

**Actors', Ideas and Ideational Realm in Irrigation
Management: The Case of Decentralization in Madhya
Pradesh, India**

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Acronyms and Glossary

Acronyms

CADA	Command Area Development Authority
CADP	Command Area Development Programme
ICEF	India Canada Environment Facility
INR	Indian Rupee
MLA	Member of Legislative Assembly
NABARD	National Bank for Agriculture and Rural Development
NWMP	National Water Management Programme
PIM	Participatory Irrigation Management
SWC	Soil and Water Conservation
TC member	Territorial Constituency member
USAID	United States Agency for International Development
WALMI	Water and Land Management Institute
WRD	Water Resources Department
WRMT project	Water Resource Management and Training Project
WUA	Water Users Association

Glossary

<i>Amin</i>	Accountant/ Person responsible for revenue collection
<i>Ayacut</i>	Irrigated or irrigable area
<i>Chak</i>	Group of holding getting water from a single outlet or in other words command area of an outlet
<i>Barha</i>	Earthen field channel constructed and maintained by the cultivators in their field for irrigating water from the outlet of the water course
<i>Kharif crop</i>	Crop grown within the period from the break of the monsoon season to the beginning of the cold weather season
<i>Mansikta</i>	Mind-set/ ideational realm
<i>Osrabandi</i>	A programme of release of water in different distributaries and minors of canal system showing the discharge, duration of supply and area to be irrigated or in other words arrangement of rotational water supply to irrigators
<i>Outlet</i>	9 - 12 inch RCC un-gated pipes fitted in the embankment of the canal to serve the command area.
<i>Panchayat</i>	<i>Panchayat's</i> are three tier locally elected bodies at the district, block and <i>panchayat</i> level. <i>Panchayat's</i> are the lowest tier of self-governance in India according to article 243G of the Panchayati Raj Act.
<i>Rabi crop</i>	Winter crop grown between the months of September and March
<i>Warabandi</i>	A programme of distribution of water to each holding of a <i>chak</i> , from an outlet, fixing the time and date/day for irrigation i.e. fixation of turn for supply of water to farmers.

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Abstract

Decentralization has been considered a panacea for good governance worldwide and pursued with great fervour by international organizations and national government alike. Though experiences worldwide reveal that it is not a panacea that it is envisaged to be. Given this dichotomy, this work systematically explores the puzzle why decentralization is being projected as a panacea for irrigation management by the Indian state and/or international institutions alike, when it has failed to deliver envisaged outcome. In this context, greater need to understand the inter-linkages between decentralization and participation has been noted in the literature. In contrast to the argument that greater participation is good for decentralization of water resource management, this dissertation examines the relationship\linkages between participation, decentralization and politics through the lens of actors' 'ideational realm' which I argue in light of structural and cultural ideational variables influences outcome of decentralization processes. This dissertation posits actors' ideational realm as a compelling parameter to understand processes that influence decentralization of water resources or in other words processes that elucidate how institutional change happens. Specifically, focus is on role of actors (NGOs, bureaucrats, farmers and farmer organizations) in influencing (or obstructing) decentralization of water resource governance structure at the intermediate level in Madhya Pradesh, India.

Ideational realm in this research building on Campbell (2004), Berman (2013), and other scholars, viz. Mielke, Schetter and Wilde (2011) is conceptualized as actor's interpretation of situation, and not the situation itself, that determines a way forward for an actor. Actor's choices are narrowed down when they take a certain subjective or objective standpoint for interpreting things. Ideational realms are formed by ideas that actors' subscribe to, and which define their ideational role. Ideational variables like norms, beliefs, and values are employed in this research to elucidate how actors' ideational realms are shaped by their motivations as well contexts. Furthermore, ideational approach is useful in elaborating how ideas about farmer participation in irrigation management have institutionalized. This research demonstrates how the existing idea on irrigation management is deliberately formed as consequence of particular kind of ideational belief(s) that state, and state actors have countenanced. This dissertation examines the historical processes that have facilitated adoption and consolidation of certain idea of irrigation management in India. This work examines the historical choice and the ideological practices of actors that established and reinforced particular definition of participation in irrigation management during the colonial period, in the post-colonial developmental state, and the liberalized Indian state. This dissertation posits that relationship of actors (bureaucracy and political office bearers) with the larger institutional ideological context within which they operate is critical to bear in mind to understand institutional changes, as actors embody particular

identities/subjectivities - for instance, engineers as harbingers of growth and progress. Furthermore, this dissertation concurs with other policy translation literature that argue that the global turn to participatory approaches by international organizations has equally fuelled and supported perpetuation of participatory management polices at the national and state level in India.

Specifically, as a case study this work studies processes that led to introduction of participatory irrigation management in Madhya Pradesh in 1999 and argues that decision to form farmer organizations was not an outcome of deliberative discussion process. Rather thrust on farmers from the top. This work also discusses how top-down regulation can initiate processes for a certain institutional change, but with little problem resolution on the ground through the empirical findings of two case study farmer organizations. Based on empirical findings this research posits that actors' ideational realm is a compelling parameter to understand and (mould) institutional change i.e. intermediate level decentralization. As implementation of decentralization initiatives in Madhya Pradesh has reinforced rather than reduce hierarchal boundaries thereby creating a contentious arena for policy implementation.

Keywords: Decentralization, Participatory Irrigation Management, Farmer Organizations, Ideational Realm, Participation, Corruption, India

1 Introduction and Research Design

“Decentralization is a word that has been used by different people to mean a good many different things. But what do we see in practice? Experiments with local government that end in chaos and bankruptcy; ‘decentralized’ structures of administration that only act as a more effective tool for centralizing power; regional and district committees in which government officials make decisions while the local representatives sit silent; village councils where local people participate but have no resources to allocate” (Mawhood 1983 cited in Agrawal & Ribot, 1999, p. 473).

“Governments often perform acts of decentralization as theatre pieces to impress or appease international donors and nongovernmental organizations (NGOs) or domestic constituencies” (Agrawal & Ribot, 1999, p. 474).

“Decentralization of the planning and decision-making process for water resources management, together with enhancement of public participation is essential for introducing sustainable solutions” (UNESCO, 2012, p. 684).

Efficacy of decentralization has been contested (Agrawal & Ribot, 1999; Mawhood, 1983), though it is still propagated by international organizations and implemented by national governments (UNESCO, 2012). The above three citations -from three different decades- echo this paradox of decentralization as a contested approach for resource management. Following this debate, this research undertakes a systematic enquiry into the puzzle that has intrigued water researchers, professionals/practitioners, and researchers who keenly study decentralization in India and worldwide. That is why decentralization is being projected as a panacea for irrigation management by the Indian state and/or international institutions alike, when it has failed to deliver envisaged outcome? To understand this paradox the focus of this dissertation is on understanding role of actors in obstructing or influencing implementation of decentralization initiatives.

Given, decentralization is widely researched subject in the Indian context varied aspects of it have been studied by scholars (See Harriss, 2010; Johnson, 2001; G. Kumar, 2006; Mahor & Singh, 2012; PRIA, 2009; Rao, 1989; inter alia). However, emphasis on intermediate level decentralization has been lacking (Mollinga, 2010). To fill this research lacuna I explore why despite numerous attempts made by the Indian state and international organizations to decentralize intermediate level of irrigation management - the results have been far from satisfactory. I focus on the role of actors’ - bureaucrats, farmer/farmer organizations, and Non-Governmental Organizations (NGO) - in influencing (or obstructing) decentralization of irrigation management at the intermediate level in Samrat Ashok Sagar (hereafter SAS) Project in Madhya Pradesh, India. This is in contrast to the work done till now, which has largely focussed on institutional roadblocks to decentralization at the micro level and don’t take into account diverging rationalities. Building on the existing scholarship on decentralization, in this dissertation I elaborate failure of decentralizing the intermediate level i.e.

devolving the 3Fs (funds, functions and functionaries) as the cause for decentralization not being considered panacea.

This work studied in-depth the SAS Project which was commissioned by the state government in 1980s. Since its inception, the project has witnessed several attempts to decentralize irrigation management through instituting farmer participation by constituting different types of farmer organizations, primarily under the aegis of the state government with occasional facilitation/financial support from international organizations like the United States Agency for International Development (USAID), World Bank and the India Canada Environment Facility (ICEF) over a period of time. The large temporal dimension (1980s, 1990s and 2000) over which farmer organizations have been constituted and variety of levels (intermediate and micro/local) of decentralization in SAS Project makes it an ideal case study to examine the impediments to intermediate level decentralization. Rather than working with the assumption that greater (farmer) participation is good for decentralization of irrigation management, this research examines the relationship and/or linkages between decentralization policies and participation in context of local politics through the lens of actors' 'ideational realm' following work of Campbell (2004) and Berman (2013).

Decentralization has followed a top-down process model, which has been critiqued by scholars who advocate for greater participation at local level. Section 1.1 reviews decentralization literature and illuminates that structural and cultural factors dominate decentralization experience worldwide. This review also underpins salience of actor's role -in light of structural and cultural limitations- as an essential element for any framework that aims to understand roadblocks to implementation of decentralization. Based on this review in section 1.2, I elaborate the research problematic - lack of decentralization at the intermediate level, followed by elaborating the conceptual framework of ideational realm that underpins this research. Section 1.3 discusses the research design and Section 1.4 concludes with structure of this dissertation.

1.1 Problem: decentralization considered a panacea for poor governance

The UN World Water Development Report 2006 argues that there is an impending water crisis, but it is a crisis of management (UNESCO-WWAP, 2006). Worldwide, the water resource sector is afflicted with bad institutions, bad governance, bad incentives, and bad allocation of resources (Mollinga, 2008, p. 6). Given the problems in allocation and management of resources, in recent years tremendous efforts have been made towards developing methods, approaches and thinking to improve water resource governance worldwide. Decentralization is one approach, which has been pursued with great fervour to improve governance after the failure of state engineered projects (c.f.

J. Scott, 1998).ⁱ Taking cognisance of the criticism of large scale engineered projects, and simultaneous growth of literature propagating ability of people to manage their resources better for instance the literature on community based natural resource management (See A. Agarwal & Narain, 1997a; Bromley & Cernea, 1989; Gadgil & Guha, 1995; Ostrom, 1990; 1992; inter alia) resulted in greater impetus for decentralization in the 1980s. Arguably, decentralization if implemented in essence has the virtue to deepen democracy, as it not only provides a platform for equitable governance but also for greater political participation, and it increases efficiency and equity for sustainable management of any resource (Agrawal & Ribot, 1999; Bardhan, 2002; Bergh, 2004; G. Kumar, 2006; UNESCO, 2012).

Given such strong emphasis on decentralization, it is not surprising that in the global (and Indian) water policy narrative, approaches like Participatory Irrigation Management (PIM) have been debated widely considering they speak about the question of institutional and organizational change needed to improve implementation of decentralized resource management. For instance, the notion of PIM is based on the 'ideology of democratization, decentralization and de-bureaucratization' and last but not least, the empowerment of water users and cost recovery (Swain & Das, 2008, p. 29). This research focuses on PIM as an exemplar of decentralization in India, as it is a dynamic case to evaluate decentralization of irrigation management wherein I demonstrate mere provision of irrigation service is not sufficient to evince decentralization. Rather real devolution of power over productive resources is required. Decentralization is an important subject for research not only in context of irrigation management, but also to understand larger issues of equitable resource distribution that pose a grave challenge to all nations. Moreover, an in depth study on current decentralization practices merits research, as despite some of the known problems -discussed briefly in the following section- decentralization policies have been pursued as a panacea for good governance worldwide.

Foremost, for definitional clarity, the process of decentralization involves both deconcentration i.e. local bodies are handed over roles and responsibilities, which are traditionally undertaken by line departments, and devolution i.e. local authorities are granted political and financial authority to fulfil their responsibilities (Johnson, 2001, p. 522).ⁱⁱ In fact, decentralization can be of varied types, viz. fiscal decentralization, administrative decentralization and political or democratic decentralization (A. Shah & Thompson, 2004).ⁱⁱⁱ The focus of this research is on democratic or political decentralization which is defined 'as meaningful authority devolved to local units of governance that are accessible and accountable to the local citizenry, who enjoy full political rights and liberty' (Blair (2000) cited in Johnson, 2001, p. 523). By emphasizing 'meaningful authority' Johnson (2001) brings attention to the

democratic aspect of decentralization which is more than just having democratic institutions i.e. elected bodies. Rather focus ought to be on institutions that promote democratic politics i.e. greater contestation and deliberation that lead to 'deepening of democracy'.

Democratic decentralization can be in any sector, for instance, health, education or natural resources. However, focus of this work is on processes that hinder and/or facilitate decentralized management of natural resources, specifically, irrigation management at the intermediate level.^{iv} Till now mostly decentralization at the micro level has been the focus of scholars (Baumann & Farrington, 2003; G. Kumar, 2006; inter alia); although, it is critical to focus on intermediate level as well, as decentralization entails devolving powers from top to the bottom. In this context, Falleti (2005), Sharma (2005) and Surie (2010) among others emphasize focusing attention on sequential theory of decentralization which necessitates devolving the 3Fs i.e. funds, functions and functionaries at all levels,^v as decentralization in essence entails clear articulation of duties and responsibilities (functions), sufficient resources (funds) and staff (functionaries). The 3Fs are crucial for any institutional design and must be sequenced to ensure its success (Surie, 2010), as otherwise the envisaged outcomes are hard to achieve.^{vi}

Prior to delving into the necessity of studying PIM at the intermediate level, a brief overview of issues that are salient for the analytical framework of ideational realm from experiences worldwide of decentralizing the micro level is discussed briefly. As I postulate that actor's ideational realm - collectively the realm includes, actor's worldview moulded over time and guided/informed by their structural and cultural reality, knowledge and ideas- determines the success of any decentralization project. Furthermore, the socio-cultural, economic and state structures (due to legislations/rulings) and development cooperation that has structural elements as well by design are critical determinants of actor's ideational realm. The frame of ideational realm is appropriate for study as it has been argued that research must delve beyond stated objectives of a policy to elucidate what the constituents are doing through and inside the institution created by any policy (Chhatre, 2008). It is not argued here that ideational dimensions are solely responsible for establishing causality. Rather conceptual frame of ideational realm facilitates in elucidating how ideas and interests *interact*.

In developing countries, decentralization reforms were initiated in the mid-1980s after promising evidence from the micro level on success of people's ability to manage resources themselves by crafting rules for management (Ostrom, 1992). Subsequently, this idea was taken up by international organizations for project implementation.^{vii} By the late 1980s, almost all countries -developing as well as transitional countries- embarked on transfer of political power to local units of government (Crook & Manor, 1998, p. 1; Crook & Sverrisson, 2001, p. 1), although for different reasons. The

western world decentralized in order to have an alternative for provisioning public services in a more cost-effective way (Work, 2002, p. 5). Whilst reasons for decentralization in developing countries are numerous, and vary from political pressure to democratize in the Latin American context, in order to prevent return to autocracy; as a step towards political and economic transformation in post communist countries; to counter economic inefficiencies, macroeconomic instability in countries like Russia, Indonesia, Pakistan or to simply enhance participation, for instance in India (A. Shah & Thompson, 2004, p. 3; Work, 2002). It is noteworthy that pursuance of decentralization as an approach for good governance was due to perpetuation of neoliberal discourse through thin multilateralism by handful of powerful liberal states. The neoliberal approach affected sub national planning by including decentralization as a measure of governance (Mohan, 2010; Mohan & Stokke, 2000; Schuurman, 1997). The neoliberal approach treats decentralization and the local as a functional, economic space with policies designed to increase the efficiency of service delivery. Emphasis on decentralization has also come from communitarians who posit salience of local knowledge and participatory development. The communitarians share a common belief to rely less on outside agents (state or western development agencies) and more on self/community for changing situation for instance (Mohan & Stokke, 2000, pp. 251-252). Overall, the above instances illuminate different motivations i.e. political or economic which have stirred the interest of policymakers to decentralize and not merely attaining the objective of having the right balance of power among different levels –local/intermediate/central of the government (A. Shah & Thompson, 2004). Moreover, not only are different motivations crucial in decentralization policies, but also the role of actors is equally salient to understand the reasons for pursuance of decentralization. As indicated earlier, the political pressure to decentralize came from the international organizations, as well as from civil society and national governments. For instance, pursuance of economic decentralization is more often hand-held by international institutions like the World Bank (Litvack, Ahmad, & Bird, 1998). Similarly, the Indian state after pursuing the economic reforms in the early 1990s, initiated various constitutional reforms and the 73rd and 74th Amendment to the constitution, and formally recognized the third tier of government at the sub national level (Behar & Kumar, 2002).

Furthermore, several structural and cultural limitations to implement natural resource decentralization have been identified by scholars (Crook & Manor, 1998; Ribot, 2004; I. Roy, 2008). First, limited devolution of power is a structural constraint that has hindered decentralization at the micro level, and without discretionary powers, local government has most often become merely an administrative extension of the central/state government (Ribot, 2004, p. 21). Second, entrenched patronage patterns from top to the bottom have resulted in weak political will to decentralize

despite pressure from the international organizations (Crook & Manor, 1998). These patterns are signifier of social structures that curtail decentralization. In this context, to create greater accountability and transparency, greater role of civil society organizations like NGOs has been advocated by international organizations to check the inherent rent seeking practices of the state functionaries as well as the entrenched patronage pattern. However, little attention is paid to the type of organization, their motivations and strategies they employ to broker greater accountability and transparency. That is to say the apolitical donor-driven governance and role of civil society organizations like NGOs in the context ought to be examined (I. Roy, 2008).

Third, international donors have addressed/ promoted certain policy problems, for instance, deferred maintenance with respect to irrigation development in developing countries as a solution to decentralized management without taking cognizance of farmer and irrigation agency staff perceptions (Suhardiman & Mollinga, 2012). Additionally, experiences of irrigation management through the case of Philippines and Mexico (discussed in chapter two in this dissertation) highlights role of international donors and state bureaucracy in perpetuating a certain idea of decentralized participatory irrigation management with great fervour to better manage irrigation systems.

Fourth, recognizing the need to build capacities of local communities to take over decentralized management of resources, 'coparticipation system' has been tried in several countries under the ambit of World Bank funding. For instance, using the Columbian^{viii} case, it has been argued that coparticipation system – wherein local communities provide labour, material, etc. in a project-fosters community involvement in execution, operation and maintenance of project work (Litvack et al., 1998, p. 28). The practice of participation that donor agencies and international organizations have promoted undermines the political process inherent to democratic decentralization. To wit, participatory approach has been pursued technically without engaging with the issue of power and politics (Bergh, 2004; Hickey & Mohan, 2004). However, despite criticism of this approach, the mechanism of coparticipation or beneficiary contribution has been almost universally adopted by all development-funding agencies for natural resource management, for instance, to manage irrigation systems, without considering the interest and aspiration of the local communities/beneficiaries. I demonstrate the same through empirical findings in this dissertation.

Problems with pursuance of participatory approach are widely recognized, however, an elaborate discussion on how, why, and what mechanisms drive the idea (and understanding) of participation in an actor's worldview is lacking in the context, though actors drive the decentralization process. Moreover, scholars of decentralization argue for greater theorizing of intervening variables between decentralization and outcomes. Ribot (2004, p. 24) argues that there are gamut of factors (like how

devolved powers are used, how decision making is undertaken, who are the influential actors for decision making, who participates and who is left out) that mould outcomes and need to be understood. Paying attention to these, and other structural constraints have been considered crucial to understand lack of decentralization at the micro level (c.f. Banerjee, 2013). Similar observation for paying attention to existing cultural, political and institutional arrangements within any country given the complexity of decentralization and multiple stakeholders (central and local governments, citizens, NGOs and community-based organizations and the private sector) that are involved in the process is echoed by Work (2002, p. 15). Without keen attention to these structural and/or cultural factors, and motivations of actors (international organizations, national or state governments, local communities, NGOs), decentralization cannot be a panacea for good governance. Additionally, greater attention to the process of decentralization have been echoed by Shah and Thompson (2004, p. 19). Overall, from this brief review, role of actors, different realms that have propagated decentralization and salience of processes become salient to understand decentralization and needs to be further researched in-depth given that decentralization is still being pursued despite some of issues discussed above.

Main concern of this research: decentralizing the intermediate level

There are several micro level studies that assess the process of implementation and impact of decentralization reforms at the local level (Baviskar, 2004; Manor, 2003; Mehta, 2005).^{ix} Similarly, there are several macro level studies that undertake comparative analysis to assess the above-mentioned problems in the process of decentralization (Agrawal & Ribot, 1999; Blair, 2000; Byrne & Schnyder, 2005; Crook & Sverrisson, 2001; Ribot, 2004; Work, 2002). However, it is only recently that researchers of decentralization have turned their focus to sub national actors and their interests while analyzing decentralization (Dickovick, 2007; Falleti, 2005; Raghunandan, 2010; Surie, 2010). There is now a greater focus on vertical relations between levels of government that elucidate levels of decentralization at different points in time, and also effects of earlier reform on later ones (Falleti, 2005). The focus on vertical relations and sub national actors and their interest for/against reform process necessitates delving into: how does actors' worldview develop as they are built over time and are reflective of social cultural reality as well structural factors that influence implementation of decentralization.

Additionally, while researching decentralization preferences of actors for type of decentralization and level of decentralization i.e. intermediate versus local level also needs to be borne in mind (Falleti, 2005, p. 344).^x This research contributes to this scholarship and focuses on intermediate level

issues, which is also broadly identified as district/regional/provincial level, as not much attention have been given to this level as illustrated further through the following discussion.

In context of decentralization of natural resource management, PIM has been heralded as a stupendous effort to decentralize irrigation management services across the world by international institutions and organizations like the World Bank, Asian Development Bank (ADB), USAID, and Ford Foundation. However, another narrative that has gained salience in context of participatory irrigation management is that PIM is *not* working. This creates a puzzle, if PIM is not working why international organizations/institutions and different state governments still considering this particular *idea* for improving irrigation management practices?

Critiques have suggested the need for change in the system of management being pursued: a need to try new/alternative models of irrigation management, for instance, Public Private Partnership (PPP) models for reducing the bleeding within water agencies/institutions, or the need for further experiments to find solutions for the maladies that inflect the irrigation sector worldwide (c.f. Mukherji et al., 2009). These discussions suggest a deductive (top-down) approach to pursue any problem for which solutions are sought without dwelling enough into the *raison d'être* for PIM not working.

Moreover, there is prolific literature on problems with implementing reforms in large scale canal projects or in other words with PIM. This work does not intend to re-emphasize these findings. Although it is noteworthy that most of the literature available is partly propounded by proponents of reforms with a sizeable section lacking any rigour (Mollinga, 2003, p. 5; Vermillion, 1997). Although few scholars have critically questioned the reform process, for instance, Reddy & Reddy (2005) have discussed lack of strong institutional structures post implementation of PIM in Andhra Pradesh as a reason for tardy reforms. While the edited volume by Bruns & Meinzen-Dick (2000) emphasize delving into the question of water rights to understand the reform process. The edited volume elucidates local community's water rights to multiple uses and also elucidates the plurality of the legal systems under which rights are negotiated and resolved. Furthermore, scholars have succinctly established that equitable and inclusive allocation of water hinges on explicit rights of the marginalized to water. Gendered aspects of water rights have been discussed by Zwarteveen (1997) and van Koopen (2000) among others.

Chhotray (2004) through her work on watershed development has examined the instrumental nature with which participation has been practiced by actors and elucidates shortcoming of the instrumental approach. Similarly, Blair (2000) has delved into the role of international organizations

like USAID in promoting decentralized local governance which in his paper he articulates as democratic local governance. Dubash (2002) through his work on groundwater management has emphasised paying attention to larger political, economic and physical exogenous shocks that are inherently constituted in spatially and historically embedded social relations. He argues that this has implications for effective groundwater market reforms. While Saravanan (2010) through the case of PIM in the Himalayas has emphasized the need to research how structural, cultural, and rational constraints restrict reform process. Building on work of these scholars this dissertation delves into understanding of bottlenecks -i.e. structural and/or cultural constraints- that restricts reform process, which not many studies elucidate.

Furthermore, experience on participatory irrigation management, till now, elucidates reluctance of irrigation bureaucracy to share responsibilities. Mollinga's (2003) work on large-scale irrigation management projects elucidates that irrigation departments processes have been disconnected from interest of other actors. The current narrative on policy making in India indicates its highly prescriptive nature, with a tendency to elaborate on how farmer participation is solicited. In this context, Mollinga (2010) makes a case for deeper analysis of actual dynamics of the policy processes, given the polarization on the issue: i) what ought to be the process for water resource policy development; and ii) process of interaction between civil society and the state (Ballabh, 2008, p. 14). Similarly, scholars have posited that farmers are not inclined to take over the new responsibility that has been envisioned and entrusted to them i.e. operation and maintenance of canals (Parthasarathy, 2008, p. 124). However, adequate explanation of *why* farmers behave in a certain way is not given. For instance, Parthasarathy argues in context of hike in water price that if farmers perceive alternative to surface water is cheaper, then they resent price hike of canal water and are not interested in operation and maintenance activity (ibid.). However, contrary to this, empirical evidence from this work suggests that farmers are willing to pay higher water rate if the service is reliable.^{xi} This work emphasises that, it is the political office bearers and bureaucracy in case of Madhya Pradesh who have changed narrative on collection of irrigation fee. Given this finding, it is evident that it's not only actor's rational interest which explicates poor implementation of decentralization. This work looks at interaction between material and non-material interest in actor's ideational realm, and thus overcomes the limitations of work which only posit rationalization of actors as a *raison d'être* to explicate poor decentralization in the irrigation sector (See Pandey, 2006; Parthasarathy, 2008; Raju & Gulati, 2008; Wade, 1982 inter alia). This scholarship omits paying attention to non-economic structures, particularly at political and cultural level that also populate actors ideational realm and is thus important variables to explicate poor implementation of decentralization.

Furthermore, in the Indian context, the idea of handing over maintenance of irrigation systems to farmers also brings forth another predominant (though subtle) idea that government is no longer responsible for taking care of farmers and irrigation structures (Naik and Karlo, 1998 cited in Nikku, 2006, p. 24). The 'usual attitude of technocrats is to smell antagonism in people. PIM programs have been directed against this attitude and have, indeed, been somewhat successful in clearing the atmosphere of suspicion on both sides' (Sengupta, 2006, p. 122). Sengupta also argues that if farmers are involved in planning stage then the reluctance to change -an institutional problem- that mars the Indian bureaucracy will be resolved. Sengupta's focus here is on institutions and does not pay attention to actor's realm or worldview.

Similar point is made by Narain who posits that no serious attempt has been made to involve users (i.e. farmers) while discussing and designing the policy process or in advocacy (Narain, 2009, p. 126). Narain comes to this conclusion by arguing that technical choices and interface with local government structures are determinant of the effectiveness of PIM (Narain, 2003). However, it is not only farmers who have not been involved in this discussion process, but also junior (irrigation) bureaucracy and functionaries of the irrigation department who implement policy on ground and are the recipients of new policy idea. This work, illustrates how actors (for instance junior bureaucracy) works at interface of various ideational realms and this is a crucial aspect to understand irrigation policy - an aspect that has not been emphasised thus far.

From this brief discussion of some of the prominent work on PIM in India, it becomes evident that the focus of most of the work has been on micro level issues. Additionally, all the above studies point towards how institutional and political economy aspects affect policy-making and political outcomes. Many a times poor outcomes are appropriated to unintended consequences of institution building by focusing on ambiguity in environmental conditions only at the outset (Parsons, 2007, p. 98). Long (1992), however, notes that policymaking is not a linear process that influences practices. Rather greater attention to context and actors in which new policy ideas are implemented is necessary i.e. actor's ideational realm or *mansikta* (as the farmers/bureaucracy in the region connoted it), which I postulate is a signifier of success of a decentralization project.^{xii} Additionally, literature on policy processes and politics of policy also discusses strategic action of actors in influencing practices (See Mollinga, 2007; Mollinga et al., 2010).

Given the salience of above literature it is imperative to focus on 'how' one understands strategic practices of actors in irrigation. This requires paying greater attention to interests (material as well as non-material) of the actor and/or organizations advocating an idea, keenness of actors who need to implement the idea or perception of actors who ought to imbibe the idea are some key variables to

be pondered over as this impacts how policy ideas are implemented. However, it is evident from the literature review that ideational aspects have been neglected till now while discussing the irrigation reforms process and emphasis is mostly on the rationalization of material interests, and institutional and political economy undercurrents as a reason for lack of decentralization. The salience of this line of enquiry is noteworthy; however it is not only material structures which guide actor's worldview. Rather as discussed earlier political and social structures also need to be taken into account.

In this research, I conceptualize decentralization as process driven, i.e. as a discursive political process^{xiii} that gains shapes due to efforts of different actors and their motivations, interests, ideas and power dynamics that are at play. This is contrary to previous studies that have viewed decentralization solely as technical endeavour. Furthermore, from the review it is evident that decentralization till now has been pursued by the states without paying adequate attention to actors -local communities/constituents, state/provincial/junior bureaucracy, NGOs or private organizations- who are the carriers, implementers or recipients of the idea of decentralization and hold the onus to decentralize. Addressing and analysing this constraint is also a focus of this work.

Specifically, this dissertation discusses the role of actors in influencing (or obstructing) decentralization of water resource management at the intermediate level through the case of PIM in Madhya Pradesh, India. I use the lens of ideational realm which is conceptualized as actors' interpretation of situation based on their material/structural/cultural bearing, and not the situation itself, that determines a way forward for an actor and undergirds how decentralization unfolds at the intermediate level.^{xiv}

Objectives of this research

The primary research question that I examine is the role of actors' (farmers, farmer organizations', NGO, and senior and junior bureaucracy) in influencing (or obstructing) decentralization at the intermediate level in SAS Project in Madhya Pradesh, India. Given that SAS is a major irrigation project spanning across two district boundaries of Vidisha and Raisen, the intermediate level in this research refers to distributory committees and project committee that were formed under the SAS Project post 2000 -after enactment of the PIM Act in 1999 in Madhya Pradesh, to hand over operation and management of irrigation network to farmer organizations. Three forms of farmer organizations were formed in the SAS Project post 2000, viz. distributory committees and project committee at the intermediate level, and Water User Associations (WUAs) at the micro level.

Three-fold research objectives to address the research question are:

- To identify the role of actors viz. bureaucracy, international organizations, NGOs and experts, in instituting a certain idea for decentralizing irrigation management in the national and state policy narrative, and the diffusion of this idea in the SAS Project area.
- To examine the understanding of participation among select actors, viz. farmers, farmer organizations', senior and junior bureaucracy on participatory irrigation management at the state level and in two select WUAs –Betwa and Saraswati- in SAS Project, to elucidate roadblocks to intermediate level decentralization.
- To assess structural (political and socio-cultural structures) factors that shape ideational realm of actors, and thereby influence implementation of intermediate level decentralization (for irrigation management).

1.2 Relevance of conceptual frame of ideational realm that undergirds this research

The research objectives, discussed in the previous section, not only clarify the focus of this research but also shed light on the conceptual frame of ideational realm that is used to analyze the research problematic. Drawing from Campbell (2004), Berman (2013) and others (Mielke et al., 2011) ideational realm in this research is conceptualized as actor's interpretation of a situation -which could be influenced by beliefs, norms, culture, ideology, structure (political, economic or cultural)-, which determines/influences actor's choices/decisions. Furthermore, this realm is not only influenced by ideational variables like beliefs, norms, culture and ideology but is also influenced by ideational roles of actors which is circumscribed (to an extent) by actors affiliations and statutory rules that guide functioning of an organization. To elaborate, context structure actor's perception. Context here could be institutional context, belongingness for instance to an organization, community, ideology or financial and market incentives that influence people's ideas and identities. Furthermore, it is premised that actors perceive and reflect on their context strategically, and this shapes their actions. Campbell (2004) argues that, loosely, there are four different types of ideas that actors can function under viz. programs, frames, paradigms and public sentiments, and these ideas have cognitive or normative outcomes which can influence/constrain actors' functioning. However, based on empirical research, this work posits that it is not organizational affiliations alone that determine an actor's ideational realm. Rather focus ought to be on ideational variables that populate and guide an actor's ideational realm.^{xv} As structural and cultural ideation factors are at play when actors and institutions interact, and are determinant of how, when and why actors act in a certain manner. For instance, farmers perceive their position: in WUA, on the canal, in the villages, as a reflection of their embeddedness in socio-cultural reality. Similarly, bureaucracy also perceives their

position based on state's structural mandate, and rulings, and existing institutional hierarchy.^{xvi} Detailed elaboration of the conceptual framework is done in chapter three.

Ideational literature also facilitates in elucidating causal relationship between ideational elements and action. Berman (2013) in her recent work has argued that ideational scholarship ought to pay attention to structural forces as well as case specific factors and agency to elucidate change. Building on this proposition, this research demonstrates that in order to understand decentralization, one need to delve into the processes and mechanisms that facilitate formulation and further reproduction of a certain ideational realm of actors. Additionally, ideational realm as a conceptual framework facilitates in examining whether the policy choices made in reference to irrigation management may even be constituted as decentralization.

A comprehensive literature review reveals that several frameworks have been developed to study\explore\assess decentralization process. For instance, Leach (2004) has developed a framework to assess devolution in terms of inclusiveness, representativeness, procedural fairness, lawfulness, deliberativeness, and empowerment, to study democratic merit of devolved policy making processes. Similarly, Manor (1999) argues, that to study decentralization of any resource focus ought to be on political, fiscal and administrative decentralization. Leach and Manor, however, follow an instrumental approach, which does not pay attention to underlying processes. Crook and Sverrisson (2001), on the other hand, undertake a comparative analysis of cases across Asia, Africa and Latin America to evaluate the performance of decentralization interventions vis-à-vis poverty reduction. They posit salience of regime type, political parties and commitment of state to prevent the capture of power by the elite at the local level. They, however, fail to pay attention to role of bureaucracy and its' constituents in decentralization. Their work is more in line with decentralization as statecraft. In another attempt, Agrawal and Ribot (1999) have developed an accountability framework, informed by actors' relations with accountability and power, to study decentralization of forest resources. Their work is interesting and focuses on institutional underpinnings of decentralization and how accountability is instituted. The above authors delve into the issue of power, and actors' role in instituting decentralization from an institutional perspective. They argue that only division of power, constituting rule making and enforcement, can lead to effective decentralization. However, their formulation does not take into account actor's worldview, which results in actors taking strategic action and is a determinant of whether rules, if at all, will be enforced by an actor. This particular facet is demonstrated through this work.

In summary, all these frameworks and/or approach to assess decentralization differ in their outcomes due to the disciplinary background of the scholar(s), and case site being studied. Moreover, although all these frameworks pay attention to institutional change (decentralization),

however, they do not pay adequate attention to role of actors, who are essential to implement change as carriers/receivers/implementers of an idea. This research tries to plug this gap by focussing on this critical and often neglected aspect.

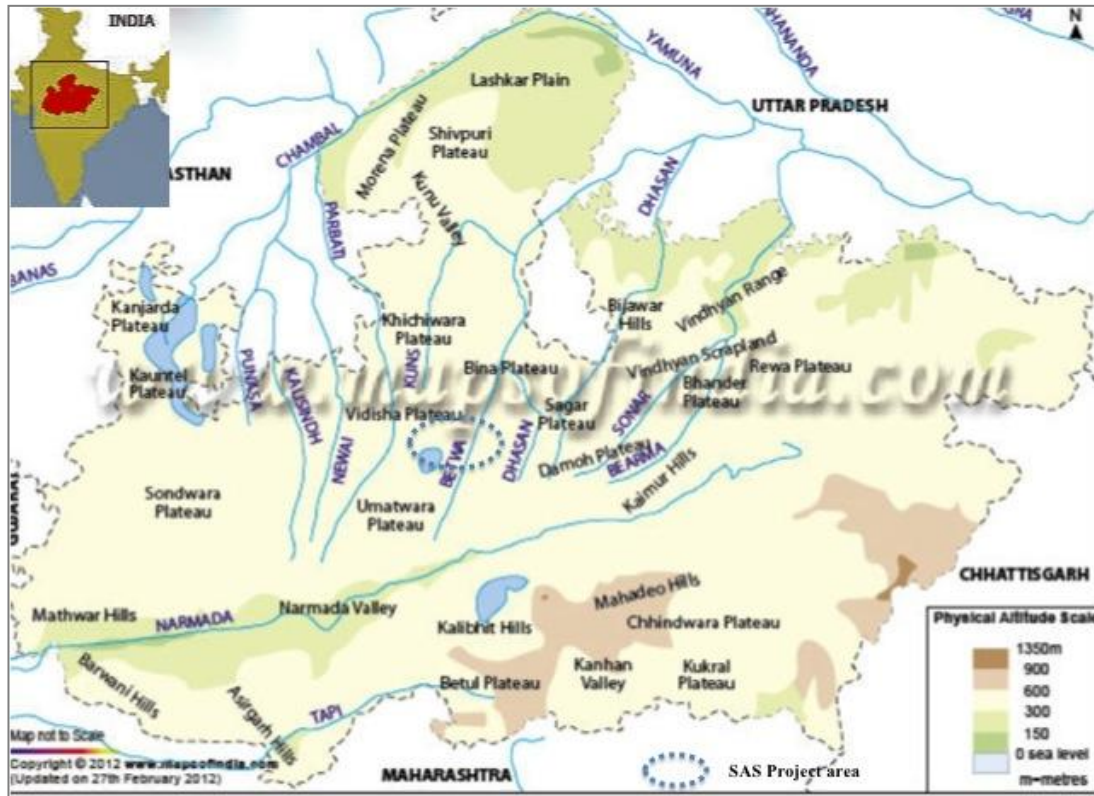
1.3 Research design

The state of Madhya Pradesh^{xvii} in central India was chosen to conduct an in depth case study. Madhya Pradesh is an ideal site since contestations over water resources have long marred its history. In fact, contestation over a series of dams on the river Narmada and its tributaries are well known. Further, efforts towards decentralized governance have long been a focus in the state. Madhya Pradesh was one of the first few states in India to enact legislations and introduce PIM (Swain & Das, 2008, p. 33); thus making it a critical case to study on PIM as an exemplar of decentralization.

Case study is an 'intensive study of a single unit for the purpose of understanding a larger class of (similar) units. A unit connotes a spatially bounded phenomenon—e.g., a nation-state, revolution, political party, election, or person—observed at a single point in time or over some delimited period of time' (Gerring, 2004, p. 342). Characteristics that are attributed to good case study selection are plentitude, boundedness, comparability, independence, representativeness, variation, analytic utility, replicability, mechanism and causal comparison (Gerring, 2001b, p. 163). However, it is not possible for one research design to incorporate all these factors; there is always a trade off, which is contingent on what criterion a researcher decides to give salience to in order to achieve the best possible fit, in light of the research question being answered. For instance, most likely case study type evinces comparability and representativeness based on the findings from a particular case. As the name itself suggests, most likely cases are instances of the most prevalent and typical events for understanding a phenomenon (Gerring, 2001a, pp. 218-219).

The case study selected for this research is a major irrigation project -SAS Project- which spreads across two districts of Madhya Pradesh viz. Vidisha and Raisen and lies in the Chambal Betwa river basin. The location of the case study site in Madhya Pradesh is illustrated in Figure 1.1.

Figure 1. 1: Location of case study site



Source: adapted from www.mapsofindia.com accessed September 13, 2013

This project was selected as a case study site as senior bureaucracy from Water Resources Department (WRD) and experts in Bhopal perceive it as successful and typical major irrigation project. This project has also received considerable funding to institute participation of farmers for irrigation management. Given, that the research problematic is to understand the success of decentralization at the intermediate level, I considered it appropriate to select a case that is considered successful and typical by the bureaucracy. Moreover, SAS is the only major irrigation project in the state where NGOs were involved as part of the India Canada Environment facility (ICEF), and hence is a critical case to study decentralization at the intermediate level as well, as this research evinces the role of different actors in the implementation of participatory irrigation management. The SAS Project provides a wide and dynamic field for analysis, as there are plentitude of actors (senior and junior bureaucracy, farmers, farmer organizations, NGO/consultancy and political office bearers) who have been involved in this project for instituting decentralization. Furthermore, SAS Project can be categorized as most likely or typical case -to use Gerring's (2001a, 2004) typology- to study (effective) decentralization. Since the project was perceived and categorized by the bureaucracy as a successful project, to elaborate, a senior official from WRD, Bhopal posited SAS Project as a very active project where there is good coordination between WUA and engineers of

the department (Interview, June 7, 2011). Given, an important criterion to bear in mind for case selection is the degree of representativeness and variation it provides (Seawright & Gerring, 2008, p. 296). SAS Project was found apt in this regard, as it is representative of large-scale irrigation projects in Madhya Pradesh and also provides variation in analysis as is the only major irrigation project, which received funding under ICEF, and had a plenitude of actors involved to facilitate decentralization. Thus, the selection of the case study state and site is purposive in this research. Furthermore, to elucidate variation within case study, two farmer organizations, one upstream (Saraswati) and the other downstream (Betwa) on the same canal was selected for data collection and analysis. It is noteworthy that for ethical reasons, the names of all individuals, farmer organizations, villages, NGO mentioned in the primary research data have been changed in agreement with the researched community.

A general feature of case study analysis is to rely on within case variation to parse larger causal interpretations (Gerring, 2001b, p. 215). Bearing this aspect in mind, and to evince causality a non-experimental cross sectional research design^{xviii} is set up for this dissertation, wherein observations and variations from single case study are used to understand effectiveness of decentralization. However, given the weakness of single case analysis in proving causality and validity, this research overcomes this weakness by undertaking an analysis of political process of policy making with respect to decentralization at the national and state level, to establish causality beyond a single case study. This also facilitates in attributing wider applicability of findings of this research. To substantiate, this research analyzes aspects of decentralization not only hierarchically (national, state, and project/WUA level), but also diachronically. To elaborate, historical analysis from pre-colonial era to present time is undertaken in chapter four to elucidate origin of ideational realm in irrigation management. This discussion illuminates how the idea of participation, role of engineers, and viewpoint on farmers has been institutionalized or changed in state ideology. Furthermore, historical analysis is also significant to understand ideational realm and process of irrigation management that was institutionalized in SAS Project after project commissioning in 1978. Historical analysis is particularly significant for the research design of this dissertation, as findings are grounded in interpreting processes, mechanisms and discursive realities that build over time. Thus, I argue that history matters to understand roadblocks to decentralization. Furthermore, historical analysis also demonstrates that ideational realms are not ahistorical. Table 1.1^{xix} outlines the research design of this dissertation further.

Table 1. 1: Research design

Factors	Case study (two farmer organizations in SAS Project)	State level analysis*	National level analysis[#]
Evidence	Within case variation	An analysis of the political process of policy making and how this influenced actors' perception and ideational realm on policy making	An analysis of the politics of policy making and institutional boundaries that influenced actors perceptions and ideational realm
Unit of analysis	Intermediate level farmer organization	Debate to institute farmer participation and constitute farmer organizations	Debate to constitute farmer organizations
Temporal scope	Synchronic and Diachronic	Synchronic & Diachronic	Synchronic & Diachronic
Population	Farmer organizations	-	-
Sample	Two	-	-
Case	Decentralization in SAS Project	Efforts made to decentralize in Madhya Pradesh and salience of actors in instituting the same	Ideas to initiate decentralization
Observation	Perception of actors that elucidate (in)effective decentralization	Perception of actors that elucidate constitution of policy on farmer participation in irrigation management	Discussion on how the idea of farmer participation in irrigation management gained salience at the national level

* State level analysis is undertaken using review and key informant interviews

[#] National level analysis is undertaken using secondary data sources.

Table 1.1 illustrates that in this dissertation two types of evidence are analyzed. First, the findings of the case study site illustrate within case variation. Second, the state and national level findings collected through primary and secondary data substantiate the case study findings and provide evidence that facilitates greater representativeness of case study findings. Furthermore, as has already been discussed, the unit of analysis for this research is the intermediate level farmer organizations (distributory and project committee) and this research undertakes synchronic and diachronic analysis to study decentralization in irrigation management. To elaborate, the status, functioning and discussion of farmer organizations for the SAS Project is done for specific time periods (pre PIM phase i.e. between 1978 and 1999 and post PIM phase i.e. from 2000- March 2012), as well as over a period of time. Similar historical analysis is undertaken at the state and national level to elucidate the trajectory of instituting participation of farmers in irrigation management in the policy narrative.

Given the research design, an ethnographic qualitative methodological approach is used for this research. This research critically examines actors' ideational perspective to elucidate their role in influencing or obstructing irrigation reform process, i.e. implementation of participatory irrigation management in two select WUAs in SAS Project, Madhya Pradesh, India. Further, this research

conceives of actors as 'social actors' and not as some disembodied social categories based on class or caste for instance, or passive recipients of intervention but rather active participants who process information and strategize their dealings (Long, 1992, p. 21). Thus, actors in this research are strategic, who perceive their standing for instance *within* the caste and class categorization or within organizational hierarchy and thus exercise their agency i.e. perceive their power/capabilities to exercise and/or influence outcomes.

Methods employed for data collection include key informant interviews, focus group discussions, observations and secondary sources. Key informant interviews were conducted with subject experts, senior bureaucrats and/or engineers, junior bureaucrats/engineers, lower functionaries of the WRD, representatives of Non-Government Organizations, WUA members, former Member of Legislative Assembly, faculty of Water and Land Management Institute, Bhopal, Indian Institute of Forest Management, Bhopal, Academy of Administration, Bhopal and International Water Management Institute, Anand. In addition, semi-structured interviews with farmers and self-help group members present in the two select WUAs was undertaken. In total, 117 interviews were conducted between May 2011 and April 2012. Interviewees of this research are from diverse backgrounds and provide eclectic information, which is essential to understanding diverse ideational realms/*mansikta* of actors.

Data collected through above-mentioned methods facilitated in understanding how actors' everyday decisions are influenced by the wider structure and cultural context. Additionally, observations facilitated in understanding the nature of relationship between different actors i.e. how actors' (farmers and WUA members) interact (and/or negotiate) with bureaucracy in WUA meetings. Furthermore, interviews and observations also facilitated in understanding not only the relationship between different actors' but also power relations that determine these relationships, as actors are positioned at different levels of authority, and have different interests and incentives for performing an action. The data collected through the above-mentioned methods also facilitates in understanding what factors influence decision-making - caste, party politics, interest group politics and how actors' strategize to work between different nodes of power relations. In addition, key informant interviews (with experts) provided critical sources of information about the political processes. To avoid disrupting the flow of discussion, elaboration on method of data collection and analysis is provided in Appendix I.

In this dissertation, I have approached data collection and interpretation objectively. To elaborate, while undertaking data analysis, several categorical inequalities based on class, caste, gender hierarchies became evident. Respondents identified binaries to elucidate categorical inequalities for

instance, big or small farmer; *bade sahab* (senior bureaucracy) or *choote sahab* (junior bureaucracy) and I have thus interpreted data along these categorizations. However, even in these categorizations, I have engaged with data relationally, for instance, within the landownership pattern (which is a structural pattern contingent on class) of big or small farmers, the caste issue (cultural structure) came up. Hence, taking cognizance of this I have analysed data from the standpoint of - as explained and perceived by respondents, however, in order to ensure scientific scrutiny I have also critically reflected how these worldview and imagery were constructed and that is when the interdependence of various structures -material, political and cultural- become salient for my conceptual framework i.e. 'how and why, me and my respondents understand an aspect in a certain way'. Moreover, these categorizations also facilitated in discerning inherent contradictions that emerged while interpreting data, for instance, overlapping of ideational realms between different categorizations.

Additionally, process tracing is used to elucidate causal processes and complex decision-making (Tansey, 2007). Near-synonyms of process tracing are process analysis, discerning, pattern-matching, micro foundations, causal narrative, intermediate processes, etc. Methodological concerns of all these different methods in the research design is to elucidate transparency and causal pathways (Gerring, 2005, p. 189). Process tracing in this research has been used to demonstrate how and when which ideas (of actors) affect outcomes (decentralization) in chapter four and five. For this archival and bibliographical material has been relied upon to determine causality between actors' (ideational) realms and policy decisions taken to implement decentralization. In chapter five, these findings are also substantiated with interviews undertaken with bureaucracy and experts in the state capital Bhopal.

1.4 Structure of this dissertation

Findings of this research are relevant not only to understand why irrigation reform process is not working in the case study site but can be *extended out* to understand decentralization processes in general. This is a critical subject to research, as worldwide so much impetus and resources are focused on getting the process right to improve governance and sustainable management of resources. This dissertation elucidates the salience of broader socio-political relations, which determine and define actors' ideational realm and thus contends that ideational realm is a crucial variable to understand decentralization processes. Chapter two sets stage for the following eight chapters of this dissertation. Chapter two argues that discussion on evolution of irrigation management in the late 1980s and 1990s in India is incomplete, if done in isolation, and without taking into cognizance the events and role of actors at the international level.

Chapter three outlines and clarifies key terms and the analytical framework employed to understand roadblock to decentralizing irrigation management. Ideational literature does not have enough cases that elucidate processes through which ideas become institutionalized and affect political outcomes over time. More so, empirical cases that carefully investigate ways in which ideas shape or form both actors' motivations and contexts (Berman, 2013, p. 217) and that is where this research contributes conceptually to the discussion by illustrating a case where ideas that gained salience earlier in time have slowed down the learning process for new idea (of participatory management) to stick through as the earlier idea of irrigation management has institutionalized actors motivations and contexts in a certain way. Additionally, given the criticism of ideational research that 'motivations and causality continue to be somewhat unclear and confused' (ibid); through the case of participatory irrigation management in this dissertation motivations and causality is clarified using the conceptual frame of ideational realm.

Chapter four drawing on chapter two and three elucidates the salience of history, structure, organization and people for understanding decentralization in irrigation management at the national level. This chapter argues that the trajectory of irrigation reforms in India with respect to imbibing the idea of greater role of farmers in participation and management of irrigation point towards the need to inquire some key aspects viz. understanding origins of idea of participation in irrigation management in India in the policy narrative, identifying the proponents and carrier of this idea, and exploring conditions that led to acceptance of this idea during a particular period in policy paradigm.

Chapter five elucidates how ideational paradigm for decentralization or in other words participation of farmers in irrigation management was shaped in Madhya Pradesh through the conception of first-generation (late 1980s to 1999) and second-generation (2000 onwards) farmer organizations. This chapter also elaborates the role of various actors that have influenced the ideational paradigm and/or held power within their domain to restrict/facilitate decentralization.

Chapter six introduces the case study site and elaborates the socio-cultural and political context of the SAS Project in which local actors i.e. farmers, farmer organization and junior bureaucracy are embedded in and which shapes their ideational landscape or mind-set (*mansikta*). Chapter seven unpacks the worldview of actors that are shaped to an extent by their ideational role i.e. farmers, farmer organizations, and bureaucracy) in SAS Project from 1978-2000 when first-generation farmer organizations were constituted in the state. The chapter demonstrates how the network of irrigation system that was set up by the state in 1970s changed the agricultural and social landscape of the SAS Project area by 1990s. Chapter seven also discusses the process of constitution of first-generation farmer organizations (*Sinchai Panchayats* and *Krishak Samiti*) in the villages and salience of ideational

variables to understand functioning of first-generation farmer organizations. The chapter provides evidence that these first-generation farmer organizations were unsuccessful as: limited role and functions were provided to them legislatively; there was little or no effort made by the irrigation bureaucracy to create awareness about these farmer organizations within the community; the leaders of these farmer organizations did not share information and/or knowledge about functioning of farmer organization with local community or other members of the committee; the attitude and perception of bureaucracy was a roadblock for having a good working relationship and/or sharing of information between irrigation bureaucracy and first generational farmer organization leaders. Furthermore, chapter seven elucidates perceptions of farmers with respect to norms for availing irrigation water, and their perception about bureaucracy and functioning of farmer organizations. The chapter also discusses how these norms and beliefs were influenced by the socio-cultural context, and until end of 1990s, all efforts to decentralize irrigation management were targeted at the micro level. There was no effort made to decentralize the intermediate level of irrigation management in the state.

Chapter eight elaborates on the ideational realm/worldview of actors' post 2000 in the project area when second-generation farmer organizations (WUAs) were constituted in Madhya Pradesh and in the project area at the micro and intermediate level. The focus is on explicating reasons that the state government has used for not decentralizing the intermediate level i.e. poor functioning of micro level farmer organizations -WUAs- have been used as a signifier to not decentralize the intermediate level. Although, field findings elucidate that the reality is not that simple. This chapter demonstrates that some of the responsibilities that were devolved to WUAs were gradually withdrawn through strategic practices of junior bureaucracy at project level, for instance, cases of maintaining paperwork, or releasing the salaries of watchmen and timekeeper. In the two case study WUAs' junior bureaucracy have on one hand maintained the sanctity of basic structural mandate; on the other hand they have exercised their agency for their self-interest to ensure their access to commission, that they enjoyed prior to constitution of WUAs are not curtailed. The chapter also identifies structural and cultural ideational factors that are salient to understand poor functioning of micro level farmer organizations i.e. WUA.

As a continuation of discussion in chapter eight, chapter nine elucidates how diverse worldview of actors have resulted in poor functioning of micro level farmer organization at the micro level. This chapter also illustrates that farmers are not a homogenous entity although the paradigmatic and programmatic ideation realm i.e. of decision makers or theorists failed to acknowledge this aspect while propagating the idea of decentralizing irrigation management. Furthermore, this chapter

illustrates that *mansikta* of farmers and bureaucracy has been a roadblock for decentralizing the intermediate level. This dissertation concludes (chapter ten) with discussion on how the concept of ideational realm (as demonstrated through this research) is useful to understand roadblocks to intermediate level decentralization and indicates future areas that merit research. The focus is also on discussing the relevance of conceptual frame of ideational realm for theory and as a method of enquiry.

Overall, this dissertation underscores strategic practices of actors that exemplify the complex relationship that exist between bureaucracy and farmer/farmer organization with respect to decentralization of irrigation management in Madhya Pradesh. This dissertation elucidates how formal political structures of decentralization and participation have influenced/ and is influenced by cultural structures and practices of irrigation management in a dynamic social political setting of SAS Project.

ⁱ Scott argues that a combination of four elements: i) administrative ordering of nature and society, ii) high modernist ideology, iii) authoritarian state, and iv) a prostrate civil society have resulted in 'most tragic episodes of state initiated social engineering projects' (J. Scott, 1998, pp. 4-5).

ⁱⁱ Decentralization process could be top-down and can be undertaken as part of governments mandate to downsize the central government, improve service delivery, etc. Although it may not necessarily provide the local community/authority right to decision making (Johnson, 2001, p. 523).

ⁱⁱⁱ Fiscal decentralization refers to devolution of fiscal powers from national to sub national or local level. Whilst deconcentration or administrative decentralization refers to giving the local officials powers to recruit or dismiss local staff and thereby making local officials accountable to elected officials (Davoodi & Zou, 1998; A. Shah & Thompson, 2004).

^{iv} Hereafter in the text, I use decentralization and democratic decentralization interchangeably.

^v An alternative argument is proposed by Dickovick (2007) who posits that central government at times take tactical decision to strengthen one type of sub national government i.e. local governments in order to weaken intermediate level governments.

^{vi} Chapter seven, eight and nine of this dissertation demonstrate that sequential theory to decentralize the intermediate level can only work if there is willingness of actors to take forward the reform process.

^{vii} For detailed explanation see chapter two.

^{viii} Chapter two further elucidates the Columbian case with respect to decentralizing irrigation management.

^{ix} Critiques of natural resources decentralization reforms argue that it may not be the panacea for natural resource management (or any public good) that it is envisaged to be, as if profitable the collective decision makers are likely to exploit natural resources rather than conserve (Ribot, 2004, pp. 14, 23).

^x Falleti (2005) in her well-known article propagates sequential theory of decentralization which has three key characteristics, viz. looking at decentralization as a process, second, taking into consideration territorial consideration of actors and third, incorporating policy feedback effects.

^{xi} At present Madhya Pradesh has one of the highest water rates for irrigation in the country (see chapter five).

^{xii} Other scholars that have worked with actor's/agents perspective are Mollinga, Bhat & Saravanan (2010), Laube (2007), inter alia.

^{xiii} Adapted from Work (2002) and Agrawal & Ribot (1999).

^{xiv} For details see chapter three.

^{xv} It is acknowledged that the conceptual frame of ideational realm is similar to the work scholars have undertaken under institutional analysis. How this work departs from this literature is discussed in chapter three and ten.

^{xvi} Discussed in detail in chapters five to nine.

^{xvii} Madhya Pradesh was bifurcated in November 2000 to create the new state of Chhattisgarh. [Note: Archival data on irrigation potential is available for undivided MP. Although the two case sites discussed in this dissertation are in the present day Madhya Pradesh.

^{xviii} Adapted from Gerring (2001b).

^{xix} Adapted from Gerring (2001b, p. 161).

2 Dominant Global Narratives on Water Management - PIM

This chapter elaborates key issues that are pertinent to understand the trajectory of initiating Participatory Irrigation Management (PIM) worldwide. The chapter also reviews celebrated PIM cases globally and outlines salience of history, structure, organizations, and people i.e. local context in order to undertake research on PIM. To recall, chapter one had emphasized focusing on actors that played a key role in shaping the discourse on PIM as a panacea for irrigation management. Consequently, in this chapter focus is on identifying these actors and elucidating how structural or cultural factors played a role in constraining and/or facilitating the idea of irrigation management worldwide through discussion of select cases. This chapter also discusses salience of policy translation literature to explicate how ideas travel and gain prominence in policy realm, which is contingent on local context.

2.1 Definitional clarity – PIM/IMT

PIM is not a new concept. Rather is follow up approach of what is widely known as Irrigation Management Transfer (IMT) or irrigation management turnover in many parts of the world. IMT refers to complete replacement of the role of government. Whilst PIM aims to strengthen the relationship between the role of government and water users (Vermillion, 1997). The concept of IMT gained ground in various parts of the world since 1960s after the irrigation bureaucracies world over decided to reduce their financial burden, improve productivity, and stabilize deteriorating irrigation systems (ibid.). PIM/IMT has been defined in several ways:

“PIM refers to the level, mode, and intensity of user group participation that would increase farmer responsibility in the management process. (...) IMT is a more specialized term that refers to the process of shifting basic irrigation management functions from a public agency or state government to a local or private sector entity” (Groenfeldt and Svendsen 2000, cited in Barker & Molle, 2006, p. 66).

Thus, it becomes evident that PIM/IMT can be of different types varying from: ‘i) transfer of assets and management to farmers; ii) transfer of management but not assets to farmers; iii) strengthening farmer management capacity without management transfer’ (Groenfeldt, 2003).

The notion of PIM gained salience in the 1990s with change in focus and thereby consideration of ‘farmer participation’ as an institutional approach. Rather than an organizational approach (Suhardiman & Mollinga, 2012). Thus, the difference between PIM and IMT is in terms of degree of farmer participation that is envisaged for management of irrigation system. Furthermore, the

institutional approach envisaged change in role of irrigation agency as technical agents of development to partners of farmer (Vermillion & Sagardoy, 1999). Additionally, a key distinction between the two is that in IMT the focus is on transferring management responsibilities at the use/micro level. However structural changes are not made to ensure greater farmer involvement at different levels i.e. macro or intermediate level in IMT. While the idea behind PIM is process driven and envisages change from macro to micro level and envisages devolving responsibilities and thus requires structural change in terms of legislations/rulings and thus necessitates institutional overhaul.^{xx}

Having made a distinction between PIM and IMT, the next section discusses key proponents of this approach. It is noteworthy that PIM/IMT is used interchangeably (in this chapter) while discussing international policy context, as scholars in their writing make reference to both interchangeably. More so, because international institutions like the World Bank made IMT as a cornerstone of its reform model for water management policy which later evolved as PIM (Mukherji et al., 2009; Suhardiman & Mollinga, 2012). Although, the focus of this work is on PIM and the structural change that it envisages by instituting farmer participation at all level.

2.2 Proponents of farmer participation in irrigation management

Proponents of PIM/IMT at the international level have come from different segments, one of them are organizations like World Bank, United States Agency for International Development (USAID), and Ford Foundation and second, the academic community. Within academia, two schools of thought have been instrumental in advocating for constitution of farmer organizations. First, the development sociology group at Cornell University -spearheaded by Norman Uphoff- has advocated participation of farmers in poor functioning irrigation systems as a possible solution; which basically advocated for top-down designing of institutions. Uphoff propounded the idea of farmer participation through a working paper which was an outcome of a study commissioned by USAID (c.f. Uphoff, 1986a, p. v). Second school of thought emphasizes attention to 'crafting institutions' and comprises theorists like Ostrom (1990, 1992) and Tang (1991, 1992) who through workshops in political theory and policy analysis at the Indiana University in the United States propounded the idea of bottom-up crafting rules by local community and thereby institutions for resource management. The idea of crafting institutions is based on promising evidence from small-scale community based natural resource management wherein local groups have made rules for resource appropriation and successfully demonstrated potential of crafting institutions. Scholars argue that this can be scaled up in the context of irrigation management as well. To substantiate, Community Based Natural Resource

Management (CBNRM) literature on water management has advocated for shift from state led development to more communitarian and civil society driven development. In this context, critical approaches that emphasise greater community participation for self-governance and autonomy have been developed as NGO approaches for agricultural water resources management with significant international financial assistance (Mollinga, 2010, p. 421). Overall, the narrative on irrigation management at the international level has been influenced by these two academic propositions, which has been taken forward by transnational policy entrepreneurs, to use Rap's (2006) terminology.

Moreover, researchers of international organizations (like the World Bank, Asian Development Bank (ADB)) and research institutes/ think tanks have been strongly inclined towards research on issues of farmer participation in irrigation management viz. International Irrigation Management Institute (IIMI), which was later renamed as International Water Management Institute (IWMI), International Food Policy Research Institute (IFPRI), the World Bank Institute, Food and Agriculture Organization (FAO), USAID, Ford Foundation. A lot that been written by the researchers of these institutions has not only provided a good overview and analysis of this issue but has also influenced the trajectory of the reform process (c.f. Giordano, Samad, & Namara, 2007; Mollinga & Bolding, 2004b; Rap, 2006). Thus, these transnational researchers acting as 'ideational brokers' developed new paradigm that promoted success of PIM/IMT at the global level and transmitted this 'programmatic idea' of irrigation management to national decision makers (c.f Campbell, 2004). These ideational brokers have used workshops, seminars, and similar forums to take forward this idea. For instance, FAO and International Network on Participatory Irrigation Management organized an email conference on IMT in 2001 (FAO, 2001). A discourse emphasising PIM/IMT was perpetuated through these conferences by these researchers where its merits and demerits, potential, and experiences from cases worldwide were discussed. For instance, the Mexican success story of IMT and functioning of WUA was told, retold and thereby legitimated and defined by these ideational brokers acted as transnational policy experts in international policy meetings (Rap, 2006). These ambitious policy makers have used the performatory success as an influential tool in international policy making. The worldview of these ideational brokers is guided by *belief* of demonstrating success and dissociating themselves from failure (Rap, 2006, p. 1301; emphasis added). To elaborate:

"Policy discourse usually presents the 'success' of a policy as a self-evident empirical fact, which basically explains its own diffusion. In conversation with a World Bank official during an IMT promotion event, I asked why he considered the Mexican case to be a success. He pondered and answered: 'because nobody denies that it is a success'" (Rap, 2006, p. 1302).

From the above citation, salience of ideational broker's worldview and their beliefs in promotion, adoption, and perpetuation of an idea (good or bad) becomes salient. Thus, ideational brokers used their belief to take forward the neoliberal and neo-institutionally informed global water discourse to national arenas (Bolding 2005 cited in Rap, 2006). Salience of ideational brokers -organizations and experts- in shaping the neoliberal discourse on environment/water at the international level is known (Heynen, McCarthy, Prudham, & Robbins, 2007; Moore, 1989; Swyngedouw, 2007). However, policy transfer and translation from international to national and sub national arena requires paying attention to the context and actors that reconfigure the idea and processes of governance (Mukhtarov, 2009; Mukhtarov & Gerlak, 2013), as it is not only foreign funding and ideational brokers which influences the reform process. Rather this process is contingent on advocates of reform process within the state, for instance, the bureaucracy. If they react adversely to the reform process -as it is reflection of feedback based on performance- then reforms would be hard to initiate. Thus, enabling conditions and context is important, and reform advocates (bureaucracy) need to be prepared to capitalize on opportunities that come their way for desired policy change (Mollinga & Bolding, 2004a, p. xiii). This preparation is reflective not only in terms of having adequate resources for mobilizing change, but also requires partnership between strategic interest groups, and a will to change. Thus, there is a need to understand 'ideational factors' that determine how reform process shapes up, i.e. funding for advocating a certain idea, interest of the actor/organization advocating an idea, keenness of actors who need to implement the idea, etc. Some of the scholars who have studied irrigation management widely and enthusiastically and have been frequently cited and aimed to influence policies^{xxi} on IMT/PIM have belonged to the World Bank (Svendsen and Groenfeldt), IIMI (like Vermilion, Brewer), Meinzen-Dick (from IFPRI). However, since then IIMI has widened its research focus from irrigation management to water resources management after changing its name to IWMI and in recent times has questioned the validity of PIM (c.f. Mukherji et al., 2009; T. Shah, 2011). Furthermore, researchers from Wageningen University, in the Netherlands have also actively tried to engage irrigation agencies in debate with civil society (Mollinga & Bolding, 2004a).

Moreover, *structural* characteristics of donor cooperation are known wherein international organizations have promoted international policy trends/ideas, which have been adopted by recipient developing country governments (Suhardiman & Mollinga, 2012; emphasis added). The structural characteristic of donor cooperation is also elucidated by Crewe and Harrison (1998) and Mosse et al (1998), Mukhtarov (2012), among others who posit development assistance is provided without taking into account the local context. For instance, the hegemonic policy narrative on Integrated Water Resource Management has been produced and promoted by representative of

international organizations (Mukhtarov, 2009) who have acted as ideational brokers without paying attention to local context. Thus, policy narratives can reproduce elements of structure.

Having discussed the salience of ideational brokers in general in influencing the policy paradigm at the international level, the next section focuses on how the hegemonic idea of farmer participation gets transformed differently based on national context through select cases. To recall, from discussion in chapter one, the focus of this work is on understanding the hegemonic promotion of the idea of farmer participation in irrigation management in India. Therefore, prior to discussing the national context in chapter four, the next section further elaborates how the dominant narrative on farmer participation in irrigation management was created at the international level.

2.3 Select international cases – creation of dominant narrative on farmer participation in irrigation management

In the 1950s and 1960s governments and international organizations made significant investments in the irrigation sector, unfortunately, the results were disappointing. As a consequence of which a discussion on sub sector irrigation reforms gained prominence in the late 1960s, and by 1970s IMT emerged as an alternative in the international arena for reforming irrigation sector (Garces-Restrepo, Vermillion, & Muñoz, 2007, p. 3). To substantiate, irrigation bureaucracies during this period were exploring ways through which they could reduce the cost of operation and maintenance of irrigation systems, increase user participation, and attain higher cost recovery for better system performance and productivity (Nikku, 2006, pp. 19-20). A FAO and IWMI study reports that the biggest motivation for adopting IMT in various parts of the world had been shortage of funds for operation and maintenance in irrigation systems (Garces-Restrepo et al., 2007, p. 12). During this period, it was also perceived that problems that plague the irrigation sector are primarily due to lack of participation of farmers, as the technical aspects of irrigations systems were well defined.

“Engineering is not the fundamental problem underlying irrigation development in the less developed countries. Engineering principles are known and can be adapted, but the major problem, however, is to discover ways to utilize farmers more effectively in operations and maintenance and development programmes which will create rural transformation. Rural transformation essentially requires changes in farmer’s behaviour, motivations, and expectations, which is hardly possible until institutions exist to provide them with improved production possibilities and incentives” (Wiener 1976, cited in Narain, 2008, p. 160).

The above citation evinces the emphasis during that period was tilting towards user participation, thus, the idea of top-down ‘designing institutions’ for collective action in irrigation management

gained salience in the 1970s primarily to avert financial problems that irrigation bureaucracies were plagued with. A general consensus during this period was that designing institutions can be an alternative to nationalization and privatization of natural resources, and to avert financial problems that irrigation bureaucracies were plagued with (Narain, 2009, p. 125). Interestingly, however, the onus of the problem was chiefly put on behaviour, motivation and expectations of farmers. Thus, many countries moved towards handing over operation and management or complete transfer of irrigation management and assets to farmer organizations (Nikku, 2006, p. 24).

International organizations like the World Bank, which currently proclaims itself as a knowledge bank played a key role as carrier of this new idea of participation of farmers in irrigation management.^{xxii} To delve a bit into the history of World Bank to underscore its salience as an ideational broker is paramount here. World Bank was created as part of the overall Bretton Woods system, which emerged from the capitalist crisis, global war and reconstruction of the 1930s and 1940s. Bank's lineages to tenets of cold war inspired liberalism (liberal developmentalism and classical modernization theory) in its early period that led to structural adjustment loans to recipient governments are known. In the late 1970s, in the changing international context the World Bank adopted the tenets of neo-liberal order which reflected the interests of its major sponsors (M. T. Berger & Beeson, 1998). World Bank's rationalization of neoliberal policies was partly grounded in the social and economic problems of the 1970s and by 1980s they emerged as agenda setters in international development debate. The Bank used its intellectual influence as an ideational brokers, which was reinforced by the economic leverage it had with governments around the world looking for investment, loans and foreign aid (M. T. Berger & Beeson, 1998) to propagate its policies.

Interestingly, IMT/PIM has been the cornerstone of World Bank policy and similar international ideational brokers. Organizations like ADB and the World Bank have made their loan conditional –a structural feature of donor cooperation- on particular reform packages that have steered towards reducing the role of the state and pushing for a greater role of private sector in management of resources. Thus, the idea of farmer participation in management was implemented by these organizations through loans they disbursed, by making farmer participation a conditionality as a solution to financial crisis that irrigation bureaucracies were facing (Mollinga & Bolding, 2004b, p. 314). There are several in-depth studies on farmer participation in irrigation management from the Philippines, Mexico, Turkey, and Colombia. Here, the focus is on parsing the salience of key processes like donor funding as a structural feature and role of ideational brokers in bringing forth irrigation reforms in these countries, as it provides guideposts to understand the irrigation reform trajectory in India in subsequent chapters of this dissertation.

Any discussion on farmer participation in irrigation management cannot begin without mentioning the case of the Philippines, as it is the first country where major efforts to introduce farmer participation were made in the late 1970s. The case of IMT in the Philippines is considered an instance of gradual learning process approach (Groenfeldt, 1996, p. 2; Raby, 2000, p. 113). Participatory approach to irrigation management in the Philippines can be traced back to 1976 when the local community owned the communal irrigation systems. When/after turnover (IMT) policies were introduced in the Philippines local development officers were engaged to work as catalysts and build capacities of farmers, as the local community already had ownership rights over the infrastructure and were entailed to undertake operation and maintenance work (Nikku, 2006, p. 23). Actors that played an important role in shaping the irrigation reforms in the Philippines were the National Irrigation Administration (NIA), politicians and funding agencies. President Marcos demonstrated political will towards the reform process, and charter of NIA was amended to make it a financially autonomous body that was expected to keep its own account. This financial pressure to reduce cost, ultimately pushed the NIA to hand over the management function of irrigation system to users (Groenfeldt, 1996). This reform process was initiated at the behest of Ford Foundation, USAID and the World Bank with the aim to completely transfer responsibility management, maintenance, and fee collection of tertiary canals to user groups (Barker & Molle, 2006, p. 67; Panella, 2006, pp. 96-97). Amongst all the lenders, the Bank has had the biggest influence on the irrigation policy in the Philippines, as it has given substantial loans (though the frequency of loans has been lesser). The focus of the Bank loans has been on incorporating institutional components over and above the component on infrastructure development. Further, the World Bank had not hesitated to get involved in the internal policy dialogue and thereby was able to influence the irrigation reform process (Panella, 2006, p. 103). The Bank's support for communal irrigation system and thereby communal irrigation committees resulted in *institutionalization* of acceptance of participatory practices in irrigation management in NIA and worldwide (Panella, 2006, p. 111; emphasis added); and the Bank used it as a successful model to be replicated elsewhere. The Bank's approval to participatory approach in communal irrigation systems also paved way for adding additional credibility to other organizations like ADB who then pursued participatory approach in irrigation loans thereafter (ibid.). The focus of discussion here has been on the role of international organizations in influencing the reform process, however, it is not claimed that they were the sole dominant actor due to which the reform happened. Rather, it is acknowledged that it was the interaction amongst different actors, and timing of events that shaped the irrigation policy of the Philippines, for instance, political will shown by the then president Marcos, and the bureaucrats in NIA.^{xxiii}

The case of Mexico is similar, to Philippines, as the role of international organizations was salient there as well. Mexican irrigation reform process was a top-down process and call for reforms came from international organizations after the economic crisis of 1986. During this period poor irrigation performance in the irrigation districts that were publicly managed was a dominant narrative. The Mexican government bureaucracy lacked incentives and responsiveness to optimize irrigation management performance (Rap, 2006, p. 1304). Consequently, National Water Commission (CNA) was constituted in 1989 with a mandate that encompassed all aspects of hydrology and policy making with respect to water resources. Through Article 50 of the National Water Law concessions were granted to WUA for use, exploitation of water for agricultural purposes and these WUAs had the right of administration and management of irrigation systems (Palacios V., 2000, pp. 5-6, 9). The Mexican reform process, though top-down process, had considerable interaction between some key policy actors at the top viz. senior hydrocrats^{xxiv}, the Mexican President, and the World Bank officials which resulted in the reforms shaping in a certain way (Rap et al., 2004, p. 57). Furthermore, the emergence of IMT policy in Mexico cannot be explained only by the economic crisis. Rather one needs to broaden the analysis and infuse it with historical, political and bureaucratic processes, to understand what factors lead up to and sustains reform. The authors do this analysis in case of Mexico and argue that that though IMT was imposed on the hydraulic bureaucracy by the World Bank and the Mexican president, ‘the reform package did not entail a complete devolution or reduction of bureaucratic powers, but that it served to reorder bureaucratic control over essential domains and resources’ (Rap et al., 2004, p. 86). The Mexican case emphasizes the importance of history, structure, and institutions for understanding any reform process.

Other well-known and celebrated instances of farmer participation in irrigation management are the Turkish and the Colombian cases that point towards different motivations and actors that lead to transfer of management of irrigation systems. Turkey has had a legal framework that facilitates transfer of management responsibility of public irrigation schemes to locals since 1954. The Directorate of State Hydraulic Works (DSI) is the main executive agency of the government to plan, execute and operate matters related to water resources in the country. The budgetary crisis in Turkey provided the impetus for state agencies to transfer management responsibility to local organizations. The Bank played a critical role in this reform by pressurizing for improved cost recovery that provided an added impetus for change. Subsequently, when moment for change arrived, Turkey built on an existing legislation for transfer of management, rather than introducing a new one. The World Bank also funded tours of DSI functionaries to Mexico and elsewhere, to facilitate envisioning of change for the functionaries after transferring management to locally controlled organizations (Svendsen & Nott, 2000, p. 27; Svendsen, Trava, & Johnson III, 2000). The

Turkish case is an instance of a hybrid approach to IMT wherein policy has evolved over time and involved consensus building and tending to organizational issues over time, while, the Colombian case is an instance of bottom up call for transfer of management of irrigation systems. The first call for transfer of irrigation management system in Colombia came from local group of farmers in Tolima valley way back in early 1970s; and the first two schemes were transferred in 1970s. It is only in 1993 that new law was enacted that recognized the legal status of water user associations and elaborated on their roles and responsibilities as well as the support and obligations that National Irrigation Agency (INAT) was to provide (Quintero-Pinto, 2000, p. 89). The ownership rights of system in all the cases (Philippines, Mexico, Turkey, Colombia) stayed with the government (Svendsen et al., 2000, p. 141).

From this brief discussion of four cases of IMT, some points that gain prominence are that reasons for initiating farmer participation in irrigation management are diverse. Foremost amongst it was the interest of governments to reduce cost given the financial crisis, and increase productivity in management of resources. Role of international organizations as carrier of new ideas for water management and pressurizing pursuance of the idea of farmer participation through loan conditionality was critical for adoption of new policies at the international level. At the national level there were political gains that domestic actors could achieve by shift in irrigation policy given the financial crisis. Furthermore, the case studies make evident that there are various structural, historical, and institutional factors that resulted in adoption of the idea of irrigation transfer differently. In some case, like the Philippines, it was the loan conditionality that led to adoption of the idea, though there was semblance of participatory management historically in the region with communal irrigation system in place. In Mexico, though this process is generally classified as big bang, there were other domestic actors like the social hydrocrats that had an important role to play as well. Overall, there was major thrust for pushing the policy model of PIM/IMT and the type of policy that resulted depended on interactions between key actors: international organizations staff, political office bearers, experts, and the bureaucrats/hydrocrats.

2.4 Summing up

This chapter provides an overview of issues and salience of international organizations globally in promoting farmer participation in irrigation management through select cases. The discussion in this chapter posits that to understand policymaking and/or the reform process, it is critical to pay attention to history, structure, organizations, people and their local context.

In case of PIM there have been two approaches that have been widely publicized, i.e. of crafting or designing institutions worldwide. The cases discussed in this chapter make evident that apart from the Columbian case (which to an extent could be connoted as a case of institutional crafting), for rest of the cases the impetus for reform was top-down and are instances of designed institutions wherein focus was to reduce financial burden of irrigation bureaucracies. Furthermore, from the brief review it is evident that appropriate conditions for reforms are critical for the reform process to stick. Additionally, this chapter discusses the salience of global narrative, which has advocated farmer participation in irrigation management as the most appropriate approach for decentralizing irrigation management.

This review was also useful to bring forth common issues that gain salience in any discussion that is held with respect to national level PIM/IMT in countries where this approach for irrigation reforms has been initiated. Given, so much impetus on farmer participation in irrigation management, the rest of this dissertation elucidates through the Indian case, why approaches like PIM are not going to work unless attention is paid to ideational factors that elucidate lucidly the roadblocks to reform process. Having discussed some key issues viz. salience of history, structure, organization and people that are critical to understand the reform process, the next chapter building on these identified elements provides a theoretical and analytical framework to understand irrigation reforms using the lens of ideational realm.

^{xx} The notion of participation in irrigation management is explained by two interrelated concepts of 'participation with patronage' and 'empowerment with accountability' by Vermillion (2006, p. 410). The former concept essentially deals with the notion of participation as tokenism, as it refers to the old irrigation development paradigm where superficial participation of farmers in government programmes was envisaged. Whilst explanations of participation with patronage, emphasize dominate role of government bureaucracies, which aim to control the development processes and rent seeking practices. Under the former explication, the state is dependent on donor funds and there is perpetuation of farmer dependency on state. The latter concept (of empowerment with accountability) is more holistic and relates to political and legal empowerment of Water User Association (WUA), and accountability between users. This notion of empowerment with accountability aims to check the rent seeking practices at work; thereby creating greater accountability and transparency (Vermillion, 2006, p. 411).

^{xxi} For instance, by influencing state's to have greater selectivity in signing loans.

^{xxii} The shift of Bank's policies now though is changing from its portrayal as a knowledge bank to that as a 'solutions bank' (World Bank, 2012).

^{xxiii} For details see Panella (2006) and Raby (2000).

^{xxiv} Rap, Wester, & Pérez-Prado (2004) refer to engineers working in water bureaucracies as hydrocrats.

