or donors who might have an interest in solving boundary issues and ongoing disputes."

In Kilombero District 73 out of 97 villages had completed VLUPs in May 2014. Among the reasons for slow progress of VLUPs are high costs involved, complex technical procedures and lack of trained personnel. Hoping for a reduction in land-based conflicts,

many villages have sought for sponsorship from NGOs and the development community to help surveying and writing VLUPs. The fertility and biodiversity of Kilombero District led to heightened interest from environmentalists and agrarian capitalists in the land survey and the VLUPs (GRECO 2016). GRECO (2015, 18) argues

"Designed to formalise the land property of the poorest part of the population through village land registries, VLUPs seem to offer instead the legal basis for land dispossession of the 'poorest of the poor'. This is particularly important in areas like Kilombero, where the land frontier is still relatively open."

Thus, VLUPS are mainly meant for creating an improved business climate, instead of protecting the rights of the poor. Although the LTSP seeks to close the gap of available land survey data, many land conflicts in the Kilombero Valley cannot be reduced to a lack of information. Instead, power asymmetries in decision-making process across scales is seen as one of the biggest problems (STAFF NLUPC I-21 2019; MBUNDA 2016a). More precise survey data through satellite images, drones and mobile phones can be regarded as a technical fix that does not address the underlying political dimensions of the preparation process. While it is commonly argued that a formalisation of land rights will lead to more tenure security for rural residents, others have argued that a formalisation is mainly done to identify pieces of land for investments (STAFF HAKIARDHI I-50 2019). MATEJCEK a. VERNE (2021a) argue that the land surveys have led to new securities and insecurities for different members of the village communities. Members of the international development community were advocating for land formalisation through land surveys and promoting large-scale investment under SAGCOT which according to MAGANGA et al. (2016) could lead to dispossession by formalisation and "could be the largest land grab in the history of the country". MAGANGA et al. (2016, 3) further maintain,

"Formalization, we argue, is proving to be a mechanism justifying dispossession of farmer and pastoralist lands to support SAGCOT. Donors and the G8 should be aware that they are entering contested terrain wherein farmer-pastoralist tensions are being exacerbated and the human rights of local communities violated."

The formalisation of communal land into individuals land titles - CCROs - will make land easier transferable. In 2016, out of 12,788 registered villages, only 1,640 had undergone village land use planning and only 250,000 CCRO's were issued in a population of 50 million (MASSAY 2016). Several thousand residents in Kilombero District received CCRO's (DAILYNEWS 2017). STAFF TALA I-01 (2019) explains

"We had cases where land titling has been done and then people are not collecting their certificates, their CCROs. Why? The message was you get this, you go to the banks, you'll get

money [imitating] 'oh, that's a good idea. With a piece of paper? I go to a bank, and I'll say I want this much money. They will give me? I say wow, this is miracle'. Now, they get to the banks with this piece of paper, the bank is saying 'What is this? No, there are other things, that you'll need to do'; 'Other things? I was told this paper is a talisman. I will put it there and money comes'. Well, so again: the sort of message that you are giving our people are misleading false promises, not telling them the truth, how easy it is for this [land] to be transacted [...] one of these obstacles for this rural land mortgaged and tradable, especially for banks when they have given a loan and in the case of default the bank cannot resell this land to whoever, it has to be someone from within the village. And most of these people are uniform in terms of their earnings [...] they are mostly relatives. But the idea behind that was this land won't go outside the hands of the village, it will be within. Maybe a relative will buy that land. That was the idea. But some people said 'no, no, no. Okay, no foreigner, but let's make a provision, where an outsider from the village even from other parts of the land, as long as he is Tanzanian, can acquire that land'. Yes, it is good for the banks, but it is not good for that proper protection [...] we don't know what will happen, will it add to conflict?"

Although CCRO's were supposed to be a security for villagers to get loans and invest in their land, not all villagers have collected their CCRO's from the district and village offices. Not all have fully understood what CCRO, individual titles and defaulting the loans could mean to their livelihoods. The original idea of the CCROs was for the village land to remain in the ownership of villagers once a loan was defaulted: 'Maybe a relative will buy that land'. However, that policy was compromised 'let's make a provision, where an outsider (...) as long as he is Tanzanian, can acquire that land'. By changing the original provision, now district middle classes, bureaucrats, urban elites and those with financial networks can accumulate land across the country. STAFF TALA I-01 (2019) wonders whether it will add to conflict, instead of resolving it. In rural settings, where land was owned and managed communally, individual titling may lead to new conflicts. STAFF HAKIARDHI I-50 (2019) states,

"[...] how the land use plans were done, how consultative was the process? Now there have been surveying of plots and we always have debates here on titling. The view is, it kills the customary ownership, because people used to own land communally. And they had their own ways to give each other and take it back. When you introduce the title, the title doesn't embrace all the customary features. And that's why the title needs to be in your name, it cannot be written in a clan name. But now, this land used to be clan land and people were happy with that way, but now it makes them more individual. And it makes that land easily transferable. So, you can sell, you can do anything with it. It is a very worrisome situation. I would have advised for it [VLUP] to end in zoning and let people decide, we want this for grazing [...] and that's it."

In his view, titling 'kills the customary ownership'. Whereas before 'people used to own land communally', now an individual name instead of a clan name appears on a legal document. In rural communities across Tanzania, 'they had their own ways to give each other and take it back'. The introduction of a titling system 'doesn't embrace all the customary features'. The land title makes 'land easily transferable. So, you can sell, you can do anything with it'. According to STAFF HAKIARDHI I-50 (2019) this is a 'worrisome

situation'. If the land use planning process could have stopped with zoning, villagers could have decided communally which areas to be used for which land use.

DFID, SIDA and DANIDA funded the LTSP with 3,3 Billion TShs between October 2016 and end of 2019 under the lead of MLHHSP (KILORWEMP 2018). A core goal of the LTSP was to survey all land, do zoning, register land under the right land category, improve village and district level land use plans, redefine new borders and hand out CCROs (MGETA 2019). Furthermore, the LTSP should identify small- and large-scale plots in each village that can be enlisted in a land bank (KANDOYA 2016b; STAFF HAKIARDHI I-50 2019; STAFF MOL I-06 2019). The LTSP was hoped to bring new clarity about the land right situation for local populations, the central state, environmentalists and potential investors (KANDOYA 2016a). According to STAFF HAKIARDHI I-50 (2019),

"[...] we have land use plans that are biased [...] every village in Kilombero had a land use plan, but they had no titles, the CCROs. Why? Because they never had an authorised land officer to sign the title. That was the only thing lacking. So why are you taking LTSP to the same district that already has land use plan? It gives a very simple explanation. You know, they (central government) need land for investment. The first land use planning never really considered setting aside land for investment. It was done as a trial and there were no that interests, that you see today. So, they forced the LTSP to go again to Kilombero, so you assume there is zero and you start the land use planning again."

Most villages had VLUPs prior to the LTSP. New interests of national level for land-based investments emerged after the land use planning in the Kilombero Valley had already terminated. When previous VLUPs were done, there were different interests, than those, 'you see today'. An amendment of the Village Land Act No. 5 of 1999 obliges village land boards to demarcate and allocate a given percentage of village land to potential investments. Before, the category of village land for investments had not been part of the VLUPs. Changing the land act to serve economic interest undermined the VLUP processes: 'they forced the LTSP to go again to Kilombero, you assume there is zero and you start the land use planning again'. The MP for Malinyi constituency, MP MALINYI I-25 (2019) thinks,

"The policy concern about this shortage of land is, that LTSP that people have to plan better on how to use the available land for farming, as well as livestock keeping. [...] After good land use plans, then people have to farm based on the commercial farming. That will work [...] they should make farming as a business, that's commercial farming, [...] not just you farm to get your daily meal, no. You have to farm instead of producing, say, one ton per acre, for commercial farming you need to have more productivity, that's the real meaning of commercial farming, but in the environment in which we are living, most of them they are peasant, they are not commercial farmers. And in order to take them from a peasant low-level farming level, they have to go to commercial farming level, they have to use modern equipment, modern tools for farming, [...] like tractors, like ploughs, and new fertilizer, chemicals as well, proper agricultural practices."

After the LTSP and 'good land use plans' people should 'farm based on the commercial farming'. Although, currently most rural residents are peasants, they can become commercial farmers by using 'modern equipment, modern tools for farming, (...) like tractors, like ploughs, and new fertilizer, chemicals as well, proper agricultural practices.' This believe in modern technology and good agricultural practices is widespread among policymakers and the development community. The demand to 'have more productivity' per acre is a central hegemonic narrative.

To sum up, the LTSP, its land survey in the Kilombero Valley, the new processes of VLUPs and the formalisation of land titles through CCROs have shown to be initiated, sponsored, supported, and dominated by powerful interests. It was no coincidence that a pilot land survey was conducted in SAGCOT's 'Kilombero Cluster'. The intervention into and neglect of already-existing VLUPs in the Kilombero Valley meant new lines of conflict about land use planning between different scales. Although the Village Land Act 1999 provides Tanzanian villages with wide-ranging competences, both the Kikwete and the Magufuli administration have shown that, as soon as hegemonic interests are concerned, these provisions count little.

5.2.3 Large-scale Irrigation Schemes – A Socio-technical Imaginary?

Large-scale irrigation schemes were part of the policy toolbox for rural development in Tanzania since independence, and earlier. Over previous decades, many hundred irrigation schemes were built across Tanzania. As early as 1960s, the FAO made feasibility studies on irrigation schemes in the Kilombero Valley (OTNES 1961a; OTNES 1961b). Questions of technical possibility, water availability, infrastructural connectedness to urban centres and finance were discussed. Irrigation schemes vary in size from a few hundred, to a few thousand hectares. In 2018, the Tanzanian parliament discussed to build additional irrigation schemes along the border of the Kilombero Game Reserve because rural residents without access to water are settling along local streams without government consent, or control (PETER 2018).

MP MALINYI I-25 (2019) demands,

"We have to farm using irrigation. So my push in policy perspective to the government that we have to make people now farm, not depending on local rains [...] in terms of agriculture climate change affects us a lot. For example, this year we received late rains and that has affected productivity. If we could have irrigation farming, that would not be a problem."

For the MP from Malinyi constituency, irrigation schemes are a way to make rural residents less dependent on local rains. This is dependency is problematic because 'climate change' affects farmers by making local rains less reliable. The MP hopes that 'If we could have irrigation farming that would not be a problem'. MP ULANGA I-24 (2019) adds

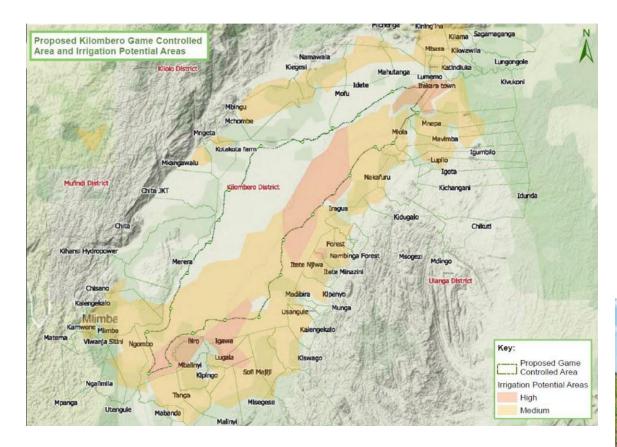
"If the government implements these schemes, it can solve all problems from the peoples, Sukuma people. Because they can use that irrigation system, in spite of destroying the Kilombero Basin."

He argues that irrigation schemes can 'solve all problems' and specifically mentions Sukuma, who have recently migrated into the Kilombero Valley, who instead of 'destroying the Basin' could start to engage in irrigation agriculture. MBUNDA (2016b) demands more investments to be made in irrigation schemes, because climate change would make the availability of water less certain. Rain-fed agriculture needs to be transformed to ensure stable harvests and food security. MBUNDA (2016b, 275) claims

"The solution of dependence on rain-fed crop production is the use of water for irrigation. Official data show that a total of 29.4 million ha is suitable for irrigation farming in Tanzania. However, only 326,492 ha have been developed for irrigation farming. This is an insignificant size of the land which is suitable for irrigation farming. Water for irrigation can be captured from rivers, lakes, dams and rainfall."

A potential of many million hectares has not been tapped thus far. As the required infrastructure for large-scale irrigation schemes would be too expensive for a single households or a village community, MBUNDA (2016b) sees the state as the central actor for planning and financing them. Political priorities and the lack of funding to the agrarian sector are responsible for slow progress. COULSON (2015) claims that except for land along the Kilombero and Ruaha, the abundant availability of land for irrigation is a myth.

URT (2013b) cites a total of 123,000 ha for irrigation potential in the Kilombero Valley was calculated with only about 20,000 ha developed thus far (Table 4). With Mbingu Farm (Mbingu Sisters), Mnegta Farm (under Kilombero Plantation Limited - KPL), and Kilombero Sugar Company Limited (KSCL), private actors thus far have established most irrigation schemes in the Kilombero Valley. Since the mid-1970s, irrigation schemes were constructed across the Kilombero Valley, 1978 in Mkula village and 1996 in Njage village (HÖLLERMANN et al. 2021). As the URT (2013b) suggests, large areas in the Kilombero Valley either have medium (yellow) or high (red) irrigation potential (Figure 23). The proposed line of game-controlled areas (green) overlaps with areas suggested for possible irrigation schemes. A conflict of objectives between these two forms of land use exists. One of the biggest areas with high irrigation potential is situated west from *Iragua*, in Itete village.





- a) Map of irrigation potential areas in the Kilombero Valley (lower) (URT 2013c, 101)
- b) Irrigation channel, Njage village, Kilombero District (left) (photo: RV)
- c) Irrigation channel and Inlet Nr. 12, Itete village, Malinyi District (right) (photo: RV)





Table 3: Table of existing and intended irrigation schemes (URT 2013b, 101)

Nr.	Scheme	Potential (ha)	Developed (ha)	Product	Remarks
1	Mngeta Farm	5780	5780	Paddy	KPL (2019), SUMAJKT (2021)
2	Kihansi Farm	5100			
3	Ngalimira	5000			
4	Ngoheranga	5000			
5	KSCL	7000	7000	Sugarcane	
6	Idete Prison	6000	6000	Rice	Uncertain Status
7	Mofu Farm	500			
8	Mbingu Farm	3000	3000	Rice	
9	Udagaji	1935			USAID
10	Mgugwe	2270			USAID
11	Kisegese	7298			USAID
12	Mpanga- ngalimila	31500			USAID
	Total	123383	16000		

In Itete village, a group of farmers initiated an irrigation infrastructure in 2005 in their village (IRRIGATION SCHEME MANAGERS ITETE I-46 2019). Similar small-scale irrigation schemes can be found all over rural Tanzania. HARRISON a. MDEE (2017) debate to what extent these irrigation schemes can be considered successful, and if yes for whom, or to what extent they represent environmental destruction. When more local farmers showed interest in joining the irrigation infrastructure, the village community applied for government funds to construct a large-scale irrigation scheme that would include the construction of water reservoirs, pipes, inlets, roads, and channels (Figure 23). The funding procedure took many years. Construction started in 2012, the scheme opened in 2017, with first harvests in 2018. Since then, the Itete scheme received many visitors from all over the Kilombero Valley (IRRIGATION SCHEME MANAGERS ITETE I-46 2019). The success in convincing the central government to support local farmer groups with infrastructure became known throughout the area. Similar stories are shared on the other side of the Kilombero Valley, where the WB helped to finance a large-scale irrigation scheme in Njage (Figure 23).

Itete irrigation scheme lies in Itete village, in the northern part of Malinyi District. With about 1,000 hectares village land within the irrigation scheme, large parts of Itete village were transformed into an irrigation scheme. In the West, Itete borders the swamp area of

Kilombero River and in the East, it borders the regional road that leads from Ifakara to Malinyi. Thus, water for irrigation is available in Itete, as well as possible transport to the next biggest town. Two other factors implied rapid agrarian changes in South-eastern Kilombero Valley. On the one hand, the construction of the *Magufuli Bridge* across the Kilombero River in 2018, that substituted the unreliable ferries. On the other hand, the electrification that has come to Itete village a few years ago. Since then, investments were made in small shops along the street, in solar panels, milling machines, tractors, and combined harvesters.

Individual parcel sizes within the Itete irrigation scheme vary between half-an acre and 20 acres. The land owner with the largest piece of land holds about 50 hectares (IRRIGATION SCHEME MANAGERS ITETE I-46 2019). These figures suggest that not all villagers can own land in the irrigation scheme, but that land belongs to rural middle classes and those households who have access to loans, remittances, or other sources of finance. The 300-hectare irrigation scheme in Njage village has similar land ownership patterns, where the biggest land owner owns about five hectares (VILLAGE OFFICIAL NJAGE I-31 2019). With about 900 adult villagers in Njage, not all are able to own a plot within the irrigation scheme. Hence, irrigation schemes create new classes, between those who own land *within* the schemes, and those, who do not.

The central motivation for rural residents to become part of irrigation scheme is an expected higher certainty of harvests and increased yields per acre. Whereas a rain-fed agriculture system in Itete village can harvest between five and eight bags of paddy/rice per acre in one harvesting season per year, the average harvest in the irrigation scheme of Itete is around 30 bags of paddy/rice per acre and allows for two to three harvests per year (IRRIGATION SCHEME MANAGERS ITETE I-46 2019). If these estimates are right, a piece of land in an irrigation scheme can produce between 10 times and 15 times more per year (factors such as long-term exhaustion of land, higher labour input and other external input, excluded). Thus, the village-level interest of owning land in an irrigation scheme is high. Accordingly, land prices in villages with irrigation schemes have gone up. VILLAGE OFFICIAL NJAGE I-31 (2019) expects land and food prices to rise due to improved agricultural production in irrigation schemes. Besides rural middle classes, urban middle classes in Dar es Salaam and Zanzibar have invested in the irrigation scheme of Itete (IRRIGATION SCHEME MANAGERS ITETE I-46 2019). Urban capital invested into rural areas are a recent phenomenon which has not been sufficiently understood (LECTURER UDSM I-09 2019; COULSON I-03 2019). LECTURER UDSM I-09 (2019) calls the phenomenon of welleducated, retired staff from ministries and school teachers who invest into rural farms 'weekend farmers'. Other terms for the Kilombero Valley are *commuter farmers*, or *absentee landlords* (WHITE 2014).

The irrigation scheme in Itete has a potential of up to 8,000 ha. Due to lack of funding, the current infrastructure only reaches the core of 1,000 ha (IRRIGATION SCHEME MANAGERS ITETE I-46 2019). Nevertheless, all 8,000 ha are currently under some form of agriculture. Farmers surrounding the 1,000 ha core of the irrigation scheme have started to connect their fields through their own efforts to the core infrastructure of the irrigation scheme (IRRIGATION SCHEME MANAGERS ITETE I-46 2019). Practices of connecting one's land to the irrigation scheme shows the utility of the irrigation infrastructure and the willingness of rural residents to become part of it. It is a form of future-making and shows the agency to counter-act social exclusion. STAFF ACT I-17 (2019) claims,

"We have a huge potential in irrigation and fishery areas, but we haven't tapped it. The big problem as to why we haven't tapped the potential of irrigation is that irrigation in Tanzania perspectives, it is taken as a public good - infrastructures for irrigation. Very few private sector can go and invest directly in building irrigation infrastructure, in the dams. That in Tanzania perspective is government responsibilities [...] but we don't have huge public investment in agriculture. If you look at the Maputo and Malabo Declarations, the African leaders agreed that, they will allocate at least 10 % of the (states') budget to go to agriculture development and one of the key area was in irrigation, because it's an area that needs huge amount of money. But we are not allocating that money. If you look at the agricultural policy of 2013, it indicates the willingness of the government to do that, but in an actual sense, they are not doing it, because of other priorities. Like now, we are building the railways, electricity, aviation, and the like, so you can find that agriculture suffers a lot, due to that fact that a lot of money is taken to those areas. But otherwise we were supposed to put at least 10 % [...] of the government's budget."

Tanzania's 'huge potential in irrigation' has not been tapped. One of the reasons given are the popular perception that land, water, and irrigation infrastructure should be owned communally, as a public good. This is why 'very few private sector can go and invest directly in building irrigation infrastructure, in the dams'. However, if the central government is not allocating enough public investments into irrigation infrastructure, this potential cannot be tapped. Although the 'Maputo and Malabo Declarations' were signed by Tanzania, 'we are not allocating this money'. While under Kikwete, there was 'willingness of the government', but other priorities, under Magufuli 'we are building the railways, electricity, aviation, and the like'. The consequence of the policy focus on infrastructure and industrialisation means that 'agriculture suffers a lot'.

While large water channels in Itete were financed by the central government, the small channels which lead the water from the big channels to the individual fields, were financed by the land owners (IRRIGATION SCHEME MANAGERS ITETE I-46 2019). For management

purposes, the irrigation scheme in Itete formed an irrigation group of 420 members (100 of which are women). To be a member of the irrigation group, it is a requirement to own land within the core of the irrigation scheme and to pay 50,000 TShs per year (IRRIGATION SCHEME MANAGERS ITETE I-46 2019). The benefits of being part of the irrigation scheme group are management position of inlets, better accessibility of loans and prioritisation of trainings given by NGOs and development agencies. Members of the irrigation group perceive the irrigation scheme as a private company which can bring high profits, if managed well (IRRIGATION SCHEME MANAGERS ITETE I-46 2019). The VILLAGE OFFICIAL NJAGE I-31 (2019) stresses,

"There are many benefits. Being a member of the irrigation group, you are entitled of getting opportunities, one of them being education. We are educated from time to time as farmers on proper farming methods, which is done by the FAO and also from the AWF. Being a member makes it easier to access such knowledge. [...] Being a member of the irrigation group also gives a member an opportunity of being recognised by the irrigation commission of Tanzania. [...] Being a member makes it easy to get information on whatever is going on, like if there are changes or updates from the irrigation commission. [...] Through the irrigation group, we can easily access irrigation tools such as planters, irrigation tools and devices for measuring moisture of the land. [...] Now this village office is also the secretary of the irrigation group."

One of the benefits local populations are getting is the improvement of education and knowledge transfer, in terms of farming methods by NGOs, FAO and the AWF. Furthermore, the recognition through the irrigation commission is referred to as an advantage, as well as the accessibility of 'irrigation tools' like planters and devices for measuring the moisture of the land.

ISAGER et al. (2016) and SULLE (2017b) show that the access to local leadership positions are often exclusive for local middle classes and elites who own land, businesses or have access to capital. Members who vie for relevant positions in irrigation scheme in Itete must own a minimum size of land within the irrigation scheme. The interests of successful businesspeople are over-represented. One of our interviewees was appointed the inlet-manager of inlet number 11 and number 12 (of 30 inlets). As an inlet manager, he has the authority to decide when, for how long and how much water is coming through the inlets. Although strict regulations were set up by the irrigation group, the inlet manager admits that some farmers have changed the flow of the water to their fields illegally. He said, 'some inexperienced farmers might think that the more water is coming to their field, the better for their harvest'. Yet again, that is not necessarily the case. Especially absentee landlords and weekend farmers do not harvest much per acre, because irrigation rice fields need close attention (WHITE 2014).

In harvesting times, up to 5,000 people are working within the core of the Itete irrigation scheme as daily or seasonal workers. Some are paid to live within the irrigation scheme to permanently oversee the fields (IRRIGATION SCHEME MANAGERS ITETE I-46 2019). The two interviewed farmers belong to the upper middle class in Itete. Both own several plots within the scheme, which amounts to 15 hectares and 25 hectares respectively. They intend to acquire more land in the irrigation scheme in future. Currently, one of them is growing organic rice for a premium. Whereas the market price for a bag of non-organic rice is 70.000 TShs $(28 \, \epsilon)$, a bag of organic rice would give him $100,000 \, \text{TShs} \, (38 \, \epsilon)$.

Large-scale irrigation schemes have led to social differentiation. Well-off members from rural middle classes can accumulate land use rights and control the flow of water, are informed earlier and better about their land rights and about policy initiatives, tend to know ward and district officials and have networks to NGOs. The quantity of urban capital invested in the irrigation schemes in Itete and Njage is too little to conclude that 'accumulation from above' is happening in a substantial way (VAN DER PLOEG 2018). Instead, 'accumulation by the middle' is a more accurate analysis for the Kilombero Valley. Afterall, a lot of site-specific knowledge about local institutions, land availability, soil fertility and water variability are needed to judge, whether a land investment is worthwhile.

Recently, in Kilombero Valley a new class of farmers has begun to emerge. They managed to move from being smallholder farmers (e.g., 1 - 2 hectares), to become medium holder farmers (e.g., 2 - 20 hectares). In national discourse this class of medium holder farmers is often called 'missing middle' between subsistence peasants on the one hand, and commercial large-scale farming on the other hand (STAFF ASPIRES I-16 2019). The successful medium holder farmer is a utopian sociological figure in Tanzanian agrarian politics, presented as a hard-working 'traditional' rural farmer and as a modern successful businessperson. Mediumholder farmers unite the best from a traditional agrarian Tanzania and the modern market economy. However, the emergence of an agrarian middle class in the Kilombero Valley is based on the de-peasantisation and proletarianisation of fellow villagers. While few villagers are able to solidify their class position by accumulating land, others are in the struggle on whether and under which conditions, they should *hang in* and continue a village life, or *step out* by migrating to urban centres. VILLAGE OFFICIAL NJAGE I-31 (2019) comments,

"Land conflicts are no longer here. Even if they exist, they are very few or none, simply because all the plots have been marked and everyone is given a title deed for the village, 'hati ya kumiliki

ya kimila' the customary right for owning land. [...] As per land conflicts they do not exist. If this is the scheme [drawing a sketch], we have farmers who are on this side, and others on this side. So those farmers who are nearby the scheme and those who are inside the scheme there are no conflicts on land, but there are conflicts based on ideologies, those who belong and those who don't belong have different varying ideologies. Those who are not within the scheme, would like to join the scheme, but they don't have the creditability's of joining the group, for example having a farm or a plot inside the scheme is one of the requirements and also you have to register yourself before you join the group, that is you have to pay an amount of 40,000 TShs so that you can get permission to become part of the group. But you can also have these 40,000 TShs but if you do not have a plot inside the scheme, it does not work. So that means, it is still limited."

First, he comments that there are no land conflicts in Njage. But then, he admits that conflicts are based on 'varying ideologies' between landowners and 'those who are not within the scheme, would like to join the scheme' but that land 'is still limited'. Many villagers 'don't have the creditability's of joining the group' and cannot afford to pay 40,000 TShs per year either. He concludes that 'those who belong and those who don't belong have different varying ideologies'. The processes going on in villages with large-scale irrigation schemes can be summarised by *differentiation by irrigation (VAN DER PLOEG 2018)*. Irrigation schemes are an accelerator of agrarian change leading to new aspirations and competition for limited irrigated land (HÖLLERMANN et al. 2021). Tensions arises, as membership in or connection to irrigation schemes is likely to decide about who can *hang-in*, *step-up* or must *step-out* the agrarian sector.

The policy discourse on the utility of large-scale irrigation schemes across rural Tanzania was ongoing for many decades. COULSON I-03 (2019) comments,

"The thing which I find extraordinary is that Kilimo Kwanza, which was another flagship of Kikwete, was created outside the framework of the ministry of agriculture. [...] It was imposed on the ministry and the ministry of agriculture never accepted Kilimo Kwanza. Their bible was always the ASDP, so they had worked for twenty or so years on versions of the ASDP. And there were good things and bad things in the ASDP. There were some good policies, defendable policies, but there were also some pretty crazy things, like 75 per cent of the money going on large-scale irrigation projects most of which were a disaster. So the strategies in the ASDP were defendable, but the expenditure was not. Irrigation stood out as a technocratic way, a way in which people who have interest in big spending and centrally directed projects could built big engineering works and all the contracts that go with it."

Under the ASDP the 'bible' of the MoA for which they had worked for many decades, '75 per cent of the money going on large-scale irrigation projects'. The large amount invested in irrigation schemes is judged 'pretty crazy', because most of these irrigation schemes 'were a disaster'. In the view of COULSON I-03 (2019), 'irrigation stood out as a technocratic way, a way in which people who have interest in big spending and centrally directed projects could built big engineering works and all the contracts that go with it'. To COULSON I-03 (2019) problems in irrigation schemes are the technocratic ways in which they are

planned, socio-technical and spatial fixes envisioned in far distant places (JESSOP 2004). According to DISTRICT OFFICER FOR AGRICULTURE I-45 (2019),

"Some other feasibility studies have been done already and the government has agreed to put on another irrigation scheme. We are just waiting for funds to be released. There's also a master plan [...] to put an irrigation scheme in Usangule village and Kilosa kwa Mpepo village."

Additional irrigation schemes in the Kilombero Valley are under discussion. After the feasibility studies were made, 'we are just waiting for funds to be released'. The 'master plan' of the central government intends to build further irrigation schemes in Usangule and Kilosa kwa Mpepo village. International development partners like the FAO, WB and USAID have financed many dozen irrigation schemes across Tanzania (STAFF WB I-18 2019). For the Kilombero Valley, USAID proposed additional irrigation schemes in Udagaji, Mgugwe, Kisegese and Mpanga-Ngalimila of a total of 41,375 ha (URT 2013b). Despite these intended sponsorships, irrigation schemes may have "significant negative hydrological and ecological effects through consumptive use of water and contamination by agrochemicals and wastes" (URT 2013b, vi). URT (2013b, xi) continues

"Because of the risks of significant irreversible negative impacts to critical habitats, ecosystem services and downstream users as already demonstrated on the Great Ruaha River, large-scale irrigation developments in the Kilombero Valley should be temporarily postponed until there is (i) a better understanding of water availability, (ii) a full understanding of the water requirements of the floodplain ecosystem and downstream users, and (iii) an effective sub-basin water management organisation."

After the report was released, USAID discontinued their plans for the above-mentioned irrigation schemes. It is suggested that only after 'a better understanding of water availability', 'a full understanding of the water requirements of the floodplain ecosystem and downstream users', and 'an effective sub-basin water management organisation' further irrigation schemes should be pursued. Although historically, farmers in the Kilombero Valley were faced with irregular weather patterns, due to climatic changes rainfalls and therefore harvests have become more uncertain (NÄSCHEN et al. 2019). VILLAGE OFFICIAL NJAGE I-31 (2019) reflects

"One of the challenges for people in this village is low income, which is contributed by climatic changes. This time [2019], the rains did not come in the expected season, and as a result, even those who harvested their rice could not dry it properly in the sun. So when it rains, the rice rots, so they cannot get anything to eat and nothing to sell."

The village leader sees a direct connection between climatic changes, harvests, and level of poverty in his village: 'when it rains, the rice rots, so they cannot get anything to eat and nothing to sell'.

To sum up, irrigation schemes as a model for rural development receive wide support. Rural residents, staff from NGOs, policy makers, banks and government officials positively mention large-scale irrigation schemes as a solution for poverty alleviation, food security, responses to demographic and climatic changes. Large-scale irrigation schemes are sites of state investments, private sector interest, NGO projects, urban capital, land surveys, new infrastructures, new technologies and rural self-organisation (COUSINS 2013). On the one hand, irrigation schemes qualify as a socio-technical imaginary (JASANOFF 2015b) because they are a 'collectively-held' vision of the future, on the other hand, they qualify as hegemonic. Especially the ways in which irrigation schemes were introduced and funded imply hegemony effects. I conclude with agreeing to the remark by COULSON I-03 (2019) that irrigation schemes should not be built "without having a social organisation that's created in advance so that the farmers know who is going to be using the land".

5.2.4 Nucleus Outgrower Scheme - A win-win model?

FELGENHAUER a. WOLTER (2009) state "contract farming appears to be the main road towards making African agriculture more market-oriented". The SAGCOT (2011b) argues the outgrower model is a "proven model for integrating large-scale and small-holder farmers with mutual benefits". Thus, what the nucleus outgrower model is allegedly able to do is to bring advantages from different scales together and provide a win-win solution for all (SULLE 2021). The framing of outgrower models as win-win was observed through the development projects in Tanzania (ENGSTRÖM a. HAJDU 2018). LECTURER UDSM I-09 (2019) explains the mixed position of the Magufuli government on the scale debate:

"Sometimes you hear government, including the president, talking about commercial farming and supporting, but in a very mixed way [...] Policy-wise, there is that mix and the tension between supporting smallholding and supporting large-scale farmers. What is of the future? Who is the key player in agriculture in the future? For the past 20 or so years, the view has been these [smallholder farmers] are outdated, the way is towards commercial farming".

The Magufuli administration sought to support smallholder farmers and large-scale farms. 'Policy-wise' this is a tension, as the promotion of one, may be disadvantageous to the other. According to Lecturer UDSM I-09 (2019) for the past twenty years the view of the central governments was that smallholder farmers are an outdated version of agrarian production and that the future of agriculture is commercial farming. Supporters of large-scale commercial farming argue that smallholder farmers are not able to produce for foreign markets, because they produce neither enough, nor the quality for international markets.

Tanzanian farmers are supposed to standardise their produce. Hence, under Kikwete and Magufuli the nucleus outgrower model (spokes and hub model) gained support.

In this production model, many hundred (up to many thousand) smallholder farmers enter a contract with a company (domestic, foreign, or PPP). Through these contract arrangements, smallholder farmers become 'outgrowers', because they are outgrowing what the company demands them to grow. Depending on the content of the contract, the production of outgrowers may imply the use of specific seeds, fertilisers, machinery, et cetera. In such a production model, the company holds a nucleus on which they grow the same crop as the outgrowers. The nucleus is something like a model farm on which training may happen. The nucleus may entail warehouses, management offices, road infrastructure, et cetera. LECTURER UDSM I-09 (2019) critically remarks,

"If you take this this model, what does it mean [...] to the peasants? [...] You have your land, you are not displaced, you have your labour [...] In this case you don't evict anybody, they stay, but you make them work for you [...] so they stay on their land, and they use their own labour and you don't hire them, you don't pay them anything [...] they take all the risks."

Outgrowers are continuing to work on their land without wages or any other payments. No eviction is taking place, and therefore no direct land grabbing. The land ownership remains the same. Since outgrowers can outcompete the nucleus on harvests per acre (due to their possibilities for self-exploitation), they are an attractive production partner for companies. The critical point raised by LECTURER UDSM I-09 (2019) is that farmers are taking all the risks for the production, bad harvests and crop failure. Often, companies are the only buyer and can use their powerful market position to keep the prices low. Furthermore, many outgrowers are pushed into taking loans to buy certain seeds, fertilisers, et cetera to comply with the demands of the company. As a result, peasants get into dept. This leads to growing dependencies of outgrowers to the company. Often, rural residents are not aware about their land rights and what is in the contracts (STAFF HAKIARDHI I-50 2019; SULLE 2017b). ACTIONAID (2015) disqualifies both contract farming and the nucleus-outgrower models. To them these models are not meeting the minimum requirements for fulfilling the self-proclaimed goal of fighting hunger and poverty. ACTIONAID (2015) argue that the potential problems of this model outweighs their potential benefits. Contract Farming, so ACTIONAID (2015), often exclude women, landless and marginal groups. In addition, when free prior and informed consent is missing, contract arrangements may qualify as disguised land grabs. At the core of the contract is an unequal power relation between rural residents, investors, and the Tanzanian state.

Mngeta is known Tanzania-wide for having a large-scale irrigated farm, called *Mngeta farm*. In recent years, Mngeta farm was used as a nucleus-outgrower scheme. It was praised for its successes and criticised for its land grabbing. Dispossession of villagers, insufficient resettlements, deforestation, spraying of chemicals, new agrarian practices, new crops, new jobs, new markets, new technology, new infrastructures, national visions, and international capital were all part of the Mngeta-model. Supported by the central government under Kikwete, *Mngeta* was supposed to be replicated elsewhere. Hence, its' vision, ideas and practices are relevant to reflect in the following.

Mngeta farm was constituted in the mid-1980s. It comprises about 5,800 ha. Mostly rice and maize were grown for export. The farm is adjacent the densely forested Udzungwa mountains in the northwest, and the Kilombero swamp in south and east. The latter has become a UNESCO Ramsar Site in 2002 and gained a special environmental protection status. The water quality and availability in Mngeta is high, the potentiality for irrigated agriculture given. In previous decades, around 185 kilometres of road and 290 kilometres drainage ditches were constructed on the Mngeta farm. Additionally, Mngeta farm has a connection to the Tanzania-Zambia Railway (TAZARA), a private airstrip and a connection to the rural road that connects to Ifakara town. Mngeta farm was constituted on village land of Mngeta, Mkangawalo and Lukolongo (now all part of the newly constituted 'Mngeta division'). In the 1980s, the three villages agreed to give parts of their village land to constitute Mngeta farm. The land category changed from village land to general land to enable the lease to investors. As of 2022, Mngeta division has around 25,000 - 30,000 residents with over 95 % of the residents engaging in small-scale agriculture, fishery or (agro)pastoralism (KANGALAWE a. LIWENGA 2005; GEBREKIDAN et al. 2020). Due to inmigration along the TAZARA and the regional road, including seasonal workers, Mngeta division has a high population growth rate. Conversion of marginal wetland and forested land into farmland was observed (OLWIG et al. 2015). To better capture the agrarian change in Mngeta, Bernstein's Agrarian Questions are posed.

Who owns what? The first investor of Mngeta farm was the North Korean Tanzania cooperation (KOTACO). In 1986, a 5,800 ha farm was agreed between former president Julius Nyerere and Kim II Sung (OAKLAND INSTITUTE 2015). Subsequently, Mngeta farm was surveyed, cleared and about 185 kilometres of road and 290 kilometres of drainage ditches built (OAKLAND INSTITUTE 2015). After rice production had started on about 2,500 ha and \$ 25 million were invested in the farm, in 1993 the farm was liquidated (OAKLAND INSTITUTE 2015; GRECO 2015). The equipment remained with the Rufiji Basin Development

Authority (RUBADA), a government agency founded in 1975 with the aim to promote investments in the Rufiji Basin.

A second investor for Mngeta farm was found in 1999, when it was contracted to Kilombero Holding Company (KIHOCO). Yet again, the latter was never able to engage in production on more than 400 hectares (OAKLAND INSTITUTE 2015). After it failed to pay rent for five consecutive years, the company was forced to leave in 2007.

A third investor, Kilombero Plantation Limited (KPL), was found in 2008. The PPP between Agrica Tanzania Limited (ATL) and RUBADA, acquired Mngeta farm for USD 2.5 million in September 2008 (OAKLAND INSTITUTE 2015; BERGIUS et al. 2017). ATL is wholly owned by UK-based Agrica Limited with the aim to "develop sustainable agriculture in Africa" (OAKLAND INSTITUTE 2015). KPL defaults on loans in 2018 and was up for sale since (OAKLAND INSTITUTE 2019). High-ranking politicians tried to find new investors for the KPL farm (MNGETA VILLAGE LEADERS I-13 2019; THE CITIZEN 2019); CEO SAGCOT I-15 2019).

In late 2021, the Tanzanian treasury bought Mngeta farm back after paying bank loans that KPL was unable to pay (THE GUARDIAN 2021b). Mngeta farm was given to the National Service Corporation Sole (SUMAJKT), the economic wing of the Tanzania national service, Tanzania's military, with the treasury's demand that "communities surrounding the farm should be first beneficiaries of the goods and services generated here" (THE GUARDIAN 2021c).

Who does what? Villagers expanded their land use on unused Mngeta farm. Between the failure of the North Korean Tanzania cooperation in the early 1990s and SUMAJKT taking over in 2021, three surrounding villages -Mngeta, Mkangawalo and Lukolongo- had, in different phases, expanded their land use on Mngeta farm through settlements, grazing and cultivation (OAKLAND INSTITUTE 2015). In the years without investors, rural residents perceived the former village land as idle and unused. The coming of new investors every few years reopened the land questions. Rural residents who claim back village land, or who transform protected land into arable land are called *invaders*, *encroachers* and *squatters* (CHACHAGE 2010; GRECO 2017; THE GUARDIAN 2016d; THE GUARDIAN 2021a). After a survey in 2009 found a complex land use situation in Mngeta, a resettlement action plan was suggested. Many thousand rural residents were resettled and compensation for the loss of land and housing promised. However, OAKLAND INSTITUTE (2015) found major irregularities. Rural residents claim the terms of the compensation were dictated and many were left with less (fertile) land, than before.

The Kikwete government identified Mngeta Farm as a role model. The prime minister at the time, Mizengo Pinda, visited Mngeta Farm and identified it as suitable for Kilimo Kwanza policies, which were controversially debated (MBUNDA 2011). Mngeta Farm became part of the SAGCOT initiative and was praised as one of their model farms (OAKLAND INSTITUTE 2015). The organisation model of the farm under KPL was a nucleus outgrower model with contract farming arrangements. Quantities, qualities, crops, fertilizers, and market prices are usually part of these contracts (SULLE 2020; SNYDER et al. 2020). KPL convinced several thousand villagers to do agriculture for them either on Mngeta farm by renting out land for farmer groups, or on farm in the villages. Thus, although most villagers remained on their land, the introduction of contract farming led to new production relations, including new seeds, methods, and inputs. The OAKLAND INSTITUTE (2019) criticises,

"However, local farmers who exclusively planted rice for KPL were required to purchase chemical fertilizers manufactured by the Norwegian fertilizer company Yara. They also had to sell the rice at a price determined by the company. KPL basically peddled chemical inputs to smallholders, leaving many in debt".

Many farmers were put in debt because they could not pay back the loans and fulfil the contract conditions. Hence, some rural residents stopped cooperating with KPL and perceived them as thieves (MNGETA VILLAGE LEADERS I-13 2019). While many villagers were not able to pay back their loans, other villagers liked the stable market and the price for the rice, that was higher than that of local middlemen (MNGETA VILLAGE LEADERS I-13 2019). KPL's production model was based on a set of practices called Sustainable Rice Intensification (SRI). A number of reports have sought to analysed to what extent the SRIapproach has led to higher yields in Mngeta and neighbouring divisions (DEVOTHA B. MOSHA et al. 2021; ISINIKA et al. 2020; ISINIKA et al. 2021; JECKONIAH et al. 2020; MOSHA, DEVOTHA, B. et al. 2021). A key criticism was that the SRI was not taught in a holistic way and has never been fully applied by farmers. JOHANSSON a. ISGREN (2017) suggest that KPL's restriction to use their infrastructure caused deforestation in the Udzungwa mountains. Many villagers were restricted to reach areas that are relevant for collecting firewood, gathering roots and other means of subsistence. Furthermore, instead of employing rural residents, KPL employed Tanzanian's from Tanga region. Since these 'outsiders' were employed in higher position, rural residents felt excluded and devalued by KPL (MNGETA VILLAGE LEADERS I-13 2019). Additionally, KPL used an airplane to spray pesticides which caused health concerns and fear among rural residents (MNGETA VILLAGE LEADERS I-13 2019). After raising their concerns about the airplane, KPL stopped using it.

Who gets what? KPL's production model was based on sustainable rice intensification (SRI) (FUTURE AGRICULTURES 2019). In workshops smallholder farmers learned new methods on the distance between plants and the weeding during the growth process. After farmers adapted new methods some were reported to outcompete KPL's nucleus farm on harvests per acre (OAKLAND INSTITUTE 2015). Nonetheless, OAKLAND INSTITUTE (2015) criticises the way in which local farmers were included in the KPL farm and argues that KPL dispossessed local communities of their land. It claims KPL's agrarian model was one-sided, externalising production risks to smallholder farmers, leading to insecure tenure arrangements, insufficient compensation, and negative ecological implications.

What do they do with it? After KPL's investment failed in late 2018, its staff left its premises. Middlemen quickly filled in the gaps of buying the rice harvest from smallholder farmers (MNGETA VILLAGE LEADERS I-13 2019). Yet, the land question re-emerged on who owns Mngeta farm, what will happen to the land, if no new investor is found and under which conditions can Mngeta's land be transferred back to the category of village land? The constitution of Mngeta farm on former village land happened in the 1980s. Dispossession and evictions of villagers has not happened within villages, but on Mngeta farm, when villagers used parts of Mngeta farm, when no investor was using it. The dispossession of villagers between 2008 and 2010 was legitimised by the central state to reinstall the previous order and to keep Mngeta farm investible. Between late 2018 and late 2021, it was not clear if, and if yes when, a new investor would take over Mngeta farm.

To sum up, the example of the Mngeta nucleus-outgrower model shows that site-specific histories are important when trying to understand the current social-ecological transformation and possible futures. KPL's nucleus outgrower model is no collectively held production model In Mngeta, as farmers could not pay back loans, could not reach markets and were left with contract that no longer apply. The fact that the Tanzanian military took over Mngeta farm shows, that despite the alleged successes of the Mngeta farm under KPL to be replicated elsewhere- no international investor was found. Since the Mngeta farm under KPL was the only large-scale farm that officially partnered with the SAGCOT initiative (and became their flagship project in SAGCOT's 'Kilombero Cluster'), the failure of KPL was also a failure of the SAGCOT (in the Kilombero Valley). After KPL left Mngeta farm, alternative futures to the KPL-model became imaginable. One alternative is presented in the next section.

5.2.5 Bloc Farms – A Chinese production model for Tanzania's rural future?

KINYONDO (2020) wonders, to what extent Tanzania was on the development path of China instead of 'the West'. He argues that similarities between China and Tanzania are their status as a developmental states with socialist rhetoric, nationalistic discourse on self-reliance, with a centrality of the party, the focus on large infrastructural projects as a backbone of the national economy, and the will to a 'fast-speed development' of more than five per cent per year (KINYONDO 2020). Like in China, a quick national development in Tanzania is presented as a trade-off with democratic human rights and suppression of oppositional voices for the greater good of national welfare. According to KINYONDO (2020) and JACOB a. PEDERSEN (2018), under Magufuli resource nationalism is the preferred development path. However, KINYONDO (2020, 21) draws the conclusion that Tanzania should find a 'model for its own developmental path' because it is hard to replicate the China Model. LECTURER UDSM I-09 (2019) explains how a Chinese agrarian production model could be applied in Tanzania:

"They are called bloc farms [...] each one will have an acre, or two. But in one bloc. There are individual small pieces, but in one bloc. So government provides services to these bloc farms, because it wants standard, it wants quality and it wants quantity. [...] It is easier to approach all these growers together, in a bloc. So, if you are on air, you will see one, or two hundred hectares of cotton farm. One farm, but that farm is different smallholders. [...] It looks large-scale, but it is individual blocs."