3 Theoretical and Analytical Framework: Ideas, Actors and Ideational Realms

The idea of irrigation has not only transformed agricultural practices worldwide but has also transformed relationships within farming community and their interaction with state and its representatives. The notion of irrigation has brought with it different ideas, ideology, beliefs and norms on how irrigation ought to be administered/practiced/managed depending on state or societal perspective. Furthermore, given that water management is critical for food security as mostly food grains are cropped in irrigated areas, management of irrigation systems has been a focal point of discussion for policymakers, and farming communities alike. Consequently, there have been diverse policy ideas on how irrigation systems ought to be managed. In contemporary history, there has been greater impetus on the idea of farmer 'participation' in management of irrigation systems in the state narrative as a signifier of decentralizing irrigation management. As indicated in previous two chapters, farmer participation as an essentiality for decentralizing irrigation management has been emphasized by the Indian state and international organizations alike. This chapter elaborates on the theoretical and conceptual framework applied to examine the dynamics of decentralizing irrigation management at the intermediate level in Madhya Pradesh, India. The focus is on ideational realm of actors' -i.e. farmers/farmer organization, NGO and bureaucracy- as roadblock for reform process i.e. emphasis is given to context, narratives and strategic practices that actors' employ to establish and legitimize a given practice of irrigation management.

Given several efforts have been directed to explore the right idea to formulate the right policy model. The case of participatory irrigation management discussed in this dissertation is posited as an instance that furthers understanding of factors behind policy making on one hand. On the other hand, policy-making is not finished after its political design is accomplished. Rather policies are subject to a continuing process of production and promotion aiming to mobilize and maintain political consent among the epistemic community^{xxv} to which they are directed and which they shape (Haas 1992 cited in Rap, 2006, p. 1303; see also Saravanan, 2010).

Foremost, in section 3.1, I review relevant literature on role of ideas and actors in policymaking and policy analysis (briefly) to inform relevance of this literature for this work. Thereafter, in Section 3.2, relationship between ideas, institutions actors and change is elaborated with a focus on clarifying the conceptual guideposts of this research. Following Berman (2013), this section clarifies the ideational variables employed in this research. In Section 3.3, I discuss work of Campbell (2004) and others for understanding salience of type of ideas in influencing ideational role and realm of actors. This

discussion is undertaken in reference to the discussion in previous two chapters. In section 3.4 based on the theoretical underpinnings discussed thus far, I elaborate on the analytical framework used for analyzing ideational realm on irrigation management in this work. Section 3.5 briefly summarizes the arguments of this chapter.

3.1 Role of ideas and actors in formulating policies

The role of actors in promoting a certain idea for policymaking have intrigued scholars lately, and in this context the relationship between ideas and policymaking has been identified as crucial. For instance, the seminal article by Peter Hall (1993), 'policy paradigms, social learning and the state', emphasizes the need to look at various ways in which state and society can be linked in order to better understand what social learning implies and entails, and thus emphasizes the need to pay greater attention to role of ideas in policy-making.

"The manner in which ideas condition policymaking and how they change, are organized around the concept of 'policy paradigms'. Policy paradigms can be seen as one feature of the overall terms of political discourse. They suggest that the policymaking process can be structured by a particular set of ideas, just as it can be structured by a set of institutions" (Peter A. Hall, 1993, p. 292).

Furthermore, Hall emphasizes the role of ideas in political life by arguing that state actors' interpretation of past and present events as well as their power to selectively screen information can exert crucial impact over political outcomes (Berman, 2013, p. 220). Similarly, constructivists have argued that ideas can mediate and magnify material ideation, or in other words power of ideas can shape perceptions and identities and foster a certain interpretation of situation. However, in this analysis actor's agency is not taken into account and Bell (2012, p. 662) argues for paying greater attention to *how* ideas constitute relationships of power. Specifically, how actors develop and use ideas is crucial to understand. For instance, varied ideas of 'participation' are used in policy arena. The idea of participation is an instance of how a policy can be negotiated by state and societal actors at different levels i.e. during its design and implementation. To elaborate, historically, the idea of participation is not considered apolitical. Rather, its origins lie in radical politics and ideologically charged political movements that worked for greater democratization of development activities (Chhotray, 2004, p. 327). The current mode of participatory development approaches, however, has been criticized for not engaging (enough) with issues of power and politics. Rather in the current narrative of policy making, participation has been advanced as a technical approach to development by NGOs, international organizations and state actors alike (Chhotray, 2004, p. 327; Hickey & Mohan, 2004, p. 4). However, this technical conceptualization misses to observe the need to draw a link

between participation and popular agency as a political practice, in order to rethink the concept of participation with respect to the notion of space, political capabilities and citizenship (Hickey & Mohan, 2004, p. 4).^{xxvi}

From this brief discussion salience of ideas in policymaking is evident. Additionally, through the instance of participation it is evident that actors can evoke a certain meaning attached to an idea and make it a predominant narrative compared to other. Thus, to undertake ideational research, salience of actors and their repertoires that influence or obstruct policy (or its implementation) is critical to understand. Policy analysis with an ideational perspective is a two-step process:

“During the first stage, existing ideas are questioned and tarnished, opening up political space new ideas can fill. In this phase, in other words, a demand for new ideas is created by the perceived failures or inadequacies of the reigning one(s). Once a political space has begun to open and a demand for new ideas begins to appear, the second stage of the process begins. During this stage, a variety of new ideas may arise as political actors champion alternatives to the ideas being questioned and perhaps abandoned. It is during this phase, in other words, that a supply of new ideas begins to appear and vie with each other for dominance” (Hall 1989 and Trachtenberg 1983, cited in Berman, 2013, p. 227).

Moreover, salience of structural elements is evident in ideational research. For instance, state structures can forge social alliances among institutions and thereby shape social and political development. Skocpol and Weir (1985, p. 109) through the American, Swedish and the British cases provide comparative historical evidence to argue that variation in national responses to depression account for different social policy outcomes in the 1930s. They demonstrate that structural features of state and pre-existing legacies of public policy are imperative for understanding the variation in interstate response to depression, as that in turn influenced the political orientation and capacities of different actors, determined what changes would be acceptable, specifically, what intellectual innovations would be successful (Skocpol & Weir, 1985, pp. 109, 136). Thus, salience of studying elements of structure as an idea for understanding policy is noteworthy. Moreover, through the three cases Skocpol and Weir demonstrate how policy relevant ideas emerge and become influential by developing a ‘complex model of causal interrelationships’ which illustrates that actors consciously build and/or react against past governmental efforts to come up with same or similar policy problems (ibid., p. 119).

Similarly, Blyth (2002) argues that role of (economic) ideas need to be taken seriously and sequentially. In ‘Great Transformations’ he demonstrates primacy of ideas or ideational research to understand institutional change and critiques rational choice institutionalism and historic institutionalist explanations as incomplete formulations. Researchers need to perceive how

institutional orders are formed or broken: as a sequential phenomenon of uncertainty reduction, mobilization, contestation and institutional replacement. This approach provides a better understanding of how double movements work in practice (ibid, p. 45). Blyth focuses primarily on the double movement surrounding role of economic ideas and the business in institutionalizing embedded liberalism in the United States (Blyth, 2002, pp. 5-6, 81) to demonstrate causality. As a major challenge of the ideational literature has been demonstrating causality:

“(...) all ideational claims require two arguments. First, they must show the proximate causal role of preexisting ideational elements. This involves a demonstration that the ideational elements do not just reduce to other immediate conditions, but focuses on conditions just prior to the action in question. The second step is to show more deeply that these ideational elements reflect their own distinct dynamic, establishing their autonomy vis-à-vis longer-term or overarching objective conditions. In other words, an ideational claim must document its particularistic foundations, showing how much ideas or norms have autonomy from other causes” (Parsons, 2007, p. 109, emphasis added).

Furthermore, causality is demonstrated in Hall’s (1993) analysis in reference to the change in British economic policy by identifying first, second and third order change and by arguing that though the basic policy goals remained unchanged, the policy instruments underwent a change to achieve the policy goals. In the British case study, the policy goals were achieved not only by past policy precedence but also by societal conflicts and debates. Hall demonstrates causality by demonstrating a different learning curve for actors in the first, second and third order, where different causal mechanisms and processes are elucidated (Berman, 2013, p. 220). Thus, for ensuring causality, it is pertinent that there is clarity on ideational claims from the very outset. In her most recent article Berman (2013) has also emphasized on definitional clarity and need to identify ideational variables up front to undertake ideational research and to evince causality.

Overall, since ‘policy paradigms, social learning and the state’ several scholars have used ideational variables to explain policy-making and institutional change. Scholars like Béland (2009) in this context have used ideational variables to flush out motivation and causality in their analysis to respond to the criticism of ideational literature that ideational argument is not an explanation. Additionally, scholars -Béland & Cox (2010), Berman (1998), McNamara (1998)- have distanced themselves from material ideation and have argued that ideas rather than interests (though this is debatable) determine actor’s goals, preferences and political behaviour (cited in Berman, 2013, p. 222). There are not enough empirical cases in Political Science that demonstrate how ideational variables play an important role in understanding how ideas become institutionalized and how ideas shape both actor’s motivation and contexts (Berman, 2013, p. 233) when policies are implemented.

Moreover, most of the ideational literature till now has unilaterally focused on how ideas influence policies, however, scholars fail to pay attention to relationship between these policy models and practices, events that the policy is expected to generate/legitimize. Policy making generally follows a linear or instrumental approach has distinct phases, viz. problem identification, policy formulation, implementation and impact evaluation (Mosse, 2004) and how everyday practices are influenced by cultural norms and structural elements is overlooked. Generally, once decision to implement a certain policy is taken then efforts/ discussions are directed towards how to implement these policy models in practice (Rap, 2006, p. 1303). For instance, there is prolific literature in context of Participatory Irrigation Management (PIM) in India that favours this instrumental approach and has been propagated by international organizations like the World Bank. However, this instrumental approach of policy formulation, focuses more on successes of a policy and thus it is not surprising that policy actors in public forums evade responses or acknowledge problems with certain policy, for instance, the irrigation management transfer policy in Mexico discussed in chapter two (Rap, 2006, p. 1302). What has been not been emphasized enough, however, is structural and cultural aspects that facilitate in understanding the context in which policy formulation and subsequent reproduction that happens. For instance, Rap (2006), Suhardiman and Mollinga (2012) have emphasized structural elements of donor cooperation that illuminate promotion and propagation of policy of integrated water resource management by international organizations. To elaborate, sector wide approach to water resource management and tied funding have been used as policy instruments by donor organizations which led to pursuance of neoliberal and neo-institutional informed global discourse on water (Bolding 2005 cited in Rap, 2006). Similarly, salience of cultural aspects and social structure and ideology to understand how communities manage water resources has been emphasized by scholars (Boelens, Getches, & Gil, 2010b; Mosse, 1999). Thus, recognizing the salience of political and cultural structures this research analyzes policy trajectory with respect to irrigation management in India to elaborate how ideational variables -norms, beliefs, values, culture, and ideology- can influence both the policy implementation and outcome and thus result in tardy reform process. However, prior to delving into this aspect, it is imperative to get some definitional clarity on some key terms that are used in this research, viz. structure, culture, ideology - in context of the notion of ideational realm.

Any analysis of ideas affecting policy making cannot be done in isolation and without taking into account structural -material, legislative, rules, regulations- aspects that determine the arena in which a policy is implemented and thus are a signifier of institutional change. Structure facilitates in understanding distribution of power between different institutions, agencies and society through studying the interaction between actors and institutions over a period of time.^{xxvii} Furthermore,

institutions and institutional change has always intrigued scholars. This work using ideational approach process-traces the way actor position one another through the use of a widely employed discourse/narrative on irrigation management. I employ this approach as it is suitable to trace not only dominance of ideas in the national or state narrative but also gives salience to how ideas are legitimized by actors in the case study.

Furthermore, new policies are made with an objective to change existing institutional arrangement, for instance, as was discussed in chapter two, existing irrigation management practices were not considered beneficial for irrigation bureaucracies and thus new institutional arrangements, or institutional change i.e. farmers involvement in irrigation management through constitution of farmer organization has been envisaged. Given that the research focus is to understand institutional change, the next section further clarifies the relationship between ideational processes, ideational variables and institutional change by taking cognizance of key ideational variables.

3.2 Salience of ideational processes and variables to understand institutional change

Scholars like Bourdieu (1977), Denzau & North (1994), Mielke et al. (2011) and Campbell (2004, p. 33) posit salience of ideational processes by elucidating the notion of habitus, mental models, mind-set, and ideational realm to explicate circumstances/context in which actors perceive their interests and environment in order to mobilize for institutional/policy change.

Ideational perspectives are considered noteworthy to understand institutional change that could be evolutionary or revolutionary. The degree to which change is evolutionary or revolutionary depends on how many 'dimensions' of an institution change over a given period of time, wherein, 'institutional bricolage' alters dimensions of an institution and makes the change evolutionary or revolutionary (Campbell, 2004, pp. 32-33). The notion of bricolage facilitates in paying attention to processes that facilitate actors to recombine existing institutional elements at their disposal; second, understand the paradox of institutions which enable as well as constrain actors; third, explicate processes involving recombination of institutional traits (ibid., pp. 71-73). Building on bricolage, the notion of ideational realm is evoked by Campbell to elaborate the *context* in which actors function and their role in influencing institutional change. There are four different types of ideas that actors can function under viz. programs, frames, paradigms and public sentiments, and these ideas have cognitive or normative outcomes which influences and/or constrains actors' functioning (ibid.), and thus are used to explicate change.

The notion of ideational realm propounded by Campbell goes beyond the previous understanding of rational choice theorists where actor's actions are only determined by their material interest and/or motivations and not by ideas and this is explicated as the main criterion that drives policymaking and its subsequent reproduction. Campbell's conceptualization is useful to understand actor's ideational realm as he critiques rational choice theorist for not giving attention to role of ideas in their analysis though they clearly establish importance of actors and their agency in their analysis (2004, p. 101). Whilst historical institutionalisms (Abdelal, Blyth, & Parsons, 2010; Béland & Cox, 2010; Peter A. Hall & Taylor, 1996; March & Olsen, 2004) demonstrate through their work the importance of institutions as actors' motivations and actions about future course of action are contingent on institutions, and so is the response of other actors' to their actions. Institutions provide actors with cognitive templates for actions that shapes actors identities and preferences (Berman, 2013, p. 221). On the other hand are the organizational institutionalists like Hirsch and Lounsbury (1997) who pay attention to the role of ideas (by having for granted worldviews) in their analysis but fail to give enough attention to role of actors and their agency (ibid.). Overall, there has been progression from rational choice and historic institutionalism to ideational scholarship to explicate institutional change and policy making as historical institutionalism did not provide a 'sophisticated understanding of how institutions affect behaviour' (ibid., p. 222).

Additionally, the old literature on ideas posited the old idealist notion that ideas rather than interest matter, however, rather than starting from that standpoint, which leads one to dwell on idealist versus materialist explanation of policy making. The arguments in this dissertation follow the approach of Campbell (2002a) and Hall (1993) who look at how ideas and interests *interact* with each other (Campbell, 2002b, p. 33). There has been some headway with this approach, with research on how identities influences how actors define their interests, for instance, the case of labour unions explained by Locke and Thelen (1995). Research on transnational advocacy networks by Keck and Sikkink (1998) has also provided insights into how interest based rational actor models can be combined with an idea based social constructivist model to explain how new policy programmes are propagated (Campbell, 2002b, p. 33), case in point being the transnational network on environment advocacy networks and the HIV AIDS network. Till now, so much has been said in this section about ideas, clarity on ideational variables is paramount, as many a time scholars have been criticized for not clarifying what they mean by certain terms. Some of the most common evoked ideational variables -relevant for this research- that defines actor's ideational role and realm are norms, beliefs, culture, ideology and structure.

Beliefs according to Oxford English dictionary is defined as an ‘acceptance that something exists or is true, especially one without proof or something one accepts as true or real; a firmly held opinion’. Thus, it is the basic viewpoint of actors that is limited in scope and could be bounded by certain area of politics. Beliefs can be individual or held collectively; can last for years or change with the wind (Berman, 2013, pp. 223-224). Thus, it can be argued that beliefs are not durable entities rather quite facile, compared to other ideational variables like norm and culture.

Norms compared to beliefs are more circumscribed, as they can be associated with a specific group of actors. Moreover, a group may share more than just norm -a strongly held belief about a defined policy area or type of behavior. A norm can be defined as a ‘collectively held belief that governs thought and behavior in some specified and circumscribed area of political life’ (Berman, 2013, p. 224). Norms can be identified as ideational elements that explain social action of actors. Moreover, norms are dynamic and inter-subjective constructs rather than static structures (Schmidt, 2008). Comparable to norms are values attached to political action.

Values legitimate policies and programmes by referring to its appropriateness and thus values and political culture help in adoption of transnational policy ideas (Schmidt, 2008). For instance, caste has been a salient element of politics in India, which has been adopted by the Indian state since its birth as a method and value of democratic politics as its meaning as a social institution is founded in the values of Hinduism (c.f. Rudolph & Rudolph, 1960). Values are affective views of an actor who is somewhat conscious of his/her belief or norms, which leads to his/her emotional preferences in light of conceivable alternatives. Thus, actors consciously prefers his/her practices or beliefs, having ‘internalized’ a commitment to them, and would tend to defend them against alternatives (Parsons, 2007, pp. 121-122). This constant belief in values leads to its institutionalization through routinization of actions (Mielke et al., 2011).

Culture has been defined in various ways. According to Geertz (1973), it is a way of life of people (including their technology and material artifacts). Whilst Keesing (1974) defines culture as publicly available symbolic forms through which people experience and express meaning (Swidler, 1986, p. 273). Culture often is ascriptive in nature and individuals do not (generally) join or switch cultures. Rather they belong to them. For instance, in the Indian context, caste is an ascriptive cultural notion. Culture provides a repertoire or tool kit of habits, skills and styles, from which people construct strategies of action, thus influence of culture is not because of the value that it provides. Rather because of the shaping of these repertoires (Swidler, 1986, p. 273). Similarly, DiMaggio (1997, p. 265) citing Swidler (1986) and Bourdieu (1990) posits ‘culture as complex rule like structures that comprises resources that can be put to strategic use’ which is in contrast to another popular view of

culture as beliefs, intention and collective life. Whilst **Ideology** differs from culture as ideological groups are not defined by their ascriptive characteristics. Ideology creates its own community of individuals with a belief and commitment to ideology itself (Berman, 2013, p. 225). For instance, state ideology to pursue large-scale irrigation projects.

Structural claims explain what people do as a function of their position vis-à-vis exogenously given 'material' structures like geography, distribution of wealth, or distribution of physical power (Parsons, 2007, p. 12). Thus, material identities are also structurally constituted and need to be taken into account. To give an instance, gift-giving (economic) norm in society, for instance the practice of dowry is an instance of structural and cultural ideation. Structural elements of state ruling/legislations emerge when they interact with society. For instance, chapter two had discussed structural elements in development cooperation (case of PIM). Similarly, government rulings also have structural elements. Another related concept that needs clarification is **Class** that by traditional Marxist theorists is viewed as salience of economic structures for understanding state society relations and points towards the direction of economic determinism. However, Marxist theory also recognizes the salience of political in the context of revolutionary action as it subjugates and holds down subaltern groups. Taking that perspective, economic structures can also be 'viewed as a set of constraints on political initiatives which limit political acts- in the sense of ruling out some options, constraining others, and imparting a direction to political choices consistent with the interests of basic social groups' (Kaviraj, 2010, p. 8). In the Indian context, while discussing class, Kaviraj emphasises the need to look at coalitional relation of classes which he posits can be contained in three distinct social groups, viz. the bourgeoisie, the landed elites and the bureaucratic managerial elite (Kaviraj, 2010, pp. 107-109). The salience of bringing in bureaucratic elite as a category of coalition class is crucial as Kaviraj argues that 'traditional Marxists accounts of the ruling coalition saw the bureaucratic elite as being too straightforwardly subordinate to the power of the bourgeoisie, and saw what was basically a *coalitional* and bargaining relation as a purely *instrumental* one' (Kaviraj, 2010, p. 108, emphasis in original).

Having clarified salience of ideational processes and ideational variables for institutional change the next section elaborates how different types of ideas define actor's ideational role and therefore is signifier of actor's ideational realm and their actions thereof.

3.3 Type of ideas and their salience in shaping ideational realm of actors

Ideational realms are formed by ideas that actors' subscribe to and which define their ideational role. Ideas here are worldview, norms, identities, values, intellectual paradigms, culture and other beliefs.

Actors and their ideational realms is a good lens to analyze institutional change as it overcomes limitations of the rational choice and historic institutionalism (Campbell, 2004, p. 90). There are varieties of ideational explanation, which use different methods and have different levels of analysis, but all arguments in ideational research concern with following the basic causal logic that is the relationship between ideational elements and action.^{xxviii} Table 3.1, elaborates Campbell’s typology of ideas.

Table 3. 1: Types of ideas and their effects on policy-making

	Concepts and theories in the foreground of the debate	Underlying assumptions in the background of the debate
	<i>Programs</i>	<i>Paradigms</i>
Cognitive (outcome oriented)	Ideas as elite prescriptions that enable politicians, corporate leaders, and other decision makers to chart a clear and specific course of action	Ideas as elite assumptions that constrain the cognitive range of useful programs available to politicians, corporate leaders and other decision makers
	<i>Frames</i>	<i>Public Sentiments</i>
Normative (Non-outcome oriented)	Ideas as symbols and concepts that enable decision makers to legitimize programs to their constituents	Ideas as public assumptions that constrain the normative range of legitimate programs available to decision makers

Source: Campbell (2004, p. 94)

Table 3.1 illustrates four types of ideas that actors can function under viz. programs, paradigms, frames and public sentiments. Ideas can be normative or cognitive and these ideas can influence/constrain functioning of actors. In Table 3.1, paradigms illustrate elite assumption that can constrain decisions of decision makers like politicians, bureaucrats. For instance, as discussed in chapter two the idea of crafting or designing institutions through farmer participation for better irrigation management was a paradigmatic idea introduced by scholars like Uphoff (1986a) and Ostrom (1992) and propounded later by international organizations. Chapter two had also illustrated that this paradigmatic idea of participatory irrigation management has been adopted differently by politicians, bureaucrats in Mexico, Turkey, Philippines and Colombia based on their understanding of the local conditions, history and institutions. Thus, paradigmatic idea can lead to different institutional change in different conditions. Additionally, chapter two demonstrated how once the idea of farmer participation in irrigation management was adopted by the national governments as a programmatic idea, it was legitimized to its constituents using different repertoires i.e. actors used public sentiments to favour their viewpoint on PIM. What becomes evident from the discussion until now is that different types of ideas have different effect on policy making. Additionally, the above-

mentioned typology of ideas demands a certain ideational role from actors in a particular category, which determines actor's ideational realm to an extent.

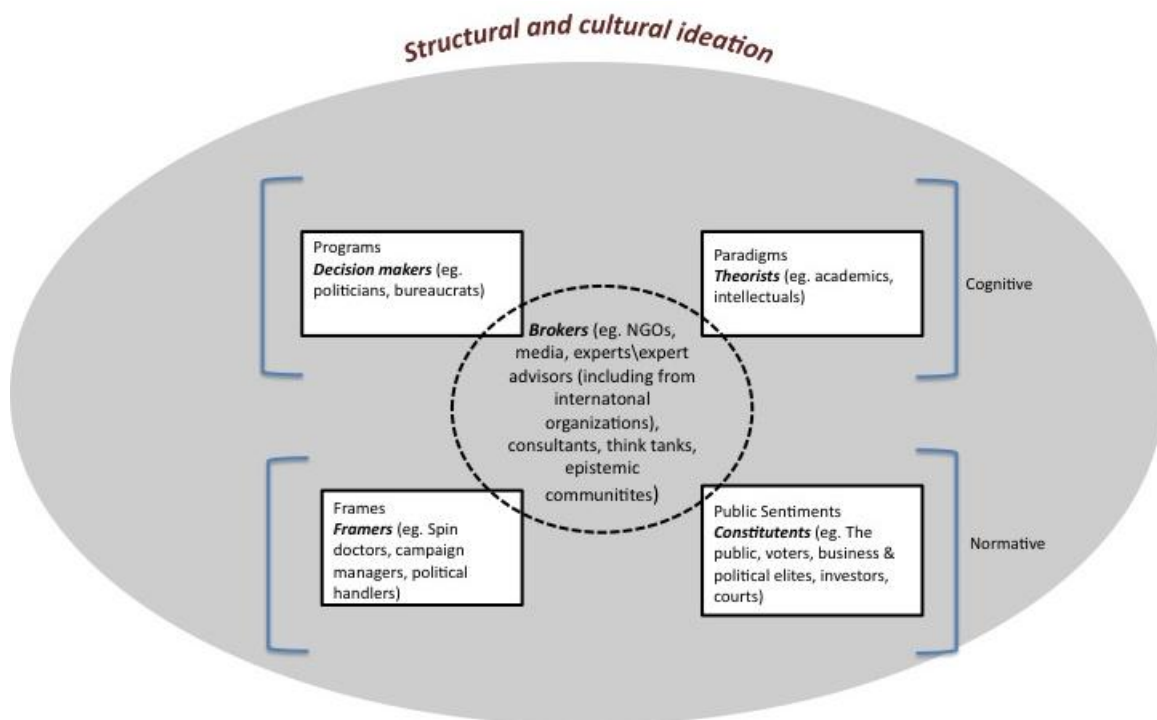
Campbell (2004) argues that ideational realm necessitates theorizing the role of actors' vis-à-vis any account of institutional change as it is contended that ideas do not emerge spontaneously or become influential without actors. Institutional frameworks are guided by ideas that populate it and this guides (or constrains) actors and their ideational realms. Institutional change is tardy when ideas are not transferred from one actor's ideational realm to other, to wit, actors' don't fulfil their ideational role. Rather they get constrained by it. This leads to ambiguity or incoherence in representation of ideas and making policy decisions. This in turn reflects actor's preferred interpretations thereby opening space for politics (Béland & Cox, 2010). Additionally, there is slippage in ideational realm. It is not air tight, actors (at times) operate at interface of different ideational realms (Campbell, 2004, p. 107). So, there may be unconscious ideas at work in people's mind, which may define/guide their ideational role but actors are not conscious of it. It is noteworthy that the concept of ideational realm used in this dissertation is similar to Bourdieu's (1977, p. 72) concept of habitus, which is defined as a 'system of durable transposable dispositions'. Through the concept of habitus, Bourdieu links the external conditions and internal motivations of actors i.e. actors' cognitive mind-sets and behaviour/agency. Bourdieu argues that it is the context that determines how actors position (or continue positioning themselves). Thus, it is the *context* that an actor is in which constrains and/or enables possibilities of other actors. For this research, context has been understood and elaborated using the typology of Campbell (2004). Bourdieu's expositions are useful to conceptualize and describe cognitive dimensions of ideational realm.

To further elaborate, according to Bourdieu, an individual's behaviour and daily interactions are guided by their habitus in two ways: as 'structuring structure' and as 'structured structure'. The former stresses the creative capacity and provides guiding principles for concrete action as *modus operandi* while the latter subsumes an individual's history and experiences as the *modus operatum* (Mielke et al., 2011, p. 11). It is possible to trace 'structured structure' empirically through practices and actor's worldviews. Whilst, 'structuring structure' can be elaborated by elucidating underlying aspects of detectable structures, i.e. what generates regular practical actions and patterns of perception, evaluation and thinking in general (ibid.). Bourdieu argues that culture, social institutions, habits and routines shape people's practices and their viewpoint of the world, notions of proper behaviour and peoples actions are framed by their past experiences, individual capacities and current social positions. And based on these experiences individuals develop a sense of orientation that guides their actions (Cleaver, 2012, p. 38). For Bourdieu, 'the freedom to innovate is strongly

‘conditioned’ by social structure and ‘conditional’ on relations with others’ (ibid., p. 39). However state structures like rulings, legislations or donor cooperation also have structural elements that cannot be overlooked.

Actors use the given social reality -an ideational artefact premised on perceptions and agreements of relevant actors- for instance the norm of irrigation management to suit their purpose. Actors thus use ideas and mental constructs of varied kind to interpret a situation individually and collectively in order to mirror their interests or preferences (Bell, 2012, p. 666). Campbell’s conceptualization is useful in this context as ideas and mind-set of actors are shaped by the *context* that is the ideational role which I posit is determined by the changing structural and cultural context, as is demonstrated through this work. Drawing on the typology of ideas discussed earlier, Figure 3.1 illustrates a typology of actors and their ideational realms.

Figure 3. 1: Actors and their ideational realms



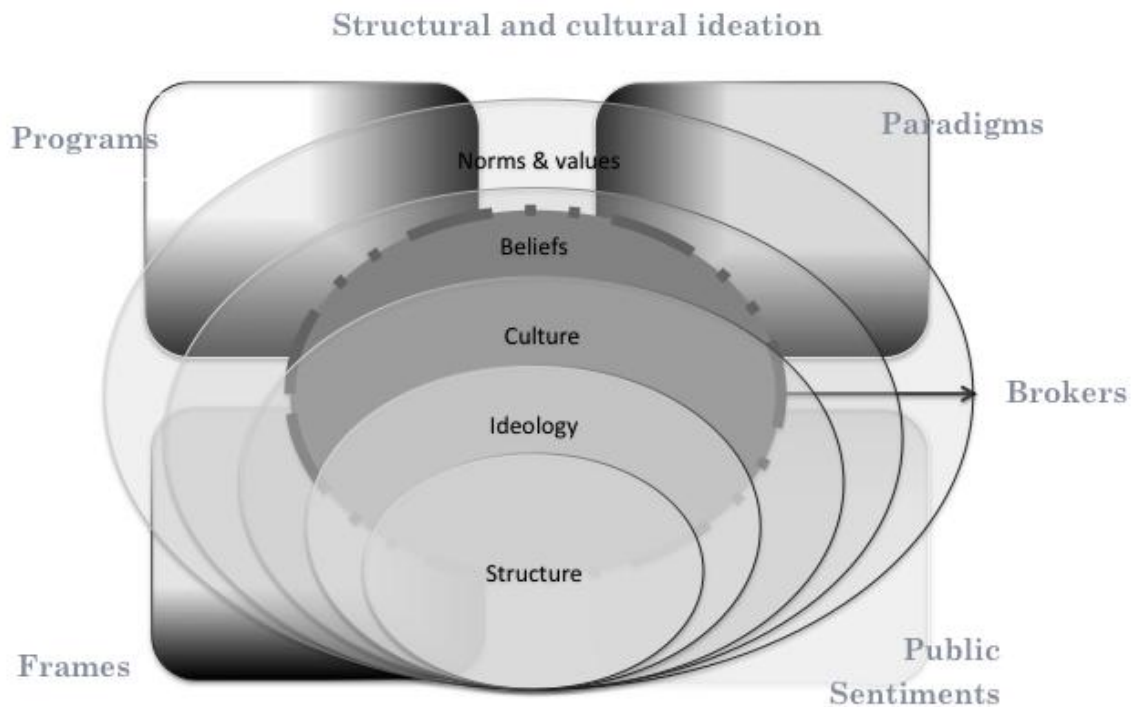
Source: Adapted from Campbell (2004, p. 101)

Figure 3.1 provides an overview of key actors that embrace, fabricate, manipulate and carry a certain idea within a given institutional setting of being, for instance, a bureaucrat or a politician (Campbell, 2004). On this formulation of Campbell I have added political and cultural structures as ideational elements -as explained above- to emphasize that it’s not only institutional settings that determine ideational realms. In Figure 3.1, decision makers are politicians, bureaucrats, etc. who follow elite

paradigmatic assumptions propounded by theorist like academics and intellectuals who propounded the idea of crafting or designing institutions for irrigation management. Thus, worldview of actors is populated by different ideas and ideologies. Constituents are actors like political elites, voters, general public, farmers, etc. who through their way of functioning and normative assumptions can constrain/influence the outcome of any programmatic idea. Brokers are actors who facilitated interaction between all the other actors. To recall, from chapter two, international organizations like World Bank, USAID were actors who brokered the paradigm of participatory irrigation management at the global level. In the above figure, it is conceptualized that actors function under cognitive or normative realm and are thus influenced by ideational variables (beliefs, norms, culture, structure), which in this research is connoted as structural and cultural ideation. Overall, I find it useful to articulate my research under the above discussed categorizations of Campbell, however, the categorization of framers (spin-doctors, campaign managers, etc.) was not found relevant for this research and is thus not discussed in empirical chapters.

It is premised that these categorizations -programs, paradigms, public sentiments, brokers- facilitate in defining and distinguishing positions and hierarchy. Moreover, these categorizations also facilitate in discerning inherent contradictions that emerged while interpreting data, for instance, overlapping of ideational realms between different categorizations (see chapter six to nine) which are contingent on which aspect of structural or cultural ideational actors rationalize in their ideational realm. Consistence of structural and cultural ideation indicated above is further clarified in Figure 3.2.

Figure 3. 2: Consistence of structural and cultural ideation



Source: Adapted from Campbell (2004, p. 101)

Additionally, this research recognizes the need to have a fine balance, and pays attention to actors' material (for instance large or small holding farmer) as well as non-material (junior or senior bureaucrat) identity. Although, it is contended that some of the material identities (for instance, big or small farmer) are also structurally constructed and thus need to be viewed as a structural constraint. This is noteworthy as recent criticism of ideational scholarship stems from ideational scholars having given preference to actors' non-material identities or in other words ideational structures -for instance, as socialists, conservatives, religious fundamentalists- with the claim that these identities trump over actors economic identities- for instance, as workers, capitalists, export-oriented business owner, small farmer (Berman, 2013, pp. 231-232).^{xxix} However, as indicated earlier in this chapter, this work does not intend to make the same folly and hence the focus is on interaction between the material and non-material structures and how that shapes the ideational realm of actors.

Culture is a guide for social action and can have significant impact on actors' ideational realm. Background influence of culture on social policy has been explained in varied ways, for instance by Hall (1993) as policy paradigms and Kane (1991) as cultural structures. Laclau and Mouffe (2001) argue that culture not only shapes human action by structuring understanding of an individual and their world but also changes as meanings become contested and re-configured within new symbolic

relationships and social practices (as cited in Padamsee, 2009, p. 416). Moreover, power is deep seated in any study of cultural aspects to elaborate, 'everything in social and cultural life is fundamentally to do with power (...) it is integral to culture. *All signifying practices -that is, all practices that have meanings- involve relations of power*' (Jordan & Weedon, 1995, p. 11, emphasis in original). Whose voices are heard, what aspects of history are remembered, what are hidden, what is perpetuated through norms all have implications for what kind of actions are perpetuated by actors. All these repertoires speak to the question how certain practices are upheld or resources managed and thus respond to the question - who has power in a given social setting to legitimate actions and is also a signifier of the underlying politics for resource management. Here, power is understood as a relational force, which facilitates in understanding how rules and practices create divergent meaning for how actors ought to act on one hand; and also is structured and generated by these processes (Mielke et al., 2011). Foucault argues that power should not be studied from the site of domination i.e. intentions of, for instance, state actors who set out rules and regulations, rather from the standpoint where it is exercised over individuals and legitimated, as power circulates through networks rather than being applied at particular focal points (Foucault 1979: 92-102; 2003:27-34 cited in Jessop, 2006, p. 5). This is in contrast to the Weberian notion of power wherein the emphasis is on explicating authority system through concepts of domination and ideal types. Weber posits 'power as a probability that one actor within a social relationship will be in a position to carry out his own will despite resistance, regardless of the basis in which probability rests' (Weber, 1978, p. 53). In this work, however, Foucault's conceptualization of power is found more compelling as it brings out the relationality of actors as a historical construct linked through complex web of relations (McKee, 2009). Building on this conceptualization in this work, I demonstrate how worldview of farmers in Samrat Ashok Sagar (SAS) project area are historically constructed and intersubjective which has led to multiple (rationalities) site of governing in the project area wherein each actor exercises his/her power. To cite an instance, Gill (1995, pp. 411-412) has developed a framework of power and posits 'disciplinary neoliberalism' as perpetuation of concrete form of structural and disciplinary power. Here, neoliberalism as an idea is bureaucratized and institutionalized with varying degrees and intensity across public and private spheres wherein discipline embodies both transnational and local dimensions of power. This conceptualization of power does not concede to state as sole monolithic centre of power. Rather it is posited that there are multiple sites from power can be exercised for instance, by international institutions or NGOs (Hart, 2004, p. 92). Moreover, the above conceptualization facilitates in going beyond the traditional understanding of hierarchical state control, towards a more enabling state that is promoting involvement of private and local community (McKee, 2009). Power here is situated in network of human interactions and actors worldview changes when any practice (for instance downstream

farmers drawing water fist) is regarded legitimate by attaching normative values to it and this results in institutionalization of the practice. It is noteworthy that discussion on legitimacy have had varied focus, viz. Habermas's (1975) conceptualization of formally structured social forms like the state or societal authority systems of Weber (1968), or Powell and Dimaggio's focus on (1991) organizations (J. Berger, Ridgeway, Fisek, & Norman, 1998, p. 380). The concept of legitimacy is fundamental for understanding social process as it mediates relationship between power and authority and thus affects establishment, persistence and change of organizational forms (J. Berger et al., 1998, p. 379). As, legitimacy provides institutions validity and thus, is crucial internal mechanism of control in actors worldview (Mielke et al., 2011, p. 15). For instance, in case of participation in irrigation management, how the idea is legitimized and gains salience is critical to understand. Figure 3.3 illustrates the relationship between participation, legitimacy and power.

Figure 3. 3: Relationship between participation, legitimacy and power

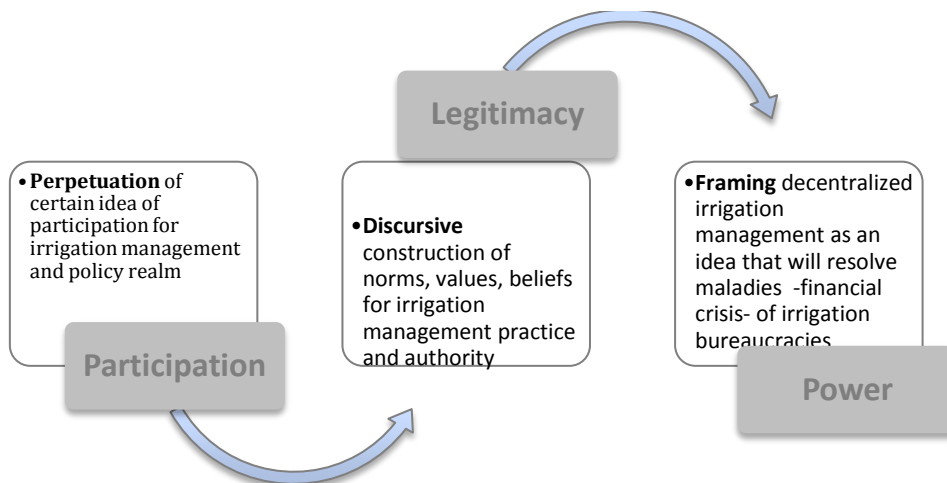


Figure 3.3 illustrates that perpetuation of certain idea of participation for agricultural water resource management in the policy realm has led to discursive construction of norms, beliefs and values for irrigation management practice. Taking an ideational approach here, facilitate in understanding not only how reform process shape but also shed light on how idea of farmer participation is legitimized by actors, in different contexts, an aspect that is overlooked while designing institutions.

As discussed earlier, ideational variables that define actor's ideational role and realm are norms, beliefs, and values. These variables are also identified as institutional variables. Both the perspectives -ideational and institutional- give salience to the idea that meanings are causes; however, the difference between the two is ontological. As by taking ideational approach different aspects of causality are discerned, i.e. ideational explanation facilitates in discerning how actors understand causality of norms/beliefs/values. Thus, the distinction between the two is in terms of explicating

‘how’ causality works. One aspect gives greater salience to totality of institutional structures while the other to actor’s ideational realm which is guided by not only economic structures but also political and cultural structures.

Bearing in mind the above discussion, the concept of ideational realm in this study is posited as actors’ interpretation of situation, and not the situation itself, that determines a way forward for an actor. Actors’ choices are narrowed down when they take a certain subjective or objective standpoint for interpreting things. Thus, ideational elements facilitate in providing an *interpretative* dynamics, which makes it distinct from mere structural or cultural explanations rather one needs to view it as interdependence of structural and cultural ideation.

3.4 Operationalizing ideational realm in context of irrigation management

The previous section elucidates conceptualization of ideational realm for this research and also clarifies the ideational variables that are salient to understand actor’s ideational realm. This section elaborates how ideational realm has been operationalized for this research. From the above sections it is evident that rationality of actor’s (i.e. why they take certain decisions) cannot be explained only through structural or cultural ideation. Rather one needs to take into account *interdependence* of structural and cultural ideation. The analytical framework to study ideational realm of actors’ is elaborated in Table 3.2.

Table 3. 2: Analytical framework to study ideational realm

Formation of ideational realm: ideational variables	Signifier of ideational realm	Understanding ideational realm
<i>Norms, beliefs, culture, ideology, structure</i>	<i>Cognitive or normative frame</i>	<i>Programs, frames, public sentiments, and brokers</i>
Idea of participation & politics	Actors* perception and their capabilities over time (based on the ideational frame that they follow) vis-à-vis the world around them result in creation of dominant mind-set/worldview/ <i>mansikta</i>	<ul style="list-style-type: none"> ▪ Salience and perpetuation of certain idea of participation in irrigation management in policy realm ▪ Discursive construction of irrigation management practices ▪ Framing decentralized irrigation management as an idea that will resolve the maladies of bleeding irrigation bureaucracies and benefit farmers ▪ Discursive construction of (irrigation) decision making authority – differences between mandated and actual practice of irrigation management

Formation of ideational realm: ideational variables	Signifier of ideational realm	Understanding ideational realm
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Participation and politics are structured by certain settings of institutions i.e. configurations which are established due to prevalent structural and cultural dimensions

* For this research, relevant actors are farmers, farmer organizations, junior and senior bureaucracy, Non-Governmental Organization (NGO).

In context of irrigation management -which is the subject of this research- to understand how irrigation management practices are structured by ideational realm it is critical to understand who has the authority or decision making power, how policy decisions for irrigation management are made. Table 3.2 provides an analytical framework to do the same based on the theoretical underpinnings discussed in previous sections. To elaborate, it is premised that to understand ideational realm focus ought to be on ideational frame that actors follow as it influences ideational role and realm of actors'. Actor's studied in this work are farmers/farmer organization, (junior and senior) bureaucracy, experts, and NGO who work at interface of ideational realm based on their cognitive or normative frame as structural and cultural dimensions mould ideational frames, and are crucial analytically to understand institutional change building on the discussion in previous section (c.f. Campbell, 2004). Additionally, in the above table, following Berman (2013) ideational variables that are identified to be crucial to study are norms, beliefs, culture, ideology and structure which determine what meaning of participation for instance is propounded by an actor.

Typology of ideas viz. programmes, frames, paradigms and public sentiments are critical for operationalizing ideational realm as elaborated in Table 3.2. To elaborate, First, it is premised that salience and perpetuation of certain idea of participation in irrigation management in policy realm is due to elite prescriptions as propounded by international organizations and experts, which has led to, for instance, top-down designing of institutions (creating farmer organizations) for irrigation management. Additionally, programmatic ideas were propounded by designing representative institutions by mandating inclusion of women and/or marginalized sections (discussed in empirical chapters five, seven, and eight). Secondly, it is premised that to understand ideational realm focus ought to be on discursive construction of irrigation management practices. To wit, perpetuation of certain assumptions about management of irrigation systems to legitimize programs available to decision makers/ senior bureaucracy on one hand and on the other hand a contra discursive practice formulated by junior bureaucracy by propagating a strategic and normative imagery of irrigation practice. Third, to understand ideational realm, framing of idea is critical. For instance, framing of decentralized irrigation management as an idea that will resolve the maladies of bleeding irrigation bureaucracies and benefit farmers discussed in subsequent chapters. Additionally, framing of ideas is

also critical to understand how actors strategically construct realms about who has the decision-making power.

Overall in Table 3.2, the ideational realm is conceptualized as an understanding of how actors' (farmers, farmer organizations, bureaucracy, NGO) perceive themselves and their capabilities over time vis-à-vis the world around them i.e. their worldview/mind-set/*mansikta*. The notion of ideational realm of actors facilitates in understanding institutional change, in this case decentralization i.e. devolution of governance structure for irrigation management at the intermediate level. It is premised that institutional change or any reform process is contingent on actors' agency i.e. willingness and capability to exercise influence, as this determines which ideas, practices, knowledge, information gets diffused or reinforced in a certain setting. Thus, ideational realm of actors is a useful analytical tool to understand and elucidate how certain ideas gain salience in policy making, how certain irrigation practices (like salience of undertaking *warabandi* (fixed time and date for water supply) in large scale projects) and decision making authority is reinforced and perpetuated over time despite known lacunae. To wit, rules, norms and meaning arise through interactions and they are preserved and modified through human behaviour (W. R. Scott, 2008).

Furthermore, understanding position of actor's in context of irrigation management is a complicated exercise and needs to go beyond the predominant viewpoint of actors', for instance, farmers are profit maximizers or that irrigation officials are rent maximizers (Mollinga, 2003, p. 27). As mentioned in the earlier paragraph, key actors' whose perceptions on irrigation management are studied in this research are farmers, farmer organizations, NGOs, and bureaucracy.

In literature there are different conceptualizations of NGOs: not for profit organization, independent organization, third front, voluntary organization, separate from market and state, separate from politics, and the difference between the three generation of NGOs (Fisher, 1997, pp. 446-448; Petras, 1997). Thus, it needs to be clarified that NGOs^{xxx} for this research are envisaged as significant actors - and fall under the typology of brokers (in reference to Figure 3.1) - for deepening democracy by facilitating decentralization. As key development agents, NGOs have also become key partners of both governments and donor agencies in implementing development programmes. However, in their role as political entrepreneurs (to use Chhotray's terminology), NGOs are not devoid of politics and use various repertoires to make headway with the state functionaries (political office bearers, bureaucrats and other officials) to elicit greater participation and accountability (ibid.). Similarly, international organizations are also conceptualized as brokers in this work, who have propounded the idea of farmer participation in irrigation management drawing on ideology of neoliberalism and communitarianism.

Given, there are diverse facets to the idea of participation in irrigation management literature and this affects how this idea is implemented in context of irrigation management. It is imperative thus to elaborate on various meaning of participation that are there which affects practices of irrigation management, and the same is discussed briefly in this section. The typology of participation (Table 3.3) developed by Agarwal (2001) in context of inclusion of women in community based forest management is worth mention in context of this work to evaluate how participatory approaches are implemented.

Table 3. 3: Typology of participation

Form/level of participation	Characteristic features
Nominal participation	Membership in the group
Passive participation	Being informed of decisions <i>ex post facto</i> ; or attending meetings and listening in on decision-making without speaking up
Consultative participation	Being asked an opinion in specific matters without guarantee of influencing decisions
Activity-specific participation	Being asked to (or volunteering to) undertake specific tasks
Active participation	Expressing opinions, whether or not solicited, or taking initiatives of other sorts
Interactive (empowering) participation	Having voice and influence in the group's decision

Source: Agarwal (2001, p. 1624)

Table 3.3 illustrates that normative and/or cognitive aspects influence participation of individuals in meetings. Normative aspects here include social norms that define gender segregation of public space or gendered division of labour, or gendered behavioural patterns restrict participation. Similarly, cognitive aspects include social perceptions for instance, incorrect perceptions regarding women's ability impinges men's reluctance to include women in activities, or the social perception that farmers don't know the science of irrigation management; other elements that restrict participation are household endowment and attributes, men's entrenched claim and control over community structures (B. Agarwal, 2001). Nominal participation is of least influence in this typology, as it just ensures membership and thus envisages commanding-managing people's participation through quorums for instance. Whilst interacting (empowering) participation envisages regulating social processes and is more substantial in nature. Based on the above discussion, for the purpose of this research participation is conceptualized as not apolitical. Moreover, is assumed that participation as a practice influences the workings of power in the decentralization process and fosters inclusion/exclusion in spaces in which participation occurs (adapted from Bebbington, 2004, p. 281). The notion of participation conceptualized for this research emphasizes more inclusive participation that acknowledges the agency of citizens as 'makers and shapers' rather than users and

choosers of interventions (Cornwall & Gaventa, 2000 cited in Gaventa, 2004, p. 29). According to the typology of participation advanced by Agarwal (2001), the meaning of participation used implied in this research would fall in the last category of interacting (empowering) participation.

To sum up, I argue in this chapter that to study ideational change, one needs to focus both on the creation of political spaces and the emergence of new ideas to fill them. This necessitates paying attention not only to the structural variables and impersonal forces, but also to case specific factors (i.e. local socio-cultural context) and agency (Berman, 2013, p. 229). The analytical framework for understanding ideational realm elaborated in Table 3.2 takes care of this aspect. For instance, state ideology as discussed in next chapter is an instance of structural and impersonal force that influences outcome of intermediate level decentralization, whilst the empirical chapters focus on case specific factors and agency of actors in shaping implementation of decentralization in Madhya Pradesh.

To further elaborate the application of analytical framework in this dissertation: chapter four focuses on elaborating how ideas have influenced irrigation management in India at the national level, and have led to creation of a certain ideational realm for irrigation management. This is achieved through process tracing of key ideas that emerged due to given political and social structures in context of irrigation management in India. In subsequent chapters (five to nine) the focus is on particularistic aspects. The focus is on applying the conceptual framework of ideational realm discussed in this chapter. These chapters (five to nine) highlight salience of actors in influencing implementation of irrigation management policy and thereby obstructing decentralization at the intermediate level. The focus is also on elaborating how and what type of idea of participation for irrigation management gained salience in the state of Madhya Pradesh and in the SAS Project, which is the case study site. Chapter ten is the concluding chapter and brings together the discussion on roadblocks to implementation of PIM at the intermediate level.

3.5 Summing up

This chapter outlines and clarifies the key terms and the analytical framework that is used to understand roadblock to decentralizing irrigation management in this research. Ideational literature does not have enough cases that elucidate processes through which ideas become institutionalized and affect political outcomes over time. More so, cases that carefully investigate ways in which ideas shape or form both actors' motivations and contexts (Berman, 2013, p. 217), and that is where this research contributes conceptually to the discussion by illustrating a case where ideas that gained salience earlier in time have slowed down the learning process for new idea (of participatory management) to stick through as the earlier idea of irrigation management has institutionalized

actors motivations and contexts in a certain way. Additionally, given the criticism of ideational research that ‘motivations and causality continue to be somewhat unclear and confused’ (ibid.), the case of participatory irrigation management also provides insights in this context in subsequent chapters of this dissertation.

^{xxxv} An epistemic community is ‘a network of professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue-area’ (Haas, 1992, p. 3)

^{xxxvi} New theorizing of participation requires posing awkward questions about attitudes and behaviours and to understand not only the framing of participation but also the sites from where it is advocated and promoted (Bebbington, 2004, pp. 278-279).

^{xxxvii} Structuralist account can be manifold, however, all scholars of structure build on the classical social science theorists, i.e. Marx’s foundation and Weber’s edifice. To elaborate, both Marx and Weber grappled with fundamental transformations associated with rise of capitalism. While Marx developed a general strategy for socialist revolution; Weber examined human behaviour in a society through the notion of legitimate authority, and thus developed the theoretical and normative demands of the bureaucratic state (Lichbach & Zuckerman, 1997, pp. 4-5; Weber, 2009, p. 84). Drawing on tradition of Marx and Weber, structuralists draw together long-standing interests in political and social institutions and provide response to how state and societies interact (Lichbach & Zuckerman, 1997, p. 6).

^{xxxviii} Ideational research can be categorized into four major types with focus on four main dimensions, viz. affective versus cognitive; end versus means; tight consensual versus loose/contested and coherent versus incoherent (Parsons, 2007, p. 123). Parsons argues essentiality of (loosely) following one of these categorizations (though they are not mutually exclusive), as otherwise the theoretical claims become weak and less distinct.

^{xxxix} More and more it is being recognized that there needs to be a fine balance of material and non-material identities to explain why actors take certain action based on their context, as otherwise it provides only lopsided perception (c.f. Friedman, 1996; Green & Shapiro, 1994).

^{xxx} In liberal democratic theory, civil society has been propagated for its functional as well substantive notions (as they act as a realm of mediation between the political and the social) and at the heart of which are NGOs, often referred to as the third sector/ third realm (Baker, 2004 p. 43). NGOs have been identified as civil society with huge body of literature especially by donor agencies as symbolic civil society, which provides immense opportunities to set up development projects especially for democratization or participatory development. However departing from this literature, this research acknowledges that NGOs are not synonymous with civil society. Rather their association in this context must be treated carefully, relationally and historically (Chhotray, 2008, p. 262).

4 Ideational realms for irrigation management in India

Understanding how the Indian state pursued democracy, development and decentralization has intrigued scholars as it provides an insight into how state functions and also sheds light on the present state of affairs. Why has the Indian state not been able to change over time despite making several efforts to decentralize is a critical question to ponder in this context. Most of the responses to this question focus on origins of a certain institutional configuration and leave unexplained the subsequent reproduction. Thus, analyses like bureaucratic inertia or historical momentum are offered in literature as the reason for an unsatisfactory state (Chibber, 2006, p. 11). Chibber argues that as long as the political elites are nominally committed to ensuing a development agenda despite being aware that the existing state apparatus lacks the capacity to serve its function, it is critical to ask why elites abide by a weak state (ibid.). This line of questioning useful for this work as a similar question is dealt in this research i.e. why efforts to decentralization have been ineffective despite several efforts made in the last few decades. As discussed in chapter one, this research hypothesizes that an actor's ideational realms is crucial for decentralization of irrigation management. This chapter reviews and analyzes the irrigation management literature in India to identify various ideational (ideology, norms, beliefs, culture, structure) dimensions that influence actors' ideational realm at the national level. Furthermore, this chapter also maps the emergence of a certain idea of irrigation management in the Indian policy narrative and how this has influenced actors' ideational role and realm on irrigation management.

There is no dearth of literature review on irrigation management on India (See Gol, 1972; Gulati, Meinen-Dick, & Raju, 2005; Mollinga, 2003; Ramamurthy, 1995; T. Shah, 2009; inter alia); thus, making readers sceptical of reading another review that many may perceive just casts old wine in the new bottle. This chapter does not intend to do that. Rather the reasons for undertaking historical review of irrigation management are two-fold: First, irrigation management has *not* been looked till now using the lens of ideational realm.^{xxxi} The newness is not only in terms of exploring and/or elucidating irrigation management in India through the lens of ideational realm. Rather I argue through this research that ideational realm is an important perspective to understand (and influence) the maladies that the irrigation sector in India faces today. Any understanding of how the ideational realms of actors' currently involved in irrigation management is incomplete, without understanding how actors developed a particular viewpoint or how it has evolved over a period of time. Saliency of history and time is important in any analysis, but particularly for this research it gains even more significance, as actors' realms are not formed overnight. Rather are formulated, guided and evolve

with time and are influenced by structural, socio-political and cultural context (using key international cases, salience of these elements for this research was established in chapter two). In this chapter historical review and analysis facilitates in elucidating why systemic change is not happening, though new ideas have been discussed in context of irrigation management over the last century. A critical insight from institutionalist approach is that historically entrenched patterns of behaviours and social relations powerfully constrain and shape possible future outcomes. Consequently, a predominant viewpoint is that even if institutional reform is desirable, path dependency will give a particular cast to how reforms shape up (Bell, 2002, p. 20). However, this chapter elucidates that though ideas about content and direction of reform in irrigation management are important, diffusion and adoption of ideas largely depends on *context/circumstances* in which they are promoted. Moreover, it is not only circumstances - window of opportunities - that are important to identify and understand, but also the ideational processes, which is characterised by contestation and reflect the interests, values and power of their upholders or in other words actors' ideational realm. Ideas for irrigation management influence ideational realms only to an extent and are contingent on factors -socio-political, cultural or structural rationalities- that gain primacy in defining an actors' ideational role. Mere introduction of a new idea does not guarantee that it will gain constituency among all actors. One needs to take a broader/historical viewpoint and understand how and when certain ideas gain constituency in actors' ideational realm and how state policy is influenced by it.

Second, through the lens of ideational realm, three distinct fields of literature on irrigation as articulated by Mollinga (2003, pp. 13-14) are brought together: i) intervention or action-oriented literature i.e. policy oriented literature on irrigation management; ii) understanding-oriented irrigation literature i.e. work being undertaken by universities and research institutions; iii) academic literature on irrigation i.e. historical, sociological, political work on irrigation for instance. This diverse field of literature provide an overview of different bearing on actors' and their ideational realms. This chapter gleans through various perspectives, for instance, meaning-centred or structure-centred accounts in order to understand and explain causation due to perpetuation of certain idea for irrigation management. Understanding of class based differential access to resources, for instance, does not become clear from static analysis of irrigation management. Rather necessitates a more dynamic review as it comes from and is embedded in actors' ideational realm (who is from different classes as well). Focus of most of the literature review on irrigation management in India has been on accounting the problems related to irrigation management and the question of rights, however, what is lacking is the distinction between different behaviour and beliefs and how that results in origin and perpetuation of ideational realms for irrigation management. It is critical to understand political

motivations of actors' or state, as that is a guide to understanding ideational realms, and this necessitates reading between lines to glean motivations and perceptions thereby different realms of actors'. This exercise has not been done thus far in context of understanding the trajectory of irrigation management in India. Furthermore, this interpretation is critical for this research as this chapter provides a historical backbone and aids in substantiating and understanding the state of affairs in the SAS Project in the subsequent empirical chapters. The aforesaid mentioned reasons are significant and merit a discussion on predominant as well as contrasting ideational realms on irrigation management and their evolution in the Indian context.

Contrasting explanations to understand trajectory of irrigation management in India

In academic writing, one of the dominant meta-narrative is that the roots of the present crises (of water management) can be traced back to the arrival of British in India, when there was a call for technocratic solutions to manage the environment and that has continued till date, despite different political regimes/authority. Another predominant idea is that historically, community has had customary rights over water^{xxxii} in India and has been involved in use-management of all natural resources (DCAP, 2003). In addition, in contemporary writing, binary explication of 'traditional' versus 'modern development' has been used to explicate changes in water sector (Sengupta, 1985). Another narrative is furthered by Agrawal and Sivaramakrishnan (2000), D'Souza (2006), Rangan and Kull (2009) who posit that emerging pattern of environment transformation cannot be explained by this binary explication. Rather deeper exploration of past is necessary. Agrawal and Sivaramakrishnan (2000, p. 14) explore the role of agrarian change in emerging patterns of environmental transformation and conflict, and aver that methodologically it is important to explore the dynamic relationship between history and current moments to understand how present is inflected by past utopian aspirations (Agrawal & Sivaramakrishnan, 2000, pp. 12,14). The neomalthusian explanation^{xxxiii} for understanding ecological change is critiqued by D'Souza (2006, p. 12) and he argues that one needs to understand the *longue durée*^{xxxiv} of environmental history in India.^{xxxv} D'Souza in his work emphasises basin histories. Additionally, scholars like Agrawal and Sivaramakrishnan (2000), D'Souza (2006), and Skaria (2003) among others, have critiqued Gadgil & Guha (2002) and Shiva (2002) for not going too far in the history to understand ecological change, and in only explaining certain idea of the 'modernist cathexis of the natural'^{xxxvi} (Skaria, 2003, p. 266). It is argued by Agrawal and Sivaramakrishnan (2000, p. 19) that the theoretical and conceptual relationship between modernity and environment, ought to focus on understanding that the colonial or post-colonial variants of modernity are integrally connected to the very production of the idea of nature or natural. Thus, importance and emphasis on history to understand environmental change or

management becomes evident for any research that aims to understand the root of the present problems in irrigation management. So, rather than emphasizing that with modern development transformation in water sector occurred it is imperative to understand how modern development seeded/influenced the idea of irrigation management in India.

Therefore, the following section (4.1) analyzes historically how the events during the colonial period instituted a certain technocratic (bureaucratic) ideational realm in irrigation management that celebrated modern scientific rationality (logic of governing) over traditional management of irrigation systems. The emphasis is also on elucidating how this impacted perception of engineers about themselves and their work. In Section 4.2, emphasis is on elucidating, how the Indian state engaged with the idea of irrigation management post-independence, and how this has reproduced centrist state policy as an ideational belief for irrigation management. This section also elucidates role of bureaucracy and international organizations in influencing/shaping predominant idea for irrigation management and participation in state ideology. Section 4.3 focuses on explicating the turn of events post-nineties in India, and how post-nineties the tenets of neoliberalism have influenced ideational realm of actors. Section 4.4 briefly summarizes the ideational variables that gain salience from the discussion in this chapter.

4.1 Origin of ideational realms in irrigation management

Salient ideational factors to understand pre-colonial irrigation management

Several scholars (A. Agarwal & Narain, 1997b; Bottrall, 1992; Ludden, 1978; Mosse, 1999; Sengupta, 1985) have accounted for and elaborated on different types of system of irrigation management prevalent in pre-colonial and colonial India. For instance, King Krishna Devarāya initiated farmer management of irrigation systems by handing over management to local village councils in the sixteenth century (Maloney & Raju, 1994, p. 41). The Grand *Anicuts* currently part of Tamil Nadu have historical records dating back to second century AD and is considered an engineering excellence of the ancient Indians (Maloney & Raju, 1994; Sengupta, 1985, p. 1920). Similar evidence also exists for northern India, for instance, some of the Yamuna canals date back to fourteenth century (World Bank, 1991b, p. 1) and were managed by the local community. The ecological zones and cultural economy of irrigation in Southern Tamil Nadu between ninth and nineteenth century has been studied by Ludden, who posits that ‘institutional basis for (irrigation management) was shaped by the *complex cultural and historical context* under which the irrigation economy developed’ (Ludden, 1978, p. 4 parenthesis and emphasis added).^{xxxvii} From this brief description, the overall picture of pre-colonial India that emerges is that there were well-defined local water rights and quotidian

management of water was devolved to local agriculturists (Bottrall, 1992, p. 228). Society during that period had a decentralized approach to water management. Furthermore, relations of production and management of resources was determined by complex socio-political (structural) and cultural ideational factors like caste, political status, material ownership of resources, and institutional hierarchy (chieftain, king) played a key role.

Bureaucratization of water management in the colonial era

After the advent of the British in India majority of these indigenous irrigation works that were locally managed till then were eliminated by the East Indian Company, and these works were bestowed on company officials (Sengupta, 1985, p. 1923). The *ryotwari* settlement is intriguing, as the commonly owned properties like *eries* (tanks) were vested with the government, and the responsibility of maintenance lay with the revenue officials. The British learnt their first practical lesson in irrigation management when they realized that the formal training of revenue officials was not of any particular significance for carrying out the maintenance work; thus, the revenue spent under this head was getting wasted (Sengupta, 1985, p. 1924). Therefore, seeking new expertise, civil engineers of the army were called in as experts in this area. It was circumstances that made irrigation science a subject of civil engineering; the shackles of which it has not been able to break till date (Gilmartin, 1994, p. 1135; Sengupta, 1985). Once the civil engineers were identified as experts their involvement in irrigation development and management gradually increased and canal administration was done under 'Canal and Drainage Act (VIII of 1873)' in northern India which created institutional hierarchies that ran from chief engineer down through superintending engineers to the executive engineers who controlled circles of canal sections. Thus, a new cadre of specialist irrigation engineers was created (Bottrall, 1992, p. 230). The irrigation engineers underscored new concepts like irrigation efficiency and pressed for projects of larger and larger scale that were capable of integrating local irrigation works into larger systems which gradually resulted in bureaucratization of canal administration (Gilmartin, 1994, p. 1135). At the local level, executive engineers entrusted themselves not only with problems of technical design and overall efficiency in operation of canals, but also with managing large numbers of local subordinate workers (ibid., pp. 1135-1136).^{xxxviii} Thus, the irrigation department was bestowed with all-important rights. Gradually, the system became more integrated and the manner of functioning of irrigation engineers was not very different from other colonial officers and the bureaucratization process was thus set in place (Gilmartin, 1994, pp. 1135-1136).

In northern India, water rights of users were in relation to the limited entitlement that farmers had to available water, as per the *warabandi* roster prepared by the irrigation department staff (Bottrall, 1992, p. 230). The engineers in North were in constant discussion about most relevant management

techniques to follow.^{xxxix} The company officials in Northern India experimented with several engineering and social control methods for distribution and management of the irrigation systems. The engineers did so, as they had strong pressure from higher authorities to ensure that canal's financial and famine prevention objectives were met. Moreover, they were not legally accountable to water users, so not much consultation with them was undertaken apart from reaching an agreement on how to maintain tertiary watercourse channels (Mollinga, 2005). Overall, an aspect that is salient is that the colonial engineers (British and Indian) were oriented towards discussing and solving field level problems, however, they were not inclined to take the viewpoint of farmers while taking a decision of maintenance of watercourse channels i.e. take into account perception of farmers and socio-cultural factors that influence management of water, as they were no such directives from the colonial state. Thus, it becomes evident that during this period there was no space to for alternative ideas like community based water resource management to develop. Moreover, with enactment of laws during the colonial period, there was change in customary rights and natural resource management was brought within the control of the colonial state (c.f. Iyer, 2003, p. 84). In this context, Gadgil and Guha (1992) have noted that a strong interventionist colonial state asserted its proprietary right over non-private resources, for instance, water and forest which primarily led to demise of traditional systems of sustainable resource use. Although, this view has been confuted by Mosse (1999) who argues in context of tank irrigation systems in Southern India by pointing out that tanks were not maintained and operated by autonomous village institutions, but by the wider political relations of the decentralized or 'segmentary' (Stein, 1980) pre-colonial states (Mosse, 1999, pp. 304-305, 314).

Further, events of that time created generations of 'engineer-managers' who take pride in their professional competence and are dedicated to achievement of their assigned tasks through adherence to a code of paternalist, quasi-military discipline (Bottrall, 1992, p. 231). For instance, in several projects in northern India, canal irrigation was extended without paying attention to tradition and they faced popular resistance and/or failed to achieve desired results (ibid., pp. 1924-1925).^{xi} Similarly, Mosse (1999, p. 304) argues that colonial government in India 'formalized, generalized and invented customs and traditions of village communities as a basis for minor irrigation administration'. However, in case of tank irrigation in South India, the old traditions like *Kudimaramat* were vital for tank maintenance and administration for the colonial state (Mosse, 1997, p. 379).^{xii} Second, the colonial state legitimized the demand for village labour as long standing custom (Mosse, 1999, pp. 311-312). Overall, with colonial rule in India, rights of local community for management of irrigation systems were redefined, as the British followed a policy of centralized

management of irrigation system (Maloney & Raju, 1994), thus water resource management was bureaucratized in colonial India.

Perception of the colonial state about environment and community

With advent of colonizers in India the relationship between environment (resource use), state and community was redefined. To elaborate:

“Critical for the structure of British rule was the fact that by tying Indians to the land (and by legally defining their relationship to the land through institution of private property), the British tied them also into a social scientific discourse in which the language of ‘community’ and ‘custom’ defined a local social order associated with the colonial state. This discourse lay at the heart of ‘scientific empire’” (Gilmartin, 1994, p. 1133).

Consequently, irrigation was categorized as major, medium and minor mainly for revenue and managerial purpose (Vani, 1992). Thus, the British initiated the process of viewing the environment (water/ forest resources) for its productive uses which (in turn) necessitated disciplining water users, and the environment in general (Gilmartin, 1995, p. 213). They introduced the notion of colonial taxes and policies for water usage, which led to transformation of water into a commodity, which until then the community had customary rights over. Given, that the chief interest of colonizers was capital maximization (by viewing water resources as a productive resource); they did not pay any attention to develop bureaucratic administration as an instrument for instituting socio-economic change. Rather the only purpose of the administration was policing (i.e. maintaining law and order) and to collect irrigation revenue (Jain & Chaudhuri, 1982, p. 4). Moreover, by using the process of revenue settlement, the British enmeshed the local powerful elite (men) to the state. They were drawn into the scientific discourse of privilege, which was (primarily) framed within the ‘local idioms of customary authority, genealogy and descent’ (Gilmartin, 1994, p. 1133). The local power holders became the dealer of local knowledge (irrigation customs, and traditions) irrespective of the fact that the value and meanings the two (British administrators and local elites) attached to local practices were different. Thus, the colonial state engaged with the local elites who represented the local (material) structural and cultural hierarchy and embedded them with the narrative of science, planning and management of resources.

Colonialism also commodified access to water for irrigation purposes. To elaborate, rules of irrigator behaviour were framed that allowed the bureaucracy (engineers/ administrators) to control people as they controlled water. These rules indicated proper irrigation practices (application of water to fields), prohibited cultivation of certain crops in certain areas and were enforced by a system of

monitoring and levying fines (Gilmartin, 1995, p. 224). The high extractive revenue agendas dismantled community control over natural resources and caused impoverishment of the rural communities (D'Souza, 2006, p. 4). It also led to decay and destruction of numerous water harvesting systems that were in place.^{xlii} The political imperatives of colonial domination necessitated separation of the state from natural environment and the Indian society, as the prevalent concept of participation that required maximizing state users was not acceptable to the colonial rulers (Gilmartin, 1995, p. 213). The community was made part of the state's project of environmental transformation with the assumption that community's requirement of water use can be adapted with the larger requirements of hydraulic models of planning (ibid., p. 214). Community was re-defined by the British through codification using 'census surveys, classifications of castes, tribes, languages, and religions to help to lay the foundations for their power' (Gilmartin, 1994, p. 1127).

The case of irrigation system in the Indus basin (during the colonial period) highlights how the colonial state pursued a system of domination where 'local irrigators were included within a larger hydraulic environment, but were separated from the culture of scientific modelling that defined this larger hydraulic system' (Gilmartin, 1995, p. 232). The British brought with them the 'notion of disciplining the colonial society', who were seen as the 'savage other' (ibid., p. 213). A process of othering and naturalization of local community was undertaken and community was bundled with the environment - an entity to be controlled (ibid., pp. 214, 227). Similarly, environmental modelling (for instance canal building) and change was tied to the larger political process of colonial control and the imperative to rule (Gilmartin, 1994, p. 1129). The colonial state was also inherently irreconcilable with development of a civil society, as colonial governance was not about self-government. Rather, 'it had to function as an aspect of coercion, that is, instituting the sovereignty of alien rulers' (Prakash, 1999, p. 126). There is strong relation between irrigation and nation building, as efforts to civilize discipline citizens was an exercise of nation building (Mollinga & Bolding, 2004b, p. 314). Thus, water resource management was not only bureaucratized in colonial India; but also boundaries for interactions between states, society and environment were set through these categorizations that exuberate relations of power in order to control production system.

Some of the outcomes of the above processes -colonial capitalism- were revenue maximization, commercialization, commodification and/or the urgency to extend the agrarian frontiers that were critical in transforming the existing relationship between pre-colonial society and nature (D'Souza, 2006, p. 6). There was transformation of community's relationship with environment from subsistence to the order of British colonizers to meet endless demand for commodities (Agrawal & Sivaramakrishnan, 2000, p. 35).^{xliii} Rebuilding of canal in Dehra Dun was undertaken to irrigate large

tracts of uncultivated wasteland, and as a consequence of it land prices rose in this area rapidly, as European merchants rushed to buy large tracts of land fuelling a surge of land mania in speculation of profit (ibid., p. 37). The colonizers set up large scale irrigation work that was controlled centrally and provided high revenues (Hardiman, 1995, pp. 189-190). Though, the colonizers claimed frequently that they wished to preserve irrigation systems, however, in practice they did little to preserve these systems, as low value was put on anything organized by peasantry. Mitchell (2002) in context of Egypt talks about the significance of 'enframing'^{xliv} for the colonial project. The political significance of this ordering can be seen in the context of India as well in terms of mathematical modelling of the environment that was undertaken in order to discipline water users, to increase production, and exercise greater control. Moreover, notion of water management was given a new meaning: irrigation manuals were prepared which detailed rules against wastage of water, rules on construction and clearance of village watercourses (Gilmartin, 1995, p. 24). The agriculturists were believed to be incapable of managing the irrigation system on their own (Hardiman, 1995, pp. 204-205) given the assumption that the savage other was not capable of managing water on their own. The colonial irrigation policy in India drew on the then prevalent international discourse of water engineering (Gilmartin, 1995, p. 211).

Thus, overall new (structural) relations couched in ideas of order/control were put in place, which signified the dominant ideational realm (scientific ordering of society for maximization of state profit) of the state structure and were influenced/powered by scientific discourse for management of resources (forest, water, etc.). The consequence of this idea was perpetuation of what Shah (2011) connotes as 'build-manage-generate-surplus-maintain' narrative propounded by the colonial state.^{xlv}

Organizational culture of irrigation bureaucracies

The relationship between masculinities and irrigation professionalism can shed light on the current ideational realm of bureaucrats; however, not much attention has been given to this interrelationship (Zwarteveen, 2008). Moreover, the circumstances of the colonial period also shed light on how the current organizational culture of irrigation bureaucracies has evolved. The linkages between water control and gender in irrigation are identified, and untangled by Zwarteveen:

"Lynch (1993) postulated that the characteristics and culture of the 'bureaucratic traditions' to which irrigation institution and polices are tied is one that strongly associates decision-making and power with masculinity. The hegemonic strength of this tradition has long been maintained, and to some extent continues to be maintained through the socialisation of generation of engineers and bureaucrats. Through the 'bureaucratic traditions' masculinity and professional irrigation identity have come to belong to each other; they mutually constitute and define each other at symbolic and

metaphorical levels. This means that the irrigation profession and the professional status of those working in the field of irrigation are partly delineated through a gender demarcation. Attributes and skills that are seen as typical characteristics of good irrigation professional –such as technical competence, physical strength, being in command, self-confidence, and rationality – are normally seen as characteristics belonging more to men than to women” (Zwarteveen, 2008, p. 115).

Additionally, several of the irrigation engineers were army (men) and trained in military colleges (Gilmartin, 1994). The imagery of engineers in colonial India was that of ‘pioneering colonial heroes’ who did not hesitate to design and construct large irrigation works and get their feet dirtied in the mud when the occasion necessitated (Zwarteveen, 2008, p. 115).

“The ‘masculinity’ of large public irrigation agencies and their staff was linked to the historical importance of irrigation in bringing about development. In many countries, irrigation agencies were the largest public agencies in terms of budget and numbers of staff. Their power and magnitude was largely based on, and legitimized by, the ambitious dreams of modernization that irrigation promised to realize, consisting of making deserts bloom and bringing prosperity to all through huge infrastructural works” (Zwarteveen, 2008, p. 116).

These associations connote to irrigation engineers an idea of being masculine, an appointment of power and prestige, and these therefore became virtues for irrigation engineers and the position that they were associated with in the eyes of general public. Moreover, the organizational culture (of irrigation bureaucracies) that this imagery of engineers perpetuated was that of an organization which is entrusted with great power, role and responsibilities, and for transforming the physical landscape through the infrastructural work that they undertake. This organizational culture is also a signifier of irrigation engineer’s ideational realm, as it gives an insight into the prevalent normative values and ideology that determines how they perceive their role and responsibilities.

Thus, ideational realm of irrigation engineers during the colonial period stemmed from events of that period which considered the local community (farmers) as savage others, an entity to be controlled and regulated. Furthermore, at that time the old feudal masculinities (local power holders) and the new modern professional masculinities were on tenterhooks. The clash was essentially due to the fact that modern engineers based their demand for more water power on argument of technocracy and scientific rationality. While, traditional leaders based their water power on history and local knowledge (Zwarteveen, 2008, p. 117, citing Gilmartin 1994, 2003).

Predominant ideas that are embedded in the above discussion of colonial ideology of resource management are: first, irrigation management needs to be done centrally and scientifically - a capability that local population lacked. Second, irrigation engineers were considered torchbearers for

taking forward the scientific rationale for management of resources (i.e. to bring forward the notion of modernity brought forth by colonizers). Thirdly, management of an irrigation system can be done by co-option of local leaders.

Overall, this section elaborated how British colonialism through its idea of maximizing colonial state capital led to non-politicization of irrigation management, as the narrative of management was couched in meaning of scientific control and order, which streamlined rules of irrigation behaviour and proper irrigation practices. Further, pre-existing cleavages (for instance, social hierarchy based on caste, or material relations) in society were reinforced by the state and normalized through various categories like caste, community, and practices like cartography^{xlvi}. The normalization of these social categories led to their politicization. Moreover, colonial policies were beneficial for the colonial government and big farmers (elites in villages). However, they were at the expense of poorer sections of the community and the environment. In addition, the ideational realm of engineers viewed anything organized by farmers as of low value as their perception was of the community as the savage other who used traditional methods of irrigation and were not aware of scientific and technical know-how.

4.2 Ideational realm post-independence in India

Contrasting ideational beliefs for resource management

During the late colonial rule in India, the developmentalist rationale was brought to forefront by the colonizers but it could not overcome the underlying contradictions of the colonial project. Therefore, democracy and development was imprisoned within the structures of the colonial past (Makki, 2004, pp. 156-157). Thus, when India gained independence in 1947 the ethos of economic nationalism was a dominant narrative, as a critique of the colonial rule and to overcome backwardness and poverty that was inflicted due to colonialism (Corbridge & Harris, 2000, p. 56). Developmentalism was the dominant political rationality (political logic of governing) adopted by the Indian state under the reins of the first prime minister Jawaharlal Nehru with focus on modernization and industrialization through a centrist economy (Corbridge & Harris, 2000, p. 56; Kohli, 2001).^{xlvii} The first few decades of development in India are best articulated as an idea embodied in planning, Planning Commission and Nehru himself (Corbridge & Harris, 2000, pp. 31-32). Thus, it is noteworthy that the political rationality (i.e. the ideational belief) followed by the postcolonial state was different from the colonial state, as there were conscious efforts to break away from the colonial past by pursuing policies of economic nationalism with the aim to redistribute benefits. Concomitantly, the dominant paradigm of development after independence connoted nature's endowments with power it entailed and thus

had to be tamed, managed and controlled. For instance, an advertisement for a cement brand in India during those days read 'the river is furious, but the dam will hold' (Parajuli, 1991, p. 179). Thus, it is not surprising that the Nehruvian state employed the route of planned development (command economy) of an industrial society to eliminate poverty, provide social justice, and to create a self-reliant economy (Rudolph & Rudolph, 1987, p. 62).

Interestingly, Gandhi's idea of *gram swaraj* (village republics) was the first vision of decentralization for Independent India which enunciated an alternative ideology of pursuing development which was contrastingly different from the centrist state policies propagated by the Nehruvian model. In fact, post independence the Indian government called E.F Schumacher as a consultant to help plan the development of the country. Schumacher's (1973) ideas of 'small is beautiful' in his book by the same title were in line with Gandhian ideology, however they were not well received by planners of that period. Gandhian ideas were rejected by Nehru who envisaged forming a developmental interventionist state which could be lodestar of economic development (Dhawan, 1990, p. 43; Rudolph & Rudolph, 2001, p. 161). Hence, it is not surprising that post independence the state apparatus continued to overlook the collapse of traditional systems of smaller village tanks and distributaries (Gadgil & Guha, 1995, pp. 20-21).

Furthermore, as a consequence of centrist state policies pursued by the Nehruvian state greater impetus was on embracing technocratic scientific practices of the colonial state for efficient management of resources in order to traverse the path of economic growth and development. For instance, the administrative rationale behind managing forest resources, constructing large-scale irrigation projects to increase agricultural production is a colonial legacy. Prime Minister Nehru in his speech at the industries conference in December 1947, remarked that 'development of big river valley schemes, dams, hydroelectric and thermal power would drive the country forward' (Gol, 1983a, p. 100).^{xlviii} Overall, after adoption of policies for planned development, a major priority for policy makers in India was harnessing country's water resources for irrigation and power in order to achieve self-sufficiency.^{xlix} Nehru stated:

"The key industries should be under the state control, partly because it is dangerous for those key and basic industries to be controlled by the private interests. (...) When a state plans its industrial or other development, planning itself involves a certain measure of control and direction from the state. The idea is to utilize our resource to the best advantage and going ahead with the people concerned" (Gol, 1983b, p. 142).

Nehru envisaged state as the guardian of social and economic interest and rapid harnessing of water resources was the prime goal and the emphasis was on encouraging and expeditiously developing

projects for irrigation, flood control, hydro power generation, etc. and large number of dams and barrages were built. The aim was also to provide self sufficiency to a predominantly (65 per cent) agrarian population (Gol, 2009b, p. 6).

From the above discussion salience of state as chief actor to pursue development becomes evident which was in consonance with the dominant new classical Keynesian developmental discourse of post world war period which posited state intervention as necessary to pursue growth and development (c.f. Pieterse, 2009). In light of this discourse, there was no space in the first few decades after independence to pursue an alternative model of development for instance, bottom up planning. Consequence of this state led interventionist developmental ideology has been what Shah (2011) connotes as 'build-manage-neglect' narrative. The next section elaborates the effect of this narrative on planning, development and viewpoint of actors.

Perception of engineers as harbinger of growth and progress at the national level

Given the focus on irrigation and development, agriculture, the backbone of Indian economy gained emphasis in all Five Year Plans with thrust of investments on large-scale (irrigation) infrastructure projects. Moreover, given the impetus on planning for large-scale development/irrigation projects there was an obvious orientation towards abstract science of hydrology, hydraulics and civil engineering, as was practiced in USA and USSR. The focus was on design of dams and canals, i.e. on high tech engineering. This focus on irrigation engineering as science led to decline in orientation of engineering science towards field level operational issues (Mollinga, 2005, p. 12). The sheer scale with which so many large scale projects were created led to major delay in project completion and commissioning and with subsequent budgetary constraints, a generation of irrigation engineers were isolated from experiences of day-to-day system management (Bottrall, 1992, p. 235). Engineers were thus, raised to the status of statesmen, for instance, the legendary M. Visvesvaraya. For engineers, the high-tech orientation became an accepted professional standard and there were no incentives for the laborious work of field level engineering. The dominant ideational realm of engineers is self explanatory from sentences that they uttered – 'since democracy came, things have become worse' (Mollinga, 2005, p. 17). Furthermore, importance given to engineers at national level becomes lucid from Nehru's speech while addressing the annual meeting of Central Board of Irrigation:

"I know of no other place in the world, which has tremendous power locked up in it as the Himalayas, and the water that comes to the rivers from them. How are we to utilize it? There are many ways. Essentially, it is the job of the engineers to tap this tremendous

reserve of power *for the benefits of the people. (...) The profession and work of an engineer in India is of highest importance and significance" (Gol, 1983b, p. 84 emphasis added).*

The engineers and planners continued to follow an instrumental approach for water management that had a predilection for civil engineering solutions and an affinity to standardize procedures. Thus, the first four decades of independent India witnessed vigorous focus on large-scale project (more than 90 per cent of public investments in agriculture were for large-scale projects). Given, that substantial funds were channelled into making these projects, there was widespread lobbying by engineers, irrigation bureaucrats and contractors who had vested interest in construction of large dams projects (Bottrall, 1992, p. 235). Consequently, engineers/bureaucrats were perceived as harbingers of growth and development.

Self assigned tutelary role of the state

The Indian state inherited from the colonial state a common bureaucratic framework; numerous legislations, use of vocabularies and techniques of nation-state legitimization; a relatively centralized state; a well-functioning civil service; early introduction of elections; and socialization of highest political elites in values of liberal democracy (Kohli, 2001, p. 4; S. Roy, 2007a, p. 27) and the same is embedded in the Indian system and continues to be in use till date. The Nehruvian ideas worked as the congress party was considered the vanguard of the national movement, and had considerable legitimacy and popularity. After independence, Nehru and his supporters in the congress party and the civil service were free to construct a state suitable for a dominant party system and a planned economy with the demise of Gandhi, Sardar Patel, and Subhas Chandra Bose (Rudolph & Rudolph, 2001, p. 161). Nehru was in cognizance of this fact and employed this inherited political capital wisely by bringing on board the rival political class under the larger political umbrella that was congress (Kohli, 2001, pp. 6-7). In that era of 'command politics' Nehru believed and argued that no Supreme Court and no judiciary can stand in judgement over the sovereign will of parliament that represented the will of the entire community (Rudolph & Rudolph, 2001, p. 141). Thus, in the Nehruvian era the Indian state assumed a self-assigned tutelary role as educator of its people under the high modernist society¹. Big infrastructure projects like large dams, city planning like Chandigarh were a result of this high modernist ideology in the Indian context. The high modernist ideology by itself tends to relegate politics, which was true for the Nehruvian state as well. The high modernist ideology draws attention to the ubiquitousness of the Five Year Plans that were followed in India by the Planning Commission and the objectification of progress through a series of preconceived goals - largely material and quantifiable - which were achieved through savings, labour, and investments in the interim (J. Scott,

1998, p. 23). In addition, the most frequently invoked figure of Nehruvian India was that of an 'infantile citizen'^{li}, and his need for state tutelage and protection in order to realize potential of citizenship, itself conceptualized as an infinitely receding horizon rather than an existing bundle of rights' (S. Roy, 2007a, p. 20).

Two points that are salient from the above discussion are political will to pursue development and state structuring to ensure achievement of these goals, for instance by putting faith in planning and the Planning Commission. Furthermore, the above ideas of Nehruvian thinking in context of irrigation management entailed that water ought to remain under the control of the state; and secondly continuing with 'a pragmatist strand, that favoured 'keeping what works well'—in this case the irrigation departments extremely efficient construction and management machine' (Bottrall, 1992, p. 236). Thus, not much emphasis was given to context while taking decisions (Mollinga, 2007, p. 12). With unlimited powers to government and the irrigation department, citizen rights did not gain primacy (despite a democratic constitution), and colonial legacy of irrigation management continued which changed little with respect to surface water development and management, and there were scarcely any rights or recognition for water users or general public (Bottrall, 1992, p. 235).

Moreover, despite the fact that the Indian state continued its focus on large-scale projects (like the British) and adopted rules and regulations^{lii} of the colonial state, there was change in viewpoint and functions of the government. The post-colonial Indian state departed from the colonial state ideology by approaching development from the standpoint of welfare and well-being of its citizens rather than merely being guardians of law and order (Jain & Chaudhuri, 1982, p. 4). Given the focus on economic nationalism, bureaucrats, planners, engineers played an important role in carrying out state functions.

Thus, the programmatic framing of that period resulted in the dominant ideational realm being guided by it and actors (engineers, bureaucrats, planners) worked within this enframing which guided their actions. To elaborate, programmatic framing of that period was enthused with rationalization of British colonial rules and regulations which India inherited from the colonial state. However, notably as discussed in the previous section through the instance of Kudimaramat, spells of British utilitarianism were tempered with ingenuous regard for traditional eminence during the colonial period (Kaviraj, 2010, p. 149). Kaviraj argues that this resulted in creation of surrogate rationality for upper (senior) bureaucracy to maintain social order and this continued post independence as well, though the institutions for governance were fragmented and not institutionalised. To elaborate:

“British policy had followed a practice of studied non-interference in the social institutions of the colony. In the princely states and, in other spheres of political life, the British underwrote the existing styles of pre-capitalist authority. The institutional legacy of colonialism was indeed extremely mixed... The acceptance of the British to the pre-capitalist power structures ensured that structures of irresponsible power existed... The modernist decisions-makers at the level of ministries shared no common language with the village clerk whose ideas of social reasonableness were radically different.” (Kaviraj, 2010, pp. 150, 153, 155)

This impacted the state society relations, and shaped the ideational realm of actors. Notably, the bureaucratic culture was deeply afflicted with two cultures in Indian politics as is evident from Kaviraj’s exposition. First, modernist decision makers (bureaucracy) of Nehruvian era shared no common language with village clerks of the nation. Second, the resistance that centre faced from coalitions of caste and culture at the rural and state level resulted in fragmented institutional building (Kaviraj, 2010, p. 155). Scholars (Kothari, 1970; Sheth, 1982) have elucidated a crucial feature of traditional Indian society, viz. its ability to marginalize the political order. In context of water management (for instance, tank irrigation systems), this aspect of the Indian society has also been observed by scholars (Mosse, 1999; Stein, 1980) who elucidate that it was the wider social relations (social order) of the decentralized segmentary or pre-colonial states rather than the administrative village institutions (political order) that determined how water was managed.

However, post-independence, the modernists were in strength in the realm of policy making, and thus the dominant ideational realm (self assigned tutelary role of the state- statist frame) was influenced by these centrist ideas that gave enormous importance to role of engineers in developmental planning. However, overall there was conflict between logic of political change and logic of social order which resulted in emergence of divergent rationalities as an acceptable belief. The irrigation engineers adopted these centrist ideas that promoted large-scale development, like the British irrigation engineers, and their ideational role and realm were defined by it. Given, this scenario, the earlier efforts to decentralize were ineffective, for instance, the Gandhian idea of *gram swaraj* (village republics) which envisaged communitarian ideology. Although, the political structure of that time did not allow actors’ (bureaucrats) to break away from the dominant idea i.e. centrist state policies that they were operating in. The next sub-section further elucidates the political reasons for why efforts to decentralize failed. The next section also elaborates the motivations of different actors’ and the mechanisms they applied to ensure and/or obstruct change i.e. implementation of decentralization initiatives.

4.2.1 Ineffective efforts to shift from large scale planning to decentralized planning

The first three Five Year Plans (1951-1966) of India eloquently focused on decentralized planning after the Planning Commission was constituted in 1950. The first Five Year Plan (1951-1956) suggested that the planning process in India ought to be broken into national, state, district and community level (PRIA, 2009, p. 4). The Planning Commission for the first time in 1969 issued guidelines for district planning. In 1977, the Planning Commission formed a working group chaired by Prof. M. L. Dantewala to draw guidelines for block level planning (Rao, 1989). This idea was concretized with establishment of the District Development Councils (DDC) that were envisaged to consolidate plans prepared at the village level through a participatory process (PRIA, 2009, p. 4). However, this focus ebbed off in some of the later plans, as the emphasis was not that explicit. The *raison d'être* for the idea of decentralized planning not taking roots was not only due to resistance from local elites, and lack of political will (Kohli, 2001; Rao, 1989), but also because the initial stages of development planning in India favoured centralized decisions at higher levels as discussed in the previous section.ⁱⁱⁱ

Additionally, the idea of decentralized planning that Planning Commission envisaged through its Five Year Plans in its initial years had little enforcement capacity and thus did not find salience at the state level. Nehruvian ideas -and its faith in planning- necessitated that Planning Commission had the wherewithal to ensure/discipline state governments in order to implement planning decisions taken at the national level. However, Planning Commission was bestowed with responsibilities but was not given enforcement authority to ensure implementation of policy ideas like setting up DDCs. Here, the causal link between state structure and quality of policy idea and its implementation is evident. Furthermore, though Planning Commission was responsible for designing plans, it did not have any instruments to implement or monitor these plans for instance, budget, which was under the purview of respective ministries (Chibber, 2006, pp. 162, 168).

To elaborate further on causality of state structuring during this period, the DDCs were aimed to provide a link between the state functionaries and the people by consolidating plans prepared at the village level. Funds were channelled to district without vesting any power with district related to land and water (Misra, Sundaram, & Prakasa Rao, 1974). However, the task of formulation of these councils was ultimately entrusted to state governments who were functioning autonomously and thus did not give any political significance to the formulations made by the Planning Commission (Chibber, 2006, p. 181). Thus, the onus of implementing decentralization was on willing bureaucrats.

(Re)introduction of the idea of farmer participation in irrigation management

The ideology for (irrigation) planning at the national level changed slightly with the end of Nehruvian era with Nehru's death in 1964, when there were calls by political elites as well as bureaucracy to overhaul. During this period, a large section of bureaucracy acknowledged that large surface water schemes were problematic, and there was need to rethink strategy for water management in the country. Thus, a counter idea (against centrist state policy) that started to gain prominence in policy circles was the need to (re)think strategy for water management given the huge socio-economic and environmental costs associated with large-scale water management projects as evident from experiences worldwide (Dhawan, 1990; Patwardhan, 2000; Singh, 2004; WCD, 2000). Consequently, a discussion on merits of small-scale community based natural resource management gained salience (B. Agarwal, 2001; Agrawal & Gibson, 2001; Chambers, 1988; Wade, 1987 inter alia). In this context, Ostrom's (1990) work on common pool resource management need a mention as it established merits of collective action for sustainable management of resources by local communities.

In India, however, the irrigation department (engineers) resisted to any change in thinking on large-scale water management schemes. This is not surprising, as the rent seeking behaviour and the nexus between irrigation engineers, powerful farmers and politicians was well known in policy circles and was also gaining academic inquiry (c.f. Wade, 1982). The irrigation engineers resisted changing, as any shift in focus at national level would have curtailed their resource access and make them accountable. The department during the 1970s and early 1980s alleged that the problem in water management was due to inefficient use of irrigation water by farmers. Thereby arguing that in large surface water schemes, management was an issue below the outlet (Chambers, 1988, p. 86).^{liv} The above discussion makes evident that irrigation engineers were not ready to rethink their outlook towards irrigation management, as it would have also entailed a change in their ideational role of harbingers of growth and progress thereby curtailing their access to resources. Rather the blame was shifted to farmers, to explicate poor achievements in irrigation sector.

To substantiate the above-mentioned proposition further: the second irrigation commission report of 1972 recommended On-Farm Development (OFD), on-farm management and formation of farmer organizations for water management. Additionally in sync with the idea of economic nationalism emphasis was on revisiting and resetting the water rates so that irrigation works do not become a liability for the state exchequer (Parthasarthy, 2008, p. 125). Subsequently, Command Area Development Programme (CADP) was started in 1974 to implement the irrigation commission's recommendations i.e. OFD, farmer organizations and water management (Chambers, 1988, p. 86). However, given the resistance of irrigation engineers, CADP did not tackle the vital issue of system

design and management practice, and focused only on outlet level issues (Bottrall, 1992, p. 237; Chambers, 1988, p. 86). Interestingly, this focus on outlet level was buttressed by international organizations like the World Bank, as it was easier for them to disburse large sums swiftly for infrastructure development. As it was more visible and had tangible results, rather for instance outputs of management funding (Chambers, 2013, p. 153).

Thus, not surprisingly, Command Area Development Authority (CADA) that was set up to implement CADP outlined and identified the problem of major and medium irrigation projects primarily in terms of physical works.^{iv} Additionally Plan reports elucidate emphasis on farmer participation in scientific management of soil and water resources of their area during this period (Pant, 1987, p. 49). Overall, the question of main system management was ignored and focus was solely on construction-oriented approach according to functions enlisted for CADA in the sixth Five Year Plan. Interestingly, in its report the irrigation commission emphasized that CADA's ought to be abolished after *ayacuts* (irrigable area) were fully developed (Chambers, 1988, p. 88). Thus, prevalent policy idea that the irrigation engineers furthered during this time period premised that once *ayacut* development was done, and farmers were disciplined (i.e. the *warabandi* roster enforced) then CADAs could be dissolved, as its functions would no longer be required. The assumption here that farmers are homogenous entity that can be disciplined insinuates colonial hangover.

Similarly, the seventh Five Year Plan (1985-90) noting the increasing gap between irrigation potential created and utilized (refer to Appendix II) underscored farmer participation as an area that required special attention (Pant, 1987, p. 49). Subsequently, there was substantial debate on formation of water user organizations for irrigation management, the principal proponents of this debate were bureaucrats of the irrigation department, academics, and sector experts and international organizations like the World Bank, and the USAID (Satish & Sunder, 1990, p. 1). There are numerous reports, workshop proceedings that discuss the issue of farmer participation in irrigation management, practicing *warabandi* in irrigated agriculture, and several other issues that concern management of public irrigation systems (GIMS, 1987; GoI, 1981; Maloney & Raju, 1991; Sundar, 1990). In policy and programmatic discussions (which becomes evident from papers of senior bureaucrats, representatives from the World Bank, in these workshops and from documents of CAD, national water management programme, etc.) prescriptive model for irrigation management gained prominence and the dominant meta-narrative echoed benefits of initiating Participatory Irrigation Management (PIM). To substantiate:

“Management is the only way of getting the best out of whatever resources, good or small. (...) Warabandi (rotational method with fixation of time and date/day for supply of

water to farmers) is only partial engineering in the conventional sense of the term. It is more a social engineering project. So, technological engineering and social engineering will have to be blended in appropriate portions" (Swaminathan, 1981, p. 5).

Thus, in 1980s, a predominant idea that gained salience was that enforcing *warabandi* could lead to desired change in irrigation management.^{vi} Additionally, the above citation also reflects the dominant narrative of the (post-Nehruvian) period wherein engineers and planners were still in high demand and considered part of an important vocation.

Furthermore, the reasons for discussion on irrigation reform that aims at better irrigation management has had varied perspectives. For instance, the senior bureaucrats argued for financial benefits that would accrue to state exchequer by reducing operating costs of canals by transferring this responsibility to farmer organizations. The bureaucracy argued that this would result in equity in pricing and greater irrigation efficiency (Satish & Sunder, 1990, pp. 2-3). These policy ideas were a sign of neoliberal development ideology that was beginning to emerge in the national policy narrative (discussed in detail in the following sections) with the aim of reducing the financial and management burden of state actors. Another prominent ideology that was emerging was of critiques that were concerned about the role and representation of these farmer organizations. For instance, communitarianism that premised that these organizations would develop as a power base at the grass roots level and therefore provide appropriate checks and balances mechanisms for democratic decentralization. The idea of communitarianism has emerged from the work of common property theorists like Ostrom (1992) who emphasize the role of local institutions and crafting rules for local community cooperate with each other. The literature on community based natural resource management portrays community as one homogenous group which has a common culture (M. Leach, Mearns, & Scoones, 1999).

To sum up, this section discusses events and discussions on farmer participation in 1970s and 1980s at the national level. From the above discussion it is clear that not all actors considered participation of farmers in irrigation management practical. However, the Indian state through its policies was swaying towards this idea, given the financial and managerial concerns that irrigation bureaucracies were mired with. These discussions for including farmers in irrigation management were not solely endogenous. Rather there were few exogenous factors that also influenced and introduced new policy ideas for irrigation management. The next section elucidates the role of international organizations (which are connoted as ideational brokers in this research) for pushing the idea of farmer participation in irrigation management.

Role of international organizations as ideational brokers in introducing the idea of farmer participation in irrigation management

Recognizing the need to increase agricultural production United States Agency for International Development (USAID) proposed to the Indian government a project on irrigation management and training in order to have a more integrated and coordinated approach by all the state government departments initially for period of seven years from 1983-1990. This project was initiated with focus on on-farm management, however, after an internal review between Central Water Commission (CWC) and USAID in 1986, the project's scope was widened to main systems management and the project name changed to Water Resource Management and Training (WRMT) project (Wall, Sundar, Das Gupta, & Elmore, 1992, p. 3). The WRMT project was designed to enhance the institutional capacity of government of India and the select state governments'; to 'plan, design, construct, operate, manage, and maintain efficient and productive irrigation systems; and to conduct river basin planning for water resources development' (ibid., p. vii).^{lvii} The idea behind USAID funding for WRMT project succinctly comes out from the following paragraph of the project completion report that was submitted to USAID by Irrigation Support Project for Asia and the Near East (ISPAN), Arlington:

"By 1980, Indian engineers had sufficient expertise to plan, design, and construct hydraulic structures for storing and conveying water. They did not, however, have all the necessary expertise to plan, design, and manage distribution systems at the outlet level, considering farmers' needs, nor the expertise to develop plans for integrated river basin development. The WRM&T Project sought to enable engineers to become experts in delivering water to farmers' fields and systematically plan development of river basins. It provides an in-service training capability to the state irrigation departments through the Water and Land Management Institutes (WALMIs) and selected agricultural universities and engineering colleges. Likewise, their needs for training in river basin planning are served through the central training unit" (Wall et al., p. vii).

It can be concluded from the about citation that the core idea behind initiating WRMT project was that Indian engineers lacked expertise, to plan, design and manage distribution systems at the outlet level and hence they had to be made experts in delivering water to farmer fields. There is clear focus in the text to enable engineers to move away from 'construction oriented mind-set' to 'management mind-set'.^{lviii} Overall, salience of exogenous aspects for changing perceptions becomes evident. In the colonial era the British raised the engineering profession to its helm, a tradition the Indian state continued with. However, in the 1980s, the international organizations through their funding programmes were pushing a move away from the mind-set of colonial era where irrigation engineer's work was mostly restricted to construction aspects to more managerial concerns. This was a consequence of the neoliberal development approach that was starting to gain salience in the

international arena and envisaged greater role of market forces in management of resources. Initiation and pursuance of this approach by international organizations in the late 1980s explains the insistence to change in focus from construction to management for engineers through their funding programmes, as this ideology envisaged lesser role of the state. Notably, the other prominent ideology community based natural resource management also gained prominence in response to the poor results from large-scale infrastructure projects like big dams and envisaged greater role of community.

Furthermore, during 1980s, in several states WALMI/Indian Management Training Institutes (IMTI) were established through technical and financial collaboration between the concerned states' and USAID. These WALMIs/IMTIs were set up with the objective that they will help irrigation departments to train irrigation system managers and improve the efficiency of water use in canal command areas (Gol, 2002a, p. 49). Also in the late-1980s, the World Bank supported National Water Management Programme (NWMP) was initiated to maintain system facilities and improve water management in order to improve efficiency (Vaidyanathan, 2006, p. 25).^{lix} NWMP emphasized farmer participation in irrigation management and through this programme efforts were made to build capacities of engineers and change their behavioural pattern for better irrigation management. NWMP was initiated as the gap between irrigation potential created and utilized (refer to Appendix II) was alarming and was recognized that irrigation bureaucracy was bleeding with the diagnosis that part of the problem was technical but there were problems also because of socio-organizational issues that were at stake both within the farmer community and the irrigation department. Further, elite discussion in policy circles recognized the problems with irrigation sector in India was due to mismatch between field realities i.e. centres of decision-making – bureaucrats/engineers – were far removed from field realities. Moreover, water for irrigation is a sensitive political issue and NWMP was not able to address the core problems that the irrigation sector faced and the irrigation department was oblivious to change (See Berkoff, 1990, p. 26; Bottrall, 1992, p. 237; IDP, 1993, pp. 5-6). Evaluation studies of NWMP projects like Bhadrak reservoir in Karnataka elucidate that projects undertaken under NWMP were not able to achieve/implement the idea of farmer participation in irrigation management, though there were some positive signs in terms of water distribution along the distributaries and increase in agricultural output (Sakthivadivel et al., 1999). By the World Bank's own admission, this project failed to achieve its objective in terms of increasing the incremental irrigated area, greater cropping intensity, etc. The Bank's evaluation report elucidates that there was little awareness amongst state level bureaucrats for better water management. Though short term training programmes were conducted, but they had little impact on project design or implementation (World Bank, 1997, p. vi). As a future course of action, the Bank came out with

several recommendations viz. first, the need for equity in irrigation by ensuring volumetric water supply. Second, the Bank pushed for the idea of high-level farmer participation (mostly nominal) in irrigation management to change the status quo, thus, advocating for not only technical change but also social change. Third, the Bank argued for strengthening capabilities of irrigation department staff, and the need for institutional restructuring to provide emphasis and staff resources to these activities (World Bank, 1997, pp. vii-viii).

Interestingly around this time, (1980s), the Philippines model (discussed in chapter two) influenced the way irrigation reforms were undertaken in India. This reform process was promoted by Ford Foundation, which in turn supported few NGOs [Society for Promoting Participative Ecosystem Management, Samaj Parivartan Kendra] in the state of Maharashtra, and Gujarat for undertaking pilot experiments (Mollinga & Bolding, 2004b, p. 293). Under the Ford Foundation programme, few piecemeal efforts were made by NGOs in western India in the state of Gujarat and Maharashtra to explore, motivate, and organize farmers of irrigation systems into user groups for water management (Narain, 2008). Based on experience from these pilot experiments undertaken by NGOs there was considerable interest shown by senior bureaucrats for formation of water user organizations.

To sum it, from the above discussion it is evident that CADP is the earliest attempt to initiate irrigation sector reforms for participatory irrigation management by the post-colonial state in 1970s and 1980s to improve water use efficiency and increase irrigation potential by organizing farmers at the outlet level (Thomas & Ballabh, 2008). Thereafter, emphasis in the policy narrative for farmer participation continued to increase, what merits attention here, is that the 1987 national water policy puts emphasis on farmer participation in management of irrigation water and rationalization of water charges; seek assistance of voluntary agencies to educate farmers in efficient water use and management (Gol, 1987). So, by the late 1980s the essence of participation and farmer management was seeping in as strong ideas in policy language and was also reflected through various programmes that were initiated like CADP, watershed management.

Furthermore, the structural imperatives provided by the colonial state in form of rules, regulations, etc. provided the bureaucracy legitimacy to continue their old way of functioning. These structural imperatives –lack of devolution of power to districts (for instance, DDCs), structural characteristics of development cooperation which focused on micro and/or macro level (for instance WRMT and NWMP project resulted in perpetuation of bipolar structure due to strong counter force against decentralization by a section of bureaucrats/engineers as discussed in the previous sections. The bipolar structure has been explicated by Mollinga (2005) building on Kaviraj (1997) as centralist state

dealing with villages, and there is nothing in between, which is explicated as 'state-village dichotomy'. The centre/state (in the state-village dichotomy) relate to a centralistic state organization, and the water bureaucracy (ministry and department of water resources) that is populated by civil engineers who aim to make the water resource sector efficient. The state-village dichotomy has led to conundrum in the management of water resources, especially at the village level. Management of water resources, for instance, drinking water, irrigation, and watershed management is the responsibility of various ministries at the national and sub-national level. Duplication and diffusion of roles and responsibilities is observed while managing water resources, as several ministries (and departments) -irrigation, agriculture, environment and forests, rural development, urban development, public health engineering- are responsible for one or more aspects of water governance. More often than not, these ministries (and departments) operate in the same geographical area and lack of synergies between these departments results in sub-optimal utilization of scarce resources, leading to creation of lop-sided water policies and schemes and also creating confusion at the receiver's end, (farmer in a village, households in town/ city) (Singh & Dasgupta, 2008). Perpetuation of this bipolar structure has resulted in lesser focus on the intermediate level, which has remained a vacuum in context of water resource management.

This section also elucidated how the international organizations through their funding -structural element of development cooperation- for various programmes introduced the idea of farmer involvement in irrigation management as a solution to maladies that the irrigation sector was facing. Appendix III elucidates the accelerating investment and decelerating irrigation benefits at the national level. Moreover, the international organizations also brought into forefront the issue of capacity building of irrigation staff to ensure not only technical change but also social change. To initiate/foster this change, organizations like Ford Foundation also included NGOs and other experts in the discussion process, and thus widened the expanse of the debate of designing institutions for irrigation management. The irrigation reforms that were needed from the state during this period were to initiate more state intervention to ensure that the functionaries of the state (the irrigation bureaucracy) would fall in line, however, instead in the 1990s, the Indian state decided to change its intervention strategy from tighter intervention to lesser intervention with adoption of the tenets of neoliberalism; details of which are discussed in next section.

4.3 Ideational realm post-nineties in India

Tenets of neoliberalism

A change in policy process can be observed since the 1990s after actors' responding to historical challenges turned the balance of power. To elaborate post 1989, there has been shift in ideology for governance by the Indian state that is a shift from centralized planned economy to a regulatory state that envisaged economic decentralization and more independent and competitive federal state (Rudolph & Rudolph, 2001, p. 161). It is noteworthy that India has a federal structure of governance and with liberalization there has been greater autonomy for states, as earlier the state government's had little scope to digress from the path being chartered by the central government due to tied^{lx} nature of funding from the central government (Kennedy 2004:32). This kind of influence was possible in the pre-liberalization period as public investment was the main determinant of growth, and at the sub-national level, states were dependent on central government funding. This changed with liberalization and there has been greater autonomy for the state governments' to formulate and implement their own economic policies. With this shift in decision-making there has also been a shift in accountability from central government to state government (and to private actors) due to the new apparatuses that have been activated by pursuance of neoliberal policies. Some of the instruments that have been activated in order to follow neoliberal policies are privatization of services, deregulation, disinvestment of the public sector which have been pursued with the rationale that the public utilities (for instance, irrigation bureaucracies) the way they were are not profit making.

Comparing this with the post-independence time period, the project of Nehru had an essence of national integration, which is in sharp contrast to the present Indian state, which highlights a disintegrating trend at the national level (and an integrating trend at the global level).^{lxi} In the Nehruvian state, the focus was on modernization and industrialization through a centrist economy and now the focus is on globalization, and at the sub-national level states in India are competing with each other to lure capital. Thus there is a clear shift in state ideology and 1990s is considered a watershed decade for restructuring, divestment and privatization in India as the liberalization process formally began and continues to dominate the development agenda till date. The electricity sector was one of the first to be privatized and in the past few years the focus has been on privatization and institutionalization of regulatory authority for water resource sector.^{lxii} Given, the change in state belief, there has been greater interest for farmer involvement in irrigation management, as the tenets of neoliberalism favour a leaner state organization. Recognizing the

changed political context, the next section evaluates the trajectory and implications of the discussion on farmer participation in irrigation management at the national level post 1990s.

Continued emphasis on farmer participation in irrigation management in the 1990s

Series of workshops streamlined the path for what ought to be the desired path for irrigation management and focus of discussion at the national level shifted from 'participation' to 'management' of infrastructure and several states in India took up PIM as an approach to manage water resources (Maloney & Raju, 1994; Nikku, 2006). To elaborate, two workshops that were organized by Administrative Staff College of Hyderabad are of particular interest here and need mention. The first one was organized in July 1987 with the title 'people's participation in Irrigation management'. The second workshop was organized in January 1992, with the title 'farmers management in Indian irrigation systems'. Conceptual advances were made in second workshop in January 1992 when the word participation was dropped and replaced by the word management (Maloney & Raju, 1994, p. 29). During these conference's one of the rationale for promoting PIM was to reduce pressure on government finances, improve performance of irrigated agriculture, and to ensure sustainability of irrigation systems (Gol, 1995). At the same time period, Vaidyanathan Committee report on 'pricing of irrigation water' in 1992 also recommended involvement of user groups in management of irrigation systems. In fact the Vaidyanathan Committee report solicited by the Planning Commission recommended involvement of farmers not only at the minor level, but also envisaged gradual increase in role of farmers at the distributaries and main systems level (Gol, 1992b, p. xi). The committee recognized and recommended for decentralization at not only the micro level but also at the intermediate level. However, it needs to be borne in mind here, that the Indian state is extremely bureaucratic which at times results in incoherent policies (Chibber, 2006, p. 7); so even though issues may be recognized to be of importance, action on the same is not taken immediately.

Subsequent to these discussions at national the level, the ministry made changes in the mandate of CADP in 1996 in light of the emerging trends on problems that the irrigation sector faced. Thus, components like farmers participation, reclamation of waterlogged areas were included in CADP to make this programme more beneficial for farmers. The idea that was being pushed at the policy level (through committee recommendations and conferences) was to look at farmers (water users) as managers and an equal stakeholder in water management. It was recognized that there were differences between farmers (water users) and irrigation agency officials/engineers, and it was paramount to bridge this gap to bring in a paradigm shift and involve farmers in irrigation

management (L. K. Joshi, 1997, p. 18). It is noteworthy that this line of thinking also resonates with community based natural resource management approach that gained salience in 1980s-1990s and elaborated the limits of state led top-down ideology of development. This thinking was discussed in chapter two as crafting of institutions as propounded by Ostrom (1992) who based on successful evidence of small scale resource management argued for crafting rules for institution building and resource management at the micro level. Communitarianism by instituting participation of local communities for resource management has been propounded by majority of international organizations/institutions through development cooperation funding. For instance, Ford foundation, International Development Research Centre (IDRC), World Bank, Swedish international Development Assistance (SIDA), Canadian International Development Assistance (CIDA) (Agrawal & Gibson, 1999, p. 631) have promoted this idea for resource management through their funding. Although, it is noteworthy that idea of communitarianism is premised on greater democratization and voice for the publics. Similarly, decentralization and devolution also envisage greater involvement of communities however, the idea is essentially premised on tenets of neoliberalism (McCarthy, 2005). Thus, making evident that idea of involving local community in natural resource management has had competing claims, which are driven and structured by different ideologies. Having discussed the origins of communitarian ideology briefly the following paragraphs discuss how the narrative on farmer participation in irrigation management was influenced at the national level by these competing claims for involvement of farmers in resource management.

The thrust for irrigation reforms came from international organizations like the World Bank by promoting discussion on the subject of farmer participation in irrigation management through their publications, reports, and the conferences that sponsored/organized. In 1991, the World Bank came out with irrigation sector review of India and concluded that the sector is suffering from poor planning and financial management on the one hand and inadequate water management and maintenance on the other; the two in tandem have led to mediocre performance (L. K. Joshi, 1997, p. 12). The sector review argued for restricting the role of public sector to fostering private sector investment and greater role for farmers in operation and management of farm level courses, channels and drains (micro networks), and also in actual construction (World Bank, 1991a, p. ii). The irrigation sector review argued for modelling success by 'designing institutions' - by reducing the size of irrigation personnel and greater reliance on consultants (for instance, foreign as well as local retired engineers); increased role for farmers and women; staff training, improving institutional performance by creating greater accountability and transparency, etc. (World Bank, 1991a, pp. 56-57, 60). Moreover, the Bank reflecting/learning from the implementation of its previous programme (NWMP) in the next generation of irrigation projects (water resources consolidation project or sector

reforms) incorporated a major focus on improving productivity of irrigation systems through modernization linked with farmer involvement (World Bank, 1997).

During the same period, in 1995 and 1997 two conferences were held on PIM in Delhi. The first one was held from 19-23 June 1995. This conference focused on discussing overview of PIM, its legal aspects, national issues on PIM, and most importantly preparation of states for preparing action plan on PIM. The second workshop cemented the 'idea of PIM as a new paradigm in irrigation management' by making it title of the conference (Gol, 1995, 1997). The World Bank was one of the sponsor's for these two national workshops, and hence played an active role in pushing for designing institutions from the top as it had propounded this idea earlier through its irrigation sector review report. Post these two workshops, the Ministry of Water Resources played a promotional role in implementation of PIM in the country by providing incentives to state governments in form of technical advice, financial assistance, and providing training/ study tour etc. (Gol, 2002a, pp. 35-36).

Given the discussion that was happening in policy circle at the national level in the 1990s, it is not surprising that review of CADP implementation for eighth (1992-97), and ninth (1998-2002) Five Year Plan period evinced the need to restructure the programme. The CADP review cited restructuring as an essential need given numerous constraints, for instance, deficiencies in the irrigation system about the outlet affecting the water supply for farmers; low priority given by state governments to extension and training activities; non-revision of costs norms for activities. Taking note of this review, Government of India gave huge importance to PIM from ninth Five Year Plan (1998-2002) onwards, and constituted a working group on PIM which recommended that farmers involvement in management of canal irrigation works should be a priority (Raju & Gulati, 2008, p. 93). Subsequently, in February 1998, IndiaNPIM (hereafter INPIM) was established by the Ministry of Water Resources, Government of India as a non-profit organization and registered under the Societies Registration Act of 1860. INPIM was involved in organizing several international and national events on PIM. INPIM organized two all India conventions of presidents of water user associations in 2002 and 2007, and have been involved in training and capacity building, advocacy work (INPIM, 1998). However, INPIM did not have any permanent source of funding, and this has restricted their work in recent years (Interview, Secretary, INPIM December 27, 2011).

On 5 February 2003 the twelfth national conference of water resources and irrigation ministers was held at New Delhi, in which the prime minister released the vision document for integrated water resources development and management for the country. Additionally, one of the key recommendations of the conference was that CADP ought to be restructured and the programme need to be pursued with vigour across the country (Gol, 2003, p. 13).^{lxiii} Interestingly, the need for

restructuring CADP had first been made during the eight plan report, and a decade later, it was still being pushed for as an idea that will facilitate better management of irrigation resources. Despite calls from various quarters (international organizations, experts, academics, policy makers, Planning Commission) there was hesitation from the bureaucracy to implement change. Its only when in August 2003, when PIM was identified as a 'thrust area' for the country and its progress was started to be monitored by the Prime Minister's office (Gol, 2012d, pp. 1-2, 9) that the bureaucracy responded to the CADP review and the national conference recommendations. Subsequently, during the tenth plan (2002-07) period the programme was restructured to Command Area Development and Water Management Programme (CADWM) in order to make it more comprehensive and beneficial to farmers (Gol, 1996, 2009a, 2012a). The tenth plan also envisaged 'decentralizing water distribution, collection of water charges and maintenance of local irrigation channels to local water distribution co-operatives' (Gol, 2002c, p. 129). Command area development was thus restructured in April 2004 based on the report of the working group of the Planning Commission on CADP (Gol, 2003, p. 31). After restructuring, funding for CADP from the central government to the state governments has had a renewed thrust on PIM. It was mandated that the funding under CADP would be allocated only when:

"i) Central assistance to states has been linked to enactment of PIM legislation. Till this is done, alternative arrangements have to be in place for formation and empowerment of water users associations (WUAs); ii) WUAs have to be in position before project components are taken up so that beneficiaries are involved in the implementing of programme activities, since inception; iii) A minimum 10 per cent beneficiary contribution has been made mandatory in the construction of field channels, reclamation of waterlogged areas and renovation of minor irrigation tanks to ensure increased beneficiary participation and thereby improve the quality of works" (Gol, 2006a, p. 19).

Additionally, under CADP provision was made for one time functional grant to farmer organizations at the rate of INR 500 per hectare, the burden of which is shared by the central government and the state governments equally, and INR 50 per hectare is the contribution made by farmer organizations. The restructuring was undertaken with the aim that the subsequent operation and maintenance responsibility, and collection of water rates would be the responsibility of farmers (Gol, 2002a, pp. 34-35). Consequently, the central government developed an indicative roadmap for initiating PIM for states that have not yet enacted the PIM Act (Gol, 2012d, pp. 9-10).^{lxiv} The above description is also an instance of salience of structural elements in terms of tied funding that the central government used by linking central assistance for water resource management with enactment of PIM legislation by state governments in order to shape the ideational landscape at the state level.

Furthermore, the Ministry of Water Resources acknowledges that as a result of various conferences/seminars organized by them (and restructuring of CADP), there has been an increased consciousness and greater incentive for state governments to actively involve farmers in management of irrigation systems (GoI, 2011a, p. 22). Overall, the impetus for reforms for state government has been external it has come from either the central government or through donor funding (Raju & Gulati, 2008, p. 93); though the state of Madhya Pradesh is an exception in this regard, as the impetus for reform was more due to internal factors, and this is discussed at length in chapter five.

Apart from the CADP, emphasis on PIM at the national level is evident from policy directives of 2000 onwards. To elaborate, the second national water policy was introduced in 2002, despite not much work done to bring the first policy of 1987 into effect (Iyer, 2003, pp. 53-55). The National Water Policy 2002 focused on greater involvement of stakeholders or beneficiaries, and private sector in management of water resources from the project planning stage. Furthermore, the policy envisaged transfer of management of water resources to user groups eventually.^{lxv} There is clear influence of tenets of neoliberalism in the national policy, given the greater focus on private sector for management of water resources from the planning stage. However, like the 1987 policy, the 2002 policy has not resulted in any change on the ground. The National Water Policy 2012 reiterates the concern at the national level of widening gap between the irrigation potential created and utilized (GoI, 2012c, p. 2).^{lxvi} Specifically on WUAs, the draft policy enunciates more statutory power to them to collect and retain a portion of water charges, manage the volumetric quantum of water allotted to them, and maintain the distribution system under its jurisdiction.^{lxvii} The policy re-emphasizes like the previous national policy of 2002 the importance of involving the local planning bodies like water user associations in planning of the projects (ibid., pp. 6-7). The 2012 policy also enunciates:

“Water resources projects and services should be managed with community participation. Wherever the state governments or local governing bodies so decide, the private sector can be encouraged to become a service provider in public private partnership model to meet agreed terms of service delivery, including penalties for failure” (GoI, 2012c, p. 10).

Overall, the three national water policies are indicative of a gradual shift in thinking, or at least the language that the state would like to use, as words like participation, management, greater role for *gram panchayats* (which essentially means decentralization) find space in the policy documents. The latest policy is also subtly encouraging the role of private sector, by adopting public-private partnership model gradually in few urban areas with respect to water distribution. Though the Ministry of Water Resources has been formulating new policies there has not been any successful

implementation, as was explicated in the previous section with the change in ideational belief of the state there has been lesser role control of the state compared to the Nehruvian era.

Furthermore, the bipolar structure of governance has also led to dilemmas for state to undertake developmental task without establishing appropriate relations of authority across policy agencies (Chibber, 2002, p. 953), which was also explicated in the previous section as conundrum in management of water resources. In this research I argue that the impediment to bridging the bipolar structure is actors' ideational realm, which I discuss in depth through the empirical case of Madhya Pradesh following chapters. Moreover, it becomes evident that there are no appropriate mechanisms to take forward the policy decisions taken at the centre to various state governments.

To sum this section, a prominent idea that pushed for decentralization in rural development in the 1990s was based on the belief that decentralization will solve existing maladies of irrigation management. To wit, if communities are given clear rights to access and use of natural resources, they would be better managers of these resources than state bureaucracies, as their livelihoods are dependent on it (Mosse, 1999, p. 304). The Ministry of Water Resource's website is rather lucid and points out that the central government has been trying to pursue state governments since 1985 to promote participatory irrigation management, for which the central government also came out with a roadmap outlining the action points and milestones that ought to be considered (GoI, 2012d, p. 10). However, it is only in the 1990s that the notion of self-governance and with that the notion of participatory management of irrigation system gained momentum in India. Thus, with shift in focus there has been also shift in the idea of what is appropriate for irrigation management, i.e. a gradual shift from the idea of management of irrigation system which was undertake through CADP, NWMP, etc. to the idea of participation at the policy level. Furthermore, By Ministry's own admission, these conferences have facilitated changing the narrative and outlook towards farmers' participation in irrigation management at the national level. Moreover, the idea of farmer participation in irrigation management has received extensive support through policy legislations, and the narrative that was created at the national level by donors, government functionaries, and NGOs and research organizations.

4.4 Summing up

This chapter analyzes various ideational variables that resulted in emergence and perpetuation of certain idea of irrigation management in India. Furthermore, this chapter also elucidates how the ideational paradigm shaped irrigation management in India, and how different political questions determined the type of policy that gained salience for irrigation management in a particular period.

Table 4.1 provides a snapshot of ideational variables and their influence on irrigation management, as discussed in this chapter.

Table 4. 1: Ideas, ideology and ideational realm for irrigation management in India

Dimensions	Colonial era	Post-Colonial era	Post 1990s
Ideational variables: Ideology, beliefs	Practice of colonialism as an ideology led to perpetuation of legislations for resource management	- State's belief that for democratization centrist state policies are best; thrust on economic nationalism through legislations (salience of structural rulings - Gandhian idea of <i>gram swaraj</i> as an alternative did not stick in policy realm	Community participation in natural resource management (irrigation management) initiated through two competing claims: i) state's belief that tenets of neoliberalism will solve existing problem. ii) farmer participation couched in the idea of communitarianism which envisaged greater democratization.
Idea	Scientific ordering of society and natural resources for maximization of colonial state's profit/capital	Welfare state/ developmental paradigm to pursue growth	Farmer participation through decentralization will solve existing maladies of (irrigation) bureaucracy
Ideational Realm	Traditional versus modern/technocratic/scientific rationality	- Self-assigned tutelary role of the developmental interventionist state - Technocratic scientific rationality	Participatory management & good governance (lesser role of the state is envisaged) as a consequence of neoliberal and communitarian values
Consequence of ideational realm on irrigation management and on imagery of key actors	- Salience of civil engineering & heightened role of engineers (British & Indian) - Native population as savage other - Focus on irrigation 'Build-manage-generate-surpluses-maintain'	- Engineers considered harbinger of growth & development - Imagery of infantile citizen - Focus on irrigation 'Build-rebuild-neglect'	- Weak state - Call for farmer participation in irrigation management - Decentralization pursued with renewed vigour at national and state level in policy narrative - Focus on irrigation 'Build-rebuild-neglect'

* Note: all the above elements were formed, defined, and sustained by structural or cultural ideation by perpetuation of certain state structures through rulings/legislations, donor cooperation, and idea of how community ought to manage resources as discussed in this chapter.

During the colonial era, the British policies were initiated with an aim to accumulate capital from the Indian colony, which determined the political logic for governing the colony. The British also instituted salience of engineers for irrigation management, and this continued post independence in India as well and engineers were connoted as harbinger of growth and development in the Nehruvian Era, an era that was defined by centrist state policies that connoted large dams as temples of modern India. Thus, in the first two decades after independence the belief of Nehru in centrist state policy pushed the development planner to give more attention to large-scale infrastructure projects over Gandhian ideas of *gram swaraj* (village republic) or decentralization. Pursuance of this belief by the Indian state led to viewing the problem of gap in irrigation potential and financial woes (refer to Appendix II and III) as performance problem that could be solved by focusing on technical improvements in the late 1960s and 1970s through OFD programmes. Thus few senior bureaucrats promoted this alternative idea of farmer involvement through various reports and programme based on their experiential learning. However, this idea did not stick/gain salience with most of the bureaucracy and they initiated a counter movement against decentralization, which resulted in bipolar structure for governance. Further, post 1990s there has been sustained interest at the national level for decentralization, with the Indian state pursuing the tenets of neoliberalism. During this period, international organizations played a crucial role in pushing the idea of designing institutions for irrigation management along with experts, academics, and select bureaucrats can be categorized as an epistemic community (as articulated by Haas, 1992) that took forward the idea of decentralizing irrigation management.

Further, this chapter also demonstrates that ideas do have causal powers and can gain prominence if actors take cognizance of it. In this context, recognizing the agenda setters is critical, as all actors may not be able to garner same constituency. For instance, the working of Planning Commission discussed in this chapter elucidates that members of Planning Commission were not able to exercise their idea of state planning in its formative years' as the ministries at the state level were fragmented and not keen on taking forward this idea. Furthermore, the causality of ideas in policymaking is also evident from ineffective efforts made for decentralizing irrigation management over the years as sizeable section of irrigation bureaucracies was against it. This chapter also discusses how new policy ideas have been brought into the policy realm to improve irrigation management, however, new policy idea has not gained constituency among all actors. Operationalizing new ideas (PIM) for desired policy change has been an issue in the Indian context, despite a strong narrative at the national level for PIM. The chapter discussed ineffective efforts to decentralize have resulted in bipolar governance structure and multiple organizations that are responsible for management of resources, which has resulted in conundrum in management of resource. Second, actors'

(bureaucracy/engineers at the national level) pursuing various ideas and ideologies for resource management has been a major roadblock as they have been reluctant to embrace change. Further, strategies that actors' (for instance, irrigation engineers putting the blame on farmers to explicate poor irrigation management) embrace to influence or resist change are important; as they evince the processes that actor's adopt and is also a reflection of their ideational realm that they subscribe to. This chapter also discussed the trajectory of PIM and special focus this idea has received at national level through various programmes and policy that have channelled resources and necessitated that states comes up with its own legal and regulatory framework to initiate PIM if they want to avail funding.

This chapter demonstrates the political question behind certain policy decisions (for instance, influence of donor organizations, or motivations of bureaucrats). Thereby elucidating that the type of idea that gains salience is contingent on the interaction between actors, structure and/or institutions; and is reflective of whose voice gains most resonance. There has been ideational change in state's thinking as elucidated in Table 4.1. However, the ideational change in actors' viewpoint has been slow, as demonstrated in this chapter, which has resulted in bipolar structure for governance. Berman (2013, p. 227) argues that ideational scholars 'attribute ideational change to either broad structural changes for instance in terms of change in legislation and exogenous shocks or local political contexts and local political actors rather than to an interaction between them'. To avoid this folly, and to have a holistic understanding of ideational change (or its lack thereof) with respect PIM the next chapter turns to understanding how the idea of participation gained salience at the sub national level through the case of state of Madhya Pradesh.

Additionally, from the discussion in this chapter it is evident that the current focus of legislations on water resource management has led to bipolar governance structure and intermediate level is a vacuum. The structural elements like type of legislation, structural feature of development cooperation and funding imperatives proposed by central government were discussed in this chapter that have reinforced the bipolar structure. However, the cultural elements that reinforce ideational paradigm were latent in this chapter and the same are discussed in subsequent empirical chapters.

Furthermore, having set the historical and ideational landscape that have shaped irrigation management at the national level in India, the next chapter outlines the conditions that led to adoption of PIM in Madhya Pradesh in the year 2000. Specifically, chapter five discusses how the idea of farmer participation in irrigation management in Madhya Pradesh has been rooted in different ideologies (interventionist state planning and development, Neoliberal) to pursue irrigation management. Madhya Pradesh was selected as the case study site, as it has a long history of

decentralization and thus, it was assumed that it would provide a dynamic field to study ideational change, as already pointed out in chapter one. Chapter five also focuses on discussing events, conditions (political environment) and actors' that influenced the ideational paradigm in Madhya Pradesh with respect to participation of farmers in irrigation management in light of the happenings at the national level.

^{xxx} Several scholars (Laube, 2007; Naz & Saravanan, 2010; inter alia) have used actor oriented perspective to elucidate problems of resource management. Though the notion of 'ideational realm' has not been used to discuss irrigation management earlier.

^{xxxii} Until the advent of British in India village institutions were responsible for management of drinking water, and irrigation systems.

^{xxxiii} Thomas Malthus in 1798 in his now widely critiqued 'an essay on the principle of population' argues that it is primarily irrational reproductive behaviour of poor people that results in their material deprivation; however, Malthus ignored the role of economic systems in creation of poverty. Similarly, neo Malthusians argue that population control can solve all problems (Ross, 1998).

^{xxxiv} An approach used by historians to study history. In this context Ferdinand Braudel's work is quite intriguing who employs four notions of time: *l'histoire événementielle* (short term- events), *l'histoire conjoncturelle* (medium term what he calls conjunctures), the *longue durée* and *l'histoire structurelle* and these categorizations provide a tool to undertake enquiry of social history in quantitative terms (Braudel, 1980, p. 30). Braudel explains capitalism as part of the *longue durée* wherein despite 'reversals and ruptures' the shared characteristics have persisted over a long time span; thus highlighting that history needs to be understood not only in terms of events but in its entire complexity, in its relation to the complex surroundings (ibid., pp. 33, 38).

^{xxxv} Through his work on Odisha in eastern India, D'Souza argues that 'the quest to control water and dominate rivers in British India is not simply a narrative about engineering triumph or failure but must be disclosed or revealed for the many distinct calculations of colonial capitalism and specific imperatives that drove the empire' (D'Souza, 2006, p. 2). Thus, to understand the present better, one needs to understand the relationship between 'capitalism and nature', and if capitalism relates to nature through a specific path (D'Souza, 2002, p. 1261). There is a need to understand the (ecological) rupture brought in by colonial capitalism that led to large-scale environmental transformation and conflicts in India (D'Souza, 2006, p. 2).

^{xxxvi} Skaria's reference to cathexis is not merely 'natural as imagined'. Rather he argues that it is foregrounded in particularly charged imaginings of nature. He posits that 'the imaginings of nature was not just one more set of social practices. It was rather a crucial dimension of anxiety and uncertainty involved in the constitution of the modern' (Skaria, 2003, p. 266).

^{xxxvii} Similarly, three sets of 'peasant ecotypes' (mixed wet, dry grain, and dry wet) are identified by Stein (1985) in context of explicating cultivation regimes in medieval south India. These ecotypes -are used as signifier to explain the system of resource management in the Pallava and Chola period- possessed social and political entailments that were derived from the commanding material base of each ecotype (Stein, 1985, p. 57). This system of resource management was based not only on the local cultural and religious context, but also was influenced by politico-military relations as well as exchange relations, as the three ecotypes were linked to it (ibid., p. 58). Thus, in southern India, the means and processes of production were vested with chiefs in local farming communities under whose mastery there was sustained and successful development of irrigation potentials in the southern peninsula (Stein, 1985, p. 85).

^{xxxviii} Furthermore, they were involved in assessing canal rates, resolving local differences over distribution of water, and noting unauthorized irrigation and violations in canal rules (ibid., pp. 1135-1136)

^{xxxix} For instance, the problem of sedimentation in the northern canal system was researched and discussed as a managerial issue. In many of these cases, management issues rendered into scientific discussion among engineers who were of British as well as Indian origin (Mollinga, 2005, p. 12).

^{xl} However, situation was slightly different in south. The renovation of the Grand *Anicut* on river Cauvery is considered a major success in irrigation development. After renovation of the Grand *Anicut*, the distribution

and allocation of water in this system was done by local management organizations (Sengupta, 1985, p. 1924). Though, this was not explicitly mentioned, the local management organizations were able to do so, because at the time of development of the renovation plan for the Grand *Anicut*, Major Arthur Cotton had unknowingly also preserved the indigenous method of management. Thus, the Grand *Anicut* project did not face much management difficulty, as the Madras engineers had restricted their role only to repair work, and not concerned themselves with distribution and allocation of water (Sengupta, 1985, p. 1924).

^{xli} *Kudimaramat* is an exemplary instance, of how the idea of community involvement in irrigation management originated in the backdrop of organizational problems that tank systems in southern India presented to an increasingly centralized public works bureaucracy during the second half of the nineteenth century (Mosse, 1999, p. 313). However, *Kudimaramat* can also be viewed as a case of enforcing participation during the colonial period (Maloney, Mehta, & Raju, 1991, p. 12), as there was too much state control in enforcing *Kudimaramat*, thus can be categorized as a case of designing institutions from the top. Thus, though the system of *Kudimaramat* failed, it standardized manner of irrigation practices as categorized by efficiency of irrigation engineers.

^{xlii} For instance, in Garhwal and Kumaon Himalayan region, community had usufruct rights over all natural resources (including water) till the advent of British (DCAP, 2003). The village institutions were responsible for creation and management of drinking water systems (*naulas* and *baoris* (step wells)), traditional irrigation systems like *guls* (water channels) and *gharats* (water mill). This situation changed after the colonizers established sovereign rights over these territories in 1917 (M. D. Kumar, 2005). 'Dying wisdom...' a survey on traditional and pre-British water harvesting systems by Centre of Science and Environment, New Delhi, provides an exhaustive account of these pre-colonial traditional structures (See A. Agarwal & Narain, 1997b).

^{xliii} For instance, in the Garhwal and Kumaon Himalaya (now in the state of Uttarakhand) three major projects were launched to institute commodification viz. commercial production of wheat and sugarcane, cultivation of tea and construction of Ganges canal (Agrawal & Sivaramakrishnan, 2000, p. 35).

^{xliv} 'The importance for the colonial power of forcing colonized societies into an encompassing structure of order that was continuous 'forming unity or whole whose parts were in mechanical and geometric co-ordination' (Gilmartin, 1995, p. 212).

^{xlv} For instance, D'Souza (2006) through his work on Odisha argues that the practice of flood control was employed by the British to establish them in the Odisha delta. Given that British had a political project, there functioning was deeply embedded in social, economic and political calculations of capitalism and colonialism. Flood control was used as rubric to organize systems of land revenue, institute private property and shape the region's hydrology with physical infrastructure such as embankments, canal networks and the Hirakud dam.

^{xlvi} Prabhakar and Gadgil (1995) through their case study of Nilgiri hills in Southern India elucidate how maps were markers of ecological change and categorized agricultural landscape.

^{xlvii} Furthermore, the nationalist project of the Nehruvian state had a distinct middle class orientation (Klingensmith, 2003).

^{xlviii} An often cited quote of Nehru is his projection of large dam projects as temples (secular) of modern civilization, on completion of the Bhakra Nangal Project in Punjab (A. Roy, 1999).

^{xlix} The Nehruvian state also pursued with great rigour the schema of river valley schemes on the lines of Tennessee Valley Authority (TVA) in the United States, arguably to solve the food problem and to provide power for industrial growth (D'Souza, 2006, p. 202). This was in consonance with the international happenings, as after the second world war, several of the world's modernizing states initiated gargantuan dam building programmes to transform environment and economies (Klingensmith, 2003, p. 123). The United State's was the dominant actor in the international arena after the world war and many of the decolonized countries adopted the American engineering approach. Not surprising, the Indian state was also influenced by the American approach for large-scale irrigation development, although the eastern European and USSR's approach on this subject also influenced its policies (Mollinga, 2005, p. 12). One of the instances of such projects in India is the Damodar Valley Corporation Project though it failed to achieve its goals despite assistance from the TVA officials in terms of training and other support. The DVC was to be the model for river basin organization in India. However, it did not fulfil its envisaged role and ended up being a power generation company and had little role in water management (Briscoe & Malik, 2006, p. 73). Despite failures such as Damodar Valley Project, independent India's water strategy has essentially been a continuation and intensification of the multi purpose river valley development paradigm for industrializing river control (D'Souza, 2003, p. 3785). Other large dam projects which merit a mention in this context are the Bhakra Nangal Project in Himachal Pradesh, the Hirakud dam in Orissa and the Saradar Sarovar Project in Madhya Pradesh.

¹ A defining feature of high modernism is that it envisions not only transformation in people's material

environment but also in improving human nature, the intent being the limitless ambition to transform nature to suit man's purposes (J. Scott, 1998).

^{li} Chatterjee has problematized this imagery and argues that the modernizers in the process of turning the subaltern subjects into national citizens encountered resistances from the political society. However, in the process of resisting the modernizing project the subaltern classes also embarked on a path of internal transformation (2004, p. 51).

^{lii} Most act and policies of the Indian state are based on the colonial policies, for instance the Land Acquisition Act of 1894.

^{liiii} Several national level committees findings since the 1950s also outline that *panchayati raj* has not taken ground due to unwillingness of the states to devolve substantive power, a resistant bureaucracy and the power of local elites (Johnson, 2003, p. 16).

^{liv} To substantiate, one of the evaluation reports of major irrigation project from 1965 observed problem of access of water for tail end farmers. The report posits this problem due to carelessness of farming practices in upper reaches which results in wastage of water and shortage of water for farmers downstream (Gol, 1965, p. 3).

^{lv} This becomes evident from functions that were enlisted for CADAs to perform in the sixth Five Year Plan (1980-1985): 'Modernization and efficient operation of the irrigation system as well as development of main drainage system beyond the farmers blocks of 40 hectares; construction of field channels: land shaping and land levelling; construction of field drains; lining of field channels/water courses; exploitation of ground water through tube-wells, open wells etc.; adoption and enforcement of a suitable cropping pattern; enforcement of a suitable roster system of distribution of water among farmers (warabandi) (...)' (Gol, 1980).

^{lvi} It becomes evident from Dr. Swaminathan's (who was member of Planning Commission at that time) presidential address at conference on *warabandi* in April 1980 that it is subsumed that peoples' role/function in management of irrigation system can be engineered. Furthermore, alluding to terms like social engineering - which don't really mean anything - is indicative of an engineering mind-set wherein it is assumed that human beings can be engineered to achieve desired results. Usage of such terms is also indicative of a blueprint approach that a conventional planner understands (Mollinga & Bolding, 2004a, p. 4).

^{lvii} The project cost to USAID was \$51 million (\$41 million in grant funds, \$10 million in loan funds), which was to be repaid over 40 years. The Indian government provided a rupee equivalent of \$28.2 million (Wall et al., 1992, p. viii).

^{lviii} It becomes evident that during this period, the thinking at the international level (at least in organizations like the USAID) was pondering over engineers taking on the role of management and distributing water as advocated by Norman Uphoff through a study commissioned for USAID (Uphoff, 1986a), as also discussed earlier in chapter two. Hence it is not surprising that in the 1990s, the idea that gained salience in irrigation management was that farmers ought to be enabled in order to become experts in irrigation management.

^{lix} The first phase of the NWMP was from June 1987 to March 1995. The project was carried out in 80 schemes in 11 states in India (Sakthivadivel, Thiruvengadachari, & Amarasinghe, 1999, p. 1). NWMP was designed to provide additional resources to the state governments to improve water management by upgrading select irrigation schemes. The basic objective of NWMP was to reduce the gap between irrigation potential created and achieved and to improve agricultural productivity and thereby increase incomes of farmers in the command area through a more reliable, predictable and equitable irrigation service (Gol, 2000, p. 5; World Bank, 1997). Through NWMP efforts were made to increase accountability of irrigation engineers by involving farmers, and local/state officials in developing and approving operational plans for diagnostic analysis (Berkoff, 1990, p. 26).

^{lx} The tied nature of funding can be explained in terms of selection of beneficiaries for targeted schemes, spending priorities, etc. (Kennedy, 2004, p. 32).

^{lxi} Adapted from McMichael (2000, p. 169).

^{lxii} Thrust of water sector restructuring till now has led to 'reforms of the legal and regulatory framework, corporatization of public sector water utilities, increased farmers participation in irrigation management, increased water rates, privatization of urban water supply, regulation of ground water, and a policy shift to accommodate private interests' (IELRC, 2006, p. 1).

^{lxiii} Further, during this conference it was emphasized, 'participatory irrigation management is central to the sustainable management of irrigation systems, as also for improving their efficiency'. Recognising this, the implementation of the CADP is closely linked with participatory irrigation management, wherein beneficiaries are required to bear a small part of the overall costs (Gol, 2003, p. 13)

^{lxiv} This roadmap elaborates six steps that ought to be undertaken, viz.: i) drafting of legislation on PIM and its

approval by the assembly at the earliest; ii) preparation of rules and regulations within two months of notification of the Act; iii) organising state wide awareness camps for irrigation/water resource department functionaries and farmers; iv) forming water user associations and handing them over the requisite responsibilities mentioned in the Act; v) covering a target of 25 per cent of the area under major and medium irrigation project under the tenth plan period; and lastly forming appropriate state level committees that will communicate with the central government the progress on PIM (GoI, 2012d, pp. 9-10) .

^{lxv} There is clear emphasis in the second national water policy on PIM, wherein it is emphasized 'management of water resources for diverse uses should incorporate a participatory approach: by involving not only the various governmental agencies but also the users' and other stakeholders, in an effective and decisive manner, in various aspects of planning, design, development and management of the water resources schemes. Necessary legal and institutional changes should be made at various levels for the purpose, duly ensuring appropriate role for women. Water Users Association (WUA) and local bodies such as municipalities and *Gram-Panchayats* should particularly be involved in the operation, maintenance and management of water infrastructures/facilities at appropriate levels progressively, with a view to eventually transfer the management of such facilities to the user groups/ local bodies' (GoI, 2002b, p. 5).

^{lxvi} The policy re-emphasizes that water is a common pool resource held by the state, in fact, the policy enunciates taking corrective measures, like modifying the existing irrigation and groundwater acts, to ensure that the dominant perception that groundwater is a individual property is reconsidered/changed (GoI, 2012c, p. 3); and thereby taking groundwater out of the private space into the state's domain.

^{lxvii} WUAs -according to the draft policy- will also have the freedom to fix rates subject to floor rates determined by water regulatory authority, that the policy necessitates should be established in each state (GoI, 2012c, p. 3).

5 Ideas and Ideologies influence Irrigation Reform Process in Madhya Pradesh

Chapter four discusses how the ideational paradigm for irrigation management in India has been shaped by historical and structural elements, which has resulted in bipolar structure for water resource management. This also resulted in lack of development of intermediate level governance structures. This chapter discusses how the ideational paradigm on farmer participation in irrigation management gained constituency with different actors in the state (policy makers, bureaucrats, and experts), which consequently led to enactment of the Participatory Irrigation Management (PIM) Act in Madhya Pradesh in 1999. This chapter also maps actors at state level and their role in influencing the decentralization process using the analytical framework discussed in chapter three. Moreover, this chapter critically evaluates how ideational paradigm for irrigation management in Madhya Pradesh has been shaped due to interaction between key actors (bureaucrats and politicians) and influenced by existing and structural and cultural factors during a particular period. The focus is also on elaborating perpetuation of certain meaning of participation, management through various government and development cooperation funding and rootedness of these ideas in ideologies like interventionist developmental state, neoliberalism, and community based natural resource management (communitarianism for short) has shaped the ideational realm of actors and thus influenced irrigation reform process in Madhya Pradesh.

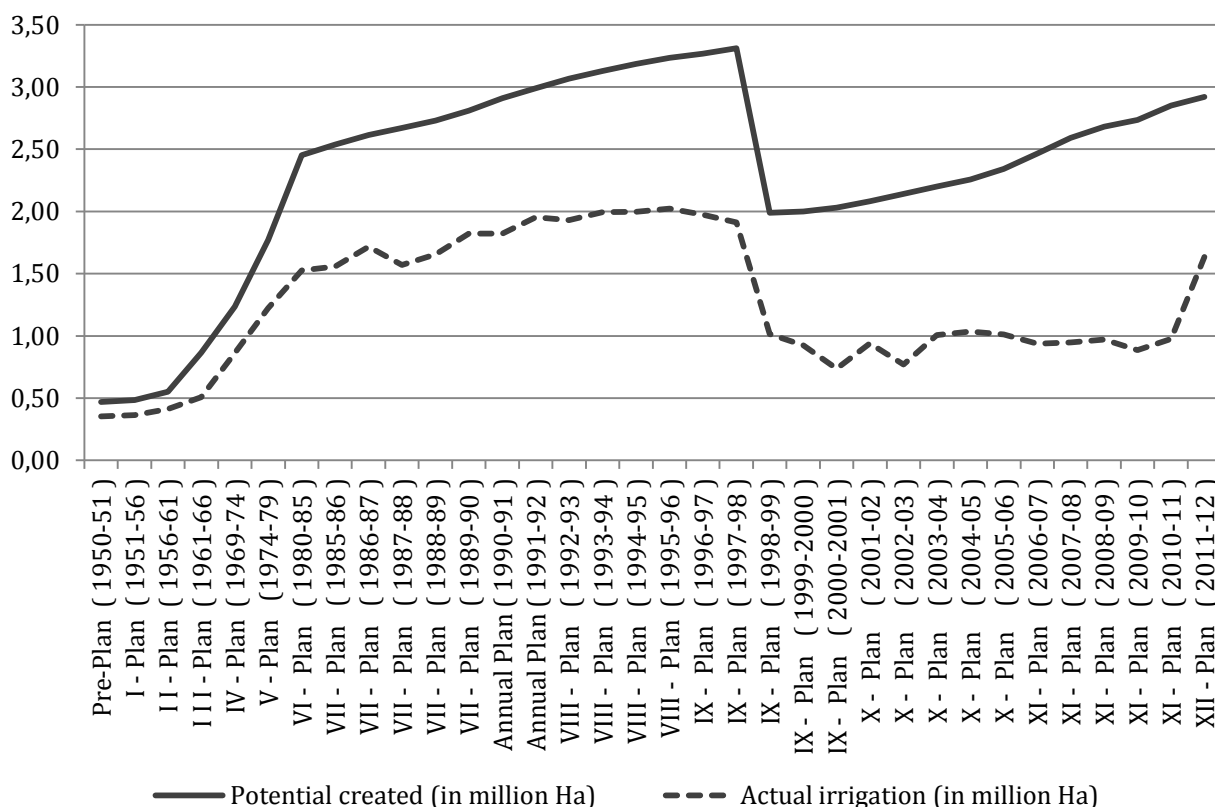
5.1 Irrigation development and management in Madhya Pradesh

Madhya Pradesh has a long history of irrigation, and development of irrigation sources started in the first century A.D. by Chandel Kings in Khajuraho area. In more recent past, the history of irrigation development in Madhya Pradesh cannot be discussed without mention of construction of Wainganga Canal System in Balaghat in 1923 and the Pagara Dam in Gwalior district in 1927. Similarly, irrigation tank systems were constructed in Palamati in Bhopal and Moorum *Nalla* in Balaghat in mid 1930s. Most of these projects were created for the purpose of protective irrigation with an irrigation potential of 0.06 million hectare in the state (GoMP, 2012c).

Post independence, the thrust on developing irrigation potential in the state was in consonance with the central government's policy (discussed narrative elaborated in chapter four). Additionally, in accord with the national happenings the gap between irrigation potential developed and utilized has also been a cause of concern for the state government (Figure 5.1).^{lxviii} This figure lucidly illustrates that the gap between irrigation potential developed and utilized has not decreased over the years,

and this has been a persistent cause of concern for policy makers. According to 2011-12 state plan figures, the total irrigation potential created is 2.92 million hectares, while the irrigation potential utilized is 1.63 million hectares (GoMP, 2012c).

Figure 5. 1: Irrigation potential developed and utilized in Madhya Pradesh



#Note: Data for IX plan (1998-99) onwards is for divided Madhya Pradesh as Chhattisgarh was carved as a separate state. Hence, there is a drastic fall in developed irrigation potential 1998-99 onwards.

Source: Design by author based on data from GoMP (2012c)

Underutilization of irrigation potential is a problem not only in Madhya Pradesh, but also at (and still is) the national level, as most of the Indian states are more or less underachievers in this context (as is evident from all India figures presented in Appendix I). Some of the reasons for underutilization of irrigation potential that were being discussed at the national level viz. poor system management, lack of funds for undertaking operation and maintenance, poor involvement of farmers in irrigation management, thus, also found resonance in Madhya Pradesh in the 1970s and 1980s (Pandey, 2006, p. 3; WALMI, 1988). Thus, institutional and system deficiencies were identified as the reason behind poor irrigation management in Madhya Pradesh as well in accord with national narrative which perpetuated an interventionist developmental model of planning. Consequently, institutional and

legal reforms were initiated in Madhya Pradesh to decentralize, to wit, involve farmers in irrigation management. The first effort in this direction was undertaken in 1973, when the state government instituted a State Water Resource Utilization Committee. This committee was concerned with initiating an integrated approach to project management for optimum utilization of water resources across various departments and is recognized as first generation reform that resulted in formation of an apex water institution in the state (World Bank, 2004, p. 20).^{lxix}

In Madhya Pradesh, Command Area Development Programme (CADP) was initiated on September 9, 1974 in consonance with national happenings^{lxx} that recognized the problem with agricultural/irrigation systems was lack of development and management below the outlet. In the beginning, CADP was under Department of Agriculture, however, to give more thrust to the programme an independent *Ayacut* (irrigable area) Department^{lxxi} was constituted on September 23, 1980 in Madhya Pradesh (GoMP, 2011a).

Structural influence of development cooperation funding in shaping irrigation reforms in Madhya Pradesh is noteworthy. In the 1970s United States Agency for International Development (USAID) promoted the idea of farmer participation in irrigation management, as discussed in chapter four. This idea was rooted in the ideology of that time period of donor organizations, which were beginning to promote the idea of community participation in management (McCarthy, 2005) and envisaged lesser role for the state to remedy the financial crisis the irrigation bureaucracies were facing worldwide. Consequently, USAID's Water Resource Management and Training (WRMT) project through its funding advocated the idea that farmers ought to be enabled in order to become 'experts' in irrigation management, so that they can take over management work from the irrigation bureaucracy. USAID through WRMT project supported 17 projects in 11 states as part of its Action Research Programme. Madhya Pradesh was one of the states that benefitted from USAID funding^{lxxii} (LBII & WAPCOS, 1992, p. 2).

Designing institutions for irrigation management

Madhya Pradesh was included under the WRM&T project in June 1984 and consequently, Madhya Pradesh Water and Land Management Institute (hereafter WALMI) was constituted and registered in August 1985 with the objective of increasing effectiveness of irrigation projects.^{lxxiii} One of the foremost objectives of setting up WALMI was to have an organization that can promote scientific knowledge and integrate theoretical and applied knowledge related to irrigation management and thereby 'promote active participation by farmers in irrigation management for optimal utilization/production through social organizations' (WALMI, 1985, p. 3). The thrust on farmer

participation for irrigation management in WALMIs objective is not surprising as the action research component of the WRMT project envisaged improving quality of training at WALMIs and also to improve operation and management of irrigation systems (LBII & WAPCOS, 1992, p. 1). Thus, WALMI's statement of objectives reflects that as well. To elaborate, the main objectives of the Action Research Programme of WRMT project were: (i) to improve the water/irrigation use efficiency; (ii) to increase crop productivity by improving system operation and management; (iii) to develop field training material for faculty and trainees; (iv) to improve participation of farmers in system management; and (v) to motivate farmers to organize (ibid.). The last two objectives mentioned above, are of particular interest to this research as they envisaged motivating farmers to organize for better participation in system management. Through this Action Research Programme, the idea that farmer participation will improve irrigation management and thus they ought to participate was incorporated and an era of designing institutions based on advice of international organizations like USAID began in Madhya Pradesh. Not surprisingly, the Action Research Programme was considered the most important activity of WALMI, Bhopal in the initial period and to facilitate it's working as a separate unit -Action Research Unit- was established within WALMI. An interdisciplinary research team comprising faculty members and officers from irrigation department, agriculture department among others was formed to carry out this exploratory programme in two projects in the state, viz. Halali project (which was later renamed as SAS Project, which is also the case study for this research) and Ghorapacchar project (WALMI, 1991a, p. 1).^{lxxiv}

Furthermore, taking cue from the field experiences that were being undertaken during this time, a rough draft for constitution of farmer organizations was prepared by few progressive officials of the Irrigation Department during that time, informs a senior official of Water Resources Department (WRD), Bhopal (Interview, December 16, 2011). Moreover, building on this momentum of designing institutions, in 1985 the state government constituted a special committee for farmers' involvement in the operation and maintenance of irrigation projects. This committee was formed under Madhya Pradesh minor project with financial support from USAID and comprised chief engineer, two superintending engineers and director of WALMI (who was also chief engineer in erstwhile Irrigation Department) chaired the committee. The committee had representatives only from the bureaucracy and USAID. The committee's main objective was to examine the ways and means to improve farmer involvement in minor irrigation projects and to implement training activities in support of farmer organizations. The committee envisaged:

"(...) We must know how best to organize farmers. The cost of irrigation continues to increase. The government can't do farmers work. This study is to provide direction to the government as how to build farmers organizations at all level of irrigation systems

having good linkages with the irrigation department” (WALMI, 1991b, p. 3, emphasis added).

Three points need to be highlighted from the above quotation. First, there was willingness on part of state to address the issue of ailing irrigation infrastructure and bleeding irrigation bureaucracies. Second, during this period, the best way forward was considered by state bureaucracy and representatives of international organizations to organize farmers from the top, i.e. top-down designing of institutions. Third, it becomes apparent that during this time period the focus was on decentralization at the local/micro level, and not any attention was given to intermediate level issues.

Furthermore, the political motivation for instituting farmer participation or designing institutions was partially endogenous (bleeding irrigation bureaucracy and not being able to utilize irrigation potential developed) and partially due to exogenous factors (tied-funding from international organizations like USAID) which resulted in greater impetus to idea of role of farmers (participation) in irrigation management. Thus, it is not surprising that the special committee’s findings argued for constitution of farmer organizations based on a diagnostic and perception survey results undertaken in Ratapani project. Implementation of these recommendations of the committee was facile for the state bureaucracy as Madhya Pradesh already had the Madhya Pradesh Irrigation Act 1931 in place where a section of the Irrigation Act was devoted to constitution of *sinchai/irrigation panchayats*^{lxv}. The salient features of Irrigation Act and Irrigation Rules 1974 (relevant for this research) are discussed in Appendix IV. The Madhya Pradesh Irrigation Act 1931 was considered revolutionary for its time, as it was the only Act that envisaged *sinchai panchayats* for water distribution and management before any other state in India. Consequently, first generation farmer organizations (i.e. *sinchai panchayats*) for irrigation management were constituted in the state for the first time in the late 1980s and few years later as part of the Action Research Programme of USAID, outlet committees were formed in select project sites for better irrigation management. However, these first generation farmer organizations did not achieve their desired objectives, and lay defunct. The reasons for these are manifold, requiring in-depth elaboration, and are thus discussed separately in chapter seven. However, what can be succinctly put here is that the idea of constituting and involving farmer organization in irrigation management did not lose sheen with two key actors’ –bureaucracy and political office bearers- after these first-generation farmer organizations lay defunct in the state. This becomes evident from reinvigorated efforts made by these two prominent actors in the mid-1990s and early-2000 for constitution of second-generation farmer organizations, which is discussed in the next section.

Overall, the idea of farmer involvement in irrigation management that was pondered upon and discussed at the national level was implemented in the state, through either CADP funding and/or through other donor interventions. The ideational paradigm for farmer involvement in irrigation management at the state level was shaped by exogenous and endogenous factors. To elaborate, exogenous factors in this context are role of international organizations and the central government in promoting farmer participation in irrigation management; whilst, the endogenous factors refers to initiatives taken by the state actors themselves. Both the exogenous and endogenous factors were influenced by the prevalent state ideology for instance developmentalism in post-independence time and post 1980s there has been greater influence of neoliberal and/or communitarian ideology as was also elaborated in chapter four.

Moreover, from the above discussion it can be asserted that the ideational paradigm for irrigation management was shaped mostly by (state) structural directives which informed the interaction (experiences) that actors within the bureaucracy had with existing state organizations like the irrigation department or by constituting WALMI as an additional organization to undertake capacity building of farmer organizations. As there was a recognition that the irrigation bureaucracy was bleeding, i.e. the cost of irrigation was rising, and at the state level, at least in high level committees there was this perception that the state cannot undertake farmers work, i.e. management of irrigation water.

5.2 Participatory Irrigation Management in Madhya Pradesh

Discussion for forming farmer organizations or involving farmers in irrigation management had been on going in Madhya Pradesh since 1980s in the bureaucratic circles as is evident from the above discussion. In early 1990s, decentralization initiative received a renewed thrust in Madhya Pradesh under Digvijay Singh the then Chief Minister of the State belonging to congress party. After the central government passed the 73rd and 74th Amendment to the Constitution of India in 1993 for constitution of *panchayats* (lowest tier of governance) in India which was a step to devolve functions, and power from macro to micro level in order to reduce the role of the state. Thereafter, the Madhya Pradesh government took lead in India to enact relevant legislations to strengthen its commitment to decentralization and to cover lacunae in the existing laws in Madhya Pradesh. Consequently the *panchayat* elections were held in the state in 1994. The political willingness to decentralize becomes evident from Digvijay Singh's commitment and initiatives. Moreover, the urgency with which decentralization initiatives were implemented by the state government in the 1990s can be explained using the concept of 'mimetic isomorphism' propounded by Di Maggio and

Powell (1983:66) who argue that ‘organizations compete not just for resources and customers but also for political power and institutional legitimacy’. Given that congress party government was in power in the state and at the national level the Digvijay Singh initiated several legislative measures like Madhya Pradesh *Panchayati Raj Awam Gram Swaraj Adhiniyam* and District Planning Committees Act to initiate decentralization measures in Madhya Pradesh in order to ensure institutional legitimacy to this idea of top-down decentralization propounded by the central government. As a consequence of this decentralization drive, 65 farmers organizations (*Krishak Samitis*)^{lxxvi} were constituted on pilot basis under Madhya Pradesh Cooperative Society Act in 1994-95 to involve farmers in irrigation management; the funding for which was provided by the World Bank under National Water Management Programme (NWMP), apprised a senior official of Water Resources Department (WRD) in Bhopal (Interview, December 16, 2011).

Thus, on one hand there was political willingness to decentralize at the state level; on the other hand there was urgency to hand over irrigation management to farmers as well in the bureaucratic circles. To recall the discussion in chapter four, poor irrigation potential utilization^{lxxvii} and thus an urgency to lessen this gap has been consistently voiced at the national level, which is evident from various Government of India reports as well (GoI, 1992b, 1996, 2001b, 2011a). Further, at the national level as demonstrated in chapter four, experts argued that for sustainable irrigation management there is greater need for participation/commitment/involvement of farmers in management and distribution of irrigation water, which was not happening in states at that time (GoI, 1995; L. K. Joshi, 1997, p. 12; Parthasarthy, 2008, p. 125; WAPCOS, 1997). The bureaucratic discussions in Madhya Pradesh is not that different, as was discussed in the earlier sub section, few piecemeal efforts were made to devise ways to have greater involvement of farmers in irrigation management. These efforts were in accord with the national narrative on irrigation management and shaped ideational paradigm –i.e. the irrigation bureaucracy are bleeding and the farmers need to be involved- for irrigation management in Madhya Pradesh through not only various central government or donor funding like CADP, NWMP, and USAID but also by introducing the bureaucrats of Bhopal to the idea of participatory irrigation management through various conferences, workshops that were organized on the subject - details of which were discussed in chapter four (c.f. GIMS, 1987; GoI, 1981, 1995; IDP, 1993; Maloney et al., 1991; Maloney & Raju, 1991; Sundar, 1990).