He explains that in a bloc farm every farming household would have 'an acre or two' and would produce a certain product, in his example cotton. The role of the central government in these bloc farms would be to ensure standards, quality, and quantity. The advantages of a bloc farm would be to 'approach all these growers together, in a bloc'. Taking the birdseye perspective in the air, 'you will see one, or two hundred hectares'. Although the bloc would seem to be one large-scale farm, in fact it is constituted by many hundred smallholder farmers. STAFF MVIWATA I-04 (2019) agree to the bloc farm model and suggest that farmers could join cooperatives to organise themselves. Yet, both could not explain further, how such a bloc farm could look like. A key disadvantage in the bloc farm model seems to be the strong role of the central state (like in China). Additionally, the cooperative model is unpopular in the Kilombero Valley (and in other parts of Tanzania). Thus, it is a hard task for supporters of that model to convince rural residents about a production model that involves a strong state combined with constituting cooperatives.

To sum up, different production models can be categorised depending on whether they are suggested by the actors of the hegemonic bloc, or by counter-hegemonic actors and

whether these models are collectively held, or whether they are not (Table 4). Whereas irrigation schemes are supported by a wide range of hegemonic actors, this production model in the Kilombero Valley is collectively held and aspired by a vast majority of farmers. This stands in stark contrast to the SAGCOT and the nucleus-outgrower model, which was suggested by hegemonic actors, but was never able to become collectively held and convincing to many rural residents. Whereas ideas of organic agriculture and agroecology are both counter-hegemonic ideas and in their core, values shared by a majority of farmers in the Kilombero Valley, ideas of bloc farms and cooperatives are suggested by counter-hegemonic actors but did no manage to become collectively-held.

Table 4: Empirical Examples for Socio-Technical Imaginaries (own table)

Socio-technical Imaginaries	Collectively Held	Not Collectively Held
Hegemonic	Irrigation Schemes	SAGCOT/ Nucleus- Outgrower Model
Counter Hegemonic	Organic Agriculture/ Agroecology	Bloc Farms/ Cooperatives

5.3 Farming or (Agro)Pastoralism?

"In future, every piece of land around here will be covered by agricultural practices." (KOKOA KAMILI MANAGERS I-28 2019)

"We have, for instance, special zones for crops like cotton, coffee, tobacco and sisal but nothing like that for livestock keeping. We have even special areas for zebras (national parks) but livestock keepers are hanging" (Julius Nyerere, 1981; quoted in PINGO FORUM 2013)

"There have been evictions in Kilombero [Valley] which now brought a lot of pastoralists to the Southern Regions. When you go to these regions, they never knew pastoralists, they never used to have one person with 500 cows [...] in the course of moving, many conflicts arise in-between. So you'll find many land conflicts, when you go around." (STAFF HAKIARDHI I-50 2019)

In a third juxtaposition of two conceptions of the Kilombero Valley, the question of access to and ownership of village land is discussed (SIKOR a. LUND 2009). In many ways, this third juxtaposition is connected to the first (see 5.1), as land-related conflicts between different user groups have led to the popular demand that parts of protected land could be converted to village land, to solve farmer-herder disputes (BENJAMINSEN et al. 2009; WALWA 2017; WALWA 2019; MASSAY 2017).

Before the 1980s, (agro)pastoralists did not live in the Kilombero Valley in a substantive way (MONSON 1991). Since then, an increasing number of (agro)pastoralists migrate into

the Kilombero Valley. Some migrated voluntarily to seek for a job, or for better economic chances, others can be considered internally displaced people who were evicted. Currently, about five per cent of the population in the Kilombero Valley are (agro)pastoralists (GEBREKIDAN et al. 2020). There are few signs that their ratio could raise to more than ten per cent. Nevertheless, among farmer the presence of (agro)pastoralists is contested. Many farmers claim that (agro)pastoralists have no historical right to settle in the Kilombero Valley and destroy the environment. For many residents, (agro)pastoralists are 'the other', whose mobile livelihood, agrarian practices, languages, and cultures are seen with suspicion or rejection. Many farmers want (agro)pastoralists to move to other districts or want the central state to intervene. For (agro)pastoralists, the options for a secure rural livelihood are migration, or assimilation. In the following, the examples of (agro)pastoralists (5.3.1) and smallholder farmers (5.3.2) from Mtimbira village are presented.

5.3.1 Transitional Brickmaking in Mtimbira Village

After Grace and I had informed the village leaders about our intended research in Mtimbira village in Malinyi District, we took a walk through the village. About one, or two kilometres from the main road, we saw how several individuals produce bricks from clay and water (Figure 24). Two brick producers we met were Peter, 27 years, and Robert, 33 years. Both are (agro)pastoralists from the ethnic group Sukuma. They were born and raised in Shinyanga Region, where many (agro)pastoralists live. Shinyanga is about 800 kilometres away from the Kilombero Valley. Peter has temporarily abandoned (agro)pastoralism to produce bricks - symbols of a sedentary livelihood. Peter and Robert said they would produce bricks until they have enough money to buy cattle to change back to (agro)pastoralism.

Peter has come to Mtimbira village in July 2018, Robert four years ago. Thus far, Peter's wife and five children have remained in Shinyanga. Whenever he can afford, he sends them money through a mobile money system called M-pesa. When Peter came to Mtimbira, he had asked the village land council for permission to start a brick business close to a local stream (Figure 24). The quality of the bricks, Peter says, are the same as in Shinyanga. One brick cost about 100 TShs, of which he can produce 400 a day. After one week, the bricks are dry enough to be burned in a self-made kiln, and then sold to buyers who collect them in trucks. Peter produces the bricks with plastic buckets (for water transport) and a wooden construction (for shaping the bricks) (Figure 24).



Figure 24: Brick production, Mtimbira village, Malinyi District (photos: RV)

Wealthy villagers, so Peter, improve the quality of their houses for the prestige of the household. After one year of work, Peter bought himself a small field (shamba) on which he grows food for his consumption. Peter moved to Mtimbira, because other Sukuma were already there. He had come to the Kilombero Valley, because he had heard from other Sukuma that work opportunities and land were available. Many Sukuma migrate in groups and along networks. While some remain within their (agro)pastoralist communities, others assimilate. Many Sukuma are not using Kiswahili on the daily basis, which is why Peter and Robert had difficulties to understand Grace who spoke Kiswahili to them.

Robert, 23 years old, has one wife and one child. He moved to Mtimbira village from Shinyanga four years ago. His wife and child had come to live with him in Mtimbira. However, after a few months, they went back to Shinyanga, because 'they did not like the place'. Currently, he is renting five acres of land for agriculture. He can sell surplus on local markets and occasionally employs wage labourers when the harvest is due. Although he would like to, Robert has not been able to buy cattle thus far. Like Peter, Robert does not have plans to shift back to Shinyanga any time soon. Thus far, he said, he has never experienced a personal conflict between the Mtimbira community and in-migrating

Sukuma. Robert and Peter agreed that virtually every day new Sukuma are coming to this village.

Peter and Robert can be considered assimilated. They cannot be easily identified as Sukuma (agro)pastoralist. Whereas Peter became a brick-producing peasant, Robert became a smallholder farmer who can employ others on his field. Categories of peasant, smallholder farmers, (agro)pastoralists have become fluid in Mtimbira and other villages. Besides brickmaking, charcoal production, bee keeping, fishing, wage labour and local transport businesses are available. Especially in-coming migrants are using their skills for livelihood activity that promise stable income. Although Peter and Robert wish to return to an (agro)pastoralist livelihood, it is not certain, if they ever will. Peter's migration to the Kilombero Valley, his permission-seeking procedure at the village offices and his brick business can be considered future-making practices. Peter's future lies somewhat in the past, as he wants to return to the livelihood of his ancestors.

To sum up, many in-migrating (agro)pastoralists are flexible to comply with a sedentary village life. Peter and Robert did not have any conflict in the previous years. It appears as if (agro)pastoralists, who have transitioned into being peasants, smallholder farmers, brick-makers or fishermen are less discriminated. The main threshold for integration into the Mtimbira village community seems to be the language as Kiswahili seems to be key for successful integration/ assimilation. This integration cannot always be considered voluntary as previous evictions, increasing levels of poverty, diseases, effects of climate change, overpopulation, overstocking, land degradation and number are responsible for migration and transition to other livelihoods. For many, assimilation into the peasant/farming economy is a short-term strategy for returning to (agro)pastoralism. Pure pastoralist communities would have more difficulties integrating into the Kilombero Valley, as their traditional livelihood does not involve farming (URT 2013b).

5.3.2 Smallholder Farmers in Mtimbira Village

Later the same day, Grace and I interviewed two women in Mtimbira village, both in their late 20s and early 30s. Together with their family, they live near the main road. They are called Sarah and Valentine here. Both were born and raised in Mtimbira. In recent years, they have lived through many aspects of the social ecological transformations: A growing village population, electrification, improvements on the rural road, more traffic coming through the village centre, more warehouses along the road, new technologies like milling machines and tractors. On two and a half acres, the family of Sarah and Valentine produce

maize and rice. Depending on the harvest, they sell their surplus on local markets. The price for rice, they say, is currently very low, and fluctuating. The export ban for rice under Magufuli affected them negatively. Under Kikwete, they say, they were able to buy more medicine, seeds, fertilizers, pesticides, and other inputs. These days, agrarian inputs have become more expensive and inaccessible. Yet, they claim that their land is still fertile enough to give them enough harvest without investing in many external inputs.

Furthermore, they have observed that in recent years, harvests were fluctuating more than usual. The year 2019 was the worst harvest of all times for them. In addition, their family had problems with wild rats in 2018, as well as with the weed Kinyanga. Moreover, they have observed increasing conflicts between Sukuma livestock keepers and local farmers. In future, they think, these conflicts are likely to intensify. Sukuma, they recollect, were coming to Mtimbira village for the past eight years. Since then, the cattle that entered their fields illegally and destroyed parts of the crops has increased. In their eyes, the compensation paid by (agro)pastoralists is not adequate. As women, they feel powerless against Sukuma and perceive them as a threat to their livelihood. According to Sarah and Valentine, large herds of cattle are making the soil in Mtimbira drier and less fertile. Although the soil in Mtimbira used to be good enough to be worked without fertilizer, these days' villagers have begun to use fertilizers. Moreover, Sukuma are said to cut down trees, which adds on drying the soil. Every time they see a Sukuma, when they are in their field, they start to run and hide. Sarah and Valentine have heard of a recent incident, in which Sukuma herders killed a farmer in a land conflict nearby. Although a possible solution to the land conflict would be better village land use planning, Sarah and Valentine have doubts as to whether the village, ward and district administration has the will and the capacity to implement these plans. For now, they wish that all Sukuma and their cattle should migrate to some other place, so that they can live in peace.

To sum up, possible futures of a small village like Mtimbira imply a conflict around land and rural livelihoods. The in-migration and coming of (agro)pastoralists in recent years has invoked different reactions from the established village communities. While some invite (agro)pastoralists as fellow Tanzanians to their village and support their contributions to the village life and village economy, others stress their fear about their behaviour, including their livelihood practices and cultures. It remains to be seen, to what extent a future version of the land use plan of Mtimbira village, will include areas for (agro)pastoralists.

5.4 Intensification or Agroecology?

The last of four conflicting conceptions of future Kilombero is the one between Kilombero Valley as a site for *Intensification*, or as a site for *Agroecology*. In the following, the antagonistic ideas of the SAGCOT initiative (5.4.1) and of the Tanzanian Organic Agricultural Movement (TOAM) (5.4.2) are contrasted. In addition, two competing production models in the cocoa value chain in Mbingu are discussed (5.4.3).

5.4.1 SAGCOT's obscure 'Kilombero Cluster'

At the turn of the century, the African Union founded the New Partnership for Africa's Development (NEPAD) and came up with the Comprehensive Africa Agriculture Development Programme (CAADP) (AFRICAN UNION 2003a; COOKSEY 2013). In the latter, the need for large investments into the agrarian sectors across the African continent is declared. In the years that followed, several African governments sought to attract international investors into their agrarian sectors. The global food price crisis in 2007/8, as well as the global financial crisis after 2009, meant new worldwide interest into African land and the possibilities of investing into agrarian sectors. An African land rush began (HALL et al. 2015; ANSEEUW et al. 2011). Since most African countries have different land laws and regulations on how to acquire land, one-stop-shops were found in which potential foreign investors could meet staff from different ministries to fast-track potential investments. In the late 1990s, the Tanzanian Investment Centre (TIC) was found with its' main office in Dar es Salaam. The Landmatrix enlists a total of 35 land deals for Tanzania since the year 2000 with the added land size of more than 100.000 hectares (LANDMATRIX 2022). The debate around land grabbing and dubious land-based investments in Africa and Tanzania peaked between 2010 and 2015 (MWAMI a. KAMATA 2011; HALL 2011; KAARHUS 2011; MWALONGO 2013; BORRAS JR a. FRANCO 2013; SULLE 2015). This peak coincided with president Kikwete's second term in office, his Kilimo Kwanza policy after 2009, the SAGCOT initiative after his re-election in October 2010, as well as the Big Results Now (BRN) initiative after 2013.

In June 2009, towards the end of his first term in office, president Kikwete presented the policies agenda Kilimo Kwanza (Agriculture First). The 'ten pillars' of Kilimo Kwanza resonated with the New Partnership for Africa's Development and the Comprehensive Africa Agriculture Development Programme (Figure 25). Among others, the ideas of Kilimo Kwanza include agricultural transformation, enhanced financing, institutional reorganization, improving land availability and mobilization of Tanzanians to support and participate in the implementation of Kilimo Kwanza. Especially the last point reveals that ideas presented in the Kilimo Kwanza had not been coming from demands of peasants and smallholder farmers. Kilimo Kwanza was developed by the Tanzania National Business Council (TNBC) (TNBC 2009). The underlying common sense of Kilimo Kwanza were, that deregulation, marketisation and foreign direct investments would be the best way to transform Tanzania's agrarian sector. A guiding principle was higher yields per acre through intensification.

- 1. Political will to push our agricultural transformation.
- 2. Enhanced financing for agriculture.
- 3. Institutional reorganization and management of agriculture.
- 4. Paradigm shift to strategic agricultural production.
- 5. Land availability for agriculture.
- 6. Incentives to stimulate investments in agriculture.
- 7. Industrialization for agricultural transformation.
- 8. Science, technology, and human resources to support agricultural transformation.
- 9. Infrastructure Development to support agricultural transformation.
- 10. Mobilization of Tanzanians to support and participate in the implementation of Kilimo Kwanza.

Figure 25: Ten Pillars of Kilimo Kwanza (TNBC 2009)

To lay the policy focus on the agrarian sector was not new for Tanzania. Nyerere had envisioned a restructured agrarian sector in Ujamaa villages and collective production schemes. The ways in which the Kikwete administration envisioned the agrarian sector between 2009 and 2015, was different. His policy envisioned an agrarian revolution (or green revolution) by attracting international capital, which would help to modernise the sector and to create hundred thousands of new jobs (Scoones a. Thompson 2011; AFDB 2012; BUSETH 2017; MIHAYO a. SWAI 2019; NHAMO a. NHAMO GODWELL 2014; NKONU 2019; UONGOZI INSTITUTE 2013). International development partners and the private sector supported this approach across Africa and were proactive in convincing heads of states of the same (STAFF AGRA I-48 2019; SHAMES ET AL. 2013; SAGCOT 2011a). A few years before intensification became the hegemonic common sense under Kikwete, it was a global narrative among powerful actors (AMINZADE et al. 2018). STAFF TOAM I-20 (2019) states:

"Kilimo Kwanza for some was taken by some for transforming agriculture, discussions were around green revolution. At the same time, there were even discussions that even smallholder farmers can be taken out of agricultural and be replaced by big farms; big farmers. But that had led to a great debate, which I think it didn't succeed. Though we have programmes like SAGCOT coming again with the same, like linking bigholder farmers with smallholder farmers, but whether that mechanism is sustainable, is there to stay for long, we are not very sure."

Kilimo Kwanza included ideas of modernisation and marketisation. These goals meant transforming peasants and smallholder farmers to commercial farmers and market participants. A multiple win for the private sector, the government and the people was envisioned. Furthermore, the debate was about scale. On the one hand, large-scale production schemes were envisioned to be modern, efficient, and higher yielding and became a cipher for development and the future. On the other hand, small-scale schemes became a cipher for underdevelopment, backwardness, and the past. Hence, the discussion on large-scale 'led to a great debate' and 'didn't succeed'. Both Kilimo Kwanza and SAGCOT sought to link 'bigholder farmers with smallholder farmers' through contract farming, and nucleus outgrower schemes (BRÜNTRUP et al. 2018; COULSON 2015; SMALLEY 2013; WEST a. HAUG 2017; WINEMAN et al. 2020). The suggestion to connect the two is partially a populist proposition as most rural residents are peasants or smallholder farmers. Thus, conceptions of the world and narratives which do not speak to potential benefits for them would hardly become hegemonic. Under Kikwete, it became common sense that all scales and all livelihoods can equally benefit from a flourishing national economy in which the cake, being distributed, is getting bigger.

In May 2010, at the World Economic Forum on Africa in Dar es Salaam, President Kikwete presented the SAGCOT as a way to translate Kilimo Kwanza into action. URT (2013b, i-ii) summarises SAGCOT:

"The SAGCOT Programme is a public-private partnership intended to improve the incomes, employment opportunities and food security of smallholder farmers in southern Tanzania. This will be done by linking them to internationally competitive supply chains and accelerating commercial agricultural development, in particular by using foreign direct investment attracted by the removal of policy and infrastructural constraints to competitiveness and by facilitated access to land. SAGCOT lies along an existing road, rail and power corridor running from Dar es Salaam west through Iringa to Mbeya and beyond. Initially investments will be focused on six areas with high potential for quick agricultural development ('clusters'), including the Kilombero Valley. Over the next 20 years the initiative aims to bring 350,000 ha of land into commercial production, increase annual farming revenues by US\$1.2 billion, and lift some 450,000 farming households out of poverty."

Over a period of 20 years, several hundred thousand hectares were supposed to be transformed into commercial production. By doing so, the SAGCOT aimed to lift several hundred thousand farming households out of poverty. SAGCOT defined six clusters in which their activities were supposed to take place (Figure 26).

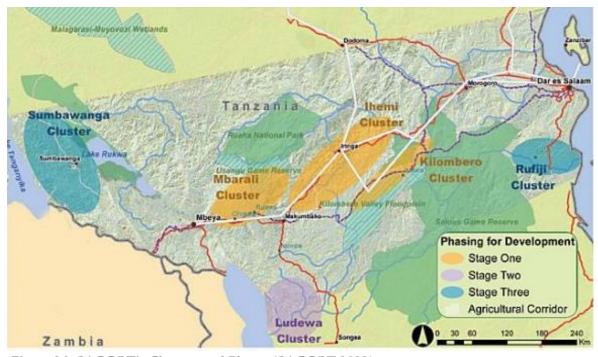


Figure 26: SAGCOT's Clusters and Phases (SAGCOT 2022)

SAGCOT initiative covered a *corridor* between Dar es Salaam in the east and Zambia in the west, along the mayor road to Zambia and the TAZARA. It targeted around a third of the Tanzanian mainland and can be regarded a *megaproject* as it is one of the largest visions about Tanzania's agrarian future since the Ujamaa ideas and (enforced) Villagisation in the 1960s and 1970s.

The SAGCOT united three central neoliberal ideas. First, the structure of public-private partnership (PPP) in which the state and the government form a coalition with private sector actors. Under the Kikwete presidency, this was the historic hegemonic bloc. Second, the attraction of foreign direct investments to Tanzania became a central demand. Third, to remove 'policy and infrastructural constraints to competitiveness', was intended to make the 'access to land' easier. Given, that peasants and smallholder farmers had not been involved in the formulation of Kilimo Kwanza and SAGCOT meant that they were largely uninformed about them. KAARHUS (2011) was among the first to wonder if 'Agricultural growth corridors equals land-grabbing?'.

The SAGCOT became more concrete in an *investment blueprint* (SAGCOT 2011b), an *investment greenprint* (MILDER et al. 2012) and in a number of affirmative press releases, media reports, government reports and consultation publications (JENKINS 2012). It was to be implemented in three stages. The first stage includes Mbarali cluster, Ihemi cluster and Kilombero cluster, the second stage Ludewa cluster and the third stage Sumbawanga cluster and Rufiji cluster. The initial SAGCOT maps resembled sketches and did not reveal which regions, district and wards would be included. On a second glance, the proximity of Kilombero cluster to the protected Kilombero Valley Floodplain (the KVRS) and the Selous Game Reserve becomes apparent. The discussions between the viability of large-scale intensive agriculture, or small-scale environmentally friendly agroecology can be seen on the map.

In November 2010, Kikwete was re-elected. In January 2011, the SAGCOT was launched, and the executive branch of SAGCOT centre limited institutionalised. The SAGCOT was proposed, when other large-scale agricultural development corridors across the African continent were active (MÜLLER-MAHN et al. 2019; SMALLEY 2017). SAGCOT documents had striking similarities to the Beira corridor in Mozambique, which suggested that the Beira corridor had functioned as a blueprint. Since the early 2000s, development corridors across Africa functioned as dreamscapes of modernity in which a specific set of actors envision and implement the ways in which they foresee the future (MÜLLER-MAHN 2020; ZAJONTZ 2022). The SAGCOT was a combination of three ideological fragments. First, the US-model of agrarian production (e.g., large-scale mono-cropping), second, the green revolution of Asian countries in the middle of the 20th century (e.g., in India) and third, development corridors like in neighbouring countries (e.g., Kenya and Mozambique).

SAGCOT's intention was to bring about a green revolution to Tanzania. This included vertical integration in global value chains, foreign direct investments, new domestic markets, more agrarian inputs, closing the yield gap, unlock dormant agrarian potential, link new value chains through new infrastructures from the hinterland to the harbours, create ten-thousands of jobs and lift rural residents out of poverty (OUMA et al. 2020; PISSARSKOI et al. 2021; SULLE 2020; HARTMANN et al. 2021). SAGCOT's terminology became agriculture green growth and inclusive green growth (AWF 2019; AWF UNDATEDb; AWF UNDATEDa). A terminology used by the Global Green Growth Institute (GGGI) (STAFF GGGI 2019), the Organisation for Economic Co-operation and Development (OECD) (OECD 2019), and the WB (WORLD BANK 2012). Critical voices debated to what extent green

growth is possible (HICKEL a. KALLIS 2020; MIHAYO a. SWAI 2019) and what this would imply (DALE et al. 2016).

Within a few years, the SAGCOT proceeded from envisioning to planning without involvement of the Tanzanian parliament or broader publics. Without information and consultation campaigns, the SAGCOT had a democratic deficit which is why it can be regarded a post-political (DOUCETTE 2020; MOUFFE 2013). Due to growing domestic and international critiques and SAGCOT's plans in its 'Kilombero cluster', the government launched a report that looked at social and environmental impacts of SAGCOT's intended activities in the Kilombero Valley. URT (2013b) cautions further:

"the SAGCOT Programme carries potentially significant risks unless it can be implemented without the documented negative social and environmental consequences that have accompanied foreign direct investment in land seen elsewhere in Africa." (URT 2013b, iii)

"SAGCOT [...] could result in a lose-lose situation rather than win-win." (URT 2013b, 39)

"the possibility of negative public perception of government policy and development partners is considered high due to the potential for significant negative environmental and social impacts arising from some SAGCOT Programme activities." (URT 2013b, 225)

The report cautions that SAGCOT could be a 'lose-lose situation'. Unless implemented with care, the SAGCOT initiative could lead to similar results, like other 'foreign direct investments in land seen elsewhere in Africa'. This comment reflected the land grabbing literature between the years 2010 and 2015. Potential significant risks about SAGCOT in the Kilombero Valley meant that quick successes by SAGCOT within the Kikwete presidency (until October 2015) became unlikely. URT (2013b, viii) adds,

"Kilombero Valley: high risk from accelerated agribusiness investment due to the very high biodiversity values at risk, the presence of vulnerable groups and indigenous people, the absence of regional land use planning and lack of awareness/ recognition of village land use plans (and the associated risk of social conflict arising from this), the weakness of government institutions and the shortage of accurate data, especially on hydrology. The highest concerns relate to impact of SAGCOT Programme investments on natural habitats and pest management. Risks of involuntary displacement may be mitigated to a great extent if the ongoing village land use planning (VLUP) programme is completed successfully, with due regard to transparency, participatory processes and informed choice."

The reasons why the SAGCOT would be difficult to implement in the Kilombero Valley range from 'high biodiversity values', 'vulnerable groups', 'absence of regional land use planning', 'weakness of government institutions', as well as 'shortage of accurate data'. Additionally, the 'risks of involuntary displacement' is mentioned. Taken together, the report cautions about simplistic understandings and assumptions about the Kilombero

Valley, first and foremost about the availability and accessibility of land. Two keys to future government intervention in the Kilombero Valley would be more and better data, as well as better land use planning on the district, ward, and village level. This is why report recommended a *land survey* and an associated *land bank*.

The SAGCOT responded to the critique by founding feeder groups (e.g., for environment and for social aspects). In those feeder groups, Tanzanian NGOs could raise their concerns about the SAGCOT. The chair of SAGCOT's environmental feeder group, STAFF WWF I-10 (2019), says:

"As part of WWF, I am chairing the environmental feeder group which is advising SAGCOT on how they can develop the SAGCOT initiative. What we talk to them most of the time is yes, we like development, we like food, because we need to eat, but we should not do the agricultural development at the expense of the environment. We need to strike a balance. For instance, the Kilombero. Most of the food production is downstream [...] if you want to make sure we have water for irrigation, but still have enough water for environmental flows, we need to take a holistic approach and manage the upper catchment as well. That is not an approach they are taking [...] I always tell SAGCOT centre limited your initiatives are not sustainable, if you are not taking a holistic approach. I was brave enough to also speak top SAGCOT funders [...] DFID were open enough and said: 'to be honest, we didn't know about that, so we are going to reconsider our investment'. Also, the Norwegians, they said the same thing. So we are not really pushing back, we are part of the process, trying to influence decisions in areas which probably can help, but we cannot stand and collect signatures to say: 'stop this process'."

STAFF WWF I-10 (2019) sees conflicting objectives in the Kilombero Valley between agricultural development on the one hand, and environmental protection on the other hand. Although he agrees on the overall goal 'we like development, we like food, because we need to eat', he does not agree on how these goals can be reached by SAGCOT. By demanding that 'we should not do the agricultural development at the expense of the environment', he implies that SAGCOT has not sufficiently included environmental concerns into their initiative. He demands SAGCOT to take a holistic approach to 'manage the upper catchment as well'. Since this is not the perspective of SAGCOT, Kalonga approached funders to report on potential environmental consequences of SAGCOT's activities in the Kilombero Valley. The fact that 'DFID' and 'the Norwegians' were allegedly surprised about his information and said they would reconsider their investment, shows the agency of individual experts. STAFF CARE I-49 (2019), the chair of SAGCOT's social feeder group, argues:

"For example, in Ihemi cluster. If you can show me [...] five village members whose life has changed because of SAGCOT interventions and its model, I tell them, I'll become their spokesperson, if you can show me real changes, meaningful changes [...] I haven't seen is the feel good -oh, we have transformed peoples life's- [...] when you say before people were only able to produce five bags of rice, now they are producing twenty, we also need to understand they are now investing more in this twenty, but also we need to ask about the seeds, the fertilizers, [...]

not just the quantity, but also the quality. I have gone to places, where some of the companies of SAGCOT have been there for five years and the villagers are just as poor, as it gets. But when you say, my company has been here, when we came there was only one shop, now they are five. Those shops would have been there, whether you were there, or not, because the population is increasing, which means the needs are also increasing. So that has nothing to do with you."

She sarcastically offers to become the spokesperson of SAGCOT, 'if you can show [...] five village members whose life has changed because of SAGCOT'. The fact that she has not yet seen five villagers ten years after the SAGCOT was launched, makes her critique fundamental. She suggests that many of the effects that SAGCOT claims for itself cannot necessarily be linked to the initiative. Due to population growth, needs of rural residents naturally increases over time. Therefore, to compare the time before SAGCOT and after SAGCOT with the number of shops in each village cannot necessarily claim causality. Additionally, STAFF CARE I-49 (2019) stresses the difference between quantity and quality in the agrarian production. When before SAGCOT people only produced 'five bags of rice' and 'now they are producing twenty', this does not necessarily mean that the livelihoods of these peasants and smallholder farmers has increased. STAFF CARE I-49 (2019) cautions that 'we need to ask about the seeds, the fertilizers' and other inputs that change the economic logics and equations of agrarian production. STAFF CARE I-49 (2019) further claims,

"I think the SAGCOT model, their intentions are good, they really want to transform people's lives, but something is missing, it's too elite and western thinking, but does not necessarily mean it addresses the real issues at local level."

She suggests that the intentions behind the SAGCOT initiative were good 'they really want to transform people's lives, but that elitist and western thinking meant disregarding 'real issues at local level'. In addition, STAFF CARE I-49 (2019) remarks:

"One thing I have learnt is that all these issues especially when it comes to land investment is super political and you never know who might get the right ear of the president and the president might change his tune. So, you can never say never."

To her, land-based investments are 'super political'. Since mega-initiatives, like SAGCOT, involve a lot of land, several land questions are at stake. Although she observed that the political support for SAGCOT declined under president Magufuli, her comment 'never say never' indicates, that the SAGCOT initiative may re-emerge among political priorities, depending on who 'might get the right ear of the president'. Advisors near the president are able 'to change his tune'.

A few months after the interviews with the two chairs of SAGCOT's feeder groups, I conducted a group interview with members of the WWF/CARE alliance. In 2019, the alliance worked on an inclusive green growth tool for SAGCOT, meant to improve defining social and environmental standards for investments (WWF/ CARE ALLIANCE 2019). Although STAFF WWF I-10 and STAFF CARE I-49 were critical about the SAGCOT initiative, staff from the same institutions formed an alliance to define a tool that could improve on the delivery of SAGCOT. To this conflict of interests STAFF CARE I-49 (2019) responds:

"We are trying as much as we can to remove ourselves from being the chair of the social feeder group, because it's so confusing. Because every time people ask: are you talking as the chair of the social feeder group, or as CARE? Because you guys have three feet with SAGCOT. So you have one foot full engaged with SAGCOT, and you have another feet we want to question [SAGCOT] [...] this is very confusing to me, and very confusing to the social feeder group and that's why I keep telling people, we need to get ourselves off the chairship [...] one of the fear of the social feeder group is you don't want to end up to just being a rubber stamp."

It became apparent that CARE and WWF were supporting and criticising SAGCOT at the same time. On the one hand, they 'have one foot full engaged with SAGCOT', on the other hand, 'we want to question [SAGCOT]'. To STAFF CARE I-49 (2019) this is 'so confusing' which is why she has suggested 'to get ourselves off the chairship'. A central fear she has is 'to end up just being rubber stamp' for policy initiatives that she does not agree to. When researching about SAGCOT during the presidency of Magufuli, it was difficult to distinguish which organisation and individual is/ was in support of, or in opposition to SAGCOT. Meanwhile, the SAGCOT centres claimed to be social and environmental sustainable (MILDER et al. 2013a; MILDER et al. 2013b; MILDER et al. 2013c; SAGCOT 2011a; SHAMES ET AL. 2013).

In policy debates in Dar es Salaam and Dodoma, the SAGCOT had become the hegemonic project between 2010 and 2015. DFID, Norwegian Agency for Development Cooperation (NORAD), YARA, Unilever, Syngenta, Monsanto, AGRA and many other international actors supported it (SAGCOT 2018a). Especially the support of President Kikwete gave the SAGCOT credibility and legitimacy beyond parliamentary discussions.

While the SAGCOT initiative became known throughout the world, few Tanzanians living in rural areas have heard of it. A representative household survey in the Kilombero Valley, in SAGCOT's designated Kilombero cluster, found that less than one per cent of rural residents knew about the SAGCOT (GEBREKIDAN et al. 2020). This asymmetrical information about the SAGCOT can be explained through the communication strategy. Most of SAGCOT's press releases, their presentations, reports, and their website were in English and not translated into Kiswahili, the language of rural Tanzania. It is questionable,

if a broad -and potentially controversial- debate about the SAGCOT was intended. MP MALINYI I-25 (2019), MP for Malinyi Constituency and former federal minister for health, states:

"Southern Agricultural Growth Corridor, if you ask my people, they just heard it, but they don't know what is it. So, it's a good idea, but it's not really coming into practice. The reason: We don't know. Even people like us, people at our stage we have just heard it, but we have not seen it in the real situation, we have not seen in the fields. One of my plans is while being in Dar, I am going to ask: When are they coming to my constituency?"

He complained that although being an MP 'people at our stage', he had never been fully informed about the SAGCOT. He further claims that SAGCOT had no activities in his constituency: 'it's not really coming into practice'. Both to him, and the people in his constituency, SAGCOT lacks implementation. When going to Dar, in July 2019, he intends to ask SAGCOT centre, when they are coming to his constituency.

SAGCOT launched Kilombero cluster with the new minister for agriculture, Japhet Hasunga, on 23rd of November 2018 (Figure 27). This happened despite the lack of political support during the Magufuli presidency, despite the reports in 2013, despite international critique and despite critique from its feeder groups. Hasunga had become the minister for agriculture on 13th of November (The Citizen 2018l; The Guardian 2018d). On 19th of November, SAGCOT centre published the launch on their website (SAGCOT 2018b). The launch took place in Flomi Hotel of Morogoro town, an upper-class hotel five hours drive away from Ifakara. Most guests on the event were dressed in expensive business clothing. In a press release three weeks later, it says:



Figure 27: Launch of SAGCOT's Kilombero Cluster, Morogoro (the Guardian 2018b)

"The launch was graced by various SAGCOT partners from agribusinesses, development partners, non-state actors, farmers' associations, regional and national government, government agencies, members of parliament, and ministers." (SAGCOT 2018c)

Allegedly, all stakeholders were invited and 'graced' the launch with their attendance. However, it is questionable if residents from the Kilombero Valley were present. First the language barrier (English), second the long and expensive distance (to Morogoro), and third the expensive venue (Flomi hotel) stands in stark contrast to the statement made by minister Hasunga (cited in (SAGCOT 2018c)) on that event:

"For true transformation, there must be a true partnership between smallholder farmers, mid-sized farmers and large-scale farmers, none of them can succeed in isolation."

Shortly after the launch of Kilombero Cluster, the SAGCOT initiative seemed to be at the end. This had two reasons. First, the government of Tanzania cancelled a US 47 Million matching grant fund (MGF) which was meant to help the SAGCOT to attract international investors and requested the WB to withdraw a loan worth USD 70 million (AFRICA CONFIDENTIAL 2020). Second, and at about the same time SAGCOT's flagship project in the Kilombero Valley, the Mngeta farm, stopped its operations. Hasunga tried to rescue an initiative that his previous employer while he was deputy minister declared over. In MNRT (2018, 16) it says:

"Their study outcomes restricted feasible investments from the initially expected 40,000 ha to few thousands of hectares. Soil suitability, land availability, environmental concerns and institutional capacity bottlenecks for large-scale agriculture investments have led the momentum to ebb and the Kilombero Valley is no longer a priority cluster for SAGCOT."

The report of MNRT claimed that SAGCOT's interests in the Kilombero cluster ebbed and that the Kilombero Valley 'was no longer a priority cluster'. The 'initially expected 40,000 ha' needed to be reduced to 'few thousands of hectares', as the 'soil suitability', 'land availability' and 'environmental concerns' were too high. Furthermore, the final report of KILORWEMP (2018) states "eventually, SAGCOT shelved Kilombero Valley as a priority cluster and has concentrated on other clusters".

Although the SAGCOT initiative and its clusters remained present in media, in reports, and scientific papers, in numerous interviews with scholars, NGO staff and high-ranking policymakers, it became clear that SAGCOT in the Kilombero Valley could not convert their future into rural realities. Also in other clusters, it was difficult to find material traces of the SAGCOT (HARTMANN 2019). The launch of Kilombero cluster in November 2018 was the last activity by the SAGCOT in Morogoro Region. Kilombero cluster never made it to

SAGCOT's official website, where up-to-date only Ihemi cluster and Mbarali cluster are listed (SAGCOT 2022). Although the SAGCOT initiative was politically side-lined under Magufuli, the SAGCOT centre limited as an institution survived. It could meet the fate of RUBADA which used a strategy BÉLAIR (2018) calls institutional stickiness to survive and to continue working under the radar. In previous decades, RUBADA managed to reinvent itself, to survive politically although it was confronted with high-level corruption allegations in 2015, and although Magufuli's government proposed its' resolution in 2017. A STAFF WB I-18 (2019) comments:

"I think the [SAGCOT] institution in itself ends up having a need to survive. And these changes now become part of that survival strategy. Not necessarily for that sector, but the institution itself [...] given the erratic policy nature of the [Magufuli] government, they might end up shutting it down, at some point. Best case scenario is, SAGCOT develops a manual, or a blueprint, of how to develop similar projects in different areas of the country [...] it becomes more of a corridor pioneer [...] becoming more of a TIC in the agri-space [...] I think they are just caught up between the rock and a hard place. So do you continue to become inactive and continue with your strategy and face extinction, or adapt in your new strategy, upset the kind of donors that you have, but you might gain legitimacy by surviving your relations with the government and end up having an institution survive in the long run."

He suggests that SAGCOT is 'caught up between the rock and a hard place'. Due to 'the erratic policy nature' of the Magufuli government, 'they might end up shutting it down at some point'. Further, he proposes that SAGCOT becomes 'more of a TIC in the agri-space'. For SAGCOT to survive as an institution, he suggests it could become 'a corridor pioneer', whose ideas can be implemented across the country. Likewise, this strategy was suggested by agricultural minister Tizeba who demanded SAGCOT to go national (THE CITIZEN 2017j). Yet again, to go national, would run against most of SAGCOT's initial ideas on focussing on a specific corridor and clusters. MP KILOMBERO I-47 (2019) MP for Kilombero constituency remarked about the benefits of SAGCOT for his constituency:

"One of the major promises from SAGCOT was the construction of that road [Kidatu to Ifakara], so we are very happy, that SAGCOT has helped us to construct that road, though it is constructed by other partners, like the EU, USAID [...], but it all falls under the SAGCOT initiative [...], and apart from that? Health facilities, like dispensaries and hospitals."

For Lijualikali, the main benefits of SAGCOT in the last years were 'the construction of that road' (between Kidatu and Ifakara) and the construction of health facilities. The comment 'though it is constructed by other partners, like the EU, USAID' indicates that SAGCOT played a minor role in the project. When Magufuli inaugurated the construction of the road between Kidatu and Ifakara, in May 2018, he did not mention the contribution of the SAGCOT (THE CITIZEN 2018c). These subtle signs of neglect further side-lined the SAGCOT centre as a legitimate institution and the SAGCOT as a political initiative.

From the beginning, the SAGCOT centre claimed the mandate of at least four (arguably five) Tanzanian institutions. First, the mandate of Tanroads, the managing authority for Tanzanian roads. Second, the ministry of health, mandated to construct and manage health facilities. Third, the mandate of the TIC, mandated to attract foreign investors to the agrarian sector. Fourth, the space of RUBADA, which since the 1970s was mandated to attract development projects and funding for the Rufiji Basin (of which the Kilombero Valley is a part). Fifth, the mandate of the ministry of agriculture, who suggest policy priorities for the agrarian sector. It was a difficult task to establish the SAGCOT centre in the institutional landscape between these institutions.

To sum up, for five main reasons, the SAGCOT centre discontinued its plans in the Kilombero Valley. First, Kikwete had only five years to push his policy agenda. He did not find a successor in president Magufuli who was willing to continue. Second, SAGCOT's assumptions concerning the availability of idle and investible land in the Kilombero Valley was highly unrealistic, as URT (2013b) mentions. Third, the undemocratic ways in which the Kilimo Kwanza/ SAGCOT was envisioned, communicated, and planned meant that a broad civil support was missing. SAGCOT's ideas did not become common sense among rural residents, as they were not involved at any stage. SAGCOT did not become a sociotechnical imaginary that was collectively held. Instead, many misconceptions, rumours and fears about the SAGCOT spread. A fourth reason for SAGCOT to lose momentum was the negative press under the terms land grabbing, exclusion of peasants and smallholder farmers and environmental feasibility (MWAMI a. KAMATA 2011; KAARHUS 2011; NELSON et al. 2012; Byiers a. Rampa Francesco 2013; Bergius 2014; Twomey et al. 2015; Sulle 2015; BERGIUS et al. 2017; SCHIAVONI et al. 2018; BERGIUS a. BUSETH 2019; BERGIUS et al. 2020). The fifth reason was an unclear political mandate of SAGCOT as a political initiative, or as an institution.

5.4.2 Tanzanian Organic Agriculture Movement: SAGCOT's negation?

From the beginning, Kilimo Kwanza and the SAGCOT initiative were criticised as false promises (BASSERMANN a. URHAHN 2020; FARRELLY 2018; HOERING 2015; WICHTERICH a. MENON-SEN 2018; WISE 2020). In Gramscian terms, SAGCOT's critics questioned the coherence of SAGCOT's approach, their conception of the world. Instead, TOAM seeks to counter-pose their own conception of the world and to establish the common sense that organic agriculture is a viable option for agrarian futures. The term *organic agriculture* includes ideas of small-scale production, organic food, agroecology and food sovereignty,

local land ownership, independent management structures, empowerment and rural (re)organisation (MDEE et al. 2018a; MDEE et al. 2020). STAFF TOAM I-20 (2019) comments,

"We may achieve both industrialisation and sustainable production, if we balance what exactly we want to harvest out of the land. Whereas retaining parts of the land to sustain itself, but if you mine the land for you getting the maximum to feed the industry, then you are not balancing the equation."

To him, it is possible to reach industrialisation and a 'sustainable production' in the agrarian sector. If 'you mine the land for you getting the maximum to feed the industry', then the balance between the primary and the secondary sector is not right. STAFF TOAM I-20 (2019) further argues,

"I don't see a mechanism, of substituting this population to transform them to medium, or largescale, but there will be some changes within the smallholder systems."

Overall, he does not see 'a mechanism' in which smallholder farmers can be transformed into medium or large-scale farms. Nonetheless, he expects 'changes within the smallholder systems'. On the possibilities of nucleus-outgrower models, STAFF TOAM I-20 (2019) says:

"This system [nucleus-outgrower model] should come naturally, it should not be induced [...] it's not you should have a big farm to work with small farms. It's not a precondition [...] because if this is the case that means I will first sell my product before I sell the farmers product."

Scale, decision-making and production models are central topics within TOAM's conception of the world. Nucleus-outgrower models, STAFF TOAM I-20 (2019) argues, 'should not be induced' in a top-down way by a big farm, but should 'come naturally'. This is a call for democratic processes in which peasants and smallholder farmers can decide for themselves what is good from them. Furthermore, he argues that having a big farm is 'not a precondition', which indicates that alternative ownership regimes of the 'nucleus' are possible. STAFF TOAM I-20 (2019) suggests,

"As long as for years the education at the university and colleges and school's education has been towards industrial agriculture and agricultural modernisation agenda, then a majority of our academicians know only that. They don't know the alternative [...] we need now to reeducate those people so that they consider environmental ways, sustainable ways of achieving agricultural transformation."

To him important sites to challenge the established common sense are schools, colleges, and universities. What is taught at universities, colleges and schools will later become the common sense of not only 'our academicians', but for people working in ministries and other relevant positions. What they learn in universities will later translate into material realities through everyday practices (MANN 2009). Since 'a majority of our academicians

know only that', he suggests to counter-pose an 'alternative' to them, another conception of the world: 'we need now to re-educate those people so that they consider environmental ways, sustainable ways of achieving agricultural transformation'. This reminds of Marx's third Feuerbach theses (MARX 1845),

"Die materialistische Lehre von der Veränderung der Umstände und der Erziehung vergißt, daß die Umstände von den Menschen verändert und der Erzieher selbst erzogen werden muß. Sie muß daher die Gesellschaft in zwei Teile - von denen der eine über ihr erhaben ist - sondieren. Das Zusammenfallen des Ändern[s] der Umstände und der menschlichen Tätigkeit oder Selbstveränderung kann nur als revolutionäre Praxis gefaßt und rationell verstanden werden."

Educators need to be educated in a way to support a specific transformation. STAFF TOAM I-20 (2019) calls for educating intellectuals that challenge the hegemonic conception of the world. For STAFF TOAM I-20 (2019), a central discussion between intensification, or organic agriculture evolves around the need for external inputs:

"Your only possible strategy for you to be within the break-even maybe minimal profits, is for you to minimise the production costs. And in order to minimise the production costs you can't depend on 80 % of the external inputs. That is not feasible and that is not viable. So, trying to enable the farmers to really maximise the available inputs and less on the external inputs is the only way they can expand their agriculture."

He claims that minimising the production costs is the 'only possible strategy' to be 'within the break-even maybe minimal profits'. To cut the production costs he suggests that 'you can't depend on 80 % of the external inputs' but need to 'maximise the available inputs'. This is a call against the production model of SAGCOT that intended to increase the yield per area through the increase of inorganic fertilizer. STAFF TOAM I-20 (2019) suggests a possible middle ground,

"You could intensify organic agriculture. We have under FAO the so called sustainable intensification, you can still intensify not necessarily using synthetic and agro-chemicals in farming, because the challenge in our front is the climate change, loss of biodiversity and there is a call that we need to change our agricultural systems, if we are to cope with climate change we have to build resilience, so we have to have an agricultural approach and strategy that addresses the key issues and not only yield and profit."