Reflecting on the process of enactment of PIM Act, a senior official in WRD apprised that Digvijay Singh’s government provided policy environment conducive for constitution of PIM Act. The chief minister set up a committee of senior bureaucrats from Irrigation Department (later renamed WRD), all line departments and academics to develop a strategy for initiating PIM in the state. Thereafter,

the senior bureaucracy acted as agenda setters for initiating discussion on PIM within WRD (Interview, June 6, 2011). The state level bureaucracy (hereafter senior bureaucracy) was keen on taking up this idea given poor irrigation potential utilization in the state. Senior bureaucrats cited system deficiencies as a reason for poor underutilization of irrigation potential in the state apart from deferred system maintenance, lack of funds to meet operation and maintenance cost and lack of involvement of farmers in irrigation management (Interview, June 6, 2011; Pandey, 2006). This perspective has however, been critiqued by Suhardiman and Mollinga (2012) who posit that fixation for deferred maintenance has been a core element of international donor policy though it is not in sync with farmers and irrigation agency staff perceptions.

Nevertheless, cost cutting measures, top-down pressure (in terms of tied-funding by central government as discussed in previous section) to implement and imitate the institutional framework propounded by the central government played a key role in shaping the ideational framework that led to adoption of PIM in the state. Additionally, pursuance of 'mimetic isomorphism' to adopt PIM in Madhya Pradesh becomes salient from interviews with WRD officials who apprised that they studied the PIM Act of Andhra Pradesh (enacted in 1997), and also visited Gujarat, Maharashtra and Andhra Pradesh to study different models of PIM being tried. Additionally, experiences of farmer organizations in Mexico and Philippines were keenly studied in order to explore/learn from experiences of other countries (Interview, June 7, 2011). From, the discussion in the empirical chapters it will become evident that enthusiasm for PIM was a just a strategic move of WRD to source new funding for command area development in the state. Given that it was tied funding, it came with the idea of implementing participation, i.e. specific vocabularies as necessary. Thus, the bureaucracy interpreted and implemented participation minimally in the state (see chapter eight to ten).

So, there was not only political willingness to initiate PIM but also curiosity and certain degree of willingness within senior bureaucracy at the state level to explore new models of farmer managed irrigation systems that was being implemented in Andhra Pradesh (and was being discussed at the centre). One of the faculties of WALMI who was part of one of the sub committee's that drafted the PIM Act in Madhya Pradesh posits:

"Andhra Pradesh was doing some basic study on PIM; suddenly we got news Andhra Pradesh enacted the Act. The Irrigation Department here in Bhopal thought Andhra Pradesh has done it, so why not we. That is why we went to Andhra Pradesh (...) we had sent some senior officers there, who studied the Andhra Pradesh Act and found (realized) that it is easier to adopt entire Act rather than experimenting something on our own.

So, this state has taken an abrupt decision to go for the model that Andhra Pradesh has implemented. They (referring to WRD officials) made some amendments in Act suitable to Madhya Pradesh” (Interview, August 30, 2011).

The above citation makes evident that while drafting the Act the senior bureaucracy did not give adequate attention to context specificity. Rather once the chief minister showed inclination to decentralize and ordered setting up a committee for initiating PIM, the senior bureaucracy implemented this directive without incorporating context specific changes. Thus, it becomes evident that the policy translation from national to state level was undertaken without bearing in mind the local specificities. To elaborate, Chief Minister Digvijay Singh had initiated the reform process to institute greater democratization through decentralization. However, it needs to be noted here that the interest to decentralize was not only financial. Rather this was an attempt to widen the voter base of Congress party by including lower castes -Other Backward Castes (OBC), Scheduled Caste (SC), Scheduled Tribe (ST)- in its fold in the wake of the politics of Mandal Commission (Jaffrelot, 2008). Jaffrelot posits that this move of Digvijay Singh was informed by the logic of clientelism. Another aspect is pointed out by Manor (2009) who argues that the main reason to decentralize was utilitarian rather than ideological as it provided greater developmental outcomes and aimed at redistribution and taking away power from the village chieftains (Also see Behar, 2003; Johnson, Deshingkar, & Start, 2003).

Furthermore, a senior WRD official noted that PIM legislation was not enacted due to international funding pressure in Madhya Pradesh, which is in contrast to Andhra Pradesh where PIM was a donor driven process (Interview, June 7, 2011). Although, this viewpoint for reforms in Andhra Pradesh has been confuted by scholars (Mooij, 2007; Nikku, 2006) who have argued that that the then Chief Minister of Andhra Pradesh, Chandra Babu Naidu, post liberalization of the Indian economy was interested in big reform programme in order to consolidate his rural voter base and hence, irrigation sector was top priority. Thus the Andhra Pradesh government mobilised international funding to support its reform programme. Coming back to reform process in Madhya Pradesh, the senior WRD official apprised that that between 1997-98 the state government made efforts to strengthen and garner political will at all levels by organizing consultations with farmers of command area, *panchayats* and Members of Legislative Assembly (MLA) on this subject with concluding agreement that farmers involvement in operation and maintenance is the only option to improve irrigation management in the state. Consequently, the draft bill was constituted in 1999 taking due consideration of all participants of the consultative process (ibid.). It is noteworthy, however, that Non-Government Organizations (NGO) were not involved in this consultative process which is contrast to Andhra Pradesh where NGOs were involved in the consultation process (See Nikku,

2006). There are two reasons for NGOs, or civil society of Madhya Pradesh as Manor (2009) puts it, for not being part of the consultative process. First, the chief minister had little interaction with civil society within the state. Second, the civil society raised inconvenient demands (Manor, 2009, p. 9).

Another sub-committee member of the drafting committee reveals that senior bureaucrats and experts held the key to formulating the Act, and consultations did not have much role in its design. This is not surprising given the hierarchical bureaucratic structure; lower level officials (junior bureaucracy) are not known to question or suggest changes to their reporting authority. Although, the committee did recognize that sharing of power between farmers and engineers could be a problem. Moreover, within the department there were reservations about this model where greater role for farmers was envisaged (Interview, November 5, 2011), according to institutional design. Prior to formulation of the Act the committee also discussed financial sharing of irrigation revenue (about 30-50 per cent) with WUAs. However, the finance department had reservations about sharing the irrigation revenue, which comes to the state exchequer and thus WUAs were not given financial autonomy in the Act (Interview, November 5, 2011). In the above discussion, committee's recognition that sharing of power could be a problem acknowledges the prevalent hierarchy and reluctance to share power between two key actors –junior bureaucracy and farmers- at the local level. Additionally, as previously discussed in chapter four, in the seventies and eighties the problems in the irrigation systems were attributed below outlet which led to what scholars (Mollinga, Meinen-Dick, & Merrey, 2007) have connoted as 'blame the farmer train the farmer' approach and 'organise the farmer reduce the burden' approach as social engineering solutions to resolve maladies of the irrigation system i.e. designing farmer organization. However, as critical scholars (Wade & Chambers, 1980) have demonstrated that the problem has been the blind spot i.e. main system management. The crucial issue to discuss is why despite known problems with this approach, bureaucrats and donors were still advocating it in policy circles.

The above discussion sheds some light on this subject, to wit, it becomes evident from the material presented above, that the process of formulation of PIM Act was top-down and is an instance of policy translation idea adopted without giving attention to context specificity. From ideational perspective it is clear, that participation of actors (farmers, junior bureaucracy) in formulation of the Act was limited. However, all relevant state departments/organizations like Agriculture, Finance, Water and Land Management Institute, Bhopal were part of the consultative process. Mostly senior bureaucrats were involved in this process and they worked within their organizational mandate for instance the irrigation department, who was not keen on sharing responsibilities (or revenue) with farmer organizations as a consequence of that would have been lesser power for them. The role of

junior bureaucracy who experience and implement policy legislations is important to understand, although was overlooked while formulating policy (c.f. Lipsky, 2010). Additionally, token consultative participation (c.f. B. Agarwal, 2001, p. 1624) was undertaken with farmers, *panchayats*, etc. wherein their opinion on farmer organization was solicited, though with no power to influence decision-making of the committee.

Overall, participation and discussion was restricted to select senior officials who were appointed to be part of the committee. The committee prepared a draft bill, which was discussed in the state legislative assembly and subsequently 'Madhya Pradesh *Sinchai Prabandhan Mein Krishkon ki Bhagidari Adhiniyam 1999*' (hereafter, PIM Act) was passed in July 1999. The Act came into effect from September 1999 and with its enactment passed on management of irrigation networks to farmer organizations -delineated on hydraulic basis- to improve system condition (GoMP, 1999). From the above discussion, the coalitional and bargaining relation (See Kaviraj, 2010, pp. 107-109) between two key actors which fall under the programmatic frame according to Campbell's (2004) formulation, viz. bureaucrats and politicians become evident.

Some of the salient features of PIM Act are elaborated in Box 5.1.

Box 5. 1: Salient features of Madhya Pradesh PIM Act

According to the Madhya Pradesh PIM Act, Water User Associations (WUAs) are to be delineated on a hydraulic basis in the command area. The canal deputy collector (the district collector) divides a water users' area into Territorial Constituencies (TC) of not less than four and more than ten wards. A WUA comprises following members:

" (...) All the water users who are land holders in the water users' area. An amendment to Act was made in 2005 that entitled and recognized wives of the land titleholders also as part of the WUA. Additionally, women were given the right to vote as well during WUA elections.

In situations where both owner and tenant are landholders in respect of the same land, the tenant is considered part of the WUA.

All other water users' in a water users' area.

Three ex-officio members one of *amin* (accountant/ person responsible for revenue collection) cadre and one of sub engineer cadre from WRD who will act as coordinator between the government departments and farmers association and the third from the Agriculture Department or *Ayacut* Department who will act as Advisor" (GoMP, 1999, pp. 10-11).

The above members also constitute the general body of the WUA. The general body meetings of a WUA are to be held at least twice every year before the *kharif* and *rabi* season. Each WUA has a management committee according to the Act, which consists of a president, and member from each of the territorial constituencies of the water users' area. Further, the act necessitates co-option of a women member in the management committee if the management committee does not have any women member. The Act entrusts the management committee with all powers and expects it to perform function of the WUA. The list of functions

that WUAs are supposed to undertake is exhaustive, viz.

“To prepare and implement a *warabandi* schedule for each irrigation season, consistent with the operation plan based upon the entitlement, area, soil and cropping pattern as approved by the distributory committee, or as the case may be, the project committee.

To prepare a plan for the maintenance of the irrigation system in the area of its operation and the end of each crop season and carry out the maintenance works of both distributory system and minor and field drains in its area of operation with the funds of the association from time to time and to provide funds for the maintenance of staff including such persons who are placed by the state government with the WUA for the purpose of regulation and maintenance of irrigation system.

To regulate the use of water among the various pipe outlet under its area of operation according to the *warabandi* schedule of the systems; To promote economy in the use of water allocated; to maintain a register of land holders as published by the revenue department; to monitor the flow of water for irrigation; to conduct regular water budgeting and also to produce a periodical social audit.

To prepare and maintain a register of co-opted members, to prepare and maintain an inventory of the irrigation system within the area of operation.

To resolve the disputes if any between the members and water users in its area of operation.

To raise resources; to maintain accounts; to cause annual audit of its accounts.

To assist in the conduct of elections to the managing committee; to conduct general body meetings as prescribed” (GoMP, 1999).

Additionally, WUA are expected to work closely with key stakeholders like WRD, Agriculture and other relevant line departments for financial and other needs. WUAs are also involved in identifying the problems in the physical system through a joint walk through process with engineers of WRD (ibid.).

From the above discussion on PIM Act in Box 5.1 it is evident that the PIM Act transferred responsibility of managing state infrastructure to farmer organizations and delineated them on hydraulic basis. The state addressed the equity in representation within WUAs by having Territorial Constituency (TC) members who are representative of the entire WUAs area. The WUAs have five-year tenure and the Act provisions for right to recall an elected member after one year. The Act also provides financial and administrative autonomy to WUAs so that they can raise additional resources for undertaking WUA work (GoMP, 1999). Further, from Box 5.1, it is evident that WUAs have an exhaustive list of functions to perform. Thus, to implement the Act i.e. to constitute WUAs and enable their smooth functioning, the state government initiated administrative, governance, institutional and financial reforms in the state to ensure smooth functioning between farmer organization and WRD. Additionally, greater responsibilities were given to farmer organizations in implement decentralization. The detailed elaboration of the same is done in section 5.2.1.

Based on the discussion till now it can be argued that decentralization process in Madhya Pradesh has been top-down. The call for reform came from chief minister and efforts to decentralize were taken up by progressive senior bureaucrats in the state at the behest of the chief minister. The idea of farmer participation propagated through the Act had semblance of programmatic and

paradigmatic strands -as elucidated by Campbell (2004), and elaborated in chapter three. The idea of farmer participation propagated in Madhya Pradesh was not only influenced by elite assumptions that farmer participation will improve irrigation management, as was the discussion in the state in the 1990s within the bureaucracy, but also by programmes of international organizations (like USAID, and the World Bank) which were propagating farmer participation in irrigation management taking cognizance of scholars like Norman Uphoff (1986b). Furthermore, the then chief minister framed the discussion of decentralization as greater power/ decision-making authority to local communities in order to sell the idea of decentralization to his constituents. Thus, salience of idea of farmers as actors capable of taking over management of irrigation system was perpetuated. This was different from the ideology and imagery of the tutelary state of Nehruvian era of infantile citizens (see chapter four). Moreover, given that the idea of farmer participation in irrigation management is rooted in two competing ideologies – neoliberalism and communitarianism (see chapter four) one aims to reduce the role of the state and provide greater role to market while the other aims to provide greater voice at the local level and deepen democracy. It is noteworthy that in development theory, neoliberalism is explicated as an ideology that was initiated with an aim to reduce the role of the interventionist state and promote market based interventions, as the state was observed to be a barrier rather than a driving force for development. However, lately there has been shift in neoliberal development strategy from singular focus on market deregulation to additional emphasis on institutional reforms and social development. In this context civil society has emerged as an arena wherein these development objectives could be achieved. Thus, in popular development lexicon terms like stakeholder assessment, participatory approaches and assessments have become popular which has been propagated by institutions like the World Bank to activate civil society arena (Mohan & Stokke, 2000, p. 248). It is noteworthy that neoliberal ideology approaches participation instrumentally which can be achieved by top-down institutional reforms. While communitarian approaches have envisaged a more encompassing and radical meaning of participation, which goes beyond collaboration between state and NGOs that work to make institutions more efficient. Here distinction between ‘big (D)evelopment and small (d)evelopment’^{lxxviii} NGOs is significant to understand the ideology, values and beliefs that NGOs work under. The focus of Big (D)evelopment is on alternative forms of interventions, while that of the small (d)evelopment is on systemic changes - a fight for an alternative development paradigm where NGOs not merely form a third sector and provide other services rather they also depict struggle defined by relations of power (Bebbington et al., 2008, p. 5).

Having briefly discussed the consistence of different ideologies the next section elaborates how actors’ rootedness in different ideologies –developmental interventionist state, neoliberalism and communitarianism- shaped implementation of reform process in Madhya Pradesh.

5.2.1 Reforms to implement PIM in Madhya Pradesh

Several WRD officials perceive that PIM Act was implemented in haste (discussed in detail in chapter nine), states a senior WRD official. He further reveals that the Act was implemented in a haphazard system, given the financial crisis that the department was facing (Interview, December 16, 2011). Furthermore, the political office bearers and senior bureaucracy have controlled implementation of the Act through Madhya Pradesh government’s executive orders vide Principal Secretary, WRD, Bhopal who gives directives to WRD to implement the Act (c.f. GoMP, 2010). These executive orders have made the Act more users friendly and/or aimed to control the functioning of the WUAs - the details of which are discussed in subsequent sub-sections.

5.2.1.1 Administrative and institutional reforms

A separate PIM Directorate was constituted in WRD, Bhopal in the year 2000 to monitor and evaluate PIM activities at the state level. Two officials, one from executive engineer’s office and one from chief engineer’s office were nominated as nodal officers to collect information regarding activities of WUAs and compile monthly progress reports on progress of PIM. Furthermore, in the year 2000, the district collector was appointed the nodal officer for monitoring the finances of WUAs by the order of then Chief Minister to ensure there was no misuse of funds. The PIM Directorate was also made responsible for monitoring all PIM related activities (GoMP, 2010, p. 19). Additionally, the Act envisages a three-tier farmer organizations set up for irrigation management with competent authority as a representative from WRD. To comply with the Act organizational reforms were initiated in the state, to implement the three-tier farmer organization set up outlined in the Act (Interview June 7, 2011).

Table 5. 1: Three-tier structure of farmer organizations in Madhya Pradesh

	Micro level	Intermediate level	
Major irrigation project (more than 10,000 hectare)	Water User Associations	Distributory Committee	Project Committee
Medium irrigation project (more than 2000 hectare and up to 10,000 hectare)	Water User Associations	-	Project Committee
Minor irrigation project (up to 2000 hectare)	Water User Associations	-	-
Competent Authority	Sub Engineer	Sub Division Officer	Executive Engineer

Source: Author's elaboration based on GoMP (1999)

The lowest tier in the institutional hierarchy is a WUA at water user level of the irrigation system. Secondary unit is distributory committee at distributory canal level of the irrigation system and tertiary unit is project committee at the project level (GoMP, 1999). In Madhya Pradesh all major irrigation schemes have the above-mentioned three-tier system. Medium irrigation schemes have a two-tier system (with only WUAs and distributory committees); and the minor irrigation projects have only one tier structure with WUAs to manage the network of minors. In addition, a state level apex committee is formed headed by the minister of WRD and has representatives from project committees across the state; two representatives from non-governmental organizations; and three senior bureaucrats from WRD (GoMP, 1999).

Furthermore, to facilitate WUA functioning, farmer organizations were provided functionalities vide an order in 2000 which delegated existing lower daily wage functionaries of WRD like watchmen to WUAs (GoMP, 2010, p. 18). To provide powers to WUA president, it was noted that the department will disburse wages of these functionaries only after the WUA president submitted appropriate forms that indicated monthly pay data of these functionaries (GoMP, 2010, p. 44). This order provided WUAs with functionaries who could facilitate in quotidian working of WUAs. Moreover, the idea behind providing greater power to functionaries at the local level is rooted in the neoliberal ideology of top-down designing institutions at the micro level. This approach aimed to provide greater power and control to WUA members in order to make the junior functionaries of the department accountable to them. Additionally, this model of institutional building and social development envisages that powerless can be empowered without making any change to the existing social order or extensive social mobilization (Mohan & Stokke, 2000, p. 249).

Moreover, to ensure closer interaction between farmer organizations and WRD, sub-engineer was included as ex-officio members by an executive order in 2000, as competent authority in WUAs, (as elaborated in Table 5.1). The sub engineers support WUAs by providing technical assistance and also ensure structural safety of the system, aid WUAs in preparation of estimates for operation and maintenance, and prioritization of work that ought to be done (GoMP, 1999; 2010, p. 33; Pangare, Hooja, & Kaushal, 2003, p. 8). A former WALMI official reveals that in initial period after the enactment of the Act there was a suggestion from WRD that secretary of WUA ought to be a sub engineer from WRD. Although, the then Chief Minister Digvijay Singh was against creating this hierarchy as it would have put the onus of doing the paperwork on farmer organizations, however, most of the bureaucrats, experts in the committee wanted sub engineer to be secretary of WUA in order to have some control over WUA functioning, and thus sub engineer/competent authority were

made secretaries in WUA (Interview, November 5, 2011). Similarly, to ensure greater control over WUAs, vide another order in 2002, sub engineers/competent authorities were mandated to be invited to general body meetings of WUA. Thus, the essence of administrative and institutional reforms initiated on one hand facilitated departmental functioning and on the other ensured that 'control' over farmer organizations was somehow maintained by WRD, for instance, by mandating sub engineers to participate in general body meetings. Also, the state bureaucracy ensured that sub engineer was made secretary in WUA although the chief minister was against it, as not all sections of bureaucracy were willing to lose control that they had over management of the irrigation systems by transfer of responsibilities to farmer organizations. Thus, though these reforms were supported to facilitate decentralization but instead, the executive class through some of the later executive orders limited the scope of decentralization. Interestingly, the bureaucracy was still functioning and believed in the ideology of centrist state planning and state supremacy and thus restricted devolution of functions to WUAs. The impact of these orders on functioning of WUAs i.e. second-generation farmer organizations is discussed through the SAS Project case in chapter eight.

5.2.1.2 Measures undertaken to ensure accountability and transparency

To institute decentralization, the PIM Directorate was made the nodal agency for organizing capacity building programmes for farmer organizations and department functionaries (Interviews, June 6th & 7th, 2011). To ensure accountability and transparency, the competent authorities were made secretaries (as an ex-officio member) in farmer organizations and were made signatory to any financial transaction that farmer organization undertakes. The competent authority was also made responsible for assisting WUAs in preparing of list of works to be done and to prepare cost estimation for the same. In addition, the competent authorities were given power to sign the technical clearance of any works that is planned. The technical clearance for special repairs up to INR 100,000 is with the executive engineer; the sub engineer can give clearance up to INR 10,000; and the chief engineer has full power for other higher amounts. In case of ordinary repairs, the executive engineer has full powers for the funds that are to be provided to farmer organizations (GoMP, 1999). Thus, through inclusion of engineer as competent authority in WUA, greater control was not only envisaged over day-to-day functioning of farmer organizations but also over their financial transactions. Moreover, it is ironic that to ensure transparency and accountability, the bureaucrats at the state government introduced technical clearance, as the idea behind initiating farmer organizations at the national level was to foster/design organizations/institutions that would be transparent, democratic and self-reliant. Moreover, by giving the competent authority the power to sign payments, this power was not decentralized to WUA presidents, which created an environment where WUA presidents would always have to seek patronage from the concerned officials.

Furthermore, to facilitate functioning of WUAs in 2005, and to institute greater/wider farmer participation, an amendment to the PIM Act was made in order to facilitate management committee to constitute six sub-committees within WUAs for smoother implementation and to enrol greater number of farmers in WUAs. The six sub committees are: i) water distribution management sub-committee; ii) works sub-committee; iii) canal dispute and crime reduction sub-committee; iv) financial audit and social audit of resources sub-committee; v) irrigation cooperative revenue sub-committee; vi) participation of women sub-committee (GoMP, 1999, p. 44; 2010, p. 53). These sub committees were formed in order to have an inclusive process, provide a tool for participatory monitoring, and to involve larger group of farmers (and women) in various activities of WUA (functioning of these committees is discussed in chapter eight). Thus, the aim of forming these sub committees was to make functioning of WUAs more feasible/practical, and to ensure that the workload and/or decision-making power is not vested only in the hand of WUA members (who could be elite farmers). Rather to have involvement of wider general body of WUA. Additionally, the Madhya Pradesh PIM Act is (deemed) visionary by senior bureaucrats in WRD, as it gives voting right to women even if the land title is not on their name (but their husband's). A senior official of WRD states that initially when this resolution was proposed there was public resistance to amendment of this clause in the Bill, however, eventually this clause was amended to the Bill after extensive deliberations in 2005, due to persistence and interest of senior officials in WRD who had support of the political office bearers (Interview, June 7, 2011). The state bureaucracy takes pride in this amendment as it is solely due to their efforts that this amendment has been made. However, this form of soliciting participation has been criticized for being depoliticizing as it forecloses discussion (politics) within a given 'hierarchy of place and function', as certain known actors like women or marginalized sections are included in the sub committees fully knowing their disposition or rather what actors perceive are their dispositions. Thus, public participation in constituting committees could be used as a depoliticizing strategy to uphold the dominant hegemonic order (Swyngedouw, 2011, p. 268) or ideational realm, for instance, how participation is perceived and implemented through perpetuation of this neoliberal communitarian ideology. Thus, it becomes evident that bureaucrats at the state level, in accord with the debate propounded by international organizations designed politically correct (though non-political) institutions. The SAS Project case study elucidates how this affected the dynamics of irrigation management at the intermediate and local level empirically.

Overall, from the above discussion it is apparent that though the Act was enacted in 1999, its implementation has been gradual and these orders have aimed to facilitate as well constrain participation and functioning of farmer organizations. For instance, delegation of daily wage

functionaries is an attempt to facilitate better functioning of WUAs, and gives power to WUAs over lower functionaries. Whilst, involvement of sub engineers as secretaries in WUAs is to have some control over WUAs and to ensure that the system is not structurally altered. Moreover, the above mentioned measures of including sub engineer in WUA is counterproductive to the essence under which farmer organization were formed that is WUA members were elected by the people (through a secret ballot), and were responsible for maintaining records and taking decisions in a participatory, transparent and accountable way. What also becomes evident from the above discussion is that the bureaucracy did not have (one voice) consensus on decentralization and were not prepared to alter the existing structural status quo. Thus, section of bureaucracy exercised their agency and ensured control over WUAs by legislating sub engineer or executive engineer as competent authority in WUAs. The above discussion also elucidates the salience of case specific factors and agency to understand ideational change in policy making (c.f. Berman, 2013).

Capacity building efforts for institutional development of farmer organization and irrigation officials has been undertaken through three main (and diverse) actors' till now in Madhya Pradesh, viz. WALMI (semi-governmental organization), non-government organizations and through an international consultancy firm, and the works of the same and the idea of participation they advocated through their work is discussed in the following sub-section. These capacity building measures have been initiated in the state as it was recognized by the bureaucracy that there was not adequate attention paid to the ground realities (i.e. preparedness of farmers or junior bureaucracy at project level to implement the Act) and the Act was being implemented in haste. As mentioned earlier, the Act was implemented two years after the Andhra Pradesh Act and once the Madhya Pradesh legislative assembly passed the Act in September 1999, it was implemented in six months; the first WUA elections were held in April 2000. Thus, there was a felt need for undertaking capacity building measures to bring farmers on board about this idea and to capacitate them on their new responsibilities.

Capacity building through Madhya Pradesh WALMI

A faculty of WALMI who has been associated with training programmes of farmer organizations notes that post implementation of the PIM Act, the state government recognized the need to build capacities of the newly formed farmer organizations and Irrigation Department officials, as part of a broader governance reform with an objective of instituting greater cooperation, commitment and participation of these two actors in operation and management of these irrigation network systems. Therefore, to meet this objective, a training calendar was prepared by the WRD in Bhopal. Officials were sent to Chhattisgarh and other parts of the country to study various models for capacity building and a calendar for training programme was developed (Interview, August 30, 2011). In fact,

the first phase of training of engineers was initiated prior to handing over the operation and maintenance responsibility to farmer organizations in March 2000. This training programme was held at WALMI campus in Bhopal. After the first phase of WUA elections were held in the state in April 2000 the training calendar for capacity building programme was initiated in May 2000. The planning for second phase of training programme was concurrent and paid attention to implementation aspects within PIM, i.e. how work ought to be done. The two-fold objective behind these training/capacity building programmes was to create awareness amongst WUAs (by disseminating knowledge to WUA presidents) about their roles and responsibilities and to prepare engineers for their new role as facilitators compared to their old role of doers, which was a position of control and power and defined their ideational realm. The capacity building programmes were believed to be critical as the lower bureaucracy had a lot of un-learning and re-learning to do to overcome their (dominant) ideational realm and fit into their new shoes. 140 Master trainers were brought in to undertake this massive capacity building exercise in October 2000. RCVP Noronha Academy of Administration and Management, Bhopal and WALMI, Bhopal conducted these training programmes (Interview, June 6, 2011).^{lxxix} After the second round of WUA elections in 2006, the PIM directorate prepared the training calendar for capacity building of newly elected WUAs. WALMI conducted this training programme in the second round and the focus was on increasing coordination at the field level. Each training program was for three days duration and covered following issues:

“Powers, duties and responsibilities of WUA; accounting procedures for the WUA; tips for better coordination between WUA and competent authority; information about already transferred and future schemes for the overall betterment of the WUA; information about various relevant provisions of the Act and its amendments; coordination with other departments like Agriculture, Rural Development, Forest; information about various sub-committees that can be constituted under the provisions of the Act” (WALMI, 2011, pp. 24-26).

From the content of the training programme cited above, it is evident that WALMI focused on discussing the procedural matters in its trainings - they provided basic information on roles and responsibilities of WUA presidents and basic relevancy of the Act and its provisions in order to create awareness amongst presidents about their role. The extent to which the training programme of WALMI has been useful in building capacities of WUA presidents is discussed in detail in chapter eight and nine. None of the WUA trainings were conducted in the field. WUA presidents from across the state were invited to WALMI, Bhopal for the training programme, or taken on exposure visits to select sites.

The above-discussed style of functioning of WALMI evinces a bureaucratic top-down model that is being pursued by this interventionist semi-state agency wherein the focus has been on providing a list of rulebook and functions to WUA presidents so that they can facilitate effective service delivery and reduce the burden of water bureaucracy. The impact of this model is discussed in chapter eight and nine.

Capacity building through NGOs from 2003-2007

After initiation of PIM in the state there was considerable hesitation amongst WRD personnel at district and local field offices i.e. junior bureaucracy about implementation/consequences of the PIM Act. At the state level, however, WRD officials showed reasonably keen interest in implementing the Act, but were unsure of how to commence PIM activities. India Canada Environment Facility (ICEF) funding for capacity building came under this backdrop in the state and the ICEF managers recognized on one hand the uncertainty that WRD officials faced of how the Act would reduce their role and on the other hand they were also aware that WUAs in many projects lacked credibility and capacity and thus the only way to overcome this problem they perceived was through serious efforts at capacity building through select NGOs (ICEF, 2004). Thus, ICEF was a significant ideational broker according to Campbell's (2004) typology and intervened through their funding to initiate capacity building measures. Furthermore, ICEF and state officials perceived that the training programmes carried by WALMI were not enough. Given, this backdrop, in the year 2003, the ICEF sponsored participatory irrigation management project in six locations in Madhya Pradesh 'to demonstrate the process of shift from traditional to pragmatic participatory model' (GoMP & ASA, 2004). Under ICEF funding, four NGOs -Saadhan, Sankalp, Rakshan and MART (names changed) - were selected by WRD, Bhopal on the recommendation of a well-known NGO from Jaipur in Rajasthan. A senior official from WRD, Bhopal posits that there was significant political pressure on WRD officials to select these four NGOs. These four NGOs were selected to support project implementation and strengthen both WUAs and WRD teams at six project sites for four and a half years between 2002-2007 (Interview, June 6, 2011). Additionally, three more NGOs were associated with this project specifically to impart Geographic Information System (GIS) training, exposure visit cum training and for gender mainstreaming (ASA, 2005, p. 37).^{lxxx} Specific aspects that the four NGOs needed to address were:

"Proper maintenance of the system; equitable distribution of water; re-orientation of the WRD personnel from executing agent to facilitator; capacity building of farmer organizations to enable them to assume their new role; and greater participation of women" (ASA, 2005, p. 35).

Additionally, this funding had come with an assumption that the select projects funded under ICEF could be later used for replicating a model of capacity building in Madhya Pradesh and this project of

capacity building will bring about attitudinal changes in WRD personnel at all levels (ibid., p. 38). Overall, the ICEF project had a total budget of INR 176.6 million. A senior official of WRD apprises that to instil cooperation and participation among farmers, ICEF provided 50 per cent of the programme money, and it was envisaged that the farmers will give 30 per cent matching contribution and 20 per cent matching contribution was to be given by the state government for any physical work that will be undertaken. However, after mid-term evaluation of the project in 2005-2006 it was recognized by WRD and ICEF (apprises a senior WRD official) that farmers were not able and/or willing to pay 30 per cent beneficiary contribution and consequently ICEF reduced the beneficiary contribution from 30 per cent to 20 per cent (which in turn increased the state contribution to 30 per cent and the donor contribution remained at 50 per cent), and eventually to 10 per cent (which increased the donor contribution to 60 per cent) (Interview, June 6, 2011).

Given that the ICEF project was based on the theme of 'active participation' (to use Agarwal's (2001) typology) of three key groups -WRD, WUAs and NGOs- during one of the first meetings of all the project partners in Bhopal in February 2004 it was emphasized by senior project officer from ICEF that 'all physical work under this project will be taken up only through the process of participatory walk through, in which beside WRD and NGO maximum number of farmers should also be associated' (GoMP, 2004a). Thus, facet of participation envisaged under ICEF funding focussed on beneficiary contribution (to use development parlance) in cash, as an instance of participation. Moreover, ICEF funding encouraged activity specific participation, for instance, emphasis on participatory walk-through to assess problems in the canals system.

By mid-2007, the four NGOs based on their experience of capacity building in six select projects had initiated a discussion with WRD on several new ideas that could be tried in the field to improve functioning and build interest of WUA members in WUA functioning, for instance, proposal that part of water revenue collection undertaken by WUAs could be retained by them. Moreover, in order to strengthen WUAs and make them financially sustainable different models like the cooperative model for marketing were suggested (Minutes of the meeting between Saadhan and Principal Secretary, WRD, Bhopal, June 12, 2007). However, the NGOs were not allocated the institutional building contract after ICEF funding lapsed (details of which are elaborated in the next section), and thus their ideas could not be implemented. Instead an international consultancy firm was recruited for capacity building of select WUAs in the state. Here, again case specific factors and actor's agency as brought to the forefront by Berman (2013) and discussed in chapter three as a crucial factor to understand ideational realms becomes salient. To elaborate, though irrigation reform process i.e. initiation of PIM in the state was not donor drive, ICEF did intervene with its funding in 2003 with the aim to have

attitudinal and behavioural change (a change in ideational realm) of bureaucracy. However, once, the ICEF funding lapsed, the NGOs funding was not extended under Madhya Pradesh Water Sector Restructuring Project (MPWSRP) and the same is elaborated in the next sub-section.

Institution building through a consultancy firm under MPWSRP

In the year 2005, the Madhya Pradesh government received World Bank loan of INR 19190 million under the MPWSRP. One of the key issues that project rationale for MPWSRP stresses on is to strengthen WUAs through motivation, capacity enhancement, empowerment, and adequately functioning infrastructure taking cue from successful WUAs in other states (World Bank, 2004, p. 1). The working of World Bank in this context also fits under the typology of ideational brokers. To elaborate, this was also the time period around which the ICEF funding was lapsing and thus the four NGOs showed interest and communicated with WRD for continuing the work of capacity building of farmer organizations that they had started under ICEF funding, as they recognized that (about) four years of work that they had undertaken was not sufficient to build capacities, transform/change perceptions of farmer organizations or the junior functionaries of WRD. Some of the senior bureaucrats from WRD during that time suggested that the NGOs could take up this work under World Bank funded MPWSRP Project (Minutes of the meeting between Saadhan and Principal Secretary, WRD, Bhopal, June 12, 2007). An employee of one of the NGOs that was funded under ICEF apprised that initially there were talks about involving NGOS, however, after few closed door meetings between World Bank and WRD it was made clear that World Bank will not provide funding to NGOs for second round for capacity building programme. The un-official talk in WRD office lobby during this time was that WRD officials were not keen on involving local NGOs for the institution building activities under MPWSRP. The World Bank eventually allocated the task of institution building to an international consultancy firm that hired experts (many retired government officials) from Madhya Pradesh as consultants to work for institution building (Interview with NGO staff, October 11, 2011). During the time of fieldwork, several attempts were made to interview the concerned World Bank official in New Delhi to understand why NGOs were not given a chance, but there was no response from the Bank's side. Further, interview with a very senior bureaucrat of WRD elucidates that the department was not keen on working with NGOs:

“NGOs are civil contractors. NGOs don't have commitment (...) tell me names of NGOs which are committed, where are they? They raise issues make noise. (...) They don't want to work with commitment. (...) Money is not a constraint for the department, but what the department is lacking is trained manpower” (Interview, February 8, 2012).

Further, to implement the institutional building component of MPWSRP; an international consultancy firm was recruited in March 2007 through a competitive bidding process. This

consultancy firm was responsible for capacity building of WUAs and WRD functionaries in five river basins in Madhya Pradesh. This consultancy firm was awarded INR 192.6 million to undertake:

“ (...) capacity building of a) the members of the management committee of the WUAs (WUA-MC) including nominees from MPWRD, Agriculture Department etc. and b) awareness raising of the members of the general body of the WUA including in particular the women members about the Act and their rights and responsibilities as per the Act etc.; WUA-MCs (managing committee) are elected bodies of farmers and other water users located in the command area of irrigation schemes and include WRD and Agriculture Department functionaries as nominated members” (GoMP, 2008).

A senior official of WRD apprises that this consultancy firm recruited a multi-disciplinary team, and set up its office in Bhopal to undertake the contract awarded under MPWSRP for 36 months (Interview, June 6, 2011). This consultancy firm was entrusted to undertake capacity building for 77 WUAs in six districts in Madhya Pradesh. Given, the large number of WUAs involved for capacity building, the consultancy firm prioritized WUAs based on the stage of work they were in: i.e. ‘construction work is in progress, contract awarded, Scheme Modernization Plan (SMP) either approved or in advanced stage, SMP in the stage of preparation’ (SMEC, 2007, pp. 2-3). Moreover, given that there were many WUAs to cover, this firm recruited community organizers from local villages who were responsible for capacity building of two to four WUAs (depending on the size of the irrigation project). The consultancy firm recruited and trained these community organizers who in turn were responsible for disseminating information to WUAs. The focus of the training programme was on introducing the project and its components; details about the Act and its objectives; details about functioning of WUAs; tools for community mobilization; importance of managing irrigation water and participation of women in WUAs, and aspects of agricultural productivity and marketing (ibid.). The consultancy firm relied on 32 community organizers who were employed specifically for this purpose and were trained to disseminate information; overall community organizers organized 6217 training programmes. Apart from imparting information through these community organizers, 201 training programmes were executed by senior experts of the firm for 77 WUAs (ibid.). Overall, this consultancy firm focused on disseminating basic information about the roles and responsibilities of WUAs to WUA members. It is noteworthy that the consultancy firm recruited by the World Bank pursued neoliberal values and ideology and approached capacity building from a functional and instrumental perspective wherein it was perceived that 32 community organizers would be sufficient for creating effective service delivery mechanism at the micro level by WUAs. The outcome of pursuance of this approach is discussed in chapter nine; here it is suffice to say that the firm focused on ensuring that the target number of

training programmes that were part of its terms of reference was conducted, however, the WRD was not satisfied with the work of this consultancy firm, and their contract was terminated.

Moreover, under MPWSRP, some of the senior retired WRD officials who were key agenda setters for enactment of the PIM Act were recruited as consultants, and thus continued to influence working of PIM through their understanding of how things ought to function. Non transparent, closed door discussions, *close-door agreement* between the World Bank and Indian government officials, dishonest research and absurdly impractical policies has been recently elucidated in an article by Chambers (2013) in context of large scale irrigation projects in South Asia. My observation in the field has been similar. For instance, recruiting senior WRD officials as consultants under MPWSRP could be viewed as continued patronage of bureaucracy towards Bank's policies on one hand. On the other hand it can also be viewed as state actors' propounding a cognitive and behavioural lock-in by ensuring that non-political organizations like the international consultancy firm was recruited by the Bank. It is unknowable who the structural rider is: the Bank officials or the senior state bureaucrats who exercise their agency to ensure certain decision-making. The NGOs, clearly could not exercise their agency in this context, though they were able to influence decision making in the early 2000s by ensuring that NGOs were given the work of capacity building under ICEF funding.

To sum this section, three different approaches of capacity building i.e. WALMI doing three to five day training programme once in a WUA's tenure; NGO teams stationed in the project areas and working towards capacity building through their team; and third, international firm recruiting local villagers as community mobilizers for imparting training were pursued by these three different organizations to build capacities of farmers, farmer organizations and WRD engineers. The selection of these organizations (apart from WALMI, which is the nodal agency for capacity building in the state) for capacity building was top-down and done by the department, either with or at the behest of international organizations like the World Bank and ICEF. All these organizations aimed at instituting participation and greater awareness amongst farmer organization by focusing on creating greater awareness about the PIM Act and its rules and regulations.

This section also sheds light on how WRD excluded NGOs from being involved in institution building under MPWSRP, though some of the progressive senior bureaucrats had suggested that NGOs could do institution building. Thus, it becomes evident that within bureaucracy there isn't one perception about NGOs, however, diverse perception of bureaucrats gained salience in the discussion at the state level, as they were part of the state structure and they were excluded from institution building activities under MPWSRP funding. The case study evaluates further how these capacity building

programmes have fared in actuality in chapter eight and nine which facilitates in responding the central research question, i.e. role of actors in influencing or obstructing decentralization.

Having discussed briefly various actors who were involved in designing these capacity building programmes, the next section elucidates the financial reforms that were undertaken in the state to facilitate implementation of the PIM Act.

5.2.1.3 Financial reforms

As mentioned previously, the irrigation reforms were not initiated in the state as part of a donor driven process and the WRD officials in Bhopal take pride in explicating that it was state’s own initiative. Therefore, during the beginning all the financial support for implementation (including maintenance and administration) of PIM was provided by the state government itself. As part of financial reforms post-PIM, the irrigation water rates have been revised thrice after the enactment of the PIM Act in the state.

Table 5. 2: Irrigation water rates in Madhya Pradesh

Crop	Flat water rate (in INR/hectare)			Rate for each watering (in INR/hectare)	
	1992	1999	2002	2005	
Paddy (<i>kharif</i> season)	59	200	215	85	
Paddy (<i>rabi</i> season)	54	494	525	155	
Wheat (3 watering with <i>palewa</i> *)	62	200	105	125	
Wheat (each extra watering)	15	62	65	75	
Soybean (<i>kharif</i> season)	44	124	130	75	
Soybean (<i>rabi</i> season)	59	247	265	75	
Green fodder crops	45	124	130	50	

* Pre-sowing irrigation of land, to prepare the land for sowing and cultivation.

Source: Data compiled from (GoMP, 2012a) and SAS Project Office, Division 2, WRD, Vidisha

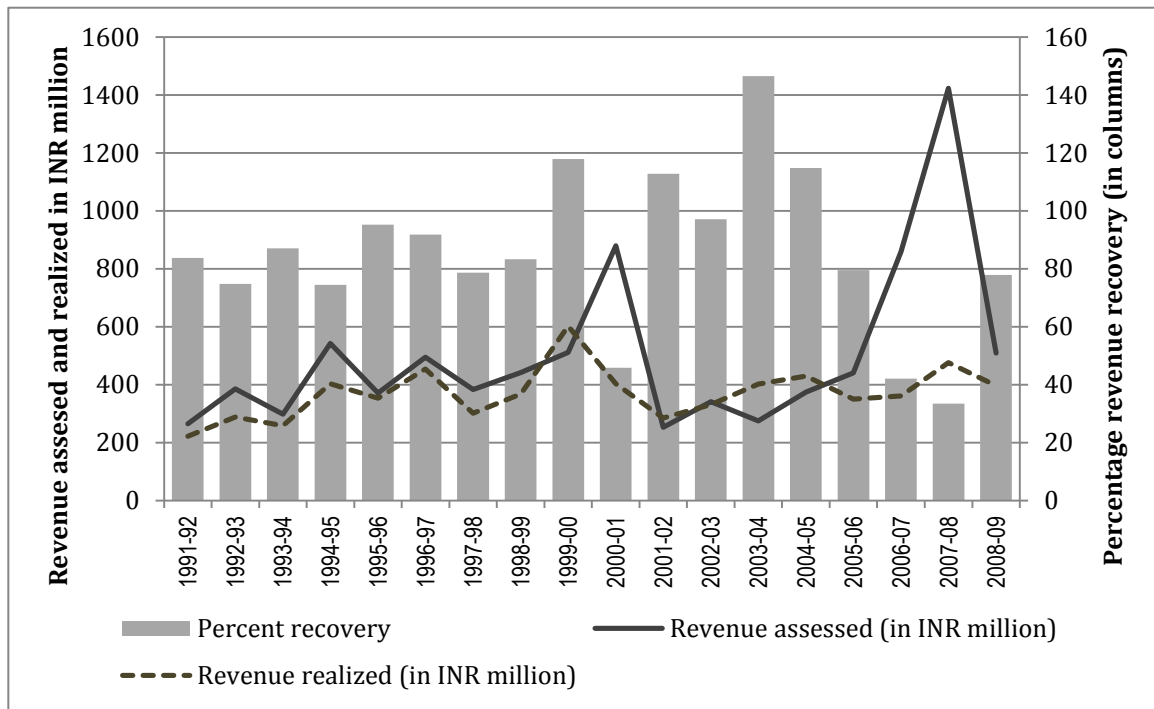
From Table 5.2, it is evident that the irrigation water rates were increased exponentially in the year 1999 from the earlier prevalent water rate charges post enactment of the PIM Act. The irrigation water rates have been revised thrice -1999, 2002 and 2005- in the state. The most recent revision of 2005 has annulled the practice of calculating the irrigation charges through a flat-water fee (for an irrigated area) and has begun charging the irrigator for each watering that they avail. The last revision has made irrigation more expensive for irrigators and aimed to reduce the financial burden of WRD. The increase in irrigation fee also envisaged greater water use efficiency amongst farmers. Interestingly, the revision of water charges^{lxviii} in Madhya Pradesh has been one of the highest in India. Other states which have high irrigation water rates are Andhra Pradesh, Maharashtra and

Gujarat (GoI, 2010b). Rationalization and parity in irrigation water rates has also been done through an amendment on October 22, 2012, to rule 120 of the Irrigation Rules of 1974, by bringing water rates for farmers that undertake lift irrigation through pump sets at par with water rates that farmers in the command area pay (GoMP, 2012b, p. 3).^{lxxxii} These amendments have aimed to ensure greater water use efficiency amongst farmers and to simplify work of farmer organizations.

A former WALMI official who worked closely with drafting of the PIM Act notes that the water revisions are a step in the right direction, however, the problem is that in Madhya Pradesh water for irrigation is provided to farmers on basis of acreage and not by volume, as there are no measuring devices, so it leads to water disputes and is also difficult to monitor how much irrigation revenue needs to be realized (Interview, November 5, 2011). However, no efforts yet have been made to change this scenario.

To elucidate, the revenue collection method post reforms. The WRD in Madhya Pradesh is responsible for assessment and collection of revenue. Within WRD, the revenue branch is responsible for collection of revenue, which is headed by the canal deputy collector and irrigation inspector works under him/her. Under the irrigation inspector are *amins* (accountant/ person responsible for revenue collection) who are responsible for inspecting the irrigated areas under different crops during the *kharif* and *rabi* cropping season and collect water charges accordingly. Number of *amins* in an area depends on the extent of irrigated area. At the division level, the executive engineer is responsible for ensuring that the process of revenue collection takes on time and WUAs are responsible for facilitating the process of revenue collection (GoI, 2010b, p. 38). Thus, it becomes evident that post enactment of the PIM Act, revenue collection has remained with *amins* or in other words with WRD and this responsibility was not handed over to farmer organizations. Figure 5.2, illustrates the gap in irrigation revenue assessed and realized in Madhya Pradesh.

Figure 5. 2: Gap in revenue assessed and realized during 1991-1992 & 2008-2009 in MP



Source: Design by author based on data from GoI (2010b, p. 88)

The gap between irrigation revenue assessed and realized in Madhya Pradesh is significant. This gap has widened in the last few years and the per cent recovery has been only 33.47 per cent in 2007-2008 and 42.08 per cent in 2006-2007 (GoI, 2010b, p. 88).^{lxxxiii} Poor rainfall in 2006 to 2008 explicates poor recovery during this period. In Figure 5.2, the revenue realized is higher than revenue assessed for four years, viz. 1999-2000, 2001-2002, 2003-2004, and 2004-2005. These are also the years when the WUA elections were notified and subsequently WUAs were formed. Additional revenue realization between year 2000 and 2004 can be explained due to initial enthusiasm of WUAs to participate and facilitate in revenue collection in its formative years. Also, for farmers to participate in WUA elections all previous unrealized irrigation charges had to be paid, this can also be the reason for more irrigation revenue realization than assessed in these years. Overall, however, the gap between revenue assessed and realized is significant in Madhya Pradesh even after the irrigation reforms were undertaken as part of the decentralization initiative in 2000. It is evident from the above discussion that the state has not taken any strict action against defaulters, which explains poor revenue recovery. A very senior bureaucrat of WRD explains the reason for not taking any strict action against defaulters.

“Member of Parliaments (MP)/ MLAs play representative politics... this year the Chief Minister has said that all the overdue should be collected but next year is election year, let’s see if that will happen” (Interview, February 8, 2012).

Thus, though WRD is responsible for collection of revenue for the state exchequer, the politicians exercise their power to forgo collection of revenue by communicating to senior officials in WRD how seriously efforts ought to be made. Moreover, post 2003 Bhartiya Janta Party (BJP), a right wing party has been power in the state, it is noteworthy however that decentralization reforms were introduced during Congress Party regime. Thus, BJP government has not been keen to take forward some of the policies elucidated by the Congress government (this aspect is discussed further in chapter nine). Overall, the political office bearers have the upper hand and dictate what actions are taken, which is not surprising as they have the legislative authority. Second, clientelism is evident from the working of the political class, as they don't want to disturb their vote bank for instance by enforcing revenue recovery. Perpetuation of clientelism is an offshoot of an interventionist developmental state ideology in India in the 1980s and 1990s as it centralizes power structures by design resulting in perpetuation of vote bank politics. To elaborate, the Nehruvian ideology under Congress government propagated an affirmative equity enhancing state in India whereas post liberalization there has been polarization in class positions which resulted in greater evoking of particularistic identities like caste and religion (c.f Heller, 2009, pp. 138-139). It is noteworthy that clientelism and perpetuation of particularistic identities thereof is not an institutional problem. Rather its ideological problem, which resulted in perpetuation of particularistic identities when liberalization process was ensued in India.^{lxxxiv}

Till now, this chapter focused on elaborating the status of irrigation management and how the idea of farmer participation in irrigation management gained constituency in Madhya Pradesh. Further, the first two sections (5.1&5.2) of this chapter elucidate how the ideational paradigm for irrigation management has shaped gradually, i.e. the state policy has more or less followed the national policy framework, and there has been considerable influence of international organizations in instituting the state to consider the role of farmer organizations in irrigation management at critical junctures through USAID funding in the 1980s and the World Bank funding (NWMP, MPWSRP as part of sector reforms) in 1990s and 2000s.. However, it was not only international organizations that influenced the ideational paradigm, as discussed in this chapter. The efforts for enactment of PIM Act were endogenous and due to interest taken by select state actors viz. at the behest of political office bearers in the state. Moreover, senior officials in WRD were not averse to this idea, as they were aware of the failing system conditions and thus when the chief minister initiated the decentralization drive, they evinced interest and examined different models of PIM that were being experimented with across the world and in India. The expert committee was largely responsible for implementation of the Act, and consultations with farmers were few, and thus did not play a decisive role. The NGOs were not involved in the consultation process, (as already mentioned) and thus it was more or less a

closed top-down discussion that led to initiation of reform process in the state. Thus, it was this expert group spearheaded by senior WRD officials' who worked towards changing the institutional ideation (or state's belief) on irrigation management. The expert group diffused new idea of PIM as they had the bureaucratic power to do so, after the chief minister gave orders for studying the Andhra Pradesh model of PIM, and implementing it in the state.

This section also discussed the ideational debates that were held by this expert group for instance, to include sub engineer, as secretaries in WUAs, which basically determined how much power farmer organization would have in the field, to wit, how participation essentially will be implemented in the field. WALMI's training programme targeted only WUA presidents and competent authorities. While NGOs under ICEF funding and the international consultancy worked with farmers, farmer organizations and engineers. Given, different approach and target groups for capacity building, these programmes are determinant of intent to change perception of farmers, farmer organizations and bureaucracy about participation of farmers in irrigation management in the select sites. Moreover, understanding the content of these capacity-building programmes sheds light on the seriousness with which reforms have been undertaken in the state. As essentially, these programmes were designed to change people's beliefs that potentially could lead to change in mind-sets over a period of time. The PIM Act was enacted to initiate/enable institutional change in order to transform the process of management of irrigation infrastructure and water distribution in Madhya Pradesh. Given, the intent to decentralize at the state level, how this intent was implemented needs to be evaluated, as merits of decentralization have been discussed many a times (chapter one also reviewed this briefly). However, this has not been discussed in context of how ideational factors determine success and failure of a reform process. Through the case of SAS Project in Madhya Pradesh, this study elucidates why reforms in irrigation have not been successful. Further, the case study underscores the importance of ideational factors. This research contends that it does not matter what policy model is applied unless ideational factors are taken in to consideration while implementing a policy.

5.3 Summing up

This chapter presented the status of irrigation in Madhya Pradesh. Additionally, this chapter also elaborated how the idea of irrigation management through farmer participation gained salience in Madhya Pradesh's policy directive that eventually led to constitution of PIM ACT in 1999 after formation of different type of farmer organizations like *sinchai panchayat*. This chapter also discussed that for the first time in context of irrigation management, intermediate level committees i.e. distributory committee project committee were mandated to be formed legislatively in the state.

Given, that this research is about roadblocks to decentralization at the intermediate level. This aspect is discussed in detail in chapter nine i.e. what structural and cultural elements restrict their functioning through empirical observations.

Additionally, this chapter elaborated how the ideational paradigm was shaped partly by structural constraints i.e. the central government's directive and donor funding, who introduced the idea of farmer involvement in irrigation management. And partly by the endogenous factors that is willingness to take forward this idea by political office bearers and sections of bureaucracy. This chapter also demonstrates how the reform measures that were taken, for implementing the PIM Act decentralized and re-centralized functions at the same time, and thus bureaucracy ensured that few powers remained within their decision-making ambit.

It is also noteworthy from the discussion in this chapter that while designing the policy on PIM the state bureaucrats viewed cultural factors instrumentally, as is evident from the discussion on involvement of women in WUAs, as mandated by the Act. Furthermore, by amending the Act to include women as voters in 2005 provided greater agency and voice to women structurally, however, this legalisation was not undertaken bearing in mind the field reality, as the next four empirical chapters demonstrate. The inclusion of nominated members from scheduled caste or tribe in farmer organizations is similarly an instance of instrumentality. Thus, it becomes evident that the ideational landscape at the state level resulted in actors dwelling upon cultural aspects instrumentally as the predominant discourse on participation internationally and nationally recognizes and necessitates greater involvement of women and other marginalized sections. This has been propagated and established as an obvious course to take while drafting of and enacting PIM legislations. This broad based view of culture and community dominated the ideational paradigm of state level bureaucracy and political office bearers. Additionally, this chapter also elaborated the rootedness of ideational paradigm of actors in ideology and values of neoliberalism, interventionist state or communitarianism.

The next four chapters elucidate how the idea of participation by including farmers in organization/management of irrigation system was implemented in the SAS Project. The Project has a large command area, the focus of the next four chapters primarily is on two WUAs (Saraswati and Betwa- names changed) one on the head reach and the other on the tail end - to explicate how the idea of farmer participation in irrigation management, as propounded at the international, national and state level has panned out at the micro level. Chapters' seven to ten also elucidate why decentralization is not happening at intermediate level in irrigation management by using the lens of ideational realm.

^{lxviii} In 1980s the gap between the irrigation potential created and utilized in Madhya Pradesh was about 37 per cent and efforts were directed to reduce the gap and to improve system efficiency and increase productivity in irrigated agriculture (WALMI, 1991a, p. 1). Despite these measures, however, the gap between the total irrigation potential created and utilized in Madhya Pradesh has increased from 1980s and according to the latest (2011-2012) plan figures is 44 per cent (GoMP, 2012c).

^{lxix} The water resource utilization committee comprised the Chief Secretary, Secretaries of Agriculture, Public Health, Industry, Irrigation, Chief Engineer of the concerned river basins and the Secretary of the Control Board for major project who was also a Deputy Secretary to Government of Madhya Pradesh (World Bank, 2004, p. 20).

^{lxx} Events at national level that led to initiation of CADP were discussed in chapter four.

^{lxxi} *Ayacut* literally means command area (irrigated or irrigable area) served by an irrigation project. Irrigation departments were earlier called *Ayacut* department.

^{lxxii} The other states that were selected for setting up of WALMIs/STIs were Andhra Pradesh, Bihar, Gujarat, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Tamil Nadu and Uttar Pradesh. Till 1987 action research work had already begun in Tamil Nadu, Maharashtra, Gujarat and Rajasthan before it started in Madhya Pradesh (LBII & WAPCOS, 1992, p. 2). The WRM&T project supported 11 water and land management institutes (WALMIs), and assisted in their construction, purchase of equipment, training the faculty (in India and abroad), facilitate in production of training course material and selection of action research sites (Wall et al., 1992, p. 16).

^{lxxiii} The members of the governing body of WALMI at its inception were officials (bureaucrats) from departments of Agriculture, Finance and Irrigation, the *Ayacut* Department, agriculture production commissioner, Agriculture University (Jawaharlal Nehru *Krishi Vishwa Vidyalyaya* (JNKVV), Jabalpur), and director WALMI (who is also a bureaucrat) (WALMI, 1985, p. 3).

^{lxxiv} Though the main focus of the action research programme was SAS Project and Ghorpacchar Minor Irrigation Project, the governing body in its twelfth meeting added four more additional projects for adaptive trial viz. Baikhedi minor in Tawa Project, integrated development of watershed lake fringe development of Rani Awanti Bai Sagar Project, action research on Rani Awanti Bai Sagar Project, and action research on a minor irrigation project of Badera Mohari in Jabalpur district (WALMI, 1991a).

^{lxxv} *Sinchai* or irrigation *panchayats* are used interchangeably in the text. During fieldwork, the respondents mostly referred to them as *sinchai panchayats*, though in official documents, the term irrigation *panchayat* is used more often.

^{lxxvi} Status of these committees is discussed in depth in chapter seven.

^{lxxvii} In 1998, of the total 6.72 million hectare irrigated area only 1.97 million hectare was actually irrigated, which was 30 per cent of the total irrigation potential created (Pandey, 2006).

^{lxxviii} Two types of developmental paradigms have been outlined by Bebbington et al. (2008) as 'big D' development and 'small d' development' NGOs. The authors problematize the issue 'can NGOs make a difference' (in the title by the same name) in the neoliberal context and provide a framework to view alternative forms of development futures for the world's poorest and most marginal sections. The first element of their framework is the distinction between two types of prevalent developmental alternative: small (d)development relates to geographically uneven profoundly contradictory set of processes underlying capitalist development and Big (D)development focuses on the project of intervention in the third world in context of decolonization and the cold war (Bebbington et al., 2008, p. 5).

^{lxxix} I was not able to collect any documentation of this training programme from Academy of Administration; the officials from the academy apprised that this is very old information, and according to the state ruling any documentation more than five years old can be destroyed to manage storage. Therefore, details on various components of this training programme are not available.

^{lxxx} Given, the programmatic approach to GIS as training was undertaken, however, in the case study site data on GIS is not being collected by the officials.

^{lxxxi} The water charges for irrigation area in Madhya Pradesh is calculated based on the net additional income that farmer earn from irrigating their crops bearing in mind their paying capacity. Other factors that play a role in determining irrigation water rates are: 'i) Geographical unit; ii) System and type of irrigation; iii) Seasons and crops; iv) Confessional water rates; v) Location of the project; vi) Agreement rates' (Gol, 2010b, p. 15).

^{lxxxii} Till 2012, the farmers who availed water through lift irrigation were paying lesser than farmers of the

command area for irrigation. This amendment necessitates that prior to lifting water from canals, farmers make advance payment in full for crop, area and number of watering that they aim to undertake by entering into a formal agreement with the canal officer. These agreements are for short term and any lift irrigation from pump sets done without entering into a formal agreement is deemed to be un-authorized and legal actions would be taken against the offenders (GoMP, 2012b, p. 3).

^{lxxxiii} Although, overall the gap between revenue assessed and realized is significantly better than other states like Andhra Pradesh, where the average percent recovery is 27.75 per cent during the same time period (Gol, 2010b, p. 80).

^{lxxxiv} This aspect has also been explored by scholars (Ruparelia, Reddy, & Harriss, 2011) as 'great transformation' in a edited volume with the same title building on Polanyi's reference to double movement in the historical European case wherein attempts to create a market society from above resulted in movement from below.

6 Embedded Realities: Ideational Context of SAS Project

The previous two chapters discussed historical and geographical - national and state level - perspective on irrigation management. These two chapters analyzed: i) how the idea of irrigation management gained constituency in the Indian policy realm; ii) how the ideational realm of actors', and their role in irrigation management, has been influenced by the state structures and various ideas and ideologies on irrigation management viz. interventionist developmental state, neoliberalism and communitarianism. Additionally, salience of role of engineers as irrigation managers and harbingers of growth and progress was also reinforced by state structures and prevalent ideologies and values for resource management. This, chapter introduces the characteristic features of Samrat Ashok Sagar (SAS) Project and elaborates on the heterogeneous, and diverse background of farmers in the project area. This chapter provides an insight into the social setting in which the first generation farmer organizations were constituted at the micro level in the SAS Project. The discussion in this chapter also elucidates how resonance of certain idea of irrigation management was initiated in the project.

The following section (6.1) explicates the condition of the canal system and principles that determined water allocation, and operation and maintenance of the system from 1978-2000. Additionally this section provides an overview of the socio-cultural context of the SAS Project area. Section 6.2 elaborates on the process of constitution of these first generation farmer organizations in SAS Project.

6.1 The SAS Project

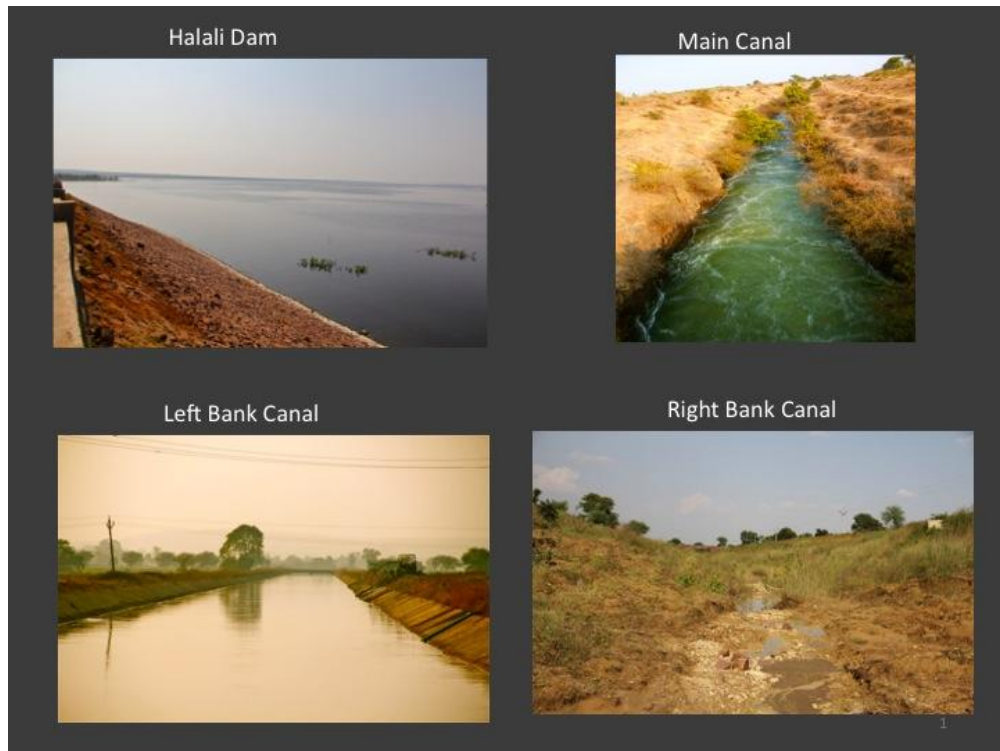
The SAS Project is a major irrigation-cum-flood-protection project constructed over Halali River, which is a tributary of Betwa River and flows through Vidisha and Raisen District. SAS Project falls in the Chambal-Betwa River Basin of Madhya Pradesh and is part of the Malwa Plateau that has a mean elevation of 426.7 metres above the sea level. The construction of SAS Project started in 1973 and dam stream closure was completed in 1976. Irrigation from SAS Project started in the year 1978. The total project cost in the year 1976 was INR 85.7 million (GoMP, 1976). Furthermore, both the Districts -Vidisha and Raisen- of the SAS Project area perform poorly in terms of the generic socio-economic indicators.^{lxxxv} Additionally, they have poor infrastructure, majority of the population lives in rural areas and are predominantly agrarian economies (Gol, 2011b). SAS Project is the lifeline for farmers of this region.

6.1.1 Salient features of the project

The earthen Halali dam of length 945 metres and with a maximum height of 2956 metres is constructed on Halali River and has a catchment area of 699 square kilometres. The dead storage level of Halali Dam is 448.66 metres and the irrigation storage level is 458.41 metres (GoMP, 1976). The dam can store water up to 462.68 metres safely (Gol, 2006b, p. 64). The project was constructed with an aim to reduce intensity of flood in Betwa River by 44 per cent, by providing relief to low lying areas along the Betwa River and to Vidisha Town. The project has a gross command area of 37,637 hectares of which the culturable command area is 27,924 hectares (GoMP, 1976). The main canal of the project is 3.28 km in length and runs through a rocky bank with heavy deep cut. Just after the turbine pump site there is heavy erosion of soil from the bed and slippage of side slopes of the main canal. After about three kilometres the main canal branches out into Right Bank Canal (RBC) and the Left Bank Canal (LBC). The LBC branches into Sahodra Branch Canal (SBC) after 12.5 kilometres (GoMP, 1976, p. 11; WALMI, 1991a). From RBC there are three main distributaries that branch out D1, D2 and D3, and nine direct minors. There are also several direct outlets from RBC that are oversize (12 inch diameter pipe outlets) and not proportionate to the *chak* (group of land holding getting water from a single outlet or in other words command area of an outlet) area (WALMI, 1991a, p. 12). In total, there are five direct minors on D1, six direct minors on D2, and six minors on D3. Similarly, from the LBC three major distributaries branch out D1, D2 & D3. There are 12 direct minors on D2 of LBC and 13 direct minor channels on D3 of LBC (GoMP, n.d.). In this project, under CADP work on construction of watercourses and field channels has been undertaken. Between 1982-83 and 1995-96 about 99.5 kilometers of field drains in command area of SAS Project were constructed under CADP with an expenditure of INR 1.46 million (Gol, 2006b, p. 102). The irrigated area in the project for the *rabi* season (1st November to 31st March) is 25092 hectares while for the *kharif* season (15th July to 15th October) is 12545 hectares (Pangare et al., 2003, p. 3). The project was designed to cater to the irrigation needs of farmers for *rabi* and *kharif* season. However, at present farmers only demand water from the reservoir for the *rabi* season.

Photograph 6.1 shows the dam site, Main Canal, LBC and the RBC. From the photograph it is evident that the project has earthen canal network apart from parts of LBC, which are now being lined as part of World Bank's Madhya Pradesh Water Sector Restructuring Project (MPWSRP).

Photograph 6. 1: Halali Dam and the canals



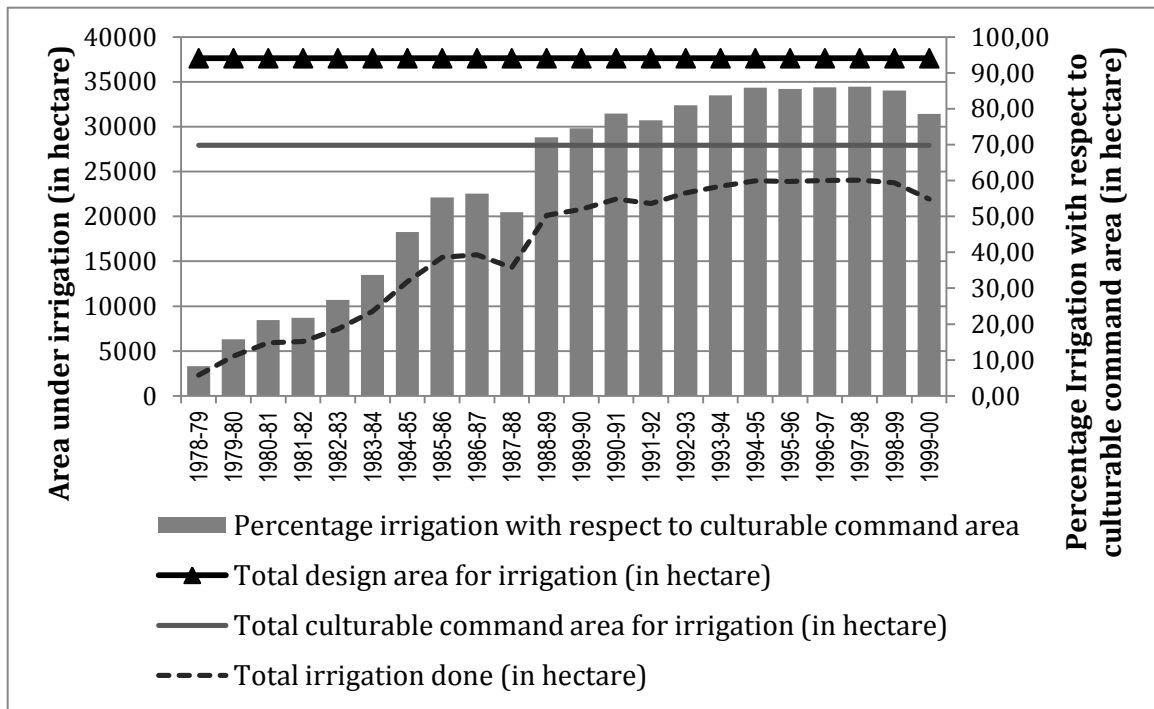
When the SAS Project was commissioned in 1978, the operation and maintenance of canals up to outlet level was with WRD i.e. undertaken by the state government. Here, it may be noted that the reservoir was in a good condition with no reports of seepage; however, the condition of the network of canals under the SAS Project was bad. The RBC was constructed close to deep cutting near the historic Buddhist site of Satdhara and in 1980s was reported to be in poor condition with a capacity only to take discharge of 100 cusec of water safely. Notably this was much below its designed capacity of 185 cusecs (WALMI, 1991a). Also, the approach road to RBC, LBC and the Main Canal were fair weather roads and were usually in deplorable conditions during monsoon. In addition, during 1980s, the roads in command area were also in very poor condition, which made the command area inaccessible during monsoons unless approached on foot. Further, there were no measuring devices at the take-off point of LBC and RBC to measure the volumetric flow of water. Also, there were few gates in the entire canal network area to control distribution of water (CWC, 2006; Field Notes, August 2011). Thus lack of infrastructure, in addition, to absence of night-time irrigation in this region led to wastage of water (WALMI, 1991a, p. 15).

Additionally, when the SAS Project was commissioned (in 1978) the operation and maintenance of the network of canal system had a fixed procedure. Erstwhile Irrigation Department, now Water Resources Department (WRD), provided water to farmers and all decisions on operational aspects of network of canals were taken in the District Water Utilization Committee (DWUC) meeting that was

(and still is) chaired by the district collector. The executive engineer was (still is) the secretary of the DWUC, and members of DWUC included district heads of department of agriculture, horticulture, veterinary, fisheries, and industry and presidents of farmer organization of respective irrigation schemes. The water allocation directive, once approved by the chairman of DWUC, was handed over to executive engineer to make an *Aeelan* (announcement) about plan for distribution of water to farmer organizations in the area. These DWUC meetings were also attended by few farmer organizations of the project region (Minutes of DWUC 1989, SAS Project office, Division 2, WRD, Vidisha). The DWUC chairman in consultation with all present in the DWUC meeting also decides the date of opening the main canal system, which has been opened every year till date between October 25th and November 15th. Details on opening and closing dates of the canal along with the reported water levels in the dam (at the time of opening) are presented in Appendix V. The opening of canal is usually done with great fanfare since the beginning of the project. Senior officials such as the district collector, executive engineer of the project and other officials from WRD like the sub division officer and sub engineers hold a symbolic prayer along with few farmers of the region. Thereafter, the district collector (along with executive engineer of the project) opens the sluice gate marking the beginning of the irrigation season. Historically, officials have held the decision-making power and have controlled the access to irrigation water.

The above brief description illustrates that not everything was smooth in the project area in the 1980s and 1990s. The infrastructure of the system was failing, the water allocation was done from head to tail, and management of water was essentially top-down i.e. the state was responsible for managing it. The condition of the project was similar to what the irrigation bureaucracies at the national and state level wanted to fix/improve. To wit, the project had poor irrigation utilization as is evident from Figure 6.1, which illustrates the year wise actual irrigation done in the command area of SAS Project against the culturable command area of 27924 hectares. Furthermore, from Figure 6.1, it is evident that the project had not achieved 100 per cent irrigation potential against the total culturable command area of 27924 hectares until 1999-2000. Year wise actual irrigation against planned irrigation area for SAS project since 1978-2011 is illustrated in Appendix VI.

Figure 6. 1: Year wise actual irrigation done against cultural command area in SAS Project



Source: Design by author based on data from SAS Project Office, Division No. 2, WRD, Vidisha

Further, as can be recalled from the discussion in chapter four, poor irrigation potential utilization and widening gap between potential created and its utilization, a signifier of poor irrigation efficiency, has been a cause of concern for policy makers at the national level (c.f. Gol, 2009b; IIMA, 2008). The same narrative has also found resonance at the state level, which led to initiation of irrigation reforms (discussed in chapter five).

In the official narrative during this period, however, the onus of poor utilization was put on farmers. For instance, a Water and Land Management Institute (WALMI) report states that farmers in general were unaware of the irrigation practices and were using flooding method of irrigation that invariably led to over-irrigation of their fields. None of the other relatively efficient irrigation methods like border strip, checking basin or furrow method of irrigation were being used in the SAS Project’s command area in 1980s (WALMI, 1991a, p. 8). In late 1980s, officials from WALMI believed that if they introduced new and effective methods of irrigation to farmers then problems of irrigation utilization potential could be solved, as it would improve the underlying irrigation practice (WALMI, 1991a, p. 16). As a result, WALMI directed its efforts towards acquainting farmers with better irrigation practices through its Action Research Programme that was supported by United States Agency for International development (USAID) (as discussed in chapter four and five). SAS Project

was selected as a case study site for Action Research Programme by WALMI, Bhopal in June 1987, the criterion for which was:

“Nearness to WALMI, Bhopal; possibility of implementing the interventions as project account was open for further construction; irrigation was being practiced in the project area for ten years then; interdisciplinary approach was not practiced earlier in SAS Project” (WALMI, 1991a, p. 3).

Under this research programme, 2649 ha of command area, in one of the distributory of the RBC was selected based on location, soil, topography and climate. The tail-end of RBC was selected by WALMI officials with a viewpoint that if this programme could increase productivity and water use efficiency in the tail end area then it will have an overall positive impact in the project area (ibid., pp. 3-4). An initial diagnostic survey by WALMI found 57 outlets on the distributory, which were 12 per cent lower than the planned 65 outlets. Further, documentation of late 1980s elucidates that WRD and WALMI officials together opined that the outlets were not properly installed and in a number of places outlets were placed above the full supply level of minor channel. This resulted in farmers availing water by putting obstruction in canals in order to raise the water level (WALMI, 1989, p. 88). Based on these observations, WALMI officials concluded that irrigation practices in this region were inappropriate and subsequently planned an Action Research Programme (for three to five years) from 1989-90 in select sites of the project. In total about 40 outlet committees were made in the project area, and efforts were made to build awareness within these outlet committees about water distribution techniques through various training programmes (ibid., p. 14). In the late 1980s, when the Action Research Programme of WALMI was initiated, only about 52 per cent of the total length of the watercourses and 61 per cent of *barhas* (field channels) were constructed. Incidentally, these numbers also include construction of *barhas* done by farmers and there is no documentation to differentiate between *barhas* made by farmers and/or WRD (WALMI, 1991a, p. 14). Given that the network of canal system in SAS Project was made in a piecemeal manner, this also explains poor irrigation potential utilization in the initial years after project commissioning.

Based on the condition of irrigation infrastructure and irrigation practices in the initial years under the aegis of Action Research Programme of USAID, WALMI initiated adaptive trails for introduction of improved seeds, inter-cropping, irrigation methods, drainage and *warabandi* (fixed time for distribution of water) with a view to improve agriculture production, cropping intensity and efficiency of water use (WALMI, 1989, p. 88).^{lxxxvi} As part of this programme, WALMI organized exposure visits of farmers to Shree Datta Cooperative Society, in Aurangabad, Maharashtra, which during early 1990s was one of the most studied and visited model for farmer managed irrigation system in India (Faculty WALMI, December 16, 2011). Additionally, exposure visits for farmers were

organized to farmer organizations in Gujarat. The funding for these exposure visits came from USAID and also from National Water Management Programme (NWMP) of the World Bank. Additionally, another faculty of WALMI apprised that in 1980s they organized training programme for officers of the irrigation department and through their seminars for action research project about 20 officers were trained for this endeavour (Ibid.). Though, the content of training programme was not available with WALMI, Bhopal.

Till now, this section elaborates on the condition of network of the canal systems, and how the need for first generation farmer organization was legitimized by couching it as a necessity to improve irrigation practice of farmers through USAID funding for SAS Project (also discussed in chapter five). Thus, with the idea of constituting outlet level committees, one of the first generation of farmer organizations at the micro level was initiated. Apart from outlet committees other first generation farmer organizations in the SAS Project were *sinchai panchayats* (constituted in 1980s) and the Betwa *Krishak Samiti* (constituted in 1995). However, prior to discussing the process of constitution of these farmer organizations, the next section provides an overview of the SAS Project area to elucidate how farmer organization are embedded in the socio-economic, and political cultural landscape.

6.1.2 Social landscape of caste, class, gender and politics in the project area

SAS Project region is not a homogenous society. There are about 163 villages in the SAS Project, which avail water directly through canal irrigation (GoMP, 2012a). The project spans across two districts boundaries of Vidisha and Raisen. There are diverse caste and class groups in this region. Some of the predominant communities residing in the two farmer organizations - Saraswati and Betwa (names changed) - where fieldwork was undertaken for this research are *Sharma, Rajput, Tomar, Chauhan, Gurjar, Solanki, Nai, Pal, Kumhar, Chamar, Mehtar, Basod, Dhanik, Razak, Kacchi, Maina, Sahu, Mehar, Patel*, etc. (Pandey, 2006; Field notes, January 2012). These groups can be classified under four major categories of the *Varna* system of caste in India, i.e. *Brahmin, Kshatriya/Rajput, Vaishya* and *Sudra*, with *Brahmins* being at the top of the hierarchy followed by the *Kshatriya, Vaishya* and *Sudra* in descending order. The caste system is hierarchical - a hierarchy based on birth and reincarnation- and its basic organizing principle centres on inequality in terms of following traditional occupation, claims to common origin and/or both these factors (Blunt, 1931, pp. 5-6). According to the *Varna* system the lowest in the hierarchy are the outcastes/untouchables that fall outside the caste system. Since the late ninetieth early twentieth century several leaders have tried to eradicate the practice of untouchability as a social practice, and this led to rise of *dalit*

(earlier referred to as untouchables) liberation movement. Post independence this practice of untouchability has been legally abolished (Kshirsagar, 1994). However, social discrimination of lower castes has continued as a discursive social practice.

Matter of food and drink legitimizes the social class of a particular caste, i.e. which caste consumes water/food in a particular group (Blunt, 1931, p. 8).^{lxxxvii} In recent past, the dominance of *Brahmins* who have been historically the dominant social caste group in India has been taken over by agriculturally landed and numerically strong social groups, which comprise *Kshatriya* and other caste groups. Thus, at present it is the economic and political power structures that define the socially stratified contemporary Hindu society (D. Joshi & Fawcett, 2005, p. 45) on one hand. On the other hand within *brahmanical* patriarchy the purity of women has been central, as caste is contingent on it (Chakravarti, 1993) and still is a dominant factor for consideration. Consequently, there is not only caste and class stratification but also gendered stratification within the Indian society, wherein mobility of women (especially upper caste women) has been traditionally restricted.^{lxxxviii}

The above brief description of three pillars of social structure -caste, class, and gender- also manifests in quotidian living of community in SAS project. For instance, in villages where first and second generation farmer organization for Betwa and Saraswati were made are segregated on caste, class and gender hierarchy. Villagers practice food and drink taboos, and mobility of women (especially upper caste women) is restricted. To elaborate, *Brahmins* being on the top of the hierarchy do not consume drinking water in a Scheduled Caste (SC)^{lxxxix} or Scheduled Tribe (ST) household. Though, they consume drinking water in a *Rajput*, *Maina* or *Sahu* household. Similarly, *Rajputs* consume water at *Brahmin* households and all the lower caste groups like *Solanki*, *Nai*, *Kumhar*, etc. consumes food and water at *Brahmin* and *Rajput* households. *Maina* consume water in *Brahmin* and *Rajput* households but not at *Chamar Dalit* households who belong to SC community. The SC community consumes water at all households but none of the caste groups consume water from their hands (Pandey, 2006, Field Notes, January 2012).^{xc} Thus, in day-to-day living, social and caste norms are dominant factors in SAS project villages, as is evident from the above description of the practices related to offering/consuming drinking water in a particular household.^{xci}

Having established the significance of caste and social class in quotidian living of farmers, I now focus on elucidating how caste segregation has resulted in gender specific roles with respect to water (irrigation as well as domestic consumption) in SAS Project villages. Women of the SAS Project, and of the two studied farmer organizations -Betwa and Saraswati- are largely responsible for collecting water for domestic consumption and household chores, which they provision through hand pumps and wells in their village. This is cognizant with the fact that gender segregation has been a defining

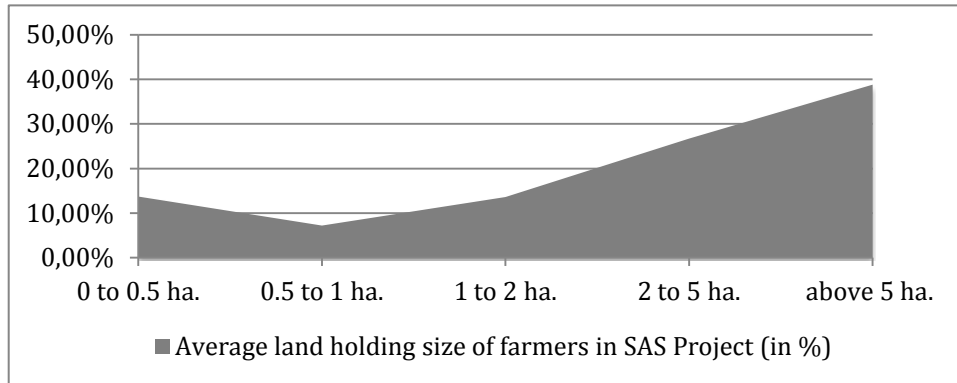
social order of the caste system. This segregation based on maintaining caste purity is observable in villages of SAS Project region as well. Moreover, irrigation water is primarily man's domain in Betwa and Saraswati region and due to restrictions on mobility of women. This also manifests itself in their non-partaking in irrigation activities. However, this restriction is more observable in *Brahmin*, *Rajput*, and *Maina* households, although, if needed elderly women from these caste groups at times do assist in weeding and similar agricultural activity on farms close to their homestead. However, the older women from upper caste groups do maintain kitchen gardens within their household premises. Irrigation water for these kitchen gardens is provided mostly through pump sets (Arjan Singh, February 7, 2012; Leela Devi, November 15, 2011). Moreover, (elderly) women from lower caste groups engage in agricultural activities on their own farms and take care of irrigation as well, especially if it's a female-headed household. Women from lower caste groups are relatively more mobile and vocal in public gatherings as well as opposed to the upper caste women who do not make their presence felt in public spaces (Field Notes, October 2011).

Politically Vidisha, one of the districts through which the network of canal system runs is the bastion of right wing fundamentalist party the Bhartiya Janata Party (BJP), ever since the Vidisha parliamentary constituency was constituted in 1967, and Indian National Congress (hereafter Congress Party) has only won it twice till now, in 1980 and 1985 elections. Some of the popular BJP leaders from Vidisha Parliamentary Constituency -which also includes parts of Raisen district- who have a stronghold in the state, and/or national politics are: Sushma Swaraj who is a Member of Parliament (MP) and also leader of the opposition in the *Lok Sabha* (lower house of the parliament) and Shivraj Singh Chauhan - the present Chief Minister of Madhya Pradesh. Thus, Vidisha is considered a safe constituency for *Hindutva* protagonist (N. D. Sharma, 2011). Further, Vidisha is also known to be politically active region, as it is the constituency of the present Chief Minister and one of the members of parliament (Interview, February 8, 2012). As a result and by extension farmers are also political of this region. At this juncture, it may also be noted that the farmer organizations in Raisen District also fall under Vidisha Parliamentary Constituency, however, for state elections, the legislative constituency in which the farmer organizations in Raisen are located in is a reserved category. Consequently, the Member of Legislative Assembly (MLA) for this region has alternated between BJP and Congress Party candidate. To recall, clientelism as an ideology was elaborated in chapter five as a driving force that drives the relationship between political office bearers and the political society.

Delving into material ownership of resources by farmers of this region, in 1980s, the average size of landholding in the project area (after the project was commissioned) was relatively higher than the

rest of the state. In Vidisha the average landholding size in 1980-81 was 6.7 hectares while in Raisen it was 5.8 hectare (GoI, 2006b, p. 129). Figure 6.2, elucidates the average land holding size of farmers in the SAS Project in around the time period project was commissioned.

Figure 6. 2: Average landholding size of farmers in SAS project in 1980s



Source: Design by author based on data from WALMI (1991a, p. 5)

From Figure 6.2 it is evident that about 40 per cent of farmers in this region in 1980s had more than five hectares of land, which is almost three times the all India average of 1.82 hectares [Agriculture Census 1980-81 (Dhanagare, 1995, p. 75)]. Further, using the Agriculture Census categorization (refer to Appendix VII), the farmers of the SAS Project area fall in the range of medium and upper medium landholders i.e. have an average landholding of 2.76 to 5.97 hectares. Thus, making evident that farmers in this region were better endowed with land (a productive asset) compared to other parts of the country in 1980s. It is also noteworthy that predominant occupation of the population in the project area is agriculture, and as a result, farmers are heavily dependent on functioning of network of canal system for irrigation.

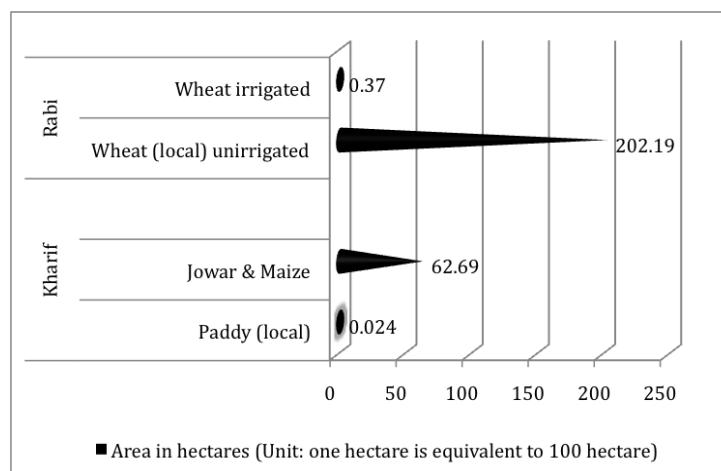
6.1.3 Agricultural practices before and after project commissioning

SAS Project has a long history of irrigation. In fact, in Sanchi -a well-known Buddhist site in the SAS project area- archaeologists have documented ancient irrigation dams between 1998 and 2000. These ancient dams were built to provide irrigation as a response to increased population levels close to the Buddhist settlements (Shaw & Sutcliffe, 2003, p. 73). For centuries after, however, local agriculture in this region has been rainfed wheat cultivation and absence of irrigation in this region has been attributed to high moisture storage capacity of the black cotton soils that is recharged by the annual monsoon rains. Another reason for lesser focus on irrigation or increasing agricultural productivity historically in this region has been due to series of famines (1896-97 and 1899-1900) in eastern Madhya Pradesh that resulted in massive devastation and death of animal and human

population that account for many abandoned settlements in this region (Phadnis & Kulshrestha, 2010, p. 174; Shaw & Sutcliffe, 2003). Thus, the low intensity of local agriculture in nineteenth century can be related to demography rather than soil type (Shaw & Sutcliffe, 2003, p. 81).

In the more recent past, the idea of initiating irrigation-cum-flood-protection projects to ensure water security was seeded in this region, as central India had faced two big famines. In the year 1965, there were abnormal floods in Betwa River that flows through the project area. The flood resulted in damage to property as well human lives and livestock in low-lying areas (Phadnis & Kulshrestha, 2010, p. 174). Thus, it is only after the project was commissioned in 1978 that irrigation started on a large-scale in this region. About 48 per cent of the area in the central and western part of Madhya Pradesh has black cotton soil (WALMI, 1991a, p. 3). SAS Project also falls in this black cotton soil region and compared to other parts of the country and the state, the practice of irrigation in this region started much later (in more recent past) one of the primary reasons for this was the soil type. The black cotton soil of the region (which is free from salts) retains moisture after monsoons and *rabi* (1st November to 31st March) wheat could be easily cultivated in this region without irrigating fields as the drainage of this area was considered to be good (WALMI, 1991a). However, without irrigation the agricultural production was substantially lesser. Figure 6.3, elaborates the cropping pattern prior to commission of the project in 1978.

Figure 6. 3: Cropping pattern before commission of SAS project



Source: Design by author based on data from WALMI (1991a, p. 5)

From Figure 6.3, it is evident that few crops were irrigated in this region. Wheat which is the primary crop grown in this region was mostly cultivated rainfed during the *rabi* season. For *kharif* (15th July to 15th October) cultivation, irrigation was not required as post-monsoons the soil retained some

moisture and *jowar* (sorghum), *toor*, maize, and other pulses could be cultivated without irrigation. Apart from *pissi* (wheat), other crops that were grown in this region prior to commissioning of the project were *chana* (gram or chickpea), *masoor* (pulses), and *alsi* (linseed) (Arjan Singh, February 7, 2012; Gol, 2006b, p. 114).

Box 6.1 elaborates on irrigation experience of few progressive farmers in late 1950s who had access to irrigation prior to SAS Project.

Box 6. 1: Collective farming by (few) progressive farmers

Some of the progressive farmers of Saronj started practicing irrigated agriculture in this region in the late 1950s, much before the SAS Project was commissioned. Few farmers in Saronj had availed 20 horsepower diesel pump set from then newly formed Madhya Pradesh state. Saronj is strategically located on the bank of a river. Thus, farmers could lift water from the river for irrigation. The state government in the 1950s was promoting improvement of agricultural practices by promoting new varieties of seeds, fertilizer and pump set schemes. The pump sets were available to willing group of farmers from the block office. The farmers had to pay INR 1.5 per hour for three years for using the pump set for irrigation. The block officials had an operator stationed at the village who used to operate the pump set and the state paid the fuel cost. During that period, Mohan Lal, one of the progressive farmers' from Saronj points out that farmers did not know about fertilizers and only organic manure was used. Farmers during that time were apprehensive to use urea as they thought that it would ruin their crop. Thus, initially only about ten farmers gained from this government programme and their agricultural production improved. Subsequently, a group of farmers bought 40.46 hectares of land in Samaykheri to undertake collective farming. They experimented and grew crops that were not yet cultivated in this region like sugarcane. During that time as SAS Project had not yet started in this region, irrigation was undertaken through diesel pump sets. These progressive farmers were also the first few to practice mechanized agriculture in this region through tractors, and other implements.

Source: Interview with Mohan Lal, December 14, 2011

Given, that there was not significant irrigated agriculture being practiced in this region till the 1980s, only 404.68 hectares of area was irrigated in total, prior to commissioning of SAS Project (GoMP, 1976). Rest of the agriculture was rainfed. Farmers in this area were poor and dependent on traditional agricultural practices. The crop yield in this region was very low as there were no contour bunds to retain monsoon rainfall in the soil (WALMI, 1991a). To give an instance of crop yield, in dry farming, 12.5 quintals of wheat was produced in a hectare. This number increased substantially to 50 quintal per hectare after farmers started availing irrigation from the canal system post 1980 (Bhagwan Singh, December 10, 2012). Official records indicate that yield for wheat crop varies from 22 quintals per hectare to 40.20 quintals per hectare with an average yield of 32.87 quintals per hectare (Gol, 2006b, p. 120).

Although, farmers started reaping benefits of irrigation after the project was commissioned, most of the farmers during their interview argued that availability of water was a problem during the 1980s

and 1990s. Farmers at the tail end, as opposed to the head and middle reach, listed timely water availability as a problem. This is not an unexpected finding as the canal network (as discussed earlier) was completed piecemeal and it was only in 1990s that farmers in the tail end received water. For instance, the tail end villages of Betwa farmer organization like Saronj and Radhakheri only started receiving water in 1985 and 1990 respectively (Maharaj Singh Jat, December 11, 2011; Rakesh Tiwary, January 10, 2012). Official records also verify that the canal system was completed on a piecemeal basis due to paucity of funds, land acquisition problem, etc. As a result, work of canal and distribution system was taken up in different phases under various central/state government schemes viz. USAID funding, NWMP funding, state funds, CADA, etc. (GoI, 2006b, p. 103). Consequently, the cropping pattern in this area changed gradually as farmers gained access to irrigation services, and new crops like Soybean were popularized by the department as proposed in the detailed project report of the SAS Project (GoMP, 1976). The cropping pattern in this region post 1990s is elaborated in Table 6.1.

Table 6. 1: Cropping pattern in SAS Project in the 1990s

Season	Irrigated	Rainfed
<i>Kharif</i>	Soybean	Soybean, <i>Jowar</i> (Sorghum), <i>Toor</i> and other pulses
<i>Rabi</i>	Wheat HYV, Wheat (local), Gram	Wheat (local), Gram, <i>Alsi</i> (linseed), <i>Masoor</i> , <i>Batla</i> , <i>Tiwda</i>

Source: Puranik (1997) and Field notes, December 19, 2011

There has been significant change in the *kharif* crop after irrigated agriculture in this region. Soybean as a cash crop became popular in the region in 1990s, prior to that only wheat was the only predominant cash crop. However, in the *rabi* season wheat and gram are still the predominant crop in this region. Detailed cropping pattern vis-à-vis percentage cropped area for SAS Project is presented in Appendix VIII. Interestingly, the purpose of the project was to provide irrigation water for both *kharif* and *rabi* cultivation, however, Soybean is still cultivated rainfed in this region and irrigation water from Halali dam is only used for *rabi* cultivation.

One of the structural designs of the project envisaged that farmers could be convinced to change their agricultural practice from dry and/or rainfed farming in *kharif* to irrigation in *kharif* season through extensive agriculture extension work (GoMP, 1976), however, this did not happen in the 1990s. At first, water use efficiency was not very high in the project, which led to wastage of water by farmers, and there wasn't enough water in the dam for provisioning water for two irrigation seasons. Second, the thrust of agriculture extension work in the area was not adequate apart from the impetus provided by Action Research Programme of WALMI to create awareness about better cropping practices in Betwa farmer organization (Field Notes, December 2011; GoI, 2006b, pp. Ec-

10). Further, it is noteworthy that Soybean was designed to be part of the cropping pattern but only for 10 per cent of the cropped area, but by end of 1990s it was the most extensively cultivated crop in *khariif* season. The rest of area was distributed in the designed cropping pattern between *jowar* (sorghum) and maize (50 per cent), pulses (5 per cent), ground nut (5 per cent), paddy (20 per cent), fodder (5 per cent) in *khariif* season and hybrid wheat (42 per cent) and ordinary wheat (22.57 per cent) in *rabi* cultivation season. Additionally, Sugarcane was envisaged as a perennial crop in 35.43 per cent of area (GoMP, 1976). Hence, it is fair to conclude that the designed cropping pattern had not become a reality by the 1990s in this area.

Overall, farmers in this region have learnt from experience and have gradually changed their cropping practices only once they internalized the benefits of proper irrigation and usage of agricultural inputs. For instance, wheat crop is now being irrigated four times (including for *palewa^{xci}*) (Maharaj Singh Jat, December 19, 2011). Further, since the 1990s, mechanized agriculture is being practiced in this region, which has reduced the requirement for labour drastically. Farmers use substantial quantity of inorganic fertilizers and pesticides in their farming. Farmers, especially large farmers prefer to use tractors for tilling and harvesters for harvesting their agricultural produce. It is noteworthy that not many people migrate from this region for seeking better employment opportunities. There is, however, shortage of agricultural labour in the command area of the SAS Project (Field notes, December 2011). Overall, the above discussion indicates that land is a productive asset and provides enough income to farmers in this region to sustain and is also the main source of sustenance.

6.2 Initiating participatory approach – first generation farmer organizations in the project

In the SAS Project region three types of farmer organizations were constituted by WRD as an attempt to decentralize irrigation management at the micro level till 1999. These were the *sinchai panchayats* that were formed in late 1980s, outlet committees that were formed in 1990-91 as part of the Action Research Programme of WALMI, and finally the Betwa *Krishak Samiti* that was constituted in 1995 at the behest of the then Chief Minister (Digvijay Singh) of the state of Madhya Pradesh as an initiative to decentralize (Field Notes, August 2011; Puranik, 1997, p. 142). All the three committees were at the micro level, though there is slight variation in terms of expanse of their functioning.

The *sinchai panchayat* usually comprised members from five to six villages and thus had the entire network of minor channels of respective villages under its functioning. Whilst the outlet committees were at outlet level, and had all farmers who availed water from an outlet/*chak* (mostly comprised

farmers from one village). Whilst Betwa *Krishak Samiti* was constituted on a minor channel and had select farmers from five villages/hamlets as its members, whose land was irrigated through this particular minor channel. Farmer organizations like the *sinchai panchayats* were formed in the entire SAS region, but the focus of discussion in this chapter is on elaborating farmer organizations (like the *sinchai panchayats* and the Betwa *Krishak Samiti*) that were formed in the two selected case study sites. The next section describes the process of constitution of these first generation organizations as an initiative to decentralize.

6.2.1 Constitution of farmer organizations in SAS Project

At the onset it is noteworthy, that in SAS Project region (and in the two case study sites) several attempts were made to make farmer organizations in a short period of less than a decade (from 1985-1995). Thus, farmers (if not very active, or part of these committees) were not able to distinguish one committee from the other, and their responses sometimes overlapped, as they would begin recalling details of, for instance - *sinchai panchayats*, and conclude the discussion with talking about outlet committees (Field Notes, September 2011). One of the reasons for this could be that during the time of the fieldwork, two decades had already passed since the old committees were constituted and (now) lay defunct. This, however, is also indicative of not enough attention paid by the state to build awareness amongst farmers about new institutions that were being designed in this region on a pilot basis to improve farmer participation in irrigation management.

It is noteworthy that farmers did not have any prior experience of irrigation in this region (see section 6.1.3 and Box 6.1), hence, irrigation and involvement of farmers in irrigation management was a new notion for them. Furthermore, during the course of fieldwork I was not able to collect any secondary information (like number of farmer organizations, membership pattern within farmer organization, minutes of meeting of these organizations, finances disbursed, area under farmer organizations, details of capacity building programmes) on any of these old/first generation farmer organizations as the generic response during the fieldwork by officials from WRD, Vidisha was that this was very old information and it was not available or they had no idea where it is. The state of affairs of small town government office is evident from Photograph 6.2, which is telling.

Photograph 6. 2: Documents stored in project office



Sinchai panchayats

Sinchai panchayats were constituted in Madhya Pradesh in mid-1980s. These *panchayats* were constituted under Madhya Pradesh Irrigation Act of 1931 (salient features of the Act discussed in Appendix IV). The *sinchai panchayats* were constituted in the state under Section 62(i) of Irrigation Act and were mandated to perform four main functions:

“Assist the officer of the irrigation department in detecting and preventing encroachments on canal lands prevent damage to irrigation works and report any wilful damage caused to irrigation works. Assist the officers of the irrigation department in arranging for the construction of water course, in recording and checking of irrigation and in making measurements and settling disputes. Collect irrigation revenue and remit to the treasury. Arrange for the repair of watercourses” (GoMP, 1931, Section 62(2); emphasis added).

From the above citation it is apparent that structural constraints were instituted in *sinchai panchayats* by design by envisaging *sinchai panchayat* members as mere assistants to WRD officials rather than providing the members any decision-making power. This is in sync with the state’s ideational landscape that heralded centrist state policies. It is noteworthy that by late 1980s at the national level, ideas and ideologies of neoliberalism were seeping in and thus there was call for lesser role of the state in management of irrigation as a consequence of poor financial condition of the irrigation bureaucracies (discussed in chapter four and five). However, it is known that ideas take time to travel and institutionalize. Thus, in Madhya Pradesh in the late 1980s the first farmer organization that were formed still insinuated top-down role for farmers as these organizations were constituted based on the colonial Irrigation Act 1931 of Madhya Pradesh which state ‘the member of

irrigation panchayat shall be deemed to be a Public Servant for the purpose of Indian Penal Code' (GoMP, 1931; 1981, p. 127). Moreover, *panchayat* members were paid an honorarium at the rate of 3 per cent for the first INR 1000 collected and an additional 2 per cent subsequent collection. The collected amount was to be distributed amongst members of *panchayat* (CWC, 2010, p. 38). Payment of honorarium was considered to be an incentive for smooth functioning and better performance of *panchayat* functions.

Moreover, the district collector was a powerful actor at the intermediate level and held key to decentralization at the micro level in context of constitution of the *sinchai panchayats* that were set up in the state. The district collector played an essential role both in constitution and dissolution of *sinchai panchayats*, as selection for the *sinchai panchayat* members was done with support from district collector's office. Further, number of members to be elected in one *sinchai panchayat* was not fixed according to the Irrigation Act. Rather was determined by the district collectors' office bearing in mind recommendations of the executive engineer's office. The average term of a *sinchai panchayat* according to the Irrigation Act 1931 was three years, though the district collector had the power to extend the term of office of a *sinchai panchayat* for a period not exceeding three years in aggregate (GoMP, 1975, Rule 143, 144(a)). The district collector had the power to nominate one member of the *sinchai panchayat* and s/he also had power to dissolve these *panchayats* by merely giving an order in writing (GoMP, 1975, Rule 144(c)). Overall, the district collector's office was the primary decision making body for conducting *sinchai panchayat* elections along with the executive engineer (from the Irrigation Department) who was responsible for making proposals that outlined number of members to be fixed for a *sinchai panchayat* and also fix date, time and place for elections. Subsequently, the proposal for constitution of *sinchai panchayats* was submitted to district collector's office for consideration and approval, and the district collector had the final authority on decision-making. From the Irrigation Department, the sub division officer was responsible for ensuring formation and functioning of these *panchayats*. The sub division officer undertook this work with the aid of *amins* (accountant/ person responsible for revenue collection) and junior functionaries (like time keeper, watchman) to distribute water to a *sinchai panchayat* (Gol, 1989). The election for *sinchai panchayat* president was done through nomination. All permanent landholders within the command area were considered electors for a *sinchai panchayat*. These electors were identified/defined by the executive engineer responsible for managing the canal system (GoMP, 1975, Rule 147(a)). The primary decision-making body for constitution, and selection of members was with officials (district collector and executive engineer) at the intermediate level. The above discussion highlights the power intermediate level bureaucrats had over decentralizing the micro level. It is noteworthy that no efforts/inclination was shown to decentralize the

intermediate level functioning by involving farmer organizations at this juncture. This is consonance with deliberation in chapter four on including farmers in management of irrigation system. Here it also needs to be noted that Madhya Pradesh has a long history of struggle for agrarian and environmental movement. This peaked in the late 1980s and 1990s in form of the *Narmada Bachao Andolan* (Save the Narmada Movement), which is a social movement struggle against 300 small and large dams in India, and this struggle peaked with contestation over building of Sardar Sarovar Project in southern Madhya Pradesh. The movement contested knowledge claims role and hegemony of method of development being pursued and which displaced local population and neglected existing local knowledge of subaltern groups (Singh, 2004). Contrastingly to happenings in central and southern Madhya Pradesh, however, the command area of the SAS project did not witness similar contestation and first generation farmer organization like *sinchai panchayats* were constituted by state ruling.

Outlet committees

Additionally, outlet committees were formed as part of the Action Research Programme in select area in SAS Project area. According to WRD an opening from a canal is identified as an outlet when a 9 to 12 inch wide RCC un-gated pipes are fitted in the embankment to serve as an outlet for water in the *chak* or outlet command area (WALMI, 1991a, p. 13). Outlets committees were informally organized, and as a result were not registered. Each committee had 40 hectares under its command area. *Thokdars* (outlet committee leaders) were responsible for distributing water in respective outlet command areas during irrigation season. Puranik (1997, pp. 143, 146) researched these committees in the SAS Project and observes that they were active only during the irrigation season and during the rest of the year they laid dormant. The outlet committees were formed by WALMI, who held meetings with farmers on a pre-decided date and time. All permanent landholders in an outlet were members of the outlet committee, and *thokdars* were selected by nomination as leaders of outlet committee (WALMI, 1991a, p. 29). Interestingly, description of selection of *thokdars* in the Action Research Programme report of WALMI is: 'frequent interaction with clients had given fair ideas about the influential people (who could be) acting as group leaders' (ibid.). Two points that need to be elaborated from the above citation is that elite farmers' in the outlet's command/*chak* area were given preference and selected as *thokdars*. Furthermore, influential farmers during that period were either the village *patel's* (traditional authority) of the village or those individuals who were favoured by the village *patel*. Given, that WALMI officials, selected group leaders or *thokdars* on this criterion, hence, only medium or large landholding farmers gained from this selection process.

As part of the capacity building programme for outlet committee members, select farmers from each outlet committee were taken for field visit to Maharashtra to interact with farmers in Maharashtra and to learn irrigation methods employed there. The objective of the field visit for WALMI was to motivate select farmers who in turn were responsible to create further awareness in their villages about salience of farmer organization for better irrigation management (WALMI, 1991a, p. 30). Additionally, training programme for farmers was also organized by WALMI in a close by town on May 20, 1988 where the then MLA from the region emphasized that officers of the irrigation department ought to meet the farmers more frequently to solve their problems (WALMI, 1991a, p. 9). Despite these efforts made for capacity building, these outlet committees were not successful and were more on paper rather than actuality. Moreover, from name of these committees, it is self-evident that their focus was also on micro level irrigation management i.e. the outlet level and intermediate level issues were not considered.

To recall from chapter five, in the early 1990s Chief Minister Digvijay Singh had initiated decentralization drive in Madhya Pradesh and as an outcome of this decentralization drive, few of these outlet committee areas were shortlisted for registration under Madhya Pradesh Societies Registration Act of 1973. One of them was Betwa *Krishak Samiti* in the same region that earlier had Betwa *sinchai panchayat*, and needs further elaboration.

Betwa Krishak Samiti

In the year 1994-1995, in order to decentralize irrigation management in the state, a total of 65 farmer organizations were formed on pilot basis under Madhya Pradesh Societies Registration Act of 1973. Of these 65 farmer organizations, Betwa *Krishak Samiti* (hereafter *Krishak Samiti*), in the SAS Project area was the first farmer organization that was constituted in Madhya Pradesh on July 20, 1995 for instituting cooperation of farmers in irrigation management as part of the decentralization drive of the 1990s. This *samiti* was registered under the Madhya Pradesh Societies Registration Act on August 22, 1995 and was formed on one of the tail end minors of the canal. The *Krishak Samiti* had 504.43 hectares of land (162 farmer fields) in its command area and was spread across five villages/hamlets in adjacent districts of Raisen and Vidisha (SAS *Krishak Samiti*, 1995). The Betwa *Krishak Samiti* was not very different from the *sinchai panchayat* that were constituted in the state in the 1980s. The only difference being that *sinchai panchayat* had several minor channels and/or distributary under its functioning while Betwa *Krishak Samiti* had one of the tail end minors under it. Funding for constituting Betwa *Krishak Samiti* was provisioned under National Water Management Programme of the World Bank (Interview, Senior WRD official, December 16, 2011).

6.3 Summing up

This chapter introduces the SAS project as a case study site and also discusses the three forms of first generation farmer organizations that were constituted in the project region at the micro level. Table 6.2 summarises the salient features of these first generation farmer organizations.

Table 6. 2: First generation farmer organizations

Farmer organization	Year of constitution (approximate)	Level and expanse of operation	Number of villages/hamlets	Legal status
<i>Sinchai panchayat</i>	mid to late 1980s	- Micro level - Its expanse included several minor channels and/or distributory. More than 1000 hectares of land under its command area	5-6 villages	Mention of <i>sinchai panchayat</i> in Irrigation Act of 1931. Recognized by the irrigation department and made in the entire state
Outlet committee	From late 1980s to early 1990s	- Micro level - On one outlet of the canal system. Each outlet had about 40 hectares of land under its command area	Mostly farmers from one village i.e. all farmer fields being served by an outlet	Informally constituted by WALMI, not registered. Only constituted in the regions where Action Research Programme was carried out
<i>Betwa Krishak Samiti</i>	1995	- Micro level - On one minor channel of the canal system. About 504 hectares of land under its command area.	Five village/hamlets	Formed across the state as part of Chief Minister's decentralization drive in 1990s. Registered with Madhya Pradesh Societies Registration Act 1973

From Table 6.2 it is evident that all the three type of farmer organization were constituted at the micro level and there were *no* efforts made to decentralize the intermediate level of irrigation management i.e. in terms of devolution of funds, functions or functionaries during this time period. The micro level organizations were constituted, as the state structural mandate demanded so. The happenings at the state level that shaped the ideational landscape for constitution of farmer organization as a consequence of tied funding from the central government and funding from donor organizations was discussed in chapter five. Building on chapter five, this chapter demonstrated salience of structural factors like legislative rulings, and donor funding emerge as important factors that shape the ideational landscape at micro level and thus the process for initiation of first generation farmer organization in the project.

Additionally, this chapter elaborated the socio-cultural and political context of the SAS Project in which the local actors i.e. farmers, farmer organization and junior bureaucracy and junior functionaries of the department are embedded-in and which shapes their ideational landscape. The

chapter also elucidated SAS Project situatedness in a dynamic context with diverse heterogeneous community. Thus, socio-cultural and structural factors like caste, class, gender, position on the canal network emerged as important factors that need to be borne in mind to understand ideational realm of actors. Building on this discussion, the next chapter elucidates the process of selection of farmer organization members and its leaders in the two select case study sites, practices of water distribution, and relation of farmers with bureaucracy using the conceptual frame of ideational realm elaborated in chapter three.

^{lxxxv} Vidisha District is primarily populated in rural areas and of the total 297419 households in the district, 231876 (78 per cent) reside in the rural areas (Gol, 2011b). About 75 per cent of rural households in Vidisha use hand pumps to meet their domestic water needs; and about 11 per cent have hand pump within their premise (Gol, 2011b). These statistics are similar for Raisen District, and of the total 274219 households in the district, 214616 (78 per cent) households reside in the rural areas. About 71 per cent of the rural households use hand pumps in rural Raisen to meet their domestic water requirements of which only about one percent have hand pump within their premise (Gol, 2011b). Vidisha and Raisen District also have one of the poorest sex ratio in the state. According to Census 2011, the sex ratio in Vidisha District is 897 females against 1000 males while in Raisen District it is 899 females against 1000 males (Gol, 2011c). The figures are not any better if data on basic sanitation facilities is delved into. In Vidisha District, 75.3 per cent of households according to Census 2011 don't have latrines. The figures are slightly better for Raisen District with 69.9 per cent households not having their private latrines. 61 per cent of households in Vidisha District have access to electricity while 70.9 per cent have access to electricity in Raisen District. The figures for literacy rate are relatively better for this region, with 72.10 per cent literate in Vidisha District and 74.3 per cent literate in Raisen District (Gol, 2012b).

^{lxxxvi} This programme was done in collaboration with scientists from RAK College of Agriculture and from Zonal Agriculture Research Station Powarkheda and WALMI officials (WALMI, 1989).

^{lxxxvii} One explication of caste system traditionally is as workers guild, at the top of which are *Brahmins* who are priests by vocation, then comes the *Kshatriya/Rajput* who are the warriors/rulers, third in the hierarchy are the *Vaishyas* who are predominantly merchants, traders and then are the *Sudra* who are unskilled workers, followed by the outcastes/*dalit*/untouchables who did menial jobs in society. Moreover, within these four major groups there are sub categories as well (Blunt, 1931, p. 8).

^{lxxxviii} To elaborate, 'safeguarding of the caste structure is achieved through the highly restricted movement of women or even through female seclusion. Women are regarded as gate-ways-literally points of entrance into the caste system. The lower caste male whose sexuality is a threat to-upper caste purity has to be institutionally prevented from having sexual access to women of the higher castes so women must be carefully guarded' (Chakravarti, 1993, p. 579).

^{lxxxix} The Indian state categorizes the society into four groups, viz. General, Scheduled Caste, Scheduled Tribe, and Other Backward Caste to identify historically marginalized/wronged sections. Based on this categorization the state provides specific groups greater benefits through its affirmative action policy with the intent to bring them at par with the general population which comprises for instance *Brahmin, Rajput, Kayasth*, etc.

^{xc} Observation of Pandey(2006) are similar who undertook an ethnography of one village in this Project.

^{xc1} Similar norm can be observed for instance, while drawing water from well or hand pump. The upper caste person draws water first and then the lower caste person draws water (Pandey, 2006, p. 34). However, these norms are changing gradually and people are questioning the validity of some of these practices. For instance, during the time of fieldwork respondents (men and women) were always curious about my caste, and families from lower caste were hesitant to offer water as they (wrongly) assumed that I would not consume it. Further, my first field assistant was from the upper caste (*Brahmin*) community and he did not consume water in SC households. When I confronted him why he was not consuming water, given with time people's attitudes are

changing, he responded, 'he did not have a problem with consuming water from a SC household. But everyone in this area knows him (as he is a local) and he has to observe the norm as otherwise people will start talking' (Field notes, December 9, 2011).

^{xcii} Pre-sowing irrigation or *palewa* is practiced in this region for *rabi* crop. *Palewa* is required in fields where *kharif* crop has been taken earlier. *Palewa* is provided for 'land preparation to ensure proper seed-soil contact; to provide necessary moisture for germination; to meet evapotranspiration requirement up to first irrigation' (WALMI, 1993, p. 1).

7 *Mansikta* of First Generation Farmer Organizations

Chapter six discussed the embeddedness of actors within the socio-cultural reality and thus set the context to unpack the ideational realm of farmers, farmer organizations, and bureaucracy from 1978-2000 when the first generation farmer organizations were constituted in the state. Following on that discussion, this chapter discusses dominant ideational realm of actors' i.e. their *mansikta* (mind-set) when farmer organizations were constituted in 1980s and 1990s in the SAS Project area. The importance of structural and cultural ideational factors gains prominence in this context, and facilitates in building an imagery of perception and rationality of actors, viz. farmer organizations', farmers and the bureaucracy about participation, corruption, role of state in context of irrigation management.^{xciii}

It is noteworthy that ideational effect is simpler to trace at the macro level, as policy directives, minutes of meetings, and similar secondary literature are reasonable sources to grasp the ideational effects of introducing new idea(s), and the bottlenecks thereof that are faced in implementing it. Ideational effect and its impact are more challenging to trace at the intermediate and/or micro level, as the material effects of introducing new ideas, interposed with norms, values, worldviews of actors creates a dynamic field for analysis. To undertake methodological analysis, perception of actors' in this section is evaluated in reference to election of farmer organization (leaders and members), key roles and responsibilities enunciated for farmer organization, and their perception and relation to bureaucracy. The rationality of actors is evaluated against envisaged functions as elaborated in the Irrigation Act 1931 under which *sinchai panchayat* were constituted and the byelaws of Madhya Pradesh Societies Registration Act of 1973 under which *Betwa Krishak Samiti* was constituted. Discussion on outlet committees is brief as they were non-starter from the beginning. Furthermore, this chapter analyzes how underlying structural and cultural factors moulded actors' perception and selection and functioning of first generation farmer organizations in the two select case study sites.

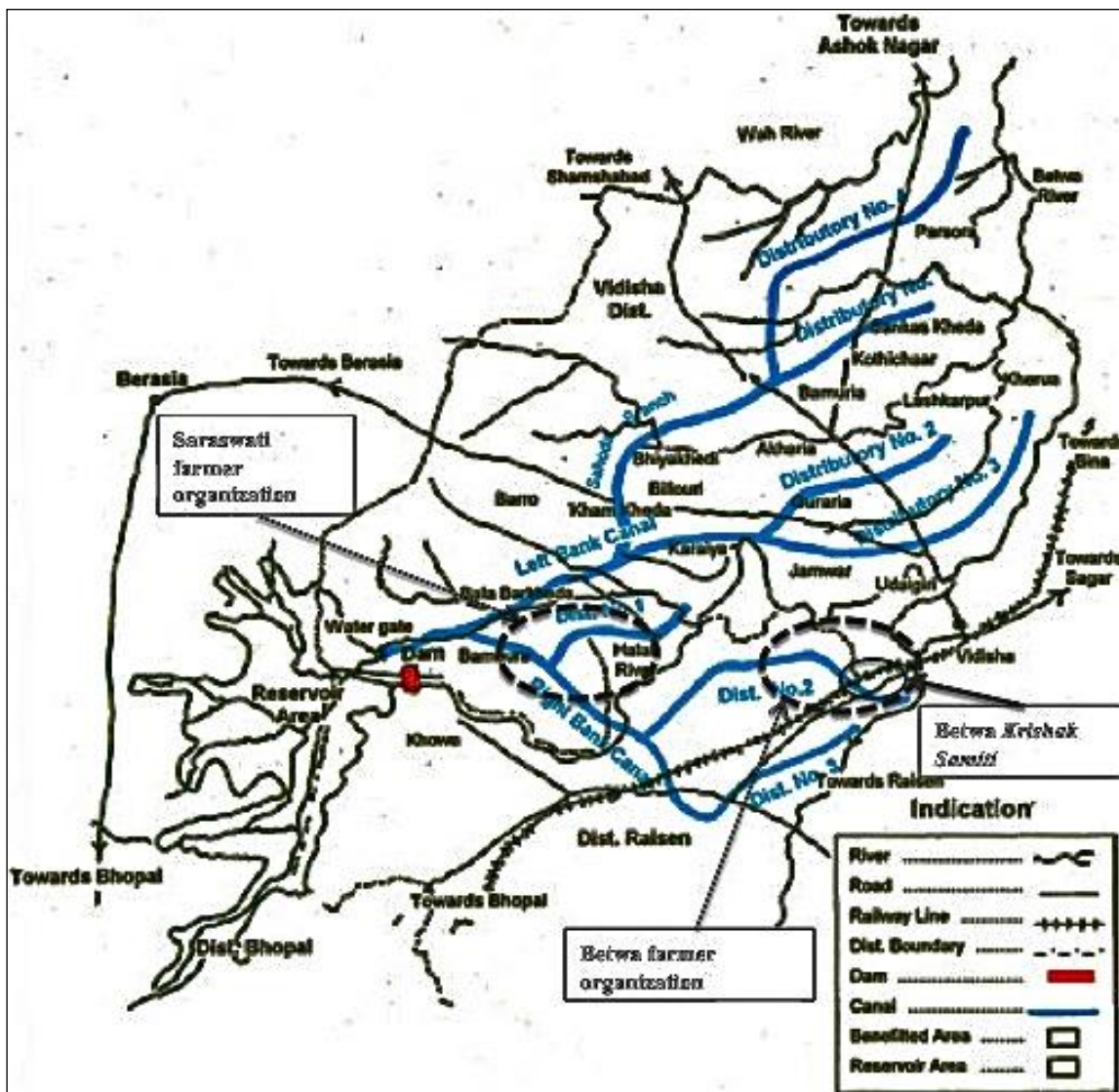
This chapter puts forth the idea, that bureaucracy worked under a technical and managerial mind-set (harbingers of growth and progress), whilst the farmers and farmer organizations' perception about 'self' and their capabilities was influenced by their socio-political, cultural setting and their perception about the material, socio-cultural and political leverage that they had accumulated. Moreover, salience of prevalent ideas and ideologies on irrigation management in shaping actors perception are also elucidated. Specifically, section 7.1 and 7.2 elaborates the ideational realm of actors' with respect to irrigation management, whilst section 7.3 highlights the significance of

structural and cultural factors influencing the ideational realm of actors in first generation farmer organization in SAS Project and provides a summary conclusion.

7.1. Selection process of first generation farmer organization members and its leaders

This section discusses the election process of first generation farmer organization in the two select case study sites, viz. where Betwa and Saraswati *sinchai panchayat* were made in late 1980s and Betwa *Krishak Samiti* was made in mid 1990s. Figure 7.1 illustrates the location of these farmer organizations on the map.

Figure 7. 1: Map of SAS Project



Source: WALMI (2011, p. 30)

7.1.1 Betwa *Sinchai Panchayat*

Betwa *sinchai panchayat* is on the middle/tail end of the canal and had about 16 villages in its jurisdiction demarcated on hydraulic basis, and had in total about 15-20 members in the *sinchai panchayat*. The meeting for nomination and selection of members of Betwa *sinchai panchayat* was done in Betwa village in the late 1980s, and farmers from nearby villages (Chapna, Amla, Saronj, Karamkheri, Radhakheri, Sadhai, Kanakheri, Sagwaan, etc.) that were notified to be part of Betwa *sinchai panchayat* came for the meeting held at Betwa village. Although despite prior notification about the time and venue for the meeting by the *chowkidaar* (watchman) from the irrigation department there wasn't representation from all the 16 villages (Samar Malik, December 9, 2011 and Bhagwan Singh, December 10, 2011). Approximately 40 villagers came to Betwa village for selecting the *sinchai panchayat* members, now almost three decades ago. It is noteworthy, that in the late 1980s, this region had very poor connectivity and there were only fair weather roads in the area. Moreover, there were very few farmers who had motorcycles or any other mechanized means of transport (Samar Malik, December 9, 2011). Mode of commute was mostly on foot or on bicycles / motorcycles, if (some) farmers owned them. Given this context, presence of about 40 farmers for village meeting was considered (by farmers) a good turnout for selection of *sinchai panchayat* members and president. Officials from the irrigation department and district collector's office were also present at the meeting held in Betwa village, and were responsible for convening the meeting and documenting/reporting the entire process (Field Notes, December 10, 2011).

Given, that there wasn't representation from all the villages delineated under the *sinchai panchayat* for this meeting, the villagers present nominated *sinchai panchayat* members mostly from Betwa (six members), Saronj (three members), Sadhai (one member), Karamkheri (one member), Chapna (one member) and Amla (one member) villages. Farmers present also nominated few members from villages missing representation in this meeting including one member from the *dalit* (belonging to scheduled caste) community (Samar Malik, December 9, 2011). There was, however, no representation of women, even for the sake of tokenism, in Betwa *sinchai panchayat*, which is not surprising as co-opting women in the *sinchai panchayat* is not elaborated in the Irrigation Act 1931 (c.f. GoMP, 1931).

Samar Malik from Betwa village was the former president of Betwa *sinchai panchayat*. He describes the entire election 'process as just a formality' (ibid.). Explaining the process of his nomination and selection as president, he posits:

“My name was proposed for president in the meeting held in Betwa village. I was not considered an advanced farmer in agricultural practices, but was educated and an expert in talking to officials. People did not want to ruin their work, so they thought that let us propose his name (...). All influential people and big farmers had proposed my name like the former tehsildar from Betwa village; Nahani Singh from Saronj village, who was former sarpanch (leader of Betwa Panchayat) and is a Congressi (person associated with Congress party); Bhagwan Singh from Saronj; Rakesh Sharma from Amla, etc.

Everyone knew my political affiliations were with Congress Party and this was synchronous with the political leanings of some of the other farmers who nominated my name. Thus, there was huge uproar to my nomination as president in the meeting. People who belonged to the BJP camp objected to my nomination, for instance, Kanhaiya Lal Saxena and Bhawar Singh who were from my village, also opposed my candidature. However, this opposition did not change the election result, as majority was on my side including support from farmers who were affiliated with BJP. So all the big people shouted at those opposing my candidature and shut them up. Vote was not given on party lines but on the basis of personality of the candidate in the end. The people who were opposing me were less educated (had studied up till secondary school or lesser)” (Interview, December 9, 2011).

Box 7.1 provides a short profile of Samar Malik, which further substantiates the reason for him being elected as Betwa *sinchai panchayat* president.

Box 7. 1: Profile of former Betwa *sinchai panchayat* president

Samar Malik is an active septuagenarian. He comes from the Muslim community, which is a minority community in Betwa *sinchai panchayat*. Despite being from the minority community he was elected president of the *sinchai panchayat* around 1990. His family owned 14.56 hectares of land in 1980s, when the land reforms had not yet happened, and his father and the three brothers owned this land collectively. Currently, he owns about 6.07 hectares of land. He completed his secondary schooling from nearby area, and completed his senior secondary school from Bhopal. Samar Malik completed his undergraduate degree in 1969 and started teaching in a school close to Betwa village. He taught in two schools in the area for 15 years, and simultaneously during this period studied law in Vidisha. After completing his law degree, he resigned from his teaching job and started practicing law between 1975 and 1990 at the district headquarters. Samar Malik discontinued his law practice and returned to Betwa village in 1990 after his father died. Since then he has been practicing agriculture in this region, though, he does not practice hands on agriculture - all agricultural work is done by hired labourers. After his return to Betwa he was selected the *sinchai panchayat* president. Additionally, in mid 1990s, he was member of *bees-sutra samiti* of the Congress Party at the block level for five years.

Samar Malik has sharp memory and recounts with clarity the events that led to constitution of *sinchai panchayat* for the first time in this region. He also recalled how WALMI was constituted under the aegis of some American funding organization (referring to USAID). Evidently, the WALMI officials and staff communicated this to him. Samar Malik is astute and agile for his age, and is still actively involved in his (agricultural) occupation.

Source: Interview, Samar Malik, December 9, 2011

From description in Box 7.1, it becomes evident that Samar Malik was not merely nominated. Rather his selection/election needs to be viewed in context of salience of structures i.e. he was materially endowed (owned 14.56 hectares of land), had access to education and thus privy to knowledge/information. There were not many farmers in Betwa *sinchai panchayat* who had similar capacities. Additionally, he was well travelled, which was rare during that period.

To elaborate further, the process of selection of farmers as *sinchai panchayat* members by the villagers during the meeting was based on several criterions. First, perception of farmers about the nominee being progressive and active i.e. someone who will bring new knowledge and information to them. For instance, Bhagwan Singh, from Saronj was un-educated but considered a progressive farmer who tried new agricultural practices (Interview, December 10, 2011). Thus, he was nominated to be one of the members of *sinchai panchayat* from Saronj.

Second, was the educational qualification of the nominees. During this period, there were not many people who were educated in this region. In fact the literacy rate is still poor in this region. So, farmers present for the meeting nominated literate farmers, for instance, Samar Malik as president, and Mohan Lal from Samaykheri as member of *sinchai panchayat*. Maharaj Singh Jat from Saronj, another member of *sinchai panchayat* elucidates that during the meeting Samar Malik was selected as president as farmers stated 'you are a lawyer, you should take some time out and get involved in management as that can improve the situation' (Interview, December 11, 2011).

Third, was how vocal the nominated members were in their respective villages and in their interaction with outsiders, for instance, officials from the local district and block office.

Fourth, critical factor was ownership of landholdings (Field Notes, December 9, 2011). Although, members of *sinchai panchayat* did not per se, deem landholding as an important criterion for their nomination, however, delving into their personal details illuminates that many of the members of Betwa *sinchai panchayat* were large landholders, for instance, Bhagwan Singh from Saronj (26.30 hectares), Rakesh Sharma from Amla (20.23 hectares), Ravindar Prasad from Ranakheri (20.23 hectares), Mohan Lal from Samaykheri (24.28 hectares), Behram Singh Yadav from Chapna (14.16), etc. (Samar Malik, December 9, 2011). Thus, it (also) becomes evident that landholding did play a critical role in selection of farmers as *sinchai panchayat* members, apart from perception of these farmers being progressive. Additionally, almost all the above-mentioned members of *sinchai panchayat* belong to upper caste, apart from Behram Singh who belongs to Other Backward Caste (OBC). For instance, Bhagwan Singh and Mohan Lal are *Rajputs*, Rakesh Sharma is a *Brahmin* and

Ravindar Prasad is a *Kayasth* (a sub-caste between *Rajputs* and *Brahmins*). Some of these members were from village *patel* (traditional village authority) family, viz. Mohan Lal, and Bhagwan Singh.

Moreover, farmers were connoted progressive if they were educated, active in their villages and vocal. These aforementioned criterions -progressive, educated, village *patels* and/or large landholders- by definition excluded the marginalized sections of the community. Thus, it is fair to conclude that in the late 1980s the process of selection of *sinchai panchayat* members and president was biased towards the better-off sections in the Betwa *sinchai panchayat* villages. Table 7.1, summarizes the characteristics of Betwa *sinchai panchayat* committee members discussed till now.

Table 7. 1: Characteristics of select Betwa *sinchai panchayat* committee members

<i>Sinchai panchayat</i> members	Name [#]	Land ownership (in hectare)	Caste/ Religion	Village/hamlet	Education level	Dominant perception about SP members & their party affiliations
President	Samar Malik	14.56	Muslim	Betwa ¹	Law degree	Well-travelled, Congress Party
Member	Bhagwan Singh	26.30	<i>Rajput</i>	Saronj ²	Illiterate	Progressive farmer, good relations with officials, well-travelled, village <i>patel</i> , vocal, BJP
Member	Mohan Lal	24.28	<i>Rajput</i>	Samaykheri ¹	Secondary school	Village <i>patel</i> , BJP
Member	Maharaj Singh Jat	80.9	<i>Rajput</i>	Saronj ²	Secondary school	Well-travelled, Village <i>patel</i> , BJP
Member	Rakesh Sharma	20.23	<i>Brahmin</i>	Amla ²	Illiterate	Vocal, good relations with officials, Congress Party
Member	Behram Singh	14.16	<i>Sudra</i>	Chapna ¹	Primary school	Active farmer, good relations with officials, BJP
Member	Ravindar Prasad	20.23	<i>Kayasth</i> *	Ranakkheri ²	Senior secondary school	Village <i>patel</i> , Congress party

[#] Pseudonyms are used to maintain anonymity of respondents

* Sub-caste between *Rajput* and *Brahmin*

¹ Middle reach village

² Tail end village

Reiterating, from Table 7.1, it becomes evident that farmers selected those individuals, as *sinchai panchayat* members who they believed were active, vocal, well educated, had good relations with officials and were considered progressive. Incidentally, all these are also criterion of good leaders. However, all the farmers listed in Table 7.1 were large landholders of this region, which points that material structures^{xciv} also played a role in selection of members. Furthermore, most of the farmers

were also from the predominant caste group (*Rajput*) of the region. So, it is fair to conclude that all members of the *sinchai panchayat* were well endowed with one or many of these qualities and were leaders, elites of their villages. Thus, the rationale for selection of *sinchai panchayat* members was contingent on farmers' perception about selected members, which was guided by their beliefs about progressiveness of farmers, education, social and material status and hierarchy. For the selection of *sinchai panchayats* members, farmers' beliefs about potential farmer organization member, and the value they attached to the candidature of an individual was important. Furthermore, the above discussion elucidates that it was not the individual beliefs, but the intersubjective beliefs on the type of candidate that ought to be *sinchai panchayats* members that shaped actors worldview/*mansikta* for selecting *sinchai panchayats* members.

7.1.2 Saraswati Sinchai Panchayat

Likewise, Saraswati *sinchai panchayat* was formed after a notification letter for constitution of the *sinchai panchayat* came from the erstwhile irrigation department to six villages (Saraswati, Mangod, Tarasi, Karonj, Sadaiya, Amlakheri), which were delineated on a hydraulic basis to be under the *sinchai panchayat*. Saraswati *sinchai panchayat* was formed on head reach of the canal system. Here, it may be noted that though the *panchayat* boundaries were delineated on hydraulic basis, there were villages within the *panchayat* on head, middle and tail end. For instance, Sadaiya, Amlakheri are the tail end villages within the Saraswati *sinchai panchayat*.

Abhay Singh Maina, former president of Saraswati *sinchai panchayat* is from Sadaiya, and reflecting on the process of formation of the *sinchai panchayat* points out that he was chosen president by nomination/delegation. There were five members in total in Saraswati *sinchai panchayat*, and one nominated *dalit* (from Scheduled Caste community) member. There was no women representative in Saraswati *sinchai panchayat* as well (Abhay Singh Maina, December 6, 2011 and Arjan Singh, February 7, 2012). Abhay Singh Maina belongs to OBC, which is another predominant landholding group in this area.

The process of constitution and selection of *sinchai panchayat* members was similar to that of Betwa *sinchai panchayat* (as elaborated in the section above), Although slightly more democratic, as the consensus for the post of president was not achieved during the first two rounds of elections given that there were two contenders for the post of president (Abhay Singh Maina and Surjan Singh). Surjan Singh is from one of the hamlets of Saraswati village i.e. Baagkheri, which falls on the middle reach and is habited close to the canal). Surjan Singh, as opposed to Abhay Singh Maina is a *Rajput* by

caste and is a big landholder of Baagkheri. A minor channel from the canal provides water to farmers of Baagkheri. Though, few farmers of Baagkheri also avail water directly through outlet on the canal.

The process of selection of Saraswati *sinchai panchayat* president was mired by controversies. There was politicking by the two contenders to garner support for their nomination. The first two rounds of elections were inconclusive as both Abhay Singh Maina and Surjan Singh had equal votes. Eventually, the selection of Saraswati *sinchai panchayat* president was done through nomination by the then Irrigation Minister's (Digvijay Singh) office. During the interview, Abhay Singh Maina whose political views are in line with Congress party's emphasized the good relations he had with the then irrigation minister from Congress party. Apart from selection of Abhay Singh Maina as the *sinchai panchayat* president, representation from *dalit* community was also ensured in the *sinchai panchayat* by nomination of Nannu, as one of the members (Abhay Singh Maina, December 6, 2012 & Arjan Singh, February 7, 2012). Table 7.2, provides a summary of the characteristic features of Saraswati *sinchai panchayat* members.

Table 7. 2: Characteristics of Saraswati *sinchai panchayat* committee members

<i>Sinchai panchayat (SP)</i>	Name [#]	Land ownership (in hectare)	Caste	Village/hamlet	Education level	Dominant perception about SP members & their party affiliations
President	Abhay Singh Maina	8.25	OBC	Sadaiya ³	Illiterate	Active farmer, good relations with officials, village <i>patel</i> , Congress Party
Member	Surjan Singh	48.12	<i>Rajput</i>	Baagkheri ²	Illiterate	Active, village <i>patel</i> , Congress Party
Member	Mangu Lal	21.24	<i>Vaishya</i>	Mangod ¹	Primary school	Vocal, active farmer, good relation with officials, Congress Party
Member	Amar Singh	27.82	<i>Rajput</i>	Karonj ¹	Primary school	Progressive farmer, BJP
Member	Arjan Singh	7.25	<i>Rajput</i>	Tarasi ²	Primary school	Active & progressive, farmer, well-travelled, BJP
Member	Nannu	0.4	<i>Dalit/SC</i>	Saraswati ¹	Illiterate	Nominated as he is a <i>dalit</i>

[#] Pseudonyms are used to maintain anonymity of respondents

¹ Head reach village

² Middle reach village

³ Tail end village

Table 7.2, indicates that there is wide variation in landholding size of farmers in Saraswati *sinchai panchayat* compared to *Betwa sinchai panchayat*. This variation explicates the reasons for

controversies/differences between farmers. Additionally, many of the members were large land holding farmers and thus influence of material ideation in influencing farmer perception is evident in this case as well. Furthermore, the president of the *sinchai panchayat* is from *Maina* community, which is another predominant caste group (OBC) in this region. Moreover, given that Abhay Singh Maina's name was nominated by the Irrigation Minister's office, and the former *sinchai panchayat* president takes pride in his connection with the minister it is safe to conclude that proximity to the minister - the socio-political leverage that he commanded in the region - played a role in securing *sinchai panchayat* president post for Abhay Singh Maina. Moreover, from Table 7.2 it is evident that membership of Nannu in Saraswati *sinchai panchayat* is an exception - he was made member by nomination in order to have representation from marginal *dalit/SC* in *sinchai panchayat*. It is however noteworthy that his selection was apolitical.

From the above discussion it becomes evident that clientelism also played a role in selection of Saraswati *sinchai panchayat* president as Abhay Singh Maina used his political connection with the irrigation minister to leverage support in his favour for nomination as president. This was possible as the selection process was not through secret ballot vote rather through nomination and the district collector's office had the final authority to decide the candidate who decided in favour of Abhay Singh Maina. Here, different beliefs that shape the worldview of actors and thereby the process of selection of leaders also becomes salient that is in Saraswati *sinchai panchayats* the two predominant leaders were selected given their position in the social hierarchy of caste and proximity to the political office bearers. This is in contrast to the downstream Betwa *sinchai panchayats* where selection apart from social hierarchy of caste was also contingent on progressiveness and educational status. The above discussion elucidates different beliefs like progressiveness or education as a signifier of quality of good leader that shaped the ideational realm/*mansikta* of farmers.

7.1.3 Betwa Krishak Samiti

The selection of *Krishak Samiti* members was done in a meeting organized by the irrigation department at the village temple close to Karamkheri. Five members of the management committee were selected through nomination: Mehtab Patel (*Rajput* by caste and from the family of village *patel*) from Karamkheri was nominated for president (he was earlier *sarpanch* of Betwa *panchayat*); Madhav Ram (*Rajput* by caste) from Ranakheri was selected as co-president. Prakash Narayan (*Rajput* by caste) from Ranakheri was the secretary. Ram Patel (*Rajput* by caste and village *patel*) was the co-secretary and Rakesh Tiwary (*Brahmin* by caste) was the cashier, both were from Radhakheri.

Another prominent member of the *samiti* was Nahan Singh (*Rajput* by caste) who was also a member in the earlier constituted Betwa *sinchai panchayat*, and was elected *sarpanch* of the *sinchai panchayat*. In total there were 22 members in the *Krishak Samiti*. Two women members were also part of this committee. Overall, majority of members selected for this committee were from upper caste, and like the previous *sinchai panchayat* members, had large landholdings and were active farmers, or village *patels* (traditional authority). Thus, most of the committee members were powerful elites of their village. Moreover, most of the members of this committee were from prominent *patel* families and/or were rich farmers, for instance, one of them owned a shop in the close by town, another had an agriculture farm (SAS *Krishak Samiti*, 1995). Several of the members of the *Krishak Samiti* were affiliated with Congress Party and had been also members of the Congress Party Committee at the district level.

According to the regulations of the *Krishak Samiti* to become a guardian member, farmers had to pay INR 500 to the committee fund within a year, and to be a lifelong member one had to pay INR 200 to the *samiti* fund. General members had to pay INR 24 for a year (SAS *Krishak Samiti*, 1995). The *Krishak Samiti* lasted for about five years, till Water User Associations (WUAs) were introduced in the state in the year 2000.

Chief Engineer, Operation and Maintenance (O&M) did the inaugural for the constitution of the committee with great fanfare on April 4, 1995 (ibid.). Mehtab Patel, president of *Krishak Samiti* (also) remembers the inaugural ceremony for the *samiti*, as a big event, invitation cards were printed and sent out in advance to all officials. Further, he posits 'we were given lot of importance then, there were programmes of us on the radio where we shared the process of constitution of *Krishak Samiti* with the audience' (Interview, September 30, 2011). The opening lines of byelaws of the *Krishak Samiti* elucidates that constitution of this committee was the dream of the then Chief Minister Digvijay Singh and the then Irrigation Minister Rajendra Prasad Shukla (SAS *Krishak Samiti*, 1995). This indicates the importance Digvijay Singh had given to decentralization policies and practices in Madhya Pradesh in the 1990s, which was also discussed in chapter five. From this discussion it becomes evident that the *Krishak Samiti* (and similar *samitis* across the state) was enunciated as harbingers of decentralization in the state narrative in the mid-1990s and a big event was planned to mark the inauguration of *Krishak Samiti* as there was willingness from the political class for the same.

This section elaborated how the process of constitution of these committee members was influenced by farmers worldview which was shaped by their normative beliefs about progressiveness of potential *sinchai panchayats* member, their education status, their social networks, political connections and material ownership. Moreover, from the discussion it is evident that the selection

process reinforced existing structural and social hierarchies. This is not surprising, as the rulings of Irrigation Act 1931 which were followed to constitute *sinchai panchayats* did not envisage any change in the village status quo by design in terms of confronting/altering existing power centres. The impact of this on management efforts by farmer organization is discussed in the following section. The next section analyzes how these first generation farmer organizations performed by analyzing the functioning and ideational effect of introducing farmer organizations in the two selected case study sites.

7.2 Perception of farmers & farmer organizations' and their relation with bureaucracy

The main aim of constituting farmer organizations was to institute greater ethos of participation amongst farmers or in other words to involve farmers in management of canal network. The *raison d'être* for involving farmers in management of canal networks at the macro (international, national and state) level was elucidated in chapter two, four and five. Here, however, the focus is on arguing how the idea of farmer involvement for irrigation management that gained salience in policy directives, still did not alter the existing irrigation practices. Moreover, these farmer organizations could not fulfil their desired functions, and in this context ideational explication lucidly demonstrates how such reform processes can be side-lined/derailed.

7.2.1 Nominal participation of members and/or farmers in farmer organization given lack of financial autonomy

Participation of users in functioning of farmer organizations can be gauged from the experiences and reflections of members of farmer organizations. For instance, Bhagwan Singh a large land holding farmer (26.30 hectares), and one of the elected members of the Betwa *sinchai panchayat* recalls the main work of the *sinchai panchayat*, as assisting in operation and maintenance of network of canals and distribution of water within the Betwa *panchayat*. Further, reflecting on functions that *sinchai panchayat* performed, he posits:

"Sinchai panchayats did not receive any financial resources, to ensure that work was done. The sinchai panchayats did not have any power, and the irrigation department did most of the work... vasooli (collection of irrigation fee) was the job of sinchai panchayat president" (Interview, December 10, 2011).

Interestingly, collecting irrigation fee was one of the main responsibility of *sinchai panchayat* according to the Irrigation Act 1931, apart from providing assistance to irrigation officials in ensuring smooth operation of canals (c.f. GoMP, 1931, section 62 (2)). However, Bhagwan Singh posits that *vasooli* was not the responsibility of *sinchai panchayat* members, rather just the Betwa *sinchai*

panchayat president's, which is indicative of his partial knowledge about one of the key role and function of *sinchai panchayat*. On the other hand, Samar Malik (president Betwa *sinchai panchayat*) reflecting on his tenure posits that collecting irrigation fee was a murky business. To elaborate:

"I was provided a list (of name) of farmers along with their irrigation dues to the state, and a receipt book. The irrigation dues were calculated by amin (accountant/ person responsible for revenue collection) by undertaking a survey of farmer fields. I did not want to be involved in collection of irrigation fee, as I did not want any burai (acrimony) unnecessarily. I was aware that amin's do not accurately report actual area irrigated and dues that ought to be collected. They under and/or over report area irrigated from the canal water (...) Burai happens because if the patwari (another term for amin) was doing the collection himself then they make money on one hand; and on the other hand farmers also pay lesser irrigation fee. Let me explain that...for instance, patwari may calculate INR 2500 as the irrigation fee. A farmer generally negotiates and would agree to pay INR 2000. Patwari however will agree to take INR 2000 but will give receipt for only INR 1200. This whole mechanism of collecting irrigation fee was win-win for both patwari and farmer. If I would have intervened and asked farmers to pay their rightful dues then farmers would be upset with me and would not have appreciated my action. So I decided why should I get burai and get involved in this process of collecting irrigation revenue" (Samar Malik, December 9, 2011).

From the above citation, it becomes evident that Samar Malik decided unilaterally that Betwa *sinchai panchayat* would not assist WRD officials in collecting irrigation revenue without consulting the *sinchai panchayat* members. Further, from the aforementioned two instances, it also becomes evident that there was no (extensive) discussion, on the role of *sinchai panchayat* president or its members prior to formation of the *sinchai panchayat*. For Bhagwan Singh it is a given that *sinchai panchayat* members were not responsible for collection of irrigation fee and thus non collection of irrigation revenue was a lived and accepted reality for Betwa *sinchai panchayat* members in general.

It is also noteworthy, that Bhagwan Singh, though uneducated, is not an ignorant farmer. Rather he is well respected, and is considered as one of the progressive and knowledgeable farmers of this region. A brief profile of Bhagwan Singh is presented in Box 7.2.

Box 7. 2: Bhagwan Singh - a progressive farmer

In Saronj one of the villages that is on the tail end of the RBC, Bhagwan Singh who is more than ninety years old reminisces about the era gone by, while narrating his experiences of irrigation management in this region. Bhagwan Singh is from upper caste; he is a *Rajput*, which is one of the predominant landholding groups in this region. Bhagwan Singh is an illiterate but progressive farmer and very well respected not only in Saronj but also in the nearby villages, and has been practicing agriculture for more than six decades. Bhagwan Singh along with his brother and another peer (Ram Singh Jat and Param Singh Jat) were the first ones to start irrigation in this region before Halali dam was even planned in this region. Bhagwan Singh was also member of Betwa *sinchai panchayat*, and also part of the outlet committees that were formed by WAMLI in Saronj.

Bhagwan Singh's eyes shine when he starts talking about the 1950s when India had just gained independence, and the Indian state under the aegis of Prime Minister Nehru, who had organized *Bharat darshan* (tour of

India) for farmers who were willing to pay INR 300 (which was a substantial amount during the 1950s.). Bhagwan Singh participated in this tour, and visited sites across India, including the Bhakra Nangal Dam. Bhagwan Singh recalls his experience with great enthusiasm and also fills in that he along with 500 other farmers were deeply disappointed when they were informed that Pandit Nehru (referring to Prime Minister Nehru) could not meet them due to an unscheduled meeting at the end of the tour. Reacting to this, Bhagwan Singh told his Block Development Officer (BDO) that he plans to organize a hunger strike (along with other farmers) to solicit a meeting with Nehru. Their insistence led to Nehru sparing three minutes for agitating farmers. For Bhagwan Singh, those three minutes meant a lot, as it defined his life, and his enthusiasm, to pursue new endeavours. Furthermore, the *Bharat darshan* elevated his stature in Saronj and nearby villages, as people appreciated what he had to say, as he had seen the world (i.e. travelled far and wide) and was privy to information/knowledge, which others in the village did not have. Bhagwan Singh considers this as one of the foremost reason for him being nominated as a member of Betwa *sinchai panchayat*. Further, he considers himself to be honest, and posits that in earlier times honesty was a virtue and only honest individuals were selected, sadly that is not the case anymore.

Bhagwan Singh has a keen thirst for knowledge and motivation to do things differently. Remembering his experiences, he posits that he was an avid listener when any government official came to the village with new information about various government schemes; he tried to make the most of the information he received. Thus, it is not surprising that he was (also) very popular with government officials and they contacted him regarding new schemes, etc. Bhagwan Singh says with great pride, 'we adopted all the schemes that the government came out with. Village Saronj has been productive since the beginning'.

Bhagwan Singh (along with few more farmers) is considered a pioneer in this region for trying new agricultural practices. He, along with about 20 more farmer of this region, had formed a joint farming society, of which he was the chairman. The group of farmers purchased about 40.46 hectares of land in late 1960s close to the highway and they jointly practiced new crops like sugarcane (which was not being grown in the area) through piped water irrigation. Given that he was part of joint farming society, he ran for elections for the post of public representative for the district cooperative banks for three terms from 1972-1984.

Bhagwan Singh was also part of the local *natak mandali* (drama) in his village, and was famous in his youth for doing a special dance with sticks and mare, and for organizing educative plays in Saronj, and nearby areas. Reminiscing about the era gone by and to explicate the essence of development/progress that they propagated through their *natak mandli*, during the interview, Bhagwan Singh breaks out into a song that he used to sing to bring awareness in Saronj and nearby areas.

Echoes in the wind sing along, this is a popular song....

Panchayati raj (decentralization) is ours...

There shall be no filth or dirt...neither in our house nor in our hearth

Clean shall be our homes...with sparkling walls

There shall no more be a muddle to slow our gait...paved shall be our roads

There shall be no more darkness, no fear no fright

We shall light up lamps...keep our streets alive until late in the night

Panchayati raj (decentralization) is ours...

Our decisions small and big... shall be ours

We shall resolve small issues, through *panchayats*

We shall be empowered to solve our own feud

We shall not have to petition in courts

Panchayati raj (decentralization) is ours...

Awake; rejoice...painted black will be the face of the corrupt

Panchayati raj (decentralization) is ours...

Source: Interview with Bhagwan Singh, December 10, 2011

From Box 7.2, it is evident that Bhagwan Singh operated under the normative realm of what ought to be the development of Saronj and nearby areas, as elucidated through his song on *panchayati raj* (decentralization). Bhagwan Singh also through his *natak mandali* (drama) in villages was initiating a deliberative discussion on need for bottom up decision-making. However, contrastingly Bhagwan Singh does not view his role in functioning of Betwa *sinchai panchayat*, as there were no discussions that were held in the villages prior to constitution of these committees about its functioning. Moreover, from Bhagwan Singh and Samar Malik's interview it is evident that honesty and transparency were considered important ideals for development and management of resources. Given, that the processes were not ideal, the Betwa *sinchai panchayat* president and member decided to *not* participate in *sinchai panchayats* activity. Moreover, from the above discussion it is apparent that Bhagwan Singh had an idealistic understanding/belief of participation which the lyrics of the song elucidate (see Box 7.2) which ought to result in corrupt, clean, and empowered rural public.

Additionally, user's participation at that time was restricted to active farmers' of this region. For instance, Maharaj Singh Jat argues:

"I was identified as an active farmer of this region, I was ahead of other farmers and officials from block, or agricultural department always used to approach me. As they knew I was one step ahead of others, in terms of method of practicing agriculture. Several times, my agricultural fields were used as demonstration sites for other farmers so that they could see and adopt new practices" (Interview, December 11, 2011).

Given, that member of farmer organizations' were not completely involved in its functioning during this period, participation of user's i.e. farmers was even lesser, as during this period no meetings were held of either the *sinchai panchayat* or the Betwa *Krishak Samiti*, where farmers could discuss their grievances with *sinchai panchayat* president or its members. In case of any conflict/disagreement over water, farmers used to approach mostly the irrigation department officials or staff for grievance redressal (Field Notes, December 2011). Given, lack of discussion about constitution of these committees at the local level prior to constituting them, farmers believed that irrigation department officials held the power to resolve their grievances, and rightly so. As was discussed in this section, the farmer organizations were mostly envisaged as assistants to irrigation officials and had no decision-making power. *Sinchai panchayat* presidents', however, noted that in

few cases farmers did approach them for grievance redressal. Some of the problems with which farmers of Betwa and Saraswati *sinchai panchayats*' approached their president during this time were related to timely availability of water, farmers obstructing minors that led to overflow of water into close-by farmer fields, need to get adequate water, improving the system by putting pipes in outlets in required spots (Interview, December 19, 2011). The *sinchai panchayat* presidents' then contacted the irrigation engineers about these issues to get them resolved. Thus, the ultimate authority due to structural design of farmer organizations was with the irrigation department, and farmers were aware of it as well that *sinchai panchayat* presidents' or the *Krishak Samiti* president were merely middlemen with no benefit or power but a list of responsibilities.

Interestingly, a unique instance, of bottom-up organization of farmer groups for management of irrigation water over one outlet happened in Saronj in the mid-1980s, and the same is elaborated in Box 7.3.

Box 7. 3: Case of bottom-up crafting of farmer organization for management of water

In Saronj, in the mid-1980s, a group of farmers started *warabandi* (of sort) on one outlet from the distributory of the RBC. A group of 15-20 farmers came together, at the behest of Bhagwan Singh of Saronj and made their own rules for water distribution. Bhagwan Singh is a well-known and respected farmer of Saronj, who other farmers listened to (see Box 7.2). The farmer's collective made a system where they used to draw out names through a blind token system to decide who would draw water first from the water course channel. All the farmers in the *chak* cooperated and adhered to this token system. The *warabandi* was not in terms of fixing time for availing irrigation water. Rather in terms of turn to take irrigation water.

The initiation of cooperation amongst farmers' here was not at the behest of any external actor. Rather, farmers between themselves agreed on this innovative system, as there were several instances of conflicts over who would access water first. This token system was initiated in 1984-1985 and lasted for roughly five years after which this system collapsed and farmers returned to their old system wherein those who were on the head reach of the outlet received water first. Farmers of Saronj were not able to give a clear response of why the system collapsed, however, what is now known is that during this time *sinchai panchayats* were being made in this region and WALMI's action research programme also started, which focused on Saronj. Few farmers insinuated that new organizations, outlet committees were being set by the department, which resulted in slowly fading away (collapse) of this particular outlet committee.

Source: Bhagwan Singh, Narendra Singh and Mahesh Singh Jat (Interview, December 10, 2011)

This bottom-up crafted *samiti* (committee) performed well, until new committees were introduced in the region by design through state ruling and which ultimately led to demise of this organically created institutional arrangement for irrigation management by farmers. The committee was constituted through deliberative discussion at the local level by farmers themselves and thus they took interest in its functioning (rotational water supply) and used to resolve conflicts within themselves. This committee was an instance of Gandhian idea of village republic.

7.2.2 Awareness about roles/responsibilities, and functioning of farmer organization

Most of the Betwa *sinchai panchayat* members were not aware of their roles and responsibilities with respect to functioning of *sinchai panchayat*. In fact they posit that they did not undertake any work in their position as members of *sinchai panchayat*. As a result, functioning of Betwa *sinchai panchayat* was restricted to *sinchai panchayat* president and the *panchayat* members did not play any role. Further, elaborating on the functioning of Betwa *sinchai panchayat*, Samar Malik, the president elaborates:

"I restricted my work to supervision of the canal system. Farmers used to come to me to inform me about problems that they face with respect to accessing irrigation water and I used to pass on this information to the officials from the irrigation department. Additionally, in my role as sinchai panchayat president I did not do any paperwork for the organization, apart from giving complaints in writing to the irrigation department.

I had good relations with officials (...). Sinchai panchayat members did not have any contact with officials from irrigation department. They also did not have any power. The sinchai panchayat had no meetings during this time" (Interview, December 9, 2011).

The above citation demonstrates that the Betwa *sinchai panchayat* president did not involve other *panchayat* members in quotidian management of affairs. The president undertook the work that was envisaged for him, that is assisting the irrigation officials in supervision of canals, or in informing the officials about water related disputes.

Juxtaposing findings from Betwa *sinchai panchayat* with Saraswati *sinchai panchayat*, however, does provide some variation in responses. The president of Saraswati *sinchai panchayat*, Abhay Singh Maina collected irrigation fee, which is in sharp contrast to Betwa *sinchai panchayat*, whose president Samar Malik refused to collect irrigation fee. Thus did not undertake one of the important roles of the *sinchai panchayat* as envisaged in the Irrigation Act of 1931. To elaborate:

"I used to collect irrigation fee from farmers under Saraswati sinchai panchayat and hand over the collected money to irrigation department every Saturday. I collected the irrigation fee during the irrigation season. During summers, farmers were notified to come to the local town haat (market) and they paid the fee directly to the amin (person responsible to collect irrigation revenue) on the notified day and time. I also used to be present during the time of collection of irrigation revenue at the haat.

With the help of chowkidaar (watchman), I notified all villagers that I will collect irrigation fee at a particular time and venue, and farmers used to come and pay their irrigation dues. Sometimes farmers did not have money and asked for time to pay the fee later at the town haat. For collecting irrigation fee, I received an honorarium, which was 2 per cent of the irrigation fee collected. I collected in total between INR 0.1-0.15 million. The transportation cost of collecting the irrigation fee was quite high for me.

Additionally, in some villages, I had to take my tractor, as these villages were not accessible by motorcycle.

I stopped collecting the irrigation fee, as I was spending (in terms of time and money) more than I was receiving. (...) I used to spend a lot of time in collection. Once, the officials' left me close to Karonj village with INR 15000, and said that I can return to my village from Karonj on my own. I told them that it is late in the night, and if someone comes with a stick to steal the money, what will I do. I asked them to drop me closer to my village, but they refused and said that they had to go back to Bhopal and they were getting late. My village was about six kilometres from Karonj. I stopped doing recovery of irrigation revenue after this incident. I was alone and these three officials from the department who were in a jeep did not bother to drop me back to my village. I was carrying INR 15000, which was large amount in those days and I was very scared (...). Moreover, I thought, why should I follow someone orders, the engineers were doing their work, as orders for constitution and implementation of sinchai panchayat had come from the top" (Interview, December 6, 2011).

It becomes evident from the above citation that in Saraswati *sinchai panchayat*, irrigation revenue recovery by the president happened for approximately a year. The *sinchai panchayat* members were not involved in collection of revenue recovery in this case as well, and the president (Abhay Singh Maina) did revenue recovery on his own. The president argues that the *sinchai panchayat* members did not aid in collection of revenue, as they were not getting any financial benefit (ibid.). Though, this is not true, as the regulations under the Irrigation Act 1931 elucidated that the benefits from the revenue recovery ought to be shared equally between the *sinchai panchayat* members. From the discussion, it can be safely concluded that the *sinchai panchayat* presidents' did not want to share responsibility with the *sinchai panchayat* members, as the financial and social (in terms of status) gains would have to be shared. Here, importance that the *sinchai panchayat* president gave to state structure becomes salient, as he perceived the post of president alleviated his status in the village and thus, in both the *sinchai panchayats* the presidents' did not want to share role and responsibility with other members.

Additionally, from the above lengthy discussion it is evident that the ideational realm of the *sinchai panchayats* members was shaped by how the junior level bureaucracy related/interacted with farmer organizations. To recall, Abhay Singh Maina was selected as president as he enjoyed political patronage and support of the intermediate level bureaucracy. However, the above-narrated encounter of the *sinchai panchayats* president with junior bureaucracy led him weighing and shaping his worldview that it was not worthwhile to collect the irrigation fee anymore.

Furthermore, apart from assisting the irrigation department officials in irrigation works, other responsibilities assigned to the *sinchai panchayat sarpanch* (president) were:

“Irrigation panchayat may maintain the account of income and expenditure of the panchayat... which shall be checked by a Canal Officer, Irrigation Inspector or section subordinate (...) An irrigation panchayat shall maintain the following books and papers: (i) Panchayat fund account book in Form, 16; (ii) Counterfoil receipt book in Form, 17; (iii) Proceedings book in Form, 15; (iv) Correspondence and notices issued by the panchayat (GoMP, 1975, Section 62, Rule No. 167, 168, 169)”

The above citation elucidates a lot of paperwork, procedural functions that ought to be performed by the *sinchai panchayat* president. However, *sinchai panchayat* presidents did not undertake these administrative tasks; in fact during the interview the respondents did not mention this as one of the functions of the *sinchai panchayats*. The above discussion discerns the beliefs that first generation leaders functioned under, which led to *sinchai panchayats* not collecting irrigation revenue, for instance. Overall, formation of intersubjective belief (understanding) of farmers in the region about roles and responsibilities about the *sinchai panchayats* become evident.