The terminology sustainable intensification seems to be a centre position and compromise between organic agriculture on the one hand, and intensification on the other hand (MDEE et al. 2018a). Although the demand for intensification sounds contradictory at first, what is meant here is not the use of 'synthetic and agro-chemicals in farming', but to maximise organic inputs. The reference to the FAO indicates that potential allies are in sight to support TOAM in their approach. In addition, STAFF TOAM I-20 (2019) says that 'not only yield and profit' should be addressed in policy-making, but also coping with the effect of

climate change and to build resilience by doing so. When confronted with the terminology 'green growth', STAFF TOAM I-20 (2019) responds,

"It shouldn't be a slogan; it should be real. In organic, we say: this is yes, and this is no. So when they say, they we need green growth, then they should itemise what is yes, and what is no. And everybody should understand. In organic, you are not allowed to use this, because of this you are not allowed to use this, because of this [...] And some of them are already prohibited by the WHO [World Health Organisation] and other treaties they have banned some of the inputs. So, when we say green growth, do we have a blueprint of what is allowed to achieve green growth. Because some of these slogans want to please people that we are also conscious and concerned, but actually under the table you are doing the same things we did 50 years ago which has led to these effects. If they do different, then it's fine. We have no problem with the so called SAGCOT, we have no problem with you calling yourself green growth, then if it is green growth, it should be green growth. But you can't say green growth and in the end you bring GMOs [Genetically Modified Organism] [laughs]. You say green growth and you are still promoting the same fertilisers and agro-pesticides, then it is not green growth."

In his opinion, many slogans 'want to please people'. Actors using the term green growth to him 'are also conscious and concerned' about the need for environmental protection and livelihood security. STAFF TOAM I-20 (2019) demands that green growth 'shouldn't be a slogan, it should be real' and suggests that it should be better defined and 'itemised' by SAGCOT and other actors what exactly they meant by green growth. He demands a list of agrarian practices which are allowed, and which are not allowed, within a green growth framework. In organic agriculture, he claims, 'we say: this is yes, and this is no'. SAGCOT and supporters of green growth 'should itemise what is yes, and what is no, and everybody should understand', to avoid that 'under the table you are doing the same things we did 50 years ago'. The main critique is that through new terminology a mystification of what is (not) allowed is happening.

In Tanzania, several NGOs and members of the development community are supporting organic agriculture, agroecology, and food sovereignty. Among them are SAT, CARE, AFSA, TALA, HakiArdhi and MVIWATA. Their strategy under President Kikwete was to show how organic agriculture can be an alternative future for Tanzanian agriculture. Activities of TOAM include policy advocacy, policy development, capacity and extension service and improving organic value chains (STAFF TOAM I-20 2019). Farmers should be able to source seeds from their own farms, from community seed banks and farmer managed seed systems (STAFF TOAM I-20 2019). When trying to convince larger publics about organic agriculture, many Tanzanian's think organic cannot give them high yields, because they translate *organic* with traditional farming (STAFF TOAM I-20 2019). Convincing peasants and smallholder farmers about a conception of the world needs to deal with established common sense that organic is 'traditional' and is not yielding well.

5.4.3 Competing Production Models in Mbingu Ward

In recent years, cocoa was introduced in Mbingu ward as a new crop. Since its introduction around the year 2007, two different production models compete for the expanding cocoa market in and around Mbingu. According to a first model, a deregulated free market economy with the help of international capital is suited to relate to smallholder farmers to produce for export. The first model is supported by the private company Kokoa Kamili. It is like a nucleus outgrower model but works without a nucleus and without contract arrangements. The second production model is that of a rural economy, organised in associations and AMCOS that primarily produce for domestic markets, with domestic capital. The second model is supported by the Mbingu Organic Cocoa Outgrowers Association (MOCOA). The Tanzanian state is key in both. While de-regulation happened under President Kikwete, re-regulation was widespread under President Magufuli. The competition around the cocoa value chain in Mbingu allows reflecting on future-making processes, impacts on development paths of rural development in the Kilombero Valley.

With a population growth rate of more than three per cent annually, Mbingu ward is growing fast. Around 8,000 residents were living in Mbingu ward in 2019/ 2020. Among the newcomers are farmers migrating along the regional road and the TAZARA railway and (agro)pastoralists migrating without concerns of infrastructural connectivity (MP MALINYI I-25 2019). Many newcomers to Mbingu come with new crops, animals, and new business ideas. They invested in housing, land, and business infrastructure. As soon as Mbingu is connected to the national electricity grid and the regional roads get upgraded to bitumen, investments in tractors, combined harvesters and milling machines are expected. According to AGRICULTURAL EXTENSION SERVICE OFFICER I-30 (2019), the main challenges of local producers are market access and transportation, plant diseases, decreasing soil fertility and negative impacts of climate change. Especially rain-fed agriculture has come under pressure by climatic changes. While some farmers have started to apply industrial fertilisers, others shifted to irrigation schemes. Recently, new crops like banana, sesame and cocoa were introduced in Mbingu and substituted maize and rice (VILLAGE LEADER MPOFU I-32 2019; NKWAME 2021).

In 2007, a group of about 400 smallholder farmers in Mbingu formed MOCOA. Registering as an association had the advantage that now international donors could finance office spaces, warehouses and drying facilities (STAFF MOCOA I-29 2019). The alternative to the form of an association would be to register as an AMCOS. But since fewer bureaucratic steps are involved to register as an association, they decided for that form

(STAFF MOCOA I-29 2019). If successful as an association, MOCOA members could reregister as an AMCOS or as a company at a later stage. According to STAFF MOCOA I-29 (2019), no competitors were present in Mbingu before 2007. Only a few hundred farmers grew cocoa then. Most smallholder farmers in Mbingu are poor and therefore risk averse. They were sceptical about the availability of stable markets for cocoa. Hence, MOCOA needed some efforts to convince smallholder farmers to join. Although the initial idea of MOCOA was to grow organic cocoa, this focus was lost over the years, as the costs involved in certifying as organic producers was regarded too high. It costs several million Tanzanian Shillings per season. Despite that, most smallholder cocoa farmers produce organic cocoa by default, as inorganic inputs are either unavailable, or unaffordable (NKWAME 2021).

In 2013, two investors from abroad started a small-scale company called Kokoa Kamili in Mbingu. Their offices are at the Mlimba-Ifakara road, about one kilometre away from the MOCOA offices. On their website, KOKOA KAMILI (2020) says:

"We buy cocoa at farm gate, our factory, and through buying stations that we operate in nearby villages. Doing this frees up the time, expense, and effort that farmers take in accessing markets and we can ensure only the best quality beans get to our fermentary. Contrary to many operations in Africa, we only buy directly from farmers, without any agents/middlemen. By offering one well publicised price and using certified scales we are atypical in the local industry and fully transparent to farmers."

Through buying 'cocoa at farm gate', 'directly from farmers' without 'agents/ middlemen', Kokoa Kamili became a competitor of MOCOA in Mbingu. Although some smallholder farmers were part of MOCOA, not all sold their entire harvest to them, a phenomenon called side selling. The competition between MOCOA and Kokoa Kamili for the harvest of many hundred smallholders in Mbingu is based on the right of farmers to sell their produce, to whom the farmers prefer. Due to lack of local markets, middlemen

from Morogoro and Dar es Salaam are often dictating prices and thereby reduce the profit margins for smallholder farmers. Whoever can convince most smallholder farmers to sell to them, will have the greatest share of the harvest in each season. This competition for the harvest of smallholder farmers starts afresh in every season.



Figure 28: Kokoa Kamili Advertisement, Mpofu Village (photo: RV)

To spread their production model, Kokoa Kamili have engaged into an advertisement campaign. In and around Mbingu ward, Kokoa Kamili have wrapped bags around prominent village trees (Figure 28). On a bag in Mpofu village, it says 'Kokoa Kamili unanunua - Kokoa Mbichi - Bei TSH 1400 - 0785 59982'. In other words, their name Kokoa Kamili, the fact that they are buying raw/ fresh/ wet cocoa at a price of Tshs1400 per kilogram. Finally, a mobile number is put on the bag, in case villagers have further questions about the offer. By distributing bags across several villages and wards, Kokoa Kamili seeks to convince smallholder farmers to bring (parts of) their harvest to their facilities. The presence of the bags implies stable markets. Besides the guaranteed price, the opportunity getting credits and loans, the flexibility of selling the produce at any time of the season, the trust relationships and the expected cocoa quality are relevant aspects in decision-making.

One of the investors of Kokoa Kamili did a voluntary year in Mufindi District with the US-funded Peace Corps around 2000. KOKOA KAMILI MANAGERS I-28 (2019) states,

"I was trying to work with some NGOs and they would come in, drive in with a fancy car and do some training, very quickly, or something, for like half a day, feed everyone and maybe pay some allowances and then leave us and then come back three months later or something, but in the meantime they were not really taking a holistic viewpoint [...] on the entire value chain."

He became dissatisfied with how NGO in Tanzania relate to local producers and regards NGO work as inefficient in the way they spend resources: 'they would come in, drive in with a fancy car and do some training'. The new approach to rural development by Kokoa Kamili is to take 'a holistic viewpoint (...) on the entire value chain'. KOKOA KAMILI MANAGERS I-28 (2019) argue,

"The private sector is much more efficient in resource allocation, than the government in particular, or NGOs particularly."

Private companies and the market are regarded as more efficient, than governments, or NGOs. Due to increasing competition in Mbingu (between MOCOA, Kokoa Kamili, Olam and Mohammed Enterprises) internal mismanagement, problems in marketing and lack of capital, MOCOA lost members. The membership decreased from 400 members in 2007, to 150 members in 2019. According to STAFF MOCOA I-29 (2019), this had effects on the amount of cocoa brought to their facilities:

"MOCOA did not perform well. We did not have enough capital to cope with the situation [...] you know, them [Kokoa Kamili], they have the capital to raise the [cocoa] price, as they like."

In the view of MOCOA, Kokoa Kamili used their capital to raise the 'price, as they like'. Despite the competition, Kokoa Kamili and MOCOA exchanged ideas, undertook trainings together and respected each other's business model. According to Kokoa Kamili in 2018/19, around 3,700 smallholder farmers from up to 20 kilometres away brought cocoa to their facilities. Their offer, to pay 1,400 TShs (ca. 0,50 €) per kg raw wet cocoa is allegedly between 10 - 20 per cent above the market rate. Through buying stations and transportation services in distant villages, Kokoa Kamili collect up to 1,500 kg cocoa from the farm gate without agents. KOKOA KAMILI MANAGERS I-28 (2019) explain:

"We process it through fermentation, drying it to a better standard, than anywhere else in Tanzania, anyone else in East Africa, or Africa, for that matter."

After the collection of raw wet cocoa, the fermentation and drying process adds value to the cocoa. They need to ensure that the intended quality standards are met Kokoa Kamili have observed a fast-growing number of farmers interested in growing cocoa in the Kilombero Valley which is why they would like to grow their operation to three or four times higher to get all the cocoa from the entire Kilombero Valley. According to their estimates, about 80 % of their cocoa volume is organic. They are selling organic cocoa to organic exporters (mainly to USA, Europe) and the rest of the cocoa to other exporters (mostly domestic traders). KOKOA KAMILI MANAGERS I-28 (2019) explain further:

"Organic is by far the better market for us, but we are having a tough time making sure that farmers continue to grow by organic principles [...] there is no access to organic inputs here".

"I worked in coffee which is very similar to cocoa. And in coffee, they were able to make it work precisely because the exporters of coffee at the time care about quality. They understood that there were international buyers who would pay more for a higher quality product and therefore those exporters would pay the farmers, or the farmer co-ops, higher prices for better quality products. So, it would be a win-win-win on the whole value chain. And this worked in coffee after 10, 15 years of NGO work and policy development."

The business model of Kokoa Kamili is based on collecting raw and wet cocoa to be able to do quality control and satisfy the needs of exporters who are willing to pay an extra price for better quality that can be handed down to local farmers. According to KOKOA KAMILI MANAGERS I-28 (2019), due to the lack of quality control after harvesting, Tanzania does not have a reputation for high quality cocoa. Since West African countries have a far higher market share, only high-quality organic cocoa has a comparable advantage on the world market. Kokoa Kamili holds trainings for smallholder farmers and does field visits to ensure organic production is upheld. For ensuring quality standards, they only purchase raw wet cocoa because they would not know under which conditions the cocoa was dried

otherwise. Only a centralised drying and fermenting process (and thereby added value) can ensure the targeted quality of cocoa that can enter the organic niche at the world market. The African Wildlife Foundation (AWF) partnered with Kokoa Kamili selling 40.000 seedlings of cocoa to farmers per year (100 TShs per seedling), although the production cost is three times that (300 TShs). A staff of Kokoa Kamili said, "If you give seedlings to the farmers for free, they can decide to just through them away".

While under president Kikwete, Kokoa Kamili's business and production model was in line with central ideologies of deregulation, export, and foreign investments. Under president Magufuli, the turn to domestic added value, nationalism and populism meant that private companies with foreign investments were treated with suspicion. KOKOA KAMILI MANAGERS I-28 (2019) claim,

"Our big issue is that the current government has gone backwards a little bit in some of their earlier free market reforms and gone back towards socialism a little bit [...] where they mandated that cooperatives had to do the intermediate processing and exporters cannot be involved in processing and then cooperatives had to sell at auctions to exporters."

This re-regulation under President Magufuli is perceived as a shift 'back towards socialism'. Kokoa Kamili had assumed and hoped for policy stability after Kikwete resumed office. Instead, the Magufuli administration 'mandated that cooperatives had to do the intermediate processing', 'exporters cannot be involved in processing', and 'cooperatives had to sell at auctions to exporters'. These new policies shook up the cocoa value chain in Mbingu. Suddenly, the once-flourishing production model of Kokoa Kamili was at risk, while MOCOA rejoiced.

MOCOA and Kokoa Kamili continue to compete for the produce of many hundred smallholder cocoa farmers, for the support of development partners and for that of the government. While MOCOA targets low-quality domestic markets, Kokoa Kamili targets a high-quality organic segment on international markets. Although MOCOA had an early start in 2007 and established networks with farmers, Kokoa Kamili was able to outcompete MOCOA within a few years, mostly due to higher prices and economies of scale. Around 2013, MOCOA almost collapsed. The remaining members decided to transform and upgrade their association (registered under the ministry of home affairs) into an Agricultural and Marketing Cooperative Society (AMCOS). This was a strategic step, as the Tanzanian state supports AMCOS (STAFF MOCOA I-29 2019). Instead of associations, which have relative freedom to do their activities, AMCOS fall under Tanzanian law. STAFF MOCOA I-29 (2019) explains,

"If you are registered as cooperatives, then it means the government has access to all activities which you will be doing. The government will even be auditing your books."

According to new legislation under president Magufuli, private companies are no longer allowed to buy raw products directly from farmers. Smallholder farmers are instead supposed to sell their harvests to AMCOS (STAFF MOCOA I-29 2019). This new legislation would restrict the freedom of farmers to sell to whom they want and would undermine the business and production model of Kokoa Kamili. KOKOA KAMILI MANAGERS I-28 (2019) claim,

"If that business model was mandated by the government in Kilombero, we would cease to exist for a couple of reasons."

This drastic statement shows that national legislation can mean a rapid end to business models like that of Kokoa Kamili and that legislation is not implemented everywhere at the same time. The legislation led to the Cashew Nut Saga in 2018/19, when the Magufuli government guaranteed a market price for cashew nut (THE CITIZEN 2018m). The Tanzanian military forcefully collected Tanzania's entire cashew nut harvest. This intervention led to a crisis in internal affairs. Through the ideological shift from free trade to state intervention, domestic added value, agro-processing and protectionism, AMCOS were getting an upper hand under Magufuli. STAFF MOCOA I-29 (2019) thinks,

"If this cooperative will come to existence, I am afraid to say, Kokoa Kamili will be in a bad situation, because the government intervenes [...] and does not allow companies to buy products directly from farmers."

The future vision of MOCOA is to be mandated to collect the raw cocoa from smallholder farmers, add value by drying it in a standardised way and process it into powder, which can be sold in Tanzania. Additionally, they would like to cooperate with Kokoa Kamili as a marketing partner for export in the organic world market niche (STAFF MOCOA I-29 2019). This way, MOCOA would regain control over one, or two steps in the value chain.

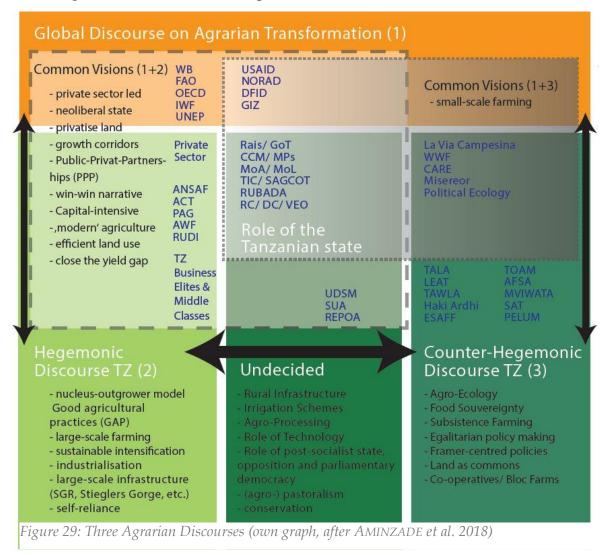
To sum up, although the solution suggested by MOCOA may be of higher social acceptance locally and would fit into the eco-populist ideology of Magufuli, it is questionable to what extent their business model would be more successful on the long term, and whether it can ensure stable and high prices for local smallholder producers. The example of cocoa in Mbingu shows, how opposing production models, representative of opposing polit-economic models are competing about recreating rural futures. Thus far, farmers and investors are facing uncertainty about fluctuating policies and open futures.

5.5 Interim Conclusion

In this chapter the second main research question – *In which ways do different future conceptions about the Kilombero Valley compete for their materialisation?* – was posed. Although the juxtaposition of four pairs (each representing a spectrum) for the Kilombero Valley remains incomplete and schematic, I argue that discussions on possible rural futures take place on different levels. Under Kikwete's presidency, the main ideological struggle evolved around the questions between the opposing ideas of intensification and agroecology. The hegemonic pressure on farmers to transform into market actors under Kilimo Kwanza, SAGCOT and BRN were considerable. With Magufuli's presidency, these discussions moved into the background. The topic of industrial revolution side-lined internal discussions in the agrarian sector and rather discussed how the agrarian sector could be connected to the emerging industrial sector.

On the one hand, Magufuli's terminology of industrial agriculture provided links previous ideas of large-scale commercial agrarian production. On the other hand, his agrarian populism was clearly positioned against evictions, land grabbing and elitist accumulation of land for speculation through corruption. Hence, the second juxtaposition between agriculture and industries became more relevant for the Kilombero Valley. The beginning of the construction of the Stiegler's Gorge dam project in 2019 can be considered a game changer for the political economy and the social-ecological transformation of the Kilombero Valley. Should the dam be completed and provide the Tanzanian political economy with energy, the water usage upstream become of national importance. The Stiegler's Gorge will have long-term implications for large-scale farms like the KPL, teak plantations, fishermen, large-scale irrigation schemes in Njage and Itete, on in-migrating (agro)pastoralists communities along the shores of the Kilombero Rivers and for many hundred thousand smallholder farmers. Shifting beacons, new borders, new institutions are only signs of a different eco-governmentality of the central government. Whereas Kikwete's presidency was more concerned about making land available for the SAGCOT, President Magufuli was concerned about the control over, the access to and usage of water. Although abundantly available, water became politicised. A constant and reliable run-off upstream the Kilombero River into the Rufiji is needed for the energy production downstream at Stiegler's Gorge. Furthermore, a run-off that does not carry too many sediments to fill the water reservoir.

A detailed analysis of AMINZADE et al. (2018) is helpful to understand the discursive dynamics within Tanzanian between the Kikwete and the Magufuli presidency. They argue that under Kikwete there were three discourses on Tanzanian agrarian futures, each of which can be linked to different ideologies, different understandings of the role of the state and a different set of actors (Figure 29). AMINZADE et al. (2018) argue there is a global discourse (1 - yellow) and two Tanzanian discourses (2 - light green/ 3 - dark green). Additionally, I argue, there is a fourth 'undecided' ideological space between the domestic discourses in which ideological fragments exist that have the possibilities to be taken up by the dominant (the hegemonic) and the inferior (the counter hegemonic) discourse. The discourses AMINZADE et al. (2018) describe changed considerably after the abrupt regime change to Magufuli. While the ideological alliance of actors around central ideas was solid under Kikwete, the reorganisation of these actors around in-coming ideas under Magufuli never resulted in a similar solidified historic hegemonic bloc. One of the main reasons may were that the hegemonic conceptions of the world under Kikwete was more coherent that the conception of the world under Magufuli, which lacked clear and consistent articulation.



Under Kikwete's reign, the common sense conception of the world on rural futures shared by the global discourse and the dominant Tanzanian discourse (1 + 2) were a strong private sector, a neoliberal state, public-private partnerships, growth corridors, win-win narratives and a capital-intensive 'modern' agriculture that is more large-scale, than small-scale. Actors and institutions supporting this hegemonic alliance were the WB, FAO, OECD on a global scale, the domestic private sector, business elites and middle classes in Tanzania that were involved in the writing up process of Kilimo Kwanza. Moreover and the international development cooperation around USAID, NORAD, DFID that supported SAGCOT. In addition, ANSAF, ACT, AWF, RUDI and many other NGOs supported Kikwete's agrarian policies. If this historical hegemonic bloc had continued their development path for a few more years, it could have been better able to implement their ideas.

Under Magufuli's reign, the dominant domestic discourse sought to incorporate ideas of mega-infrastructures, industrialised agriculture, self-reliance, domestic value addition, a strong state, and more taxation. These ideas were incompatible with the agenda of previous allies and incompatible with global discourses, which demanded free trade and an enabling business climate. The result was a disruption with global discourses, a discontinuation of funding and projects, as well as a premature end of many strategic alliances.

Under the presidency of Kikwete, the counter-hegemonic discourse evolved around ideas of agro-ecology, food sovereignty, co-operatives, subsistence farming, bloc farms and farmer-centred policies. Actors like TALA, HakiArdhi, Eastern and Southern Africa small-scale Farmers Forum (ESAFF), TOAM, AFSA, MVIWATA and SAT supported these ideas. Furthermore, USAID and DFID supported it. These ideas did not manage to become hegemonic during Kikwete's presidency.

The internal conflicts of the historic hegemonic bloc in the transition between President Kikwete and President Magufuli in 2015/ 16 gave the opportunity for previous counter-hegemonic ideas to now become hegemonic. On the one hand, it was unlikely that more egalitarian and participatory policy making took place, as Magufuli's presidency turned evermore authoritarian. On the other hand, Magufuli's agrarian populism, nationalism, protectionism, and anti-imperialism opened doors for ideas like agro-ecology, food sovereignty and organic agriculture. Ideas about agrarian futures, to which President Magufuli remained undecided, concerned the role of rural infrastructures, irrigation schemes, agro-processing facilities, the role of modern technology, the role of (agro)pastoralism and the role of conservation. All the latter are still part of progressive debates and emancipatory politics in Tanzania.

6 Narratives - Contesting to become 'Common Sense'

In this chapter, the third research question - *In which ways do narratives legitimise future conceptions about the Kilombero Valley?* – is posed. The two sub-questions in this chapter are *How do different actors use narratives about the Kilombero Valley?* and *How are these narratives fused with power?*

Narratives are analysed as a key part of conceptions of the world (Chapter 5). Narratives are coherent stories that are told, presented, imagined about the world. They may take the form of convictions, ethics, values, ideologies, chains of arguments, propaganda, utopia, and dystopia. Narratives are narrated by some actors and aim to convince others. Narratives define political potentials and problems in specific ways. This specificity makes narratives normative. They passively imply, or actively demand, political interventions. According to Gramscian political theory, conceptions of the world seek to become hegemonic, and narratives seek to become common sense. A common sense is similar to an established paradigm in science, as KUHN a. HACKING (2012) describe it. Paradigms and common sense do not change easily. A narrative that is common sense is a set of ideas that in a specific time, in a specific space is accepted as normality, as an inescapable truth that is not questioned by a large share of the population. In the following, first receding hegemonic narratives are discussed (6.1), followed by a section on narratives that became common sense during Magufuli's presidency (6.2). Next, counter-hegemonic narratives (6.3) are analysed, before an interim conclusion is drawn (6.4).

6.1 Receding Hegemonic Narratives

During the presidency of Magufuli, narratives that were hegemonic during Kikwete's presidency continued. However, they did not manage to remain common sense and receded into the background, because they did not fit into the strategy and ideology of CCM at the time. In the following, first, the narrative -no future for (agro)pastoralists in the Kilombero Valley- is discussed (6.1.1). Second, the narrative -rural population does not comply to laws out of ignorance-, is analysed (6.1.2).

6.1.1 No future for Environmentally Destructive (Agro)pastoralism

Many rural residents in the Kilombero Valley believe that (agro)pastoralists have no historical right to live in the Kilombero Valley. This is because most (agro)pastoralists came to the Kilombero Valley post-1980s. This narrative of a Kilombero Valley without (agro)pastoralists envisions a golden past, a Retrotopia (BAUMAN 2019). It assumes a Tanzania with fix identities along regions, ethnic groups, and livelihoods. However, in Tanzania, where many million rural residents were forcefully evicted and resettled in the Ujamaa/ Villagisation period, historical land claims are hard to substantiate. Although only a small fraction of todays' residents in Kilombero Valley can prove their origin in the area for more than one generation, it is often narrated that (agro)pastoralism has no future in the Kilombero Valley.

At the national level, this first narrative claims that (agro)pastoralism as a livelihood has no future and will go extinct until the end of the twenty-first century. Livestock keeping is narrated as 'the ways of the past' and 'not modern' (SNYDER et al. 2020). In Kenya this narrative is used for suggesting sedentarisation and settlement programmes for (agro)pastoralist communities (WAFULA et al. 2022). LISSU I-52 (2020) narrates,

"[(Agro)Pastoralism] is likely to be gone. If you ask me, I grew up in an agro-pastoral community. My father kept hundreds of cattle. Today we have none. I grew up in a village, where everybody had livestock in their crawl. Today, if you can find ten households in my village with cattle you are very lucky. So, pastoralism is on its way out! The pastoralist communities of the plains of Tanzania, the Massai and the others are largely gone. Taken care of by these national parks and other forms of land use."

To him, (agro)pastoralism has no future in Tanzania. Raised by a presidential candidate from the opposition shows that this narrative is supported by powerful individuals and networks. Although at first LISSU I-52 (2020) suggests that (agro)pastoralism 'is likely to be gone', he later describes the agrarian change in his home region as an inevitable, natural and linear process, 'so, pastoralism is on its way out!'. The extinction of (agro)pastoralism will be a self-fulfilling prophecy, once a critical number of politicians come to the same conclusion (BECKERT 2016). Population growth, negative effects of climate change, desertification, fencing, privatisation of land, changing tenure arrangements within (agro)pastoralist communities, environmental protection and waves of evictions have meant high stress for (agro)pastoralists across Eastern Africa (WAFULA et al. 2022). Whereas the lobby for (agro)pastoralists nationally is strong, in the Kilombero Valley, where a vast majority are farmers, it is more difficult to articulate the interests of the (agro)pastoralist minority. An AGROPASTORALIST REPRESENTATIVE MALINYI I-42 (2019) claims:

"[...] a pastoralist is like an orphan; it has no mother and has no father. That's how we are. Our relatives protect themselves in the system of cultivation and so forth, but us pastoralists we are seen as orphan children, we are not being cared for. Once a question comes, it comes to torture us, to harvest what we have earned in our production. We are not cared for even for a little bit. We are being tortured in that form; we are people who are seen as we are staying with no relevance. [...] I myself was once appointed in the whole district; I was the one in charge of this matter in this district in the case of marking [cattle] [...] Finally, we were overruled, because we had no power and we are like orphan children. That is something you'll find, we have complaints because we are not cared for. We are in a horrible situation. Where can we go? Everything we do, the government is against us. Everywhere we go the government is watching us. We don't have any right. The leaders and the government are both against us. It has reached a point, where we seem to be like orphans because we are under attack every time."

To him, (agro)pastoralists in the Kilombero Valley 'are in a horrible situation' that 'are not cared for even for a little bit'. To him, (agro)pastoralists have little perspective on going to other places. He wonders, 'Where can we go?'. The government is perceived as 'against us', which is why they were overruled in previous struggles. This powerlessness makes the AGROPASTORALIST REPRESENTATIVE MALINYI I-42 (2019) compare the situation of (agro)pastoralists with orphans. Although he was the representative for (agro)pastoralists on the district level, he feels 'we are not cared for even for a little bit'. In his perception, the central state and its devolved bureaucrats are against the interests of (agro)pastoralists, 'we were overruled, because we had no power'.

Since the 1980s, ten thousand (agro)pastoralists migrated to the Kilombero Valley from Shinyanga, Mbeya, Tabora, Singida, Dodoma and Mwanza. As WELDEMICHEL (2020) shows for Loliondo, state violence continued in recent years. Despite the rhetoric of inclusive and participatory approaches in conservation, he sees a return to fortress conservation and militarisation in Tanzania. Citing the term 'green militarisation' by Lundstrum (2014), WELDEMICHEL (2020) shows how central institutions in the Tanzanian conservation sector recruited ex-military personnel, used military logics and terminology, as well as *othering* pastoralists as intruders, or poachers.

In the OSKV in 2012 and 2013 ten-thousands of cattle were forcefully evicted from the Kilombero Valley (IWGIA 2013; IWGIA 2016; MWAKA 2020). The name of the operation *save* Kilombero Valley, invokes that the valley needs to be saved *for* farmers and *from* (agro)pastoralists. In August 2012, it was announced that (agro)pastoralists and their cattle have to leave the KVRS to prepare for the new investment corridor (BERGIUS et al. 2020). A report claims that president Kikwete "instructed government officials to evict pastoralists from water catchment areas in the country, including those in Kilombero Valley" (PINGO FORUM 2013, 22). Police officers, national park rangers and the military evicted 5,000

(agro)pastoralists and killed at least eight (PINGO FORUM 2013; BABUK 2013; BERGIUS et al. 2020). ESRI KILOMBERO (2020) summarizes,

"Forcible evictions took place in the area surrounding the Kilombero Valley in the Kilombero and Ulanga districts in Morogoro region from September 2012 to January 2013. It is estimated that 486,736 out of approximately 500,000 total livestock were seized and removed from the area, and around 5,000 people were evicted. These evictions were done mainly in the name of conservation of the Kilombero Valley (which is a Ramsar Site) and in the interest of large-scale agricultural business. The evictions were carried out in a brutal manner and affected the Sukuma and Taturu agro-pastoralists and Ilparakuyo Maasai and Barbaig pastoralists."

The operation lasted for several months, is here described as 'brutal', and on-sided, affecting 'the Sukuma and Taturu agro-pastoralists and Ilparakuyo Maasai and Barbaig pastoralists'. Allegedly, 486,000 cattle out of 500,000 were seized, leaving (agro)pastoralists without their means of subsistence. More than the correct numbers on the deaths, evicted or seized cattle, the name of the operation and the timing in 2012 and 2013 suggests that a certain development path was enforced on the Kilombero Valley in these months. A development path that is 'in the interest of large-scale agricultural business'. Furthermore, the Regional Commissioner of Morogoro Region at the time said "we will not stop until all livestock keepers and their animals are flushed out from their hiding" (BERGIUS et al. 2020, 2). District and regional officials from neighbouring regions agreed that (agro)pastoralists would not be welcome. AGROPASTORALIST REPRESENTATIVE MALINYI I-42 (2019) recall,

"[...] we live with suspicions that today I awake, but I don't know what will happen next. Whether there will be another operation, or anything. We live the life with suspicion, because we do not have a permanent area, to say that when I am here, I won't be touched by the government, or being beaten. When an operation comes, it goes even to the villages, which are separated. It doesn't matter, whether it is separated or not both are combined, even if you do not live in the reserve."

A few years later, the OSKV has not been forgotten by (agro)pastoralist communities in the Kilombero Valley but deepened the suspicion against actors of the central state. The threat to them is to be touched and to be beaten by the government. The government is perceived as a violent actor that punishes (agro)pastoralists. The perception that 'we live with suspicion' and that they 'don't know what will happen next' is related to the threat that 'another operation' can happen at any time. AGROPASTORALISTS MALINYI I-43 (2019) comment,

"For now, as the compass direction shows, [...] we do not have a clear direction, because a person with a compass can have the assurance that I have arrived. That means we start arranging for future life. Now to us we are wanderers. Today you are rich, tomorrow you are poor. And many pastoralists in this valley have died because of government operations within reserved areas. Many, including old people, of this age who have died, and others are still young. You will find that a person had a herd of one thousand two hundred has been impoverished completely and he

has a family. Sukuma and we pastoralists, we marry up to ten wives. You'll find that family hasn't even a single cow. You have been impoverished. Meaning that now even the life you planned, how will you plan the life?"

The phrase 'you have been impoverished' points to the political dimension of poverty. Different from Lissu I-52 (2020) who suggests a quasi-natural development path for (agro)pastoralists 'on the way out', AGROPASTORALISTS MALINYI I-43 (2019) point to 'government operations within reserved areas'. Previous operations caused (agro)pastoralists to lose their compass. A compass is a symbol for 'the assurance that I have arrived'. Since only people with a compass can 'start arranging for future life', and (agro)pastoralists are 'wanderers', they cannot 'plan the life'. The "capacity to aspire" APPADURAI (2013a) comes into mind. A capacity that is more, than just a feature of a social group. For (agro)pastoralists in the Kilombero Valley to realise the full potential of their capacity to aspire, the overall political and economic structure in which this social groups are embedded, must be reflected. (Agro)pastoralists claim that they cannot plan for their future because 'today you are rich, tomorrow you are poor'. AGROPASTORALIST REPRESENTATIVE MALINYI I-42 (2019) comment on the end of (agro)pastoralism,

"I believe it can happen and it's not within fifty years. It is by few years to come ahead of us. Because in 2012, in Malinyi the cattle were over. The operation entered and impoverished the people, and people have died. Pastoralism ended. Therefore, it is not by fifty years to come, no. [...] Even the day before yesterday, they announced an operation. [...] As you announce the operation means if you confiscated the pastoralists' cattle means business is over. Therefore, saying the truth, it's not only to wait for those years. Starting even tomorrow if they say an operation starts, the pastoralists won't have any peace."

The statement 'not within fifty years', but 'even tomorrow' shows that negative impacts for their livelihoods are reckoned with at any time. After the OSKV, 'in Malinyi the cattle were over' and 'pastoralism ended'. The willingness and the potentiality of the Tanzanian central state to evict (agro)pastoralist by force was shown in the OSKV.

A key argument that seeks to legitimise state action against (agro)pastoralists is the claim that they are environmentally destructive (WALWA 2019). LIGANGA (2017a) calls the inmigration an "invasion of livestock keepers from Tabora, Shinyanga and Mwanza regions". He quotes a councillor from Mofu village saying that (agro)pastoralists were degrading the Kilombero Valley on the highest degree (LIGANGA 2017a). The removal of (agro)pastoralists and their cattle was supported in the inaugural speech of former president Kikwete in 2005 (LIGANGA 2017a). To counter-act environmental destruction, evictions, destocking, modernisation of cattle keeping, more environmental education and better land use plans are suggested. In Malinyi and Kilombero District, (agro)pastoralists are commonly blamed

for felling trees, over-stocking village land and drying up soil. DISTRICT OFFICERS MALINYI I-44 (2019) comment,

"It is also the culture for these pastoral people, especially the Sukuma. When they stay in a place, they have the habit of cutting down all trees, and if you visited a pastoral society area, you cannot see even a single tree standing. So, of course in the flood plain yes there are no trees, but again in the areas where they are staying if there have been trees, there are no trees as well. And easily they cut down trees for farming actually, so when they encroach a forest area, they make sure that within a short time it is already empty with no trees standing. They kill all the trees. So, areas by Kilosa Mpepo and other types of highland areas where there are forests, they are cutting down trees. So, this habit, this trend is not regulated. In future, we will have different view of Malinyi district. Because in the past even ten years, Malinyi was not like the way you see it. If you go and check for instance the GIS maps, if you try to see how Malinyi looked like before, and today we have different things. If you download the google maps, so it is really I think it is more or less can happen this scenario from the local people, has some truths. So, we should take some more efforts to enforce the laws in the areas, which have been reserved, for protection, for conservation to make sure that they are not really encroached. But the areas outside also have the right to have the trees to be standing on. So, we should also have some regulations and of course we have already, someone who want to cut the trees now, we need to give them permits and to regulate it. However, it is not the enforcement some people just cut with no permits."

The officer claims that Sukuma have 'the habit of cutting down all trees'. Although the problem in the flood plain is not as severe, in densely forested areas like Kilosa Mpepo and other highland areas, deforestation has become a problem, 'Within a short time [...] no trees [are] standing. They kill all the trees'. Stricter law enforcement is presented as a solution 'to make sure that they are not really encroached'. Yet again, law enforcement does not seem to work, as handing out permits for regulating deforestation is suggested, but 'some people just cut with no permits'. AGROPASTORALIST REPRESENTATIVE MALINYI I-42 (2019) respond,

"That is correct, that is not a lie. We are proceeding to educate them. And even me myself as a chairman, I started a program of planting trees, as a group of planting trees and environmental conservation and I took areas for planting trees. A tree with a Sukuma is a conflict. Even living they must live in a bare land."

When confronted with the allegation that Sukuma cut down trees the answer is 'that is correct, that is not a lie' and that 'a tree with a Sukuma is a conflict'. Although (agro)Pastoralists need to live 'in a bare land' for their livelihoods, education programmes are underway that aim at planting trees. Although many of the allegations on environmental destruction are accurate, it mystifies that destructive behaviour is also done by the vast majority of landless, peasants, smallholder farmers, fishermen and village elites. To suggest that destruction would stop if (agro)pastoralists were evicted from the Kilombero Valley is a key feature of the narrative -no future for (agro)pastoralists in the Kilombero Valley-. AGROPASTORALISTS MALINYI I-43 (2019) add,

"When we shifted to this area in 1982, it was a forest, it was an impassable area. There was no centre here. From Igawa coming to this area it was not a village, it was a hamlet. So when we say that the environment is not destroyed, we are cheating ourselves. It is true that in 50 years to come this area won't be as it is today. It will be increase and become a village, then what will follow is a ward, then it will proceed to become a district. Was Malinyi a District before? Means that with a simple translation, as the people increase, the environment is destroyed. We should agree that the environment goes on being destroyed, that cannot be denied. [...] Malinyi was not the same it is today, when we came. [...] But if you deny it, we won't be helping ourselves [...] the government will know that, this was a reserve area. [...] If there is a destruction of anything, we have to say it. In case of cutting trees, can you clear a farm without cutting down trees? [...]. Also, we use trees in building cowsheds [...] you cannot cultivate without cutting down trees, you cannot rear cattle without a cowshed and a cowshed is built by using trees. Cattle feeds on grasses and they cannot eat plants [...] drought is a must [...] We should always say the truth rather than saying lies which will cost us or our children the future. They will be blaming that your fathers did not say the truth, or your fathers said that we are not multiplied. That what is facing us today the issue of beacons. Because once they will be coming, they will say that, in the reserve there are no people. They knew that people will not reach into these areas because it was a forest. These valleys were in the forest and no one came to live in these areas. If we keep cheating, we shall not succeed either ourselves, children, grandchildren, or great grandchildren. The government will be saying, you said you will not increase in size, what are you complaining for? [...] lower people do not get any help, whether a farmer, or pastoralist. The women too are in need of the help because when you take a look here, there no women [being interviewed]."

In the 1980s, when the first (agro)pastoralists migrated to Malinyi, it 'was not the same it is today, when we came'. Large parts were forested, 'an impassable area' with no centres around the current location of Mwanangasa. However, 'as the people increase, the environment is destroyed'. In future, further environmental destruction is expected, 'in 50 years to come, this area won't be as it is today'. Today's villages will increase to become wards and districts. Cutting down big trees is presented as a prerequisite for farming and for building cowsheds, 'you cannot cultivate without cutting down trees, you cannot rear cattle without a cowshed and a cowshed is built by using trees'. The statement 'drought is a must' shows, that the consequences of today's environmental practices are understood. Agropastoralists Malinyi I-43 (2019) demand that vis-a-vis the state, 'we should always say the truth rather than saying lies', because lies could 'cost us or our children the future'. If (agro)pastoralists told the government that they would not increase in population, the government could decide to set beacons in certain locations. STAFF MOL I-06 (2019) maintains,

"As you know, land never increases, but population and their use increases, as time goes on. So really, for Tanzania we'll really have to go for modern agriculture and modern pastoralism. Not the nomadic way of moving here and there with a lot of cattle, because in future we don't have that much land for pastoralism, for agriculture, or even for housing."

Increasing national population and the declining availability of land per capita necessitates both (agro)pastoralists and peasants to change their ways of life. 'The nomadic

way of moving here and there with a lot of cattle' will not be possible. Agriculture and (agro)pastoralism are supposed to 'modernise'. MP ULANGA I-24 (2019) suggests:

"If the government implements these schemes, it can solve all problem from the Sukuma people, because they can use that irrigation system, in spite of destroying [...] Kilombero Basin."

For the MP, irrigation schemes would be an alternative for 'Sukuma people', to change from (agro)pastoralism to farming. In his view, the Tanzanian central state should help to provide better local infrastructures.

To sum up, the narrative that due to environmentally destructive behaviour of (agro)pastoralists there is no place for (agro)pastoralists in Tanzania, or in the Kilombero Valley is wide-spread and strong. Although this narrative was common sense under President Kikwete, under President Magufuli this narrative receded into the background and lost its status as common sense. Although the core of the narrative - that (agro)pastoralists are environmentally destructive - is 'true' and is admitted by (agro)pastoralists, the other part of the truths - that the rest of the rural population also engages in environmentally destructive behaviour - is often neglected. Thus, the one-sided blame of (agro)pastoralists to cause environmental destruction in the Kilombero Valley is a mystification of the root causes. The narrative is part of a political strategy too. While under the President Kikwete, the OSKV used the force of the Tanzanian military and police to evict (agro)pastoralists, under the presidency of Magufuli, less direct state action was used. Many rural residents in the Kilombero Valley believed that Magufuli's relative inaction and passivity was connected to him being from an (agro)pastoralist community himself. Although tribalism certainly came back to Tanzania during Magufuli's presidency, his populism was the main reasons, as to why he did not engage in evictions and resettlements but kept the future of many villages in a state of uncertainty. Magufuli's agrarian populism leads us to another receding hegemonic narrative in the subsequent section.

6.1.2 Rural Population does not comply out of ignorance

According to a second narrative, vast parts of the rural population in the Kilombero Valley are ignorant. It is ignorant to comply to 'good agricultural practices' and ignorant to comply to 'environmental protection'. Different from the first narrative that is used by many agriculturalists to criticise (agro)pastoralist livelihood practices, the second narrative is mainly used by bureaucrats, state officials and politicians to justify their actions. Ignorance or to be ignorant in the context of the Kilombero Valley can mean two things. On

the one hand, it can mean to be uninformed about something. About a law, a regulation, about the beacon and land rights. On the other hand, ignorance may mean to know something, but to ignore this knowledge intentionally. Whereas the former understanding of ignorance calls for more awareness campaigns among rural residents, the latter understanding calls for stricter law enforcement. While some actors believe that parts of rural communities fundamentally do not care about laws, regulations and the environment, others claim that rural residents have a self-interest in protecting the environment on which their livelihood depends. The ACTING DISTRICT EXECUTIVE DIRECTOR MALINYI I-38 (2019) claims,

"So long as now people they are digging, they are ploughing, they are farming, soiling of that river that is one of the precautions, that in the long run we are going to find that river either that depth can decrease or even in the long run can what? Can dry. [...] So even in Igawa, not only Igawa, Maguba, when you go Itete, even Mtimbira, even Sofi, there is a certain areas it is river banks, so that river banks sometimes that villagers they tend to dig, we can say ignorantly, near to the water bank, so now we have to control, so even those who are dealing with environmental conservation, even those dealing with the water basin, there is a certain authority which now are controlling that area and they have that map and boundary, they know. So unfortunately, the people extend, they used to expand their farms and whatever. Now they have the habit of shifting agriculture. Once they found maybe the harvest has decreased, [...] they go to find another area, which is virgin, and they dig. So now, we have to control. There is no problem that there is deficit of land for farming, but people are not of course ready to adapt good land use."

Certain agricultural practices within protected areas and along riverbanks have negative impacts for the environment. This includes drying up rivers, soil depletion, soil erosion, and high amounts of water outtake. According to ACTING DISTRICT EXECUTIVE DIRECTOR MALINYI I-38 (2019), the 'virgin land' and the land at riverbanks is vulnerable to environmental degradation. Although land is not scarce in Malinyi district, 'people are not ready to adapt good land use'. He suggests stricter law enforcement as a solution. COULSON I-03 (2019) instead claims,

"One of the arrogant mistakes is to think that farmers are ignorant and unsophisticated and unable to innovate, they will only innovate if they have extension work that tells them what to do. Now that is just not true, that's a colonial perspective, but it's still here. [...] You don't have to have extension; you don't have to have some superior person coming to you."

Contrary to the officer from Malinyi, COULSON I-03 (2019) believes that rural residents know what is best for them. He claims that they exchange knowledge about agricultural practices among each other and can innovate without 'extension work that tells them what to do'. Perceiving rural residents as 'ignorant and unsophisticated' is a 'colonial perspective' that is still there. COULSON I-03 (2019) argues that most rural residents 'don't have to have some superior person coming to you'. A STAFF WWF I-10 (2019) comments,

"[...] what is supposed to happen now is to have proper enforcement of our policies and pieces of legislation [...] we have the best policies and pieces of legislation in Tanzania. It's just the gap of implementation, so that will be the first step. In addition to that, we need to continue try to see, if really we don't comply with the policies and legislation we have. Why don't we do that? Is it because we have settled policies and pieces of legislation in a language people cannot comprehend? What should we do? Because we need to have a general public who understands for instance the environmental policy, the regulations, the EMA itself. If someone wants to invest in land, what does the land act say? What does TIC policy say on that? So we create a culture in which before any development happens, people should refer to the existing policy and pieces of legislation. What are the guiding principles before I do this? But, you know, it has been happening the other way round in Tanzania. I want to invest in large-scale paddy production, I start doing it, then 'ah, sheria anasemaje?' [What does the law say?]. But we sort of need to reinvent the wheel, go into the policies and the pieces of legislation first, before we sort of decide, if we want to invest in any development venture. And thirdly, it has to be a collective type of initiative the government, the private sector, CSOs, try to support each other to protect our mother earth."

STAFF WWF I-10 (2019) argues that policies do not need to change in the future, because 'we have the best policies and pieces of legislation in Tanzania'. To him, the gap of implementing laws and policies is the main issue. He argues that the general public does not understand the policies, the regulations and the guiding principles behind it. The ignorance of the rural population is not necessarily intentional, but lies in the fact that few pieces of legislation are written in a language rural residents can comprehend. STAFF WWF I-10 (2019) claims that investments are often done before it is asked what the legal requirements are. The mentality of 'ah, sheria anasemaje?' comes too late in cases, in which regulations were not followed. A RETIRED TEACHER I-35 (2019) agrees,

"Most of the local people do not understand the national interests due to lack of awareness and education about environmental conservation. Taking the example for pastoralists who have recently migrated into the Kilombero Valley. Not all now the historic relation between the villagers and the conservation sites. So, they still take the cattle to the borders of the conserved areas and also beyond. This leads to environmental destruction, overgrazing and the land is losing its fertility. The central government needs to put more efforts on educating the people concerning environmental conservation within the village so that local people can understand national interests. For now, villagers only see that the central government is restricting them from using the land."

It is argued that 'local people do not understand the national interests' because awareness campaigns are not done. In-migrating pastoralists need to be better informed about 'historic relations between the villagers and the conservation sites'. According to him, not all know the exact borders, which is why 'they still take the cattle to the borders of the conserved areas and also beyond' which leads to 'environmental destruction, overgrazing' and a loss in soil fertility. To him, the central government 'needs to put more efforts on educating the people concerning environmental conservation within the village'. Thus far, many rural residents perceive the central government as 'restricting them from using the land'. The RETIRED TEACHER I-35 (2019) further claims,

"The local people are powerless because there is nobody who is confident enough to confront politicians, or to make follow ups, dig deep on different reports regarding the true motives of the politicians, as well as their true intentions when it comes to developing the village. Sometimes, it is not clear, whether what is in the official reports has been done, or who has been doing certain things, the MP, or the villagers themselves. This is due to low awareness and lack of education among the local people. At the end of the day, politicians end up politicising everything and the villagers are left to agree to what the Diwani or the MP have said."

The RETIRED TEACHER I-35 (2019) who confronted the MP in a public village meeting on the lack of electricity in the village primary school, claims that follow-ups on village-level development initiatives are rarely done by villagers. Due to a lack of confidence and 'due to a low awareness and lack of education' local people are 'left to agree to what the Diwani, or the MP' say. RETIRED TEACHER I-35 (2019) wishes that in future more residents can differentiate between what is 'in the official reports' and was done. Thus far, many do not understand the responsibilities of elected leaders. The availability of information decides about whether villagers 'are left to agree', or whether they can actively engage with ongoing developments. STAFF ANSAF I-08 (2019) claims,

"They are the most vulnerable group, because they don't have information. That's why we engage a lot in media campaigns, creating awareness of smallholder farmers, we feel that just by not being able to access the right information at the right time, these people are disadvantaged. [...] the majority is the smallholder farmers. These are the ones who are feeding almost everybody here."

Farmers are vulnerable and disadvantaged because they have limited information. STAFF ANSAF I-08 (2019) mentions media campaigns through which ANSAF tries to increase the level of information and to create awareness for farmers. The need to inform smallholder farmers is justified, as 'these are the ones who are feeding almost everybody here'. STAFF LEAT I-23 (2019) explains why awareness campaigns are not always in the interest of the government:

"It is capacitating the community to understand their roles and to understand their rights regarding the forest resources and any other resources within their villages. How they can be able to hold accountable those duty bearers entrusted with the management of the natural resources. Now, it is from there now [...] our government uses ignorance of the communities towards robbing them [...] it was a challenge for us because training a person to become aware of his rights or her rights is an issue for the government, because the government can no longer use any means to hurt that person on whatever means."

According to her, the central government 'uses ignorance of the communities' to take decisions that are not in the interest of villagers. Awareness campaigns can be a tool for rural communities to enhance accountability. LEAT tries to capacitate rural communities 'to understand their roles and to understand their rights regarding the forest resources and any other resources within their villages'. STAFF LEAT I-23 (2019) continues,

"They think that the government owns their resources, so they have nothing to do with the resources, that's why poaching occurs and everything. So, what I have been telling them is, that the resources is theirs, that the government has only been given mandate to manage it, but it is their resources and they have to benefit from the resources [...] it is you community members to stand up and hold accountable these duty bearers."

A common perception in rural areas is that the government owns all resources. This misconception leads many villagers to think, 'they have nothing to do with the resources'. Through information campaigns STAFF LEAT I-23 (2019) explains that logging, or poaching is not robbing the central government, but that the trees and animals belong to the village forest. STAFF LEAT I-23 (2019) hopes that once villagers understand that 'it is their resources', another perception of rural livelihoods, environmental practices and accountability would follow. STAFF MVIWATA I-04 (2019) describes disinformation campaigns,

"We use training as the way of building capacities of farmers in different scenarios [...]. So, yes we have trainings, yes we have awareness campaigns, we have everything but we cannot single-out the fact that we have a heterogeneous society, like you put your agenda, and you campaign for something. But also, we are aware of the fact that, there are people who are campaigning for counterattacks, counter-campaigns [laughs]. [...] Sometimes they are powerful since they are the lawmakers, they are the policymakers [...] they direct in such a way that these policies have to favour this line of thought that we are having and these policies... the situation is kind of complicated. Yes, we are pushing forward but also there are counter campaigns. But farmers at a certain extent, they are aware of the policies, through the number of campaigns, the number of trainings that they receive."

Capacity building, trainings and awareness campaigns are among the main activities of MVIWATA. In a 'heterogeneous society', counterattacks and counter-campaigns are underway, sometimes supported by powerful lawmakers, and policymakers. Rivalling interests are taught in different campaigns. Information and disinformation, fact and speculation, law and reality complicate the picture. Often, villagers are not able to tell, where village land ends and environmental protection area start, which livelihood practices are allowed where, for whom, and why. STAFF CARE I-49 (2019) states,

"What I am having troubles with is when you just give one statement and then you remove everybody else. I am removing a person because they are cutting down trees. Why are they cutting down trees? [...] What is the root cause of them cutting trees? Is it something you can talk to them about? Probably they don't know the concept of them cutting down trees [...] of the consequences of their actions [...] you don't even tell them where to go. You just let them roam around. Which means if you remove them from point A because you are scared, they are going to cut trees, they are going to go to point B and continue cutting trees. So, you are not solving anything, you are just shifting the problem to another area."

According to STAFF CARE I-49 (2019), rural residents do not necessarily know the long-term effects of them cutting down trees. She criticises that rural residents are removed from

an area before they were educated on environmental concerns. By not telling evicted people where to go, they 'roam around', so that the environmental problem is shifting from one place, to another. MBINGU SISTERS I-33 (2019) comments,

"In terms of climate, I think it could be worse if we don't protect our environment because now Mbingu is very populated and everybody believe, when they come here their life will change because the land is very fertile, so everybody is looking for land to cultivate and at the same time a lot of people are not using electricity [...] they are using firewood. So, what they do, they cut trees. We have a lot of poachers for tress in our area and it is out of control, we can't control them, so what is going to happen is, we are going get delay of rain every year and that's the biggest challenge in our area. So, when the climate is changing all the time [...] that means we are going to harvest less, than what we are expecting."

In recent years, MBINGU SISTERS I-33 (2019) observed an increasing ratio of deforestation due to population growth. The need for energy is the main driver, as villagers 'cut trees' for 'firewood'. Deforestation of 'poachers' is connected to the delay of rains and eventually the decline of harvests in the Kilombero Valley. MP MADABA I-27 (2019) recalls,

"One of my village is in conflict with reserved areas where smallholder farmers have taken part of the reserved land for agricultural purpose. Sometimes they have to be forced out by the authorities. So, it's like scramble for land is happening. Now, to solve that problem I had to negotiate with the ministry of livestock and fisheries. They have a ranch in my place where they keep cows. I had to request them 1.800 acres of land to provide for smallholder farmers in that village. So now, we are in the process of transferring the ownership of that piece of land. That is a typical example, where you see the population growth goes hand in hand with the demand of land, which is not easily available, because the land is already allocated for different purposes. Now we have to recall the government to reconsider redistributing the land to those needs, because as the rural community grows, the demand for land also grows simultaneously."

The comment 'land is already allocated for different purposes' refers to the conflict between the demand for arable land by a growing agrarian population on the one hand and the need for environmental protection on the other hand. That farmers 'have to be forced out by the authorities' shows the pressure on land and that the central government need to 'reconsider redistributing the land'. That the MP requested 1.800 acres from the ministry of livestock and fisheries for his villages shows the contingency of village borders. In other cases forceful evictions by state actors were justified with population growth, over-stocking of cattle and illegal in-migration (WELDEMICHEL 2020; WELDEMICHEL et al. 2019).

6.2 New Hegemonic Narratives under President Magufuli

"If anything, Tanzanian history demonstrates the key role that political leaders can play during periods of uncertainty and crisis, when morally principled leaders have decidedly shaped trajectories of change." (AMINZADE 2013a, 367)

Soon after he resumed office in November 2015, it became clear, that Magufuli perceived himself as a 'morally principled leader' that seeks to change the trajectory of Tanzania decidedly. By identifying narratives of the Kikwete presidency as insufficient, Magufuli presented his conception of the world, his narratives, and his common sense. Many years into his presidency, the rapid shift in state and party ideology between Kikwete and Magufuli left many actors in Dar es Salaam and Dodoma in confusion, wondering which development path Tanzania was on. In the following, four new hegemonic narratives under Magufuli' presidency are analysed. First, the narrative development first, environmental protection later (6.2.1), second the narrative that the agrarian sector does not need state support (6.2.2), third rural infrastructures for competitive industrial agriculture (6.2.3) and fourth mega-infrastructure for national pride and economic development (6.2.4).

6.2.1 Development First, Environmental Protection Later

In public meetings in his home region Mwanza, Magufuli addressed an audience in his mother tongue Sukuma. Furthermore, Magufuli built an international airport in his home village Chato. Since no president before used a local language in a public address, Magufuli's rhetoric and public investments were perceived to favour his home region Mwanza and his ethnic group Sukuma. His suggestion to shift the government, ministries and embassies from Dar es Salaam to Dodoma is another example that Magufuli supported the Northern and the Central corridor, more than the Southern corridor (BREWIN 2016b). PEDERSEN a. JACOB (2019, 22) suggest that tribalism came back to Tanzania during Magufuli's reign through regionalism, nepotism and patronage politics. Furthermore, PEDERSEN a. JACOB (2019, 22) suggest that the cabinet of Magufuli was less diverse in regional origin of ministers and high bureaucratic staff, than the cabinets under previous presidents. Kheri James, the chairman of the CCM youth wing implied that the CCM rewards loyal districts with more development (SAID 2018). James said, "CCM alone decides whether to bring about development or not in a given area" (EYAKUZE a. SAID 2020). Although his statement was later criticised with Magufuli's tenet 'development knows no party', no action was taken against James (SAID 2018). MP KILOMBERO I-47 (2019) explained that government funds were not withheld for his constituency, as the ministry level, responsible for constructing hospitals, roads and other infrastructures, makes no difference between regions and districts. However, MP KILOMBERO I-47 (2019) claimed, that bureaucrats selected by the president may be in loyalty conflicts and may engage in politics that favour specific groups.

According to NDESANJO (2021), in the first years of Magufuli's presidency, protected areas were supposed to be cleared from illegal occupants. On the one hand, Magufuli' was concerned about the status of protected areas as such, on the other hand, through enforcing environmental laws Magufuli showed the strength and the abilities of the central state. This strength can be read as his strong leadership and convictions. During his presidency, Magufuli sought to re-establish the role of a strong state, instead of Kikwete's neoliberal state. Magufuli presented himself as a dealmaker and as president who rigorously fights for its interests abroad and as a state that can implement its policies domestically. Magufuli was a populist in the sense that he based his legitimacy on the popular opinion about him (PAGET 2020b; NYAMSENDA 2018a). He was careful not to portray rural residents as ignorant because they were his main voting bloc in the 2015 general elections.

Magufuli created new national parks for national prestige and to leave a distinct legacy. He also had some success on anti-poaching due to the militarisation of the conservation sector (Weldemichel 2020). Magufuli's government evicted the cattle owned by foreigners (Kenyans) in northern territory after he claimed that Tanzania is no host for foreign cattle. According to NDESANJO (2021), the eviction campaign in Loliondo district in November 2017, where authorities left "more than 23,000 people without homes", marked a turning point in Magufuli's environmental protection policies. In early 2019, Magufuli revoked the government decision to evict 366 villages which fall within protected areas (THE GUARDIAN 2019a). Instead, he ordered ministries to survey and formalise the villages and to redistribute the land to people, a policy Magufuli followed with idle farms since 2016. Disregarding existing law, Magufuli declared that farmers are free to farm where they wanted, as long as they can deal with the consequences (NDESANJO 2021). After 2017, Magufuli favoured settlement areas and infrastructural projects over environmental protection. This change in political priorities was a change in narrative: that the environment is supposed to be used for the developmental needs of a growing population.

Likewise, in the mining sector Magufuli took controversial decisions (NELLIST 2017a; NELLIST 2019). In mid-2017 Magufuli had stopped the export of cargo at the port of Dar es Salaam, a case later called the mineral sand export saga (NELLIST 2017b). Mining and extraction of natural resources gained new momentum during the Magufuli presidency (PAGET 2017b; KINYONDO a. HUGGINS 2019; KASHAIGILI 2013; BRYCESON a. GEENEN 2016; JACOB et al. 2016; PEDERSEN et al. 2016). In the Kilombero Valley, this meant oil and gas exploration by Tanzania Petroleum Development Corporation (TPDC) and Swala Oil and Gas company in September 2017 at the Kilosa-Kilombero block of the size of 16,500 km².

Large parts of the concession are in the middle of the KVRS (MNRT 2018; THE CITIZEN 2017b). On a plot of 150 meters times 150 meters at Ipera Asili Village (Malinyi district) the TPDC and Swala began seismic tests since 2012 (THE CITIZEN 2017b; LIGANGA 2017b). Additionally, small-scale mining activities happened around Kidatu village since 2015 (BLACHE 2019), Graphite mining around Mahenge and gold was found in Misegese village (Malinyi District) (THE GUARDIAN 2020a).

To sum up, Magufuli's take on the conflict of objectives between environmental protection and the increasing demand for settlement areas was contradictory and inconsistent. Magufuli's turn to militarise the environmental protection sector sought to establish his hegemonic position. Yet, when evictions threatened his popular image of protecting rural residents, Magufuli changed the narrative and settlements were given priority over environmental protection. Magufuli's change in narrative shows the contingency of narratives. The political prioritisation of development over the environment was applied for the construction of the Stiegler's Gorge dam project, which required the deforestation of many dozen square kilometres of forest in the Selous.

6.2.2 The Agrarian Sector does not need State Support

After showing relative disinterest in the agrarian sector for many years, in October 2017, Magufuli split the federal ministry of Agriculture, Livestock and Fisheries (MALF) into the ministry of agriculture (MOA), and the ministry for livestock and fisheries (MOLF) (THE CITIZEN 2017i). Charles Tizeba became the first minister in the MOA from October 2017 until November 2018. He was replaced by Japhet Hasunga who held the position between November 2018 and June 2020. The reason given by Magufuli for replacing Tizeba was that he failed to deliver (LUGONGO 2018). In Magufuli's new cabinet, in December 2020, Adolf Mkenda replaced Hasunga. Mkenda was replaced by Hussein Bashe in January 2022 by Samia Suluhu Hassan (TAYLOR 2022). Thus, the MOA had four ministers in only four years.

Since 2006, the main working document and policy for the MALF was the Agricultural Sector Development Programme (ASDP) (URT 2001b), complemented by the Agricultural Sector Development Strategy (ASDS) (URT 2001a). MP MADABA I-27 (2019) claims,

"Actually, [ASDP2 is] a business in the book. We need to translate this into the typical life of the people in Madaba what they need in terms of inputs, what they need in terms of access to markets and what they need in terms of other technologies in agriculture [...] you cannot talk about industrialisation without talking about agriculture [...] according to the policies agriculture needs to be given more weight now than ever, because we want to industrialise Tanzania and 65 % of the materials for industrialisations come from agriculture. So, you can't get industrialised Tanzania, if you don't invest in agriculture."

To him, the ASDP and ASDP2 are just business books that need to be translated 'into the typical life of the people'. In his view, 'you cannot talk about industrialisation without talking about agriculture' because '65 % of the materials for industrialisations come from agriculture'. Hence, Tanzania will not be able to industrialise, 'if you don't invest in agriculture'. COULSON I-03 (2019) claims,

"The thing which I find extraordinary is that Kilimo Kwanza, which was another flagship of Kikwete, was created outside the framework of the ministry of agriculture. The ministry of agriculture had no involvement, and it was imposed on the ministry. And the ministry of agriculture never accepted Kilimo Kwanza. Their bible was always the ASDP, so they had worked for twenty or so years on versions of the ASDP."

He argued that actors of the development community in support of Kilimo Kwanza competed for influence and competence with bureaucrats of the MALF who were in support of the ASDP. In November 2017, ASDP2 was launched for a ten-year period until 2027/2028. On an institutional and policy level, the MALF won the rivalry. A STAFF MOA I-26 (2019) on the difference between ASDP and ASDP2:

"In the ASDP1 [...] the involvement of the private sector was almost none. In this one, private sector is number one. [...] 59 % of the activities should be implemented by the private sector. So, you can see during the ASDP1 there was no involvement of the private sector. [...] In ASDP2 we consider prioritization in terms of areas, in terms of crops, in terms of commodities."

The fact that more than 50 % of the ASDP2 activities should be implemented by the private sector shows the dependency of the MOA on external funding and implementation. Only a fraction of all investments going into the agrarian sector is channelled through the MOA. Large parts are going through other ministries, channelled through the private sector, or international NGOs. The STAFF MOA I-26 (2019) explained that along agricultural value chains, the federal ministries of land, water, fisheries & livestock, industries, infrastructure have interests and competence. In the ASDP2, the MOA is just one among many ministries involved in agriculture as a group of ministries is called Agriculture Sector Lead Ministries which report to the vice president's office (STAFF MOA I-26 2019). The ASDP2 targets to have more 'on-budget investments' which are channelled through either basket funds, or the general budget support (URT 2017, 136; STAFF MOA I-26 2019). Many off-budget investments go to projects directly, which is why the government cannot enlist these sums in their budgets accurately. STAFF GROW AFRICA I-51 (2019) holds another perspective on the function of the ASDP2,

[&]quot;If you ask them [MoA] what they meant by implemented by the private sector, you'll get a lot of differing or incomplete answers. One component of the ASDP2 is to promote climate smart agriculture and technologies. Cool, great [laughs] who is gonna do that? [...] Promotion of what

sort? Advertising on television? We know that costs money, so you can quantify that in a monetary sense. A climate change sorghum project you can put that under that portfolio, that's a quantifiable thing. But which one is the promotion that they [MoA] are looking for? [...] If you have a company who is doubling their force of young agronomists visiting farmer groups and telling them, we encourage you to buy our drought tolerant seed [...] that company is putting that into their marketing budget or in their field operations budget. They don't have a budget called ,promotion of climate smart agriculture'. That's development speak, that's nonsensical academic foreigners in development circles language. No businessman calls that climate smart agriculture promotion. It's marketing. But I am afraid that document has been written by development professionals. [...] that's not language the private sector uses. [...] They are development principals applied to anything happening, it's not a scope of work, it's best practices. [...] If I was to look into the account books of Syngenta, or Monsanto, they'll have staff, travel, logistics, communication. Yes, but where is your climate smart agriculture budget? They will be like: What are you talking about? [...] That's all donor funded projects speak language and not how agriculture happens and function [...] you almost have to be suspicious when you hear a smallholder farmer say, we need to build our resilience'. If you were really treating your farm like a business, you wouldn't be talking like a Harvard graduate. [...] So for us [Grow Africa] we pay lip service to it [ASDP2], except it's not cynically because all we are doing is, we are adhering to the practices and principles that it outlined."

The ASDP and the ASDP2 documents are presented as a collection of 'development principals applied to anything happening' in the agrarian sector. To him, the ASDP2 is not 'a scope of work, it's best practices'. He admits that Grow Africa pays 'lip service' to the ASDP2 by 'adhering to the practices and principles that it outlined' without changing their actual activities on the ground. It is argued that the ASDP2 was 'written by development professional' with 'nonsensical academic foreigners in development circles language' which is not the language of the private sector. If the ASDP2 demands 50 per cent of its intended activities to be implemented by the private sector, the question arises, how the MOA can quantify these numbers with their limited capacities. Moreover, when the ASDP2 demands more 'promotion of climate smart agriculture', it is not clear, whether an advertisement in the television or in the radio or a 'Sorghum project' qualify as such.

While the private sector thinks in terms of 'marketing budget' and 'field operations budget', the ASDP2 demands for more budgets going to 'climate smart agriculture'. STAFF GROW AFRICA I-51 (2019) argues private companies 'don't have a budget called promotion of climate smart agriculture'. These opposing languages, logics and interests result in the government demanding budget allocation for certain development goals (e.g., climate smart agriculture) and the private sector and NGO's constantly rebranding their projects without changing their activities. Afterall, different budget lines of a private company can count to fulfil various development goals of the ASDP2.

In line with Magufuli's policy interests, ASDP2 is entitled 'Agricultural Sector for industrial development' (URT 2017). This sounded like the seventh demand of the Kilimo Kwanza resolution 'Industrialization for agricultural transformation'. Under Magufuli, the

new narrative was that the agrarian sector should produce raw material for agro-processing and industrialisation. COULSON (2015) cautions,

"Policies more or less similar to the ASDP can be found in almost all African countries south of the Sahara and reflect the 'Washington Consensus' of open borders, a maximum role for the private sector and identification of a small number of crops whose productivity can be raised through use of high-yielding new varieties together with fertilisers and other chemical inputs. The policies of AGRA are similar. The fundamental criticism of all these is that, in the last resort, they are top down. They do not start with the achievements of small farmers and the best means of addressing the problems they face. As a result, they look at crops one at a time, instead of relationships between the different crops that farmers plant in an area. They give too much weight to production [through new seeds and chemicals] and too little weight to marketing. If the support systems are in place, there is almost no limit to what small farmers can produce."

He reminds that documents like the ASDP can be found throughout Southern Africa and were suggested and implemented in a top-down fashion. According to Coulson, these policies reflect the neoliberal ideology of open border and a maximum role of the private sector. This is confirmed by LECTURER UDSM I-09 (2019) who argues,

"There is that mix of thinking within the government. Maybe the president has some ideas, but if you go to what the minister of agriculture is doing, it's a contradiction of what the president is sometimes saying [...] this is what guides them and is funded. And who funds it, and who supports it? Which brain produced this document? [...] I think the FAO is key in this [...] their thinking is reflected in this document and others might be involved, World Bank, etc. [...] the frontrunner might be the FAO."

He argues that the MOA and Magufuli are contradicting each other. By posing the question 'who funds them?', LECTURER UDSM I-09 (2019) refers to international actors of the development community who were involved in writing the ASDP2. Their involvement was justified because development partners are supposed to finance and enact the ASDP2 for more than 50 per cent. Tanzania's main agrarian policy document does not necessarily entail Tanzanian ideas. The ASDP2 is another example for future-making. As the discussion on the agrarian policy is evacuated from public discourse, it may be called hegemonic. Possible alternative agrarian futures are prematurely narrowed down to the ASDP2-future.

Since Magufuli came to power, the direct budget line to the MOA was cut. In a public speech Magufuli stated that lazy people should not be helped with food aid (THE CITIZEN 2016k). He suggests that the agricultural sector should function without state support. The Maputo Declaration on Agriculture and Food Security (AFRICAN UNION 2003b), signed by the government of Tanzania, demands all signatories to allocate at least 10 % of the state's budget to the agrarian sector. The Malabo Declaration reaffirmed the commitments made in the Maputo Declaration (AFRICAN UNION 2014; URT 2017). However, between 2000 and

2010 the budget line for agriculture in Tanzania was far less than 10 % (MBUNDA 2016b). STAFF ANSAF I-08 (2019) comments,

"Now we have the industrial agenda, but for us agriculture still remains at the centre of industrial development, so we promote and advocate for budget analysis and budget allocation of public resources to the [agricultural] sector. We look at the Maputo and Malabo agreements that at least 10 % are allocated to the sector. We challenge the government that you signed at least you would be allocating 10 % for the purpose of increasing productivity and making Tanzania a better country."

ANSAF and many other actors in the agrarian sector in Dar es Salaam challenge the government on signing the Maputo and Malabo agreements. Advocacy for ANSAF means 'budget analysis' and to see how much public funding goes into the agrarian sector. For ANSAF 'agriculture still remains at the centre of industrial development' because the raw products are produced in the primary sector. STAFF ACT I-17 (2019) agrees,

"Sometimes it's even less than one per cent. Yes, it is real. Last year we tried to go through every budget because you know in Tanzania agriculture is financing through different ministry. Ministry of Agriculture, Ministry of Livestock, Ministry of Water, Ministry of Industries, Ministry of Home Affairs, we have also the prisons who are giving money to agriculture, we have ministry of defence, we have the national service area division, which is also giving the money. So, last time we tried to trace, see how much these people (agriculture) get. Then we pulled it together, then we got to 1.7 per cent. But that is not disbursement, that was just maybe we are going to spend, but when it comes to disbursement, it is less than one per cent."

Several Tanzanian ministries contribute to the budget of the MoA. Therefore, it is not easy to know, how much is invested into the sector. When ACT 'pulled it together', they 'got to 1.7 per cent'. This, STAFF ACT I-17 (2019) claims, is only the intended disbursement. The amount, which is actually disbursed by all ministries together, 'is less than one per cent'. RETIRED STAFF MALF I-22 (2019) thinks,

"After all our government is not given a due weight to the agricultural sector but we have used to advocate for that so that they can allocate much more money but when you touch the Ministry of Finance they used to sell us that its not because you are the one concerned with the money, otherwise you could see that we have already allocated more than 10 % [of the states' total budget]. You know, the way they see it, is, they see if we give money to the ministry of water, we give money to the ministry of livestock, we give money to the Ministry of Agriculture and we give money to the industry and trade ministry. All this money, if you combine, it is the money going to the same same sector, agriculture."

According to her, 'our government is not given a due weight to the agricultural sector', but the Magufuli administration supports agriculture in many ways. If money is given to the ministry of water, the ministry of livestock and fisheries or the ministry of trade, ultimately all money goes to 'the same same sector, agriculture'. Although the total budget going to agriculture under Magufuli can never be ultimately calculated accurately, because

there is no single definition on what budget allocation to the agrarian sector mean, COULSON I-03 (2019) cautions for something else,

"[...] it's even worse, if they then spend all of what they have got on a few big large-scale irrigation projects. So, I would not say the answer is money necessarily. The first thing is to get the recognition of the bottom-up. Really, unless you get some preconditions right you might be better to spend less, not more. [...] There is need for more money, but it needs to be used with much more care and in the short-term. I would put much more money in the research stations."

In his view, the most important precondition for success of the ministries action is 'the recognition of the bottom-up'. Many policies and initiatives in recent years and decades have come from top-down failed on the implementation stage. According to COULSON I-03 (2019), more money should be put in research stations. Furthermore, COULSON et al. (2018) demand that the agricultural extension service needs to be rethought. While the discussion on budget allocation to the agrarian sector remains abstract on the national level, on the district level, it became more concrete. The DISTRICT OFFICER FOR AGRICULTURE I-45 (2019) complains,

"We have two main sources of funds which are funds within the district level and funds from the central government. For example, during the last financial year we agreed on a total of Tshs 74 million district budget, but the actual amount which we received was only Tshs 22 million which is not even closer to what we agreed on. On the central government side we have a paddy project which is all about improving the production of paddy within the district, the central government has done well on providing the funds for the supervision of the project and it is going well so far but apart from that, there are plans on ASDP2 but the central government failed to provide funds to facilitate those agricultural activities and this has resulted to failing to implement those agricultural improvement plans. [...] Another challenge is the low number of agriculture extension service officers. Malinyi district requires 65, but currently we are only 25. This lack of personnel results to massive inefficiency in the agriculture sector [...] Also, there is an inadequate number of agriculture specialists, there should be people who are specialised in different sectors within agriculture such as horticulture, soil health, crop rotation and others, but currently there are only three agriculture specialists in the district instead of 12 and this too is causing inefficiency in the agriculture sector. However that, there are orders from the prime minister, who is saying that three people are enough for Malinyi District. When we asked the ministry of agriculture why they are short of funds and personnel in Malinyi District, the ministry of agriculture answered that they cannot go against the orders of the prime minister."

The district budget for agriculture in Malinyi of TShs 74 million was reduced to TShs 22 million in 2019. This cut means that the district officers are much less able to implement policies and provide the minimum public services. The low number of agricultural extension service officers and agricultural specialists in 'horticulture, soil health, crop rotation and others' result in 'massive inefficiency in the agriculture sector'. Whereas Malinyi district needs 65 staff and 12 experts, currently, they only have 25 staff and three experts. When the district officer sought to know why they are short on funds, he was told

that the MOA 'cannot go against the orders of the prime minister'. The DISTRICT OFFICER FOR AGRICULTURE I-45 (2019) explains further:

"TAMISEMI [regional administration and local government authority] can sometimes give orders like the agriculture extension officers in the village to act as village executive officers which can sometimes be conflicting to the farmers, simply because the local government believe that in most parts agriculture extension officers are most educated, so they just give that mandate which can sometimes be conflicting."

The President's Office can give orders that overrule the interests of the agricultural district officers. The district officer explains that extension officers are sometimes asked to function as VEOs which is extra work and can cause a conflict of interest, 'they just give that mandate which can sometimes be conflicting'. On a policy level, DISTRICT OFFICER FOR AGRICULTURE I-45 (2019) further remarks,

"On the local level different sector are competing for these funds. Generally, in Malinyi District less priority is given to the agriculture sector, although almost 100 per cent of Malinyi's economy depends on agriculture [...] I think agriculture is not a priority in the current regime like other sectors like health and education because for example health and education sectors never lack any funds from the government; they have all the facilities they need in their sectors, but not us. I feel agriculture has been forgotten, I am still confused."

On the district level devolved offices of federal ministries compete for funds. His observation is that colleagues in the health and education sectors 'never lack any funds from the government'. He feels that 'agriculture has been forgotten' and 'is not a priority in the current regime like other sectors; they have all the facilities they need in their sectors'. 'But not us' means that the agricultural sector lacks funds and facilities. In Malinyi District, a political prioritisation away from agriculture is felt hard because 'almost 100 per cent of Malinyi's economy depends on agriculture'. The comment 'I am still confused' shows the level of frustration on the side of a leading officer who is not able to do his job properly. Hence, the DISTRICT OFFICER FOR AGRICULTURE I-45 (2019) cautions,

"The impacts are pretty negative because farmer's need huge support from the government, according to what we have forecasted this year will probably fall short of 40 % in the overall harvest, though we are sure that there won't be any situation like hunger, but the overall economy will drop. To make sure that we are on the safe side, we try to advice the households to concentrate on other type of farming apart from paddy like vegetable farming, watermelon farming, banana farming so that they can survive rather than depending on the government hundred percent."

The impacts of this lack of funds are 'pretty negative'. The forecast of a forty per cent harvest loss in this year may cause hunger. In order not to be 'depending on the government hundred percent', the district officer advised residents in Malinyi District to diversify their

crops to include vegetables, watermelon, and banana. According to DISTRICT OFFICER FOR AGRICULTURE I-45 (2019),

"As far as industrialisation policy is concerned, the government has not been able to go with the speed, but on our side to make sure that this policy is being implemented. We just give advice to the investors and private business people here in Malinyi, regarding agriculture. At least the investors have been trying to go with the speed. For example, there are 350 warehouses which belong to the investors, while less than six warehouses belong to the local government, so as we can see the government has not been able to implement its own industrialisation policy compared to the efforts of the private sector and the investors."

Magufuli's industrialisation policy 'has not been able to go with the speed'. In Malinyi, the policy was not implemented by the private sector and investors who 'have been trying to go with the speed'. Three hundred and fifty warehouses in Malinyi District are compared to only six, which belong to the local government. He concludes, 'as we can see the government has not been able to implement its own industrialisation policy compared to the efforts of the private sector and the investor'. MP KILOMBERO I-47 (2019) agrees,

"Honestly speaking, and I am not saying this, because I am from CHADEMA, or an opposition party, because this is the truth and reality. For example, this industrialisation thing has done nothing to the local people, to the local farmers [...] at the local level nothing is done. When you look at the agricultural budget, you'll see nothing [...] it's just political, to gain just popularity. I don't see if there is any achievement there."

In his view the industrialisation policies of Magufuli, 'this industrialisation thing', has not reached Kilombero District, 'I don't see, if there is any achievement there'. Allegedly, the policy has not managed to improve rural livelihoods, it 'has done nothing to the local people, to the local farmers'. According to the MP, there are little budgets for the agrarian sector, 'when you look at the agricultural budget, you'll see nothing'. He concludes by saying that the industrialisation rhetoric is a populist agenda by Magufuli, 'it's just political, to gain just popularity'.

To sum up, under Magufuli public investments into rural infrastructures (6.2.3) and into mega-infrastructures (6.2.4) required most parts of the states' budget. Not investing into the agrarian sector was a matter of political prioritisation. This priority came with a certain political risk, as Magufuli relied on the rural agrarian voting bloc for his popularity. His politics meant that his voting bloc received far less subsidies and public services for their rural livelihoods than before. Afterall, investments into mega-infrastructures only start to pay-off many years or decades later. Hence, Magufuli engaged in the ambiguous narrative that the agrarian sector does not need state support, but that through infrastructural

development and industrialisation, rural areas would be supported too. In the next section, the investments into rural infrastructures in the Kilombero Valley are discussed.

6.2.3 Rural Infrastructures for Competitive Industrial Agriculture

While the Magufuli government stresses that mega-infrastructures are necessary for national development, according to another narrative rural infrastructures are necessary for competitive industrial agriculture (THE GUARDIAN 2018c). ENNS a. BERSAGLIO (2019) argue that the design and function of mega-infrastructures follow (neo)colonial logics of extraction. Yet again, national, and rural infrastructures have different implications for rural residents in the Kilombero Valley, which is why the construction of roads, bridges and irrigation schemes, is largely welcomed, but new beacons, land surveys and the Stiegler's Gorge met with scepticism. Different from national infrastructure which remain unseen and abstract to most rural residents, infrastructural 'upgrading' in villages is tangible, concrete, popular and sites of future-making. In the Kilombero Valley "major infrastructure development projects will materialize in the coming 3 - 5 years including the construction of trunk roads and rural electrification" (MNRT 2018, 63). On the one hand, these infrastructures promise development and progress, on the other hand, they increase what SCOTT (1998) calls *legibility* for the state and push the frontier of the national economy into the peripheries.

When asked about wishes for their future in Chiwachiwa, rural residents hoped for administrative upgrading from a hamlet to a village for better representation and public services, for better quality of their road to Mbingu village, a more solid bridge so that trucks can collect their harvest, electrification so that villagers can stop using expensive generators, an irrigation scheme similar to that in Njage village so that climate change effects can be minimised and for more school teachers at their primary school.

With the total cost of more than TShs 60 billion, the biggest infrastructural project in the Kilombero Valley was the 400-meter bridge across Mnyera River between Ifakara town and Lupiro village (Figure 30). The bridge was named *Magufuli Bridge* and was inaugurated by President Magufuli in May 2018. It substituted the two ferries, one of which drowned in 2002 with up to 100 people dead, and a smaller ferry, that partially drowned in 2016 (THE CITIZEN 2016d; OTIENO 2002). The bridge lowered personal risks and transaction costs so that many investments happened across the bridge after its construction (THE CITIZEN 2018d; KANDOYA 2018a). The quality of smaller bridges in the Kilombero Valley varies from bitumen to timber (Figure 30). While wooden bridges like in Chiwachiwa Hamlet allow for

cars and trucks up to three tons to pass, the wooden bridge near Mofu Village collapsed in the rainy season. Muddy roads and collapsed bridges show the vulnerability of rural infrastructures. Despite that, throughout the Kilombero Valley, villagers finance and construct village-level infrastructure like roads, bridges, irrigation schemes and electric pols themselves.

Another infrastructure that was upgraded under Magufuli was the regional road in the Kilombero Valley (THE CITIZEN 2017d) (Figure 30). In May 2018, Magufuli launched the upgrading of the street in Kidatu village that is still ongoing in 2022, with funding from EU, DFID, USAID and the government of Tanzania (THE CITIZEN 2018c; TANROADS 2022). Although CEO SAGCOT I-15 (2019) claims, that SAGCOT was important to bring about funding for this road, Magufuli does not mention them in the opening ceremony (THE CITIZEN 2018c). Often, decision-makers use opening ceremonies to demonstrate their ability to attract funds and to bring development. Memorials, naming streets and bridges become part of narratives and legacies. Construction sites are used as performative acts that are broadcasted live on television, in radio and on the internet.

Residents in the Kilombero Valley are concerned about the quality of rural roads, because their daily trade, migration, in-coming products, out-going harvests, tourism and access to public services depend on them. The main road to and through Kilombero Valley leads from the junction south from Mikumi national park to Ifakara. The quality of the road varies in quality between bitumen to mud-road. This is especially true beyond Ifakara, when going to Mlimba village (southwest), to Mahenge village (southeast), or to Malinyi village (south). In rainy seasons, several parts of the Kilombero Valley are cut-off from the rest of the outside world due to floods and poor road quality. Rural roads become incrementally more available as the dry season sets in (Figure 30). Small motor cycles, bicycles and walking are the main means of transport in Kilombero Valley. MP MALINYI I-25 (2019) explains,

"There is less investment, less commitment in terms of finance putting to agriculture, even though the economy does depend so much on agriculture, especially in the rural areas. When you go to the rural area, a majority of the people they are involved in agriculture, but the government does not invest much in agriculture. Why? Its because [...] the government is creating an environmental situation to allow people, to get involved in their own costs, on their own expenses. That means: for a local peasant based in Malinyi what the government make is just providing infrastructure, good roads, which will enable to bring product, industrial whatever product to Malinyi and put infrastructure to collect, whatever is being produced in Malinyi, to urban areas and markets. So that's what I mean providing infrastructure as a government."

Compared to the presidency of Kikwete, 'there is less investment, less commitment in terms of finance putting to agriculture' although Tanzania's economy depends much on it. For a local peasant, the MP claims, the government provides the infrastructure to bring industrial products to Malinyi and to better collect what was produced locally to urban markets. This is how the government understands 'providing infrastructures'.

Other, infrastructures built under Magufuli's presidency were market buildings and slaughterhouses. The market buildings formalise, the otherwise scattered and hidden market transactions and higher fees must be paid per stand. The slaughtering house in rural areas of Malinyi was built for the increasing number of cattle herders in the district. Rural and urban middle classes invested into warehouses for rice and maize, into milling machines, combined harvesters, and trucks for transportation. Both infrastructures aim at commercialisation of agriculture (SMALLEY et al. 2014; SULLE a. SMALLEY 2015).

New public infrastructure is a way to shift the frontier of Tanzania's national economy further towards remote areas. These infrastructures increase the legibility of the Kilombero Valley, lower transaction costs for rural residents and foreign investors and to fulfil the demands of rural residents. Although public infrastructure seem to benefit all, GREEN (2015, 298) holds,

"The intention is, rather, to bring all Tanzanians into the possibilities for 'inclusive growth' through investments in infrastructure, agricultural modernization, and the formation of special economic development zones. The plan is not concerned with redressing imbalances between rural and urban. On the contrary, it seeks to extend the economic opportunities conveyed by the urban to encompass other areas."

The intention of public infrastructures is not to address inequalities, but to open rural areas for urban capital circulation and investments. Once the infrastructures are in place, investors can follow, leading to agrarian transformation, agrarian modernization, more jobs, technology and knowledge transfer. TENGA et al. (2012; cited in URT 2013b, 161) claim,

"It is often said that there is a large amount of land available for agricultural development. In reality, this is not true. Although there are significant areas of unused and underused land in the Southern Corridor, the assumption that this is available for immediate development may not be correct. Most of the high potential areas have been developed, and many of the areas with less potential require major infrastructure investment if they are to become commercially competitive. Also, many areas of high agricultural potential, especially around wetlands, are also important for biodiversity."







Figure 30: New Infrastructure in the Kilombero Valley

- Magufuli Bridge between Ifakara and Lupiro (Kandoya 2018a) (top left) Intact Wooden bridge, Chiwachiwa Hamlet, Mbingu Village (top middle)
- Collapsed Wooden Bridge Mofu Village (top right)
- Regional Road Kidatu Ifakara under construction after 05/2018 (TANROADS 2022) (lower left)
- Mud road, Mofu Village (lower right)



Figure 31: Electrification of the Kilombero Valley (photos: RV)

- a) Electrified market square, Mbingu Village (lower left)
- b) Mobile Phone Shop Majiji Village (lower right)
- c) Electricity poles in Mbingu Ward (top left)
- d) Private electricity grid, Mbingu sisters (top right)

Although many claim land is available in Tanzania 'in reality, this is not true', because 'most of the high potential areas have been developed'. Areas with 'less potential', like peripheral parts of the Kilombero Valley 'require major infrastructure investment if they are to become commercially competitive'. Thus, the construction of rural infrastructures is aimed at transforming rural areas towards becoming more 'commercial' and becoming more 'competitive'. STAFF TALA I-01 (2019) claims,

"These investors, they are the same like the settlers, they are from all over. What we want is capital, technology and all this. And then, where do they expand, because there is no land to expand. There is no what we call 'empty land', so the frontiers are the peasant farms, these are the reserves [...] of course a lot of it is lying fallow, not because they cannot farm their own land, but because of the sort of technology that they are using [...] and so you justify that to say 'yes there is land after all they are not farming the land, these people are very lazy. So, we cannot entertain this sort of laziness, if we can get someone with capital, with technology who can come and invest'. And so, land can be acquired in the public interest for purposes of investment."

Investors to him are 'the same like settlers'. To him, there is no 'empty land' in which they can invest. The current frontier of investment, he argues, are 'peasant farms' which are like a reserve. To an onlooker, a lot of land appears to lie fallow, 'because of the sort of technology that they are using'. The narrative of putting their land into a different use is that 'they are not farming the land', 'they are lazy' and 'we cannot entertain this sort of laziness'. The solution is to 'get someone with capital, with technology who can come and invest'. In this way village land 'can be acquired in the public interest for purposes of investment'.

Another important infrastructure in the Kilombero Valley is the electricity grid. Public energy infrastructure transports energy produced in Kihansi village to Morogoro town, further to the national grid (Figure 31). Large power poles of more than twenty meters height were erected in villages, which were not yet connected to the national electricity grid. Unequal ownership of and access to electrification was visible in the Kilombero Valley. These days, dozens of villages along the main roads were electrified and further electrification is underway (Figure 31). Thus far, rural middle classes use batteries, generators and solar panels of all sizes to be independent from public energy supply. Where electrification happened, milling machines were bought and smart phone shops opened. In Majiji village, a shop offers smart phones in a yet unelectrified village (Figure 31).

Two medium-scale hydroelectric power stations in Kilombero District supply electricity to Morogoro town. One power station is at Kihansi village and one at Kidatu village, the latter of which at *Ruaha River* that flows into the Rufiji River. According to MCCLAIN a. WILLIAMS (2016, 30) five additional hydropower dams have the following potential:

"There is potential to develop an additional 2,435 MW of installed capacity at Ruhudji (358 MW), Mpanga (144 MW), Upper Kihansi (248 MW), Stiegler's Gorge (1,200 MW), Ikondo (340 MW), and Taveta (145 MW)."

Thus along the *Mpenga River* and the *Mnyera River* at the locations Upper Kihansi, Mpanga village and Ikondo village (Utengule Ward), Taweta Village (Masagati Ward) there is certain potential (MNRT 2018; MDEE et al. 2018b; MCCLAIN a. WILLIAMS 2016). However, the status of these plans is unclear, as a government report cautions about the water availability and feasibility of those dams (URT 2013b). A small-scale hydroelectric power belongs to the Mbingu sisters, a catholic mission, based on > 1,000 ha on the village land since the 1980s. In 2005, they have installed a hydroelectric power station in the Udzungwa Mountains and electrified their compound many years before all surrounding villages (Figure 31). In recent years, the sisters produced surplus energy which they intend to feed into the national grid, once last technical problems are solved (MBINGU SISTERS I-33 2019).

To sum up, the existence of electricity, the construction of the Magufuli Bridge and the upgrade of the regional road has brought visible changes to the Kilombero Valley. Infrastructures increased the access to neighbouring centres and opened new market opportunities. The more the Kilombero Valley is connected to the national political economy, capitalist wage labour relations are introduced, higher usage of mobile phones, smart phones, and the internet. Investments into small machines as part of production or small businesses have implications for pattern of production and consumption, and rural labour regimes. Infrastructures are a main driver of differentiation in the Kilombero Valley. GREEN (2015, 299) argues,

"The impacts of these transitions are visible in Ulanga, where the economy is moving toward its new form in which the role played by the middle class is critical. Though this role is determined partly by aspiration and the need for additional income, it is enabled by the sociotechnical possibilities brought about through the conjunction of development interventions, the expansion of financial services and mobile technologies."

The agrarian change in Ulanga and Malinyi according to here depends on the extent to which rural middle classes can make use of the new infrastructures vis-à-vis elitist interest from domestic elites or those from abroad.