SAS *Krishak Samiti* was constituted about half a decade later, but the functioning of this committee was also similar to *sinchai panchayats*. The main functions that the *Krishak Samiti* was envisaged to perform were:

“i) facilitate distribution of irrigation water through pipes or other means in the command area; ii) create awareness about improved agricultural and irrigation practices; facilitate water distribution and selection of crops in the command area; organize training programmes for members of the samiti on better agricultural production techniques; undertake regional developmental work” (SAS Krishak Samiti, 1995).

However, *Krishak Samiti* like *sinchai panchayats* did not have any meetings. Mehtab Patel, president of the committee during his interview pointed out that ‘meetings were a formality. We all knew each other; we had no facilities, why would people come for meeting when there were no incentives, not even *chai nashta* (refreshments- signifier of hospitality and respect)’ (Mehtab Patel, September 30, 2011). Also, there wasn’t much involvement of members in committee’s functioning or of farmers. Reflecting on the functioning of the *Krishak Samiti*, Mehtab Patel posits:

“We were not given any work, so there were no tangible results that the Krishak Samiti performed. We did not have any financial autonomy. We were given in total about INR 0.25 million in the committee fund. But we could spend only the interest that we earned on the principal amount for day-to-day functioning of the samiti. So we could buy furniture, supplies for our office in the sinchai (irrigation) colony, spend on any travel done related to matters of irrigation or to meet the irrigation department officials (...) the money given to us was of no importance, for instance, we could not make a road on the canal if we wanted to, we were just caretakers and had money in the account but we could not use it (...) we lost interest in doing any work for the samiti with time (...) Our work was to give suggestions to officials about water. We had ensured that water reaches everyone in the tail end of our minor” (Interview September 30, 2011, emphasis added).

From the above citation, it is evident that the president of *Krishak Samiti* perceives that *Krishak Samiti* was not delegated any functions and their role was of a caretaker with no power given to undertake work. The role of *Krishak Samiti* members as per the byelaws was also restricted to 'facilitating' distribution of water, selection of crops; creating awareness and organizing training programmes (SAS *Krishak Samiti*, 1995). Thus, the farmers read/perceived the situation correctly, and were aware that they had no power and were mere assistants to the irrigation officials. The *Krishak Samiti* president posits that there has been money in the account, but they never had legitimate authority or power to use this money (Interview September 30, 2011), thereby questioning the relevance of constituting the *samiti*. The structural constraint (role of *samiti* members as facilitators) that was introduced in the organizational design restricted participation of farmers. From the above discussion lack of legitimacy of first generation farmer organizations in the mind-set of members due to limited devolution of funds and functions (an institutional problem), led to shaping their ideational landscape, which further restricted their participation.

A contrasting viewpoint on functioning of *Krishak Samiti* is provided by a senior WRD official:

"One of the reasons for Krishak Samiti to lay defunct was lack of clarity on committee's roles and responsibility. Another reason for it being defunct was internal strife between members of the committee. There were differences between Rakesh Tiwary of Radhakheri who was the cashier and other members of the committee from Karamkheri like the samiti president Mehtab Patel. Internal differences of the committee members made the functioning of the committee very difficult" (Interview, December 16, 2012).

To elaborate, Radhakheri is situated further downstream of Karamkheri and is a small habitation of mostly SC population, with few *Brahmin* households like Rakesh Tiwary's and few *patel* households (related to *patels* of Karamkheri). The *patels* of Karamkheri are supporters of Congress party while Rakesh Tiwary supports BJP and was an active *karyakarta* (party worker) and known to browbeat to get what he wanted in his youth. The two factions had differences over accessing water. Moreover, Radhakheri being the last village on the tail minor started receiving water only post 1990s after the entire network of canal system was completed.^{xv} Even then, the availability of water was contingent on farmers upstream not obstructing the canal, so for few years Rakesh Tiwary used his might to ensure access to water for all farmers of Radhakheri, this resulted in arguments between Karamkheri and Radhakheri farmers (Field notes, January 2011; Rakesh Tiwary, December 20, 2012). Consequently, the *Krishak Samiti* lay defunct. Overall, the reason for *Krishak Samiti* being defunct is structural (that is not being delegated role and responsibility and merely directed to facilitate) as well as cultural that is lack of cooperation between farmers due to inherent categorical inequalities like caste, affiliations with different political parties, and/or personal rivalries. From the above discussion the ideational landscape that shaped the ideational realm of bureaucracy is lucid. The junior

bureaucracy did not perceive limited devolution of funds, functions or functionaries as a problem. Rather, they perceived the problem lay with 'cognitive pattern'^{xcvi} of farmers which was shaped by the local social structure. This resulted in conflicts and concomitantly poor functioning of *Krishak Samiti*.

Few aspects that become evident from the above interviews is the importance of social structure in providing a higher playing field to the already empowered sections, this was evident from the selection procedure of the *sinchai panchayat* and the Betwa *Krishak Samiti*. In case of *sinchai panchayat* the Irrigation Act provided an opportunity for *sinchai panchayats* to charter their own course within the mandate given to them. The *sinchai panchayat* presidents took this as an opportunity and exercised their influence agency in different ways: for instance, by choosing to collect or not to collect irrigation dues. Farmer organizations *mansikta* was influenced by their worldview, which was populated by their beliefs, values, and normative assumptions about the situation: i) the socio-political, and caste cleavages in which they were embedded in, ii) friendly relation with local politicians. The state structural ruling further empowered and enabled this decision as it provided greater legitimacy to them. The two presidents of the *sinchai panchayat* reacted differently basing their decision on how they will be perceived in the region. For instance, the Betwa *sinchai panchayat* president based his prior knowledge and impression of functioning of the irrigation system (and collection of irrigation revenue) on the first ten years of project life that he had witnessed. Samar Malik deduced that corruption in irrigation systems is structural and cannot be changed as the farmers were also benefitting from this practice. To elaborate, given that Samar Malik had travelled extensively and lived outside the village for few years, he internalized his experience and his perception of how things functioned as an outcome of his lived reality in the village (as an educated medium land holder) and that of studying and working outside. Moreover, being a lawyer and having practiced law for few years, before he moved back to the village, he perceived corruption as a structural given as part of state society interaction based on his lived experience.^{xcvii} Additionally, Samar Malik did not want to take any action to curb this practice, as he did not want any *burai* (acrimony) from the community, more so, because he was from the minority Muslim community in the village. Thus, Samar Malik refused to collect irrigation fee on behalf of the irrigation department when he was made the *sinchai panchayat* president, as he was too deeply embedded in the socio-cultural setting and did not want to take a decision that could alter his social ties within the community. Thus, refusing to participate in functioning of Betwa *sinchai panchayat* despite being the president signifies Samar Malik's dissent with the prevalent way of functioning and also reflects his view on participation. He perceived that he could not make any change in the existing modus operandi by participating in the functioning of farmer organization.

Abhay Singh Maina the president of Saraswati *sinchai panchayat* on the other hand worked differently through his tenure as president. Abhay Singh Maina is not educated but was politically active during his youth, and used to be part of local Congress Party rallies. He was a low level *karyakarta* (party worker) and had political ambitions. He became the *sinchai panchayat* president when he turned 35 years and his selection as *sinchai panchayat* president is questioned in the *sinchai panchayat* villages even today when this issue is broached, as nomination for his name came directly from the irrigation minister's office. Abhay Singh Maina followed a more instrumental approach (initially). He took upon the opportunity of *sinchai panchayat* president with great enthusiasm and performed devolved functions including collection of irrigation fee. However, after a year he re-evaluated his position and the work he had done and deduced that the benefits that he was receiving were lesser than the cost in terms of time and resources spent in travelling. Thus, the ideational realm of Abhay Singh Maina altered with time, based on his experience of working with junior bureaucracy and his own assessment of benefits from his social status as *sinchai panchayat* president. To elaborate, the *sinchai panchayat* president perceived that the officials were not very cooperative and open to (institutional) change i.e. increasing role of farmers in irrigation management. Therefore, he decided not to collect irrigation fee in later years of his presidency.

In addition, in case of both the *sinchai panchayats*, the *panchayat* presidents' did not work towards making the functioning of *panchayat* inclusive. The presidents' of these farmer organizations perceived the post of president as an exclusive position of elevated status, and they did not want to share responsibility (or even information) with other members of these farmer organizations.

7.2.3 Principles that guided farmer ideational realm to access water for irrigation

There was no organized system of water distribution since the beginning in the SAS Project. The canals were operated on a continuous basis and full supply level was maintained by means of cross regulation method (Puranik, 1997, p. 140).^{xcviii} The department practiced *osrabandi*^{xcix} and regulated water supply to ensure that the network of canal structures do not break given the earthen system. Thus, farmers like Bhagwan Singh perceived and rightly elaborate that farmers upstream availed the canal waters first and once their requirement was fulfilled the downstream farmers received canal water (Interview, December 19, 2011). Social status i.e. caste and social class did not play a role in accessing water. Explicating why the guidelines^c for irrigation management were not followed, president of Saraswati *sinchai panchayat* posits:

"We were given rules by the officials on how to manage water, but who was going to follow rules? At that time, the samiti (committee/sinchai panchayat) was new, and farmers had no idea about irrigation or its management, as in how much water is

required for a crop, where should culverts be made, etc. Additionally, this was also the period, when the earthen canals were still new and thus not settled, so there were problems of seepage, breakage, etc. in the canal network” (Interview, December 6, 2011).

The *sinchai panchayat* president in the above citation is referring to long list of Irrigation Rules of 1974 that were handed over to *sinchai panchayats* which outlined acceptable irrigation norms and behaviour, irrigation offences, need to practice *warabandi*, how field channels ought to be constructed, conflict resolution by *sinchai panchayat* president with *amin*, etc. (GoMP, 1975).^{ci} However, as discussed, *sinchai panchayat* members were not aware about their roles and responsibilities, and there was no initiative taken by the department to create awareness either. For instance, in the 1990s, several farmers reported that there were instances of conflict for accessing canal water for irrigation. Maharaj Singh Jat narrates that upstream farmers like (Rakesh Sharma from Amla) used to put obstructions in the canal to stop the flow of water; there was no system for water management from the side of the government as well. When we went to the irrigation officials (overseer/engineer) to complain nothing happened. As the upstream *patels* used to bribe (INR 100) the overseer and tell the *chowkidaar* (watchman) to let the *patels* (traditional authority) take water first (Interview, December 19, 2011). Interestingly, Maharaj Singh Jat is also from a *patel* family, and has 31.1 hectares of land, which he has now redistributed amongst his children. Maharaj Singh is from Saronj village but for the last few years he has been living in Vidisha town. He lives in two-storey house and owns a high-end luxury sport utility vehicle. While narrating this conflict with upstream farmers, Maharaj Singh Jat posits:

“I did not have to bribe to access water. People were scared of me! I knew access to water is my right; I used to collect 8-10 farmers and get water through might. If I had to complain I used to go to the local MLA (Ram Prakash) with whom I had good relations with; and he could not overlook what I said. I remember when I went to him and complained about upstream farmers he scolded irrigation officials and explained upstream farmers that downstream farmers also have the right to water.

Farmers were totally dependent on officials and reported to them on any problems they had with the canal network. They used to approach officials for any maintenance work that had to be carried out (...) Earlier work was done by drafting of muster roll, however, not even 10 per cent of the work was done compared to the labour that was enumerated in the muster roll. Making fake muster roll had become a profession for these officials, but no one said anything. Farmers considered officials as godly figures who were revered and were considered malik (master)” (Interview, December 19, 2011).

Dharam Singh Maina of Sadhai, who is a Congress *karyakarta* (party worker) and till a decade ago used to supervise the operation and maintenance work of the canals before WUA elections were held, makes a similar observation based on his experience^{cii}:

“The operation and maintenance work was completed in 15 days after the monsoons (...). During pre-WUA time, officials from the irrigation department used to make fake muster rolls and show more work being done, than in actuality. They were corrupt and usurped money” (Interview, February 11, 2012).

Kamlesh Narayan Sharma from Saraswati village used to do labour work on the canals when operation and maintenance work was carried out post-monsoons. He also corroborated that the department officials falsified the muster roll for operation and maintenance work done, to avail financial benefits (Interview, January 21, 2012).

The above citations illustrate the prevalent principles for irrigation in the SAS region: first, farmers who had muscle power claim their right to water, to wit, the unwritten rule ‘might is right’ applies for accessing water for irrigation. Second, upstream farmers claimed their right to water/irrigation first notwithstanding the plight of farmers downstream. Hence, farmer’s access to water was in relation to the location of their fields, rather than caste or social status. Third, networks were important, for instance farmers like Maharaj Singh Jat do not hesitate to flaunt their political connections and thereby highlight salience of networks in securing access to water. Fourth, the corrupt practices pursued by the irrigation officials, by falsifying the muster rolls. Thus, farmer ideational realm was populated by these factors which determined how they perceived access to water and the strategies that they undertook to ensure access to water. Moreover, class differentiation also inherently determined access in case of farmers who enjoyed strong political connections and used their political cleavage to ensure access to water. The above discussion also elucidates how people’s beliefs gained intersubjective understanding and became an acceptable norm for agricultural water use in the area.

Additionally, the above citations highlight the influence of state structure in irrigation management. The bureaucracy was aware during this period that constitution of *sinchai panchayat* or *Krishak Samiti* was for tokenism (given limited devolution of funds, functions and functionaries) and they did not make any effort to empower these organizations by disseminating information to the *sinchai panchayat* members or the *Krishak Samiti* members about their roles and responsibilities.

7.2.4 Perception and relation with bureaucracy

To recall from the discussion in chapter five, role of street level bureaucracy (see also Lipsky, 2010) or what is referred to in this work as junior bureaucracy is critical to ponder, especially in a government initiated PIM project. This section thus focuses on elaborating the relationship between farmers and bureaucracy.

Relationship of farmers and farmer organizations' with officials from the irrigation department becomes evident from the following assertions of farmers and members of farmer organizations':

"Officials did not listen to us then; they were not available at site when required. In case of any dispute, farmers used to resolve conflict on their own. We did not get any support from officials (...). Water distribution is in the hands of patwari (person responsible for collecting revenue) and sub engineers; they used to decide how much water we could get" (Abhay Singh Maina, December 6, 2011).

"The officials were not happy with constitution of sinchai panchayats, it lowered their status and necessitated that they come down and talk to us. At that time, sinchai panchayat were newly constituted and the irrigation officials did minimal work to comply with orders" (Abhay Singh Maina, December 6, 2011).

"Farmers are not that big landholders in Saronj compared to other villages close by. But they have been aware since the beginning. We had connections with department people so we knew how to get work done (...) Earlier department's thinking was also different, they believed that farmers cannot get work done on their own, for instance, the aqueduct close to Saronj village had been dysfunctional for many years. Officials knew that farmers couldn't get this work done on their own (...). How will they (referring to farmers) get it done, it's not possible for them" (Mahesh Singh Jat, December 10, 2011).

"Ours was a powerful samiti; officials listened to us and did our work, as the chief minister made our Krishak Samiti. We had political support (...). The officials had all the power... if there was, for instance, any seepage or breakage in the canals then they were responsible, we could not do anything, we had no power (...). We had good relations with officials, we had to, as we are on the tail end, we can (only) request them to increase or decrease water. We also had support from officials as our samiti was constituted at the behest of the chief minister" (Mehtab Patel, September 30, 2011).

Few aspects that become evident from the above citations are that the relationship between farmers and bureaucracy was clearly an unequal one. Although participatory norm, that was discussed at the national and state level in policy narratives envisaged greater participation and coordination between farmers and bureaucrats. To recall, in the 1980s, at the national level, it was argued that problem with large scale irrigation projects was at the outlet level, and thus the first generation farmer organization like the ones discussed here were formed without disturbing the status quo i.e. the department's way of functioning or delving into management aspects at the intermediate level (c.f. Bottrall, 1992; Chambers, 1988). The perceived inequality in position between the department officials and farmer organizations presidents' is evident from Mehtab Patel's comment that they only could request the officials to increase/decrease water.

Interview with officials from irrigation department and WALMI, brought forth several other reasons for farmer organizations not functioning well in the 1980s and the 1990s. For instance, a senior

official from irrigation department who was involved with assisting WALMI in the Action Research Programme argues that farmer organizations were not successful in SAS Project region due to the socio-cultural and political cleavages within villages. To elaborate, given that one of the focuses of the irrigation department was water management, and to pursue this endeavour the department had directed its efforts to rationalize number of outlets, to wit, reduce the number of (un)authorized outlets on the canal and form outlet committee to ensure proper water management in the early 1990s. In order to rationalize outlets, the department functionaries and WALMI worked to bring together select farmers from Saronj, Sadhai and Betwa villages and solicited their cooperation to forgo availing water from unauthorized outlets. The department functionaries were successful to an extent and were able to broker consensus between farmers of two tail end villages - Saronj and Sadhai. However they were not able solicit cooperation for reducing outlets from few upstream farmers from Betwa village. These farmers refused to let go of their outlets because of personal conflicts between the downstream villages, and thus did not want to cooperate (Interview, December 16, 2011). The department officials could not do anything, because these farmers were networked with local politicians. Citing this instance, the senior official from WRD believes that part of the reason for defunct farmer organizations were the existing socio-cultural and political reality of the village and the local leadership.

“Farmer organizations were functional in villages where the president was active. In the 1980s, village patels (traditional authority) were given lot of respect and their words were adhered to. The villages were organized and worked under this customary village leadership system. All major decisions were made by the village Patel. They used to regulate information and people used to respect his word, does not matter if it was correct or not. So, the sinchai panchayat that were made, functioned limitedly and participation of farmers in these committees was restricted” (Interview, December 16, 2011).

From the above discussion, it is evident that the irrigation department engineer puts the onus of failure of farmer organization on the disagreement that villagers of Betwa had with villagers of Saronj and Sadhai. The irrigation department in this particular instance, followed the regulation of reducing unauthorized outlets on the canal, and also directed its efforts to dissipate the conflict, but were not successful. The officials perceive that local (village) dynamics resulted in conflict and thus lack of cooperation for smooth functioning of farmer organizations. The understanding of this particular WRD official is in accord with the narrative that irrigation woes were due to problems below the outlet and farmer organization not working well, and has been cited as a primary reason in writings related to irrigation management, especially in the 1980s and the 1990s. Chapter four had also analyzed this as dominant narrative at the national level through secondary sources. This, however,

is a simplistic explanation and does not take into account the ideational realm of bureaucracy and needs to be delved deeper. On probing the irrigation official further, he reflected on his tenure in the project, and stated that at that juncture the thinking (of people in the department) was different:

“People did not have understanding on how to implement sinchai panchayat; the state did not promote cooperative movement.

For people to be involved in social cause they need to feel different kind of pressure; they need to invest time; otherwise the whole exercise is unfruitful. You just get burai (acrimony). You are worried anyway about your home front, and then you will also be worried about your work front. People need to have a certain kind of inclination to work, but only limited people have that” (Interview, December 16, 2011).

It becomes evident from the above citation that *not* everyone in the SAS Project office was comfortable with the idea of sharing responsibility with farmer organizations for irrigation management. Additionally, the department official elucidates that state expects you to follow certain rules and regulations, and as an employee that is what the irrigation department officials were supposed to do - follow the organization ruling provided by the irrigation department’s office in Bhopal. Moreover, the interventionist developmental state ideology becomes evident from the above discussion, as the focus was on implementing policy legislations without taking into account the local reality or instituting cooperation among state and society.

Moreover, the mind-set of irrigation bureaucracy during that period looked at working with farmer organizations, as an additional job, as a social cause that needs rectification and required time, and resources. This was not what the engineers were trained for, and thus were reluctant to take up this responsibility. This is in accord with the discussion on organization culture of bureaucracies in chapter four where decision-making is associated with power and masculinity, and socialization of generations of engineers had resulted in top-down bureaucratic traditions and a perception of superiority. Thus, the language of cooperation and allocating more time and knowledge to create awareness amongst farmer organization was not a bureaucratic tradition that officials were familiar with. This was also an outcome of the interventionist developmental policy pursued by the state. Although, notably an alternative explanation for reluctance is the material interest that the bureaucracy had to control the irrigation system (See Wade, 1982). It is acknowledged that part of the reason could be that, however, solely material interest does not explain sufficiently the reluctance to decentralize, and the ideational landscape and bureaucratic traditions were also key influencing factors.

To substantiate further, a WALMI faculty familiar with SAS Project and the Action Research Programme argues that the reason for *sinchai panchayat* not working was vested interests of political parties, irrigation officials and other powerful leader like farmers in villages. These actors changed the dynamics of irrigation organization and given that these organizations were new, were not functioning cohesively, and did not have enough awareness about the Irrigation Act or capacities to sustain any complexity, they collapsed. As they were primarily one-person *samitis* i.e. the president was the *samiti* as was discussed in the earlier section and they took decisions unilaterally, for instance, collection of irrigation fee. Thus, it appears the interventionist developmental model led to pursuance and perpetuation of existing power centres within the village in the first generation farmer organizations. The WALMI faculty further elucidates his perception of the socio-cultural context in which these *samitis* were grounded which sheds light on his own ideational realm as well.

“Sinchai panchayat was a good model in those days as there was harmony among people, however, the moment people started realizing that irrigation is a quick way to become rich, and irrigation (water) is easy to access as there is no key and lock system available in the water canal system (...) and if people wish they can take away the share of others as it gives them more benefit (...) people started breaching canals and all malpractices happened (...) and irrigation organization and panchayat model became defunct” (Interview, August 30, 2011).

From the above citation it is evident that this WALMI faculty argued that defunct farmer organizations were due to problem of self-discipline and organization within farmers. This again reeks of the ideology of the developmental interventionist state that aimed to disciple and tutelage the infantile citizen. Additionally, farmers were perceived as irrational actors who pursued only self-interest without any cognizance of the greater benefit of cooperation.

Overall, bureaucracy put the onus of non-functioning farmer organizations on lack of coordination between farmers, and argued that farmers short sightedness (i.e. non-cooperation to avail irrigation water first) resulting in defunct farmer organizations in the 1980s and 1990s in the project area. Thus, in 1980s as mentioned earlier the problem was perceived as below the outlet, due to mismanagement, and farmers taking water out of the turn. The bureaucracy did not delve deeper into the problems with the project at the system level, for instance, lack of gates (lock and key reference in the above citation), lack of enforcing *warabandi* as envisaged according to amended Irrigation Rules 1974 (GoMP, 1975). Rather, the bureaucracy cited societal and cultural factors as the reason for dysfunctional farmer organizations. A collective consensus for defending the existing bureaucratic set up (a structural given) becomes evident from the above discussion. Another official of WALMI, reflecting on the work that was done in the 1990s by WALMI posits:

“We had a very farmer centric approach; however, people from department would not even sit with farmers. WALMI started rapport building; we used to have late night meetings, and studied the status of water to build trust (...) Earlier only irrigation department was involved in water management. We made cross regulators in the system, as the department was cash strapped so we did small interventions. We also talked about providing water through a line system” (Interview, December 16, 2011).

From the above citation the perceived inequality in position between farmers and officials becomes evident. The bureaucracy did not like mingling with farmers, or even sitting with them. Thus lack of willingness to cooperate is also evident. In addition, the reluctance of bureaucrats to work with farmers, or go to the field gets accentuated from the fact that the officers of the irrigation department were comfortable with undertaking coordination for irrigation management at the district level, through district level meetings that were held, for instance, DWUC. However, officer visits to field area were limited (WALMI, 1991a, p. 9).

What becomes evident from the above discussion is that the bureaucracy was functioning in an ideational realm similar to that of colonial engineers discussed in chapter four. The officials of the irrigation department had a technical mind-set and were interested in only overseeing the work, which was legitimized by their roles and responsibilities defined under the Irrigation Act 1931 and Irrigation Rules 1974. These were based on the colonial law and did not necessitate any other function from them. This finding is in consonance with the discussion with chapter four where I had elaborated how post-independence the Indian state continued functioning within the existing bureaucratic framework and had adopted rules and regulations and legislations of the colonial state (see S. Roy, 2007b).

Further, initiation of farmer organizations was a decision that had been thrust on them from the top and they were not particularly keen on following it through. In the Irrigation Act 1931 there is no mention of how irrigation officials are supposed to facilitate formation or strengthening of farmer organization. Only lower functionaries like *amin* (person who collects revenue) were supposed to work with *sinchai panchayats* (GoMP, 1931, 1981). Apart from this, functions that a *sinchai panchayat* president or member are expected to perform are also mentioned in the Act and subsequent rules. For instance, according to the Irrigation Rules of 1974, the *sinchai panchayats* could ‘sanction expenditure from the irrigation *panchayat* fund up to the amount actually in hand for any work of public utility in the village that has been approved by the Collector’ (GoMP, 1975, Section 62, Rule No. 167, 168, 169). Though, the *sinchai panchayat* presidents’ did not disburse/sanction any fund (Interview, December 6 & 9, 2011). The district collector had the final authority to approve/sanction expenditure for *sinchai panchayats* under the public utility fund

category and in majority of cases did not approve any fund to be disbursed under discretion of *sinchai panchayats*. This also illustrates the unwillingness to decentralize the local level by the intermediate level authority i.e. the district collector, as they did not want to change the existing structural reality or lower their stature, power and authority to manage and distribute agricultural water.

The above discussion summarizes that the bureaucracy did not have an inclination or training to involve farmers in irrigation management, as they were aware of the absence of any state structural directive that necessitated them to work with farmer organizations. The mandate of farmer organizations formed during this period was to assist officials and staff of the irrigation department in irrigation management. In fact, decentralization that was envisaged through *sinchai panchayats* or *Krishak Samiti* was tokenism, as the farmer organizations were not given any decision making power and were mere assistants to bureaucracy which they also perceived and hence resisted to participate. The officials were not threatened by the newly formed farmer organizations, and continued working within their existing mind-set and did not perceive the need to change their way of functioning.

Furthermore, the organizational culture of irrigation bureaucracies as elaborated in chapter four, enunciated engineers with a position of power and prestige and had vertical/hierarchical structure of functioning which is contrastingly opposite to the ethos of participatory norm that these farmer organizations were constituted under. The officials believed that the farmers were not capable of doing technical work for instance repairs of the aqueduct on their own and thus members of farmer organization were additional labour (as assistants) for irrigation officials. This perspective of farmers as labour resonates with a top down enforced idea of participation like the *Kudimaramat* discussed in chapter four during the colonial period in Tamil Nadu which legitimized the demand for village labour in irrigation works (See Mosse, 1999).

Additionally, farmer organizations were constituted suddenly without creating any prior awareness/disseminating information about their roles and functions. Thus most of the farmers were unaware of the role or functions that these *panchayats* or *samiti* were expected to perform. Furthermore, the officials and staff of the irrigation department were also not comfortable with this new directive as it was a top-down decision that had been thrust on them from Bhopal, the state headquarters. The bureaucratic realm populated by values of centrist state ideology perceived constitution of farmer organization as threat to their professional position that could restrict their functioning. Given that farmer organizations during this period were only envisaged to assist officials, the bureaucracy resisted to this structural change by not creating any awareness about farmer

organization and their roles and responsibilities. To wit, the officials did not disseminate the knowledge necessary to facilitate functioning of the committees. For instance, the *sinchai panchayat* members were not aware of their roles and responsibility, i.e. they had to facilitate collection of irrigation revenue, or resolve disputes. There was no policy directive, which made dissemination of this information necessary.

Additionally, officials during this period perceived farmers as ignorant about agricultural practice. They were not aware of technical aspects related to irrigation management or improvement in agricultural practices and thus through Action Research Programme and other funding like CADP disseminating information and provided resources to improve cultivation practice. This was a consequence of the Indian state's belief during that time of self-assigned tutelary role as discussed in chapter four. Consequently, farmers in this region were introduced to efficient irrigation practices. Additionally, irrigation officials, WALMI and other line departments through agriculture extension services introduced new crops like Soybean in this region. In the 1980s and 1990s farmers perceived the benefits that the state was providing them and looked up to officials for guidance, assistance, and to resolve issues. Thus, perception of farmers were influenced by state structure i.e. knowledge that the state could provide support and the key to accessing water lay in the hands of officials. For instance, Bhagwan Singh's ideational realm is quite influenced by state structure and he gives a lot of merit to hierarchy and listening to bureaucracy/officials (Field Notes, October 3, 2012).

7.3 Discussion

Farmers of the SAS Project region in general were content in the 1980s and 1990s as after commissioning of the project they started practicing irrigated agriculture and acknowledged the benefits from increased agricultural production. In this context, the discussion in this chapter highlights several aspects about ideational perspectives of farmers and farmer organizations during this period. First, the influence of state structure is salient: as farmers were aware that key to irrigation lay with officials of the irrigation department. Thus, farmers with large tracts of land, in order to ensure their access to water did not hesitate to pay bribes to officials of irrigation department. This also makes evident that corruption was perceived as structural and normalized through everyday practices. To clarify from the discussion in this chapter it is evident that state structure is understood by farmers/farmer organizations as a collective that comprises bureaucracy and their control over water resources given their organizational affiliation. Hence bureaucracy as well as farmers viewed structural factors resulting in position of power with legitimate authority to control the irrigation network during this time period.

Additionally, during this time period, the lower bureaucracy was aware that they held the (k)ey to irrigation, and farmer organizations did not have any power over the irrigation system. The only power that the farmers had to influence irrigation flow for their benefit was based on their relationship with the local MLAs. Though, not all farmers claimed that local MLAs were within their approach. It is again the village *patels* (traditional authority) and/or farmers with large landholding, or farmers with interest in party politics and who were working as *karyakarta* (party workers) who could approach, request and or exercise influence through the local MLAs. For an average landholding farmer, the irrigation officials held the key to accessing water, and it is them they approached. Thus, reinforcing that the farmers in general perceived officials as a position of authority and they knew they could avail personal benefits, only if they respected existing structural boundaries.

Overall the first generation farmer organizations' lay defunct after few years as they were primarily *designed* to assist the irrigation functionaries and did not have any other substantive function to perform. In case of *sinchai panchayats* they had power to disburse funds at the village level, though it was contingent on the discretionary power of the district collector who decided if *sinchai panchayat* ought to be allocated this fund. In the case of two-*sinchai panchayats'* this decision-making power was not allocated to them.

In context of understanding politics of irrigation management, one aspect that becomes evident from the finding is that actors' not only exert influence by what they say but also one needs to bear in mind how they are seen and heard, as this impacts how other actors perceive them. Thus, taking cognizance of the social embeddedness of actors in the local social political context is crucial. For instance, Bhagwan Singh perceived officials and staff from the irrigation department as having/coming from a position of power, as they introduced new schemes to the villages, and/or were gatekeepers to ensure access of water to farmers. Moreover, given that in this period farmer organizations were being constituted on experimental basis their work was restricted to assisting in distribution of water below the outlet or in case of *sinchai panchayat* collecting irrigation revenue. The officials did not want to lose their position of power. Moreover, they had no incentive to do so and thus followed the directive of forming farmer organizations in the SAS Project on paper, but in essence they did not take any action to strengthen or support these farmer organizations as they were not bothered and there was no structural directive according to the Irrigation Act 1931 which necessitated so. The above discussion highlights another element of the structure i.e. pursuance of legislations/directives as mandated by state organizations.

Additionally, most of the officials from irrigation department who were implementing constitution of farmer organizations did not want to share the management of irrigation system with farmer organizations, as this implied a change in outlook towards farmers and brought them on a relatively equal field. Consequently, participation of farmers through farmer organizations in this period was more or less for tokenism as is evident from the findings. There were no efforts made to bolster awareness about the role of farmer organizations in irrigation management, or any training provided to farmers to prepare them for their role in assisting in irrigation management. Except the two exposure visits that were done by WALMI, there was no other capacity building programme for farmer organizations. The need for decentralization had been stressed in policy circles but the rationale and consensus for the same had not yet been achieved, which explains the reluctance of officials to share management of irrigation system, even if for tokenism in the lower tiers of bureaucracy i.e. at the project level.

The ethos of participation that the state implemented through constitution of these farmer organizations was limited, as not sufficient efforts were made to bolster confidence of farmer organizations to take up the responsibility that they were given. This is evident from the discussion of members of *sinchai panchayat* who were not aware about their roles and responsibilities.

Further, during this period irrigation was still relatively new for farmers in this region, and they were still experimenting with new cultivation practices. The village community was a cohesive unit and decisions were taken collectively. For instance, Bhagwan Singh reminisces that during this time, there was lesser *gandagi* (dirt, euphemism for corruption), and that farmers collectively had organized *colaba samiti* (outlet committee), as they were not receiving water on time. Though, this *samiti* was informal, the farmers' collective decided to register it with irrigation department, as they did not want themselves to be considered illegal, as they had made a *colaba* on the distributory (Bhagwan Singh, December 10, 2011). This highlights the simultaneous importance of state and social structure in lives of farmers. Additionally, during this period, only big land holding farmers who were from upper castes and/or village *patels*, or those who were educated were elected to be part of *sinchai panchayat* or *Krishak Samiti*. The small land holding farmers were not part of the farmer organizations. Participation from farmers of lower caste groups and women was also absent in these organizations, except when they were nominated. Saliency of cultural ideation i.e. caste or gender hierarchy as a signifier of acceptable social structure among individuals who followed tacit rules which social hierarchy and bestowed decision-making power to certain individuals like village *pastels* in the villages. These embedded social structures also provided access to certain social networks and political connections for farmers to tap in order to avail irrigation.

Coming to the discussion on participation, overall participation of farmers in irrigation management was limited till the year 2000, and this chapter delved into two basic aspects of participation, actual participation and attitude towards participation with respect to the functioning of farmer organizations, availability of water and irrigation management thereof. What becomes evident from the field findings is that farmers perception gave primacy to the structural presence of the state more than the farmer organizations' for accessing irrigation water, as they considered the officials of the state as powerful actors who brought irrigation to this region and were providing the technical know-how and knowledge for better agricultural production.

Furthermore, findings of this chapter also elucidate that during this period no effort was made to decentralize the intermediate level, and the focus was solely on decentralizing the micro level. This objective also, however, did not achieve any tangible outcome, as the essence of decentralization propagated through involvement of farmers in first generation farmer organization was mere tokenism and envisaged farmers as assistants to the bureaucracy. Building on these aspects, chapter eight elaborates about how the ideational paradigm was shaped for second generation farmer organizations i.e. WUAs in SAS Project.

^{xciii} It is acknowledged, however, that the purpose of highlighting certain perception of actors is not to homogenize and argue that these were the only prevalent perceptions during that period. The author recognizes the heterogeneity within and across groups and is (only) putting forth for discussion the perceptions of actors that gained salience during the course of field research (and analysis).

^{xciv} I explicate material claims as structural basing it on Parsons (2007, p. 12) approach that structural claims explicate what people do as a function of their position vis-à-vis exogenously given 'material' structures like geography, distribution of wealth, or distribution of physical power.

^{xcv} The first attempt to organize farmers for irrigation management was made ten years after project commissioning. Given that the network of earthen canal systems was made piecemeal, some of the areas in the tail end of the canal system started receiving water much later than the head reach.

^{xcvi} The explication of cognitive patterns of actors here resonates with that of Mielke, Schetter & Wilde (2011)

^{xcvii} An interesting discussion on how corruption is perpetuated and differentiates social class and caste is provided by Jeffrey (2002) in context of rural north India.

^{xcviii} Water level in the supply channel is raised for delivering water to water courses from the minors, from distributaries to minors and from canal/branch to distributaries is done by operating cross regulators (GoMP, 1981, p. 69).

^{xcix} A schedule of release of water in different distributaries and minors of canal system showing the discharge, duration of supply and area to be irrigated or in other words arrangement of rotational water supply to irrigators.

^c It is noteworthy that according to a departmental notification the irrigation rules of 1974 were corrected and the words *osrabandi* were deleted from Irrigation Rules 1974 and replaced by *warabandi* in 1982 (GoMP, 1982), brief discussion of the same is provided in Appendix IV. However, this change in notification was not implemented.

^{ci} Salient feature of Irrigation Act 1931 and Irrigation Rules 1974 are discussed in Appendix IV.

^{cii} Dharam Singh Maina was also up-*sarpanch* in the *panchayat* between 2000-2005 (Interview, February 11, 2012).

8 Quotidian Practices Shape Functioning of WUA

Chapter six demonstrated how the network of irrigation system that was set up by the state in the early 1970s changed the agricultural and social landscape of the Samrat Ashok Sagar (SAS) Project area by 1990s. This region was more or less devoid of irrigation, except for few progressive farmers who took benefit of the pump set programme of the 1960s initiated by the state government. For majority of farmers, however, access to irrigation materialized only post commissioning of the SAS Project in 1978. Chapter seven discussed the constitution of first generation farmer organizations viz. *Sinchai Panchayats* and *Krishak Samiti* in the project area at the micro level to assist irrigation bureaucracy in operation and management of the irrigation network. Chapter seven also provided evidence that these first generation farmer organizations were unsuccessful as: i) limited role and functions were devolved to them, ii) there was little or no effort made by irrigation bureaucracy to create awareness about these farmer organizations within the community, iii) the leaders of these farmer organizations did not share information and/or knowledge about functioning of farmer organization with local community or other members of the committee; iv) the attitude and perception of bureaucracy was a roadblock for having a good working relationship and/or sharing of information between irrigation bureaucracy and *Sinchai Panchayat* or *Krishak Samiti* leaders. Furthermore, the chapter discussed *how* the ideational realm of farmers developed through interaction between state institutions and their cognitive patterns which was contingent on various external and internal factors. This led to constitution of actors' ideational realm/mansikta/worldview on beliefs, norms and values associated with availing irrigation water, and functioning of first generation farmer organizations. The previous chapter also discussed how these beliefs, norms and values were influenced by the socio-cultural context, and till end of 1990s all efforts to decentralize irrigation management were targeted at the micro level. There was no effort made to decentralize the intermediate level of irrigation management in the state. Additionally, the chapter elaborated that though there were different viewpoint on how farmer organizations ought to function, there was no overt clash between farmer organization members and bureaucracy as a prevailing belief during this time period heralded salience of state and state actor and the ideational belief and values of both farmers and bureaucracy were populated by this notion. Likewise, state society interaction and petty corruption that it invoked was normalized as an everyday practice.

However, post 2000, the situation changed when Madhya Pradesh enacted the Participatory Irrigation Management (PIM) Act in 1999 with an aim to handover operation and management of irrigation systems to farmer organizations. The debate that led to this change at the state level and

ideational factors that influenced the reform process for implementing the PIM legislation have been discussed in chapter five. Building on these factors, the focus of this chapter is on the current status and mode of functioning of farmer organizations after enactment of the PIM Act, i.e. from 2000-2012. To recall, Madhya Pradesh PIM Act envisaged decentralizing irrigation management by constituting three-tier farmer organization i.e. for the first time efforts were directed to have intermediate level farmer organizations apart from farmer organization at micro level. Although, interestingly the state government has held elections for intermediate level farmer organizations only once post the first round of Water User Associations (WUA) elections in 2000. Therefore, the focus of this chapter is on identifying roadblocks to intermediate level decentralization.

The following section (8.1) elaborates on the processes that were instituted to devolve 3 Fs (funds, functions and functionaries) at the intermediate and micro level in the SAS Project through the case of Saraswati and Betwa WUA. Section 8.2 focuses on elaborating the processes -structural and cultural ideational factors- that have resulted in predominant ideational realm on functioning of farmer organizations. Section 8.3 briefly summarizes the findings of this chapter.

8.1 Initiation of PIM in SAS Project to devolve 3 Fs to the intermediate and micro level

The PIM Act was enacted by Madhya Pradesh legislative assembly in September 1999 and within six months -in April 2000- WUA elections were held across the state and subsequently operation and maintenance of canals and minor channels was passed by the Water Resources Department (WRD) to these newly designed farmer organizations at micro level, which were delineated on a hydrological basis.^{ciii} Given that PIM was initiated -as a new form of governance- with an aim to decentralize irrigation management, post WUA elections in 2000, the operation and maintenance of canals and minor channels were passed to these farmer organizations. As a result, the management of 1,100,000 hectares of land under the command area of irrigation projects in Madhya Pradesh was handed over to these newly created/designed farmer organizations.

As elaborated in chapter five, these farmer organizations had a three-tier structure with WUAs at the micro level. These WUAs in major irrigation project were federated at the distributory level to form distributory committees, the elections for which were held in the project area on February 17, 2001. At the third tier (i.e. the project level) were the project committees for which elections were held on August 3, 2003 (CWC, 2006, p. 96; Pandey, 2006, p. 42). These distributory committee and project committee are the intermediate level farmer organizations that were enunciated as part of the PIM Act to decentralize and initiate participation of farmers at the intermediate level. The elections for

distributory committee and project committee were held indirectly and only WUA Presidents and Territorial Constituency (TC) members participated in the voting process (GoMP, 1999).

Ideally, the SAS Project ought to have three distributory committees and one project committee. However, at present there are no distributory and project committee under the project (or in any other project in Madhya Pradesh), as the state government held the distributory and project committee elections only once -after the first round of WUA elections in the year 2000. The focus of this chapter, hence, is on elaborating *why* the intermediate level farmer organizations have not been created. Findings evince that state has used poor functioning of micro level farmer organizations i.e. WUAs as a sign to *not* decentralize the intermediate level. Therefore this chapter focuses on elucidating functioning of these WUAs using the conceptual frame of ideational realm.

The WUA elections have been held thrice in the SAS Project area on April 18, 2000, February 7, 2006 and on September 15, 2011. The SAS Project till the year 2012 had 19 WUAs delineated on hydraulic basis. In the year 2000, when the first WUA elections were held, there were 16 WUAs delineated under the project. Each WUA is divided into wards (of not more than 100 ha) and there are four to ten ward members or TC members in each WUA. At present, there are seven WUAs on the Right Bank Canal (RBC), five on the Left Bank Canal (LBC) and seven on the Sahodra Bank Canal (SBC). I carried out my research on two WUAs one on the head reach (Saraswati) and the other at the tail end (Betwa) of the network of canal system (see Figure 7.1, chapter seven for the location on map).

As mentioned in chapter five, SAS was one of the projects selected for India Canada Environment Facility (ICEF) funding to build capacities of WUAs and engineers. Two NGOs -Saadhan and Rakshan- were selected for capacity building of WUAs and engineers in their demarcated areas within the SAS Project. Rakshan followed a PIM-plus approach i.e. focused on building capacities of farmer organization through improving agricultural services in select WUAs of the project, apprised one of the senior member of Rakshan who was involved with the activity (Interview, November 6, 2011). Saadhan, on the other hand, as apprised by the then team leader of Saadhan field office focused on questioning and engaging with existing power structures in villages and with WRD in order to bring greater awareness, and to engage with greater number of farmers to encourage them to take over management of irrigation systems (Interview, August 23, 2011). As a result, the two NGOs approached capacity building through very different strategies in the same project area, though in different WUAs. This mismatch in approach was also recognized by ICEF and in one of its communication to PIM directorate, they noted that there is 'serious lack of coordination between the two NGOs' in SAS Project on strategies and approach to the capacity building programme (ICEF, 2004). In this chapter, work undertaken by Saadhan is discussed in details, as the two WUAs selected

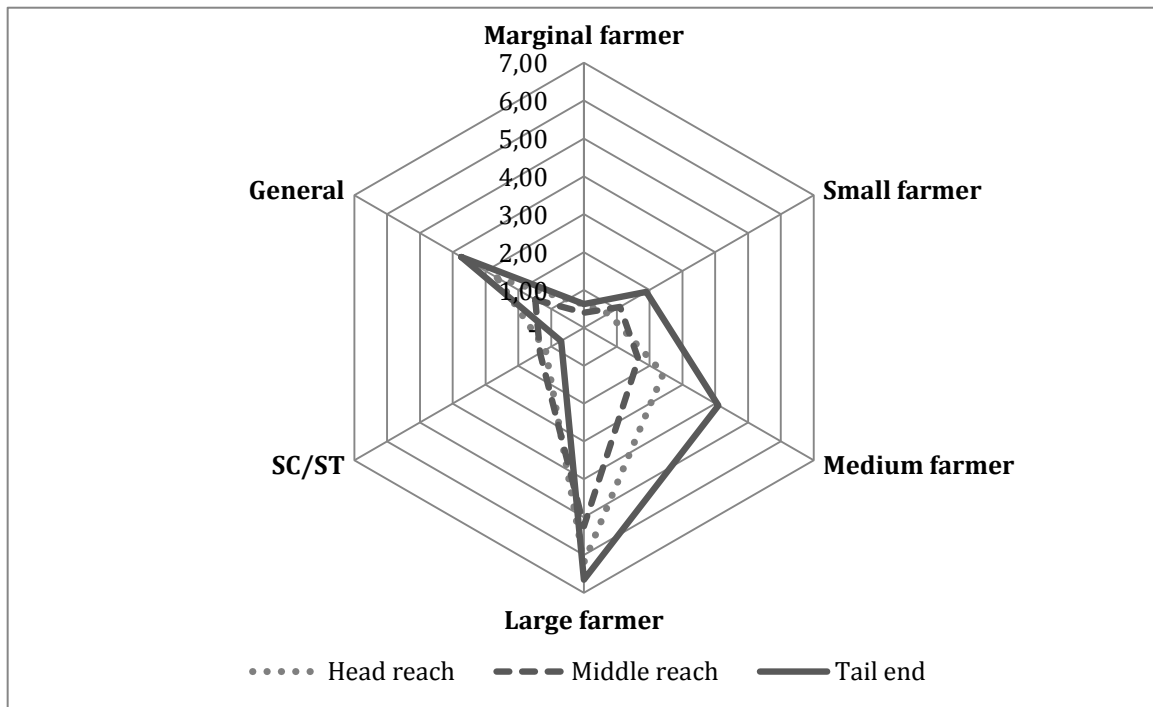
for the case study -Saraswati and Betwa- were in its region. Additionally, as part of institution building under Madhya Pradesh Water Sector Restructuring Project (MPWSRP), an international consultancy also carried out training programmes for select WUAs in the project area, the work of which is also discussed in subsequent sections.

Having given a brief overview of how PIM was initiated in SAS Project area, the next sub-section further elaborates on WUA elections that were held in this region, thrice since the year 2000. The elections in two WUAs are discussed with reference to the existing categorical inequality based on caste, class and gender, which are the defining characteristics of this region. This discussion also facilitates in elaborating the ideas, values and ideologies that guide the ideational realm of farmers who were elected to be part of second generation farmer organization.

8.1.1 Saraswati WUA- existing categorical inequality and its influence on WUA elections

The present day Saraswati WUA is constituted in same villages where Saraswati *sinchai panchayat* was formed in the late 1980s (narrative discussed in chapter seven). Saraswati WUA has a command area of 1128 hectares and has been delineated on hydraulic basis. Saraswati WUA has nine villages in its command area of which six villages receive irrigation through canals and three villages avail water through lift irrigation (GoMP, 2012a).^{civ} Figure 8.1, illustrates per unit area owned by different category of farmers in Saraswati WUA in the head reach, middle reach and the tail end. The figure also illustrates the social composition i.e. Scheduled Caste (SC), Scheduled Tribe (ST) or general category which comprises *Brahmins, Rajputs*, etc. that farmers belong to vis-à-vis the size of landholdings.

Figure 8. 1: Per unit area (in hectares) owned by farmers in Saraswati WUA



Source: Design by author based on data collected from Saadhan's field office^{cv}

From Figure 8.1, it is evident that in Saraswati WUA there are greater number of large landholding farmers (with greater per unit area) in the tail end and head reach followed by medium farmers. Likewise, the middle reach and tail end also have greater number of large farmers with greater per unit area followed by medium farmers and the small farmers. Additionally, majority of farmers in the tail end, followed by head reach and middle reach are in the general category. The figure also illustrates that most of the SC/ ST farmers are in middle or head reach followed by tail end. From this figure, it is evident that majority of farmers in Saraswati WUA are large landholders. To recall discussion in chapter six, average landholding in the project area was higher than the national average, which is also indicative of the higher economic status of farmers of this region. Moreover, the predominant land holding caste group in Saraswati WUA are *Kshatriya/Rajputs* followed by *Maina* community, which belongs to the Other Backward Class (OBC). The majority of large farmers in Figure 8.1 are *Rajputs* and/or from *Maina* community. Additionally, women also have land titles in the SAS Project area. However, the reason for this is that the large farmers in order to avoid losing land to the state have distributed land amongst all family members (Field notes, December 2011). The effect of caste differentiation on social class and its implications of food and drink taboo in reference to interaction within community were discussed in chapter six. Through the discussion I had highlighted social segregation within the community in the project region, and the salience of context i.e. *patels* (traditional authority/customary leaders) taking decisions at the village level.

Chapter six had also demonstrated that ideational values of farmers were embedded in the local setting, and thus influenced by social hierarchies for instance as *patels* were considered a legitimate social authority whose voice was respected.

Given this backdrop the following paragraphs discuss how WUA elections -a step towards democratic decentralization- for irrigation management unfolded in Saraswati WUA one and half decade later. Wherein caste and social differentiation has made WUA elections fiercely contested, however when it comes to functioning of WUAs caste dynamics is not the only driver that led to management decisions (discussed in section 8.2). There is a dichotomy in how leaders are chosen and how management work undertaken thereafter. Ideational analysis here facilitates in unraveling this dichotomy.

To elaborate, Saraswati WUA has predominant population of *Rajputs* and *Maina* in the region and there has always been a contestation between these two groups during elections since 1980s. For instance, Abhay Singh Maina (OBC) of Sadaiya contested against Surjan Singh (*Rajput/Kshatriya* by caste) of Baagkheri in Saraswati *sinchai panchayats* elections (see chapter seven). This contestation and rivalry between the two groups continued when the WUA elections were announced in 2000, discussed further in the following sections.

Table 8.1 illustrates the characteristic of WUA presidents of Saraswati WUA. From the table it is evident that large land holding farmers from *Rajput* community have won all the three terms of WUA elections.

Table 8. 1: Characteristics of WUA presidents' elected in Saraswati WUA

Year of election	WUA President	Caste	Village/ hamlet	Land ownership (in hectares)	Political party affiliation	Total number of contestants for president post
2000	Surjan Singh	<i>Rajput</i>	Baagkheri ²	48.12	Indian National Congress Party	Four
2006	Samrat Singh	<i>Rajput</i>	Saraswati ¹	30	Bhartiya Janata Party (BJP)	Four
2011	Samrat Singh	<i>Rajput</i>	Saraswati ¹	30	BJP	Seven

¹ Head reach village

² Middle reach village

The first round of WUA elections were held in the year 2000 in Saraswati WUA and during that time there were multiple contenders for post of WUA president and TC members in this region. The prime

contenders for WUA president post in the year 2000 were distributed between the head, middle and tail end villages viz. former Saraswati *sinchai panchayat* president Abhay Singh Maina of Amlakheri (tail end village; *Maina/OBC*); Tamar Singh from Amlakheri (tail end village; *Maina/OBC*); Ramesh Sharma from Saraswati village (head reach village; *Brahmin*); and Surjan Singh of Baagkheri (middle reach village) stood for elections (Ramesh Sharma, January 21, 2012; Radhey Shyam, January 14, 2012). Although, of the five contenders, Ramesh Sharma was not serious about elections, and states 'I contested elections to divert my mind, as I had recently lost my arm (handicapped) (...) elections are serious business, I thought will get something' and thus contested elections. Despite this self-recognition about his intent for elections not being serious, Ramesh Sharma provides an important insight into why there was a rush for contesting elections in the year 2000. He posits that farmers perceived that they would benefit by being part of the WUA. Similar, reflection is made by Abhay Singh Maina 'several people contested for greed as farmers thought that WUA position comes with benefits' (Interview, February 7, 2013). The above citations illustrate that not enough attention was paid to create awareness about WUAs and its purpose with farmers before conducting WUA elections. This is not surprising as WUA elections were held within six months of enactment of the PIM Act.

Given there were five contenders for Saraswati WUA election in 2000, vote was divided on caste and social or physical proximity to the leader. Finally, Surjan Singh^{cvi} from Baagkheri -one of the downstream hamlets of Saraswati village- won the WUA president post with a small margin. Surjan Singh's family owns 48.12 hectares land, and is a *Kshatriya/Rajput* by caste. He is sixty years old, and is well respected in his community.

The second WUA elections were held in 2006. By this time, Saadhan had already initiated work in this region as part of ICEF funding with the objective of creating greater awareness amongst farmers and WUA members about irrigation management. The team leader of Saadhan, narrating his experience in this region, states that after initiating work in SAS Project area for an year in 2004, and by observing and understanding the field dynamics, Saadhan strategized to break the existing power structure in WUA, by encouraging/motivating active men in villages to participate in WUA activities and contest for WUA elections in 2006, as they observed that most of the WUA presidents who got elected in the first term considered WUA presidency as a stepping stone to politics. Farmers had seen how *panchayats* (lowest tier of locally elected body) have flourished and assumed that WUAs would have similar roles and rights, and thus scrambled for this post when the first WUA elections were announced in 2000. Observing this field reality Saadhan decided to challenge the existing power structures in WUAs by motivating active men in WUA villages to contest elections in 2006.

Saadhan worked in its capacity of ideational broker to change the field dynamics and narrative for management of irrigation in select WUAs. This required questioning the existing power structures (for instance, Suraj Singh of Saraswati WUA) and engaging with farmers deeper cognitive spheres in order to question the legitimacy of the existing practices and leadership (c.f. Mielke et al., 2011, p. 15). Saadhan's efforts led to change in leadership and Samrat Singh emerged as a successful leader in Saraswati WUA in 2006 who contested elections after receiving encouragement from Saadhan (Team leader, Saadhan, August 30, 2011). Interestingly, Samrat Singh is nephew of Surjan Singh who was elected WUA president in the first term. Samrat Singh also comes from a predominant land holding family of Saraswati village, and has strong political ties. However, he is much younger than Surjan Singh, his uncle. He is in his late thirties and is active in local politics. For the last two generations, his family has supported Bhartiya Janata Party (BJP). Samrat Singh's father had strong ties with one of the prominent minister in the state government, and Samrat Singh has continued nurturing these ties and is not shy about mentioning his closeness to the minister or his party affiliations. Samrat Singh though an active farmer with keen interest in politics and irrigation issues prefers to base his campaign on caste affiliations and social relations. He does not even campaign in downstream villages of Sadaiya, Amlakheri, etc., as he is aware that farmers there will not vote for him. Apart from caste, proximity also matters in elections and farmers of a village generally vote for contestant from their village. Apart from Surjan Singh, other two contestants for WUA president post in 2006 were Tamar Singh from Amlakheri (tail end village; *Maina/OBC*) and Misri Lal (head reach village; *Pal*) from Tarasi. In case of 2006 elections, votes for Saraswati WUA were divided on caste, position on canal, and social ties. Farmers were not too happy with Surjan Singh's work during his tenure as WUA president, hence, many *Rajputs* voted for Samrat Singh. Farmers from smaller hamlets (like Jamunkheri) of Saraswati village also voted for him.

Samrat Singh won the Saraswati WUA election in 2011 as well and is considered an active WUA president by farmers and also by WRD. In 2011, there were six contenders against Samrat Singh from the usual villages and groups i.e. Thakur of Amlakheri (tail end village), two contenders from *Rajput* community of Tarasi (head reach village), *Rajput* from Karonj (head reach village), *Rajputs* from Manoharkheri (head reach village) and another *Rajput* contestant from Mangod. Given so many contestants, the votes got divided on caste and locational proximity. Interestingly, women although do not take part in irrigation activity, have the right to vote in WUA elections according to the PIM act. Thus, on Election Day there was scramble for making sure that all the electorates cast their vote. Given that voting for Saraswati WUA happens in Saraswati village, which is far away from tail end villages all contestants took out their tractors, hired vans, etc. to ensure that farmers and womenfolk from their village and their allies caste vote in their favour. Additionally, there are lot of absentee

farmers in this region, and contestants make sure that they also return to cast vote in their favour. Samrat Singh won the election by about 30 votes in 2011.

Similar has been the case with respect to selection of TC members for Saraswati WUA. There are six TC members in Saraswati WUA, who are representative of the entire WUA (as wards for TC members are delineated according to area). Additionally, there is one nominated member from backward caste and one nominated women member in the Saraswati WUA. Further, there have been new TC members after every election in Saraswati WUA, except for Ram Prakash from Jamunkheri who has been elected twice as TC member in the year 2000 and 2006. TC member posts are also fought competitively in this region, for instance, Arjan Singh, who was elected as TC member from Saraswati WUA in the second term points out that he had filed papers for TC member post in the first term but withdrew as there was another aspirant (Hemant Singh) from his community to contest for the TC post. To reduce competition and avoid division of community votes, Arjan Singh withdrew his electoral form, and supported Hemant Singh from Baagkheri. In the second term Arjan Singh again filed his nomination for TC post and convinced Hemant Singh not to contest for the TC post and thus got elected as TC member in 2006. Similarly, in 2011 for instance, from the ward in Saraswati village initially there were two contestants Tilak Singh who is Samrat Singh's estranged cousin brother and Samrat Singh's Sister Radha Singh. Interestingly, Radha Singh is married and does not even live in Saraswati village anymore but Samrat Singh had filed her name for TC member to ensure greater control over TC. However, farmers like Tilak Singh objected to her candidature forcing Samrat Singh to withdraw Radha Singh's nomination, and Tilak Singh emerged as winner for TC post of Saraswati village.

Having discussed briefly, the dynamics of elections in Saraswati WUA, it becomes evident that WUA elections have been contested on caste and social affiliations, apart from that farmers vote for contestants from their village/area. Table 8.2 illustrates the profile of WUA members elected in 2011.

Table 8. 2: Profile of Saraswati WUA members elected in 2011

Saraswati WUA	Name	Land ownership (in hectare)	Caste	Village/hamlet
President	Samrat Singh	30	<i>Rajput</i>	Saraswati ¹
TC Member	Dilip Singh Maina	90	OBC	Sadaiya ³
TC Member	Gulab Singh	10	<i>Rajput</i>	Mangod ¹
TC Member	Gainda Singh	15	<i>Rajput</i>	Tarasi ¹

Saraswati WUA	Name	Land ownership (in hectare)	Caste	Village/hamlet
TC Member	Tilak Singh	30	<i>Rajput</i>	Saraswati ¹
TC Member	Bikram Singh	25	<i>Rajput</i>	Manoharkheri ¹
TC Member	Sailesh Singh	26	<i>Rajput</i>	Amlakheri ³
Nominated Member	Kalyan	.80	<i>Dalit/SC</i>	Saraswati ¹
Nominated Member	Radha Devi	2	OBC	Manoharkheri ¹

¹ Head reach village

³ Tail end village

Table 8.2 illustrates that most of the WUA members are from predominant landed caste of this region i.e. *Rajputs*. Farmers from marginal communities SC/ST did not contest elections, and thus to ensure their participation in WUA, as mandated by the PIM Act, Kalyan and Radha Devi were nominated into Saraswati WUA. It is noteworthy that this practice of nominating marginalized sections, a signifier of apolitical participation, continued from first generation farmer organizations. When I met Kalyan and Radha Devi they were not aware about WUA activities though were aware that their names were noted as WUA management committee members. Additionally, the discussion above elucidates that *Rajputs* are not a homogenous community, and there are differences within them as well, based on social, familial rivalry and position on the canal. Thus, findings reveal that caste -a defining social strand of Indian society- was not the sole determinant of how actors perceived their options for voting in WUA elections.

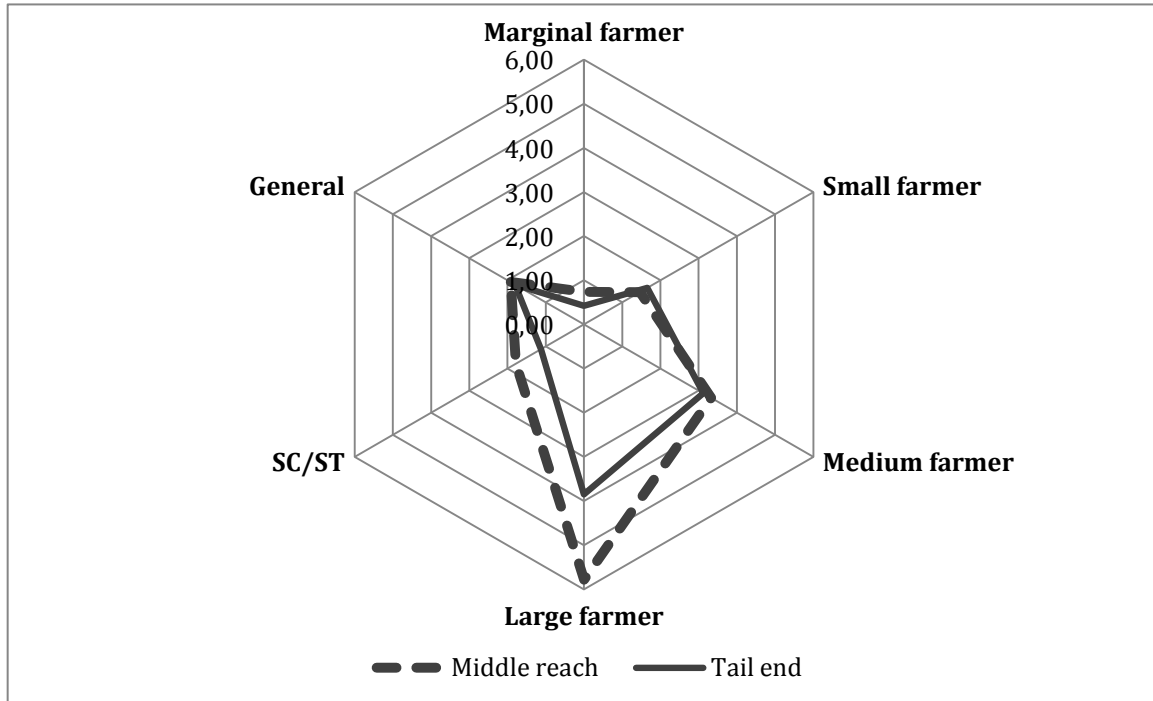
The next section elucidates more about the socio economic setting in which Betwa WUA is embedded and elaborates on the election process further.

8.1.2 Betwa WUA- existing categorical inequality and its influence on WUA elections

Betwa WUA was constituted in the region where Betwa *sinchai panchayat* was delineated in the late 1980s. Thus, in the year 2000, when Betwa WUA was delineated, it comprised 17 villages and had a total area of about 1878 hectares under it. Given the large number of villages (and area) under Betwa WUA, before 2006 WUA elections, Betwa WUA was divided into two WUAs by the WRD i.e. another WUA Chapna was carved out of it on hydraulic principles. At present, Betwa WUA has seven villages in its command area of which six receive water through canal and lift irrigation while one receives water only through canal irrigation. The total command area of Betwa WUA is 1034 hectares^{cvi}

(GoMP, 2012a, pp. 21, 23). Figure 8.2, illustrates the per unit area (in hectares) owned by different category of farmers in Betwa WUA in the middle reach and the tail end.

Figure 8. 2: Per unit area (in hectares) owned by farmers in Betwa WUA



Source: Design by author based on data collected from Saadhan’s field office^{cvi}

From Figure 8.2, it is evident that in Betwa WUA, majority of large landholding farmers’ vis-à-vis per unit area are in the middle reach followed by tail end. The proportion of farmers with medium landholdings is same for middle reach and tail end. Additionally, the proportion of farmers belonging to general population is almost similar in middle reach and tail end, while there is a higher population of SC/ST farmers in the middle reach as compared to the tail end. Like Saraswati WUA, in Betwa WUA also, women have land titles on their name but they rarely take part in irrigation activities. Predominant caste group in Betwa WUA are *Patels (Rajput)* and *Maina* community.

Thus, it is not surprising that in the SAS Project area, not even one women WUA president has been elected, however, there are few instances of women WUA presidents being elected from other parts of the state. Women in general don’t play any role in organization and management of water in this region as previously elaborated in chapter six and seven. Further, women especially from upper class and caste households are not involved at all in farming activity. Women from poorer households, still undertake small work in agriculture fields, but are not involved in irrigation activity on large scale. Saadhan in its ideational belief of broker worked towards involving women in irrigation management

activities and decision making process by encouraging them to form Self Help Groups (SHGs) and built their capacities and created awareness by conducting training programmes and taking them on exposure visits. Most of these SHGs are still functional in Saadhan's work area and continue to engage in thrift and credit activity; however this has not led to long-term involvement of women in irrigation activity. Table 8.3 provides a snapshot of three WUA presidents elected in Betwa WUA till now.

Table 8. 3: Characteristics of WUA presidents elected in Betwa WUA

Year of election	WUA President	Caste	Village/hamlet	Political party Affiliation	Land ownership (in hectares)	Number of contestants
2000	Behram Singh*	OBC	Chapna ²	BJP	14.16	Four
2006	Kamraj Singh	OBC	Sadhai ³	INC	200-300	No other contestant. Won election unopposed
2011	Mohan Patel	Rajput	Karamkheri ³	INC	25	Three

² Middle reach village

³ Tail end village

* Also elected distributory committee president in 2001

In the year 2000, Behram Singh was elected the president of Betwa WUA. Similar to the case of Saraswati WUA, he was not elected the WUA president un-opposed. Given, that the WUA elections were held for the first time in the year 2000, there was immense hype about the post of WUA president, and there were several contenders for this post. Behram Singh had campaigned heavily for his candidature, and he was able to garner support based on party lines.^{cx} Behram Singh is a wealthy farmer who owns two harvesters and tractors, apart from land. He is also an active member of BJP and also has close ties with a former BJP Member of Legislative Assembly (MLA) from this region. However, despite being an active and popular president, Behram Singh lost WUA elections in 2006. There are many narratives in this region to explicate his loss in elections: i) Behram Singh claims that everyone knew that he supports BJP and all his opponents from congress party gathered to ensure his defeat, ii) his opponent from the newly carved Chapna WUA spent about INR 0.7 million to win WUA elections, iii) some farmers claimed that he slacked work in last years of his presidency (Field notes, August 2011).^{cx}

In the second term of WUA elections in 2006 Kamraj Singh was elected un-opposed the WUA president for Betwa WUA. Here, it may be noted that Betwa WUA was already much smaller in area

as Chapna WUA was carved out of it. Interestingly, Kamraj Singh is a large landlord, from the *Maina* community and owns hundreds of hectares of land in this region.^{cxii} Apart from being a large landholder, Kamraj Singh's family has also held the *sarpanch* post in *panchayat* for the last two decades. Recalling the 2006 election, Raghav Raj, another contender for the post of WUA president from Amla village (middle reach village; *Brahmin*), who has contested for this post in all three terms, states that he also had filed papers for contesting elections for WUA president in 2006. However, he withdrew his nomination papers last minute, as his grandfather and Kamraj Singh's father had good relations. As mark of mutual respect and to continue good relations between the two families, he withdrew his candidature (Raghav Raj, December 19, 2011). Raghav Raj, however, regrets this decision as Kamraj Singh never acknowledged/showed gratitude for the sacrifice he made i.e. deciding not to contest WUA elections in 2006.

Kamraj Singh's case is noteworthy to be elaborated further as he was elected unopposed the president of Betwa WUA in 2006. Interestingly, Kamraj Singh did not have any interest in WUA activity from 2000-2006. To elaborate, few farmers along with Saadhan (NGO recruited for capacity building under ICEF funding) and WRD employees approached him in 2004 for beneficiary contribution to extend one of the minor channels by building a culvert so that water could be availed by farmers downstream. However, Kamraj Singh refused out rightly stating that he had no interest in contributing. He did not want water from the minor channel as he had other ways of ensuring access to water. Eventually the culvert was made by contribution given by other farmers and through support of ICEF funding. Kamraj Singh also benefitted from this development as his fields are close to the minor channel and thus his access to canal water improved (Maharaj Singh Jat, December 11, 2011). From the above discussion it becomes evident that though Kamraj Singh did not have any interest in fostering the ethos of cooperation, partnership and participation for irrigation management, and just by merely being a large landholder, he was considered influential in this region, and was elected unopposed as WUA president in 2006 when he announced his candidature for WUA election. However, Kamraj Singh lost the legitimacy of being an influential farmer, (by being a large landholder) i.e. structural ideation in farmers' perception, when after his election in 2006 he did not do any work to improve access of irrigation water to downstream farmers; resolve water conflict; and other day to day operational matters of WUAs. Farmers in Betwa WUA region openly criticized his lack of interest in WUA functioning during field discussion, a criticism that he was aware of as well. Consequently, Kamraj Singh chose not to stand for WUA elections in 2011.

The 2011 Betwa WUA election was relatively competitive as three candidates viz. Raghav Raj from Amla (middle reach village; *Brahmin*), Mohan Patel from Karamkheri (tail end village; *Rajput*) and

Narendra Singh of Saronj (tail end village) contested the election. Voting was divided on caste and village lines, and farmers voted for representatives that were from their caste, village and social network. Mohan Patel from Karamkheri, a downstream village (almost tail end of Betwa WUA), won the election by a small margin.

Functioning of WUAs was not new to Mohan Patel, the winner of 2011 WUA elections, as he had been elected TC member of Betwa WUA earlier as well. In 2011, he had won the post of both WUA president and TC from his region. He subsequently resigned from the TC post to take over the post of WUA president. Mohan Patel belongs to the *patel* (traditional authority) family of earlier times. His elder brother Mehtab Patel was the president of SAS *Krishak Samiti* in the late 1990s. Mehtab Patel was also elected as TC member in Betwa WUA in 2011, after Mohan Patel resigned from the TC post to take over the WUA president post. Apart from Mohan Patel, none of the TC members in Betwa WUA have been re-elected for a second term. Mohan Patel is Congress party *karyakarta* (worker) and undertakes low-key party work. Table 8.4 illustrates the profile of Betwa WUA members elected in 2011.

Table 8. 4: Profile of Betwa WUA members elected in 2011

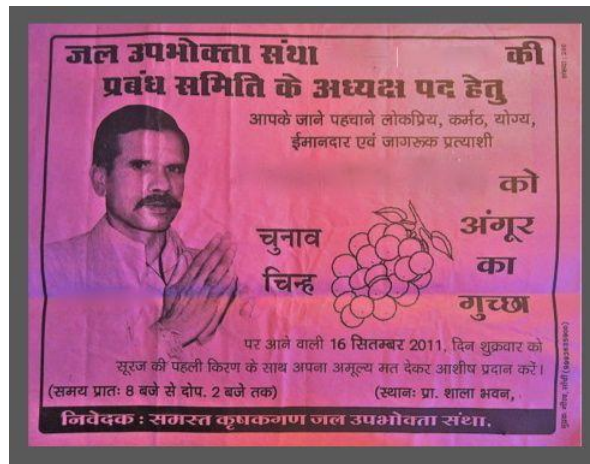
Betwa WUA	Name	Land ownership (in hectare)	Caste	Village/hamlet
President	Mohan Patel	25	<i>Rajput</i>	Karamkheri ³
TC Member	Paras Nath	2.4	OBC	Betwa ²
TC Member	Gainda Ram	12	<i>Rajput</i>	Sadhai ³
TC Member	Nayan Singh	15	<i>Rajput</i>	Saronj ³
TC Member	Mehtab Patel	25	<i>Rajput</i>	Karamkheri ³
Nominated Member	Leela Devi	3	OBC	Karamkheri ³
Nominated member	Rajesh Ram	0.7	<i>SC/dalit</i>	Radhakheri ³

² Middle reach village

³ Tail end village

When I was doing fieldwork in 2011, I witnessed the excitement and importance that farmers (particularly large farmers) gave to WUA elections. For instance, Photograph 8.1 is illustrative of the earnestness that contestants portray to garner votes.

Photograph 8. 1: Electoral announcement by a contestant to campaign for WUA elections



The electoral announcement is also illustrative of the seriousness that candidates attach to contesting elections. It is common for contestants to print electoral announcements with their picture and election symbol to request for votes. The contestants approach this process professionally, and print these announcements in advance and paste them in prominent places in their constituencies. Campaigning is done not only through these printed election announcements, but financial resources are also spent to get wall paintings done at strategic locations, to make their presence felt. Additionally, aspiring WUA presidents spend a lot of time, and financial resources (up to INR 0.3 to 0.8 million) to campaign for their candidature. However, it is noteworthy that in 2011 elections, the contestants did not evoke the issue of water or its management as an electoral issue. Field discussions reveal that water management was not an electoral issue in the earlier two WUA elections as well. In this context, Raghav Raj explicates the voting politics in this region succinctly (Interview, December 19, 2011):

“After the practice of voting for selection of farmer organizations has started in this region, work being done by farmer organizations’ is biased. People are winning elections by using monetary power. Everywhere the system is same, even in the legislative assembly, criminals are being elected. If a person is dabang (bold), people (reluctantly) vote for him (...) Other than that farmers cast vote based on caste affiliations, character of the contestant and at times votes are bought as well (...) Caste affiliations play a bigger role in farmers mind to decide who they vote for rather than land ownership”.

My observations for 2011 elections are also similar: it was not fought on issue of water (availability or its management). Rather, farmers voted based on socio-cultural factors viz. caste affiliations, social relations with other farmers in the village, village affiliations, and/or familial relations. Farmers vote mostly based on their perceptions - within/for their social group i.e. farmers give primacy to social

cultural ideation while voting. This section also highlighted that elections have been populist, mostly large landholding farmers have been elected as presidents.

Even at the SAS Project level, most of the WUA President that have been elected are large/medium land holding farmers of which many have houses in nearby towns and divide time between the village and town. Many WUA presidents in this region have held low level *karyakarta* (party worker) posts in either BJP or Indian National Congress Party (hereafter Congress Party) and their motivation to contest election is not just restricted to an altruistic motive of facilitating better and timely availability of water to irrigators in their command area. Rather there are different motivations (greater power, control and visibility) and ideas (stepping stone to get involved and gain visibility in party politics) that guide their actions and how they carry out work of WUA. For instance, Ramdhari from another WUA of SAS project has been elected WUA president thrice and is son of a former MLA from this region and who currently holds district level post in Congress Party office. Another TC member is president of the state *Maina* community and aspires to be a MLA. He owns large tracts of land (about 90 hectares) and lives in a nearby town. Behram Singh is another influential and rich WUA president who owns two harvesters, tractors and large tracts of land. He has been elected president twice (in 2000 and 2011), and is also an active *karyakarta* (party worker) of BJP. He held the position of treasurer for the local party office, few years ago. Interestingly, the state government is also interested in knowing the political inclination of WUA presidents. One of the sub engineers in WRD, Vidisha informed that the state government solicits information on party affiliations of WUA presidents after every election (Informal discussion, December 15, 2011).

Comparing the selection of WUA presidents with the process of selection of presidents in first generation farmer organizations in chapter seven, it becomes evident that during earlier time, farmers gave primacy to progressiveness, greater learning about issues, education, etc. as a reason for selection of candidates. During 1980s and 1990s perception of farmers was heavily influenced by idea of progressiveness and education. In the last decade or so, caste politics has gained primacy and is becoming a decisive factor in election. Thus, as far as voting pattern is concerned caste appears as a strong parameter that drives voting pattern. Moreover, many farmers agreed that party affiliations also drive farmer's vote, especially if the contestant is a party *karyakarta* (worker) and has a large group of opposing political party supporters in the area, for instance the case of Behram Singh mentioned earlier. Additionally, the contestants for WUA elections as well did not raise the issue of water management in their respective campaigns. From the above discussion of the election process, it also becomes evident that the state bureaucracy did not change their approach to irrigation management, for instance, making farmers aware of the objectives of conducting WUA elections.

This was clear from field discussion and is also self-evident as WUA elections were conducted six months after the PIM Act was enacted. The only difference between first generational and second was inclusion of NGOs under ICEF funding for capacity building of WUA, which was due to external factors like funding pressure.

Having discussed the election process in two select WUAs the next section elucidates the functioning of WUAs guided by core aspects –participation, corruption, state control- that the idea of participatory irrigation management aimed to address in some way.

8.2 Ideational realm influences perception of farmer organizations' and its functioning

The idea of farmer participation in irrigation management is not new for farmers of Saraswati and Betwa WUA, the first phase of participation and farmer management initiatives were tried in the 1980s and 1990s in this region, which has been discussed in detail in chapter six and seven. In this section, the focus is on evaluating functioning of WUAs with respect to key aspects stipulated under the PIM Act and how ideational realm of farmers i.e. their *mansikta* (mind-set) influences the functioning of farmer organizations. This section also evaluates to what extent the directives mentioned in the PIM Act have been implemented and how these directives have shaped ideational role and realm of farmer organizations. To recall, WUA according to the PIM Act includes the president, TC members, secretary, *amin* (accountant/person responsible for revenue collection), representative from department of agriculture and the general body, which comprises all the land titleholders in the command area of the WUA.

8.2.1 Functioning of WUA: meetings and sub committees

According to the Madhya Pradesh PIM Act^{cxii}, the WUA meetings are to be held once a month and (at least) two general body meetings in an irrigation season ought to be organized. During the time of fieldwork, however, I did not observe/hear about any general body meeting that was held in the two selected WUAs. This was (also) confirmed during interviews with farmers from both the WUAs. They stated that they generally do not get information on general body meetings. Additionally, monthly management committee meetings of WUA are also a formality and happen on paper rather than in actuality. After WUA elections were held in September 2011, only one management committee meeting of WUA was held during the beginning of the irrigation season to welcome and initiate the new members into Betwa WUA. In case of Saraswati WUA, Samrat Singh's family was going through

a personal crisis in 2011 and Samrat Singh was not that actively involved in WUA matters. Thus, the WUA meetings were not that frequent in either WUA (Field notes, January 2012).

There are multiple reasons why WUA meetings do not happen as stipulated in the Act, viz. lack of awareness/knowledge about meetings; lack of enthusiasm/interest by WUA members and farmers to take part in WUA activities; or disagreements/differences in perceptions on WUA functioning, and between WUA members and officials. In the following paragraphs, I provide evidence for assertions mentioned here.

Some of the present and former TC members of Betwa WUA elucidate that frequency of WUA meetings are contingent on how active the WUA president is. For instance, Gainda Ram, present TC member of Betwa WUA asserts that during the first term of Betwa WUA, Behram Singh (WUA president) was very active, and farmers were aware of when the meetings were held, there was also more enthusiasm and curiosity amongst farmers and WUA members, as farmer organizations for irrigation management were established for the first time through elections in this region (Interview, February 11, 2012). However, the second and third WUA presidents of Betwa WUA have not been very active and not many WUA meetings have been organized. Paras Nath was elected as TC member in 2011 of Betwa WUA, and is also one of the signatories for undertaking any financial transaction of the WUA, candidly remarks:

"I have no idea when WUA meetings happen. There was only one WUA meeting before Diwali (an Indian festival which in 2011 was in October-end). I have not spoken to the president since then. I have no idea what my responsibilities as TC member are! TC is not a vishesh pad (significant post)" (Interview, January 12, 2012).

To elucidate the background of Paras Nath, he owns 2.4 hectares of land, and considers himself a small farmer compared to other large farmers in the region who on an average own 15 hectares. Though, a TC member, Paras Nath does not take any interest in WUA activities. His papers for nomination as TC member were filed last minute at the behest of one of the contenders for WUA president post Raghav Raj of Amla village, as there was no one from Betwa village who had shown interest in being elected as TC member. Given, Paras Nath was the only who filed papers for the post of TC member, he was elected without any contestation in September 2011.

Interestingly, competent authority/sub engineer ensures signature of TC members in the minute's book for WUA meetings, although they don't go for meetings. Paras Nath further reports that the sub engineer or one of the irrigation functionaries (watchmen/timekeeper) gets his signature on the minutes book, although he had been to only one meeting (till December). According to Agarwal's (2001, p. 1624) typology, Paras Nath's participation in WUA meetings and functioning falls between

nominal and passive participation. As he does not really undertake any WUA work, but because he is one of the signatory in Betwa WUA to withdraw money from WUA account, he is informed ex post facto of decisions. Furthermore, given, that competent authority comes to Paras Nath to get his signature on minutes of the meeting, though he has not attended any, it becomes evident that there is an effort made to carry forward an official narrative in which everything is fine (meetings are happening on time, quorum of meeting is maintained, etc.), even though the reality is different. Efforts made by sub engineers/competent authorities to maintain official records are reflective of the structural constraints that they face which necessitates them to maintain records up-to-date. Informally, the officials in SAS project office are aware that the situation being portrayed is incorrect, but no one wants to make efforts and change the official narrative/discourse, and the status quo is being maintained (Field notes, December 2011). Another TC member, Madhav Ram, of Betwa WUA in the second term (from 2006-2011) remarks, 'there is no point of WUAs. Presidents' here are not very active. Vidisha (district) is more active politically and has more prosperous farmers' (Interview, February 11, 2012).