6.2.4 Mega-Infrastructures for National Pride and Industrialisation

According to a second narrative under the presidency of Magufuli, the construction of mega-infrastructures is a precondition for economic development. Throughout his terms in office, Magufuli's policy priorities were industrialisation, agro-processing, domestic added

value, anti-imperialism, developmentalism and resource nationalism (JACOB a. PEDERSEN 2018; PONCIAN 2019; NKOBOU a. AINSLIE 2021). Magufuli remarked, "Tanzania will no longer supply raw materials abroad; we cannot continue with that business, instead we are going to produce and export ready-made goods to them" (TAYLOR 2019b). The slogans 'Tanzania Mpya' (New Tanzania) and 'Tanzania ya Viwanda' (Industrialised Tanzania) became state rationality.

Magufuli sought to leave a legacy as a hard-working president with four prestigious projects. First, the construction of the SGR between Dar es Salaam and Dodoma began in late 2018 (THE CITIZEN 2018j; SCHLINDWEIN 2018) after a Turkish firm won the bid for \$ 2 billion (GLOBAL CONSTRUCTION REVIEW 2017b) (Figure 32). Second, a deep-sea harbour at Bagamoyo was discussed with Chinese investors in 2016 (THE CITIZEN 2016b). Yet again, little progress was reported until 2019 (THE CITIZEN 2019e). Third, the expansion of the fleet of Air Tanzania began with the purchase of new planes between 2016 and 2019 (VOICE OF AMERICA 2016; TAYLOR 2017; THE CITIZEN 2019a) (Figure 32). Additionally, ten airports were built, the most controversial of which in Magufuli's home village Chato (THE CITIZEN 2020e). Fourth, the construction of the Stiegler's Gorge hydropower dam began (Figure 32). DYE (2019a, 2019b) argues that taming nature through water dams for energy production indicates the strength of mankind, and that of the CCM and Magufuli. Water dams represent imaginaries of modernity, progress and development and are dreamscapes of modernity (JASANOFF 2015a). Through constructing mega-infrastructures, Magufuli used a narrative of national pride, progress and modernity and thereby followed the development path of neighbouring countries and the West.

It was less important to what extent infrastructure projects were financial failures (e.g., Air Tanzania), technologically behind potentials (e.g., SGR), did not materialise (e.g. Bagamoyo harbour) or were raising international critiques (e.g., Stiegler's Gorge). Performing pride, progress and modernity in public was a good. Magufuli sought to make Tanzania great (PAGET 2020a) a political agenda with striking similarities to Trump's slogan 'Make America great again' (GUARDIAN ON SUNDAY 2017). Both ideologies were built on nationalism, populism, identity politics, an invocation of a golden past, a dire present, and a bright future (CHEESEMAN 2018; NKOBOU a. AINSLIE 2021). A newly built facility along the Dar-Morogoro highway reads 'Viwanda? Yes we can' which is a combination of the slogan 'Yes we can' (US President Obama) and CCM's slogan 'Tanzania ya Viwanda'. Since many million Tanzanians pass this highway every year, publically visible slogans along mayor roads became sites to express state rationalities and narratives.







Figure 32: New large-scale infrastructures in Tanzania (photos: RV)

- a) Construction Site of the SGR, Dar es Salaam (left)
- b) Air Tanzania airplane, Iringa Airport (right)
- c) Warehouse along the Dar Morogoro highway (bottom)d) Top: Opening of Stiegler's Gorge, July 2019 (Tairo 2019)

By 2015, the power generation capacity of Tanzania was 1.5 Gigawatts. This was a low figure for a country with 60 million citizens (HARTMANN 2018). The expected population growth and the industrialisation policy projected increasing energy demands. According to HARTMANN (2018), the Stiegler's Gorge (as it was called then) would be the costliest investment in the history of Tanzania. Once it would be the fourth largest hydropower station in Africa and the ninth largest in the world. With 130 meters' height and 700-meter width, Stiegler's Gorge is calculated to create a reservoir lake of about 100 kilometres in length, measuring 1,200 square kilometres. It is expected to produce 2,1 Gigawatts to be fed in the national grid doubling the on-grid capacity of Tanzania (HERRMANN 2019). This amount of electricity would be more than the country's highest recorded power demand around one Gigawatts in February 2017 (Figure 32).

Similar plans for a dam and irrigation existed since German colonial time, when a German engineer, named Stiegler, lead an expedition to the site in 1901. He allegedly fell into the gorge after an elephant attack and the gorge was named after him (BALDUS 2021). In the 1920s and 1930s under British colonial administration, the construction of a small dam at Stiegler's Gorge with irrigation schemes was debated but ultimately declined. Plans for constructing a hydroelectric plant were re-examined by the FAO in the early 1960s (OTNES 1961a; OTNES 1961b). Under President Nyerere, the Stiegler's Gorge project was perceived as economically and ecologically not feasible (HOAG a. ÖHMAN 2008). In the 1980s and 1990s, new plans were made with international development community partners (HOAG a. ÖHMAN 2008). Nonetheless, in the 1990s the WB and other donors preferred to assist in the construction of smaller and less-impactful dams in Kidatu and Pangani Falls dams. After an energy crisis in Tanzania in the early 2000s, under President Kikwete, the Stiegler's Gorge project was discussed afresh, because the expected economic growth needed new sources of energy. Although during the visit of Brazilian president Lula to Tanzania in 2010, both governments agreed to support Stiegler's Gorge under Kikwete, no further steps were taken (DYE 2020; DYE a. HARTMANN 2017).

In 2017, Magufuli announced that the Stiegler's Gorge would be a flagship development project under his presidency to be financed and developed by the central government, not the private sector. The long history of the Stiegler's Gorge project was an extra motivation for Magufuli to prove that, at last, he can build a dam that no Tanzanian President before him managed to construct. This would explain why Magufuli renamed the Stiegler's Gorge to Julius Nyerere Hydropower Station. This renaming suggests that Magufuli stands in

Nyerere's legacy and continues his development path by constructing now, what Nyerere could not in his time.

Magufuli said at the international trade fair in Dar es Salaam "come rain, come sun, Stiegler's Gorge hydroelectric dam must be constructed" (GLOBAL CONSTRUCTION REVIEW 2017a; THE CITIZEN 2017c). Further, he remarked "we are not going to listen to people who speak about impacts on environment without facts on the grounds" (GLOBAL CONSTRUCTION REVIEW 2017a). A few weeks later, the National Environmental Management Council (NEMC) stated "no impact on the local ecology" are expected (THE CITIZEN 2017f). Subsequently, all ministries were ordered to streamline Stiegler's Gorge into their strategy plans.

Already in 2017, two rounds of bidding for the construction tenders were held. Two Egyptian firms with little to no experience in the construction of large-scale dams won the bid in 2018 (GLOBAL CONSTRUCTION REVIEW 2018). The successful bid improved the foreign relation between Tanzania and Egypt (EGYPT TODAY). While in April 2018, the minister for Energy said that Stiegler's Gorge could be finished by early 2021 (THE CITIZEN 2018b), the shadow minister for energy estimated the project to take nine to twelve years (TAIRO 2019). According to HARTMANN (2018) it would be quick, if the dam starts functioning before 2030.

Like the SAGCOT under President Kikwete, the Stiegler's Gorge project was evacuated from parliamentary and from public debate. It is a controversial project, since it lies in the middle of the Selous Game Reserve, a UNESCO world heritage site since 1982 and with 50,000 square kilometres one the biggest game reserve in Africa (NOE 2019; TANAPA 2022). For a long time, low levels of community participation in environmental decision-making meant disempowered for rural communities (NOE a. KANGALAWE 2015; NOE et al. 2017; PONTE et al. 2020; WELDEMICHEL et al. 2019). Connected to the Ruaha and Mikumi national parks, several forest reserves, wildlife corridors, the entire conserved landscape measures up to 90,000 square kilometres. The construction of the Stiegler's Gorge led to concerns that the downstream Rufiji-Mafia-Kilwa Marine system could be affected.

Nevertheless, the Stiegler's Gorge was pushed by Magufuli despite critique from political opposition (THE CITIZEN 2018e), international media (KOCH-WESER 2019), scholars, environmentalists, NGOs and the UNESCO (HERRMANN 2019; TAIRO 2019; DEUTSCHER BUNDESTAG 2019). A RETIRED STAFF MALF I-22 (2019) remarks:

[&]quot;Since our president sees the benefit of Stiegler's Gorge, you cannot go against your president [...] In other countries you can, but not Tanzania [laughs]. We are not groomed to do that; we cannot go against our king. Instead, we have to continue advising, continue coping with them.

If we come against him, it means we just want him out of office and then, if we take him out of office, it will be havoc [...] so we better keep quiet and give things time."

She compares Magufuli to a king who cannot be criticised. Since Magufuli 'sees the benefit of Stiegler's Gorge', it is better for the public to accept that and to 'better keep quiet and give things time'. Although 'in other countries you can', in Tanzania, she argues 'you cannot go against your president'. Criticising him would be equal to 'just want him out of office'. Since 'it will be havoc', if Magufuli is taken out of office, she prefers 'to continue advising, continue coping with them'.

About 60 % of the Rufiji River water comes from Kilombero River. Should upstream deforestation continue at current rates continue, riparian areas be grazed, marginal swamps be converted to cropland, water stored and used for irrigation schemes, cattle numbers increase and more water users settle upstream, then less water, irregular flows and more sediments would be the likely result (NÄSCHEN et al. 2019). Thus, the water management of Kilombero River becomes a prerequisite for the success of Stiegler's Gorge. MP KILOMBERO I-47 (2019) says about the construction of Stiegler's Gorge,

"It will affect irrigation activities because now Kilombero water, Kilombero River, will have another job to do [laughs]. So, irrigation schemes maybe can be affected and for example there at Itete [...] people are now chased out from using the Kilombero river, because the government wants more water going to the Stiegler's Gorge [...] there will be some negative impacts for us."

The construction of Stiegler's Gorge will affect irrigation schemes in Itete, as the water 'will have another job to do'. Because of the new water governance, 'people are now chased out from using the Kilombero River'. The MP expects 'some negative impact' for the people in his constituency, as the 'government want more water going to the' dam project. His college, MP ULANGA I-24 (2019), adds,

"In the future years, 10, 20 years Mahenge will be like this one [pointing to a figure with industries] that due to the project of Stiegler's Gorge the president is due to remove all Sukuma from the Rufiji basin, Kilombero area, they'll remove from that [...] but also, despite of removing them, the government did not prepare that pastoralist farming, where to go, so they come to the other area."

On the one hand, he welcomes the construction of the Stiegler's Gorge, because it could bring modern industries to Mahenge, the capital city of Ulanga district and he expects that the president removes 'all Sukuma from the Rufiji basin'. On the other hand, the MP admits, that 'the government did not prepare that pastoralist farming' which is why they do not know 'where to go' and in his opinion are likely to go to other areas. DISTRICT OFFICERS MALINYI I-44 (2019) summarise the new government position,

"On top of being a conservation area here, the Kilombero river also is contributing over 60 % to Rufiji River downstream, where there is Stiegler's Gorge also we need water. [...] for these we have to protect the catchment area including the Kilombero constituting to this, and upstream also. So, one of these areas why we should now be strongly protective, is just to make sure that, this catchment is remaining intact, for the future of the Stiegler's Gorge, for power production. And of course, in other conservations reasons we have the Puku antelopes which still 75 % is said to be within the Kilombero game controlled area [...] these are conservation reasons. But again, the economy likes electrical power generation in future. So, the government really put more pressure to make sure that this area is under protection. Even in future we still think we need to protect more."

Apart from 'being a conservation area', the Kilombero Valley contributes 'over 60 % to Rufiji River downstream', where the location of the Stiegler's Gorge is. Protecting the Kilombero Valley from now on has two dimensions. First, protecting the Kilombero Valley means protecting wildlife, like the 'Puku antelopes which still 75 % is said to be within the Kilombero game controlled area'. Second, protection of the Kilombero Valley under Magufuli is done because 'the economy likes electrical power generation in future'. DISTRICT OFFICERS MALINYI I-44 (2019) conclude that the central government put more pressure on the entire area 'to make sure that this area is under protection' and think that 'even in future we still think we need to protect more'. In a PUBLIC ADDRESS USANGULE A VILLAGE (2019) the MP Malinyi said,

"We have tried so much to discourage land conflicts and end them completely. I have tried to advice the central government to move the borders a little bit because many farms are still inside the reserve area. And the central government has tried to solve the situation by moving the borders somehow, but I know still some people have their farms inside the reserve area. So this is still under discussion although, to be honest, there is very little chance for the central government to move the borders again, because of the national interest. The government wants to protect the Kilombero reserve so that water within the reserve can be used to drive electricity through Stiegler's Gorge project, which will be helpful in the future because investors will come, and we will get foreign currency. Also, there will be development of industries and employment opportunities. The national interest is more important compared to the citizen interests, but we are still trying to find a solution about this, for example modern farming so that you can get high yields in a small plot of land."

The MP informs residents in Usangule A village that local resources are of national interest. Furthermore, he claims that national interests are more important than local interests and suggests that national development would ultimately be beneficial to the village through future investments, industries, and employment, 'which will be helpful in the future because investors will come, and we will get foreign currency'. Although the MP stresses that the issue is 'still under discussion', he says 'there is very little chance for the central government to move the borders again'. A solution to the conflict of interest may be 'modern farming', which can give 'high yields in a small plot of land'.

These quotes show that the construction of the Stiegler's Gorge meant a conflict between regional development in the Kilombero Valley and national development. It was foreseeable that environmental protection in the Kilombero Valley will change if a dam of the size of the Stiegler's Gorge is built downstream. In many ways, the construction of the Stiegler's Gorge was a game changer for the residents of the Kilombero Valley. Should Magufuli's successors continue its construction -which is everything but certain-, the development path of the Kilombero Valley could change drastically. During the empirical research in 2018/19, the Stiegler's Gorge was a new idea, which is why many interviewees were sceptical to what extent the Magufuli administration would be capable to construct the dam. The ACTING DISTRICT EXECUTIVE DIRECTOR MALINYI I-38 (2019) explains,

"In short, there were two programmes [...]. The first one phased out, now this new of course a concept of this area is we can say attributaries of water, river water comes here, even we can say ponching nature [...] preserve water for a long term even during dry season. So people [...] used to extend beyond that beacons and now they cause the river to what? To about to dry. So in order to protect now [...] Rufiji water. It is known as Kilombero [River], but when you go there, after joining with the Ruaha [River] and they form [...] Rufiji. Now remember that, now we have a big project [...] Stiegler's Gorge. So now we can say they reviewed now [...] that boundary so that we have to protect even that one."

After a first programme of environmental protection ran out, a second programme introduced new regulations. The Kilombero River that meets with the Ruaha River to constitute Rufiji River needs to be protected because 'now we have a big project'. Rural residents cause rivers to dry through extending their livelihoods beyond beacons. The new government programme revised the borders between the village land and the protected land and set new beacons. Whereas before they protected 'Kilombero River water' in Malinyi, now they protect 'Rufiji River water'. The political relevance of the Kilombero River water changed. The ACTING DISTRICT EXECUTIVE DIRECTOR MALINYI I-38 (2019) continues to explain,

"Those areas are [...] controlled areas under special reserved areas for specially Kilombero water basins. These are source of water for Stiegler's Gorge. There is of course a boundary. They [villagers] are aware. Unfortunately, they just encroached there, without any permission. The community [...] invaded that area. [...] The responsible authority came to mark the proper boundaries and all villagers [...] were informed why. And then, they made several meetings with them, so they are aware. [...] That is under regulations and laws [...] even the Land Tenure Support Programme, they have already measured that area, so there is a proper land use plan. They are aware that this area is specific for protection of that riverbank, so they are not supposed to enter the area, so there are certain kilometre from the water board, so that they cannot affect that water, river water and wetness. [...] Sometimes they pretend as if they are not aware. So even the responsible authorities, leaders and staff of course went there and educated those people, the villagers why they are doing so. All those problems [...] are under some resolution and discussion [...] inter-ministry, so they [local people] have to wait. We have no specific answer to that area, there is a specific ministry and even other ministries which now they deal with them. So, they know. Of course, there are certain kilometres they have extended that boundary that's

why you'll find there is an old one and the new one boundary. The new one of course, they have extended. That means the Mwananchi, indigenous, they have provided some extension of land use. So they are just waiting for go ahead, so they have to wait, no alternative, they have to wait."

Villages along the boundary with the Kilombero River have lost several square kilometres each because the new beacons 'have extended' the protected areas. It is claimed that rural residents living in these villages know about the new borders and the new regulations that come along with it, 'they are aware', 'they know' and 'they have been informed'. In legal terms, the district officer is right, when he claims, that the community 'invaded the area's and 'they just encroached there, without any permission'. The Land Tenure support programme is mentioned as a proof that the land in the Kilombero Valley was measured and that 'a proper land use plan' was developed. Villagers in Malinyi District 'are not supposed to enter the area' beyond the beacons but are supposed to be 'certain kilometre from the water board so that they cannot affect that water, river water and wetness'. In the eyes of the district official, sometimes villagers 'pretend as if they are not aware'. To him, enough information was given, as 'responsible authorities, leaders and staff of course went there and educated those people'. Currently, there are ongoing debates between different ministries, which is why he cannot give detailed answers. He demands villagers to wait for the final decision. ACTING DISTRICT EXECUTIVE DIRECTOR MALINYI I-38 (2019) adds,

"During rainy season Ngombo they are in water. But why people are there? Historically people, they went there for agriculture activities. High harvests, fertile land, whatever, for many years ago. So I think 1970s there was an operation Vijiji - Villagization, so they were removed. But after discussion, they were allowed to come back [...] but now, the problem of Ngombo, what they are facing now, it is the area that now needs to be protected for the sake of what, of that Stiegler's Gorge project. So long as now people they are digging, they are ploughing, they are farming, soiling of that river that is one of the precautions, that in the long-run we are going to find that river either that depth can decrease or even in the long run can what? Can dry. But up to now, there is no any statement whether they are going to leave, or they are going to remain. We have left it to the national level authority, because now ministers, four or five ministries they have come together, even to visit Ngombo. So, they are under discussion. What they are looking there is not only agriculture, but we are looking for another future, future generation [...] even in Igawa, [...], when you go Itete, even Mtimbira, even Sofi, there is a certain areas it is river banks, so that river banks sometimes that villagers they tend to dig, we can say ignorantly, near to the water bank, so now we have to control, so even those who are dealing with environmental conservation, even those dealing with the water basin, there is a certain authority which now are controlling that area and they have that map and boundary, they know. So unfortunately, the people extend, they used to expand their farms and whatever. Now they have the habit of shifting agriculture. Once they found maybe the harvest has decreased [...] they go to find another area, which is virgin, and they dig. So now, we have to control. There is no problem that there is deficit of land for farming, but people they are not of course ready to adapt good land use."

The situation of Ngombo is explained (see 5.1.1). Although the whole area is 'in water' during rainy season, historically people 'went there for agriculture activities'. After a removal of the villagers due to villagisation in the 1970s, 'they were allowed to come back'.

Nowadays, the status of Ngombo is still not certain, as the Ngombo area is under discussion due to the dam construction downstream, 'the area that now needs to be protected for the sake of what, of that Stiegler's Gorge project'. Due to the people's livelihood activities, the most drastic scenario would be that rivers run dry, 'so long as now people they are digging, they are ploughing, they are farming, soiling of that river that is one of the precautions that in the long-run we are going to find that river [...] can dry'.

Up to date no final decision about Ngombo was done and the district 'left it to the national level authority' to come to a final decision. Other villages within Malinyi district are mentioned to be under similar discussion 'so even in Igawa, [...], when you go Itete, even Mtimbira, even Sofi'. This suggests that a new environmental governance is underway. The district official claims that villagers are doing their livelihood practices 'ignorantly', without thinking about the long-term consequences and 'are not of course ready to adapt good land use'. For now, he claims, 'there is no problem that there is deficit of land for farming' in Malinyi District.

To sum up, the strongest narrative during Magufuli's presidency was that the Tanzanian national economy needs new (mega)infrastructures for economic growth, regaining national pride and for paving the way towards industrialisation. This narrative had a personal dimension, as Magufuli sought to leave a legacy. Propaganda material, public ceremonies and speeches were used to solidify this narrative and to install Magufuli as a strong and hard-working president. Focussing on expensive mega-infrastructures meant that the public budget available for other sectors, was low. Especially actors from the agrarian sector wondered, how a transition towards industrialisation is possible without consolidating the agrarian sector first. Two main counter-hegemonic narratives managed to gain some ground under Magufuli, because they used fractions of his narratives and ideologies, to push their interests into the main political arena. We now turn to these counter-hegemonic narratives.

6.3 Emerging Counter-Hegemonic Narratives

Although Magufuli's presidency became evermore authoritarian, his populism relied on counterhegemonic narratives to get an understanding what the needs of the population are. Under Magufuli, neither opinion polls, nor elections could produce a representative and conclusive picture on what a majority of Tanzania's thought about Magufuli. In the following, the two counterhegemonic narratives that cooperatives are a promising model

for rural futures (6.3.1) and the narrative that agroecology and food sovereignty are possible futures are analysed (6.3.2).

6.3.1 Cooperatives: Retrotopia or Dead End?

"The future of cooperatives in Tanzania is rather bleak." (STAFF TFC I-19 2019)

"The big step, what we want to do is actually [...] to start with cooperatives. We think that that is the future." (STAFF SAT I-14 2019)

Among many rural residents in Kilombero Valley, it is common sense that cooperatives are no attractive model for organising agrarian production. Their future is 'rather bleak', as a senior staff from Tanzanian Federation of Cooperative (TFC) commented. Although strong farmers' associations and strong farmers' cooperatives have the potential for a democratic bottom-up approach to rural development, they are commonly associated with inefficiency and corruption. This negative image is the outcome of the ways in which previous governments have dealt with cooperatives and how their material, political and organisational basis was intentionally destroyed.

In 1925, the first cooperatives were founded in Tanzania. In the decades, cooperatives became stronger and more successful. They built their own schools for the children of their members, opened banks and invested into real estate all over the country. At independence in the 1960s, cooperatives were among the most organised groups in Tanzania. They had political influence on all scales. A STAFF TFC I-19 (2019) remembers,

"It [cooperatives] was very very very strong, with their bank, all those assets, insurance company. It was like a government on its own. So, this is why I said the government is somehow worried, because the cooperatives are maybe as strong as the government."

Since cooperative were 'like a government on its own', the government under Nyerere became 'worried, because the cooperatives are maybe as strong as the government'. Consequently, Nyerere regarded their political influence as potential opposition (STAFF TFC I-19 2019; COULSON 2013 [1982]). In the late 1960s, up to 1980s, cooperatives were incrementally collectivised and their assets acquired by the central state. STAFF RUDI I-12 (2019) remembers:

"Before, the cooperatives were the model for Tanzanian farmers. Before independence and after independence, up to 1980s. That's when the [Nyerere] government intervened. But now, for them people at my age [around 60 years], they are born within cooperative, they got education, they got everything from the cooperatives. It was working very well. So when government intervention was made in early 1980s, cooperatives died by one sentence. Now, after a few years,

they [the central government] discovered, they made a mistake. They came back and said: 'we are back to cooperatives'. Now for them [cooperatives], they lost the warehouses, the banks, they had a lot of things, they have lost. And then, free market economy was introduced. So for them it is like someone died and you see them again, you are afraid. So, they lost hope. [...] Because now, why should they join together? They don't see the advantage of being a group and reaching all the farmers, like RUDI, it's a nightmare [...] actually, the cooperatives were too strong, especially in the North [...] so if its' the government's interest to have very strong national cooperatives, national association, I also doubt. [...] maybe one day, will come a leader who will be interested in that, but so far, there is no political will to do that."

He describes how the experience of a certain generation who saw that cooperatives were 'working very well', is different from the newer generations born after the 1980s. He was born 'within cooperative', 'got education' and 'everything from the cooperatives'. However, cooperatives 'died by one sentence' of president Nyerere. Although the current central government accepts that previous, governments 'made a mistake' in taking everything from cooperatives and now say 'we are back to cooperatives', the cooperatives have already lost everything. In his view, most farmers are afraid of future interventions by the central government into their internal affair and have consequently 'lost hope' into the cooperative model.

Market economy instead, with a deregulated state that seems more attractive for many rural residents, including peasants and smallholder farmers. STAFF RUDI I-12 (2019) wonders why farmers should join in formal groups like associations and cooperatives when they have learned from history that their assets can be taken away any time. Currently, many individual farmers 'don't see the advantage of being a group'. To form farmers into groups, like RUDI is doing, is considered 'a nightmare'. Yet, STAFF RUDI I-12 (2019) is hopeful that with the new generation in twenty years to come, the collective memory about cooperatives will have changed to an extent that younger generations see more value in forming interests groups. STAFF RUDI I-12 (2019) further explains:

"The farmers, they are not organised. They were not organised, and they are still not organised. And it has been a problem to provide any service to them, if they are not organised. So the objective was really to try to organise them into any form of association, cooperative, company, any entity, but legal entity so that you can do interventions."

A fundamental problem of rural areas is seen in the degree of organisation of farmers. It is argued that most rural residents has not been organised in previous years, and decades. When NGOs, like RUDI, want to do 'interventions' and to 'provide any service to them', it is more difficult, 'if they are not organised'. Any legal entity 'association, cooperative, company' better, than no organisation as all. Nonetheless, trying to organise farmers into farmer groups top-down, like RUDI is doing, with an extrinsic incentive (e.g., receiving

inputs cheaper), is in conflicts with the intention for democratic bottom-up farmers groups which have intrinsic motivation to form interest groups. Therefore farmers groups, associations and cooperatives that are formed by NGOs and actors from the development community, are less likely to stay together after the development project or 'intervention' has run out. STAFF ANSAF I-08 (2019) argues:

"We are promoting cooperatives; it gives them the voice. When you come together you have a voice you can speak as a group, rather than as an individual."

On the one hand, ANSAF is promoting the cooperative model, because 'when you come together you have a voice you can speak as a group'. On the other hand, it is ANSAF who gives them the voice. This relationship implies a power asymmetry between ANSAF and 'them'. When ANSAF withdraws, it can take away the voice. Hence, the debate on interest formation of rural residents into farmers groups is one of power, top-down, bottom-up, historical experiences and incentives. In 1991, cooperatives officially re-gained the status of semi-autonomous entities. Presidents Mwinyi (1985- 1995) and Mkapa (1995- 2005) were in favour of cooperatives. For the period thereafter, STAFF TFC I-19 (2019) claims:

"Kikwete saw the cooperatives as thieves and did not like to do much on it."

Although president Magufuli is in favour of cooperatives and wants trade to be done with them, STAFF TFC I-19 (2019) criticises that many non-cooperative members from the business sector benefitted from trade arrangements. According to STAFF TFC I-19 (2019), under Magufuli, the grip of the government to cooperatives became tighter:

"Even now, when we want to write a letter to a minister, maybe the minister for industry and trade, it should go through the register of cooperatives. But I am registered. I can sue, and I can be sued – I am not a government entity. But you see, the way we are being treated is like a government entity. If I want to write a letter to the minister of trade, I should have to go through the ministry of agriculture. What does this mean? That is really, really a problem."

Magufuli treats and perceives co-operatives as parts of the bureaucratic system, as a 'government entity'. When the TFC wants 'to write a letter to a minister', he complains, TFC 'has to go through the ministry of agriculture'. Although they are registered, 'can sue, and can [...] be sued', the TFC and their members do not feel free. This, they claim, 'is really, really a problem'.

Many farmer's groups hesitate to invest in, or to register as cooperatives. Due to previous waves of dispossessions, influence of the government and negative political rhetoric, the image of cooperatives in rural Tanzania is tainted (STAFF TFC I-19 2019). Many Tanzanians

have passed on stories of government's interference from generation to generation. STAFF TFC I-19 (2019) wonders,

"Is this sustainable? Every time the government is changing, our fate is also changing. Simply because we are not autonomous. We depend much on the government. So if we depend on the government, it depends on who is up there."

Given that the opinion of the president 'who is up there' has changed severally over the course of the previous decades, TFC feel cooperatives 'depend much on the government'. By posing the question 'is this sustainable', they wonder how TFC can ensure long-term solutions that will last longer, than the next presidency. Without the assurance that cooperatives can act autonomously of the government, it is difficult to build trust with the people. STAFF TFC I-19 (2019) continues to claim

"So, if we are talking about the future of cooperatives in this country, it's not the members to decide their future [...] it is like the government should put this kind of direction."

Although top-level politicians may be in favour of strong cooperatives, lower ranks of the government may have interests in weak cooperatives. STAFF TFC I-19 (2019) thinks,

"With strong cooperatives we [cooperatives] don't need them [lower ranks of bureaucracy]."

The organisational weakness of cooperatives may mean that government staff is assured their power and positions. In the opinion of STAFF TFC I-19 (2019) low level administrators are not willing to share power, as strong cooperatives could mean that many of their jobs would become superfluous. STAFF TFC I-19 (2019) further claims,

"What is happening with the local government is the same what is happening with the cooperatives. They were abolished in the same year and they were reintroduced in the same year and in the same manner. So, you'll find the way they [central government] are treating local governments is the same way they are treating cooperatives. For instance, in the local governments, they are supposed to have their own source of income, [...] but even the small source of tax there, it all goes to the central government. And then you'll have to ask there, so that you can do your activities. And it is the central government who decides who should be the agricultural officer there, who should be the livestock officer there and who should be the cooperative officer. It is not them [local government authority]. It is almost the same what happens in the cooperatives. When you do the elections – they [central government] are there. When you employ your manager, they are there. It is them; they'll say: No, this one we don't like. This one, yes. You see? But when it comes to resources, also."

Here, cooperatives and local government authorities are compared vis-à-vis the central government: 'the way they are treating local governments is the same way they are treating cooperatives'. Both sources of democratic local decision-making are undermined by flows of money which 'all goes to the central government', instead of being available locally. In

addition, when elections happen, 'they are there' and when a manager is employed, 'they are there'. 'They' is the central government, which has the power to say 'No, this one we don't like. This one, yes'. The quote shows that decisions about rural futures remain in the hands of central actors and points at consistent power asymmetries between cooperatives, local government authorities. In previous years, TFC lobbied for a cooperative law that supports autonomy from the central government. STAFF TFC I-19 (2019) comments:

"We are not that much happy because you see, it's almost government everywhere. Government, government, government. So, in fact they just call us when there is a meeting, but the real participation is not there [...] so it's just so they [central government] have a consultant and to discuss some ideas with us, so the ownership is not on our side, though we are representing the farmers, the ownership is basically with the government."

Policymaking is dominated by the central government. 'Real participation' for the TFC is not given, although they are representing the farmers. 'So, it's just so they have a consultant and to discuss some ideas with us, so the ownership is not on our side'. The TFC is faced with problematic policy-making processes as well as with the policy itself. STAFF TFC I-19 (2019)

"You will find it in all of the processes we are just taken as someone who is just invited today to someone who is presenting, so you just come, the ideas are already there [...] when I was asked to assist the policy. In fact, they started with a question, no, in fact, we have made a mistake, you are not supposed to be here, this is a government thing. When we [government] have written everything, then we'll call you. In stakeholder meetings, somebody presenting there for 45 minutes and then you sit in groups there, just one day or three hours, give your opinion and which they are not supposed to take and at the end what they [government] say is: Ah, yes, we have collected your views, we'll consider it, and then off they go."

Invitation to stakeholder meetings with government representatives may mean that certain ideas already existed before he was asked to 'assist the policy'. On the one hand, he recalls his invitation to a meeting, but when he showed up, he was told 'you are not supposed to be here, this is a government thing'. Instead, he was told that he would be informed 'when we have written everything'. On the other hand, he recalls the standard procedure of stakeholder meetings in which someone presents 'for 45 minutes', 'then you sit in groups', 'give your opinion' and at the end the government says they have collected all views, they will consider it 'and then off they go'. This quote shows frustration on the part of democratic decision-making in which all stakeholders are heard and in which the policy is the outcome of debate and not fix before any meeting was held. STAFF MVIWATA I-04 (2019) comments on the future of cooperatives in Tanzania:

"When you ask us about the alternative, we can say cooperative is the best alternative. Yes, but the cooperative owned by farmers not a cooperative controlled by technocrats. Because there was

also a problem. Even our cooperative laws and policies now is not user-friendly to smallholder farmers, because there is a huge power of technocrats. The government can intervene any time [...] they are the last sayers, like we are going to do this, and this, and this. [...] The current system of cooperative under which the cooperative exist, is of that way."

To him, the best alternative to individual farmers in a market economy is cooperatives. However, he distinguishes between cooperatives owned by farmers and cooperatives controlled by technocrats. For him, the ownership of decision-making processes within cooperatives is key on whether cooperatives as a model can work. He claims that 'our cooperative laws and policies now is not user-friendly to smallholder farmers' because the power of technocrats and the influence of the central government is too high: 'the government can intervene any time'.

Despite these structural problems, support for reviving the idea of cooperatives comes from a number of different actors. A STAFF WB I-18 (2019) comments:

"If I were the minister of agriculture today, that's certainly one of the things I would encourage. If we can find a way to have oversight, we can find ways to detach them [cooperatives] from politics, because that worries the political elite [...] I personally think they [cooperatives] would do more good, than harm."

A central obstacle in the success of cooperatives is seen in how cooperatives are seen by the political elite. 'If we can find ways to detach them [...] from politics', then cooperative would be more acceptable to current decision-makers. STAFF WB I-18 (2019) is convinced that cooperatives 'would do more good, than harm'. Yet, it is not explained how this detachment could look like, and what the result would be. What are the democratic rights of an apolitical farmer's cooperative? Especially since the historical relationship between central governments and cooperatives was conflictual and very political, it is hard to imagine, how a non-political cooperative movement in Tanzania could be like. Afterall, the democratic and political spaces of cooperatives are all about articulation of interest vis-àvis the state, taking a voice in a bottom-up way and to push back on the private sector and a central state, which has destroyed the cooperative movement in the past. STAFF TALA I-01 (2019) from TALA comments:

"We are thinking of [...] new ways of doing cooperatives [...] beyond the papers, the production part of it. Production that isn't individualised, production that is collectivised, but not necessarily with the thinking of what Lenin and the others in those centuries had in mind, not necessarily like China. In our context, how can we restructure these people, their production so that they can realise profit out of that and increase their production base and in terms of life, so they are able to live quality life and they can meet all their needs [...] it should not be something that is ideal, or something that is utopia, but something that is doable and something that we can do."

On the one hand, there is a need to 'restructure these people, their production'; which sounds like a top-down government intervention like under Nyerere in the 1970s and 1980s. On the other hand, it is demanded that this should not necessarily be done 'of what Lenin and the others in those centuries had in mind'. STAFF TALA I-01 (2019) thereby criticises Nyerere and the Ujamaa politics and cautions not to do it 'like China', where the central state is taking all decisions. What is important to him is the intention of the restructuring: to realise profit, increase the production base to live a quality life. STAFF TALA I-01 (2019) cautions 'it should not be something that is ideal, or something that is utopia, but something that is doable and something that we can do'. STAFF SAT I-14 (2019) gives an example, how such a cooperative could look like:

"The big step what we want to do is actually [...] to start with cooperatives. We think that that is the future. We think that here it is of course something people are asking us if you are now completely crazy, because especially when it comes to cooperative, cooperatives had tremendous problems in the country, especially in the Nyerere time [...]. There are two things. First of all, we want to do a bottom-up, not top-down cooperatives, bottom-up! Secondly, we want to develop kind of a scheme where we can help them with the operations because that was always the problem, so that should be SAT. So, we should be part doing the administration, the finance and the marketing. But all this together with the farmers [...] we are doing together processing and the organisation of the production and then also having the farmers completely [...] their free hand on community funds [...]."

Although SAT envisions starting with cooperatives soon, he mentions that 'people are asking us if you are now completely crazy'. The fact that 'cooperatives had tremendous problems in the country, especially in the Nyerere time', is still reason enough in present-day Tanzania, why the cooperative model is rejected as something 'crazy'. Two things are important for STAFF SAT I-14 (2019): First a bottom-up approach to the organisation and second a production scheme 'where we can help them with the operations'. In his historical analysis 'that was always the problem' of cooperatives. The role of SAT (and of similar NGOs in that matter) would be to do 'the administration, the finance and the marketing'. Together with the farmers, they can engage with 'processing and the organisation of the production'. Since political questions are not addressed in this analysis, it is questionable, whether SAT's model could work politically, beyond the technocratic, organisational and financial aspects. STAFF HAKIARDHI I-50 (2019) remains sceptical on the future of cooperatives in Tanzania:

"But then, how could they [cooperatives] do it, while they [government] are on one side already sided with the investors who want a free market, want to compete. How will they balance that interest? And that's why you see cooperatives will not grow, because they [government] have already chosen a side, they have sided with the oppressor. So, what do you expect? They would not have liked cooperatives to survive. And some of these people are big names within the same government, they are big traders. Those who have been exploiting farmers for many years. How

do you think they will accept to bring back cooperatives? People are being frightened about cooperatives all the time. They tell you, cooperatives cause a lot of chaos in this country, but if you sit down with a person. Do you know what a cooperative is? Do you know how they used to operate? [...] they don't know that story. But they will just tell you cooperatives are bad [...] and then let's go to the market economy. While they knew that others are able to run, others don't even have legs to stand and you want them to run with you. That's unrealistic."

The political and economic elites with vested interests have 'already chosen a side, they have sided with the oppressor'. It is said that some of the Tanzanian elites are both traders and part of the government. These elites do not want cooperatives to become politically and economically stronger. In fact, 'they would not have liked cooperatives to survive'. Since cooperatives are a potential threat for the class position of elites, negative stories of cooperatives bringing chaos are being told. In the words of STAFF HAKIARDHI I-50 (2019): 'people are being frightened about cooperatives all the time'. Although many rural residents have the conviction that 'cooperatives are bad', many do not know what cooperatives are and how they used to operate. Instead of cooperatives, the market economy is suggested as a new common sense: 'let's go to the market economy'. Unsurprisingly, this hegemonic common sense is in the core interest of actors of the historic hegemonic bloc.

6.3.2 Beyond the Corporate Food Regime: Agroecology for Food Sovereignty

"It's a narrative that says we have a growing world population, we have so many billions to feed [...] so we need to double our production. And we can only do that by intensifying our productivity using more of the same. And Africa has basically swallowed it, as have most of the donors. Given that it is all technologies coming from their countries, they still have to sell their crap somewhere. [...] It makes perfect economic sense, to suck natural gas from under the North Sea, pump it a couple of hundred kilometres to Norway, burn it to suck nitrogen out of the atmosphere and put it into a solid state in the harbour process, ship it half-way around the world [...] then truck it 500 kilometres inland and sell it to this guy for a dollar a kilo [...] to a guy who is making less than a dollar a day. [...] That's what we are challenging, that model. And what we are putting in it's place, is a transition to agroecology. That's what we are promoting. And there is a huge movement of tens, if not hundreds of millions of farmers who are on our side, going this way." (STAFF AFSA I-02 2019)

While the global population is growing, many hundred million Africans are living in poverty and are considered undernourished. Since these numbers did decrease neither in absolute, nor in relative terms, African governments discuss about possible futures in their agrarian sectors. In the Malabo declaration, they demanded that hunger should end by 2025. The narrative is that this goal can best be achieved through increasing growth in the agricultural sectors, more intensification through the use of modern technology, fertilizers, improved seed varieties, and through increasing productivity per land (AFRICAN UNION 2014; STAFF AFSA I-02 2019). This commercial, industrial and productivist approach is

supported by the Alliance for Green Revolution in Africa (AGRA), founded in 2006, and support by the Bill and Melinda Gates Foundation (BMGF) who grants them two thirds of their one billion USD annual budget (GÉRAND 2022). Further support for AGRA comes from African governments, members of the international development community and large companies like YARA, Syngenta and others. The latter promote a transformation towards an industrialised high-input agriculture as this transformation suits their business interests. They use strong institutional support to create new African markets for their products (TUPS a. DANNENBERG 2021). The conception of the world supported by the Maputo and Malabo Declarations, AGRA, BMGF, YARA and others is hegemonic in Tanzania. STAFF AGRA I-48 (2019) explains the intended revolution,

"Of course, the word 'revolution' was over-ambitious, it was copied from Asian revolution. It's all about getting people to increase productivity first [...] the kind of revolution we are talking about is getting from volume-driven, to price-driven economy [...] as a country we need to think beyond just self-sufficiency. How do you use the advantage of good soils, available land [...] taking advantage of bordering eight countries and become a commodity food basket. Convert what we call traditional food crops for ourselves into cash crops."

The transformation of 'traditional food crops' into 'cash crops' is of AGRA's main goals. The main aim is to 'increase productivity first'. While cash crops are produced for domestic consumption, 'for ourselves', cash crops can be sold on national and global markets. STAFF AGRA I-48 (2019) further claims,

"How do you serve farmers with less than five acres in terms of increasing their productivity? [...] the issue is not about the size, the issue is about the efficiency, the productivity – production per given land. Even if you are a large-scale farmer, if your productivity is low, you won't compete anywhere."

The transformation of the agrarian sector is 'not about the size', but about the productivity 'per given land'. The example of a large-scale farmer explains that 'you won't compete anywhere' when your productivity is low. Despite that, STAFF AGRA I-48 (2019) envisions,

"In thirty years from now, Tanzania will be predominant large-scale farms. It will take time [...] we have to increase productivity per land because of the increasing population, so intensification won't be a choice, optimisation of resource utilisation is going to be very important."

To him, the future agrarian structures in thirty years will be 'predominantly large-scale farms'. On the development path to that scenario, 'intensification won't be a choice', as Tanzania's increasing population means that 'optimisation of resource utilization' is necessary. STAFF RUDI I-12 (2019) agrees,

"The problem of small farmers in Tanzania is low productivity, because they cannot access the right inputs at the right time at the right price as individuals. So by uniting them together, they

can bulk and sell collectively and they can use their produce as collateral to get a loan from financial institutions [...] there is a connection between inputs and productivity. And for us, if you don't have high productivity, you can never get out of poverty."

The problem to him in agriculture is low productivity. Since he sees a 'connection between inputs and productivity', a lack of access to 'the right inputs at the right time at the right price' is presented as the main problem. The solution offered by RUDI is 'uniting them together' in groups, so that 'they can bulk and sell collectively'. Their produce can be used as a collateral 'to get a loan from financial institutions'.

Despite a strong hegemonic narrative, a counter-hegemonic alliance institutionalised itself. In 2011, the Alliance for Food Sovereignty in Africa (AFSA) was founded in Durban. It claims to represent many hundred million smallholder farmers. STAFF AFSA I-02 (2019) explains,

"The whole agroecology thing, if you take it to its logical extreme, then it's a socialist movement. It's a direct challenge to capitalism as we know it. Which is unsustainable, as we have seen. And the good thing about being unsustainable is, it's gotta stop at some point."

Instead of focussing on high-yielding mono-cropping with high external inputs, AFSA and many others support the use of 'traditional' crops and 'traditional' seeds that are more resilient (sorghum, millet), inter-cropping, organic fertilizers, manure, minimal use of pesticides and other practices of agroecology. In Tanzania, TALA, TOAM, Hakiardhi, SAT, PELUM, MVIAWTA, CARE and ESAFF supporters this conception of the world. Also WISE (2020) claims that AGRA and it's intended green revolution on the African continent failed. STAFF AFSA I-02 (2019) maintains,

"There is a massive fight on and for the corporates, for the fertilizers and the seed people, it's an existential battle. They stand to die, if they don't keep doing what they are doing [...] it's hardly surprising that we are getting a lot of resistance and attacks on the whole concept of agroecology. [...] They are trying to co-opt it, like with the word sustainable. [...] They are coming after the term agroecology [...] but one think they won't get is the social movement [...] the sustainable intensification people came too".

He sees a 'massive fight' for corporates who fight an 'existential battle' to establish their business model. Thus, it is not surprising for him that the agroecology movement is 'getting a lot of resistance and attacks'. One tactic is to co-opt concepts and wordings and to attach it to their own agendas. Currently, 'they are coming after the term agroecology' and have begun to use terminology like 'sustainable intensification'.

Whereas president Kikwete clearly favoured the AGRA approach to agriculture through Kilimo Kwanza, the SAGCOT and BRN, president Magufuli was sceptical on this approach.

Nevertheless, openly criticising the government position on some of the policies became ever more difficult. This is why, "more recently the emphasis shifted towards trying to demonstrate the benefits of organic, rather than challenge the government position." (STAFF AFSA I-02 2019). Disinvesting in agriculture meant that former hegemonic conceptions of agrarian futures were stripped of state budgets and state support. Instead, nationalistic rhetoric could be used by counter-hegemonic actors. STAFF SAT I-14 (2019) comments,

"I would also say at the moment we have here a strong nationalism in the country. And nationalism has here its positive sides, but yes also comes with the negative side. But the positive side is really the food sovereignty. It's very important here in the country. Definitely, we [SAT] are benefiting strong from it. So for example with the rice, the government is interested in feeding the people themselves with high quality food. And that would probably five years ago, under Kikwete, he would not mind to import. The same with the sugar, the sugar was very much protected by the new president [Magufuli]. Unbelievable. Otherwise, the industry would have probably died, collapsed. And these are really very important measures. I would say the president is not so much into agriculture ... we can say at the moment SAT is that much connected now to the government, than never before. Like Janet for example she is currently in Dodoma, she is meeting people from the ministry of Agriculture. They are consulting us now; we are even mentioned in the parliament as a NGO who contributes towards farming in the country. And they are now very much interested in organic agriculture."

The observation that under Magufuli 'we have a strong nationalism in the country' is connected to positive and negative aspects. For ideas of national food sovereignty, a nationalist discourse is beneficial. Under president Kikwete importing food was no problem, while Magufuli protected the domestic sugar industry from cheap imports to the extent that 'the industry would have probably died, collapsed'. While, SAT's conception of the world was incompatible with Kikwete's, under Magufuli's nationalism has some surprising overlaps. Currently, SAT is better connected 'to the government, than never before'. One of the leaders of SAT 'is currently in Dodoma' to talk to staff of the MoA. Furthermore, SAT is 'mentioned in the parliament as an NGO who contributes towards farming in the country'. In contrast to the Kikwete government, under Magufuli is 'now very much interested in organic agriculture'. STAFF SAT I-14 (2019) adds,

"I don't think that a lot of people have read about food sovereignty, about this concept. But the whole understanding of the concept here is about nationalism. It's here suddenly – you are proud to consume Tanzanian products. I was missing this. I remember 2010, when I was coming here, I was missing this. I wanted to have a Tanzanian product [...] and people were looking at me: He? That's not anymore! Now you'll write proud on your product 'Made in Tanzania' – that's a big shift. And that is in the agricultural sector also. We see, we can still create awareness in this. We are still sensitising people. These people in the ministries who are really pushing forward into a new direction. Our concepts match. They see that this is a good thing for a country which should be self-sufficient [...] and I see us really, our role is to facilitate and to an extent this mindset shift."

He observes that few people have heard about the concept food sovereignty, but that concepts like these are read through a nationalistic lens now. Nationalism was suddenly there with people being proud to consume products made in Tanzania. When he came to Tanzania in 2010, he was missing this mentality, but these days 'that's not anymore'. These days, he claims, 'you'll write proud on your product 'Made in Tanzania'. He feels, 'that's a big shift'. He claims that 'people in the ministries [...] are really pushing forward into a new direction', a direction in which the concepts of SAT and the MOA overlaps: 'our concepts match'. STAFF SAT I-14 (2019) argues that the role of SAT 'is to facilitate and to an extent this mind-set shift'. One of their strategies is to be in a dialogue with policymakers in Dodoma and Dar es Salaam. Under Magufuli, SAT made strategic use of the nationalistic turn to establish their conception of the world, which was marginal under Kikwete. STAFF SAT I-14 (2019) recalls,

"I remember we had in 2013 the first bachelor students here who started with organic agriculture. [...] In 2010 there was nothing [...] Then in the end, when you see the dynamics on how curriculums are developed at SUA, it's still strongly donor driven. For example, you come in with a concept [...] and they just said here is the money and please serve us the agroecological [...] and the lectures were overwhelmed, it was a completely new thing, a paradigm shift. For my view, at this point, they were not prepared for this. [...] We were recently also invited for the masters from soil science, they also have now the integration of organic agriculture, they just had a curriculum review. [...] Nowadays, whenever something is changing in the curriculum its nice, people always, they call us [...] it's very important. Also, for me, I think, that we have all these students who are going through SAT, either as intern, or through the research programme. In the end what we have is very strong alumni. And these are people now, who grow into big positions. Because when you see from 2010, 2011, 2012 some of them now have PhDs already, working for the government [...] that's how we see how impact is also working. Because in the NGO sector you have a lot of tools how to measure impact. But I can tell you, there is so much impact which we are not capable of measuring, because it becomes very qualitative, but with vibrant impact."

In 2013, when SAT started to have first bachelor students, organic agriculture was not taught at SUA and other universities. The curriculum at SUA is 'strongly donor-driven'. Different actors seek to influence what is taught at agrarian training centres. When SAT held a lecture at SUA, 'it was a completely new thing, a paradigm shift'. The students and the institution 'were not prepared for this'. More recently, 'masters from soil science' integrated organic agriculture into their curriculum. STAFF SAT I-14 (2019) argues that through teaching bachelor and master students agroecology, they become a strong future alumni network and 'some of them now have PhDs already, working for the government'. According to him, 'that's how we see how impact is also working'.

6.4 Interim Conclusion

In this chapter, the third research question – *In which ways do narratives legitimise future conceptions about the Kilombero Valley?* – was posed. This chapter discussed three categories of narratives that were relevant to agrarian and political change in the Kilombero Valley under Magufuli's presidency. First, those narratives that were hegemonic during Kikwete's presidency but were relegated to the background under Magufuli (6.1). Second, new narratives that became hegemonic under Magufuli and rose to become 'common sense' (6.2). And thirdly, counter-hegemonic narratives that tried to establish themselves under Magufuli's presidency (6.3).

The clash and contest of these narratives took place under tense political conditions. At no time was there an open, free, fair, or democratic exchange of ideas. Already during Magufuli's election campaign in 2015, it became apparent that Magufuli's election as president would herald an upheaval in Tanzanian politics. Since Magufuli spoke of a new beginning in public appearances but belonged to the same party as his predecessor Kikwete, profound personnel and ideological realignments of the ruling party were necessary to make the new beginning credible.

This double transition was not easy for Magufuli. To remain (or to become) popular, the radical rhetoric of change had to be followed by radical steps. On the surface, the transition from Kikwete to Magufuli took only a few weeks. In depth, it was never really completed until Magufuli's sudden death, in March 2021. Many old socialist cadres remained loyal to the Nyerere doctrine, others remained loyal to the network around Kikwete and Lowassa, and still others feared that the CCM was squandering democratic gains of the 1990s within a few months. Many of the new cadres Magufuli appointed to central posts from the second and third rows stuck with him out of a mixture of fear and opportunism. Towards the end of his first term, there were hardly any voices inside or outside the CCM that would have contradicted Magufuli. His word became law. This meant that a 180-degree turn in policy could be made within one speech. Under Magufuli, Tanzania was on the road to authoritarianism and dictatorship. Finally, yet importantly, the October 2020 parliamentary and presidential election, which the CCM won with 99 %, testified the state Tanzania's parliamentary democracy was in.

As opinion polls were banned and elections rigged, both fell away as 'objective' means of articulation and expression of popular opinion. Magufuli's authoritarianism made him somewhat dependent on counter-hegemonic narratives. To be successfully popular, the

populism on which the legitimacy of the dictatorship is based must constantly update and readjust itself. Therefore, certain counter-hegemonic narratives managed to establish themselves even under conditions of authoritarianism.

Many hegemonic narratives under Kikwete that Magufuli relegated to the background were reactivated under his successor, Samia Suluhu Hassan. Kikwete's narrative for the most part remained part of the bureaucratic logic at the regional and district levels. Samia Suluhu Hassan directly captured some of Magufuli's new hegemonic common sense narratives. Trying to establish her own style of politics, Samia Suluhu Hassan found herself in a difficult political space between the contradicting ideologies of Kikwete and Magufuli. The following chapter discusses which practices qualify as future-making practices during Magufuli. Which practices were used by different actors to support their version of the future from its imagination to its materialisation?

7 Future-Making – From Envisioning to Materialising Futures

In this chapter, the fourth main research question – *To what extent do practices qualify as 'future-making practices' in the Kilombero Valley?* Is posed. This question is further subdivided into the sub-questions *How do different actors use different future-making practices?* And *How are different future-making practices linked to one another?*

After discussing conceptions of possible futures (Chapter 5) and narratives supporting them (Chapter 6), in this chapter various future-making practices are examined. This is to understand how futures move between envisioning and their materialisation. Materialising futures is not a linear, but a complex and messy process in which far more futures and narratives become declined, than accepted. In all stages of future-making, agency plays a key role. Through the exertion of power, certain conceptions can be changed, rejected, or imposed in a top-down manner. The empirical research could only uncover future-making practices at a particular time and in a particular space. I argue that future-making practices are spatio-temporally dynamic and respond to the given political and societal conditions in which they are embedded, and to which they to seek respond. During the presidency of Magufuli, many long-established 'rules' of political processes changed.

The future-making concept suggested by APPADURAI (2013a), needs specification and operationalisation. In the following, it is argued that practices can be ordered along the lines of abstract/ ideational and concrete/ material. Each future-making practices is connected to others. All practices aim at the realisation of a particular future. The subsequent analysis starts with the most abstract level and ends with the most concrete (Table 5). In line with JASANOFF (2015a), it is argued that futures that manage to become 'collectively-held' have a greater likelihood to become material reality, than those failing to become the same. For the discussion of empirical material APPADURAI's assumption of democratic participation is rejected as highly unrealistic. Instead, strong power asymmetry between and among actors are uncovered, making *agency* a key analytical concept.

In the following first practices envisioning are analysed (7.1). Second, practices of convincing, justifying and stabilising are discussed (7.2). Third, practices of deciding are looked at (7.3). Fourth, practices of policing, planning, and drafting are considered (7.4). Fifth, practices of disseminating and spreading is the focus (7.5). Sixth, exhibiting and testing are suggested as another category of future-making practices (7.6). Seventh,

implementing and appropriating is discussed as the last step toward materialising futures (7.7). Lastly, an interim conclusion is drawn (7.8).

Nr.		Practice	Modus
1	Abstract/ Ideational	Envisioning, Imagining	Ideology, Utopia, Dystopia, Science Fiction, Art
2		Convincing Persuading, Justifying, Legitimising, Selling, Stabilising	Argumentation, Narration, Discourse
3		Deciding, Networking, Institutional hedging	Parliamentary Discussion, Board Meeting, Village Assembly
4	Concrete/ Material	Mainstreaming, Policing, Planning, Drafting	Writing a plan, drawing a sketch
5		Disseminating, Spreading, Communicating	Information Material, Propaganda, TV show, Public Speeches, Documentary, Movies, Podcasts
6		Demonstrating, Exhibiting, Training, Testing	Props, Trials, Training, Experimenting
7		Implementing, Appropriating	Construction work

Table 5: Operationalising Future-Making Practices (own table)

7.1 Envisioning: Socio-Technical Imaginaries

At the beginning of political and agrarian change, relevant political and societal actors envision utopias or dystopias about possible future societies that lie beyond the status quo. These actors may be politicians, artists, journalists, local opinion leaders and charismatic individuals (BECKERT 2016). For an individually held conception of the future to become collectively-held, different ways of articulation are necessary (see 7.2). The motivation for change often originates from a dissatisfaction with the status quo. According to APPADURAI (2013a) different individuals and social groups have different capacities to aspire futures. Although prior to research in Tanzania I had doubts about APPADURAI's claim, I argue, that in the Tanzanian case, envisioning the future is primarily a class project. Furthermore, gender, race/ ethnic group, livelihood, and age play crucial roles.

In the following socio-technical imaginaries about the Kilombero Valley are analysed. These imaginaries cannot be understood without the narratives, in which they are embedded. First the Kilombero Valley as pristine nature that needs to be reserved (7.1.1), second the Kilombero Valley as the upstream reservoir of water for the Stiegler's Gorge (7.1.2), third, the Kilombero Valley as the home for (agro) pastoralists (7.1.3) and fourth the Kilombero Valley as a commercialised agrarian space (7.1.4).

7.1.1 Pristine Kilombero Valley?

At the entrance of Udzungwa Mountains National Park (UMNP), at Mwaya village, a map of the UMNP is drawn against the office wall (Figure 33). This map is one of the few representations of parts of the Kilombero Valley in a public space. With almost 2,000 square kilometres in size, the UMNP covers large parts of the northern Kilombero Valley. Many dozen villages are bordering the Udzungwa Mountains National Park. Villagers are using the UMNP for several livelihood activities like collection of water, deadwood, and non-



Figure 33: Udzungwa Mountain National Park (photos: RV)

- a) Map of the National Park at Administration Block, Mwaya Village
- b) Entrance to the National Park at Mwaya Village
- c) Villager at the border of Njage Village

timber forest products. Some of these activities are legal, others, like the deforestation for timber and charcoal production and poaching, are illegal. A villager in Njage village walked with us for several kilometres from the village office at the roadside through the Njage irrigation scheme to one of the trees that marks the border between the UMNP and Njage village land (Figure 33). As large parts of Njage village are forested towards the mountains in the West, only through local knowledge it is possible to know, where the legal border is. Deep in the forest, he said, it is difficult to impossible for state agents to implement a strict border control. Some villagers, he continued, would engage in deforestation for timber and for charcoal production.

Before tourists visit the UMNP, trained tour guides explain the history, the characteristics, and the ecological value of the UMNP in English. On a map at the entrance, two shades of green present two different qualities of the UMNP. Dark green represents untouched forests, light green shows forests under pressure. A key message by the tour guide is that the ecosystem is endangered by livelihood practices of rural residents. The conflict of objectives between the Kilombero Valley as a site of environmental protection, or settlement area becomes apparent. A positive imaginary of a healthy forest is contrasted with a negative imaginary of destruction. A utopia is contrasted with a dystopia. MFUGALE (2011) contributes to the dystopian imaginary through the 'countdown to the death of Kilombero Valley'. He invokes a destructed, uninhabitable Kilombero Valley and suggests urgent action. Both utopian and dystopian imaginaries have the function to convince and mobilise others for action (see 7.2).

The map at the UMNP is a specific articulation of a narrative that is only shared by few. In addition, it is only visible for certain actors, as one must pay the entrance fee and pass through the administration block to be able to see the map. Few rural residents 'visit' the UMNP through the tourist offices, but live with, or within it. Rural residents, international tourists, journalists, and employees at the UMNP do not share the same imaginary. On the one hand, tourists who belong to middles classes and elites, imagine a future of (stricter) environmental protection to stop the 'death' of the Kilombero Valley. On the other hand, a vast majority of rural residents wish for better access to means of rural livelihoods, less human-wildlife conflicts, and better job opportunities (e.g., in the tourism sector). Thus, in villages neighbouring the UMNP, the imaginary of an endangered Kilombero Valley is not collectively held. Although deforestation is clearly happening within the UMNP, besides stricter environmental protection, resettlements and evictions, more inclusive decision-

making, reduction of the park size are possible counter-imaginaries and counter-narratives. MNRT (2018, 43) summarises,

"[T]here is a need for a shared vision of the preferred use (present and future) of the landscape, supported by reasonably coherent social values and conscious choices among inevitable trade-offs. These necessary ingredients are at best just emerging from decades of mostly unfettered land use change, within the Ramsar site and across the basin."

'Inevitable trade-offs' are mentioned, as well as 'a need for a shared vision' about the use of the landscape in the Kilombero Valley. These visions about the present and the future of the Kilombero Valley are 'at best just emerging'. 'Unfettered land use change' over previous decades have created the status quo. Given the current population growth rates of about 3 % p.a., the trade-offs become ever more relevant. It is questionable, to what extent most rural residents and international tourists will develop a 'shared vision' about the Kilombero Valley. Instead, different imaginaries are rivalling to become materialised (see 5.1). The struggle for the more convincing utopian/ dystopian imaginary is part of the class struggle in the Kilombero Valley. Reducing the size of the UMNP to a fraction of its current size due to pressure by rural residents is almost the exact opposite from a stricter border patrol for improved environmental protection. Under Magufuli, the construction of a large-scale dam project in the Selous contributed to the debate between necessary trade-offs between environmental protection and economic development. This is debated in the next chapter.

7.1.2 Post-Agrarian Kilombero Valley: Stiegler's Gorge

An important (and arguably hegemonic) imaginary during Magufuli's presidency was that of a post-agrarian semi-industrialised Tanzanian society. Under Magufuli, several infrastructural projects were meant to create an industrial development path. The Stiegler's Gorge dam project was among the most prominent examples of how a vision was translated into reality (DYE 2019a; DYE 2019b). Large-scale dams invoke the image of taming nature (DYE 2019a). Many square kilometers of forest need to be deforested and a large reservoir lake dammed. The scale of the Stiegler's Gorge project was meant to show the scale of abilities of president Magufuli to bring development to Tanzania. After ecological and economic critique was raised against the Stiegler's Gorge dam project, Deputy Minister Kangi Lugola said in parliament "anyone against Stiegler's Gorge will be jailed" (THE CITIZEN 2018f). This threat aimed not only at protecting the Stiegler's Gorge, but at protecting the symbolism and the future envisioned by the Magufuli government. While under Kikwete, critical voices from civil society could publically articulate concerns about

hegemonic projects like the SAGCOT, under president Magufuli, the same actors changed their strategies. STAFF WWF I-10 (2019) comments,

"Nowadays, people are a bit learned and they try to open up to challenge the government, although, not with the current regime, because if you speak out, the so called 'unknown people' will be after you and you will disappear. So, people are sort of trying to find out platforms on how to communicate, but not really in public. (...) the consultative process is not as transparent, as it could be, because people try to shy away to speak. Issues of which could be really for the benefit of the government. So long as you challenge the government, for the benefit of the public, but so long you challenge the government, you are in trouble and people try to shy away. I'll give you an example of WWF: We are really not supporting the development of Stiegler's hydropower plant - we are not supporting that. To be honest, we are not in support of that. But, because the government finds that as a priority, we cannot say the government should stop that process. What we now say is we want to work with the government, try to make sure that mitigate the environmental impact that will be associated with the construction of that dam. That's what we are doing now. We cannot say before the government: 'Oh, this is bad, do not do it.' That is not our intention. We know it has inherent environmental problems, so we want to be part of the process to make sure so that we mitigate the associated environmental problems (...) we are talking to the government that we are ready to provide any support you think you'll need that we mitigate some of the environmental impacts."

The comment 'nowadays people are a bit learned' is connected to the ability of the Tanzanian civil society to 'challenge the government'. This statement is relativised with 'not with the current regime'. The rules of the game changed between the Kikwete and the Magufuli presidencies. 'People try to shy away to speak' and communicate outside the public. The consequence of direct critique of the government could be attacks by 'unknown people', a common phrase for death squads (e.g., who attacked Tundu Lissu). Since the government of Magufuli could not be criticised directly for the intended construction of the Stiegler's Gorge dam, WWF tried to become part of the process. Although WWF is 'really not supporting the development of Stiegler's hydropower plant', their political strategy was 'to be part pf the process' and to mitigate all-too-destructive implementation. The other alternative for WWF was to be thrown out of the country. LISSU I-52 (2020) argues,

"[...] our energy sector has historically been dominated by hydro-power [...] they have not been the kind of long-term solutions that they were touted at. Stiegler's Gorge is not going to be any different. Particular, when you think of climate change. Where is the rainfall, where is that water that will feed the Stiegler's Gorge hydropower project and for how long in view of this drying up of the country and of the continent that we have seen in the past decades. Anyone who is familiar with the history of large hydropower projects worldwide will tell you that in the tropics hydro-power is a dead end as an energy source. So Stiegler's Gorge is just one big very expensive white elephant. We [...] should be talking about solar, we should be talking about wind, we should be talking about alternative and more durable sources of energy."

To him hydropower should not be part of a future vision of energy futures of Tanzania. Hydropower to him is not 'the kind of long-term solutions that they were touted at'. He rejects the Stiegler's Gorge as a 'white elephant' that is a 'dead end as an energy source'.

LISSU I-52 (2020) instead suggests solar and wind as alternative sources of energy production. LISSU I-52 (2020) describes his utopian future for rural Tanzania as follows,

"A utopian Tanzania would look like this: An economy that is not as much directly tied to the land, as it is now. An economy that is not really industrial, as you would want it to be, but an economy, which is increasingly based on value addition on production of industrial output in order to remove the pressure from the land. So, an economy away from the rural agriculture that it has always been, to more industrial and more service oriented economic activities. That does not mean that we will no longer be an agricultural country. It doesn't mean that. It only means that less and less people will be involved in agriculture, but it will be the kind of agriculture that is able to sustain the population that will be engaged in other economic activities."

To LISSU I-52 (2020), Tanzania's future economy should depend less on land. He suggests that Tanzania should 'not really be industrial but have domestic value addition on 'industrial output' to 'remove the pressure from the land'. He envisions an economy 'away from rural agriculture' to 'more industrial' and 'more service-oriented' economic activities. In his utopia, Tanzania's national economy has less people 'involved in agriculture'. LISSU I-52 (2020) argues for an agricultural sector that is able to produce surplus for Tanzanian's who in future 'will be engaged in other economic activities'.

Although Lissu criticises the Stiegler's Gorge dam project, he agrees to the necessity to restructure Tanzania from a primarily agrarian, to a post-agrarian political economy. Lissu, it seems, would have preferred other projects to implement a similar socio-technical imaginary. An imaginary of a twofold agrarian transition: a deeper integration of rural areas into global value chains and a transition from the agrarian sector towards other sectors. If, despite the construction of the Stiegler's Gorge dam the Kilombero Valley will remain an agrarian space, the question emerges which futures in-migrating (agro)pastoralists have. Two future imaginaries are discussed in the following section.

7.1.3 (Agro)pastoralist Futures in the Kilombero Valley?

Historically, (agro)pastoralism has not been practiced in the Kilombero Valley at a large extent (MONSON 1991). However, with the in-migration of (agro)pastoralist communities since the 1980s, a growing number of rural residents in the Kilombero Valley are concerned about possible futures of (agro)pastoralists in the Kilombero Valley. On the one hand, detrimental effects of (agro)pastoralism are invoked in dystopian imaginaries of the future. A dystopian imaginary, held by many peasants and smallholder farmers who fear that the ongoing social-ecological transformation is disadvantageous for them, is called *Shinyanga* (Figure 34). On the other hand, a utopian imaginary of the Kilombero Valley that is likely





Figure 34: Imaginaries about future (Agro)pastoralism in the Kilombero Valley

- a) Shinyanga Region in the 1980s (left) (https://www.slideserve.com/judith/a-desert-restored-shinyanga-tanzania)
- b) Kongwa Ranch (right) (Nkullo 2013)

held by (agro)pastoralists, is called *Kongwa* (Figure 34). Both socio-technical imaginaries may vary in their concreteness and may carry different names. Indeterminacy is a precondition for socio-technical imaginaries to become collectively held. The more undefined a future imaginary is, the more individuals can join to imagine it.

The dystopian imaginary *Shinyanga* is a metaphor for a dry place, where many (agro)pastoralists are migrating from. Farmers in the Kilombero Valley fears that Kilombero Valley is environmentally destructed through large herds of cattle and (agro)pastoralists who deforest the areas. DISTRICT OFFICERS MALINYI I-44 (2019) comment,

"And also this Shinyanga thing. People are saying Shinyanga, because it is the area where most of these pastoral societies come from. This area [Shinyanga] was very beautiful in the beginning, it was a forested area with all resources available [...] overgrazing happened, so like soil compaction, also cutting down all the trees, so drainage was much less. Most of the wet areas were dried out. And now, when you go there it is like a semi-desert or a desert area as we can see. It's a very dry area and many people started running away with their cattle looking for good areas, including Malinyi district."

'People are saying' that (agro)pastoralists are environmentally destructive, and their livelihood connected to 'cutting down all the trees', overgrazing and soil compaction. 'People' means most farmers in the Kilombero Valley. If (agro)pastoralists are not stopped from cutting down trees, the Kilombero Valley could end up like Shinyanga, which once was 'very beautiful in the beginning' but was turned into a semi-desert. Although most residents in the Kilombero Valley have never been to Shinyanga, in interviews it was claimed that the Kilombero Valley might look like Shinyanga in future. Therefore, Shinyanga is a central dystopian imaginary held by many peasants and smallholder

farmers. A semi-deserted place is to be avoided because it undermines the livelihood of a majority of farmers. DISTRICT OFFICERS MALINYI I-44 (2019) continue to state,

"I think in future even when they will make this area a bad scenario, they have nowhere to go anymore in Tanzania. Because the population has grown high, everywhere people are using land. Probably it's high time now we need to think about sustainable population [...] that this area sustains [...] in the next 50 or 100 years. Because they might have no areas to move to in Tanzania."

Even if (agro)pastoralists transform the Kilombero Valley into what is perceived as a 'bad scenario', it is because 'they have nowhere to go anymore in Tanzania'. Poverty is introduced as a key aspect as to why environmentally destructive practices are used by (agro)pastoralists. According to the district officers the decision-takers should think about a 'sustainable population [...] that this area sustains'. In the next 50 to 100 years due to increasing population in Tanzania and in the Kilombero Valley, the pressure on land increases. It is assumed, that the carrying capacity of the Kilombero Valley will soon be reached.

A utopian version of a future Kilombero Valley may be called *Kongwa*. AGROPASTORALIST REPRESENTATIVE MALINYI I-42 (2019) suggests,

"To me, the only thing in the future I am still going on making a process to insist our pastoralists to keep their animals in a modern way. Dairy cattle, beef cattle etc. They should keep in a modern way, because now the cattle in every time has become like marijuana. Every time, we are caught, not only in villages, the government takes the pastoralists cattle. Therefore, we are still educating the pastoralists that we should get the cattle with quality, which can sustain in our areas. And those areas which we were given, let's ask the government to set the beacon so that if it's cattle we keep in the right areas which we were given, that even if people will increase, we shall know our area is present. Because when we live like birds, we are not sure where to live. This means that already we always live with suspicion. And a big issue is that the government could make a program. Malinyi district has no ranch area, meaning that it should be given out by the government itself. That I have an area like Kongwa, there are districts with special ranch areas, which means that even if the pastoralists will increase, the government has an ability to find them a new ranch. But, in Malinyi District, we do not have an area separated by the government as a ranch. The government could create the system of separating ranch areas in Malinyi district future like the reserve they do. Because the reserve have areas, you cannot invade, even if we increase in population until 2100, you cannot enter into the reserve area. If you enter, you will be beaten and you will leave. Therefore, give us the pasturing area! When we are given, or if the government has separated the area, it means we shall be safe as pastoralists. That is a very big thing! The government could separate the area to rear those quality cattle, which we could be getting a class. […] If there could be a government farm here, it means you could be going to see and they could be buying cattle here."

Modernising animal keeping is presented as a possible future for (agro)pastoralists living in the Kilombero Valley. Modern in his opinion is 'cattle with quality', which can survive easily in their areas. In his view, Malinyi District should follow the example of Kongwa and arrange for 'government farms' and 'ranch areas' in which (agro)pastoralists can follow

their livelihood practices communally. A land use plan that differentiates between reserved areas, (agro)pastoralist areas and peasant areas would allow for better planning. A central idea about group ranches like Kongwa are to have fewer cows that are better in quality. AGROPASTORALISTS MALINYI I-43 (2019) add,

"[...] why have the reserve people and the ministry of natural reserves succeeded to set their areas with beacon? Why has the ministry of agriculture failed to set the beacon for the pasture areas? And the law [...] enacted in 2010 law number 13 [says] 'You are forbidden to do any humanly activity in the reserve area or in pasture areas'. But now it is not followed because it is politics. [...] the pastoralist has no voice because he is seen as a rich person and the farmers are the poor people. That's when he [farmer] shouts, he is listened to. The pastoralists uses the power of money so that he can force to own the land, because where the pastoralists rear their animals, there should not be a farm nearby."

Thus far, no areas are designated for (agro)pastoralists in Malinyi District. Whereas 'the reserve people' and 'the ministry of natural reserves' was able to demarcate areas, the ministry of agriculture has failed to do the same for ranches. The quote 'it is politics' points to the different powers and prioritisation between ministries. Allegedly, (agro)pastoralists have 'no voice' because farmers are perceived as poor and (agro)pastoralists as rich. Therefore, 'when he (farmer) shouts, he is listened to'. Group ranches like in Kongwa are utopian imaginaries and symbols for possible (agro)pastoralist futures in the Kilombero Valley. Reordering und remarking space in the Kilombero Valley is necessary 'because where the pastoralists rear their animals, there should not be a farm nearby'.

To sum up, the dystopian and the utopian imaginary related to the presence of (agro)pastoralists in the Kilombero Valley respond to an open and yet unaddressed national political question concerned about the future role of (agro)pastoralists in the future Tanzanian society. The OSKV can be considered a spatio-temporal fix that did not address the underlying political questions. Since more than 90 % in the Kilombero Valley are farmers, a dystopian imaginary of a deserted Kilombero Valley is shared by many. The central question raised is about the carrying capacity of the Kilombero Valley. The land and water are claimed by environmentalists, developmentalists, local farmers and pastoralists. Another set of actors imagines transforming large parts of the Kilombero Valley into large-scale commercial farms. It is their imaginary that is addressed in the next sub-chapter.

7.1.4 Organic Farming and Agroecology: SAT's Utopia

For many decades in one of Tanzania's most important universities, the Sokoine University for Agriculture (SUA), in Morogoro town, intensification and commercialisation was taught (SENIOR LECTURER SUA I-05 2019). Agriculture that is done without chemicals

and low inputs, that is socially and environmentally sustainable is not on the curriculum. This representation gap of possible futures was identified by Sustainable Agriculture Tanzania (SAT), a Tanzanian NGO that employs many dozen Tanzanians and is run by an Austrian-Tanzanian couple (STAFF SAT I-14 2019). Over the past years, several international donors funded their projects, many of which qualify as socio-technical imaginaries.

The sketch of the Farmers and Pastoralists Collaboration (FPC) project hangs at the entrance of SAT's offices (Figure 35). The level of abstraction and the English language of the sketch suggest that the target audience are international visitors, potential funding organisations and researchers. The FPC project vision includes the construction of gardens, tree fences, beehives, shops, warehouses, milling machines, ponds, training centres and solar panels. Together, the ensemble is a utopian draft of a possible rural future. For the FPC this future is organic, agroecological and free of conflicts between farmers and pastoralists (SAT 2019). A key aspect of the FPC project is SAT's farmers training centre, on Vianzi farm, a large-scale farm that is run with organic and agroecological practices. The farm is located 20—30 kilometres outside Morogoro town. The central railway between Morogoro town and Dodoma, that is currently under constructions, may have a train station near Vianzi farm. In previous years, SAT offered trainings to local farmers, invited researchers from all over Africa and had international volunteers.

Furthermore, SAT cooperates with SUA. Bachelor and master students can do internships with SAT, can engage in field studies to research about organic agriculture. One of SAT's long-term goals is bring organic agriculture and agroecology into the curricula of SUA and other relevant institutes (STAFF SAT I-14 2019). Moreover, SAT opened an organic shop in Morogoro town that exclusively offers organic products (Figure 35). *Kilimo Hai*, the Kiswahili term for organic agriculture, runs across the entrance. Although the shop is rather small, many hundred small-holder farmers in and around Morogoro town regularly deliver their organic harvest here (STAFF SAT I-14 2019). Urban middle classes are the target group because they are willing to pay a premium for organic quality. Through the shop, SAT seeks to raise awareness about organic agriculture and seeks to connect rural farmers to urban markets. In 2019, SAT sought to open another organic shop in Dar es Salaam to tap into bigger networks and markets (STAFF SAT I-14 2019).

Another aspect of SAT's utopia is the establishment of a seed bank for traditional seeds. In recent years, the variety of seeds applied on the fields has reduced. A seed bank with traditional seeds could enhance the possibility to do research and find new seeds that are more adapted to climate change (STAFF SAT I-14 2019).



Figure 35: SAT's Organic Utopia

- a) FPC Project Vision (photo: RV)
- b) SAT Organic Shop, Morogoro Town (https://icep.at/sat/)

The agrarian future imagined by SAT in many ways is the opposite from the future imagined by Kilimo Kwanza/ SAGCOT. While SAT's projects and activities seek to strengthen the current livelihood of peasants, smallholder farmers and (agro)pastoralists, Kilimo Kwanza/ SAGCOT sought to convert peasants and smallholder farmers into agrobusinesses and market participants. Despite these differences in imagination, striking similarities appear in their strategies. Both SAGCOT and SAT use new terminology (inclusive green growth vs. Kilimo Hai), engage in farmer trainings that seek to transform farmers (more intense vs. more organic), seek to influence curricula of schools and universities, seek to create new market opportunities, influence decision-makers and hope to find international funders through cross-scalar networks.

7.1.5 Ramani Mngeta and Villagers' Mngeta

A painting of Mngeta Village with the headline Ramani Mngeta (Map of Mngeta) hangs at the entrance of the KPL offices on the Mngeta farm (Figure 37). A large farming bloc with green and yellow fields is the main topic of the painting. The white sky, the green Udzungwa Mountains on the left and a large farm from the front until the horizon each cover a third of the painting. The landscape is ordered in mountains and village space on the left and agrarian production on the right. A hydroelectric power station, like the one in neighbouring Kihansi village, is painted high in the mountains, producing electricity for the village. Mngeta village is characterised by a few houses at the slopes of the mountains. The TAZARA and the rural roads mark the boundary between the village and the large farm. The homogeneous colour of the crops and the absence of any tree within the field suggests mono cropping. Although machinery is not part of the painting, an industrialised production like that in the USA comes to mind. The large-scale farm is subdivided into many hundred parcels like a chessboard, a hint at the irrigation infrastructure. In the left lower middle, a small compound of farmhouse is depicted, a representation of the farm administration. A car and two small tractors are drawn near the administration bloc, pointing to the organisation of the farm.

Arguably, Ramani Mngeta represents Mngeta's future. As the painting hangs in KPL's offices, it can be inferred that it represents the companies' vision. Questions of land ownership, production and environmental impacts are not addressed in *Ramani Mngeta*. In contrast to that, the past, the present and the future of Mngeta ward are depicted from the perspective of villagers (Figure 36). With the help of an artist, three paintings were drawn in the popular Tinga Tinga style in early 2015, when KPL was holding Mngeta farm (JOHANSSON a. ISGREN 2017). Villagers from Mkangawalo village which rents parts of their village land to KPL were asked to draw these paintings through a methodology called participatory art (JOHANSSON a. ISGREN 2017). The intention of the paintings was to "understand experiences, perceptions, and drivers of socioenvironmental change" (JOHANSSON a. ISGREN 2017, 9). In line with how Appadurai conceptualised future-making, it was claimed that although the perception of rural residents does not always coincide with objective reality ('how things really are/ were'), subjective understanding of the past, the present and the future are relevant for understanding everyday practices of villagers and how villagers engage into rapidly changing socionatures (JOHANSSON a. ISGREN 2017, 8).





Figure 36: Maps of Mngeta (JOHANSSON a. ISGREN 2017)

- a) The Past (top left)
- b) The Present (top right)c) The Future (bottom left)

Figure 37: Ramani Mngeta -Vision of Mngeta Farm at KPL offices (photo: RV)





'The past' of Mkangawalo Village of Mngeta ward around the year 2005 is portrayed with forested mountains at top, the TAZARA train at the top right, wild animals (e.g. lions, crocodiles, elephants and zebras) peacefully grazing in the front, and rivers flowing from the mountains to the Ramsar Site are carrying plenty of fish. In the centre of the painting, Mkangawalo village is portrayed, including the three livelihoods of smallholder farming on rice fields and in garden, (agro)pastoralism holding cattle in the right centre and fishermen catching and transporting fish in the bottom (KANGALAWE a. LIWENGA 2005). All villagers seem to live in harmony; no mayor conflict is shown.

'The present' of Mkangawalo village is painted as a comparative reflection on what has happened in Mngeta ward in the recent past. Some of the key changes are the rapid deforestation at the top of the mountains, the upgrading of the regional road, the electrification, upgraded roofs form thatched to iron sheet, the construction of a school, and the coming of KPL to Mngeta farm with new buildings, new technologies and new machinery. Villagers are portrayed working on the Mngeta farm as outgrowers and wage labourers. In addition, the population in Mkangawalo has increased, including the coming of (agro)pastoralists portrayed with cattle in front of the picture, suggesting that villagers are living, farming, and grazing in parts of the Ramsar Site. The space for fishermen and wild animals has decreased, and so has the village land, now occupied by KPL's activities. Beacons were set in the wetland to indicate the border between the Ramsar Site, village land and KPL, where villagers are not supposed to graze their animals. Additionally, the water quantity and quality has reduced due to the large-scale irrigation schemes and the use of chemicals by KPL, with negative impacts on the fish. The painting suggests that although the pressure on land has increased considerably, the village can host all livelihoods, wildlife conservation for tourism and the KPL on Mngeta farm. Further, two conflicts are shown. First, an airplane spraying pesticides and herbicides on Mngeta Farm around 2015, which caused conflict because villagers were concerned about their harvests and health (MNGETA VILLAGE LEADERS I-13 2019). A second conflict is depicted with a woman kneeling in front of a KPL worker who is seemingly not satisfied with the bag the woman brought to him. The KPL worker is portrayed to punish the woman, which suggests new hierarchies through labour regimes in Mnegta. However, despite these conflicts according to JOHANSSON a. ISGREN (2017) many villagers commented they would prefer to live in 'the present' due to overall progress and infrastructural development, than in 'the past'. Furthermore, there seems to be a generational conflict in Mngeta between older villagers who tend to dislike KPL, as compared to younger villagers who see job opportunities.

'The future' of Mkangawalo village is painted by two villagers who were asked to make their wishes, hopes and expectations explicit. The painting shows reforested slopes of the UMNP "in order to stabilize rainfall patterns" and for wildlife to return (JOHANSSON a. ISGREN 2017, 7). Overall, the painting shows a neat order for different interest groups: the KPL is represented by a yellow bus that carries villagers to the farm, wildlife areas in the bottom, fishermen and (agro)pastoralists in the lower centre. The houses of villagers have all been upgraded to iron roofs and electricity is connected to all houses. A tractor indicates the wish for technical development. JOHANSSON a. ISGREN (2017, 6) explain:

"The youth want the company to stay, but only if they have increased participation and authority over company decisions (1) and better working conditions (3). They want the pastoralists to reduce the number of cattle and to graze the animals in a specific area to improve water quality of the rivers (2) and they want illegal fishing to stop by having patrols in the river (6). They suggest fishponds, beekeeping, and a small-scale oil palm factory as alternative incomes (4, 5)."

The points raised give hints on the aspirations of villagers. The point 'the youth want the company to stay, but only if they have increased participation and authority over company decisions' is a critique of how KPL is relating to villagers. Villagers feel excluded from decision-making and wish for 'better working conditions' and not being punished by KPL. Moreover, villagers suggest that in future 'pastoralists to reduce the number of cattle and to graze the animals in a specific area to improve water quality of the rivers' and 'illegal fishing to stop by having patrols in the river'. Interests of farmers are priorities in the drawing, as only 'other' livelihoods need to be regulated. The painting suggests a return to harmony like in 'the past'. In the future, all groups are supposed to have their space. The infrastructure needed are 'fishponds, beekeeping, and a small-scale oil palm factory' as well as tractors. Moreover, most villagers want irrigation to stop. JOHANSSON a. ISGREN (2017, 9) remark,

"The most challenging part of the painting process was to depict future aspirations. As opposed to painting the past and present, where consensus could be reached through discussion, it was difficult to produce a common vision for the future because aspirations and interests differ among groups and individuals."

The painting 'the future' was more difficult to draw. JOHANSSON a. ISGREN (2017) acknowledge that a bias may were to include more farmers than (agro)pastoralists and fishermen in the painting process.

Including ideas of (agro)pastoralists and fishermen in the same painting could have meant that opposing ideas become part of the same future. Despite describing opposing interests JOHANSSON a. ISGREN (2017) want to "ensure that all participants were equally

included". Likewise, APPADURAI (2013b, 299) stresses the importance of 'democratic design'. Both insinuate a Habermasean ideal speech situation (HABERMAS 1970) in which social groups are able to freely articulate their needs. Yet, such an ideal speech situation was not given in Tanzania under president Magufuli (NYAMSENDA 2018a).

The utopian futures imagined through Mngeta Farm show that the utopia imagined by some can be a dystopia for other actors. The utopia articulated with 'Ramani Mngeta' is an elitist, hegemonic version of a commercial agricultural future that reflects the interests of only a few village residents. Moreover, there is no telling what the socio-ecological consequences would be if not only Mngeta, but large parts of the Kilombero Valley were transformed according to a U.S. agricultural model. Nonetheless, the draft of 'the future', designed by village residents, also shows certain conflicts of interest within the village community. Attempts to reconcile different interests in a common draft of the future must fail at those points, where diametrically opposed land use interests come on the scene.

After describing and analysing some utopian and dystopian imaginaries of possible rural futures, a next crucial step towards materialising these imaginaries is convincing and justifying. For materialising futures, a certain number of actors need to be convinced about these imaginaries, be it for political legitimisation, or funding. By returning to what Gramsci called organic and traditional intellectuals, in the following the future-making practices of *convincing*, *justifying and stabilising* is analysed.

7.2 Convincing, Justifying and Stabilising: Organic and Traditional Intellectuals

"Kirenga used to be pro-organic and maybe he still is. He was quite supportive of the efforts of TOAM in the early days, because one of the things that TOAM was doing is training for farmers an GAP, good agricultural practices, that benefit any farmer, whether they are organic, or chemical." (STAFF AFSA I-02 2019)

Any researcher who has done research on the SAGCOT in Tanzania knows the name Kirenga. Over the previous years, he has been a key public intellectual to promote the SAGCOT ideas and the institution that he is heading. Although SAGCOT in many ways stands for values that are opposite those of TOAM and AFSA, it is said that 'Kirenga used to be pro-organic and maybe, he still is'. This example shows that convictions of certain individuals can change over time and can have impacts of the development path of a sector, if these individuals are able to convince others in following their ideas.

For an individually held conceptions of the future to become collectively-held, different ways of articulation are necessary. Out of many thousand utopias and dystopias, only a few manage to gain wider popularity, relevance, and acceptance. After envisioning futures, in a second step convincing, justifying, and stabilising of futures is done. Convincing is done to create powerful networks around a certain future, justifying is done to indicate institutional legitimacy and stabilising is done to gain more coherence in the conception of the world (WAINWRIGHT 2010a). RETIRED STAFF MALF I-22 (2019) observes,

"Where we come from, we know. Where we are, we know. But we don't know where we are going somehow. But the president knows [...] maybe, there is a class of people who are certain, of where we are going, but not everybody in the country knows, where really, we are going."

Although she claims that 'where we come from, we know' and 'where we are, we know', only a small 'class of people' is certain 'where we are going'. While the population is left with the present and the past, the future is in the hand of few intellectuals. In the terminology of Gramsci, these intellectuals can be *traditional*, if they support the status quo and they can be *organic*, if they support counter-hegemonic futures. Among other societal functions, intellectuals imagine, convince, narrate, translate, support, or reject ideas.

In rural spaces, intellectuals may be successful businesspeople, schoolteachers, and popular farmers. In urban spaces, they may be professors, doctors, lawyers, religious leaders, journalists, musicians, or influencers in social media. These intellectuals move between international conferences, capital cities, major towns and rural villages and cannot be linked to only one scale. Political parties rely on these intellectuals to communicate ideas. PAGET (2018) observes that the CCM alienated rural middle classes by installing loyal CCM party cadres for important local government positions, rather than them. This, so PAGET (2018), opened up the chance for CHADEMA, Tanzania's biggest opposition party, to network among rural middle classes. Within a few years, CHADEMA could establish wideranging networks, which has led to rivalries in different rural locations.

A gathering that took place on the campus of Jordan University in Morogoro on the 12th of April 2019 can give an empiric example on the relevance of organic and traditional intellectuals on the dynamics in rural settings in Morogoro region. The host of the event was MVIWATA, the biggest farmer organisation of Tanzania. Like the land-right NGO Hakiardhi and the Tanzanian Land Alliance (TALA), MVIWATA was founded in 1994 (MARTINIELLO a. NYAMSENDA 2018). MVIWATA became part of the global network *La Via Campesina* and understands itself as a farmer's organisation that advocates for their rights. According to STAFF MVIWATA I-04 (2019), they have more than 100,000 members, mostly



Figure 38: Edward Sokoine Memorial Event, 12th of April 2019, Morogoro (photos: RV)

in Morogoro Region. For their event in Morogoro, MVIWATA invited many hundred farmers from all over Morogoro Region, brought them to the event with small buses and paid the transport costs (Figure 38). The occasion was the 35th death anniversary of Edward Sokoine (1938–1984), who, in the eyes of MVIWATA, supported peasants and smallholder farmers, when he was Prime Minister under Nyerere. The Sokoine University of Agriculture (SUA) in Morogoro is named after him. MVIWATA memorizes and recollects the earlier ideas of an intellectual to gain legitimacy in the present.

On the event, Ng'wanza Kamata (UDSM), his former colleague from UDSM, Bashiru Ally and Issa Shivji (executive Director of the Mwalimu Julius Nyerere Research Centre and chair in Pan-African Studies) addressed the assembly (Figure 38). All three are leading intellectuals in Tanzania. Whereas the first and the third recently published a lengthy trilogy on Julius Nyerere (Shivji et al. 2020), the second was promoted by Magufuli to Secretary General of the CCM in May 2018 (The Citizen 2018g). In addition to the three, the leader of MVIWATA, Stephen Ruvuga, Mary Ndaro (CARE) and Bernard Baha (TALA) were sitting in the first row. All three are further important Tanzanian intellectuals.

At the beginning of the event, and in-between, farmers were chanting the MVIWATA slogan. This happened after the panellist started shouting the slogan, with farmers echoing it. It appeared, as if the intellectuals had an emotional connection to the people in the audience. Gramsci demands that this emotional connection is key for organic and traditional intellectuals (BARFUSS a. JEHLE 2014). It shows to what extent intellectuals can articulate the needs and visions of the people they claim to represent.

After speeches about Sokoine were over, farmers sitting in the audience had the opportunity to raise their concerns. The issues raised, varied from lacking rural

infrastructure, lack of financial support (loans, input subsidies), unclear state interventions (cashew nut businesses, import/ export bans), cases of evictions and suspected land grabbing. Among the three panellists' farmers singled out Ally as the most promising person who could respond to and potentially solve their issues. In several instances, Ally promised that he would come to their village, to talk to decision-makers. Equipped with the powers of a CCM Secretary General, his visit promised a quick solution. When a visit was promised, affirmative chanting started by farmers.

After a few hours of discussion, the event ended with a common lunch. All guests were invited to eat the food, which was cooked by farmers. Most part of the food was harvests from the farmers' fields. All attendants needed to cue for the food in the same line and ate the same food. The atmosphere was full of empowerment, solidarity, and satisfaction. Many farmers felt their concerns were heard and their solution were underway.

During the event, and especially afterwards, it became apparent that all six intellectuals (three on the panel, three sitting in the front row) seemed to know each other. They ate together at one big table, with farmers keeping a respectful distance, eating at other tables, in another room. At the table of the intellectuals, many political topics were discussed controversially. I sensed that I was part of something special on that day. Sadly, my Kiswahili was not sufficient to be able to understand more than the general context and to grasp the atmosphere. It was intimate, animated, dynamic, serious, concerned, and respectful. Furthermore, I felt that my positionality as the only white attendee at the event did not allow me to take a photo of the intellectuals as they were sitting at the table. This would have stretched my role as a passive observer. Instead, I arranged individual interviews with STAFF TALA I-01 (2019), LECTURER UDSM I-09 (2019), STAFF CARE I-49 (2019) and STAFF MVIWATA I-04 (2019). It became apparent that most of them criticised Kilimo Kwanza and SAGCOT, just like they were criticising the Stiegler's Gorge and industrialisation now.