Coming to the situation in Saraswati WUA, Dilip Singh Maina (TC member of Saraswati WUA) narrates his experience of participating in one of the meeting that executive engineer of SAS Project organized to take stock of the water situation. Reflecting on his participation in meetings, he points to the inherent bias that department officials have against farmers, which becomes evident from their interactions. He argues, 'officials in these meetings are very uptight and don't let farmers speak up and there have been several occasions when farmers opinion on management (of irrigation water) are ridiculed/rebutted by officials' (Dilip Singh Maina, December 6, 2012). A similar account is presented by another former WUA president, who narrates his experience with a former executive engineer of SAS Project, 'the executive engineer did not provide space for the presidents' to present their proposals on water management in meetings'. Furthermore, comparing the attitude and behaviour of two executive engineers of SAS Project, this former WUA president posits that the former executive engineer was better as he respected them, and offered them tea (signifier of basic courtesy). However the other executive engineer did not even make provisions for tea during the meetings. Mahesh Singh further argues:

"The executive engineer was doing it on purpose to make them feel the hierarchy and show the presidents that they were below him. This is evident from his behaviour. You can call us president or consumer; all officials are lower than the consumer. But today opposite is happening. Even farmer are not able to understand that their standing is above officials. They think that their standing is below officials, I don't know when this feeling will change and there will be awareness among the farmers as well" (Interview, December 10, 2011).

My observation is similar from few meetings I attended at the WRD office in Vidisha. The structural superiority that the officials think they have because of being part of WRD is quite evident. The WRD officials are aware that they hold the key to irrigation in this region given that irrigation projects are state property and farmer organization only have responsibility to manage water. Thus, bureaucracy addresses (as is evident from above citations) participation of farmers in WUA as a procedural matter, which can be achieved by ensuring that all the paperwork is up to date. This belief is coming from the statist mind-set of an interventionist developmental state. Although it is noteworthy, PIM was initiated at the national and state level due to discussion on two contrasting ideologies neoliberalism and communitarianism – both of which emphasize farmer participation in irrigation management and lesser role of state. There has been change in ideology (to an extent) in the national and state narrative; however, the modus operandi of the junior bureaucracy has not changed who still holds on to old worldview of functioning. Thus, this resistance within bureaucracy also signifies the clash between two ideologies that they grapple with in their day-to-day functioning. As the change in state ideology demands a change in their mode of functioning but junior bureaucracy is still holding on to earlier statist ideology and beliefs.

The importance members of farmer organizations give to state structure is also evident from minutes of meetings of WRD, ICEF and WUA president. In one such meeting after the first tenure of WUAs, some of the WUA presidents' resolved to ensure attendance of all WUA presidents by institutional shaming. To elaborate, perusing through minutes of the meeting makes it evident that WUA presidents agreed that if any WUA president does not come for two meetings consecutively then this should be reported to the PIM director, WRD Bhopal (GoMP, 2004b). This is indicative of importance of state structure in WUA presidents' ideational realm who rather than using peer pressure to ensure presence of other presidents' in meetings suggested that the PIM Director in Bhopal should be informed. Minutes of the meeting also elucidate that WUA presidents believe that state and its functionaries are supreme and based on this belief they suggest that institutional shaming could force the absentee presidents to attend meetings related to irrigation management. Here farmer organization members' viewpoint on participation is not something voluntary that they ought to do to ensure better management. Rather the idea of participation in ideational realm of farmer organization members' connotes it to an obligation that can be achieved if the PIM Directorate intervenes and thus legitimacy of state structure and state ideology becomes evident.

A former WUA president echoes a similar viewpoint, 'only proper meetings that happen are the one in district collector's office (referring to the District Water Utilization Committee Meeting). Otherwise, no one really does meetings. All work happens through informal conversation over phone

or when farmers meet each other in villages' (Interview, December 10, 2011). To recall from discussion in chapter six, DWUC is an intermediary level committee that is chaired by district collector and has representatives from all relevant departments wherein decision on when to open canals and water distribution is taken since the late 1980s when the project was commissioned. Farmers attend the DWUC meeting; however, the district collector and executive engineer are the key decision makers. Whilst, distributory and project committee were envisaged after the enactment of the PIM Act to take over management of water at the regional level. However, the idea of having distributory committee and project committee was to devolve responsibility to farmers through these committees though this has not happened.

Additionally, reflecting on the issue of lack of participation by farmers in WUAs, the current president of Saraswati WUA Samrat Singh states, 'participation, is not happening as people are not educated enough, so they cannot understand the system, and perhaps we cannot explain them as well' (Interview, August 9, 2011). It becomes evident that Samrat Singh reflected on his position and the situation around him and thus posits that institutional strengthening and legitimacy of farmer organizations has not happened.^{cxiii} This awareness of Samrat Singh comes from his reflection of field reality he argues for greater discussion at the WUA/village level to bring awareness about role of farmer organizations. Here, there is an assumption that farmers are not aware as they are uneducated and thus do not understand the importance of these organizations. Samar Singh is elite of the village as discussed earlier, and his belief/understanding about Samrat Singh is an offshoot of colonial and interventionist developmental state ideology. Wherein it was presumed that management of system can be done by co-option of local leaders who in turn can manage their subjects without change in status quo (see chapter four). Although, Kaviraj (2010) has indicated that the centrist project of the state against pre-capitalist social relations has been ineffective, which brings forth the dichotomy of traditional versus modern in irrigation (See Sengupta, 1985). Additionally, this indicates that the idea of statist mind-set at the local level needs to be further unpacked, which is done subsequently in this dissertation. Furthermore, the bureaucratic structure has been also affected by the shadows of class and culture at least at the lower level. Kaviraj (1990, p. 156) in fact posits that acknowledgement of double movement - logic of political change and logic of social order - is necessary to understand how the change in quotidian living is extraordinarily long compared to change in politics and ideas at higher levels.

To substantiate, constitution and functioning of sub committees as directed by the Act has not happened. Sub-committees formed are mostly on paper. For instance, Samrat Singh, President of Saraswati WUA points out that they have only three sub committees: works committee, dispute

resolution committee and finance and accounts committee (Interview, August 5, 2011). The current WUA president of Betwa WUA has no idea about sub committees, he remarks that ‘yes, on paper sub committees are there, but not really functioning’ (Interview, February 14, 2012). The current TC members of Betwa WUA expressed no awareness or knowledge about sub committees or their functioning (Interview, January 12 and February 11, 2012). Additionally, level of participation of other line departments i.e. agriculture, horticulture, fisheries, and animal husbandry in the management committee meetings is very low/limited/negligible (Strategy Report of Betwa Basin prepared by SMEC and submitted to Executive Engineer, SAS Project, Division No. 2, WRD).

8.2.2 Function of WUA: maintenance of records

One of the responsibilities that were handed over to farmer organizations, post WUA elections, was maintenance of records. The PIM Act necessitates all WUA records and documentation ought to be with WUAs.^{cxiv} Consequently, as stipulated in the Act, WRD transferred all relevant records (and their maintenance) to WUAs through sub engineers (competent authorities) who also hold post of secretary in WUAs with the intent that these records would be easily accessible to WUA members. In actuality, however, the situation of maintenance of records is different.

Field discussion with president of Saraswati and Betwa WUA and with several other (thirteen) WUA presidents of the SAS Project elucidates that records as stipulated in the Act are not being maintained by WUAs. Most of the WUA presidents’ denied having records with them, though, presidents like Samrat Singh recognize the importance of records being with them (Interview, August 5, 2011). In case of Saraswati WUA some basic records, and maps are available with Samrat Singh at his home (he lives in a close by town) but book of accounts, minute’s book, etc. are maintained and kept by sub engineer either at his home or in Vidisha office.^{cxv} Contrastingly, the current president (Mohan Patel) of Betwa WUA seemed reluctant to keep the WUA records with himself and considers it as an additional responsibility. Mohan Patel has been part of Betwa WUA in the first two terms as TC member and since 2011 as WUA President. Therefore, he is aware of the details of WUA functioning, but is reluctant to confront WRD officials. (Interview, December 7, 2011). In fact, Mohan Patel does not even take much interest in WUA functioning. In 2011 while doing fieldwork, it became apparent that Mohan Patel rarely attended meetings organized by the executive engineer’s office to take stock of the water and irrigation situation in the project region (Field notes, February 2012).

There are several structural reasons for WUAs not maintaining the records: the Act does not specify/provision for office space for WUAs. Without office space, WUA presidents like Samrat Singh (president Saraswati WUA) are reluctant to keep records. Additionally, according to the act INR 5000

are given to WUAs to purchase office supplies annually. Enquiries about how this money is spent, did not elicit any clear response by WUA presidents or sub engineers -they cursorily remarked that adjustments are made in the budget by falsifying bills, for instance, to make up for the fuel spent on travels done for WUA work. Moreover, WUA presidents' (of Saraswati and Betwa WUA) expressed their displeasure that they have to do work without being paid any honorarium. They also lamented that they are not paid anything to cover for the fuel cost that they spend on (Interview, August 5, 2011; August 29, 2011). Thus, it is not surprising that adjustments are made for taking account of INR 5000 on paper.^{cxvi} The above narration elucidates embedding of corruption as a given in the ideational realm of both farmer organization members and bureaucracy. As corruption has been normalized and perceived as a given in the worldview of both the bureaucracy and elite farmers. In context of rural north India, Jeffrey (2002, p. 21) has discussed the interrelationship between corruption and class production wherein he articulates how low-level corruption by junior officials is manifested in their role as patrons or brokers in disbursement of state resources to rich farmers. It is a symbiotic relationship, which is beneficial for both the patron and client.^{cxvii} This depiction is correct to an extent. However, with WUA Presidents being one of the signatories the relationship no longer can be explicated only as a patron-client one. As the neoliberal ideology embedded as tenets of PIM envisages greater role for farmer organization and they have equal if not larger share in management. The change in state ideology has resulted in change in ideational role. However, change in actors' ideational beliefs and values have not been instant with change in state structural rulings. Thus, again mismatch between two ideologies at the micro level becomes evident which has complicated the landscape in which policies are implemented.

Interestingly, however the official narrative portrays the situation in the field better than in actuality, a case of justifying sanctity of existing institutional structure.

“Availability of records has increased as these are being maintained at WUA level only (...) competent authorities are good at maintaining the measurement books and similar records due to virtue of their experience in the department with record maintenance and they continue to do so. Overall, it appears that there has been an improving trend in record maintenance and there is better water accounting at WUA level in the project has also increased and there speedier availability of updated irrigation records” (MP WALMI, 2011, p. 55).

Two things that need to be highlighted from this quotation: first, officials perceive that competent authorities are adept at maintaining technical accounts and secondly, another dominant narrative that is being created is that there is an improving trend in record maintenance. Though, this was not observed in the field. A former WALMI employee and team leader of the consultancy firm recruited

under MPWSRP, concurs with the above finding and states that handing over of records has been a problem; engineers don't feel accountable to WUAs and thus have devised ways of not giving up these records to WUAs (Interview, November 5, 2011).

It is also noteworthy that reluctance to give away records also signifies unwillingness of bureaucracy to comply with participatory approach diktat. Maintenance of records traditionally has been with the bureaucracy, which gave them complete power to falsify records as per their will. However, with change in the ideology for irrigation management and lesser role envisaged for state actors under neoliberal ideology, farmer organization have been mandated to take over this responsibility. Thus, the relationship between (elite) farmers and bureaucracy has changed from earlier patron client relationship to now equal partner members in WUA (engineers are secretaries in WUA). Not surprisingly, junior bureaucracy has resisted this new diktat by foot dragging the handing over process.

8.2.3 Function of WUA: conflict resolution

Conflict resolution is one of the responsibilities of WUAs. Most common conflict in this region arises due to farmers' ploughing/erasing of *barha* (mud field channel) in their fields. There are many reasons for farmers ploughing *barhas*. First, there are umpteen instances where large upstream farmers have ploughed *barhas* that pass from their fields to trouble downstream farmers in order to pressurize them to sell their land. Second, in years of poor rainfall there was not enough water for irrigation and *barhas* were not used, thus farmers upstream ploughed them to use that area to cultivate. Third, there are no *barha* maps and once erased conflict arises over where they ought to be made. Fourth, many *barhas* have been erased by farmers due to personal conflict that they have with farmers downstream (Field notes, December 2011). However, not all *barha* conflicts have been resolved by WUA (presidents), as presidents have their biases against voters who did not vote for them, and this also gets reflected in level of grievance redressal in a particular village of WUA. For instance, a former WUA president narrates his experience of resolving a *barha* issue:

"Farmers don't come to presidents to complain/ raise issue. In my tenure I received only 2-3 complaints in total. Once, Rama (a farmer from one of the upstream villages) had come to me for conflict resolution. The situation had become very tense, and there was a chance of escalation of conflict. Bhagwan Singh of Saronj village has given his land to Rama to cultivate on lease. Rama few years back decided to curtail access of water for Sukar Singh (a farmer downstream) by ploughing the barha (field channel) that was passing through the middle of his field. Sukar Singh approached me and complained that Rama has curtailed his access to irrigation water. In this particular case, I along with sub engineer sahab (sir) came up with a solution that de-escalated the conflict. We

suggested to Rama that he allow Sukar Singh to make a barha along the field bund instead. Similar complaints came to me about not having access to water ...” (Mahesh Singh, December 10, 2011).

Mahesh Singh resolved this particular *barha* issue, as Bhagwan Singh is an influential farmer and owner of the land that Rama has taken on lease. Mahesh Singh has strong social ties with Bhagwan Singh’s family; he lives in the same village as Bhagwan Singh who is very well respected^{cxviii} in this region. In the aforesaid instance, the interaction between the material and social structures as a *raison d’être* for shaping Mahesh Singh’s ideational realm/*mansikta* becomes evident. Given that Bhagwan Singh is perceived as an influential farmer, this *barha* issue was resolved quickly. However, there have been cases when two influential farmers clash over *barha* issues and in such cases the resolution is much harder to seek, and the matter ends in court. Additionally, if *barha* issue involves farmers who are not part of the same social group and have opposed the president for instance, then WUA presidents do not take much interest to solve *barha* issue.

Additionally, post constitution of WUAs, officials do not take interest in conflict resolution, appries a TC member of Saraswati WUA (Dilip Singh Maina, February 7, 2012). This is not surprising as conflict resolution is primarily WUAs responsibilities, and engineers do not consider this their primary responsibility. However, engineers as competent authority are secretary in WUAs and thus do have responsibility to arbitrate conflict being part of the WUA. The competent authority gets involved when farmers file written complaint at the department office and then they need to take some action. Especially in cases where farmers of more than one WUA are involved, given no distributory committee in the project to arbitrate, this work needs to be undertaken by WRD officials. In such cases also the competent authority are required to get in touch with WUA presidents’ to resolve conflict. The sub engineers try to resolve conflict through discussion with respective WUA presidents and farmers. However, given that ploughing of *barha* is widespread in this region there are numerous court cases on conflicts that arise due to ploughing of *barhas*. A competent authority of the SAS Project referring to this problem posited ‘the department has overburdened them with so much work – who has the time to do paper work for all these court cases. It takes years to resolve issues, better to resolve them informally. Some cases are given priority if local MLAs start taking interest in this matter’ (Informal discussion, December 15, 2011). Thus, what becomes evident from the above discussion is that conflict resolution mostly happens informally and engineers take action only when they are pressurized by MLAs. Similar observation is made by Wade (1982) who has given an excellent exposition of problem with canal irrigation from an institutional perspective by pinpointing the supply side aspects -personnel transfer- that thrive and sustain the corruption in canal irrigated agriculture. However, taking an institutional perspective would entail that bureaucracy (any state

functionary) is enchaind in their envisaged institutional role, and values. However, this would be a simplified understanding of how actors' function as it would entail overlooking the role of ideas, ideology and beliefs, which guides ideational role of actors. For instance, problem of ploughing of *barhas* is recognized in officials meetings. To elaborate: 'big farmers are not allowing small farmers to lay pipes in their fields or to draw irrigation water from their wells. In these villages, capacity building of WUAs needs to be done to reduce the social difference between groups' (Minutes of ICEF WRD PIM Project Vidisha, October 31, 2003). Moreover from the above citation it is clear that at the project level and in project meetings social/material differentiation as a cause of inequitable access to irrigation water is recognized by all actors' -bureaucracy, NGOs, and WUAs- present in the meeting. However, the problem is that this differentiation is also perpetuated by at least two of these actors: first, quite actively by WUAs and second, discursively by engineers through their actions, which becomes apparent from whose houses they go to when they are in a village, who has access to their telephone numbers and who can contact them. The small farmers are hesitant to contact/ approach the sub engineer's directly, and go to the prominent village leaders or WUA presidents for grievance redressal. This has resulted in perpetuation of the existing categorical inequalities and in conflict resolution. Thus, it becomes evident that class and caste differentiation also enriches ideational perspective of actors and thus determinant of their action.

8.2.4 Function of WUA: water allocation and distribution

Opening of network of canal: After initiation of decentralization initiative, the decision (date/time) to open the canal systems has continued to rest with the chair (district collector) of the District Water Utilization Committee (DWUC), as was the case prior to initiation of PIM (see chapter six). Moreover, after handing over operation and management of irrigation system to farmer organization the ceremonial opening of the canal systems is also still being undertaken by district collector and the executive engineer of the project. In year 2011, when I was doing fieldwork, apart from the WRD officials, there was presence of local media, few WUA presidents' and few farmers for the opening ceremony. Additionally, a local politician belonging to the right wing political party BJP was also present, indicating the significance of the canal in local politics. Photograph 8.2, shows the formal opening of the sluice gate by the district collector and executive engineer, which marks the beginning of the irrigation season for SAS Project.

Photograph 8. 2: Formal opening of the canal network for irrigation in November 2011



Symbolic prayer being offered

Ceremonial opening of the sluice gate

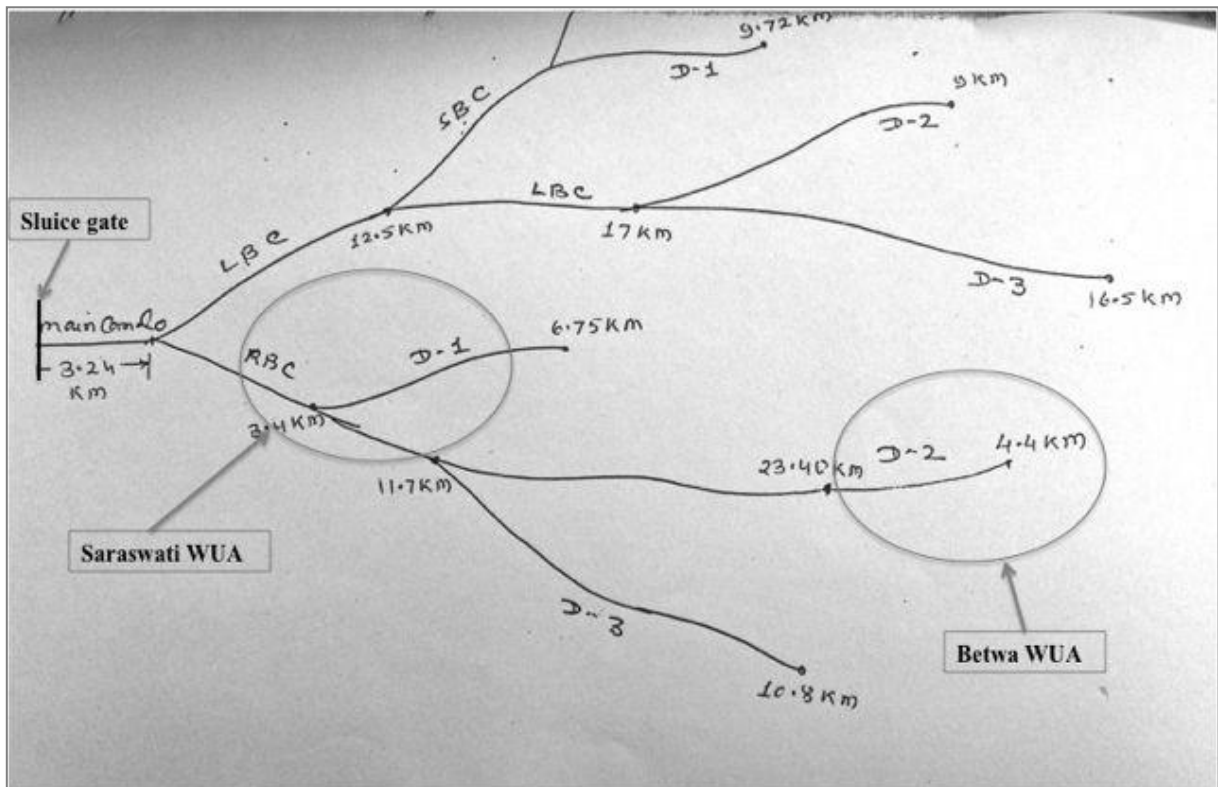


After opening of the sluice gate, a short meeting is held at the sluice village where the district collector and executive engineer respond to media queries on water availability for upcoming irrigation season. The opening ceremony concludes with taking journalists, officials and few farmers for a boat ride in the dam waters post lunch. Hierarchy is pervasive in the entire ceremony, which is self-evident from Photograph 8.2 as well. Only officials are part of the small ceremonial ritual, while farmers and rest of the officials stand at a distance and are silent spectators. Moreover, it is noteworthy that although through PIM ethos of decentralized management has been initiated, the power to decide date and time of opening of the canal system or the ceremonial opening of the system remained with the district collector and executive engineer, which is a signifier of authority and power that still vests with bureaucrats, and there have been no efforts to hand over even ceremonial openings to farmer organizations. This is an issue of significance as display of power and hierarchy during opening of the canal system signifies and reinforces farmer worldview that state is still an important actor and controls water distribution. Thus, it becomes evident that the current approach to irrigation management has misread the pulse of two significant actors' junior bureaucracy and farmers who are at loggerheads and guided by their worldview on how institutions for irrigation management ought to function. The following sections further advance this discussion

by elaborating how divergent ideologies and beliefs of farmers, farmer organization members and junior bureaucracy has been a roadblock for functioning of WUAs.

The sluice gate opens water from the dam into the main canal. Flow of water from main canal to RBC and LBC is controlled by gate where main canal bifurcates into RBC and LBC (see Figure 8.3).

Figure 8. 3: Canal network of SAS Project



Source: SAS Project Office, Division No. 2, WRD, Vidisha

From Figure 8.3, it is evident that canal network of the SAS Project is big. However, there are minimum required gates in the canal network, only at spots where canals bifurcate into distributaries, which also makes water regulation difficult. Additionally, volumetric water supply for water distribution is not being undertaken in the project.

Water budgeting: According to the PIM Act, farmer organizations are supposed to prepare a tentative programme for releasing water through various distributaries i.e. prepare water budget. As mentioned previously SAS Project does not have distributory and project committee at the intermediate level. Therefore, overall water distribution at the project level and at distributory level i.e. for LBC, RBC and SBC is still in the rein of WRD officials.

At the micro level, WUAs are responsible to prepare a water budget for their respective area. However, in actuality WUA Presidents do not prepare water budget. In fact, the executive engineer of the project posits that in WUA meetings he has urged WUA presidents to prepare a water budget and plan for water allocation (Interview, October 12, 2011; December 7, 2011). I have also witnessed him urging WUA presidents to take up this responsibility in one of the meetings. However, WUAs have not shown keenness to take up this responsibility. Reflecting on the reasons for WUAs not taking up this responsibility, Prabhat Singh, who has been WUA president for a decade now, points out:

“Problem is that at present the department manages water allocation and has the responsibility of opening and closing the gates of the canal network. Until this responsibility/control is given to farmer organizations, it is very difficult to change anything, as farmers are aware that department (functionaries) has control over water as they operate the gates” (Interview, December 17, 2011).

Prabhat Singh evinces the futility of making a water budget given the knowledge that operation of gates i.e. control of the network is in the hands of WRD. WUA presidents can exercise control only by keeping in touch with lower functionaries of WRD and competent authority and asking them to increase/decrease the flow of water. The strength of WUA president’s assertion depends on their personality, thus, is individual centric. For instance, the president of Saraswati WUA (Samrat Singh) is a young and dynamic leader and keeps regularly in touch with department functionaries. Although, he does not live in the village, he travels often to select WUA villages (which are on the head and middle reach) from where he received vote to listen/resolve any irrigation water related problems.

Contrastingly, the current president of Betwa WUA (Mohan Patel) who is from *patel* (traditional authority) family of Karamkheri and also resides in the village does not go to other villages of Betwa WUA to assess water availability for farmers or curtail wastage of water or for conflict resolution. During the time of data collection, Mohan Patel was busy with construction of his house and did not spare much time for WUA activity. Farmers observed that they saw him only once at the canal, to resolve problem of a farmer he has familial ties with in Betwa village (Field notes, February 2012).

Here viewpoint on participation of active farmer organization members like Prabhat Singh is evident. They seek a more substantial role for farmer organization rather than tokenism, which is being perpetuated by bureaucracy strategically by keeping control of intermediate level distribution of water (discussed in following section). The idea of substantial participation emerges from beliefs and success stories of community based natural resource management, which farmers in the region are aware of. Moreover, Mohan Patel’s disinterest in WUA activities is a sign of disenchantment from the

institutionalized idea of participation. Mohan Patel's learning is coming from his knowledge of WUA functioning since the beginning first as a TC member and most recently as WUA president, he recognizes and has internalized the limited scope for undertaking participatory work through WUAs in the current scenario. It is noteworthy that institutionalist explanations here would explicate lack of appropriate participatory climate in WUAs due to institutional reluctance, path dependence and inertia. However, as noted in chapter three: ideas, ideology, beliefs, values, norms matter and thus it can be argued that reluctance of Mohan Patel to actively participate in WUA is due to his internalization of the instrumental idea of participation having taken a certain institutional form in WUAs due to salience of actor's ideational realm. However, Mohan Patel despite being aware of the scenario still has been associated with WUA as he has political ambitions and being the president heightens his social status. Thus, it becomes evident that different ideas, belief systems drive actors' worldview and this impacts functioning of WUA.

Distribution of water: A former WUA president and resident of Betwa WUA, reflecting on the current practice of water distribution states:

"Till the Act is implemented in letter, nothing will change... all presidents think (obviously) about their vote bank only; and ensures that they get as many rounds of irrigation (water) they require (...). Presidents downstream can only request for water, they cannot do anything else. If the president upstream shows some reham dilli (kind heartedness) then perhaps the farmers downstream will benefit" (Mahesh Singh, December 10, 2011).

In the above citation the former WUA president is referring to lack of intermediate level committees as a roadblock for WUAs to function fully. Furthermore, as discussed in the previous section, water budgeting is not being done by WUAs, as there are no gates or volumetric devices to control/measure water. This also necessitates having a modernized irrigation network to ensure that WUA presidents can do their work. Behram Singh the distributory committee president in the first term posits that during his presidency of distributory committee, they had tried to bring all presidents on board and had initiated a system of discussing water needs and requirement of upstream and downstream farmers. But after the distributory committee's tenure ended, it has been difficult to initiate any talk with upstream and downstream presidents and it's the department, which controls water distribution. Thus, it becomes evident that lack of intermediate level committees -a structural constraint- has resulted in poor coordination between upstream and downstream WUAs.

Furthermore, stability/resilience of any organization is tested by how it performs during crisis. WUAs of this region also faced this test during the time of water scarcity from 2007-2010.^{cxix} In these years canals were run for shorter period of time, for instance in the year 2007, the canal was run only for

about 30 days. During this time period, WUA president's interest (and participation thereof) in irrigation matters dwindled. However, these are the times when politics of water access and allocation becomes most evident. Two currently serving WUA presidents' (Samrat Singh and Ramdhari) narrating their experience of this time (of scarcity) state:

“During the first term of WUAs most of the presidents were active, however, in the second term due to poor rainfall presidents' and farmers did not take much interest in WUA activity. Everyone got tube wells installed” (Interview, August 9, 2011).

However, access of water for WUAs cannot be explicated this simplistically. A former WUA President and project committee president in the first term provides another narrative, and elucidates that during scarcity, one of the WUA president had approached the local BJP MLA who pressurized the department officials to ensure water for his vote bank. Giving into political pressure, this tail end area was provided with water by stopping water flow in all other canals (Bhagwan Singh, October 3, 2012; Interview, December 17, 2011). From the above distinct citations two crucial aspects that drive notion of ideational realm are evident: first, active WUA presidents connote *their* participation in WUAs to them being responsible to provide water to farmers in his WUA. However, being aware of the local situation they know that they have limited control over water distribution (as discussed above). Thus some of them tap their friendly political connections to ensure farmers get water. Local MLAs generally oblige in such situations as this legitimizes their position in the political society. Thus, farmers who pursue and thrive on tenets of patron client ideology approach the MLA. However, give that not all WUA presidents took interest in their work it also led to many farmers getting their own tube wells installed especially in Betwa WUA which also signifies disenchantment at the local level of the current ideology, beliefs and values that drives irrigation management.

WUAs need to propagate cropping calendar in sync with water availability: After SAS project was commissioned a crop calendar conducive for irrigated agriculture in *kharif* and *rabi* season was prepared. According to this cropping calendar, farmers in SAS project ought to cultivate hybrid and ordinary variety of wheat in the *rabi* season and paddy, fodder, groundnut, pulses, and some soybean in the *kharif* season. Sugarcane was also planned/suggested as a perennial crop for cultivation in this region (GoMP, 1976). Additionally, during time of scarcity farmers are advised to cultivate low water intensive crops. However, (upstream) farmers do not practice crop diversification in times of scarcity and these results in greater stress for farmers downstream. Interestingly, the cropping pattern of this region has not changed much since the 1990s (see annexure VIII for details on per unit area cropped). Farmers of this region still cultivate soybean in *kharif* season, and wheat is the favoured crop for *rabi* cultivation. Given, that soybean continues to gain popularity as *kharif*

crop, in SAS Project region there has still not been any demand from farmers for (irrigation) water for *khari* season as soybean is mostly rainfed. So, the basic tenet for irrigation management that was there in 1980s and 1990s continues unabated, i.e. farmers have more than required quantity of water for irrigation for *rabi* cropping and this leads to wastage of water. WUAs have not been able to propagate crop varieties in sync with water availability (especially for upstream farmers).

Additionally, as discussed in chapter seven, in the 1980s and 1990s efforts made for judicious management of irrigation water by farmer organizations or the bureaucracy were also not successful. A Central Water Commission report, points towards the unwillingness of officials to change initially as the reason for non-adoption of *khari* cultivation practices as envisaged for the SAS Project in its detailed project report (CWC, 2006, p. 104).

8.2.5 Function of WUA: operation and maintenance of canals

Condition of canals and budget for operation and maintenance: When WUA presidents were elected for first time in 2000, there was much more enthusiasm amongst them to get work done. A former president of Betwa WUA, Behram Singh who was also elected the distributory committee president in the first term points out:

“When the canals were handed over to the WUAs in 2000, the condition of canals was poor, and one could not release more than 125-130 cusec of water through minor channels, as otherwise there was lot of seepage and breeches. It’s only after we have deepened the minor channels that we were able to even run 200-300 cusec; SDO sahab (sir) was not in favour of this, and made sure that I had given it in writing that I was running the canal with more than its designed capacity (...).

After WUA elections were held, farmers used to approach me for irrigation water related issue. Farmers are related to us, and if they did not receive water they used to call me to address this issue. The command area of the canal network is quite big, it expanses to 35-40 kilometres. In such a big area, some farmers are automatically left out. One needs to take risk, without taking risk it is not possible to ensure access of water for farmers, and thereby meet requirement of farmers who are in my area.

Work on canals is not done according to the Act. Rules are made in offices, and not by looking at the field reality. There is not enough budget with a WUA to undertake physical work, they should either increase budget or stop conducting elections, as there is no point really of WUAs as one cannot get any work done in INR 50 per hectare...for instance, in context of Betwa WUA, how can one get work done on 10 minor canals (approximately 1000 hectares) in INR 50,000. I even met MLAs from both BJP and Congress at the state level to increase the budget and get more funds for my WUA. I was able to get money from the local MLA for building a footbridge and also for doing some O&M work at the deep cut site” (Interview, August 29, 2011).

It becomes evident from the above quotation that Behram Singh during his first tenure as Betwa WUA president had taken huge risks to ensure access of water for his electorate. As mentioned previously he is a dynamic leader, who has political connections and was very close to the then local MLA from BJP. Interestingly, this MLA had personal stake in this area, he owns about ten hectares of land in Chapna (Behram Singh's village). So, he also supported Behram Singh's work and had given funds to Betwa WUA to make a footbridge to improve commute for farmers. Behram Singh is an active WUA president so was able to raise funds for footbridge through the MLA fund. However, not all presidents are active and are neither successful in mobilizing additional resources for WUA functioning. Additionally, from the above lengthy citation the problems with the current procedural approach to irrigation management are evident, wherein not enough funds are provided to carry out operation and maintenance of canals. To recall, financial bleeding of irrigation bureaucracy was the reason to hand over management of irrigation systems to farmer organizations. However, the current approach to devolution of functions has not fostered creation of sustainable independent farmer organizations. This has led to farmer organization presidents like Behram Singh approach local MLAs for additional funds which has nurtured vote bank politics at the local level - a defining feature of patron client relationship. Pursuance of this belief has also led to greater divide between bureaucracy and farmer organizations as WUA presidents exercise their agency by approaching the MLAs for action. This approach to participation (viewed here as getting WUA work done i.e. providing water to farmers) has created a rift between farmer organization members and junior bureaucracy and made implementation of PIM a complex endeavour. Likewise, Samrat Singh, president of Saraswati WUA, reflects on the state of affairs in the last decade:

"Sensible and educated presidents take irrigation work seriously. Those who are aware about the basics of what samitis (committees) ought to have, what are its powers they can change management process. But presidents who are not aware of the basics don't know what samiti ought to have and thus initiating any change or questioning the status quo is obviously out of question. We need more dabang (bold) presidents.

Furthermore, the budget for operation and maintenance was prepared in the first term (i.e. in the year 2000) by the WUA presidents with the aid of sub engineers. Two politically active WUA presidents from SAS Project posit that this changed approximately after 2003-04 (Interview, August 9, 2011).^{cxx}

"The atmosphere, was good till then, things were neat and clean. About then they started asking us for commission from the WUA operation and maintenance budget. If we did not give commission to WRD functionaries then they used to find problem with our estimates. They used to say that we did not do accounts correctly, or used to verbally give us an approval that budget will be approved so we used to get physical work done.

But later they used to find problems with the budget estimation and argued that paperwork is incorrect so we will be paid lesser. They troubled presidents like this for some time and gradually they took over the paperwork as presidents refuse to function like this. We had even complained to the principal secretary WRD, but he was also corrupt, so what will he do. There are cases against him”.

Samrat Singh further recounts that this situation worsened in 2009. To elaborate:

In 2009 the executive engineer sahib (sir) was asking for 10 per cent commission instead of the regular 5-7 per cent, to release the budget for operation and maintenance. Fourteen of us (referring to other WUA presidents) got together and presented the budget and requested for its approval. We told the executive engineer that we will go to the district collector and collectively submit our resignations if he does not release the budget. The executive engineer told us not to submit our resignations and go to the collector, as entire administration from top to the bottom will be shaken up if fourteen presidents from a major project resign simultaneously (...) the executive engineer then called all sub engineers and threatened them that he will suspend everyone if he does not get his commission, and he does not care if the sub engineers give it from their own pocket (...) the executive engineer did not care about the status of the canals as long as he received his commission. Sub engineers then had no choice. They devised ways to take out the extra money from the WUA budget. For instance, they indicated on paper that JCBs (earth excavator machine) run for 60 hours when they run it only for 40 hours. This misreporting does not get reflected in social audits as sub engineer does the audit himself. So, on paper, everything is correct (...) it is very important to have active presidents. There are only about five active presidents in this project. If presidents are not active then too much stake is in hands of sub engineers (...) we get about INR 60,000 for undertaking repair and maintenance, and this is not enough. INR 5000 anyway gets wasted in giving commission, as everyone takes their share. I don't give commission but sub engineer does, I don't know how he manages (...) Saadhan also facilitated in questioning the status quo. Saadhan had complained to officials in Bhopal about this commission nexus and after that the executive engineer started taking commission from sub engineers and not WUA presidents (...) now sub engineer's trouble us. They make wrong estimates and only listen to what we have to say if we agree to pay commission” (Interview, August 5, 2011).

The WUA presidents were threatening to resign as the executive engineer wanted to increase his commission to 10 per cent from the earlier accepted norm of 5-7 per cent. Therefore, in this context, Samrat Singh laments that there are not enough WUA presidents who are aware about basics of WUA functioning and who can question the status quo. Moreover, it becomes evident that corruption is pervasive in operation and maintenance work and institutionalized in irrigation management.^{cxxi} Thus, is an accepted norm in elite farmers (WUA members) ideational realm. Additionally the above citation highlights the consequence of introducing participatory process in irrigation management i.e. questioning the existing status quo - the established rent seeking practice

in operation and maintenance of irrigation system. The confrontation by WUA presidents led to shifting of the burden of paying commission to get budget approval from the WUA to sub engineers. However, the blasé approach of the executive engineer to irrigation management cannot be overlooked either. The executive engineer's confidence to approach corruption so blatantly gains strength from institutional backing of state structure. Although, the above narration also highlights salience of an alternative belief that is strength of participatory processes (though still in its rudimentary stage) and deliberative discussion process that has been activated due to change in ideology for resource management. Thus, due to change in ideology there are varying ideational realms guided by old and new ideas, beliefs, which have confronted the existing status quo. Role of *Saadhan* in facilitating deliberation at the micro level in context of highlighting and questioning rent seeking practices also needs a mention, as they not only created awareness which resulted in lesser corruption at local level, but they also raised this issue with WRD officials in Bhopal.

Overall, president of Saraswati WUA (which is on the head reach) is more active than the one of Betwa WUA (tail end). Samrat Singh, though active also has biases against farmers who did not vote for him. For instance, he does not visit tail end villages like Amlakheri and Sadaiya that have predominantly Maina community. Additionally, from these two villages there have been contenders for WUA president post in the last three elections. It is also noteworthy that the command area of Saraswati WUA is huge, and if one takes the road from Saraswati to Amlakheri or Sadaiya the distance is about 30-35 km. Hence, a huge command area is also a reason for WUA presidents not being able to travel everywhere, especially given that the president post is not salaried or receive any honorarium. Similarly, biases of presidents' also are reflected in what work is prioritized for repair and maintenance; frequency and level of grievance redressal in a particular village of WUA; and accessibility in terms of time of WUA president to their opposing groups in WUA.

Mohan Patel president of Betwa WUA was not active during the time I was undertaking fieldwork. As mentioned earlier, he did not go for meetings at the executive engineer's office, and also did not visit the rest of the Betwa command area. Although, Mohan Patel was also clear that he would only visit areas where he received vote from, which primarily was Karamkheri, Sadhai and Radhakheri. Rest of the villages in Betwa WUA, he had not even gone to campaign for his candidature as there were other contestants from those villages. Additionally, these areas are also where there have been past social rivalry between *patels* of Karamkheri and Rajput's (Bhagvan Singh's family) of Saronj, for instance.

Lack of functionaries: WUAs in the SAS project region are toothless tigers. For instance, Samrat Singh posits that in Saraswati WUA, earlier there were four *chowkidaars* (watchmen), two however died

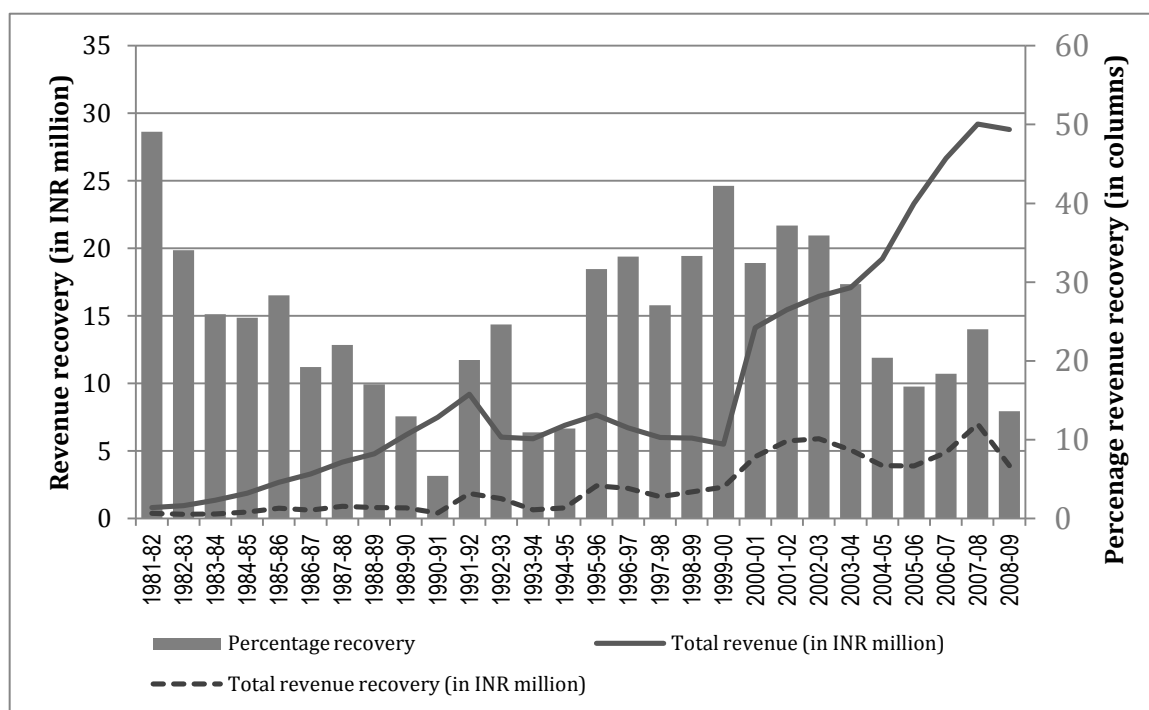
and two have retired. Thus, at present there are not enough *chowkidaars* /functionaries in Saraswati WUA. The same is the case for other WUAs. Furthermore, he posits ‘WUA president is a position without any resource, so, what is the point of doing decentralization’ (ibid.). According to the Act there is no provision for recruiting new *chowkidaars* in the department, as WUAs are envisaged to do protection and management of irrigation system by soliciting farmer participation.^{cxxii}

The idea and essence of operation and maintenance by farmer organization is that WUAs will provide water to farmer’s at most appropriate time and in requisite quantities. This necessitates, regulating the flow of water, patrolling over canals to ensure there is no out of turn irrigation or canal breaches, and to curtail wastage of water. From the discussion in this section, it is evident that regulating flow of water is not in hands of farmer organizations yet. Additionally, for patrolling there are not enough *chowkidaars* (watchmen) with WUAs to undertake proper patrolling of canals. The department has not made any new recruitment for lower functionary and many of the old *chowkidaar* have retired or died. So, WUAs currently have shortage of *chowkidaar* in the SAS Project. The PIM Act necessitates that WUAs will be responsible for patrolling and it was expected that farmers will participate, in fact take over patrolling, therefore no additional funds are available to recruit *chowkidaar* at present. However, patrolling has not been taken over by farmers. To recall from findings of chapter seven, the irrigation bureaucracy had functionaries to assist in water distribution. This is not the case, at present though.

8.2.6 Function of WUA: facilitate collection of irrigation fee

One of the responsibilities of WUAs under the PIM Act is to facilitate *amin* (accountant/person responsible for revenue collection) in collection of irrigation fees. Additionally, WUAs can also mobilize their own resources and impose penalties (GoMP, 1999). Figure 8.4 illustrates status of revenue recovery in SAS Project since its inception.

Figure 8. 4: Year wise revenue recovery in SAS Project



Source: Design by author based on data from GoMP (2011b)

From Figure 8.4, it is evident that revenue recovery in the SAS Project has been abysmal. The highest revenue recovery (about 49 per cent) in the project was in 1981-82, in its initial years. The lowest revenue recovery in the project was in 1990-1991 i.e. 5.42 per cent. Figure 8.4 also illustrates that post constitution of WUAs there has been no significant improvement in revenue recovery. Poor rainfall and consequently less water in the dam from 2007-2011 has been one of reasons for poor revenue recovery in the last few years. However, given the abysmal revenue recovery in general it is evident that poor revenue recovery is not just contingent on poor rainfall or climatic factors. Rather is a systemic problem, as revenue recovery was poor even when WUAs were not constituted and during good rainfall years too. To elaborate, the state has not taken any strict political measures to enforce irrigation revenue recovery from defaulters. For instance, the irrigation revenue recovery in Saraswati WUA is about 60 per cent and there were 144 defaulters by in 2011 (SAS Office, Division No. 2, WRD Vidisha). Whilst situation in Betwa WUA is even worse, given that it is on the tail end. Saadhan’s closure report also points out the poor revenue recovery in Betwa WUA and other WUAs where it worked.

The irrigation fee for each WUA annually is contingent on how many farmers sign an agreement with the department every year for availing irrigation water. Irrigation fee depends on number of watering, type of crop and whether the watering is for *palewa* (pre sowing) or post sowing. For

instance, *palewa* costs INR 125 per hectare; wheat costs INR 125 per hectare for each watering; gram costs INR 75 per watering (GoMP, 2012a, p. 8). Post constitution of WUAs, the WUA presidents of Saraswati and Betwa WUA have handled this responsibility of facilitating collection of irrigation revenue differently. WUA presidents' of Saraswati WUA, Surjan Singh and Samrat Singh had taken interest in revenue recovery. They accompanied *amin* (accountant/person responsible for revenue collection) at designated days and time to villages where farmers gathered to pay revenue (*Amin*, Saraswati WUA, February 10, 2012). The situation has been different in Betwa WUA where only the first WUA president, Behram Singh took interest in facilitating revenue recovery (Field notes, August 2011). Chapter seven elucidates cases of how *amins* under and/or over report irrigated area by taking bribes from farmers. After implementation of the PIM Act and constitution of WUAs, this practice of under and/or over reporting has continued and farmers in both the select WUAs have benefitted from paying lesser irrigation dues at the cost of state treasury (Field notes, January 2012).

An interesting initiative was started by Saraswati WUA president in early 2012 (at almost the end of my field research) to curb corruption in collection of irrigation revenue. Samrat Singh was making an inventory of area irrigated per farmer in select WUA villages in order to calculate how much irrigation revenue ought to be collected by the treasury. Samrat Singh was undertaking this exercise to assess what is the gap in collection of irrigation fee and if he could use this information to pressurize the *amin* to be fairer in collecting irrigation dues - a persistent problem in this region (Interview, February 12, 2012). It is evident from this initiative of Samrat Singh, that he was devising new strategies to question the status quo i.e. the existing norm that makes it acceptable for *amin* to falsify records and collect lesser irrigation revenue for the exchequer. Thus, it becomes evident that Samrat Singh was initiating a new 'politics of presence'^{cxixiii} by initiating new process of participation by and contesting the current approach of *amin* to collect irrigation revenue.

8.2.7 Other critical issues

Capacity building: Various capacity building programmes for farmer organization that have been undertaken by the state government since 2001 was mentioned in chapter five. Briefly, I elucidate the effectiveness of these capacity building programmes in facilitating WUAs to function better. A former WUA president narrates his experience of capacity building programme:

"The capacity building by WALMI is just a formality (...). Capacity building programme under MPWSRP has been a farce; no one came to train us. Moreover, their practices were corrupt. They came to the village and recruited people as community organizers who had no knowledge/experience (...). Work of Saadhan under ICEF was better. If they had continued their work here, then farmers definitely would have been more aware of

PIM Act. Farmers paid more attention to work done under ICEF scheme, as they had given 10 per cent contribution to get work done. ICEF was a good scheme as people reflected during that time about state of affairs (as they had contributed money). They were more conscious/attentive and were questioning things (...) Boys from our village who worked with Saadhan have become more active and empowered (...) if awareness among farmers increases then situation can change” (Mahesh Singh, December 10, 2011).

Behram Singh, the first president of Betwa WUA narrating his experience of capacity building programmes points out usefulness of WUA training. He posits when he was elected WUA president in 2000, he was not aware of the role and responsibilities that the post demanded. WALMI's training programme was useful in providing information about roles and responsibilities of WUA president. But this training was done only once during his first tenure as WUA president in Bhopal. Further, the exposure visits to Gujarat and Pondicherry were beneficial for him to understand how work was being done in other states (Interview, August 29, 2011). Reflecting on some of the experience he gained from exposure visits, Behram Singh notes 'that farmers in Gujarat are active and united and don't hesitate to take initiative. This unfortunately is not true for this region (referring to Betwa WUA villages)' (ibid.). Some other WUA presidents echo similar viewpoint with reference to training programmes:

“The training programme is repetitive and has nothing new to offer (...) the training programme will be more helpful if they are done in villages rather than in Bhopal, as then there will be scope for TC members and farmers to participate as well” (Samrat Singh, August 5, 2011).

“In the first five years of WUAs tenure, everyone took interest in the work, but in the second tenure officials did not take much interest, and there has been lesser participation and inclination to work from bureaucracy (...) if there was lesser rainfall greater capacity building programmes were required to tell farmers to curtail wastage of water, but that did not happen... in the first five years some tail end farmers who had never received water earlier, also received water, but after poor rainfall and water scarcity years, the interest of bureaucrats and WUAs waned” (Samrat Singh & Ramdhari, August 9, 2011).

Overall, interview with several WUA presidents in SAS Project region corroborates this viewpoint that training programme undertaken by WALMI leave lot to be desired. Most of the WUA presidents recalled that in every term of WUA training, same issues are highlighted/ repeated. From above citations the procedural approach to training programme adopted by WALMI is evident as an amalgamation of statist and neoliberal ideology is evident. In tune with state style of functioning WALMI officials designed capacity building programmes, which provided information about procedures, etc. However, this approach to building capacity does not encourage creation of

deliberative publics i.e. fostering of farmer organization that could engage with farmers of the region. This is not surprising, as capacity building for irrigation management has been approached as a neutral technical process till now. Craig (2007) argues paying attention to power and ideology and how these are mediated through structures and processes while undertaking capacity building and not mere procedural approach which promotes false consensus about goals and interests. The outcome of this approach has been that WUA presidents find WALMI programmes repetitive and uninspiring as evident from Samrat Singh's interview.

The above response is not surprising if one dwells into the process of creation of training calendar for conducting training programmes. Interview with officials from PIM Directorate, Bhopal on the process revealed that officials start preparing a training calendar only after WUA elections are held, this leads to time lag between election/selection of the WUA president and the training programme to build awareness of the WUA presidents about the post. For instance, in case of SAS Project, eleven new farmers were selected as WUA president in 2011 and they took up the role of WUA president without being aware of their rights and/or responsibilities (Field notes February 2012). The training of WUA presidents had not been initiated till March 2012, whilst WUA elections were held in September 2011. Additionally, with no focus on building capacities of TC members - it's a post that farmers don't comprehend, and consider primarily the WUA President as the WUA. As the focus of WALMI training programmes has been solely on WUA presidents and secretaries of WUA i.e. sub engineers. The outcome of this neutral procedural approach to capacity building has been reinforcement of status quo i.e. existing power, local field dynamics, and farmer ideologies and beliefs and has not provided space to build alternative leadership. Moreover, this approach to capacity building assumes that farmers lack capability and knowledge to undertake work, and hence capacities ought to be developed (c.f. Botes & Van Rensburg, 2000; Craig, 2007; Kenny, 2007). This paternalistic approach is an outcome of statist ideology which only aims to preserve the status quo and thus the capacity building programmes are viewed as an end by itself and the only utility they serve is of positive check mark that training programme has been completed and are followed by reporting of number of WUA presidents trained and snippets of cases that describe success stories. Additionally, these training programmes also reflect the imagery of participation perpetuated by trainers i.e. of limited/selective and restrictive participation of farmer organization members by design as even the TC members are not made aware of their role or the decision making processes in WUA.

Contrastingly, reflecting on the capacity building work of the Saadhan the NGO under ICEF funding, Samrat Singh found their work inspiring, as Saadhan tried to create greater transparency in WUA

functioning and questioned the status quo. However, WUA presidents found capacity building initiatives of the consultancy recruited under MPWSRP unsatisfactory and not many people recalled any substantial work done by them. For instance, Samrat Singh narrates:

“Generally three people used to come in a car, they used to ask us to collect 10-20 farmers and they used to arrange for refreshments and disseminate some information. The community organizers that this firm had recruited did not come to Saraswati village often. He used to live in Vidisha” (Interview, August 5, 2011).

Overall, the capacity building of WUAs has been unsatisfactory. WUA presidents’ perceive that work done under ICEF funding by Saadhan was better, given that farmers had to give beneficiary contribution they were more interested in *bhagidari* (participation) during that time period. The work of Saadhan also led to greater deliberative discussion (even though for short duration) in their work area, as they constantly engaged with farmers and WUA members through their stationed field staff on issues of participation, corruption, better resource management, etc. thus at least initiated an ideology of ‘participation of presence’, for instance, Samrat Singh’s initiative of curbing corruption in collection of irrigation revenue.

Although, it is noteworthy that the essence behind all these training programmes has been to promote greater community development work and lesser role of the state. However, pursuance of this approach till now only reveals a false sense of handing over functions to farmer organizations. As farmer organizations do not have any control or say in the capacity building process and it is not developed based on their felt needs though is ironically for their capacity building.

Furthermore, salience of external funding agencies like the World Bank in propagating a discussion that encourages community development as a top-down solution for predetermined goals like irrigation management within tight fiscal control measures ought to be stressed as well (c.f. Craig, 2007, p. 349). As this led to recruitment of a consultancy firm for capacity building whose work has been deplorable, which brings into question this entire approach to capacity building for irrigation management which has not achieved anything, unless perpetuation of institutional decadence is considered an outcome.

Communication within WUAs: Clear and transparent communication within WUA is crucial to ensure that PIM Act is followed in essence, however, this is lacking at present in the two selected WUAs. For instance, as mentioned earlier, within WUAs there is no clear communication to WUA members or to farmers about when WUA meetings are held. Additionally, farmers in both WUAs were not aware about general body meetings, or have any information about social audits that present information of work done by a WUA in a year (Field notes, January 2012). Lack of transparency and information

about meetings also has created a lot of misperception about WUA work in the respective WUAs. For instance, Mohan Lal a large land holding farmer from Samaykheri posits, ‘presidents don’t disclose information about how much money is spent on operation and maintenance. They always say that they have put additional funds of their own to carry out operation and maintenance’ (Interview, December 14, 2011). Mohan Lal’s statement is in concurrence with my interviews with WUA presidents’ from the two select WUAs and other WUAs of the SAS Project as well. The WUA presidents’ on the question of operation and maintenance always have had a two-pronged response: first, there are not enough funds to carry out proper operation and maintenance, which was also acknowledged by department functionaries. Secondly, that they use their own funds to carry out operation and maintenance (Field notes, December 2011). On question of their motive for spending from their pockets, the most common response was that if work is not done in time because of lack of funds then farmers will not receive water on time; and the reason why they chose to become presidents is to serve people. Some of the presidents like Samrat Singh of Saraswati WUA and Behram Singh of Betwa WUA indicated that they would take the money from sub engineer later (Interview, February 12, 2012; *ibid.*). If public social audits were undertaken then some of these aspects would be clearer. Lack of transparency and accountability is evident in present WUA functioning. Additionally, WUA presidents claim that they spend their own finances is a reflection of their patronizing belief system wherein they portray themselves as guardians of the irrigation system and control access to information. Gate keeping by local elites (WUA presidents) to control decision making and accumulate financial resources prior to disbursing has also been discussed by Botes & Van Rensburg (2000), Pattenden (2011) *inter alia* in context of decentralization and capacity building.

Communication between WUAs and WRD: there isn’t clear communication between WRD and WUA. Department functionaries only communicate basic minimum information to WUA members and at times they misinform. For instance, after constitution of WUAs in the initial years, WUA presidents’ were signing papers for releasing salaries of timekeeper and watchman. This provided WUA presidents’ (some) influence/control over the lower functionaries of the department, however, since the last three years the competent authority is signing these forms. Thus, the presidents have no control over the lower functionaries of the department. Interestingly, in one of the meetings of WUA presidents and executive engineer of the project in Vidisha, one of the WUA president’s had raised this issue. To which the executive engineer did not give a lucid response and remarked that they can sign, no one is stopping them (Field notes, December 7, 2011). The above-narrated incidents also indicates a case of slow re-centralization rather than decentralization that is happening in the SAS Project region to ensure that existing bureaucratic norm of functioning does not lose its salience. Furthermore, many a times during discussion with WUA presidents’ it became evident that WUA

presidents were not always aware of WUA meetings that were organized by executive engineer in his office or were informed last minute by competent authority (Interview, December 6, 2011; December 7, 2011).

Furthermore, communication between WUA and department is also contingent on what perception one has of the other, and how these perceptions play out in their interactions. Instances of how executive engineer treats WUA presidents' in meetings were elaborated upon earlier in this chapter. Further building on it, how WUA presidents perceive department functionaries also affects WUA functioning. For instance, a former WUA president posits:

“One of the executive engineers of the SAS Project had very strong political connections; he is a big man. The previous executive engineer was hundred times better than the current one. He is a badmaash aadmi (notorious man) (...). The department wants that farmers should not be aware about irrigation management (...). Department’s functioning depends on how the executive engineer is (...) Officials are corrupt and usurping money at present. They do not give any money to president. Karmchari khane wale hai (officials are corrupt)!

I had good relations with earlier executive engineer; the current one is not very good. We have complained about him two three times to the principal secretary water resources department, but nothing happened. All presidents had gone together, as the executive engineer was not releasing money without getting his commission. After we complained about him to the principal secretary, things have become worse. He does not pay attention to us at all” (Mahesh Singh, December 10, 2011).

Samrat Singh, president of Saraswati WUA and another former WUA president echoed similar sentiments during their interviews (Samrat Singh, August 5, 2011; Interview August, 29, 2011). Some of the active *dabang* (bold) farmers (like Dilip Singh Maina, Samrat Singh and his elder brother, project committee president, Santosh Singh) who have political aspirations started Halali *Sangharsh Samiti* (Halali conflict committee) to raise issues related to mismanagement at the project level. This *samiti* (committee) was used as a platform to raise the issue of poor quality of work -lining of canals- being done by the contractors under MPWSRP (Dilip Singh Maina, February 7, 2012). The local media had also raised this issue. Given that farmers and media raised this issue, the administration took notice of this situation and the contractor was asked to make amends. However, this incident happened during the second term of WUAs and some of the new presidents who were elected in 2011 were not part of this mobilization. Given, there is no continuity of WUA members (they are elected every five years) this also affects communication as it takes time for new association members to understand and take on their role and responsibilities. The bureaucracy gains advantage

in this situation, as their position (relatively) has a semblance of continuity and thus they are able to capitalize on this notion of legitimacy of their position in farmer's worldview.

Overall, from the above discussion, another gate keeper (junior bureaucracy) and their function become salient that they restrict flow of communication about meetings, etc. to farmer organization members. Restricting information, signing papers are instances of repertoires that junior bureaucracy uses to exercise political and administrative control over functioning of second-generation farmer organizations like they had over first generation farmer organizations. The above repertoires are an effort by junior bureaucracy to maintain power and control which the ideas and ideology of developmental interventionist state supported. There has been change in state ideology to pursue development since then as discussed, and with it change in functions of junior bureaucracy. However, the resistance by bureaucracy to give up power and control over the irrigation systems is evident, as they perceive that lesser power and control would reduce their legitimacy in front of farmers and thus their privileges and status. Clearly, in this instance, the clash between two ideologies developmental interventionist state and neoliberal state is evident in the junior bureaucracy's worldview who are expected to change their mode of functioning with change in institutional ideology. However, as the empirical evidence indicates junior bureaucracy worldview has resisted change, which brings one to question the current approach to irrigation management on one hand which is blind to this crucial factor i.e. actors ideational realm and only treats it as a procedural issue which can be altered by building capacities. On the other hand, creation of elected farmer organization at the micro level and has provided farmer organization members like WUA president's greater power which they have used to expose cases of mismanagement with aid of local newspapers. There has been change in worldview of (elite) farmers who now equipped with notional powers are contesting bureaucracy's way of functioning which is in contrast to the functioning and worldview of leaders of the first generation farmer organizations in the project. Clearly, state-societal interaction has changed with change in state ideology and this has resulted in greater contestation for management of resources and usurping of finances at the micro level between two prominent actors junior bureaucracy and farmer organization members like WUA president.

8.3 Summing up

Irrigation management in the SAS Project is far from perfect. The performance of WUAs is abysmal, and necessitates much to be desired. This chapter demonstrates that though PIM was initiated in Madhya Pradesh with much fanfare, it did not really change situation in SAS Project as many functions like collection of irrigation revenue, distribution of water and administrative control and

WUAs are still within the rein of WRD. To wit, devolution of funds, functions and functionaries to the micro level has not happened.

Additionally, this chapter demonstrates that some of the responsibilities that were devolved to WUAs were gradually withdrawn through strategic practices of bureaucracy at project level, for instance, cases of maintaining paperwork, or releasing the salaries of watchmen and timekeeper. In the two studied WUAs department functionaries (junior bureaucracy) have on one hand maintained the sanctity of basic structural mandate i.e. what the rulings demand. On the other hand they have exercised their agency for their self-interest to ensure their access to commission that they enjoyed prior to constitution of WUAs is not curtailed. The engineers have been able to exercise this influence by withholding information from WUA members/farmers about its roles and responsibilities, and thus they have reclaimed discursively some of the works that was delegated to WUAs in 2000. They have been able to do so, as the state structure -in this case legislations- necessitates, for instance, that records of WUA about meetings are up to date. However, the content or the process of record keeping is something, which the junior bureaucracy have strategically altered as the findings of this chapter indicate. Further, during scarcity years when there was not adequate water in the dam, the interest of farmers and WUA members in canal activity weaned. This was also the time when second term of WUA elections were held, and the new WUA members were unaware of their roles and responsibilities and only few active WUA presidents, who were motivated by Saadhan (as an alternate second line of leadership) showed interest and inclination to improve irrigation management, and challenged the status quo. The disinterest of WUA members (for instance, the state of functioning of Betwa WUA under Kamraj Singh's presidency) and farmers in canal functioning provided an opportunity for officials to reclaim some of the works, for instance, by troubling WUA (presidents) about not being efficient in budget estimation and preparation, or in taking over the function of releasing salaries of *chowkidaars* (watchmen). Thus, it becomes evident that actors' ideational perspective hold greater tenacity than structural mandate. Moreover, this chapter also discussed the ideational clash of worldviews due to change in state ideology and the implementation process for irrigation management thereof, which has slowed down the reform process. To elaborate by comparing field findings in chapter seven with this chapter illustrated an alternative framing of farmer organizations from 'being assistants to engineers' when *sinchai panchayat* and *SAS Krishak Samiti* were constituted to a role reversal (of sort) with 'engineers mandated to assist/advise' (hand hold) the work of farmer organizations for irrigation management. This role reversal mandated by structural ruling, provided an alternative frame for viewing the existing socio political relations in these villages. Additionally, elements of cultural ideation like caste,

position in the village, social networks, and friendly political connections determined election of WUA members and also WUA functioning as discussed in this chapter.

The notion and practice of participation that is being inculcated in this region also needs a mention. This chapter demonstrates that though participation according to the Act necessitates regular monthly meeting for WUAs and at least two general body meeting. This does not happen in actuality. The essence of participation that has been implemented in the two WUAs and in the project is instrumental in nature, which merely ensures that basic tenets that the legislations (structure) demands are fulfilled, which is ensured by keeping the paperwork up-to-date. Although, farmer organization members like WUA presidents understand 'participation' as greater role for them in financial and administrative decision-making and have used their elected position to raise issues of corruption.

Overall, this chapter discussed in detail WUA functioning and how the functioning has been curtailed due to structural and cultural constraints. Specifically, this chapter elaborates one of the reasons that the state government has used for not decentralizing the intermediate level i.e. poor functioning of micro level farmer organizations that is WUAs has been used as a signifier to not decentralize the intermediate level. However, the reality is not that simple. Therefore, as continuation of this chapter, the next chapter presents diverse beliefs, values, perception actors that have been a roadblock to decentralizing the intermediate level. The findings of this chapter elucidate roadblocks for WUA functioning, which also ought to be viewed as factors that need greater attention in order to strengthen WUAs.

Moreover, some of the key issues that need to be pondered upon based on the evidence discussed in this chapter are: who has the authority over managing the irrigation system; what is the legitimacy of WUAs; how/if cooperation between farmers and WUAs can be arranged; why is there lack of collective action in WUAs? The next chapter provides answers to these questions by elucidating the ideational realm/world view/*mansikta* of farmers, and bureaucracy towards WUAs and on irrigation management. Additionally, non-functioning of WUAs, which has been connoted as a roadblock to intermediate level decentralization is also discussed. Chapter nine also sheds light on other structural and cultural ideational factors - that are roadblock for intermediate level decentralization.

^{ciii} Salient features of the PIM Act and discussion on politics that ensued post enactment of the Act which resulted in limited administrative, and governance reforms has been discussed in chapter five.

^{civ} While discussing the number of villages in Saraswati *sinchai panchayat* in the previous chapter, seven villages

are mentioned. In Saraswati WUA, three additional villages were included which comprised primarily farmers who are availing water through lift irrigation. The lift irrigators, however, do not have the primary right to water, therefore they do not cast vote in WUA elections.

^{cv} This data is from a representative sample of farmers from Saraswati WUA. Saadhan collected this data from the project WUAs in year 2007.

^{cvi} Interestingly, this was not the first time Surjan Singh contested for a position. He had also contested for Saraswati *sinchai panchayat* president election in the late 1980s. However, during that time, the election results were inconclusive (as elaborated in chapter seven) and the Saraswati *sinchai panchayat* president name was eventually nominated by irrigation minister's office from the state capital Bhopal.

^{cvi} The command area figures cited here include area irrigated through lift irrigation as well.

^{cvi} This data is from a representative sample of farmers from Betwa WUA. Saadhan collected this data from the project WUAs in year 2007.

^{cix} Additionally, his work during the first term as WUA president is (still) appreciated by farmers of Betwa WUA and by department officials.

^{cx} Interestingly, Behram Singh won again in the last WUA elections (in 2011) with thumping majority and is currently President of Chapna WUA.

^{cx} There are several rumours about Kamraj Singh owning 200-300 hectare of land. Different farmers give different figures, about his land ownership. Kamraj Singh, himself did not confirm this figure, and had merely smiled when asked this question.

^{cxii} Salient features of Act have been discussed in detail in chapter five.

^{cxiii} The reason for non-legitimization of WUA in the ideational realm of farmers is discussed in chapter nine.

^{cxiv} For instance, map of structures and distributory network of the area; statement of assets and liabilities; minutes book; books of account showing receipts and payments; books of accounts of all purchases and sales of goods by the farmer organization; register of measurement books, level field books, work order; copies of audit reports and enquiry reports; stock register; list of users with details of land holdings.

^{cxv} These field findings are in concurrence with findings of the international consultancy which was hired for capacity building under MPWRSRP, that is of the fourteen type of records that WUAs ought to maintain, only three records, viz. cash book, meetings register and basic records register/ inventory property are maintained by WUAs in all earnestness (Strategy Report of Betwa Basin prepared by SMEC and submitted to Executive Engineer, SAS Project, Division No. 2, WRD).

^{cxvi} A former WAMI employee and team leader of the consultancy firm which did institutional development under MPWRSRP posited on this issue that the chief minister (Digvijay Singh) was against paying honorarium to WUA presidents as the work was envisaged to be done with the tenets of participation (Interview, November 5, 2011).

^{cxvii} Likewise, Wade (1982) specifically in context of canal irrigation talks about deep seeded corruption in India.

^{cxviii} See chapter seven.

^{cxix} Data from storage water level in dam (see Annexure V) corroborates that in 2007-08 there was not enough water in the dam only 453.54 metre, while in the year 2008-09, the canal system was not opened as the water was below its dead storage level, i.e. 448.66 metre.

^{cxix} Incidentally this was the time when project committee elections were held in the state.

^{cxxi} Additionally, social audits are being done on paper, rather than in actuality as mandated by the Act.

^{cxvii} However, farmers are not interested in participating and do not perceive ownership over the canal network, which also creates hurdles for WUAs to maintain the canal network. To elaborate first Betwa WUA president Behram Singh, states 'farmers don't consider canals/minors as their own property and cause damage to the canals/minors by putting *colaba* (outlet) in wrong spot and without paying any attention to design of the canal' (Interview, August 29, 2011). For details see chapter nine.

^{cxviii} See Rai (2007), for an interesting discussion on 'politics of presence' in context of limits of deliberative democracy wherein she posits that 'politics of presence and politics of ideas do not always coincide leading to undermining of deliberative processes'.

9 Diverse Ideational Realms on Irrigation Management - Roadblock to Intermediate Level Decentralization

Chapter eight elaborated on functioning of Water User Associations (WUAs) vis-à-vis Participatory Irrigation Management (PIM) guidelines. The chapter identified structural and cultural ideational factors that are salient to understand poor functioning of micro level farmer organizations i.e. Water User Association (WUA). As a continuation of discussion in chapter eight, this chapter elucidates diverse perceptions of farmers, farmer organization members and bureaucracy guided by different ideas and ideologies have shaped their ideational realm on irrigation management. Ideational realms are guided by different perceptions of actors that over time fortify as mind-sets due to categorical inequalities (caste, class, friendly relations with political parties or elites in the region), and ideas and ideologies, values belief systems that determine cognitive patterns of actors based on their internal assessment which define/guide their action. For instance, previous chapter had elaborated that junior bureaucracy's ideational perspective are still guided by old developmental state ideology thought the state now is pursuing neoliberal perspective on development with great fervour. This has resulted in an ideological clash between junior bureaucracy and WUA presidents (discussed in previous chapter) and junior and senior bureaucracy (discussed in this chapter). Furthermore, discussion on different realms does not imply that these actors are functioning in a particular realm as they are bounded by a particular institutional value. Rather it is surmised that there are not only structural constraints that guide an actor's action but also cultural norms, beliefs that structure how actors operate and there is a constant strife due to different ideational role (for instance, decision makers, framers, constituents, brokers) that different ideas and ideology necessitate which results in actors performing in a particular manner. Farmers perform the ideational role of constituents according to Campbell's (2004, p. 101) framework, whilst senior bureaucrats are decision makers, and NGO Saadhan is a broker. Thus, *mansikta* or ideational realm i.e. of farmer, elite farmer (who are part of farmer organizations), senior or junior bureaucracy on core issues like participation, corruption, state control facilitate in understanding why there is sluggish decentralization at the intermediate level. Additionally, modus operandi of functioning of NGO Saadhan is elaborated to discuss efforts they made to institute change in perception on current practices of irrigation management.

Additionally, this chapter elaborates on how the idea of participation and management through farmer organizations that has been propounded at national and state level unfolds at local level differently for different actors'. Specifically, the chapter discusses how ideas define actors' ideational

realm i.e. *mansikta*. Given that ideational realms are not watertight and work on interface of different ideas: focus is on elaborating how this has affected perception on management of irrigation water in the two select WUAs in the SAS Project area. This chapter demonstrates that senior bureaucracy works under a technical and managerial mind-set, while junior bureaucracy and farmers have been guided by their perception about self and their capabilities and is influenced by the categorical inequalities i.e. socio-political and cultural setting and their perception of material, socio-cultural and political leverage that they have accumulated. Overall, conflicting worldviews have resulted in limited/nominal participation as an acceptable norm and thus hindered decentralization.

The following section elaborates on processes related to irrigation management that have influenced/fortified *mansikta* of select actors'. Section 9.1 discusses status of intermediate level committees. Thereafter focus is on discussing how dysfunctional intermediate level committee have resulted in scramble among user groups at the micro level. Through this discussion the ideational realm/*mansikta* of actors' i.e. farmers, bureaucrats and NGOs are elaborated in Section 9.2, 9.3, and 9.4. Section 9.5 discusses implications for intermediate level decentralization and section 9.6 concludes with discussing major ideational factors that have influenced understanding of participation, corruption and implementation of decentralization in the case study WUAs.

9.1 Intermediate level committees

As mentioned in chapter eight, in Madhya Pradesh the distributory and project committee elections were held only once during the first term i.e. after the first WUA elections in 2000. The *raison d'être* for not conducting elections after 2006 and 2011 WUA elections are several, and the response of interviewees differs based on the ideas and ideologies that guide their perception. Overall, interview with senior officials (in Bhopal and Vidisha) and discussion with Saadhan elucidates that there is lack of political and bureaucratic will to conduct elections. For instance, team leader of Saadhan posits:

"The three-tier system of irrigation management if implemented in a major irrigation project creates lot of power dynamics, this was realized by the state government after the first round of distributory and project committee elections. The project committee president governs the entire irrigation system and in major irrigation projects like SAS Project, the president became very powerful at the project level, more powerful than the sansad (Member of Legislative Assembly) (...) Irrigation department is a big organization and if they implement another alternative organizational structure (referring to three-tier farmer organization) to oversee water management, there is bound to be conflict. Even they (referring to project committee) will start taking some decision at project level and decide how irrigation water ought to be distributed or about collection of revenue. The department did not think through problems and conflicts that would arise when the Act would be implemented in its entirety. These are grey areas and clear thought was not

given to this issue. This is the reason why distributory and project committee elections are not being conducted (...) If distributory and project committee are elected then joint management system will work (...) we need more maturity at state level. You would also have realized that if you talk to people (referring to SAS Project officials) in Vidisha it is different from water resource department her, as a sub engineer who is in mid-fifties will never talk about management of the system” (Interview, August 30, 2011).

Similarly, a former distributory committee president of SAS Project perceives that ‘not conducting elections is in interest of engineers, as they have control over the entire project and don’t have to share power with elected representatives’ (Behram Singh, August 29, 2011).

Moreover, lack of distributory and project committees have created an institutional vacuum between WUAs and the Water Resource Department (WRD). Former president of one of the distributory committee states that in absence of distributory and project committees the executive engineer is responsible for operation and maintenance work of distributory committees and at the main canal level. In the first term when project committee was elected, few project committee meetings were held wherein how much water needs to be allocated for each distributory was decided (Behram Singh, August 29, 2011). At present, WUA presidents’ are not even aware of all information pertaining to canal works, and they only know what is communicated to them by sub engineers or executive engineer (through occasional meetings that are organized) (Ibid.). Two presently serving WUA presidents (Samrat Singh and Ramdhari) state that they were informally apprised by WRD, Bhopal that the former irrigation minister from BJP did *not* want distributory and project committee elections to be held, as in the first term 60 per cent of the WUA presidents in Madhya Pradesh happened to be *Congressi* (anyone associated with Congress party is referred to as *Congressi* colloquially). The distributory and project committee in major irrigation projects are posts that command greater power than local Member of Legislative Assembly (MLA) and that is why the political class had indicated to the state administration that distributory and project committee elections should not to be held for now (Interview, August 9, 2011). This is not surprising as Congress party was voted out of power in November 2003 in Madhya Pradesh a few months after the project committee elections were held, and the state government since then has not held distributory and project committee elections. BJP has been in power for the last two terms in the state and has not taken as much interest in devolution of 3Fs (funds, functions, and functionaries) compared to congress party led state government.

Another reason cited often by WRD officials and also corroborated by WUA presidents’ is that there was scramble to be elected for the post of project committee president in the first term in SAS Project as there was a rumour that the post of project committee president will command enormous

power, and will be provided a *lal batti* (literally means red beacon on an official vehicle. It is considered a status symbol and is associated with power and authority which only people in high office or significant influence can have, as it is authorized by the state) vehicle as well. A former WUA president (and farmer of Betwa WUA) recalls that the project committee election in SAS was mired with controversies, there was too much corruption in project committee election procedure - votes were bought for INR 25,000 each (Mahesh Singh, December 10, 2011; Executive Engineer SAS Vidisha, June 7, 2011). Most of the WUA presidents' corroborated that project committee president had used unethical means to win the president post, however, by not conducting elections for distributory and project committees in the second and third term, the bureaucracy has ensured that farmer organization don't have the same leverage and power, states a former WUA president (Mahesh Singh, December 10, 2011). Thus, elite farmers perceive that bureaucrats have ensured that distributory and project committee elections are not organized. Small farmers are not aware about distributory committee and project committee functioning. Interview with officials in Bhopal evinces similar findings for other regions in Madhya Pradesh as well.

Interestingly, instead of introducing check and balance mechanisms to curb corruption in elections, the state curtailed power given to WUAs, for instance, by not providing information to WUAs and farmers about if and when elections would be held. The state has been silent on this matter after the second and third term of WUA elections, which has led to emergence of multiple narratives of why distributory and project committee elections are not being held. Thus, at one level, there has been lack of political willingness to conduct elections, as the MLAs prefer to play representative vote bank politics, and cater to their clients. Thus, they have not pressurized the bureaucracy to hold elections. On the other hand bureaucracy in Bhopal has been able to evade the distributory and project committee election issue, as the PIM Act does not give any specific guidelines on when it should be held. The ambiguity in the Act has given space to WRD officials to exercise discretion and reinforce their worldview that they are the controller of power and water. Thus, both the political office bearers and the bureaucracy have evaded devolution one guided by their worldview to play populist vote bank politics, while the other guided by ideas and ideologies of developmental interventionist state and neoliberal development ideology which aims to reduce rent seeking practices by seeking greater autonomy from state. The worldview of junior and senior bureaucracy has further complicated implementation of reforms at the micro and intermediate level as they are guided by these two competing ideologies (this aspect is discussed further in following sections). Overall, not holding distributory and project committee elections is an instance of recentralization rather than decentralization which instead of reducing state autonomy as maintained rather reversed the reform process.

Having discussed the dysfunctional intermediate committees in the SAS Project region. The next section delves into how this has impacted the worldview of actors at micro level. To recall, details of poor WUA functioning was discussed in previous chapter.

9.2 Salience of categorical inequalities in shaping *mansikta* of farmers

Farmers in two select WUAs (Saraswati and Betwa) of the SAS Project are not homogenous entity and can be categorized based on caste or class affiliations, social status, or because of their friendly associations with influential people like MLAs, sub engineers, caste group heads, or by just being a dynamic personality. The socio-economic diversity of WUAs was discussed in chapter seven and eight. In this section the focus is on elucidating how diversity influences farmer ideational realm on irrigation management. Due to categorical inequalities (for instance, due to caste, class, gender, access to leadership) farmers have different repertoires to exercise their influence to gain access to irrigation water. To recall, chapter six and eight had elucidated that SAS region has a significant section of large land holding farmers compared to the national average. Additionally, previous two chapters had elucidated predominance of *Rajputs* (from general caste) and *Maina* (Other Backward class) as two large landholding caste groups in the two select WUAs.

9.2.1 Access to irrigation water

Categorical inequalities based on different ideas and ideologies on state societal relations define access of farmers to irrigation water. To elaborate:

“Large upstream rich farmers are empowered and use might if they have to, in order to ensure their access to irrigation water first. In fact, there have been cases when the upstream farmers have taken violent overtures (by showing their shoe and escalating conflict) towards junior functionaries of the department to ensure that they get water first” (Raghav Raj, December 19, 2011; emphasis added).

“Who do we complain to if our acquaintances only stop the flow of water in canals upstream? For instance, Madhav Jee is a respected person in this area and used to put temporary obstructions in the minor channel and place his cot on top of it (and sit there) to ensure that no one could remove the obstruction and he receives water first; what can we do in situations like this. We have to respect him; he is an old man (an octogenarian), we cannot really lodge a complaint against him” (Maharaj Singh Jat, December 11, 2011).