In May 2018, Magufuli nominated Ally to join the CCM as a Secretary General. Virtually overnight, Ally changed from being an organic intellectual in a Gramscian sense, to become a traditional intellectual. In a controversial interview with Ally, he justified Magufuli's take on political opposition with Althusserian terminology of repressive state apparatus and ideological state apparatus (THE CITIZEN 2020b). He justified tough measures on a range of intellectuals that he was siding with, when he was at UDSM. Between May 2018 and March 2021 (until Magufuli's death), Ally evolved to be one of the strongest supporters of Magufuli within the CCM. After Magufuli's death, in March 2021, Ally was among the first

removed from his position by Tanzania's new president, Samia Suluhu Hassan. SHIVJI (2018) argues that a certain metamorphosis of the revolutionary intellectual has happened in Tanzania and across the African continent. On the relation between MVIWATA and politicians STAFF MVIWATA I-04 (2019) says,

"There is the difference Kenyan politics. In Kenya, the farmers' organisation can invite someone from opposition party and talk with him [...] Even in Germany farmers' organisation can invite someone from Green Party, let's say, and CDU of Angela Merkel and talk to him or her, about setting farmers' agenda, and everything will go okay. But in this country, when now I'll try to invite Zitto Kabwe from ACT party, [whistling, laughs] my friend, MVIWATA is going to be baptised as the branch of opposition party. We are going to be destroyed totally. But when we work with CCM, you can quarrel with CCM, and you are still safe."

MVIWATA needs to be careful which politician they invite and who they talk to. If MVIWATA were to invite an opposition leader, like Zitto Kabwe, the farmer's organisation would have to reckon with hard sanctions, 'to be baptised as the branch of opposition' that can lead to being 'destroyed totally'. This is, why instead of inviting different political leaders from different parties, MVIWATA only works with the CCM. This strategic alliance allows to 'quarrel with CCM' and are 'still safe'. STAFF MVIWATA I-04 (2019) further explains,

"Politicians are politicians, and this is a struggle. This is a struggle we know that we cannot achieve something haraka haraka. Always advocacy is a long-term process. So, we have to maintain such kind of relationship, fifty, fifty. Sometimes you believe, sometimes you don't believe [politicians]. You cannot put your trust hundred per cent on politicians. You have to know them very well, you have to learn about them, but you have also to work with them. Because they are decision-makers, so you have to maintain such kind of friendship in order to keep conducive environment, to penetrate your agenda, sometimes to quarrel, yes. We have to open the door for quarrelling; sometimes you have to quarrel with them, but as friends. Because we are not a political party, we are not struggling to take power, but we are here to fight for our interest. We are here to fight for these smallholder farmers' interests. So, Bashiru [Ally] is our friend, even before he became a CCM General Secretary. He is our friend, so sometimes we say: 'remember where we come from'".

Political successes cannot be achieved fast 'haraka haraka' but needs a long-term strategy. The line between the need to 'quarrel' and staying 'friends' shows the difficult endeavour of MVIWATA 'to fight for these smallholder farmers'. Overall, their relationship to politicians is considered 'fifty, fifty', meaning friendship and critical distance. MVIWATA wants to create a 'conducive environment, to penetrate' their agendas. They try to remind Bashiru Ally as the new CCM General Secretary that he was with them before he got in this position.

To sum up, the Edward Sokoine event shows a couple of things. First, it displayed how careful organisations like MVIWATA, that advocate for the interests of peasants and

smallholder farmers, need to navigate in the political field not to be 'destroyed'. Articulating visions of the future that are not in line with governments, needs a sound understanding under which societal conditions this can be done. Second, it shows how intellectuals may change 'sides' by being nominated to a political position and may turn against their old allies once in a position of power. Third, it indicated how deep the emotional connection between rural farmers and urban intellectuals are. Inviting villagers from all over Morogoro region to Morogoro town enabled strengthening cross-scalar alliances (here: between rural residents, MVIWATA, TALA, ESAFF, HakiArdhi, etc.). Fourth, it points to the relevance of past futures and key intellectuals promoting it.

Although the vision of a rural future with strong peasants and smallholder farmers was (re)imagined at the Sokoine event, although this future was convincing and appealing to the attendees, was justified in front of a key political figure, and was stabilised through cross-scalar alliances, no direct material change followed from the event. For futures to materialise a range of other future-making practices need to be included in the analysis. Thus far, two merely discursive future-making practices were analysed. Another necessary ingredient is the affirmation of formal politics. While under president Kikwete this meant convincing a majority of members of national and regional parliaments, under president Magufuli it meant convincing himself. Thus, in the next sub-chapter future-making practices deciding is analysed.

7.3 Deciding: Who has a say about the Future?

In the Tanzanian case, Gramsci's political theory, written in Mussolini's fascist Italy, allows to analyse, how future-making and work under conditions of authoritarianism, censorship, and widespread fear. In the case of an authoritarian leadership, the two future-making practices envisioning (see 7.1) and deciding are the same. Little convincing, justifying or stabilising is necessary, when the person in charge has enough powers to push through his or her own imaginary of the future. For many controversial decisions during Magufuli's terms in office, this description applies, e.g., for the shift of the capital from Dar es Salaam to Dodoma, the cashew nut Saga, and the construction of Bagamoyo Port by the Chinese. Whereas actors supporting counter-hegemonic projects kept meeting to discuss the futures they favoured (see 7.2), on the hegemonic side, president Magufuli claimed most power for himself. MP KILOMBERO I-47 (2019) opines,

"Especially these Magufuli politics, I don't like it [...] he is somehow a dictator. He wants to dictate everything, he wants everybody to be CCM, [...] he wants to be praised a lot. Everything he is doing himself. [...] He is denying to understand the importance of democracy, free speech, importance of the opposition parties. Even the Bunge [parliament] itself. I am not happy to be at Bunge, because I see, I am not that useful. Our Bunge is like rubber stamp. Everything coming from the government: Ndiyo – Yes. We are voting yes. Every time, most of the time, we are voting yes. And, you know, I was jailed for six months for something I didn't do."

It is of little surprise that an MP from the leading opposition party does not like the policies of the government, especially, when he 'was jailed for six months' for something that allegedly he did not do. What is of concern here is the that he calls Magufuli a dictator who wants to 'dictate everything'. To him the Tanzanian parliament became a 'rubber stamp' in which everything that is proposed is approved, 'every time, most of the time, we are voting yes'. According to MP KILOMBERO I-47 (2019), Magufuli does not understand the importance of democracy, free speech, and opposition parties. The leeway of civil society, political opposition and media to engage in a democratic discourse reduced. PAGET (2017a, 154) calls Magufuli's presidency a "ruling-party hegemony", PAGET (2020a) a "sharp authoritarian turn" and a "threat of dictatorship". However, he reminds that the authoritarian turn belongs to the CCM as a party and began in early 2015, before Magufuli was elected the CCM's presidential candidate. Confronted with the prospects of losing a general election, the CCM wanted to ensure that forging elections would not be necessary. RETIRED STAFF MALF I-22 (2019) comments,

"So, you can see, it is the leaders, heads of states themselves, everybody when he comes into power he comes with his own reservations, his own thinking, which sometimes is not correct. And sometimes, even if the experts try to advice, sometimes Magufuli is doing what he is thinking, he is doing like Trump [laughs]."

She compares Magufuli with US president Donald Trump. To her, both presidents are doing what they are thinking without giving much concern to the experts who try to advise them. Although she know that leaders and heads of state come to power with their own ideas, she thinks that this mentality is 'sometimes not correct'. STAFF ANSAF I-08 (2019) agrees,

"We have been having very short-term decisions, or plans. We don't have long term visions somehow. After every change of the president, you have a different scenario. So, this is also a challenge. There is no this long-term plan, strategy plan for the country, like this is where we want to go, so whoever comes, you start building from where the other ones end. Sometimes with a new president we start afresh, which sometimes sounds bad to me. Kikwete was focussing on gas for instance, all of a sudden, somebody comes and has a different concept. This is a challenge [...] I think there is a need to consolidate our policies and come up with a long-term vision. This is our position as a country, if we are talking about industries, then we need more than ten years to develop industries here. So, we don't want to see after Magufuli, then somebody comes with completely different business. Actually, starting afresh. We want somebody who comes to

continue the foundation that has been set [...] that vision 2025 is there, but have we been consistent trying to achieve this one. I don't think we have been consistent of sort."

He argues that Tanzania takes 'very short-term decisions, or plans'. With every new president 'you have a different scenario' which leads to confusion about the long-term perspective. With new presidents Tanzania tends to 'start afresh', which 'sounds bad' to him. Instead, he wishes for long-term plans and strategies that do not end with one president. STAFF ANSAF I-08 (2019) does not 'want to see after Magufuli, then somebody comes with completely different business. Actually, starting afresh'. For him, Tanzania's Vision 2025 does not qualify as a long-term vision, as 'we have been consistent of sort'. The two examples that he refers to are energy sources and industrialisation. Both point at the Stiegler's Gorge.

Shortly after Magufuli suggested to build the Stiegler's Gorge dam in the middle of the Selous, a short, but controversial debate began to emerge, whether the dam project is economically and environmentally feasible. After several institutions and individuals publically opposed the project, Magufuli's imaginary that sought to materialise by skipping convincing, justifying, and stabilising, was pushed through by force. It culminated in the threat that 'anyone against Stiegler's Gorge, will be jailed', raised by a minister in parliament (THE CITIZEN 2018f). RETIRED STAFF MALF I-22 (2019) says,

"But really, the developmental way of going ahead, I don't think there are people who are [...] striving to talk for those things. Because people are afraid that, if I talk, I don't know, if I will be in prison, or if I will not be in prison, so I better shut my mouth."

Actors who are of a different opinion than the ruling party, or than the president are afraid 'that, if I talk, I don't know, if I will be in prison'. The consequence is self-censorship: 'I better shut my mouth'. She doubts that there are many people who want to talk about the 'developmental way of going ahead'. This is in line with STAFF CARE I-49 (2019) who observes,

"All these issues especially when it comes to land investment is super political and you never know who might get the right ear of the president and the president might change his tune. So you can never say never."

Decisions about the future of land-related projects depend on 'who might get the right ear of the president'. Although 'you never know' who that person could be, this person may change his opinion, or 'might change his tune'. Hence, when it comes to understanding the development path that Magufuli has chosen, it is difficult to assess when next times he decides for a specific future: 'you can never say never'.

Two persons, who could change Magufuli's tune, were the Secretary General, Bashiru Ally, and his Prime Minister, Kassim Majaliwa. Magufuli appointed both by surprise. They became loyal allies during Magufuli's presidency. In Malinyi District, both the District Commissioner and the District Executive Director were appointed by Magufuli. An example from Malinyi shows, how rural populations use hierarchies in their favour. At the district level, conflicts between government officials emerge due to overlapping perceptions of responsibilities, competences, and legitimacy. Such a conflict was reported between the District Executive Director and the District Commissioner in Malinyi (THE GUARDIAN 2019d; THE CITIZEN 2019i). Rural residents waited until Majaliwa visited Malinyi and raised their discontent by showing placards with demands (THE GUARDIAN 2019d). By criticising government officials in the presence of a high-level politicians, rural residents used the authoritarian state structure in their favour. Majaliwa concluded that the district staff lost communication with rural residents and need to be replaced (THE GUARDIAN 2019d).

The dynamics at district levels and their loyalty conflicts are key to understand Tanzanian governance. On the one hand, district staff are loyal to the president by whom they were appointed, on the other hand, they are mandated mediate and solve land issues. Communication with dozens of wards, villages and hamlets requires site-specific knowledge and an understanding of the residents' needs. The power and knowledge asymmetries between the district staff and villagers are considerable. In some instances, district staff used their powers for rent-seeking opportunities (BÉLAIR 2018; BLACHE 2019). Yet, in other districts staff sided with the interests of rural residents against donors, NGOs and conservation authorities (BLUWSTEIN a. LUND 2018). The struggle around policy implementation is often centred at the district level (BLUWSTEIN a. LUND 2018).

To sum up, the future-making practices *deciding* is of critical importance on the way between imagining a specific future and materialising it. The dynamic and often contradictory policy environment in Tanzania in previous decades meant that no long-term vision or plan was followed. Instead, president Kikwete and president Magufuli filled their presidency with their own future visions. While throughout most of Kikwete's presidency an open, pluralistic, and controversial democratic discussion on rural futures was possible, under president Magufuli this was no longer the case. Thus, the future-making practices *deciding* were mainly done by himself. This is not to say that other actors did not come to any decision about the futures they favoured, but that the future the Tanzanian state supported was like the future Magufuli had in mind.

In the following section, the future-making practices *policing* and *planning* is analysed. On the continuum between abstract imagination and concrete materialisation, these practices are in the middle. A policy and plan can be digital and physical. It concretises, which material changes need to follow from a certain imaginary. Depending on who has drawn and written the policy and plan, it is charged with legitimacy and power. Policies and plans signal responsibility about the future.

7.4 Policing, Planning and Drafting: The Future belongs to people with a plan

Policies and plans are concrete articulations of an imaginary. When president Kikwete suggested the SAGCOT, he imagined transforming a third of the country. This abstract idea needed to be concretised and respond to institutions, responsibilities, policies and plans. Coulson I-03 (2019) argues that during Kikwete there were institutional tensions between the ideas of Kilimo Kwanza/ SAGCOT, and ASDP-policies followed by the ministry of agriculture. Mainstreaming ideas and imaginaries into relevant government institutions is a key aspect of future-making. Afterall, presidents rely on a large body of bureaucrats to implement their ideas.

The complexity of the institutional arrangement claiming to have a plan for the Kilombero Valley is shown by the MNRT (2018). It calls the land use change and the planning processes in the Kilombero Valley 'anarchic' three times and mentions overlapping and unclear mandates of different government institutions both vertically and horizontally. Furthermore, MNRT (2018, 44) claims,

"Important enabling provisions for environmental management included in the Tanzanian legislation (the implementation of the Environmental Management Act is still at its infancy 14 years later)."

The report maintains a lack of implementation for many years, 'the Environmental Management Act is still at its infancy 14 years later'. The report, which was financed by Belgian Aid and the EU, was launched by the MNRT and finds that the same ministry has not been able to implement their own policies. The questions emerge what policies and plans are for when they are not implemented? Which functions do they play in future-making? Due to lack of capacity in the districts, wards and villages, lack of trained personnel, insufficient funding and awareness of rural resident and a general absence of the Tanzanian central state a vacuum of power exists.

MNRT (2018)suggests an integrated management plan for the KVRS and defines social values along which different needs can be integrated into a common plan. In other words, to combine different imaginaries of the future into one, more coherent vision. It enlists four types of 'super-ordinate plans' and twelve kinds of 'sub-ordinate plans' which exist for the Kilombero Valley (Figure 39). Many federal and devolved institutions are involved in planning the future for the Kilombero Valley. The list MNRT (2018) only covers the management of KVRS, as the rest of the Kilombero Valley may have additional plans. BLUWSTEIN a. LUND (2018) observe that different government institutions work with different 'official maps' when implementing policies. Moreover, the writing up process of policies and the implementation of plans are

Super-ordinate Plans

- Sector Development Plans
- Annual Plans and budget of line agencies (MNRT, PORALG, MLF, MHLHHSD, MoW, VPO, TANESCO, MoE)
- Rufiji Basin IWRMP
- Agricultural Development Plans (SAGCOT, ASDP II)

Sub-ordinate Plans

- District strategic and Annual Plans and budgets
- District Land Use Planning Frameworks
- Village Land Use Plans
- Kilombero Game Controlled Area consolidation and General
- Management Plan
- Wildlife Connectivity Plans (Ruipa East, Ruipa West, Magombera corridors)
- Puku Conservation Action Plan
- Site specific wetland conservation plans (Kibasira, Chita)
- Iluma WMA Management
- CBFM Plans (site management and CBFM scaling up)
- BMU scaling up plans
- WUA plans
- Mining exploration plan

Figure 39: Government Plans for the Kilombero Valley (MNRT 2018, 30)

financed through international development partners, which makes long-term planning difficult. LECTURER UDSM I-09 (2019) remarks,

"Commercial farmers, whatever the number, [...] but they have powerful institutions which represent their interests. For example, SAGCOT model. Who is involved? Banks [...], government's local and foreign [...], agro-business, multi-nationals, like Monsanto, etc., they are involved, in projects like this. So, they have interest in the kind of policies this country adopts, and they finance various schemes under the ministry of agriculture. So, some of the officials, at particular, when you have a government, which has very limited financial resources, people in the ministries feel starved and someone brings money, they will listen. It's kind of corruption, although it comes in a way of a project, so they will listen to whoever is bringing that money. So, if they are pushing, or drafting a policy. They will draft that policy along the lines of who is enabling them [...] these guys in the ministry, they are pushing, because sometimes, this is their project. Land reform is keeping them busy and is giving them some money. So, they go to the rural areas, they come up with a proposal, which is basically going to be negative to even their relatives. By that time, they are not thinking, that way. They are only seeing this project and what it brings to them. So suddenly, the ministry, which was idle, which didn't have resources, it has money and people are busy. They are travelling all over the country to do this, or that. So, it keeps them busy and makes them look and feel good. So, when they meet people like MVIWATA or HakiArdhi, and HakiArdhi is telling them, but this policy is wrong, they will so say no, no, no. They will defend that policy. And if you quiz them more, they will say, no, this is what the one with money wants, so we are doing it accordingly. So, beyond that they will see continuation of this project for many like 10 years, etc. and that's good for them. Some of these small, small things are important in how policies are shaped, even if these people who are pushing that policy don't believe in it. But they have some immediate interests. Trivial, as they are, but they influence

their thinking at that moment. In a situation where government institutions are starved with money and policy formulation processes come as projects, backed up with financial support, the one who is coming with that project and the financing of that project will have a lot of influence in the project. Now, when it comes to implementation, that is a completely different matter, because these guys are just writing these projects and when it comes and test it somewhere, and it backfires, because the peasants will gang up and will say: No. Then it doesn't work. And it is not designed to support them. It is designed to support some other interest, but when you test it in one district and something happens and the peasants don't respond, it remains on paper [...] because you got the money, your document is there [...] politically it's not correct, because the peasants are mad [...] it stops implementation of policies."

During the presidency of Kikwete, the lobby of commercial farming, engaged in donorfunded policy writing and planning. LECTURER UDSM I-09 (2019) explains that commercial farmers have institutional support to gain access to land, to do land surveys and to initiate policies that are in their interest. Despite that, many top-down organised plans and policy processes failed on the long term. According to LECTURER UDSM I-09 (2019), many bureaucrats are neither interested in a quick implementation of their policies, nor in their legal viability, or long-term success. Instead, many policy processes keep bureaucrats busy by 'travelling all over the country'. These are financed by development partners or NGOs. When confronted with critique, bureaucrats would reply 'this is what the one with money wants, so we are doing it accordingly'. This suggests that not all bureaucrats believe in their policies and plans, but seek to profit from them, if donors finance them. Once a realitycheck is done, 'it backfires, because the peasants will gang up'. The implementation of policies is stopped, and the plans are shelved. At this stage, the money has already been invested in the ministries. Hence, he distinguishes between policies and plans, and their implementation, 'when it comes to implementation that is a completely different matter'. STAFF HAKIARDHI I-50 (2019) adds,

"There is a problem also with the existing policies that are in place. First, they have been written in English. That is a very challenging part. And even the village land act that is in Swahili, it is not in the ordinary Swahili that people used to speak. It's a technical Swahili. So even if I train today, and then I give that book to a villager, to be honest they will not be able to understand it. They will rather again call you and say: so, what does that word mean?"

He adds that language is a big barrier in Tanzanian policymaking and dissemination. First, many document were written in English, which only a few people in Tanzania speak. Second, many pieces of legislation were written in 'technical Swahili' that many people who speak 'ordinary Swahili' are not 'able to understand'. Therefore, awareness campaigns in rural Tanzania face the difficulty of translation. The future articulated in laws, by-laws, policies, and other official documents appears cryptic to most rural residents. All too often, the future is spelled out in English.

Despite the fact, that in recent years many policies and plans about the Kilombero Valley remained unimplemented and were shelved, they had important discursive effects. The mere existence of policies and plans indicates the responsibility of certain actors about the future. Rural residents are told that the future was decided for, planned and is underway. Policies and plans are socio-ecological and spatio-temporal legitimacy and responsibility claims about a specific future. These claims do not expire but remain valid without their material implementation. They remain forthcoming futures.

Although the future-making practices convincing, justifying and stabilising was skipped under Magufuli's presidency (7.2), Magufuli was eager to become and remain popular. Although he did not involve many actors 'upstream' in decision-making, he sought to communicate his decisions 'downstream' to rural residents. The future-making practices disseminating and spreading are discussed in the subsequent sub-chapter.

7.5 Disseminating and Spreading: Propaganda Material, Radio and Public Speeches

For future visions to materialise, several future-making practices are necessary. Thus far, four of them were introduced. In this chapter, the future-making practices disseminating and spreading are introduced. These practices aim to carry a certain vision and imaginary into broader audiences. Whereas in most democracies, these practices would be done *ex ante*, before a decision is made, under authoritarian and anti-liberal regimes, these practices are done *ex post*, as a way of disseminating information about the coming changes. First, propaganda material, like speeches, documentaries, songs, poems, slogans, images, stories, and articles become relevant. This is what Gramsci called cultural hegemony. The historic hegemonic bloc becomes dominant in all aspects of the daily life. Second, media need to be identified through which propaganda material is shared across the country. For rural areas, MTEGA (2018) found that more than 60 % of the interviewed farmers use radio for accessing agrarian information, 50 % use their mobile phones and only 29 % use television. Furthermore, newspapers and the internet are relevant sources of information.

Magufuli, who sought to be popular in rural areas, needed to communicate his achievements and imaginary to remote places, like the Kilombero Valley. He sought to inform and convince farmers who have never left the Kilombero Valley, how a new harbour in Bagamoyo, a new Tanzanian air fleet, the SGR, and the Stiegler's Gorge, are relevant to their lives. Some of Magufuli's answers were independence, self-sufficiency, and

protectionism, as well as national pride and nationalism. Magufuli appealed to the Nyerere times and invoked something BAUMAN (2019) calls *Retrotopia*. On the one hand, Tanzania's future lies in the golden past of Nyerere and the Arusha Declaration, on the other hand, Tanzania's future lies in the construction of new mega-infrastructures. In this way, the golden past and the golden future were connected ideologically.



Figure 40: 'Tanzania Mpya' Calender, Ngombo Viallge, Malinyi District (photo: RV)

A calendar of 2019 entitled *Tanzania Mpya* (New Tanzania) with the subline *Kwa Pamoja Tumethubutu na tumeweza, tunasonga Mbele* (For the first time we have tried and managed, and we are progressing) was fixed at the village office of Ngombo (Malinyi District) (Figure 40). The framing that national development was tried 'kwa pamoja' (for the first time) under his presidency is surprising, as his political party was ruling Tanzania since 1961. The wording suggests that previous presidents have neither 'tried', nor 'managed' to bring about meaningful change. 'Kwa pamoja' is a difficult framing, as it includes the presidency of Nyerere and does not give a reference to a golden past. Additionally, the wording 'tunasonga mbele' (we are progressing) indicates that Magufuli and his government present themselves to be on the right development path. An imaginary for a new Tanzania was found, that needs to become collectively held now.

The calendar in the village office includes two flags at the top, and president Magufuli in the centre. Magufuli and his slogan 'new Tanzania' are the main topic of the calendar. The pictures of infrastructural projects surrounding Magufuli give the impression that these projects are important to him, and that they are part of what he calls the new Tanzania. Among the photos on the calendar are the SGR, Air Tanzania, new flyovers, bridges, and harbour infrastructure. In two smaller photos, Magufuli sits in the cockpit of an airplane

and in the other photo exits an airplane while waving. Both pictures make a strong connection between Magufuli, Air Tanzania and the 'new Tanzania'. In addition, two pictures of conservation and tourism and an image of a Tanzanite are shown (bottom-right).

The calendar with Magufuli is remarkable for its location and its appeal. Ngombo lies at the periphery of Kilombero Valley and can only be reached by boat (see 5.1). Despite that, the CCM's propaganda material reached the remote place in time. The 2019-calender hang in the village office in June of that year. The Stiegler's Gorge project is not part of the imaginary, as the calendar was probably produced in 2018, when the mega-project was not part of the imaginary yet. A vast majority of residents in Ngombo never left the Kilombero Valley. They have never visited Dar es Salaam, never saw an airplane, nor the SGR. They will probably never get the chance in their life, too. It is questionable how infrastructures in far-distant places are beneficial to them. Although opposition parties framed new megainfrastructures as elitist projects for urban middle classes, for the expat community and for international tourists, Magufuli's narrative of industrial and infrastructural development had a popular appeal as part of a new national identity (NKOBOU a. AINSLIE 2021). Through spreading propaganda material throughout rural Tanzania, Magufuli sought to make up for the lack of participation in earlier stages of imagining futures. The calendar is a small example how elitist hegemonic top-down imaginaries can become collectively-held imaginaries through propaganda material (JASANOFF a. KIM 2015).

Since a large share of rural communities use radio as a source of information, radio is an important media (Bello a. Wilkinson 2017; Cochrane a. Mngodo 2019; Community Radio I-11 2019; Mtega 2018). Staff Ansaf I-08 (2019) comments,

"I cannot say the small scale farmers have an influence, they don't. That's why we are on their side. Because when you don't have information, you can't say you can influence anything. Now we use community radios to inform them [...] so that they are aware of what is going on and they can defend their rights. Because without information you don't know what is your right."

ANSAF claims to be on the side of smallholder farmers because they have no influence, people 'can't [...] influence anything'. ANSAF uses community radio 'to inform them [...] so that they are aware of what is going on'. Radio programmes are used for awareness creation 'because without information you don't know what is your right'. Although radio programmes are used by NGOs for their emancipatory potential, this was compromised under Magufuli. A COMMUNITY RADIO I-11 (2019) comments,

"We have new law on media, [...] when you say something, even if it's true, but is delivering bad things to the people, they [government] can come in your radio and can take everything [...] that's why this time we are just writing and just producing a lot of programmes with the

government [...] and the problem is our politicians and Magufuli. A lot of the things he is doing is good, but some of the things is going wrong. So, for example, the law of the media is too bad this time [...] which is removing the freedom of speech, freedom of writing [...] all the journalists of Tanzania need an ID. If you don't have a diploma or degree, you are not a journalist. And then, if you want to take over news, even the village, even the presidential issue, you must have an ID. And who give ID? The government. And that ID is based on one year. After one year you'll just going to renew that ID. If we say something wrong, what the government do, you'll not again get that ID. So that is the bad situation for journalism in Tanzania."

Since 'new law on media' during Magufuli the situation for radio stations and journalism became tense (THE CITIZEN 2016l). For the interviewee it feels like Magufuli was 'removing the freedom of speech [and] freedom of writing'. If a radio is 'delivering bad things to the people', although these news are accurate, the fear is that the government 'can come in your radio and then they can take everything'. A reaction by the radio producers was to produce more programmes with the government, which can be termed pre-emptive obedience or self-censorship. In this way, under Magufuli, many community radios effectively became state radios. This was further explained through the accreditation and ID procedures. As all journalists need a specific ID, granted by the government for the duration of one year, the fear of critical journalists is that the ID is not prolonged: 'if we say something wrong, what the government do, you'll not again get that ID'.

Another important medium for disseminating future visions are public gatherings. After interviewing the MP for Malinyi Constituency, Hadji Mponda (CCM), in Dodoma, in June 2019, he invited me to his constituency. To follow the MP from the parliament to his rural constituency allowed me to observe the interaction between him and rural residents and to reflect on power asymmetries, decision-making and political representation.

In June 2019, most MPs eagerly waited for the parliamentary budget discussions to end. For some the end of discussion means holidays, travels abroad or visiting their constituency. MP Mponda, a former federal minister for Health and Social Welfare (under Kikwete) does not live in the constituency that he represents. In July 2019, Mponda held several public village meetings in Malinyi constituency. His self-declared goal was to visit all 33 villages in his constituency during his term in parliament. His tour had different aims. First, it was meant to inform villagers about the budget agreements in parliament, previous development achievements and intended development projects. Second, the public meetings were political campaigns to gain support for the up-coming general election. Third, he sought to hear opinions, wishes and needs of rural residents (MP MALINYI I-25 2019). Among the villages covered by MP Mponda were *Usangule A* village, *Kipingo* village and *Tanga* village (Figure 41). For each of these meetings, several hundred visitors, elderly and youth came by either foot, bicycle, or motorbike. In the public meeting in Tanga, a

football match was underway next to where the MP-meeting took place. Far more villagers were interested in the outcome of the local football match, than in the MP-meeting. Furthermore, only residents from a given village were supposed to attend the public meeting, as the content of the MPs speech would only include challenges and demands of that village.

A few days before each village meeting, the MP gave the local government authority a notice of his intended visit. The village government would arrange the necessary and welcome the MP by arranging chairs (chairs of honour) either under a prominent village tree (Usangule A village, Tanga village), or in front of the village offices (Kipingo Village). The chairs of honour were reserved for the MP, local party members of the CCM and other



Figure 41: Public meetings with MP Mponda, July 2019 (photos: RV)

- a) Kipingo village (upper left); Usangule A (upper right)
- b) Kipingo village (middle)
- c) Usangule A village (lower left); Tanga village (lower right)

respected persons (mostly elder men). MP Mponda and a team of a few people usually came to the meeting with a big car. Each village meeting lasted between one and three hours. At the meeting, villagers kept a respectful distance of 10 - 20 meters to the MP and his guests. First, the MP spoke with a microphone connected to boxes at his car. Later, MP Mponda invited for rounds of questions in which residents could present their issues. Some villagers had prepared to present their challenges, others decided to speak spontaneously. If they wanted to speak, they had to present their issue in front of the entire village, which had something of a Foucauldian panopticon (YAR 2003).

Five villagers of different ages, genders and level of education addressed the MP with a microphone in a public meeting (Figure 41). Among the issues raised were the quality of the main road, the lack of electricity (Usangule A), lack of water (Tanga), lack of market access, insufficient hospital services (Usangule A), lack of schools (Tanga, Usangule A) and negative impacts of climate change. In the meeting in Kipingo village, farmer-herder conflicts were mentioned by several villagers. The MP answered in a PUBLIC ADDRESS KIPINGO VILLAGE (2019):

"Statistics show that there are no longer land conflicts between pastoralists and agriculturalists around here. Also, the new borders have been placed between villages, except for only two villages, Kipingo and Mtimbira. All other 33 villages [in Malinyi District] have been evaluated and registered. The only two issues here is that either people in the village are not aware of the borders, or they are aware of them, but just ignore them. That is how land conflicts happen here. We should not talk about things that solutions have already been given, because we are just wasting our time, guys. Instead, we should talk about developmental issues in the village."

By answering with abstract quasi-objective statistics, the MP disregards local experiences and concerns. Instead, the MP says that 'solutions have been given', that they are wasting their time to talk about the issue and consequently demands to change the topic to 'developmental issues' of the village. The answer by the MP shows signs of post-politics ('we should talk about developmental issues'), paternalism ('people are ignorant') and arrogance ('waste time', 'change topic'). The MP implied rural residents do not know the facts (e.g., statistics) and are ignorant, despite knowing better. In a second round of questions in the PUBLIC ADDRESS KIPINGO VILLAGE (2019), it was asked,

"Q1: you said you surpassed village border issues, but the truth is that we are still not allowed to conduct agriculture and we are chased every time we go farming, so how come you are saying that you have solved this issue? [Clapping] [...] Q2: I am not satisfied by your answers MP [...] I also need accurate statistics for the land conflicts that you told us they have already been resolved because the conflicts are still very much alive and this is a problem to us, I need you to elaborate more on this [clapping]."

Two out of five villagers ('Q1' and 'Q2') raised the point of farmer-herder conflicts. Both comments received support by fellow villagers clapping, cheering, and laughing. The answer by the MP in a PUBLIC ADDRESS KIPINGO VILLAGE (2019),

"[...] there was an announcement that nobody should go beyond the reserve but the problem is that people already cultivated in those areas but the government gave one year order for everybody to finish what they had, but we are still waiting for the presidents response on this, but so far I have no idea why (agro)pastoralists are given priority [...], but nobody is allowed to go beyond the reserve borders [...] statistics show that the borders have already been placed but now I realise that it may just be paperwork, and actually maybe nothing has been done to you guys concerning this problem, but I promise to work on this and give you guys feedback."

When MP Mponda claimed that he had achieved much for his constituency, many villagers laughed in disbelief and shook their heads. This answer was less paternalistic, more understanding and passive. Mponda indicates that he believes the perception of rural residents on the conflicts. He suggests that there are differences between 'paperwork' by the government and realities on the ground. In a PUBLIC ADDRESS USANGULE A VILLAGE (2019), the MP says,

"We have tried so much to discourage land conflicts and end them completely. I have tried to advice the central government to move the borders a little bit because many farms are still inside the reserve area. And the central government has tried to solve the situation by moving the borders somehow, but I know still some people have their farms inside the reserve area. So this is still under discussion although, to be honest, there is very little chance for the central government to move the borders again, because of the national interest. The government wants to protect the Kilombero reserve so that water within the reserve can be used (downstream) to drive electricity through Stiegler's Gorge project, which will be helpful in the future because investors will come, and we will get foreign currency. Also, there will be development of industries and employment opportunities. The national interest is of more importance compared to the citizens' interests, but we are still trying to find a solution about this, for example modern farming so that you can get high yields in a small plot of land."

Local issues like new positions of beacons and land conflicts are put in reference to 'national interests'. The Stiegler's Gorge dam project is introduced by the MP as a new reality, a coming future, to which rural residents need to adapt. Water in the Kilombero Valley has become politicised. Through the dam construction downstream, the national interest is involved in the water use of the Kilombero River system. The MP claims that national interests are more important, than local interests, but guarantees to 'find a solution about this'. This passage shows that the MP has not come to Usangule A village to seek for consent for the new locations of the beacons, nor for opinions about the Stiegler's Gorge, but to disseminate the opinion of the central government. He suggests that national development would be beneficial to the village through investments, industries and employment, 'which will be helpful in the future because investors will come, and we will get foreign currency'. Although the MP stresses that the issue is 'still under discussion', he

does not mean the village level. Since counter-voices are not invited to the tour of the MP and a controversial discussion about government projects did not take place in any of the three village assemblies, the public gatherings are a one-way traffic. They too serve as propaganda events, which seek to disseminate government plans and prepare villagers for an imminent future.

To sum up, in peripheral areas like the Kilombero Valley, where electrification has not yet reached all parts, disseminating, and spreading imaginaries of the future through physical propaganda material, through community radios and public gatherings are a powerful future-making practice. This is not necessarily done for legitimisation, but for communication. Propaganda materials circulate in high number and reach the most remote places in time. The long-established CCM party structures organise local events and distribute propaganda material. The internet, and especially social media, becomes more relevant with every new mobile phone user. By the end of the 2020s, propaganda material will most probably be disseminated through the internet. During Magufuli's presidency however, physical propaganda material, like calendars, and non-physical propaganda, like radio programmes and speeches, shaped opinions. In the next section, the future-making practices *exhibiting* are analysed.

7.6 Exhibiting and Testing: Shamba Darasa and Nane Nane Shows

Futures are mostly imagined, before they materialise. Besides a controversial discourse, a political struggle, a policy-writing process and disseminating futures, other important future-making practices towards implementation are exhibiting and testing. Besides the internet, radio, television and newspapers, almost all rural residents rely on their family, friends and neighbours for information (MTEGA 2018). The knowledge and experiences of close social contacts is trusted and often more important, than the opinion of experts, NGOs, or government programmes (COULSON et al. 2018). A specific way, how new agrarian products and practices are introduced in rural Tanzania are *shamba darasa* (field schools, demonstration fields) (CHOME et al. 2020). These fields are small windows into possible futures and laboratories of the future (MANZINI 2003). Convincing successes on those demonstration fields may lead to replication elsewhere. A future that looks promising on one plot can quickly become the future on many thousand plots. Thus, exhibiting and testing the future is an important way on how futures may become collectively-held sociotechnical imaginaries (JASANOFF 2015a).

The ASDP2 demands that each of Tanzania's 12,500+ villages should have an agricultural extension service officer (URT 2017). These officers are taught at universities and agricultural institutes across the country and are paid by the MoA. On the village level, extension officers are called Bwana Shamba, or Mr. Agriculture. Some of these officers are responsible for more than one village, as only 5,000 extension officers are employed (IGAWA WARD OFFICERS I-39 2019; COULSON et al. 2018; SENIOR LECTURER SUA I-05 2019). A key tasks of extension officers is the preparation and care of a shamba darasa on which they show the state of the art agriculture (Figure 42) (CHOME et al. 2020; MCHOMVU 2015). Depending on the financial resources of these officers, shamba darasa may be in a good shape, or may be inexistent. Shamba Darasa shows the potential yield of a given crop per hectare in each village site. If all inputs and agrarian practices are applied properly, the results can be replicated elsewhere. Test fields have a highly suggestive and convincing power because they can be experienced by all senses. The intention of the fields is to convince farmers to change their practices towards a certain direction (MCHOMVU 2015). Therefore, test fields are sites of power struggles, ideologies, and contestations. The suggestion of a certain crop, of a certain practice, of a certain technology or a certain input is value and power laden and indicates another path into agrarian futures. STAFF AGRA I-48 (2019) explains that AGRA uses Shamba Darasa in rural areas to present new crops, new seeds and new fertilizers to farmers, for them to increase the productivity per land. In some villages extension service officers own agro-vet shops. They sell products to fellow villagers, which they promote on the fields (SENIOR LECTURER SUA I-05 2019).

Along regional roads, well-managed test fields are financed by NGOs and private companies (e.g., AGRA, Syngenta, YARA, DEKALB, etc.). The input-costs, technology and labour involved in arranging a test field is often mystified. A test field of maize, on which the harvest may be triple of the average amount, may include a triple of input costs. The political and environmental implications on the long-term are not part of shamba darasa.

COULSON et al. (2018) suggest to disband the generalist extension service and argue that knowledge and innovation spreads from farmer to farmer without state-financed extension service. Extension officers often do not receive training for several years and are uninformed about market information, new technologies, seeds, fertilizers or agricultural policies (SENIOR LECTURER SUA I-05 2019). To improve the extension system, COULSON et al. (2018) suggest farmer-centred policy discussion and dialogues. Due to lack of training and funding, extension officers are often unable to perform their intended function and may become indistinguishable from the local population (SENIOR LECTURER SUA I-05 2019).









Figure 42: Nane Nane Show, Morogoro 2019 (photo: RV)

- a) Bayer and their product VELUM (top left)b) Sustainable Agriculture Tanzania (top right)
- c) Pavilion: Ifakara town council (middle)
- d) Shamba Darasa: Nane Nane Agricultural Show Morogoro; DEKALB (bottom-left)
- e) Shamba Darasa: along the road in Mbingu Ward, Kilombero District (bottom-right)

Extension officers are increasingly paid by NGOs and the private sector and cooperate on a project basis for earning extra money. Failures of the state to provide extension services, opens the doors for NGOs and companies to use village-level test fields to suggest futures that may lie beyond the interests of the state.

Extension service officers who are paid by the state and by NGOs/ companies may come in a conflict of interest. When the state suggests a test field with low chemical fertilizer use and a fertilizer company grants subsidies for a field with high chemical fertilizer input, two agrarian futures are presented. A struggle for rural futures has started around who is able to finance and influence the extension service. This includes schedules of extension officers at universities and training centres. According to SENIOR LECTURER SUA I-05 (2019), input-intensive market-oriented agriculture was taught at SUA for decades. This is why SAT and other actors who promote organic agriculture started to cooperate with SUA. They sought to establish their future in the curricula (STAFF SAT I-14 2019).

An important event in which the future-making practices exhibiting and testing can be observed is the Nane Nane Agricultural Show. In 2019 the topic of the Nane Nane was 'Agriculture, Livestock and Fisheries for National Economic Development' (ICRISAT 2019). Every August, for the duration of one week, on show grounds of all larger Tanzanian cities, Nane Nane shows are held. Together, they attract many million visitors. Since the show in Morogoro is the biggest, it is officially opened by high-ranking politicians. On the Nane Nane Show, companies, NGOs, co-operatives, universities, banks, farmer unions, federal ministries and districts exhibit and test their products, agrarian models, ideas, and utopias. About one hundred thousand people visited the Nane Nane agricultural show in Morogoro in 2019, most on eighth of August, the farmer's public holiday.

Pavilions on the show vary in size, popularity, and concept. Pavilions of radio stations, universities, banks and companies like *Coca-Cola* and *Pepsi*, network providers like *Safaricom* and *Airtel* were among the most popular pavilions and attracted attention through music, dancing performances and gifts. While Ifakara town and Malinyi district had rather small pavilions, federal ministries had higher budgets are larger pavilions.

Furthermore, in Morogoro several dozen shamba darasa were prepared for the Nane Nane show. The showground in Morogoro is several hectares in sizes. It lies along the Ngerengere River and has its entrance along the main road towards Dar es Salaam. Just like on the shamba darasa in the villages, the potentiality of seeds, fertilizers, herbicides, tractors

are exhibited. Private exhibitors, which are interested in selling their products and present a high-intensive agriculture on the Nane Nane. A flyer of VELUM prime of BAYER says:

"Velum Prime: Be part of a Revolution [...] Velum Prime, an innovative nematicide which protects the roots of the plant from Root Knot Nematodes and help farmers to harvest an increased and better-quality produce."

A product suggests an agrarian 'revolution' by 'protecting the roots' and to help increase the harvests in quantity and quality. This input-intensive agriculture was countered by SAT and others actors present on the Nane Nane who promote organic agriculture (Figure 42). STAFF LEAT I-23 (2019) argues,

"I can't see transformation for those people, we are just speaking of transforming them [...] we are just speaking [...] to get land from them, leaving them without land, leaving them without knowledge of what they have, how to go through it. For example, the land of Malinyi does not need fertilizers [...], then you are just going there and telling people to use fertilizer. The land does not need fertilizer. Its only to till it and plant, but because we want to maximise profit [...] now it is better to train people on how to use virgin land, agroecology, organic agriculture. It is from their own land, from their own traditional ways of living to get income and to get more cash. It is possible. I don't think it is only the modern agriculture can transform those people. It is also the traditional agriculture, helping them improve from what they have can transform it. They can cultivate crops and they can get food and also they can get extra for selling".

According to her, land in Malinyi does not need fertilizer, but only tilling and planting. Actors who 'are just going there' to tell people to start using fertilizers just do so to maximise their profits. STAFF LEAT I-23 (2019) argues 'it is better to train people on how to use virgin land'. Through agroecology, organic agriculture 'and their own traditional ways of living', farmers and (agro)pastoralists 'can get food and also they can get extra for selling'

Although public pavilion at the Nane Nane Show (e.g., by towns, districts, regions) suggests neutrality, bags of YARA fertilizers were put prominently in front of the table in the pavilion of Ifakara town (Figure 42). In addition, some personnel wore hats with the emblem of the Norwegian fertilizer company. This indicates that on the Nane Nane show, the line between public pavilions and private sector interests are not always clear. Again, a conflict of interest can be seen between the agrarian future, which the government suggests, and agrarian futures suggested by private companies. A visitor may get the impression that the agrarian future of the government and that of private companies is the same.

On an irrigation scheme in Itete village, six hours drive away from Morogoro town, by coincidence we met a medium-scale farmer who recalled that he went to the Nane Nane Show in Morogoro in 2018. His trip was paid by the Clinton Foundation and included a workshop on organic rice production. The futures and ideas presented at the Nane Nane

Shows and the trainings offered by NGOs have many multiplicator effects into rural areas. In contrast to that, the DISTRICT OFFICER FOR AGRICULTURE I-45 (2019) complains,

"Transport is a big problem in Malinyi. There is not enough transport here to facilitate agricultural activities. The district administration has only three cars and we can use only one. Out of our 25 agriculture extension service officers only seven have motorcycles to facilitate their daily routine activities such as visiting the farmers in their farms, advising them and give them technical assistance regarding agriculture. This shortage causes delays for the agricultural officers to perform well in their daily activities. For example, today we had an arrangement of going to Itete village for an agricultural competition we held among farmers in different wards. But we can't go simply because there is no car. Instead, we've been told to wait for a car, which is now in Kibaha. It's coming to Malinyi, so maybe we can go tomorrow. We are not sure."

'Transport is a big problem' for the agricultural officer who is responsible for an entire district. He lacks the most basic infrastructure to do his job. Besides the district administration only having three cars and only being able to use one, 'out of our 25 agriculture extension service officers only seven have motorcycles to facilitate their daily routine activities'. This lack of mobility 'causes delays for the agricultural officers to perform well'. Itete village, where he intended to travel that day is two hours' drive away from Malinyi. He declined our offer for a ride, as we were going to Itete village that day.

According to DISTRICT OFFICER FOR AGRICULTURE I-45 (2019) harvesting contests on the district level are held for irrigated fields and for rain-fed agriculture, as well as for different crops. This harvesting competition is another example for the future-making practices exhibiting and testing. Farmers with the largest harvest function as role models.

To sum up, exhibiting and testing is an important future-making practice, as the haptic and material representation of the future on test fields are highly suggestive and convincing. In contrast to abstract and large-scale futures like SAGCOT/ Kilimo Kwanza and Stiegler's Gorge/ Industrialisation, test fields are concrete, material, and small-scale. Thus, they are more accessible to rural residents and work without language. In the next section, the future-making practices *implementing* is analysed.

7.7 Implementing and Appropriating: Transforming the Land from Above and Below

The access to and the ownership of land is the most central aspect of rural livelihoods (LAHIFF 2003; SIKOR a. LUND 2009). Due to an increasing population in the Kilombero Valley, the demand for land constantly increases. Contestations arise between different user groups, interests, and imaginaries. The last future-making practices to be analysed is

implementing and appropriating, that includes top-down future-making by the central government and bottom-up future-making by rural residents.

Tanzanian land law knows three land categories. First, village land, which covers about 70 % of all lands. 75 % of the population lives on these land and 80 % of them are doing subsistence or smallholder farming (MASSAY 2016). Village land is owned and managed communally by village assemblies; all adult members of a given village that decide over village land use plans (VLUP). Second, general land which covers about 2 % of land in Tanzania, including schools, universities, police stations, hospitals, prisons, military facilities, train stations, airports, roads, and government buildings. Hence, the central state has limited land resources available for land use planning. However, the radical title is held by the president as a trustee (MAGANGA et al. 2016). If national interests are touched, the president can transform village land to general land. Third, reserved land, a category created to protect land from human intervention on varying degrees. At least 28 % of all land in Tanzania fall under the category. Moreover, parts of village lands are required to be set aside for environmental protection (e.g., village forests). Hence, de facto between 30 - 40 % of the Tanzanian land mass are under some form of environmental protection (HAKIARDHI 2019; TANAPA 2018), including 16 national parks, 31 game reserves, 38 Game Controlled Areas over 30 Wildlife Management Areas (WELDEMICHEL 2020).

The Land Act No. 4 (URT 1999b) and the Village Land Act No. 5 (URT 1999a) are the legal basis for land. Village councils are the legal body for village-level land governance mandated to allocate a maximum of 20 hectares (50 acres) of land to an individual. The village council can grant certificates of customary rights of occupancy (CCROs) introduced to Tanzania in 2004 and can mediate land related conflicts (MASSAY 2016). Given, that most land de jure is vested in the hands of villagers, large-scale land-based investments by companies or the state can only happen on village land, or protected land (STAFF HAKIARDHI I-50 2019). The Village Land Act (URT 1999a) allows villagers to claim land, if they can proof regular occupation in the previous 12 years. Although this proof is more difficult to substantiate by (agro)pastoralists, in theory this provision means legal protection. In the 1990s, it was discussed that a change in the land policies should aim at (re)distributing state land. Instead, the WB and other international institutions argued for market-regulated tenure reform (STAFF TALA I-01 2019). Although both land acts from 1999 were perceived as progressive to protect the rights of pastoralist communities, women and minorities, its' slow implementation raised question of legitimacy and usefulness. Although the implementation was to start in 2001, according to MASSAY (2016), the implementation

progress of the village land act 1999 "has been slow and uneven, and has not moved beyond pilot projects". As a consequences of slow implementation and unclear land rights, land disputes between farmers and (agro)pastoralists increased (BROCKINGTON a. IGOE 2006; BENJAMINSEN et al. 2009; MAGANGA et al. 2007; IWGIA 2013; PINGO FORUM 2013; MBUNDA 2016a; WALWA 2017; WALWA 2019; THE GUARDIAN 2020b). According to MASSAY (2016, 19) land related conflicts in "Kilombero, Kisarawe, Kilwa, Bagamoyo, Babati, Arumeru and Ngorongoro districts is well-known throughout the country". WALWA (2019, 1) argues that a bundle of power "have historically been mobilized by the Tanzanian state to exclude pastoral interests including access to resources". The land governance has empowered state officials on various scales to "alienate land from local communities in favour of what is deemed overriding issues of national interest, such as investments" WALWA (2019, 2).

Tanzanian researchers were killed by an uninformed village community in Dodoma Region (THE CITIZEN 2016a). Government officials from the MoL were attacked and barely escaped being killed in Chita Ward, Kilombero District (LUCAS 2021). In both cases, rural residents felt endangered because they did not know the intentions of outsiders coming to their village. Rumours about land grabbing create a hostile environment. The fear of state interventions that is disadvantageous to current livelihood arrangements is widespread. A SMALLHOLDER FARMER KIWALE I-41 (2019) explains,

"[...] once the people heard that there is a car coming, they ran away because they knew that these areas are restricted for cultivation activity by the government. That is why the government had set the beacon to show the demarcation of the reserve area and farmers' areas, that's why people were running, and we will still run tomorrow."

Rural residents run away, when they hear a car coming, because 'they knew that these areas are restricted for cultivation activity by the government'. Running away are practices to avoid being caught, when doing illegal activities. The statement 'that's why people were running, and we will still run tomorrow' shows that these practices were going on for some time already. AGROPASTORALISTS MALINYI I-43 (2019) add,

"Once we see a car coming, we run and leave everything that pertains to us, like hoes. You wait until you get the information that nowadays they do not visit the area, that's when we go and cultivate. We lose a year without cultivating [...] we are captured, we are fined, others run and leave the cattle and others are beaten. Before the population increased, there was high income because the yield was high. But nowadays it is very difficult to harvest many sacks. Even the pastoralists are not happy with their activity. Every time they keep asking where the reserve people are, while being afraid of being confiscated of their cattle. That means we are living like thieves, being afraid of being caught by the reserve people. We are not free, we are like refugees people who are not living in their own country."

Agropastoralists report to run away when they see a car approaching them. They leave everything behind, including hand hoes and cattle, because they fear being captured and fined. Being caught may equal 'a year without cultivating' and the loss of their livelihood. This is why 'every time they keep asking where the reserve people are'. The statement 'we are not free, we are like refugees' people who are not living in their own country' expresses alienation, frustration, and discontent with the current governance. The spatio-temporal knowledge about 'where the reserve people are' decides about being beaten, losing cattle, receiving fines, or losing one's livelihood. STAFF CARE I-49 (2019) adds,

"When she heard the car, she just ran, she forgot to wash her hands [...] when I saw the car, I just grabbed my keys and started running [...]. Unfortunately, most people who go there [by car] are their evictors, so we are among the very few that just goes there because we are an NGO, because they don't know, they also thought we are the evictors, we are coming to evict them. But when we were in the car because we had some community members that came to pick us up, they say, when you get close don't drive fast, because people will be running, because they are scared. And we thought they were joking when we were staying in the car [...] and when we were talking now in groups and they started talking about that, then I thought 'wow, this is very serious'. So you just look into that fear that was created."

An NGO staff from Dar es Salaam who frequently visits rural areas made the same experience. She once met a woman who ran away from a car and even 'forgot to wash her hands'. Many people living in remote areas, STAFF CARE I-49 (2019) argues, think that cars mean eviction. When the staff from CARA drove to a remote village, villagers 'also thought we are the evictors, we are coming to evict them'. Only when they saw that community members came to pick them up, they stopped being scared. While sitting in the car, STAFF CARE I-49 (2019) thought they were joking, but later understood that 'this is very serious'.

To make additional land available for rural residents is popular demand. This is seen as a possible solution to growing farmer-pastoralist conflicts (WALWA 2019; BENJAMINSEN et al. 2009). According to XINHUANET (2019), Magufuli stopped the removal of 366 villages who were in protected areas and said,

"I am not feeling comfortable, when I see livestock keepers chased away on the grounds that they are grazing on land earmarked for wildlife protection. [...] I get the same bad feeling when farmers are evicted from areas considered to be protected for wildlife or forests."

Magufuli demands that neither farmers, nor pastoralists who have entered into conserved areas should be evicted (UBWANI 2019). The fact that many hundred villages could extend to protected areas shows villagers agency vis-à-vis the central state on appropriating marginal lands. This practices was observed for the Kilombero Valley where forested and swamp areas are converted into arable land or pasture y (LEEMHUIS et al. 2017). These are future-making practices to maintain or to create a livelihood at the frontier of the state (Figure 43). Swamp sites have the advantage to be unowned, fertile, and inaccessible for 'reserve people' and security forces. The use of marginal lands may go unnoticed for many years. Once the floods retreat after rainy seasons, rural residents convert the swamp to arable fields.





Figure 43: Kilombero Valley Ramsar Site, Mofu Village (photos: RV)

- a) Frontier of the Kilombero swamp, Mofu village (left)
- b) Converted swamp into arable land, Mofu village (right)

According to MFUGALE (2011), law enforcement is too weak to prohibit illegal livelihood practices that cause the Kilombero Valley to die. Others speak about "massive destruction" and a "time bomb that is ticking fast" (LIGANGA 2017a; THE GUARDIAN 2021a; THE GUARDIAN 2017b; LIGANGA 2017b). PROSWITZ et al. (2021, 19) warn that a "collapse of the Kilombero wetland is likely" should the current trend of deforestation and conversion of wetlands continue. DISTRICT OFFICERS MALINYI I-44 (2019) say,

"First, I should admit that law enforcement is still weak. We still have some weaknesses, because probably is limited by facilities. Facilities to be able to carry out law enforcement throughout the seasons. Because one of the things which could create awareness is also law enforcement. Sometimes when people encroach and they see nothing is happening, they say 'oh, there is no problem'. But if you encroach and therefore you see the patrol visiting every time [...] law enforcement is very weak especially during the wet season is weak and more or less impossible also to come near for protection activities. But now, you can see them just going around, but you see all areas have been farmed, and the people have already harvested. [...] many people here are not only the indigenous people farming here, some people come from outside and hire the land here, in Morogoro. So sometimes there are people from Dar es Salaam and Morogoro, they do not know the boundaries. So, if some people just come and say, I have my farm there, he takes the person inside the protected area, and they just rent the land. So, someone will come and harvest. [...]. So, for future we must strengthen the law enforcement here, and most of the land use has to happen here which in the current land use program I think they still consider this land

is still enough for the next ten years [...] but the pressure is higher because the users of this are not only the villagers."

Law enforcement in Malinyi is weak and encroachments on protected areas are common, the fact that 'especially during the wet season is really weak', indicates that the accessibility of protected areas is a key problem for law enforcement. Due to the lack of law enforcement, the mentality among rural residents is that 'there is no problem' with extending to these areas. This led more residents to engage in illegal livelihood practices. In the opinion of DISTRICT OFFICERS MALINYI I-44 (2019), stricter law enforcement could create more awareness among rural residents. However, non-residents from Dar es Salaam and Morogoro own land in Malinyi also, and do not always know the exact boundaries and regulations. DISTRICT OFFICERS MALINYI I-44 (2019) explain,

"[...] the people formerly were using animals because they were plenty. So, they were just hunting, if you wanted meat, you just go and shoot down one [...] but now the land use has changed and the animal population has gone down and the protection enforcement has become higher. So, the people think that we have no access to these resources, which we had them since before [...] So they say the wildlife are more important taking our primary areas which we could use for production and then they take for wild protection. So, these all are creating like conflict within the conservation and people. So, they directly hate the animals."

Since rural residents were used to certain livelihood practices, but environmental laws have changed in the meantime, adapting to, and accepting new legislation becomes a challenge. When previously, 'they were just hunting', nowadays 'land use has changed, and the animal population has gone down'. Enforcing the laws on wildlife protection for many rural residents appears as if the state locks away previous means of subsistence, so that 'they directly hate the animals'. MNRT (2018) cautions,

"Local conservation debates are often overridden by conflicting land use positions, the uncertainty of land tenure, weak governance, and accountability. There is a lack of an effective institutional capacity to reconcile different interests and to sustain the intensive, long-term and deep administrative process required to harmonize multiple sectoral agendas. As a consequence, single-issue perspectives often prevail, generate short-term actions and at times unduly polarise local conflicts (e.g., pastoralists versus farmers) at the risk of losing sight of a larger and more realistic picture."

It is suggested that 'weak governance and accountability' and the 'lack of an effective institutional capacity' are central reasons as to why 'multiple sectoral agendas' cannot be harmonised. The result of these shortcomings is 'single-issue perspectives', 'short-term actions' and 'unduly polarised local conflicts'. A better funded, a better-staffed and equipped local bureaucracy would be in a better position to address and 'harmonize' local conflicts. Agropastoralist Representative Malinyi I-42 (2019) claims,

"Conflicts in Malinyi district, I can say, are in all villages [...] among thirty-three villages, including Ngombo, have conflicts. All areas have a conflict because there are pastoralists and farmers. The agriculturalists do both works, they keep animals and they cultivate crops. [...] When we shifted here in 1982, there was no designated areas for pasture. There wasn't! So, when we came to these villages, some areas were separated: They separated areas for pastoralists in those years. The government of Nyerere was wrong because it did not set the boundary beacon, as they did to our neighbours the National Reserve. These are the mistakes they did that the pasture areas were not separated with the beacon, meaning that this is the end of the farmers, pastoralists and the reserve. [...] The good luck is that the villagers were not much involved in crop cultivation, because people were using hand hoe cultivation. Therefore, many areas after the animals introduced, they started digging by using animals. In many villages when the areas were provided, for example if a pastoralist come to Malinyi village, he was told to go to pastoralist areas without differentiating that he was cultivating crops too. Therefore, he goes to cultivate in those areas because he has the means for cultivation, like cows. Therefore, he cultivates in those areas. This is the conflict, which existed that many agriculturalists in those areas, which were provided, they cultivate in all areas themselves. Because he has the means for cultivation, he can cultivate from here to Lugala himself alone. Therefore, when you forbid him today from cultivating, you let the conflict start [...]. The government has separated the areas for pasture, but the areas separated for pasture are the one being cultivated with crops."

Conflicts around land can be seen in all villages of Malinyi District. Court cases of land disputes involve 126 villages of Kilombero Valley (SHEKIGHENDA 2016). Some have led to deadly attacks in neighbouring districts (BENJAMINSEN et al. 2009; WALWA 2019). Some of these have historical roots, as the Nyerere government 'was wrong because it did not set the boundary beacon'. Most of the land demarcation in Malinyi District was not done before the 1980s. In the 1990s and early 2000s, more (agro)pastoralists came to the district. With more cattle and different ways of doing agriculture (e.g., using animals for agriculture) (agro)pastoralists were able to work larger fields, 'from here to Lugala'. Zoning different land uses in the village land use plans began to separate crop zones for peasants, and pasture zones for (agro)pastoralists. The perception was that (agro)pastoralists only herd cattle and do not do agriculture. The zoning did not work, because the livelihood of (agro)pastoralists includes both and started using the pasture zone for crop cultivation.

Due to overlapping land use plans it is often not clear which map from which year should be regarded the official map on which planning may continue (BLUWSTEIN a. LUND 2018; BLUWSTEIN et al. 2018). BLUWSTEIN (2019) refers to a case in northern Tanzania, where colonial maps, maps from the 1980s, the 1990s and current maps were produced with different methods. They all show different borders. Unclear responsibilities at administrative levels lead to transgressions of competence and gaps for which no institution feels responsible (BLUWSTEIN 2019).

According to MWALONGO (2013), the Kilombero Valley has many land disputes. Officials in Kilombero District are criticised to decide over village land without informing or consulting local interests (BLACHE 2019). MWALONGO (2013) argues that the main source of

conflict is the lack of transparency and in the non-participatory decision-making in matters that affect rural livelihoods. SULLE (2017b) analyses the case of the Illovo group that runs the Kilombero Sugar Company Limited, which intended to acquire another 10,000 hectares in Ruipa Valley, where Namwawala, Mofu, Mbingu and Kisegese villages are situated. This acquisition would mean the relocation and compensation of about 10,000 villagers (MWALONGO 2013). Whereas District officials claim that the land falls within the category of general land since the 1970s, the local population started using the land and claim it has never been developed. According to MWALONGO (2013), district officials gave contradicting information on which government body currently owns the land and did not provide maps to challenge the position of the government. Confusion about land ownership in Tanzania is wide-spread (BLUWSTEIN a. LUND 2018; BLUWSTEIN et al. 2018). A lack of information allows officials to base decisions on subjective interpretations, political favours and individual interests. STAFF HAKIARDHI I-50 (2019) observes,

"You may say the rushing for land has been reduced, but then we have a lot of scars, previous scars that land has been taken, people are still struggling about the land. There has been cases where the call was made to revoke some of these big titles and being given back to villagers [...] but then the main question has been, 'has it really been given to the ordinary villagers?' We have examples, we have a problem currently [...] where titles have been revoked in Kilosa, but the District Council never handed it over to the village for redistribution, but they created some kind of leasing ordinary villagers those farms. That is so unfair, because on the first side it was villagers' cries that has led to that revocation, but then the district was always there and they were always seeing those challenges and they said nothing. Until their leader came and people are shouting about it and even decided to act. Why are you [District] not giving them [village], so that they can give each other? The law is there, it clearly provides. So, you'll find the name Joseph has been struck out from the title, but now it is still general land. The land has not been changed to a village land category [...] Its presidential powers, if the president was asked to change from the village to general, the president could also be asked to change [the other way around] [...] that process is not done. That's why you'll never hear the possibility of changing it back. So, if the title is revoked, what does it really mean? We want that title not only to be revoked, but also change that land from this category, to another category [...] the law is very clear [...] why does the District want to hold that land? For what? Because even if I am a villager, I have been given one acre in the general land category, I'll have to pay land rent. Are they ready to pay that land rent? [...] Now they see it as a source of income and they don't want to let it go. Because they know, if it is transformed back to the village, then villagers will decide on their own and they won't get a single Shilling. [...] Those are the interests. You'll find the elites at the district level, they knew the process, they knew everything, but they don't want to do it."

On the one hand, villagers demand that the central government revokes 'some of these big titles' to give them back to villagers. On the other hand, District officials are reluctant to give revoked land to villagers. In the example of Kilosa, the revoked land was given back to villagers under dubious conditions. The district council 'created some kind of leasing' for villagers. According to STAFF HAKIARDHI I-50 (2019), 'the law is there, it clearly provides' for another redistribution. But 'you'll find the elites at the district level, they knew the process, they knew everything, but they don't want to do it'. Instead of giving land back

to villagers under the category *village land*, District officials lease the land as *general land*. Thus, although a certain name is put on the land title, it remains general land. District officials 'see it as a source of income' and 'don't want to let it go'. If the land is 'transformed back to the village, then villagers will decide on their own and they won't get a single Shilling'. STAFF HAKIARDHI I-50 (2019) explains further,

"There are also incidences, of government agencies acting as brokers in the process. When you go through Kilombero, you will hear cases of the agency that has been now being closed down. They are called RUBADA [...] RUBADA were given the role to manage the Kilombero Valley up to Rufiji Valley, but then, they had no land [...] Of course land was not part of their concern, because they were supposed to generate electricity. The so-called Stiegler's Gorge that you see today was the role of RUBADA, but they never did it. Then, because they had no land, the solution was, how do we get land from the village? Then they tried with the villagers to undertake land use planning and in the process of undertaking land use planning, they need to demarcate land for investment. So, in that way, they received funding from donors, or from investors from different parts on account that you'll come, and we'll give you land. And then later people were arising and saying you promised us schools, where is the school? [...] This land has already been transferred to general [land] category and we have paid this rent to your government, so it is the government that is supposed to bring the schools. But then the people in the village don't really understand. You have paid land rent to commissioner of lands, our land, and then you have paid someone else? Why didn't you pay that money to the village council, so that we realise that profit? They'll say no, I cannot pay here, because the land has already been transferred. Then they'll say: transferred to whom? But this is our land. You know, they never really understand how, because the rest of the process are done at the district, regional, ministry or the president. There is no back consultation. What they know is, they have been given 50 acres, or 20 acres or whatever acres to this person, so then they believe, this is still their land."

Other government agencies, like RUBADA were 'brokers' in the land process in the Kilombero Valley. Although they 'were given the role to manage the Kilombero Valley up to Rufiji Valley', they have no land to do their activities. Although this was not their mandate, RUBADA engaged in land use planning activities, and convinced villagers into demarcating investment areas. RUBADA 'received funding from donors, or from investors from different parts on account that you'll come, and we'll give you land'. When investors have come to invest on the land, after some time villagers wonder where the schools and roads are that RUBADA, and the investor promised. Then villagers get the answer by investors, that the investors pay money to the government, which is responsible for constructing schools. Villagers wonder why the land rent from their village land goes to the commissioner of lands, instead of going to the village council. They did not understand that the village land was transformed into general land and is now owned by the central government. Because 'there is no back consultation', many villagers think they have given a piece of land to a person and 'believe, this is still their land'. An overlap of mandates between different government agencies offered possibilities for corruption and rent seeking. Although RUBADA's institutional mandate was questioned in the 1990s, RUBADA survived politically by reinventing itself as a broker between private investors, district officials, the ministry of land and village communities (BÉLAIR 2018). After a major corruption scandal in 2015, in September 2017 Magufuli's government suggested to disband RUBADA (THE CITIZEN 2017h). BÉLAIR (2018) suggests that due to the strategy *institutional stickiness* RUBADA is likely to continue to operate under the radar.

Between 1999 and 2015, more than 100 farms were revoked central governments (STAFF MOL I-06 2019). In May 2019, 46 farms with a total of 5,000 hectares were under investigation to be revoked alone in Morogoro Region (STAFF MOL I-06 2019). In May 2016, in Ulanga district, an investor lost 9,000 hectares to the government (THE CITIZEN 2016j). Moreover, a land ceiling was debated, which would limit the number of plots, or the number of hectares a single person may own (STAFF MOL I-06 2019; THE CITIZEN 2016i). A land title has the condition that at least one eighth need to be developed, or put into proper use in a given period of time (mostly 48 months) (STAFF MOL I-06 2019). If that is not done, a warning letter is sent to the owner. Equipped with the radical land title, the President can revoke titles and reallocate land to villagers (STAFF TIC I-07 2019; STAFF MOL I-06 2019). Two weeks after Magufuli became president, he revoked estates in Tanga region. The federal minister for lands, explained "we shall not retreat in our goal till we see all unutilised land is taken over by the government and distributed to those in need" (THE CITIZEN 2016c; THE CITIZEN 2016e) and later reported in parliament that 32 title deeds with 67,400 acres were revoked (THE CITIZEN 2018i; SHEKIGHENDA 2021).

Under Magufuli, revoking land titles and reallocation land was a populist tool that was used to punish and reward loyalists (NDITI 2017; SAID 2018; THE CITIZEN 2017e; THE CITIZEN 2016g; MAKOYE 2016) e.g. the opposition leader Frederick Sumaye (THE CITIZEN 2017g) and the billionaire Mo Dewji (THE CITIZEN 2019b). By identifying companies and political rivals who amassed land they did not develop, they were portrayed as greedy and corrupt. In contrast to them Magufuli presented himself as integral, showed his willingness to fight corruption and indicated his concern about the needs of the common people.

To sum up, these practices of implementation are the litmus test for a future vision to move all the way from discourse to materiality. Building a large-scale dam at the Rufiji is a material implementation of the future. Setting new beacons along the Kilombero River or felling trees for better pasture is implementation too. Whether the implementation of one future makes the implementation of other future impossible is again connected to power asymmetries across scale and the distribution of agency.

7.8 Interim Conclusion

In this chapter, the fourth main research question - *To what extent do practices qualify as 'future-making practices' in the Kilombero Valley?* was posed. Before a vision of the future succeeds against other visions and eventually materialises in the Kilombero Valley, many factors must come together. As seen, a multitude of possible futures are imagined and articulated in the political space on a discursive level (7.1). Only few futures become known and relevant because most are insufficient to convince a critical mass or decisive individuals. As seen, under Magufuli's presidency, the possibilities for articulation in the political space were severely limited. There was no democratic level playing field or an ideal speech situation (Habermas), but an increasing asymmetry of power between different actors. This asymmetry exists between class, race, gender and between urban elites and rural populations. The materialisation of futures is above all a question of which actors and networks prefer which future. Every future is ideological and fused with interests. According to Gramsci's political theory, there is a constant contest over possible futures.

In this power struggle, according to Gramsci, the historical hegemonic bloc prevails, but can be undermined, criticised, and eventually replaced by counter-hegemonic blocs, their futures, narratives, and practices. Traditional and organic intellectuals play and important role in convincing, justifying, and stabilising futures (7.2).

Another important step towards materialising futures are the practices deciding (7.3) in parliaments, within the ruling party, the government and/or the president. Although futures are not only implemented by the state, but also by NGOs, civil society and private companies, all actors are ultimately dependent on political consent. The fact that Magufuli was democratically elected in 2015 but became increasingly authoritarian meant that he was less and less able to compare his future with that of others. The ban on criticising Magufuli's Stiegler's Gorge project is just one example, how fear was created among the population. This fear led to active repression and passive withdrawal from the political space, and to self-censorship. Decision-making was left to Magufuli and the CCM.

However, the decision for a future is not its materialisation. A policy implementation gap is the rule in Tanzania, not the exception. Futures are implemented only after a delay and additional future-making practices are needed before the hegemonic future leads to material change. Other practices are policing, planning, and drafting (7.4) which happen in cooperation with the private sector and international development actors, who can significantly increase government budgets for implementing their future. Policy-making

and plan-drafting indicate legitimacy and that a certain future is set in motion. As LECTURER UDSM I-09 (2019) shows, these practices are permeated by certain interests, because not all plans are written to be implemented. Some seek to attract project funds and to push through follow-up proposals. Policymaking and plan-drafting has become a political-bureaucratic strategy that ministries, agencies, and institutions like RUBADA use to survive politically.

Other practices on the way towards materialisation is disseminating and spreading (7.5). Through propaganda material, public speeches, TV and radio reports, the rural population is informed about what the central government has decided. Especially under authoritarian conditions, these practices are not about a democratic exchange of arguments and gaining legitimacy, but about communicating. Of course, the actors of the hegemonic bloc hope for approval by the population because it would make the implementation of their future cheaper and easier. In the end, however, the hegemonic bloc is not dependent on the consent of the population and can implement its future with the help of the military and other security forces. It is unlikely that the hegemonic vision of the future can become collectively held under autocratic conditions.

On thousands of shamba darasa all over the country, a possible version of the future is put on the rural population's own doorstep. These test fields are windows into possible futures that can be experienced with all senses. Therefore, they have a lot of persuasive power. The practices exhibiting and testing are an important step towards materialising futures (7.6). Yet, neither in the villages, nor at the Nane Nane Show neutral futures are presented. Intensified market-oriented agricultural production, for example, is diametrically opposed to an organic-agroecological approach. In recent years, the underfunding of rural bureaucrats, such as the Agricultural Extension Service Officers, has led to cross-funding by the private sector and NGOs. These provide more and more money for capacity building and workshops. The more the private sector and NGOs, and the less the state, trains bureaucrats, the more plural visions of the future become. These bureaucrats are often caught between several chairs, especially at district and ward level. First, they are service providers for the rural population. Secondly, they are employed by the state but receive salaries irregularly. Therefore, thirdly, they try to make a living by participating in workshops and selling agricultural products in self-owned agro-vet shops.

Lastly, the futures-making practices implementing and appropriating are relevant, as the point of crystallisation in the materialisation of futures is access to and ownership of land (7.7). A major reason as to why SAGCOT failed was the wrong assumptions about the availability of land. While the growing population in the Kilombero Valley appropriates

marginal land bottom-up in forests, reserves and the swamp, the large farming blocs are kept for government or private companies. The middles classes appropriate land mainly within irrigation-schemes, as the enclosed land promises many times the harvest. Accelerated social differentiation is happening.

To sum up, none of the seven future-making practices can stand alone but can always be found in an ensemble of practices. Visions of the future can always be discarded, adapted or resumed on their way towards materialisation. BAUMAN's (2019) concept Retrotopia unites the desire to return to the past, the utopia of the future and the ideas of a better life in the present. There is neither a linear, nor a fixed schedule of future-making practices from imagination to materialisation. The production of the future is always context-specific and can take place in very different ways. All practices have counter-practices that try to undermine the respective other to position their future against the other.

8 Conclusion: Hegemonic Future Grabbing

"They know exactly what they want when you sit down with them [...] we have stopped listening. We have become so arrogant thinking we know everything, and they know nothing. But when you listen, they know a lot and you come to find out you know nothing. So, I think the person who needs to change their mind-set should be us, not them [...] the moment we start looking at things differently through their eyes we are going to see changes [...] it's a top-down approach, that's why we never get anything right. We think we are so intelligent we have all the answers, but we know nothing [...] when you are looking into our five-year development plan who is this development plan for? Who? They are talking about investment; they are talking about industrialisation-- which industrialisation are you talking about? If the land sector, the agricultural sector is almost dying, which industrialisation are you talking about? Which one? And when you are talking about agriculture if you are talking about the big people and then the middle one leaving the majority who are the farmers, something is really wrong with you. You cannot address agricultural sector issues or land sector issues by looking at the middle and the top. You need to look at the little people here, because this where the challenges are, but also, this is where farming and pastoralism is happening. So, if anything needs to be done with the environment, they are the people who are going to make you eat [...]" (STAFF CARE I-49 2019)

Under Magufuli's presidency, the future was an instrument, a source of power and a contested field in which processes of *depoliticization* and *repoliticization* took place. In the conclusion, the term *future grabbing* is introduced as the synthesis of Appadurai's future-making, Harvey's accumulation by dispossession and Gramsci's theory of hegemony.

Magufuli's presidency meant fewer and fewer channels for civil society to articulate own desires, utopias, and dystopias. Increasingly, the future became an object of urban elites and loyal CCM cadres. When hegemonic futures are designed in cooperation with private sector actors or development cooperation partners, the English used creates an additional discursive barrier and interpretive authority. There is a complex relationship between ideabased agricultural policy in Dodoma and Dar es Salaam and its material implementation in Kilombero Valley. This relationship involves, the central government and its regional representation, (inter)national NGOs and civil society. National policy and its spatiotemporally selective implementation is mediated by a spectrum of different future-making practices which aim at political participation and at enlarging civil society spaces in the ongoing struggle for land amidst agrarian change (KAESS 2018).

The ideational transition from President Kikwete's Kilimo Kwanza and SAGCOT, to Magufuli's industrialisation and Stiegler's Gorge, has shown that spatio-temporal development priorities, leadership styles and ideologies of presidents play a major role in rural development and pathways of the Kilombero Valley. Government investments were withdrawn abruptly, large projects were discontinued, and budgets were reallocated to

other sectors. This erratic change and authoritarian style of politics led to a new dimension of insecurity and powerlessness among the people of the Kilombero Valley. The central state continues to be an actor that cannot be rationally understood, substantively influenced, or grasped. Under Magufuli, the population in the Kilombero Valley learnt that passive-oppositional waiting is more promising for undermining government plans, than active-confrontational behaviour. Passive waiting has become a political virtue.

Magufuli's presidency sought to break with the rampant corruption under his predecessor Kikwete. In delivering on his election promise, Magufuli did not only curtail corruption, but gradually curtailed democratic freedoms. He turned into an autocrat and joined the ranks of populist like Trump, Le Pen, Orban, Erdogan and Putin. Magufuli used a narrative that BAUMAN (2019) calls Retrotopia, a future that wants to return to a supposedly golden past (PAGET 2020a; FOUÉRÉ 2014). Most recently, Kenya's newly elected president, William Ruto, used the slogan Kenya Kwanza (Kenya First) in his election campaign and thereby resonated Magufuli's rhetoric.

Although the future visions under President Kikwete and President Magufuli diverged in key areas, the future became an instrument of power under both presidents. State plans, test fields in the villages and agricultural shows in big cities were used as platforms for hegemonic future-making. Likewise, propaganda material, radio programmes and television shows, popular culture and public appearances were used. The more channels were denied to the opposition, the less it was possible to oppose Magufuli's plans. A subliminally existing plurality of futures (given in any pluralistic society) under Magufuli's reign became politically narrowed down to a singular future - the Magufuli future. Above all, the interviews with the WB, in the German embassy and the WWF showed that criticism of the Magufuli government was calibrated in such a way that one is not expelled from the country, which for the WB and for the WWF was conceivable at times.

The future has a temporal and spatial dimension. This spatial-temporality is not the same everywhere. There are high dynamics for attractive spaces for which there are visions far into the future and there are low dynamics for spaces that appear less attractive. Attractiveness here means potential valorisation. Those spaces that lie outside the spheres of interest of elites are hardly considered with visions of the future. An example are the regions of Songea and Mtwara on the border with Mozambique, which were neglected by national politics for decades in terms of infrastructure development, investments, and the general provision of public goods.

Under Magufuli's presidency, the Kilombero Valley was shaped spatiotemporally to varying degrees. There was an increasing divergence between spaces that appeared relevant to the political economy and spaces that were harder to reach, to govern and to develop. The Kilombero Valley is currently the frontier of the accumulation regime of the national economy. In the coming decades, the hitherto dormant economic potential (as the neoliberal jargon calls it) can be tapped and valorised. It is to be expected that oil and gas deposits, rare earths and tropical timber are identified, claimed, and exploited with unforeseeable economic and ecological consequences for the local population. That spatiotemporal prioritisation between presidencies is not always congruent was shown by the shift away from large-scale farming in Mngeta, towards large-scale hydropower generation (DYE 2019b; DYE 2019a; DYE 2020). The role of rural residents in decision-making in both projects was negligible. They continue to be passive recipients of decisions made for them elsewhere. Hegemonic future grabbing is taking place, in the context of which existential struggles for access to and ownership of land and water intensify. The peasant wars described by WOLF (1969) are yet to come for the Kilombero Valley and have begun in parts of it. The classic agrarian question - which post-agrarian political economy is conceivable for Tanzania at the end of the 21st century - and the question what role agriculture, rural areas and the rural population could play in a future Tanzania remains open.

Analytical frameworks such as Bernstein's agrarian questions are suitable for tracing processes of change at different scales. In addition, Marxist concepts like (primitive) accumulation, expropriation and differentiation can offer an analysis that demonstrates the socio-ecological effects of expanding global capitalism in rural Africa. In the Kilombero Valley, processes of primitive accumulation in Marx's sense are taking place in forms of converting forestland and swampland into agricultural land (LEEMHUIS et al. 2017). Parallel to this primitive accumulation of marginal lands, processes of accumulation by dispossession take place in and around irrigation schemes. Rural middle classes accumulate fertile land through their purchasing power. Differentiation along rural classes emerges (SULLE 2017b). However, the access to village land is (still) blocked through collective land titles which is why top-down organised differentiation takes place slowly (VAN DER PLOEG 2018). Rural middle classes who have achieved a certain class position usually migrate to the next largest town or city. This leaves a quasi-homogeneous rural population in the villages, which is mainly characterised by trans-local networks with varying degrees of resilience. As capital becomes increasingly difficult to invest in urban centres, upper and middle classes started to invest in land and the phenomena absentee landlords and weekend farmers are emerging. People living outside the Kilombero Valley, hold more and more land titles in villages. Gradually, a landless rural proletariat is emerging that can only offer its labour to survive (NINDI 2019). Should private ownership of land be introduced in the next years (which beyond the CCROs does not seem likely), capitalist transformation processes and social differentiation would be accelerated.

Magufuli's infrastructure projects have dominated agricultural development in the Kilombero Valley. More than his predecessors, Magufuli has charted a certain development path for the Kilombero Valley through the materialisation of rural and national infrastructures. As billions of Tanzania Shillings were invested within just a few years, it was foreseeable that Magufuli's successors would be forced to continue the dam project. Neither ecologically nor economically is it certain what consequences the completion of Stiegler's Gorge will have on the Kilombero Valley. The water of the Kilombero River and the Rufiji River needed for power generation were politicised and declared to be of national interest. The MP for Malinyi Constituency communicated to the residents in public meetings that due to Stiegler's Gorge stricter environmental governance is on its way. Future governments will monitor water use more closely to ensure that the planned flow at Stiegler's Gorge is achieved and that a minimum of sediment is washed into the basin.

However, there is hope for the local population to regain control over their future. Especially in rainy seasons, large parts of the Kilombero Valley remain difficult to access. The costs of implementing, maintaining, and monitoring rural development are immense. Policies that are most difficult to implement are those that lack the broad consent of the local population and that are to the disadvantage of existing land users (BLUWSTEIN 2019). Large-scale, state-organised and financed monitoring can only be carried out in a superficial manner.

As the population in the Kilombero Valley grows rapidly and the available agricultural land becomes scarcer, it is to be expected that conflicting objectives will arise along the borders between village land and protected land. Contrary to neo-Malthusian claims and the tragedy of the commons, these conflicting objectives are not a consequence of scarcity, but a political issue of negotiation, distribution, and power. This includes the negotiations between national and local interest, as well as those between private property, commons, and public goods. After all, over half of the Kilombero Valley is still under conservation. In national politics and in villages it is debated, how much conservation areas are needed and who should benefit from them. The clearing of several square kilometres of dense rainforest in the Selous for the construction of the Stiegler's Gorge had the symbolic dimension that

electric power supply and infrastructure development were considered more important, than conservation. Magufuli's attitude *development first, clean up later* was a mixture of pragmatism, populism, and economic necessity. This trade-off between environmental conservation and rural development will remain in the collective memory of the residents in the Kilombero Valley. Should some communities demand more conserved land to be released for agrarian intensification, they have a strong narrative at hand.

Additionally, the climate change impacts in the Kilombero Valley remain difficult to assess. While the conversion of forestland into agricultural land is likely to increase due to high poverty levels, the expected crop yields are increasingly fluctuating due to unpredictable rainfall. Local environmental knowledge is becoming less effective, and immigrants bring with them little knowledge about the Kilombero Valley. Whereas the established population sees itself as a legitimate user group, newcomers assert their new claims. In particular, the increasing in-migration of (agro)pastoralists to the Kilombero Valley since the 1980s raises questions of resource redistribution and political participation. Pressured in other regions and despite the forced eviction of up to 100,000 livestock from the Kilombero Valley in 2013, many (agro)pastoralists decided to stay in the Kilombero Valley. This state action showed that policy responses to local challenges are more about cyclically recurring symptom control, rather than a deep engagement with underlying issues. Land use conflicts in the Kilombero Valley have several dimensions that can only be understood and dealt with from a longue durée perspective. Painful compromises between different actors and their interests are in the offing. If existing land conflicts are not addressed thoroughly, also the best-informed rural development risks adding new lines of conflict. The LTSP and the accompanying individual land titles (the CCROs), the failed SAGCOT investment on the large-scale farm in Mngeta, the construction of new large-scale irrigation schemes and the redrawing of administrative boundaries all have the potential to address existing problems. Yet again, the lack of democratic participation structures prevents state development initiatives from achieving the desired results (HAVNEVIK 1993).

The local population has multiple visions of the future that differ from those in Dodoma and Dar es Salaam. Villagers demand village titles, better village land use plans, better public infrastructure, more jobs, more participation, and more transparency. Above all, the local population lacks opportunities to influence decisions. More democracy would increase the satisfaction of the population with the central government and reduce the costs for the implementation, maintenance, and monitoring of projects. The Tanzanian central government should have an interest in aligning their development visions with those of the

rural population. Many ideas have recently been imported from abroad and turned out to be economically and politically unfeasible due to false assumptions such as the availability of land, lack of civil society participation and lack of parliamentary debate (BERGIUS et al. 2020). The failure of the SAGCOT initiative in Kilombero Valley, where it never really took root, joins a long list of failed state planning projects because little institutional learning takes place (ENGSTRÖM a. HAJDU 2018). Initiatives from TALA and MVIWATA aim to increase the land rights literacy of the rural population and promise means to maintain and increase civic education. The proposed dissolution of the corruption filled RUBADA under Magufuli was an important step towards greater transparency in the land sector. Even if, contrary to expectations, the Stiegler's Gorge project proves to be ecologically minimally invasive and an economic success, it is a democratic failure. Although the impact on the people of the Kilombero Valley will only become clear in the coming years, the uncoordinated erection of the beacons and new internal boundaries led to great resentment.

According to TUPS a. DANNENBERG (2021), under president Kikwete the future was emptied so that it could be filled with its own (or specially imported) ideas. From the early 2000s, YARA was looking for a suitable space in Africa to implement its already elaborated ideas. Contrary to the ideas of *emptying the future* (GROVES 2017), the term *future grabbing* refers to the process through which member of the historic hegemonic bloc gain power over futures discursively and materially. The future is not only declared empty, but literally grabbed. More important than the emptiness of the future, is the agency over the future. Under Kikwete and Magufuli, the power about the future lay with the CCM, the government and the state. That futures can be declared empty says less about the emptiness of futures, than about the power effect that claims that emptiness. According to Gramsci, the historic hegemonic bloc is in possession of the state and uses it to perpetuate its power. A spectrum of future-making practices is available for this. Through tactics and strategies of depoliticization, counter-hegemonic futures are pushed out of political discourse and the hegemonic future is seen as the only legitimate one. The hegemonic future is materialised while alternative development paths are contained. The social costs of these decisions increase to the extent to which these futures are implemented against civil society.

Whose futures counts, and whose futures materialise is less related to the capacity to aspire and more to the power asymmetries along class, race, gender, ethnicity, and livelihood. Although the thesis of APPADURAI (2013a) that different groups have different capacity to aspire is true for the Kilombero Valley, it is less an essential quality of individuals and more a matter of class. People who are poor and struggle to survive on a

day-to-day basis, do not have the time to think about the medium to long-term future. The wealthier people are, the more expansive their spatiotemporal visions of the future become. Speculating about the distant future of the Kilombero Valley is a matter of wealth and education, both of which depend on the permeability of Tanzania's social and educational system. Idealistic democratic assumptions by Appadurai and Jasanoff must be rejected when reflecting on African societies. Under Magufuli, democracy never prevailed and became increasingly distant. All too often, slogans like 'the Africa we want' (AFRICAN UNION 2021) becomes an excuse for authoritarian leaders to claim that the future they foresee is the future everyone wants. Neither the future President Nyerere foresaw in the 1960s, nor the future Magufuli foresaw will remain unrivalled in the decades to come. Futures continue to be pluralistic, radically open, and therefore contested.

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VII. Annexes

Table 6: List of Interviewees (own table)

No.		Month	Day	Length	Person/ Institution	Site	Language
1		February	22	140 Min.	Tanzanian Land Alliance (TALA)	Dar es Salaam	English
2	*	March	31	140 Min.	African Food Sovereignty Alliance (AFSA)	Dar es Salaam	English
3		April	2	109 Min.	Andrew Coulson, Scholar	Dar es Salaam	English
4		April	3	68 Min.	Mtandao wa Vikundi vya Wakulima Tanzania (MVIWATA)	Morogoro	English
5		April	5	66 Min.	Sokoine University of Agriculture (SUA), Lecturer	Morogoro	English
6		April	15	73 Min.	Ministry of Land (MoL)	Dodoma	English
7		May	2	39 Min.	Land Unit, Tanzanian Investment Centre (TIC)	Dar es Salaam	English
8		May	6	75 Min.	Agriculture Non-State Actors Forum (ANSAF)	Dar es Salaam	English
9		May	7	85 Min.	University of Dar es Salaam (UDSM), Lecturer	Dar es Salaam	English
10		May	8	60 Min.	World Wildlife Fund for Nature (WWF)	Dar es Salaam	English
11		May	13	58 Min.	Community Radio, Iringa Region	Iringa	English
12		May	16	64 Min.	Rural Urban Development Initiative (RUDI)	Dar es Salaam	English
13	**	May	20	83 Min.	Village Officers	Mngeta Village	Kiswahili
14	**	May	24	113 Min.	Sustainable Agriculture Tanzania (SAT)	Morogoro	English
15	**	May	27	30 Min.	Southern Agricultural Growth Corridor of Tanzania (SAGCOT)	Dar es Salaam	English
16	**	May	27	55 Min.	Agriculture Sector Policy and Institutional Reforms Strengthening (ASPIRES)	Dar es Salaam	English
17	**	May	28	56 Min.	Agricultural Council of Tanzania (ACT)	Dar es Salaam	English
18		May	30	50 Min.	World Bank (WB)	Dar es Salaam	English
19		June	3	83 Min.	Tanzanian Federation of Cooperatives (TFC)	Dar es Salaam	English
20		June	3	48 Min.	Tanzanian Organic Movement (TOAM)	Dar es Salaam	English
21		June	4	76 Min.	National Land Use Planning Commission (NLUPC)	Dar es Salaam	English
22		June	7	93 Min.	Ministry of Agriculture (MoA), Retired Staff	Dar es Salaam	English
23		June	22	76 Min.	Lawyers Environmental Action Team (LEAT)	Iringa	English
24		June	24	86 Min.	MP Ulanga, Chama Cha Mapinduzi (CCM)	Dodoma	English
25		June	26	59 Min.	MP Malinyi, Chama Cha Mapinduzi (CCM)	Dodoma	English
26		June	26	98 Min.	Ministry of Agriculture (MoA)	Dodoma	English
27		June	27	56 Min.	MP Madaba, Chama Cha Mapinduzi (CCM)	Dodoma	English

28	***	July	3	73 Min.	Kokoa Kamili Managers	Mbingu Village	English
29	***	July	4	60 Min.	Mocoa Association	Mbingu Village	English
30	***	July	4	54 Min.	Agricultural Extension Service Officer	Mbingu Village	Kiswahili
31	***	July	5	62 Min.	Village Official	Njage Village	Kiswahili
32	***	July	7	52 Min.	Village Official	Mpofu Village	Kiswahili
33	***	July	8	50 Min.	Mbingu Sisters	Mbingu Village	English/ Kiswahili
34		July	14	63 Min.	Village Officials	Ngombo Village	Kiswahili/ English
35	***	July	18	108 Min.	Retired School Teacher/ Medium-Scale Farmer	Usangule A Village	Kiswahili/ English
36	***	July	18	30 Min.	Agricultural Officer	Usangule A Village	English
37	***	July	19	41 Min.	Smallholder Farmers	Igawa Ward	Kiswahili
38	***	July	19	26 Min.	Acting District Executive Officer	Malinyi District	English
39	***	July	19	60 Min.	Ward Officials	Igawa Ward	English
40		July	20	180 Min.	Medical Doctor	Malinyi	German
41	***	July	20	53 Min.	Smallholder farmer	Kiwale Village	Kiswahili
42	***	July	21	109 Min.	District Representative for (Agro)Pastoralists	Malinyi Village	Kiswahili
	***					Mwanangasa	
43		July	22	173 Min.	(Agro)pastoralist Community	Hamlet; Majiji	Kiswahili
44	***	July	22	66 Min.	District Officers (3)	Malinyi District	English
45	***	July	23	61 Min.	District Officer	Malinyi District	Kiswahili
46	***	July	23	57 Min.	Irrigation Scheme Managers	Itete Village	Kiswahili
47		August	18	75 Min.	MP Kilombero, CHADEMA	Dar es Salaam	English
48		August	22	60 Min.	Alliance for a Green Revolution in Africa (AGRA)	Dar es Salaam	English
49		August	28	72 Min.	CARE International (CARE)	Dar es Salaam	English
50		August	29	90 Min.	Hakiardhi	Dar es Salaam	English
51		September	6	80 Min.	Grow Africa	Dar es Salaam	English
52	**	July	20	55 Min.	Presidential Candidate CHADEMA	Online, Belgium	English

^{*} Interview conducted together with a colleague from the CRC

^{**} Interview conducted with the supervisor of this PhD thesis

^{***} Interview conducted with Tanzanian field assistant, Grace Matemu