*“It is difficult to change *mansikta* (mind-set) of farmers, as everyone wants to access irrigation water first. So, when water flows from the minor channel close to their fields they do not listen to anyone. The administration will have to be very strict and alert to initiate change in current practices” (Raghav Raj, December 19, 2011).*

The above quotations elucidate the current practice of irrigation management i.e. the norm 'might is right'. Furthermore, the rule of thumb for water allocation in this region is that farmer's upstream access water first by putting temporary obstructions in minor channels. Only when demand of farmers for water upstream is fulfilled they remove temporary obstructions from minor channels and allow water to flow further downstream. Photograph 9.1 illustrates an instance of temporary obstruction that has been placed in a minor channel in Betwa village by upstream farmers to fulfil their irrigation requirement first.

Photograph 9. 1: Obstructing the flow of water in a minor channel in Betwa village



Furthermore, from Raghav Raj's (*Brahmin* from Amla- a middle reach village) comment it becomes evident that he perceives that onus of change (for bettering irrigation management) is on department and not on farmers. In this project from the beginning i.e. early 1980s, farmers at the head reach have availed water for irrigation first and this over time has resulted in farmers at the head reach considering accessing water first as their right - an acceptable social norm. This past perception of farmers that availing water first is their right cannot be changed without strong structural support, as farmers consider it as an embedded reality, and second generation irrigators/farmers have only seen this norm as an acceptable and dominant practice with respect to accessing irrigation water. From Raghav Raj's comment it becomes evident that despite being an

upper caste Brahmin with large landholding his worldview perceives that state control is the only way to change the existing norm on irrigation management.

Additionally, findings in chapter seven elucidated that in the pre PIM era, the access and availability of water for tail end farmers from the canal network was poor. Contrastingly, most of the tail end farmers claim that water availability has improved for them in the last decade. Some of the tail end villages like Radhakheri in Betwa WUA, for instance, were not receiving any water from the canals earlier are now receiving water. A recent WALMI report also concurs 'discussions with farmers in the area, it was pointed out that there has been a gradual improvement in water delivery, especially in tails end areas' (MP WALMI, 2011, p. 44). Though water availability in general for tail end farmers has improved, there is no organized system of water allocation and management that is in place. And geographical location i.e. upstream or downstream, influences access to irrigation water. Thus, the idea and ethos of participatory irrigation management that the PIM Act envisages has not been implemented in essence. This is in consonance with discussion in chapter eight, which elucidated that WUAs played limited role in water distribution due to structural constraints.

Furthermore, it is noteworthy that familial ties do not result in greater cooperation over water in this region. For instance, *Rajput's* of Saraswati village and *Rajput's* of Saronj (tail end village of Betwa WUA) have familial ties. However, upstream farmers like Mewa Singh who are related to downstream farmers did not consider familial ties as a reason to alter their irrigation practice during scarcity years as well (like between 2007-2010). On asking the question of maintaining prudence in scarcity years, by cultivating less water intensive crops, Mewa Singh (*Rajput* from Saraswati village) laughingly remarked that familial relations has nothing to do with consuming less water, he was higher up on the network of the canal system and thus he had the right to irrigation water foremost (Interview December 13, 2011).

Moreover, the above quotations also elucidate that *dabang* (bold) large land holding farmers can use their muscle power to get what they want and are not threatened by WRD functionaries who work to ensure access of water for farmers downstream. Additionally, the norm of 'might is right' is not only applied by farmers in the head reach of Saraswati WUA but also by middle reach farmers of Betwa WUA. For instance, Madhav Jee is from Betwa WUA, he is an octogenarian, a *Brahmin* by caste, and has large land holding. Madhav Jee is respected in this area not only because of his age but also because he is known to be very active and vocal since his youth and has had good relations with officials from all departments. Madhav Jee (*Brahmin* from Amla) is like Bhagwan Singh (*Brahmin*) of Saronj (whose profile was discussed in chapter seven, see Box 7.2) whose interest in development made him popular with department functionaries. Madhav Jee reports with pride that during his

youth any department functionary who used to come to this region would definitely come to his house for a cup of tea (Interview, January 16, 2012). The only difference between Madhav Jee and Bhagwan Singh is that the former has more aggressive personality. He used aggressive overtures (like placing the cot on minor channel) and did not even hesitate from using force of *lathi* (stick) in his youth to ensure his access to irrigation water first. Farmers in this region do not stop Madhav Jee's access to water, as he is perceived as a well-respected (rich) old man from upper caste, who also has good relations with authority (i.e. department officials). Farmers are aware of good relations that Madhav Jee's family has with department official and thus, do not want to antagonize their relationship with his family as if they have any problems related to irrigation, they also approach Madhav Jee's son (who is more active now, given Madhav Jee's age) for help. The play of structural and cultural factors makes Madhav Jee a respected person of this region, and farmers do not want to question him. Here again salience of statist ideology that is belief in state structure, its institutions and its representatives organizing body that maintains social order is evident. As a consequence of this worldview farmers appropriate greater primacy to anyone associated with state for instance through friendly connections (like Madhav Jee and Bhagwan Singh) or state representatives (like sub engineer) and this perspective determines to an extent water distribution in absence of distributory and project committees.

Additionally, it is only *dabang* downstream farmers that exercise might to access irrigation water. To elaborate farmer from downstream Betwa WUA posits, 'if water is less, farmers don't exercise that much pressure as they know they will not get water anyway' (Bhagwan Singh, October 3, 2012). One of the WUA upstream of Betwa has a gate from where water to the main canal of Betwa gets regulated. Farmers of Betwa WUA are aware and point out that in times of scarcity for instance, from 2007-2010, the downstream farmers (of Betwa WUA) did not exercise pressure on the WUA president to gain access to water. Rather most of them made alternative arrangements like buying a tube well, taking tube well water from nearby farmer for a cost, or by cultivating less water intensive crops like gram or *desi* (local) variety of wheat. As they were aware that farmers of this middle reach WUA will break gate if it comes to that to ensure that they get access to water first (ibid.). It can be recalled from the previous chapter, that WUAs are supposed to implement a cropping calendar in light of the available water for irrigation in the dam. However, as indicated earlier, WUAs have not been able to do this especially change the viewpoint of upstream farmers, and downstream farmers have learnt from their past experience, and choose low water intensive wheat varieties during the time of scarcity on their own.

2011 was a good monsoon year, when I did my fieldwork. Water was abundant in Halali dam and farmers did not have any problem in accessing water if they followed the prevalent social norm for water distribution (discussed above). This resulted in downstream farmer receiving water only 15-20 days after canals were opened. Given, that *palewa* (pre-sowing irrigation) is an established practice in the region most of the downstream farmers either did *palewa* late or those who had access to tube well, used ground water for irrigation. Consequently, downstream farmers also sow their crop later than upstream farmers if they use canal water for *palewa*.

Access to elite farmers/ WUA president can ensure access to water

Unequal relationship between farmers and WUA presidents is evident in the select WUAs. To elaborate:

“Dabang (bold) farmers get more support; poor farmers do not get the same level of support” (Raghav Raj, December 19, 2011).

“Raghav Raj is an influential farmer; if he reports to the sub engineer any problem related to irrigation (like issue of overflow of water from the minor channel), the sub engineer listens to him” (Paras Nath, January 12, 2012).

“Officials are not interested in solving farmer’s problems; they say it on our face that these things are not in their purview. They cannot do anything. Farmers should resolve conflict between themselves on their own” (Raghav Raj, December 19, 2011).

“Large farmers do listen to woes of powerless people from their caste; if they will not support them they will also not oppose them. They are aware that everyone from their social group will get together against them, and then they will have a lot of face saving to do (...) I don’t remember a single case when a big farmer has fought for the cause of small farmer (...) sometimes I have observed that if 70 per cent of poor farmers support a cause but it is opposed by a powerful person in the village, then there is a drastic change and only two three or persons have the courage to question him, though people feel bad but they don’t say anything” (Raghav Raj, December 19, 2011).

From the above citations, it is evident that farmers are aware of the unequal relationship that they have with WUA Presidents, depending on their own social standing (caste and economic status) in their respective villages. They are aware that WUA presidents will only listen to their woes and broker a solution if they have good relations with them. They are (also) aware of favouritism that exists (WUA Presidents only listen to people who are close to them, and do not give any attention to other farmers) and therefore they prefer to approach the junior bureaucracy i.e. department functionaries for solving their water woes. Here, again faith in state institutions and its representatives becomes a guiding idea that has shaped ideational perspective of farmers especially

poor farmers whose voices are not heeded to by large farmers. However, statist ideology is not the only worldview that guides the ideational realm of small farmers. Many small farmers have resorted to market solutions viz. purchasing tube wells, or renting pump sets to irrigate their fields, as they have internalized state apathy in resolving their conflicts. Additionally, another reason for section of farmers putting the onus of management on state is to avoid unpleasant questions on their own conduct, for instance, by ensuring access to water first by might as right or by stealing water.

To substantiate further, there are several instances that elucidate this working of caste and class relations by curtailing access to water for small farmers downstream by large land holding farmers by ploughing *barhas* (field channels) that pass through their fields. Few reasons of why large land holding farmers have done this were discussed in chapter eight to recall, the most common response given by farmers is that in last few years there was not enough water in Halali dam and these *barhas* (field channels) were (anyway) not being used so the upstream farmers ploughed them. However, this is not the sole reason, in last few years the land prices in this region have escalated exponentially (roughly half a hectare of land costs INR 0.8 to one million from earlier price of INR 0.1 million). Given, such steep appreciation in land prices, large upstream farmers have forced small farmers to sell their (small tracts of) land with an aim to benefit from these distress sales. Several of the small land holding farmers, however, to avoid this conflict and to avoid selling their land have made alternative arrangements for irrigation by investing in tube wells and thus resorted to irrigation through groundwater. To give an instance of *barha* conflict: an upstream farmer was harassing Sunderlal (*Pal* from one of the villages of Betwa WUA) by restricting his access to water from the *barha*. Sunderlal had complained to WUA President (Kamraj Singh) and competent authority but no action was taken. The competent authority directed him to talk to the WUA president to get the issue resolved with the upstream farmer. Kamraj Singh did not take any interest in resolving this conflict, as mentioned earlier, he belongs to the *Maina* community and is a large landholding farmer and did not spare any time for WUA activities. The WUA president did not have any particular stake to resolve Sunderlal's *barha* (field channel) problem. Sunderlal eventually sold his land and moved away from the village. Interestingly, one of the upstream farmers who restricted Sunderlal's access to water works as a *chowkidaar* (watchman) with WRD and is responsible for working with WUAs to facilitate participatory irrigation management (Field notes, December 19, 2011; Raghav Raj, December 19, 2011). However, being a watchman for thirty years with the department, Kirori Lal (*Brahmin* from Amla middle reach village) is aware that he can get away with ploughing the *barha*. Kirori Lal is aware that due to his organizational affiliation he can plough the *barha* without being penalized or facing any social sanction.

Paras Nath (*Pal* from Betwa village) has similar experience. Between his land and the minor channel there are two fields of an influential farmer from Amla. Kishori Lal, the farmer upstream curtailed Paras Nath's access to irrigation water during Kamraj Singh presidency from 2006-2011. Paras Nath had complained about this to the WUA President Kamraj Singh, *tehsildar* and the district collector's office, however, no action was taken against Kishori Lal. Paras Nath while narrating the incident notes, 'perhaps because he is not too educated he did not know how to approach the officials and resolve the *barha* (field channel) issue'. Eventually, Paras Nath purchased a tube well through the aid of Saadhan's women Self Help Group (SHG), of which his wife is a member, and now mostly uses groundwater for irrigation as there are lesser altercations. Interestingly, Paras Nath is currently also the TC member of Betwa WUA, but still prefers to use groundwater for irrigation rather than wait for his turn to receive canal water, which is (always) about 15-20 days after the main canal is opened as he is from one of the tail end WUAs of the canal (Interview, January 12, 2012).

The above discussion elucidates that either farmer have made these alternative arrangements for irrigation due to water scarcity and/or to avoid facing these arm twisting tactics that large farmers are using in this region to usurp their land, and therefore are now not too inclined to get involved with WUA matters. Additionally, there are farmers who have not faced *barha* related conflict but consider irrigation management and WUA politics as a vocation only for elites in villages, who have time and resources to spare (Field notes, December 2011). Overall, small land holding farmers don't want conflict and don't want to be involved in conflict. They prefer to make adjustments, or retract from their position as their past experiences have reduced their faith in state institutions as well as elite farmers who have become new gatekeepers for irrigation management (discussed in chapter eight). Thus, small farmers wait for upstream farmers to release water as they believe that social environment in villages has changed and not amicable like earlier (Maharaj Singh Jat, December 11, 2011). Box 9.1 further substantiates through the case of lack of access to timely information about urea (inexpensive nitrogen fertilizer), another instance of how categorical inequality plays out in the field.

Box 9. 1: Categorical inequality restricts flow of information for farmers

An instance of how inequality in access to resource/ information becomes apparent from the crisis of availability of urea in 2011. When I was in the field in the late 2011, there was not enough supply of urea to meet the demand of all the farmers in this region. This had also delayed sowing for lot of farmers who could not access urea in time. When will urea be available in the cooperative store or the local market was a conversation that was bound to happen if few farmers got together. In this time of scarcity, access to information was not same for all farmers. The big farmers knew in advance that there would be shortage of urea and had stocked it. Moreover, information flow was restricted and while small farmers were returned empty handed from cooperative store, the big farmers would be called early morning to ensure that they get their requirement when fresh supplies arrive. The cooperative model is similar to WUAs and there are regular

elections held for cooperatives and structure of leadership is similar, however, what the above instance demonstrates is the lack of transparency and restricted information flow and thus access to Urea for big and small farmers. The big farmers pressurized cooperative workers - they abuse them, and do *netagiri* (politics) to ensure they get what they want.

Source: Field notes (November & December 2011)

The discussion till now elucidates categorical inequalities that exist in villages due to social standing (caste and class) and/or political affiliations and how decisions are influenced due to these factors. Furthermore, small and marginal farmers opine that canals are state property and state has the onus to carry out operation and maintenance work on irrigation system (Field notes, December 2011). This belief of farmers evinces their strategic nature as they marginalize the political order (of WUAs) by positing that management is state's responsibility. Notably, another interpretation of the management of irrigation system in SAS Project could be that it is managed by farmers although rules of management are different, viz. stealing water, exercising their political or social network or following the established practice and social norm for availing water. Thus, it can be argued that wider social relations that determine how water is managed in the system.

Moreover, from the above discussion it becomes evident that the established practices and beliefs of farmers of water distribution is guided by their past perceptions and understanding of state-society interaction which is influenced by statist ideology, as well as coalitional and bargaining relations that they are embedded in and are defined by social hierarchy like caste and class relations, friendly relations with influential farmers, local MLAs, bureaucracy. Thus, an amalgamation of these factors drive farmers ideational realm and has also resulted in marginal farmers resorting to market based solutions instead of approach the WUA presidents for issues related to irrigation. It is noteworthy that in the above discussion the differentiation between farmers indicates that farmers are not a homogenous entity guided by a singular ideology, values and beliefs systems. Rather different sections of farmers have different worldviews. The next section elaborates further how these different perspectives have resulted in different understanding of participation and politics.

9.2.2 Perception of farmers about WUA (president), participation and politics

Farmers of the two select WUAs have diverse understanding on WUAs, participation and politics, and this in turn shapes their *mansikta*. To elaborate:

"Adhikari (official) is for life, WUA president is for five years, why should we listen to WUA presidents. President comes to the village only if work is required. Collector has come twice to see the work being done under MPWSRP work. Sub engineer sahib (sir) does not come often to the village; time keeper comes often to the area" (Misri Lal, January 22, 2012).

“This year’s irrigation season is about to end, but I have not seen any irrigation department official. They don’t come to our door to check if water is being distributed well. Presidents’ also sit in their village and do not come to check how work is being done” (Bhagwan Singh, December 10, 2011).

“Canal work is not being done in an organized manner. There isn’t enough money to get all the work done, and the presidents’ don’t take interest in getting work done” (Narendra Singh, October 3, 2012).

It becomes evident from the above citation that for an average farmer, the post of WUA president is not yet institutionalized in their perception. Despite a decade, since WUAs have been constituted in the project area farmers still give greater salience to engineers. WUA presidents are not considered a constant; though (most of them) reside in the same area. Interestingly, officials also are transferred and department officials do not maintain continuity either. However, Misri Lal still perceives department functionaries as a given while his understanding of WUA president’s post is of individuals who come and go and thus do not/cannot provide continuity for irrigation management. The above citation also portrays the import to state institutions and structure that farmers give in this region, which signifies their worldview that is enriched by statist ideology.

Categorical inequality restricts access to WUA presidents and shape understanding on participation

Often farmers in WUA villages are hesitant to contact the WUA president if they have opposed his candidature during elections as they posit that at times they have reluctantly contacted them, however, the president’s did not resolve their problem. For instance, Abhay Singh Maina who was also *sinchai panchayat* president of Saraswati WUA resides in the tail end village of Saraswati WUA. Being from different communities (*Maina* and *Rajput*), Abhay Singh Maina had not supported Samrat Singh’s candidature and is aware that his water woes will not be resolved by him (Interview, December 9, 2011):

“If we have any problem related to water access, we inform the president through telephone that we are not receiving water. Although, the president has not been to our village even once and this is his second term as WUA President. Samrat Singh will not come to this area, as he knows that his supporters are not in this area; we opposed his candidature during elections (...) few meetings were held in the first term of Saraswati WUA (during Surjan Singh’s tenure), I had also gone to some of these meetings. During these meetings, at my behest, few resolutions were also taken to improve access to water. However, given that we are from the tail end village of Saraswati WUA we never receive water in time i.e. for palewa (pre-sowing irrigation) around 15th November or after sowing in December. Though, the samiti (committee) passed resolutions at my behest, there was no follow up on those resolutions. So, I stopped going to WUA meetings (...) Presidents’ are there because of people. If people don’t vote then president

will not be elected, it does not matter if it is Samrat Singh or Surjan Singh. The president should treat all farmers in his WUA equally in spite of the fact that they voted for them or not. But what happens in actuality is that presidents weigh if a person has voted for them or not and then decide if they will do any work for them” (Abhay Singh Maina, December 9, 2011).

Similar observation was also made by Ram Prasad and Tamar Singh of Amlakheri the tail end village of Saraswati. From the above citation another interesting idea that shapes actors worldview is illuminated. To wit, to have greater role of local population in management of resources i.e. communitarian approach, which has strands of neoliberal ideology in the way it has been implemented (see chapter four and five). However, as the above citation illustrates there has been greater politicization between farming communities, which has instead of creating deliberative publics has marginalized farmers who are from lower castes and don't enjoy friendly social networks. Moreover, the idea behind political decentralization is to provide greater space to farming communities to participate in their resource management.^{cxxiv}

Interestingly, during field discussion, most common response of farmers to idea of farmer participation in irrigation management was:

“Why will farmers go for general body meetings; they participate by casting their vote during elections. Farmers send their representatives who are aware of issues that need to be handled. We talk to TC members, and it is their responsibility to take this discussion to WUAs. The TC member ought to convey problems to WUA president and ensure that resolutions are passed and necessary action taken (...) everything is just for namesake. On paper you see funds are coming, and there is a nice system in place, but in practice that is not the case (...) The reason why TC members do not work is because they have no say in any matter; however, officials don't report this (i.e. TC members are not doing anything). Samitis (committee, referring to WUA here) don't have anything (...) Samitis are like paper tigers” (Maharaj Singh Jat, December 11, 2011).

“(...) there is no awareness in the region about meetings i.e. farmers are not aware when meetings are held. No genuine efforts have been made by WUAs to create awareness about WUA meetings. Second, (big) farmers also do not give much attention to WUAs, as they don't want to get too involved. Some of these farmers use their political connections to threaten and ensure their access to water (...). At present in villages, there is a culture of complaining to politicians (MLAs) to get work done, which politicians have welcomed/encouraged” (Mahesh Singh, December 10, 2011).

“People are becoming aware and know that they will get water anyway if there is enough water in the dam; so they don't see the point of participating in meetings” (Dilip Singh Maina, February 7, 2012).

Another common understanding of participation that is evoked is 'farmers can give time, and also give beneficiary contribution if it is within their means' (Amar Singh, December 9, 2011). Financial contribution is understood as participation by majority of farmers, coming from their most recent memory of paying beneficiary contribution under ICEF project and also from many other development projects that are tailored on the idea of participation as operationalized by beneficiary contribution in cash or kind, which depoliticized the essence of *bhagidari* (participation). Here, tenets of neoliberal ideology -perpetuated by institutions like the World Bank and ICEF- were observed to have seeped into the worldview of medium and small landholding farmers wherein participation is understood as beneficiary contribution. And thus farmers do not consider participation in meetings as a necessity.

An alternative understanding on participation is provided by farmer of one of the tail end village (Sadaiya) of Saraswati WUA who argues that participation in meetings can be assured if there is some surety/known for farmers that there will be positive outcome from attending WUA meetings; and the department will hear their woes.

"There is a need to publicize issues discussed in meetings; otherwise no one listens to us in meetings. If media is present during meetings then issues will get publicized and will be within earshot of administration. Otherwise, if someone lodges a complaint, they just keep a written copy of it. What is the use of that, nothing happens! It is wastage of their and my time. They (WUA members) come for meetings and just pass resolutions; there needs to be (more) noise for change to happen. If meetings happen in presence of media then information will reach the administration, otherwise nothing will happen" (Amar Singh, December 9, 2011).

The above citation (again) points towards the weightage and confidence farmers have on state (structures) to institute change. Furthermore, Amar Singh also brings in an additional variable importance of media in instituting change. Media has played a critical role in recent times in exposing cases of corruption and ensuring greater transparency. On one hand the above quotation highlights the role of external actors to ensure (meaningful) participation. On the other hand it also portrays a grim image that Amar Singh has of WUAs, which comes across as un-approachable and non-transparent.

Few farmers compared the present management system under WUAs with the time when the canal system was primarily run by department and posited:

"Earlier the network of canal system did not run very well. Farmers did not have patience to wait for their turn. There was much more seepage/breakage in the canal system as farmers used to suddenly remove obstructions which led to overflow of water and

breakage. The officials were also at fault, they were also careless at time” (Mahendra Singh Jat, December 19, 2011).

“Earlier, situation was different. Work was done through consensus. Nowadays, presidents don’t want to question the status quo so villagers also think why they should get burai (acrimony). Earlier, if few villagers used to get together then we used to talk about issues that could be beneficial for everyone. Now, that is not the case. It is difficult to tell who is telling the truth, there is so much animosity between villagers” (Abhay Singh Maina, December 9, 2011).

It becomes evident from the above citation that *burai* (acrimony) is considered a more recent phenomenon, however, if you recall from chapter seven, many presidents and farmers did indicate not going against collective decision making, in order to avoid *burai* for selves. What seems to have changed in the last two decades is the intensity of emotions that farmers feel against each other or what Abhay Singh Maina refers to as animosity. Furthermore, there is trust deficit within the community, which is lucidly posited by Raman Singh (who is a low key functionary of one of the middle reach WUAs between Saraswati and Betwa WUA):

“Earlier farmers were less advanced. Now all farmers are advanced, and want to go and deposit their contribution directly. They do not trust villagers easily. Earlier, farmers were straightforward; they were scared of stepping out of their comfort zones; so all collections used to happen here in the village. But now all farmers are active, and they don’t trust anyone. Now, everyone is corrupt, and people don’t trust each other” (Interview, December 6, 2011).

Many a times during field discussion farmers made reference to how social fabric in villages has changed over time after elections are being held at local level (system of voting has started) be it for *panchayats*, WUAs, or for any other committee selection. Contestation for elections has made individuals more competitive and has also created groups of people/ identities that are categorized as supporters or opponents in an election, from same caste or village, etc. (Field notes, January 2012). This has created greater anxiety and competitiveness at local level, which also results in farmers not taking much interest in various *samitis* (committees) that are constituted. Furthermore, Bhagwan Singh from Saronj of Betwa WUA elaborates:

“Farmers are doing netagiri (politics) now; this did not happen earlier. Earlier, we used to spend time discussing all aspects of work to be done, prior to taking any decision. This does not happen anymore” (Interview, December 10, 2011).

Thus, it becomes evident that there is lesser collective decision making in the villages now, which was not the case earlier. Box 9.2 elucidates how wealthy farmers try to manipulate perception of farmers for their own interest.

Box 9. 2: Profile of an elite strategic farmer

Maharaj Singh Jat is a wealthy farmer from Betwa WUA. He owns 31.1 hectares and is interested in politics but has never contested any elections. Interestingly, however, he has supported candidature of many candidates whose affiliations are with BJP. Until five years ago he was an active *karyakarta* (party worker). In fact, he claims, in this region BJP has gained ground because of him. He takes pride in informing that he had a big role in facilitating the victory of one of the local MLAs four times in a row. He is strategic in his decision-making and points out, 'I will never contest elections. I have observed that the moment an individual contests election there is a group of people against that individual. I am better off with the realization that I can pressurize villagers by being out of the race for any particular position. As not contesting makes me more accessible/approachable and villagers pay attention to what I have to say. Furthermore, I can influence decisions and have credibility in society'.

Maharaj Singh Jat has interest in politics, but he likes pulling the strings from behind the scene. He understands the social cultural dynamics and the political landscape of the region and uses this knowledge to ensure his access to water and manipulate farmers.

Source: Maharaj Singh Jat (Interview, December 10, 2011)

Furthermore, an alternative perception of farmers about WUAs is provided by Samrat Singh (President of Saraswati WUA) who remarked that farmers interest in WUA work is limited and only lasts till the canals are running provides an alternate viewpoint of farmers' *mansikta*. Once the canals stop running, farmer's interest weans off (Samrat Singh, August 5, 2011).

To sum up this section, caste, class and political affiliations divides farmers in SAS project area. A sizeable section of farmers in the command area (of the two selected WUAs) operate under the viewpoint that SAS Project irrigation network is owned by the state and it is the state's responsibility to take care of the irrigation system. A recurrent subject during the interviews was the reluctance of farmers to question the president (in both the selected WUAs, presidents are large landholding farmers) depending on what kind of social relation they have with WUA president; their own standing in village (small/marginal/large landholding farmer); affiliation to opposing group and/or political party and preference to engage (or not) with them in a dialogue. There is no ownership for the canal system, farmers consider it something external and contend that it is not their responsibility to maintain them. In addition, they argue that *mansikta* (mind-set) of villagers has changed over time and at present farmers are not interested in doing anything to do with participation; thus, even if WUA president's calls farmers for some collective work, they do not evince much interest. It becomes evident from the above discussion that farmers are not prepared to carry the burden of participation (and management) that has been put on them without any consultation with them. However, farmers believe that if the state uses (police) force to implement for instance, *warabandi* then the situation may change. This is an interesting point to ponder, as farmers (and to an extent WUA presidents') believe that because they reside in same villages and

have familial and social ties with others farmers they cannot exert the kind of pressure needed to discipline water users, which overall highlights faith in state institutions. However, interpretation of this could be that farmers are not interested in following the rules of management that have been thrust on them from the top, and hence put the onus of implementing rules on the state, rather than themselves, as they ensure their access to irrigation water regardless: by stealing, by tapping social or political networks, etc.

It also becomes evident that for (small) farmers the biasness that WUAs have in their functioning can only be turned around/ reversed if adequate support from WRD is received. Farmers consider the state as supreme, and there is clear reliance (and faith) on state structure to ensure that biases that WUAs have can somehow be straightened out by structure (state directives). This *mansikta* of farmers to rely on outside actor (in this case state officials) to ensure that all problems with WUAs at local level are solved relates to communities belief that the canals are not theirs. Rather state property and thus should be their responsibility. Whereas the large farmers use their social capital and political influence to ensure that their work gets done. What becomes evident from this section is that if farmers perceive the canals systems as their own then they would make more efforts to participate in WUAs day-to-day matters. However, this has not happened in this region, as the local community is divided on caste and class lines and have not made united, concerted and persistent effort to question the exiting state of affairs. Thus, they have accepted the present norm of irrigation practice, which is developed based on their past perception of how irrigation ought to be undertaken. Thus, it becomes evident that farmer's current beliefs and associated action are influenced by their past experiences.

9.3 Ideational realm of bureaucrats

At the outset, clarification on categorization of bureaucracy made in this section is imperative. The senior bureaucracy in reference to this research is mostly engineers, and administrators that work in WRD, Bhopal in addition to executive engineer and sub division officer of SAS Project and the district collector, whilst competent authorities (i.e. sub engineers) of WUAs and other functionaries of the department are categorized as junior bureaucracy. This section discusses how the ideational realm (*mansikta*) of bureaucracy towards (farmer) participation in irrigation management is formed. One of the reasons for lack of intermediate level decentralization i.e. poor functioning of WUAs was discussed in chapter seven. To recall, chapter seven had illustrated strategic practices that the bureaucracy in SAS project has initiated to recentralize rather than decentralize micro level irrigation management. Building on that discussion further, this section articulates the narrative that has been

propounded by bureaucracy at the state and the SAS project level to justify lack of intermediate level decentralization.

It is noteworthy that lack of intermediate level decentralization cannot be discussed in light of the quotidian realities of SAS project and the two WUAs (Saadhan and Rakshan) only. Rather it necessitates bringing in the narrative that has been propounded at the state level as well on this aspect, as the decision to not decentralize the intermediate level cannot be explicated in isolation and without taking into account the beliefs of senior bureaucrats, as this decision was not taken merely because of poor functioning of WUAs solely in SAS Project. Reason for selection of SAS Project as a case study is salient here. I had selected SAS Project as it was considered a typical case by bureaucrats in WRD, Bhopal, and hence is representative of other projects in the state. Furthermore, the senior bureaucracy considered it one of the better performing projects in reference to implementation of PIM. Therefore perception of senior bureaucracy in WRD, Bhopal is also critical to understand lack of intermediate level decentralization.

9.3.1 PIM implemented in haste

A predominate perception amongst junior WRD officials in SAS Project is that PIM was implemented in haste. For instance, two sub engineer of the Project (including of Betwa WUA) posit that in the haste to implement PIM Act most of the infrastructure was handed over to WUAs without any rehabilitation. SAS Project has mostly earthen structures, and given that in the year 2000 when the project was handed over to WUAs it was already two decades old, the condition of canals and minors were not in good condition but have worsened after the handover (Informal discussion, June 10, 2011). Furthermore, competent authority of Saraswati WUA, explicating the state of affairs post-WUAs posits:

“We have no control over WUA presidents and if we don’t do as demanded by WUA presidents then WUA presidents’ complain to executive engineer. The quality of work done in canals was better prior to enactment of the PIM Act. Moreover, during that period the work was also being done within lesser budget than at present. Earlier the irrigation network maintenance work was considered department’s work and the onus of accountability was with the department, but now in the current period the accountability lays solely with (WUA) Presidents” (Interview, December 15, 2011).

Another lower level functionary at the SAS project office remarks ‘earlier things worked as people were scared of officials, but they are not anymore’ (Informal discussion, February 10, 2012). Five other sub engineers of the SAS Project echoed similar viewpoint during Focus Group Discussion (FGD) in the project office. They all collectively agreed that the state of affairs was better prior to PIM Act,

when they had more control and power, farmers used to listen to them and their words were of some importance (FGD, September 27, 2011). Two things that need to be noted here is that junior officials of SAS Project acknowledge that post enactment of the PIM Act the legislative mandate of implementing PIM was followed by WRD immediately without taking into consideration the existing state of infrastructure. Second, the condition of the network of irrigation system has worsened after handing over operation and maintenance to WUAs.

Moreover, WRD officials are not discontent only because their powers have been restricted due to PIM Act, but also because they are now vulnerable to WUA presidents who threaten them by evincing their political ties. In fact, one of the sub engineers of SAS Project informally apprised that 'he is fed up of being pressurized by WUA presidents through *netas* (politicians)' citing the instance of one of the local MLA (who is also a farmer in the project area) and pressurizes bureaucrats to ensure access to water for himself and his constituency first (Informal interview, December 15, 2011).

Furthermore, one of the senior officials of the SAS Project candidly admits that implementing PIM in totality is at the discretion of political office bearers - is a political issue and at local level cover up and positive reporting is routine. Further, he argued that PIM for big projects is a bad idea - it's a bad model for irrigation management. There are not many instances where WUAs have worked in the state and elsewhere, but still the state and central government is pushing for this idea of governance (Interview, February 10, 2012).

Overall, from the above discussion, the ideas and ideology that determine the ideational realm of bureaucracy becomes lucid. The bureaucracy predominantly seems to be functioning in a statist ideology, although the state now propagates neoliberal ideology. Moreover, the bureaucracy functions under narrow understanding of statist ideology wherein 'state is an autonomous entity whose actions are not reducible to or determined by forces in society...an expression of authoritarian intentions' (Mitchell, 1991, p. 82). This viewpoint has been salient in bureaucrat's cognitive patterns due to the impetus given to the profession of engineer and bureaucrats in the Colonial and Nehruvian era (see chapter four). Here, it is noteworthy that the statist ideology that farmer perceive (discussed in previous section) is not based on such narrow definition of statism. Rather there worldview is more subjective wherein state is understood as a realm of plans, programs, or ideas (Mitchell, 1991, p. 82). Additionally, the limitations of pursuance of this top-down idea of decision-making are also evident from the above discussion. Moreover, as discussed not all farmers are functioning under the statist paradigm.

9.3.2 WUAs are corrupt and political

A very senior bureaucrat of WRD, Bhopal posits about status of WUAs in Madhya Pradesh, which also echoes the situation in SAS Project:

“ (...) the current status of WUAs in Madhya Pradesh differs from region to region and is contingent on behavioural pattern of farmers and the manner in which they irrigate. Problem with WUAs is that they have money at their disposal. The current structure for project implementation is such that the more money you vest with anybody there is much more money generated and thus greater need for accountability and transparency. Thus, governance becomes an issue and in order to have some control over WUAs, the sub engineer was made secretary in WUA. Decentralization is a tool for better governance and not for abdication of governance. Creation of WUAs is decentralization and there is (perhaps) no need to take a step further at least not at this point i.e. to have distributory committees and project committees. Decentralization should be restricted to policy decisions, for instance we don't have a totally decentralized judiciary in the country. With MPWSRP there is more money from new projects and elections are hotly contested. WUA elections are populist and farmers look at it as stepping-stone for other elections, for instance, panchayat elections. Farmers who do not succeed in panchayat elections contest for WUA elections. While making the PIM Act it was envisaged that WUAs would be self-help bodies and will share benefits but in Madhya Pradesh this has not happened. Candidates spend substantial money for campaigning for WUA elections and it obvious that they will (try) to get back the money they have spent (Interview, February 8, 2012).

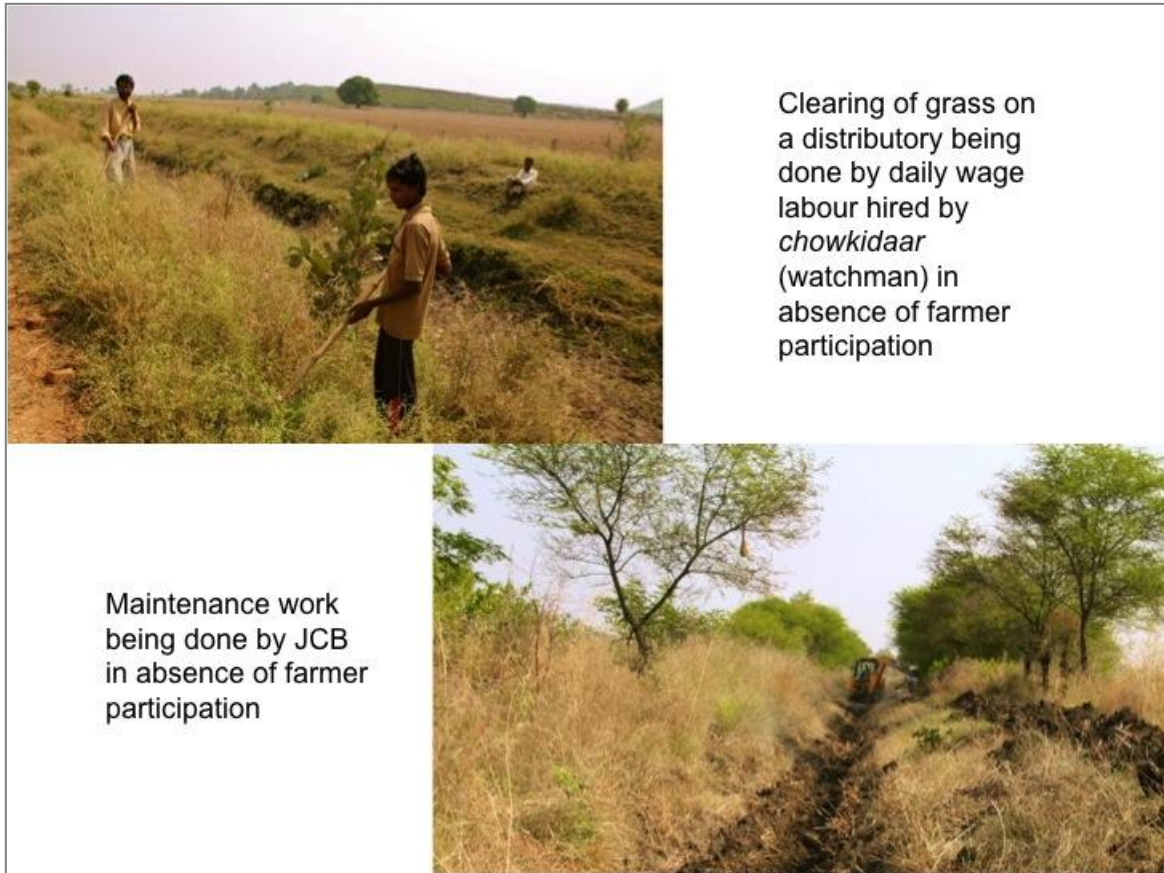
From the above citation, the viewpoint of this very senior bureaucrat in Bhopal it becomes evident WUAs (presidents) are perceived to be corrupt and thus in order to control/monitor their financial transactions soon after the first term of WUA elections an amendment to the PIM Act was made to redefine the role of sub engineers by making them joint signatories along with WUA president for any transaction. For few months sub engineers were nominated members in WUA, but after the amendment they played a monitoring role. Thus, participation of sub engineer in WUA was instrumentally activated to monitor WUA functioning. Moreover, by undertaking this amendment, structural constraints initiated to ensure control over WUAs. This amendment can thus be interpreted as department's distrust for WUAs and farmers in general and also the efforts made to ensure its continued control over irrigation management at the micro level. This need for control arose because of a popular socio-cultural perception among bureaucrats that farmers if given too much power, they will misuse it and this would lead to abdication of governance. Moreover, this is a sign of re-centralizing power back into the hand of officials rather than decentralizing, as it is perceived by senior bureaucracy that if WUAs will be given too much power then they would misuse it. Here, another facet of participation also becomes clear, i.e. participation of engineers was instituted in WUAs as a check and balance mechanism. There is an inherent contradiction here, as

junior bureaucracy was involved in WUA for ensuring smooth functioning, and has failed to do so (as discussed in chapter eight). However, the senior bureaucracy puts the onus of poor implementation of PIM on farmer/farmer organizations behaviour by arguing that farmer organizations have not fulfilled their expected responsibilities, for instance, undertaking good quality operation and maintenance, raising additional resources for better management, involving general body members in irrigation management. From the above discussion it is evident that post PIM the success of decentralization initiative is on farmers foremost and thereafter on WRD officials who are considered facilitators for implementing the Act. Top down statist mind-set emerges from the above citation wherein farmer organizations are expected to take over responsibilities, which the state has bestowed on them, i.e. to perform the task of being an extended arm of the government.

This particular senior bureaucrat, however, omitted mentioning role of junior officials in obstructing smooth implementation of participatory processes. For instance, the sub engineers were made signatories to curb corruption in WUAs, but they accentuated corruption by asking for commission from WUA presidents to approve any physical work that ought to be done. The commission for lower functionaries is 2 per cent while the executive engineer's share varies from 5-7 per cent (Samrat Singh, August 5, 2011; Ramdhari, August 9, 2011). A dominant narrative that has been propounded is that WUAs are corrupt by bureaucracy, but officials fail to acknowledge that if not less they are equally hand in glove with WUAs as far as financial malpractices are concerned. Few instances of progressive WUA presidents' trying to check this practice of taking commission for approving budgets was discussed in chapter eight. However, this is not to argue that WUAs are not corrupt, in fact, many farmers in the two select WUAs opined that WUAs are corrupt for instance, Nirman Singh of Jamunkheri (Interview, February 11, 2012).

Sub engineers of SAS Project unanimously argue that WUA presidents get work done in areas where their vote bank resides irrespective of the fact whether the irrigation network requires work in these areas or not. Furthermore, given the sub engineers are aggrieved that WUA presidents do not have the technical knowhow but still get minor channels dug deeper every year while getting them cleaned through excavators (or JCB -is the name of the company that builds excavators- as they are popularly known as in this region). Photograph 9.2 illustrates two instances where work is being done sans farmer participation.

Photograph 9. 2: Maintenance work under way



The top photograph shows work of clearing of grass on the distributory canal being done by daily wage labourers hired by the *chowkidaar* (watchman). The bottom photograph illustrates work done by JCB on a minor channel prior to opening of the irrigation season in 2011. In the two pictures operation and maintenance work is being done sans farmer participation at distributory canal and minor channel.

Prior to implementation of the PIM Act, operation and maintenance of canals was done through labour, but now JCBs are used to dig minor channels. The sub engineers' argue that usage of JCBs has affected the design discharge capacity of minor channels -as they are dug deeper- and this results in unequal distribution of water. Additionally, sub engineers contend that their powers have been curtailed, rather they have no powers now after the WUAs have been formed, which they perceive as a structural constraint (FGD, September 27, 2011). This is apparent as the Act envisages greater involvement of WUAs in management of irrigation water. The policy idea of participation and management that gained prominence in the national debate affected their way of functioning. Thus, state structure redefined their (ideational) role in management of irrigation water. However, junior bureaucracy have circumvented this structural constraint through strategic practices that they

initiated during the time of scarcity in SAS Project, when the canals were not running enough and there was lesser interest of WUAs and farmers in irrigation work. For instance, as mentioned previously, junior bureaucracy is currently signing forms for releasing salaries of timekeeper and watchmen (see chapter eight). From this instance, strategic realm of engineers becomes evident who have circumvented structural constraints by taking over some of the work that WUAs are supposed to do by not apprising them about relevant details for their own benefit and to maintain control over the irrigation system. In his seminal work, Wade (1982) posits that bureaucracy is reluctant to give away political and administrative control as they gain from irrigation corruption. This confirms in the SAS project areas as well; however, it is not only the financial incentive that leads to junior bureaucracy taking strategic action but also loss of social status and power, as indicate above.

Discussion on actor's ideational realm also necessitates understanding the materiality of their context, which drives their actions, as it is not being argued that actor's professional realm guides their actions. Rather it is being argued that ideas and ideologies that are institutionalized, determine actors' ideational realm. Box 9.3 elucidates the material context under which junior functionaries like *chowkidaar* (watchman) and timekeeper of WRD operate.

Box 9. 3: Material context in which junior functionaries of WRD operate

The *chowkidaars* (watchmen) in the two studied WUAs are local farmers and thus beneficiaries of water from this irrigation network. As mentioned earlier, there are not too many permanent *chowkidaar* currently in WRD as there has not been any new recruitment for more than a decade. Kirrori Lal is one of the *chowkidaar* responsible for patrolling one of the distributories and has been working with WRD since 1989 as daily wage labourer. After a long wait of more than two decades, he was included in the permanent rolls of WRD. He perceives like other WRD functionaries that state of canals was better prior to WUAs. He posits vehemently that 'earlier it was his responsibility to keep the canals clean and he would work all through the year to ensure that canals were clean and there was no unwanted grass (forest clearance in PIM Act's terminology) growing on its bunds. But the situation has changed now, and it is no longer his responsibility'. Further, reflecting on the current state of affairs he posits that they are being forced to do this cleaning by sub engineers though it is not their responsibility. Watchmen are not paid anything additionally to clean the unwanted grass, they either have to clear grass themselves or hire daily wage labourers for the same (see photograph 9.2). Ideally distributory committee ought to take care of cleaning of distributories. However, given that the distributory committee and project committee elections have not been held for the last two terms, and there are no distributory committees in this area. The department manages the work that needs to be done at the distributory level.

To elucidate the social setting of Kirrori Lal, he is a *Brahmin* by caste who resides in village Amla (middle reach village) of Betwa WUA. He is also one of the beneficiaries of the SAS Project and uses water from canals to irrigate his fields. On being asked about the status of work in Betwa WUA in his area, he is reluctant to respond and states that 'the sub engineer sahib (sir) ought to know what work happens; I am here to do *chowkidaari* (watchman ship)'. When the same question was asked to him indirectly, he responds that he has not seen any work being done during the second term of Betwa WUA president. From conversations with him over many months, it becomes apparent that he is wary of saying anything against sub engineer or the ex WUA president initially as one is his reporting officer (*sahib*) and the other an ex-president and a rich and influential famer of this area (to recall Kamraj Singh of Sadhai). Kirrori Lal is conscious of his status as a watchman and his job with

WRD but he is also conscious of the surroundings he resides in and does not want to do anything that alienates him from other farmers in his village. Thus, there are multiple ideas, beliefs that guide his realm. For instance, while discussing the work of Saadhan in Betwa WUA he responds to the question of farmer's contribution by stating that 'nobody paid so why should I pay'. It becomes evident from Kirrori Lal's interview that though he is part of WRD and he knows the rules and regulations; he chose not to participate and benefit from the work being undertaken by Saadhan as many of the farmers from his village decided not to. From the above it becomes evident that for Kirrori Lal the cultural paradigm as well as his socio-economic situation determines his worldview. Thus, interaction of interest *and* social cultural context guided his worldview. From this instance, it is evident that actors work at interface of ideational realms and seem to be guided by collective understanding of key terms like corruption in this case, rather than typology of ideas that Campbell (2004) articulates.

Source: Interview with Kirori Lal, January 16, 2011

9.3.3 Temperament of officials

Temperament of officials has been a major hurdle for implementing PIM in Madhya Pradesh was an often-stated remark by progressive officials of WRD, Bhopal. The following sub section elaborates on this aspect further.

Command and control mind-set

Discussions with officials (especially executive engineer) in SAS Project office in Vidisha evoked imagery of a typical bureaucrat. The executive engineer works in engineering and control paradigm and posits that the state has given too much importance to farmers and that is why things have not worked out. The executive engineer believes that PIM should not have been implemented, as WUAs are not capable enough to run the system on their own, they are corrupt and only interested in usurping money from the department rather than motivating farmers to pay their water dues on time (Interview, June 10, 2011). The executive engineer's viewpoint is clearly formed by his experience of working with farmers from a position of control, which after constitution of WUAs was diluted as farmer organization were given responsibilities and were not merely assistants like the previous experimentation with participation in 1980s and 1990s (discussed in chapter seven). Clearly, the structural directive (PIM Act) has resulted in handing over of operation and maintenance of irrigation system to WUAs and brought them on equal footing as officials (as was elucidated through powers that WUAs now have over management of irrigation system in chapter five). But these directives have not been able to change the mind-set of senior officials like executive engineer of a major irrigation project like SAS who does not want to lose the power and control he commanded over the irrigation network in the past.

Moreover, on several occasions the executive engineer expressed his displeasure with NGOs and argued that NGOS should not have been involved in capacity building by positing, 'we have no

control over NGOs, and our expectations were not met' (Interview, June 10, 2011). Conversations with executive engineer make it evident that he views participation as convenience issue rather than a value or norm to imbibe. Thus, he has not made any serious effort to work towards facilitating/implementing it in SAS project area. For instance, he advocates that WUAs should take up all responsibility of water management and solve water related conflicts but in meetings with WUA presidents his mannerism and tone and tenor indicates that he believes that they don't have either technical or management knowledge and are not capable of undertaking work on their own. Rather than motivating presidents to take up more responsibility, in meetings he silences them -does not give them opportunity to voice their opinion- to which several WUA presidents expressed their displeasure (also see chapter eight).

Participation of women in WUAs

Mind-set of officials also becomes evident from their perception on some key issues like participation of women in WUAs. To elucidate, the executive engineer of SAS Project on the question of participation of women in WUAs notes:

"Having women members in WUAs is a majboori (compulsion) for us, and to ensure that there is woman member in WUA, someone is nominated to the post (...) in order to ensure that paperwork is up-to-date" (Interview, June 10, 2011).

It becomes evident from the above citation that there are no concerted and persistent efforts made by executive engineer's office to involve women in irrigation management process. Moreover, this decision to have (nominated) women WUA members on one hand is influenced by the socio-cultural practices of this region. As indicated in chapter six, the predominant groups in this region follow patriarchal system and there are clear demarcations of gender specific role with respect to water in the two select WUAs. Irrigation water is more or less men's domain in the SAS region, and women practice *purdah* (veil) system. Though, Saadhan tried to break this stereotype and had encouraged involvement of women in WUA activities. Given, state structural directive necessitates involvement of women in WUA - the officials have devised a facile way of doing it, by promoting them as nominated member in WUAs and thus depoliticizing their presence in WUAs, as they are not involved in WUA activities. Here, again the idea of participation of women in WUAs is not viewed by bureaucracy as an idea that will transform the water management practices of the region in their mind-set. Thus, they perpetuate institution of participation of women instrumentally and apolitically through nomination as the current discourse on development and management necessitates mainstreaming gender by involving women in every activity.

Lack of transparency and cooperation in functioning

Additionally, unwillingness of officials to decentralize is also evident from their handling of work with NGOs. An initial review meeting of capacity building project of ICEF with WRD, Bhopal and Indore revealed lack of coordination between WRD field staff and NGOs as a problem in smooth implementation of PIM (ICEF, 2004). One of the responsibilities of Saadhan was to improve communication between select WUAs and WRD in SAS Project. However, a major hurdle in facilitating participation and transparency between 2003 and 2007 for Saadhan was lack of willingness from WRD office Vidisha to share information with Saadhan. For instance, there are several correspondences from the Directorate, PIM to local WRD office in Vidisha to share 'technically sanctioned/framed estimates of physical works of restoration of canal systems under ICEF projects to the WUAs and NGOs' (Directorate PIM, 2004). Despite directives by PIM Directorate, Bhopal the communication between Saadhan and SAS Project office, Vidisha did not improve with time. There are many correspondences between WRD, Vidisha and Saadhan where request for speedy technical sanctions have been made. In fact, Saadhan had questioned malpractices that were widespread in project WUAs for undertaking operation and maintenance activity. Saadhan directed its efforts to increase transparency of WUA accounts and this had put them in tenterhooks with officials of the SAS Project. Saadhan was even banned by one of the executive engineer to enter the SAS Vidisha office appraises a Saadhan employee (Interview, August 30, 2011).

To illustrate with an instance, an aqueduct close to Saronj village failed as it was made with poor quality of cement. Mahesh Singh, a former WUA president, elucidates that earlier, people did not have knowledge of how work ought to be done. The sub engineer and contractor had used poor quality cement and this resulted in seepage from the aqueduct. Saadhan employees questioned the quality of work of this particular aqueduct and similar other works and exposed cases of corruption, which created a lot of unrest and displeasure within SAS Project office for Saadhan employees (Mahesh Singh, December 10, 2011; *ibid.*). A Saadhan employee appraises that they had also reported these malpractices to the principal secretary WRD, which resulted in total break of communication between officials at SAS, Vidisha and Saadhan (Interview, August 23, 2011).

Multiple responsibilities

In addition, Saadhan's correspondence with WRD also brings forth the issue of overworked sub engineers. Correspondences between Saadhan and WRD highlight the problem of sub engineers being asked to do multiple jobs at the same time by the district administration for instance, working for *Bal Sanjivani*, *Jalabhishek*, pulse polio, programmes (Team leader Saadhan, 2006). This situation

was same in the year 2011-2012 when I was doing fieldwork. It was difficult to arrange meeting with sub engineer or *amin* (accountant/person responsible for revenue collection) as they were barely in the field after the canals were opened or in the project office, as this was also the time when they were given additional responsibilities by district administration. In fact, the executive engineer of the project also expressed his displeasure with these additional responsibilities that the department functionaries were allocated, but he expressed his helplessness as the district administration had final voice/control in these issues (Interview, December 7, 2011). It is not surprising then that the sub engineers undertake basic minimum work in WUAs, as they are also overworked due to structural constraints, have to follow orders and do other additional work, for instance, elections of different institutions (*mandi, panchayat, assembly, parliament, etc.*), pulse polio campaign, literacy campaign. Thus, project level staff of WRD is also associated with other government programmes, which are not always in direct consonance to their SAS Project responsibilities. Multiple responsibilities of WRD officials affect their work in WUAs, for instance, organizing regular meetings or conflict resolution. As meetings cannot be organized regularly, conflict resolution is hard to achieve. Moreover, given that engineers are overworked they also undertake the basic minimum work for WUAs and don't have any incentive to perform better. Additionally, many of these sub engineers are in their mid-fifties, they are not very keen on undertaking arduous field work (Interview, December 16, 2011).

To sum up, from discussion in this section it is evident that ideational realm of bureaucracy is institutionalized by structural constraint and the bureaucracy has gradually slowed down the reform process, by what has been succinctly articulated as foot dragging by Scott (1985)^{cxxv}. Furthermore, notwithstanding the structural directives, the bureaucracy (along with WUA presidents at times) gradually have developed their own strategic practice by keeping paper work up-to-date be it for minutes of the meeting or social audit, though there isn't sufficient representation of farmers or WUA members in meetings. Furthermore, interviews with junior bureaucracy (sans the sub engineers) i.e. timekeeper, watchmen, *amin* (person responsible for collecting irrigation fee), indicate that for junior functionaries the ideational realm/mind-set is a mixed one and traverses the professional and material interests *and* merges with their socio-cultural perceptions. Thus, salience of ideas and ideology and its interaction with material interests in shaping ideational realm of actors' is evident.

9.4 Perpetuation of participation by capacity building organizations

Two organizations that were responsible for capacity building in the two WUAs selected for this research are Saadhan as part of ICEF funding and an international consultancy as part of MPWSRP

funding.^{cxxvi} Hereafter, in this section work of Saadhan who were responsible for brokering a paradigm for greater involvement of farmer in irrigation management is elaborated upon.^{cxxvii}

Team leader of Saadhan who spearheaded Saadhan's intervention in this region (and the two select WUAs) recounts that when they started work in this region:

"... We found a strange situation in field: farmers had not paid water tax for almost two decades (...) moreover, collectively they were of the opinion that given that they pay water tax the onus of maintenance and rehabilitation lay with the government. It was the greatest irony of that time" (Interview, August 23, 2011).

Given that Saadhan started work with such grim scenario in field they devised a three pronged strategy for initiating work: i) identify small structures that will benefit greater number of people at the outset; ii) identify a work community model (i.e. rather than having all WUA members paying beneficiary contribution for a structure, identify and motivate smaller group of farmers that will benefit directly from a structure and thus would be willing to pay); iii) It was decided that no outside contractors will be used for project work. The farmers could decide how work gets done through machines or labour and who ought to design structures (WRD engineers/Saadhan engineers, or by hiring engineers). The first experimentation with this strategy was done in Chapna (part of Betwa WUA from 2000-2006) village to build a structure, which was successful. Thereafter, Saadhan decided to scale up this model of implementation and worked towards creating awareness amongst farmers about PIM and their roles and responsibilities by doing street plays, wall paintings and sign boards, video shows, and distributed pamphlets and posters to create awareness about PIM. They also organized exposure visits of select WUA members and farmers within Madhya Pradesh and to other states like Maharashtra to educate farmers about water management, volumetric water distribution, promoting crop diversification at sites considered successful in implementing PIM. Saadhan also organized thematic training of WUA members on technical and financial aspects for better WUA management. Additionally, they focused on building capacities of women and involving them in irrigation activities through formation of self-help groups that could avail micro credit for irrigation related needs for instance to buy pump sets (Capacity Building Achievement Report, Saadhan, 2006). Although, the idea of participation that ICEF funding instilled through its funding was 'apolitical' and it assumed that if farmers contribute^{cxxviii} then it would be a sign of consensus and participation in the project, however, Saadhan initiated capacity building of WUAs and engineers with a deeper focus so they could innovate and work towards facilitating participation in its true essence and not just in terms of amount of physical work done for canal restoration work. Saadhan worked towards sensitizing and mobilizing farmers so that they could inculcate a sense of ownership towards irrigation network, one parameter for which was beneficiary contribution that farmers had

to give for rehabilitation of infrastructure and/or to improve access to irrigation water. Another aspect that Saadhan focused was on involving women in PIM by initiating self-help groups in WUAs it was working in and lastly they worked towards changing viewpoint/perception and attitude of engineers and farmers.

Farmers in the two select WUAs, recalled Saadhan's work to be beneficial, in creating awareness about PIM, for instance:

"Saadhan created awareness and gave information about rules and regulations related to irrigation management. Farmers were unaware of so many things; and once they had the information, few farmers tried to imbibe and follow up on this new information (...) in earlier times, because of fear of department, farmers could not ask for much information from the officials. Saadhan filled that gap, and gave us lot of information about how we could get work done by giving (beneficiary) contribution" (Raghav Raj, December 19, 2011).

Furthermore, the team leader of Saadhan, narrating his experience with irrigation bureaucracy states that engineers in Vidisha at that time were reluctant to adopt and/or adapt to the new regulation/Act that was enacted by the state government. Additionally, the junior officials did not accept presence of Saadhan with ease; they were aware that they were in this region for a short time period and thus were reluctant to share space with them or lose control that they had over the irrigation network in the project. Perception of junior officials was not altered by the fact that ICEF and the state government had brought Saadhan on board as a model of government-organization-non-government-organization collaboration with aim to build capacities of WUAs and engineers (ibid.).

As mentioned in chapter eight, Saadhan through its work questioned the existing power structure, and had exposed corruption that was deep seeded in undertaking irrigation work. Given that Saadhan focused on exposing corruption in day-to-day irrigation work in this area their work was not appreciated either by junior or senior bureaucracy in the project office or in Bhopal. One of the senior most bureaucrats of WRD posits that there was no clarity on what ought to be role of NGOs during ICEF funding and on many occasions the WRD office in Bhopal had communicated to Saadhan that their role was restricted to ensuring collection of beneficiary contribution and they should just focus on it (Interview, February 8, 2012). The *raison d'être* for bureaucrats in Bhopal not appreciating Saadhan could be due to the fact that of the two NGOs in the region, Saadhan was the one which had focused on changing the style and approach of functioning of sub engineers by building pressure on them through active farmers and leaders in the villages who were motivated by Saadhan, for instance, Samrat Singh. Although, in the bureaucratic circles in Bhopal the work of Rakshan (the

other NGO also involved with capacity building) has been appreciated more than Saadhan. Interview with former Rakshan employee elucidates the viewpoint and motivations under which Rakshan functioned. Rakshan focused on tangible benefits like increasing agricultural productivity, and did not give adequate attention to institution building. On the other hand, Saadhan actively engaged with farmers, WUAs, junior and senior bureaucracy to curtail corruption in accounting during the period when repair and maintenance work on the canal is carried out. The two NGOs in this region pursued different strategies, which resulted in different outcomes as well. Although, Saadhan's work was not appreciated in bureaucratic circles they were able to motivate/ institute greater participation that is if beneficiary contribution is considered a criterion for participation. Furthermore, Saadhan worked to challenge the system and inherent rent seeking behaviour and they thus received criticism for their work and collective dominant perception in bureaucratic circles that emerged was that Rakshan's work is better than Saadhan's. Given, that ICEF funding was only for about four years, Saadhan's work has not yielded any long-term effect, but it still created some awareness in this area about PIM activities and new leadership for WUAs also emerged.

Additionally, interviews with farmers and women elucidate that Saadhan was actively involved in project activity, and they did broker a paradigm of development and participation, which was more inclusive. Saadhan was functioning in the ideational realm of brokers and worked towards changing perception of the local populace. They were successful in doing that at the field level during the time that they were working on PIM activities in SAS project area. However, they were not able to bring in any change in thinking (or perception) of functionaries at the intermediate or macro level with regard to PIM. This is also due to the fact that they were not at the same footing as the executive engineer's office and did not have the same leverage and their rights were not clear.

Overall, Saadhan's work approached participation first, instrumentally by viewing participation as beneficiary contribution- a facet of participation promoted by donor organizations. Second, approach to participation was political - drawing on the ethos of communitarianism and aimed at empowering the local farmers to question the existing practice of water management that reeks of rent seeking practices.

9.5 Implications for intermediate level decentralization

Till now, this chapter raised several important issues that impede devolution at the intermediate level, viz. categorical inequalities and ideologies that drive *mansikta*/ideational realm of different actors and this turn impacts functioning of WUAs. To elaborate, findings of previous chapter and this chapter elucidate poor functioning of WUAs in terms of lack of participation of farmers in meetings;

instrumental manner in which meetings are conducted; acrimony among actors (elite farmers) at the micro level which impedes their working together; social and political networks of farmers determine access to water; command and control mind-set of bureaucrats to name a few.

Moreover, this chapter elucidated recognition and internalization by farmers of the unequal relationship that they have with WUA functionaries (see section 9.2) and thus they perceive best to approach junior bureaucracy rather than WUA members for fulfilling their water needs. Intermediate level committees like distributory committee and project committee would have been relevant to resolve some of the issues that farmers face, and (perhaps) would have also ensured check and balance mechanism to ensure junior bureaucracy falls in line. However, as discussed in this chapter the decision to not conduct elections for distributory and project committee in the second and third term was taken at the state level, and this aspect cannot be addressed at WUA level, though impacts decision making at micro level.

Additionally, findings illustrate that farmers have greater trust on state structures and functionaries to institute change (see section 9.1.2). In this context, chapter seven and eight had illustrated salience of District Water Utilization Committee (DWUC) chaired by district collector as intermediate level organization currently deciding how water is allocated at regional level. However, currently there is only one intermediate level forum that mostly has representation from departmental heads (see chapter six). This level needs to have greater representation from farmers in order to have deliberative discussion on how irrigation water is allocated. Again, this aspect needs to be tackled at the state level to ensure deliberative discussion for water resource management at the intermediate level. Although, findings from this chapter indicate that lack of bureaucratic and political will to decentralize the intermediate level i.e. activate governance structure at the intermediate level has been a major roadblock.

Additionally, salience of intermediate level is evident from issues that emerge in this chapter. Empirical findings indicate that that some of the issues can only be addressed at the intermediate level rather than micro level, for instance, water allocation among upstream and downstream WUAs and efforts to change the existing social norm on water distribution. And at present failed devolution at the intermediate level has led to non-functioning WUAs at the micro level (see chapter eight).

Additionally, this chapter brings forth salience of scales of decentralization at different levels, as it is not possible to address issues of devolution at micro level, without addressing devolution at other level (intermediate level). Some of the issues that can be tackled at the micro level are, for instance,

process of holding WUA meetings or the manner in which the records are maintained by junior bureaucracy.

Although, in the above-mentioned context also it needs to be pondered why farmers have been burdened with attending meetings and given responsibilities. This relates to larger debate on instrumentality with which participation is being practiced and if it's worth propagating. Findings of this work illustrate that it is not, and is an issue that needs to be recognized and deliberated at the state and national level. This would have implications on how the idea of decentralization ought to unfold or if it is *even* relevant given the current circumstances and ideational realm of actors. Overall, decentralization is a complex issue that cannot be undertaken solely at one level. Therefore recognizing scales/different levels of decentralization and thereby taking appropriate action is important, otherwise the current approach to irrigation management is redundant.

9.6 Summing up

Overall, the discussion in this chapter elucidates diverse ideational realms which have resulted in poor functioning of micro level farmer organization at the micro level. Additionally, this chapter also illustrates that farmers are not a homogenous entity although the paradigmatic and programmatic ideation realms i.e. of decision makers or theorists failed to acknowledge this aspect while propagating the idea of decentralizing irrigation management (See Campbell, 2004). Furthermore, this chapter illustrates that farmer and bureaucratic realm has been a roadblock for devolving the 3Fs (funds, functions and functionaries) at the intermediate level.

Additionally, this chapter elaborated the prevalent notion of participation amongst key actors, viz. farmer perceive that their voting for WUA election or their financial contribution is signifier of their participation in WUA functioning. WUA presidents' consider working for their constituents (who voted for them) and caste groups as signifier of their participation in WUA functioning (also evident from discussion in chapter eight.). Whilst bureaucracy perceives that quotidian functioning of WUA is not their responsibility, though competent authority are secretaries in WUAs. Additionally, bureaucracy perceives that after handing over farmer responsibility to manage irrigation system - fostering participation in WUAs is the responsibility of WUA president. The idea of participation propounded by World Bank and ICEF has been instrumental in nature and focused on propagating financial participation through beneficiary contribution. Saadhan's work in select WUAs of SAS Project attempted to move beyond this instrumentality, as discussed in this chapter their work was appreciated as they questioned the inherent rent seeking behaviour of the bureaucracy.

Furthermore, findings of this chapter demonstrates that alternative framing of socio political relations -that tenets of PIM necessitates- has not happened in SAS project as bureaucracy through its strategic practices is foreclosing these options by exercising their agency to advance their dominant ideational realm of controlling the irrigation system by using managerial and technocratic narrative of irrigation management. Thus, it becomes apparent that incentives are important for actors (in this case bureaucrats/engineers) to partake in any reform process, if these incentives are denied or actors feel threatened then reform process will be sluggish or not bear desired results.

Furthermore, WUA elections were aimed to increase participation, as elections in essence provide equal opportunity for contestants to run for a post. However, the reality is different, as demonstrated in this and the previous chapter. Elite capture of WUA posts has left the poor and/or marginal sections out from these farmer organizations. Further, there is significant depoliticization of marginalized community by including them as token members in WUAs through nomination. The caste and patriarchal issues are quite evident in this bastion of Hindutva. Formation of farmer organization and inclusion of *dalit* (Scheduled Caste) and women members by elites in WUAs engineers through nomination is a signifier of that. Rather than farmer organization providing a platform for these groups to rise on own. Additionally, inclusion of (marginal) groups through nomination is an act of depoliticizing (their) participation in these farmer organizations on one hand. On the other hand, the dissensus amongst farmers about WUA activity is a signifier of their lack of interest. A former WUA president, reflecting on current status of WUA functioning puts the onus of change on farmers and argues:

“[U]ntil farmers understand the usefulness/ utility of managing system, the situation will not change. There has to be collective learning and internalization of how the system functions by farmers at large. Till that happens, neither the administration nor Ram Prakash (or any other local MLA) can usher change” (Mahesh Singh, December 19, 2011).

Thus, (small) farmers disinterest in WUA functioning can be interpreted as their organized dissensus for designed institutions, as has also been succinctly stated by Swyngedouw (2011) ‘identification of ‘democracy’ with stakeholder participation and inclusive governance fundamentally disavows the constitutive principle of democratic, namely egalitarian dissensus’.

Discussions in this chapter bring forth that farmers of this region categorically perceive that WRD should manage the irrigation system as the canals belong to the state and thus farmers are reluctant to take over operation and maintenance of the system, which refutes a dominant assumption that local communities are keen on taking over management of resources (cf. E. Shah, 2008, p. 140). Additionally, it is apparent from field findings that the problem with instituting participation (by

designing institutions) is that farmer viewpoint was not involved while taking the decision to decentralize/ implement PIM. So, majority of farmers still consider operation and maintenance as state's responsibility. Furthermore, this chapter also elaborated that social and locational background of farmers also influences to what extent they participate in WUA activities. To wit, farmers downstream were keen on irrigation activities in the first tenure of WUAs but during years of scarcity, the upstream farmers ensured that they received little or no water, which forced most of the farmers to find alternatives like installing tube wells, or renting tube well of neighbour to irrigate their fields. This chapter demonstrate that large *dabang* (bold) farmers ensure their access to water first, and the farmers downstream have internalized this situation and thus consider their voting for WUA elections (and thus putting the onus on presidents to get work done), their participation in WUAs.

Additionally, findings in this chapter also demonstrate that most of the large farmers have good affiliations with MLAs and given their political ties they are brazen about following rules. This understanding of large farmers emerges from their understanding of the socio-political reality that political office bearers command control over the irrigation system and can pressurize the bureaucracy on one hand to decentralize the intermediate level and on the other hand, at the local level pressurize the engineers to ensure that they get water first. The importance of socio-political reality forming own structural constraint is not lost on junior functionaries of WRD either, as they feel crushed between engineers and WUA presidents both. Given their material and socio-political reality they are intimidated by *sahibs* (sir) one-side and WUA presidents on the other. Overall, it becomes evident that categorical inequalities play out at the micro level and determine access to irrigation water, and results in different capacities for farmers and bureaucrats and thus impacts how WUA meetings are conducted or what social political networks actors tap. Moreover, these categorical inequalities drive relationships between farmers, and between farmers and bureaucracy making intermediate level decentralization a complex issue. This chapter also emphasizes salience of scales of decentralization for taking appropriate action. As in absence of recognizing the importance of scale - the idea of decentralization is redundant.

Overall, this chapter demonstrates: first, the technocracy, and managerial mind-set of bureaucrats which is influenced not only by structural constraints but also by how they perceive their standing in the given socio-political situation. Second, through the description and working of perception of farmers and farmer organizations this chapter elucidates that farmer motivations are driven based on how their structural position interacts with political, economic and cultural spheres and this in turn has slowed down the WUA functioning.

^{cxv} Farmers during field discussion often brought up their experiences from exposure visits where they saw how management of irrigation system is undertaken by farmers in other states like Gujarat. Farmers in these discussions always compared and posited that situation in SAS Project area is different from other regions. Farmers here do not like adhering to rules; and collective action and organization is not their forte. Moreover, they argue that if the state had implemented *warabandi* from the beginning in SAS Project, i.e. when the project was commissioned in 1978, it perhaps would have been possible. But given that they (farmers) are used to a certain system it is very difficult to institute any kind of institutional or ideational change now (Field notes, January 2012).

^{cxvi} I am aware that Scott uses this terms in context of powerless groups (poor peasants) in rural Malaysia. The usage here is in reference to junior officials of the bureaucracy who did not have enough leverage over policymaking and thus impeded implementation of reforms strategically by their non-action.

^{cxvii} The details of selection of these organizations were discussed in chapter five.

^{cxviii} The international consultancy that worked for capacity building under MPWSRP worked under project mode and was handling institution-building work for entire state of Madhya Pradesh. As already discussed farmer organizations, farmers or the bureaucrats did not perceive their work to have added any value or changed/challenged their perception of irrigation management.

^{cxviiii} Details of farmer contribution that ICEF envisaged were discussed in chapter five.

10 Conclusion: Complexity of Intermediate Level Decentralization

This research set out to examine various structural and cultural ideational factors that have moulded actors' perception on participation and their involvement in facilitating/impeding functioning of the intermediate level governance structure through the case of Samrat Ashok Sagar (SAS) Project in Madhya Pradesh, India. This research also aimed to elucidate the role of actors in instituting a certain idea of decentralization in context of irrigation management in the national and state policy narrative. Specifically this research sought to answer the question: what is the role of actors' (farmers, farmer organizations', Non-Government Organizations (NGOs), and bureaucracy) in influencing (or obstructing) decentralization of the intermediate level in SAS Project in Madhya Pradesh using the lens of ideational realm. To recall briefly, Madhya Pradesh was selected as the case study site as it is considered one of the pioneering states' to take up the idea of decentralization in India. Within Madhya Pradesh a typical case study site -SAS Project- was selected where intermediate level decentralization issues could be analyzed.

This research uses ideational realm as a conceptual frame to analyze the reasons for absence of initiation of governance structure at the intermediate level viz. distributory and project committees. Ideational realm in this research is enunciated as ideas and ideologies that actors subscribe to which determines their ideational realm. Actors follow various ideational frames, viz. decision makers, theorists, constituents, brokers (Campbell, 2004). Ideational realm is actor's interpretation of a situation i.e. their perception and their capabilities over time based on the ideational frame they follow vis-à-vis the world around them resulting in creation of dominant mind-set (*mansikta*). This dissertation demonstrates salience of the notion of ideational realm in providing an interface to study *interdependence* of structural and cultural ideation factors to better understand the process of institutional change, rather than accounts that provide merely structural or cultural explanations. Moreover, I demonstrate that actors' work at interface of different realms that are shaped by different ideas, ideologies, interests and beliefs and understanding and influence of these ideational realms/mind-set on actors (in)action explicates poor decentralization.

Using the conceptual frame of ideational realm this research (in a way) provides a counterfactual analysis of why intermediate level farmer organizations are not there in the SAS Project. To recall briefly, in the SAS Project, distributory and project committee were constituted *only* once after the first round of Water User Associations (WUA) elections in the year 2000. Subsequent to the WUA elections in the 2006 and 2011, the state government did not hold elections for either distributory or

project committee in the state. Fieldwork for this research was conducted between mid-2011 and mid-2012 and during this time there were no intermediate level farmer organizations in the SAS Project. The focus thus has been on studying the reasons for absence of these intermediate level committees by elaborating: first, the strategic practices and processes related to irrigation management that are at play at the micro level where first (between 1980 and 1999) and second (2000 onwards) generation farmer organizations were formed in the case study site. Moreover, research findings reveal that actors ideational realm are influenced by multiple ideas /ideologies - interventionist developmental state, neoliberalism, communitarianism as a consequence of which there has been clash in their worldviews and this has resulted in tardy irrigation reforms.

The focus of this chapter is on theoretical and analytical strengths of the concept of ideational realm for understanding intermediate level decentralization. Section 10.1 synthesizes the empirical findings of this research in order to respond to the primary concern of this dissertation. Section 10.2 discusses the theoretical and field utility of the concept of ideational realm in context of understanding success of decentralization projects. Section 10.3 underscores emerging issues from this research that could be further investigated, followed by limitations of this research. Section 10.4 provides few concluding remarks.

10.1 Ideational analysis of intermediate level decentralization

This dissertation presents an ideational analysis of intermediate level decentralization by positing salience of history, ideas, ideology and structural and cultural elements in guiding and shaping ideational realm of actors. As discussed in chapter one, there has been immense international and national impetus for decentralization (PIM). Given this impetus the main concern of this work was why intermediate level decentralization has not happened despite such a strong neoliberal narrative at the international and national level for initiating decentralization through call for devolution of 3Fs (funds, functions and functionaries). Chapter two discussed the keenness and willingness of international organizations like the World Bank, United States Aid for International Development (USAID), Asian Development Bank (ADB) -and its representatives- in brokering PIM as the most appropriate reform process for decentralizing irrigation management worldwide.^{cxxix} Furthermore, the chapter elaborated the debate on crafting or designing of institutions for irrigation management and elaborated how the 'paradigmatic idea' (c.f. Campbell, 2004) of decentralizing irrigation management by designing institutions for irrigation management was brokered by international organizations through development cooperation, which reeks of structural domination. This review provided an important insight, that paying attention to conditions and context of reforms i.e.

whether institutions are crafted or designed, willingness of bureaucrats, political office bearers is essential to understand why certain ideas stick in policy realm of actors' (political officer bearers and bureaucracy) and result in policymaking and thus are crucial for policy analysis. Moreover, salience of external actors in propagating irrigation management informed by tenets of neoliberalism became evident from the discussion in chapter two. As a continuation of discussion, chapter four elaborated how the discussion on participatory turn at the international level unfolded at national level. The focus was on elaborating the origin (which necessitated taking a historical standpoint) of different ideas, ideologies that have shaped ideational realm for irrigation management in India.

Chapter four argued that two-fold pressure for decentralization for Indian states has come from central government's policy: Command Area Development Programme (CADP) and international donor pressures (c.f. Gulati et al., 2005). It is noteworthy that CADP was the first reformist programme to solve the maladies that irrigation sector was facing in India. CADP was initially designed and evinced the ideology of a developmental interventionist state or statism (see chapter four). However, after its restructuring to Command Area Development and Water Management Programme (CADWM) the programme in its current avatar has more neoliberal viewpoint and notes PIM as one of its core area (See GoI, 2010a). In fact a government order from Ministry of Water Resources on CADWM states that state governments can avail CADWM funding only after they enact PIM legislation (GoI, 2008).^{xxxx} Thus it becomes evident that CADP was (initially) an outcome of an ideology of developmental interventionist state, while international donors have used good governance as a defining idea for justifying and initiating policy change favourable to initiate PIM. Thus, two different top-down ideas/ideologies and thereby approach to irrigation management were being discussed and pursued at the national level for irrigation management. Moreover, at national level, with pursuance of tenets of neoliberalism, reforms in the water sector in India have emphasized principle of cost recovery, emphasis on water rights, participation, decentralization, and privatization of some or all functions in water delivery and redefining the government (Sangameswaran, 2009, p. 230). It is recognized that these ideas stem partly from Dublin- Rio principles, however, institutions such as World Bank through assumed role of ideational broker have ensured that this message was carried to developing countries by advocacy, loans and conditionalities (Goldman, 2006, 2007; Sangameswaran, 2009). The idea behind the call for these reforms has been the perception of state failure and thus there has been greater call for decentralization in irrigation management by handing over management of irrigation systems to WUAs. The neoliberal doctrine in general the way it has been implemented by international institutions emphasizes and treats the state and market or public space as two diametrically opposite principles and fails to recognize the political character of (economic) relations that it aims to alter.

Moreover, there is emphasis on 'one size fit all' model of policy implementation to resolve the financial and thereby management problem of irrigation bureaucracies at the national level in India (Brenner & Theodore, 2002, p. 353). Another ideology that has influenced how resources ought to be managed is the literature on community based natural resource management that argued for crafting of institutions for greater participation and cooperation at the local level (Ostrom, 1990, 1992; Tang, 1991). Consequently, development practitioners have worked towards mainstreaming participatory approach and have advocated that local community plays a greater role in conservation and management of natural resources and participation became a buzzword in development practice and management of natural resources (Chambers, 1994a, 1994b). Although, the community based natural resource management literature has been critiqued for basing their work on myth of homogenous community, devoid of power relations and power dynamics and overlooks how access to resource for communities is contingent on wider power relations and hierarchical systems (B. Agarwal, 2001; Cooke & Kothari, 2001; M. Leach et al., 1999; Sultana, 2009 inter alia).

Thus, despite the criticisms, as a consequence of this two-fold pressure to decentralize irrigation management, several states in India have used good governance as a defining idea for justifying and initiating policy change favourable to initiate PIM. For instance, Japan Bank for International Cooperation has played role in formation for WUAs in Orissa (Narain, 2008, p. 164). Furthermore, impetus on PIM at the national level by funding organizations and the Indian bureaucracy led to initiating four different approaches to PIM viz. contract approach, joint management approach, WUAs as arm of the state and formally organized *warabandi* (fixed time for distribution of water) in India (Brewer, 1997). These four approaches were premised on two models of PIM: first, the large-scale impact model of policy change of which Andhra Pradesh is an example. The Andhra Pradesh model is based on the Mexican big bang approach of designing institutions that was popularized by the World Bank, despite its known problems (See Rap, 2006, and chapter two). Second, model is of scaling up through NGO interventions a case of crafting institutions, of which Gujarat is an instance (Thomas & Ballabh, 2008, p. 116). Contract approach has been used by WUAs in Gujarat and Maharashtra wherein the irrigation department and WUAs entered into an agreement that guaranteed water supply to WUAs in lieu of payment of fees for the water used. Development Support Centre, an NGO in Gujarat has been actively involved in implementing PIM in the state. This model has performed better as Development Support Centre has been involved in mobilization of farmers consistently in its field areas (Narain, 2009, p. 128).^{cxxxi} Joint management approach - of which Tamil Nadu and Kerala are instances - used a multi-tier WUA model with Joint Management Committee (JMC) at system level, WUA or JMCs at the middle level and WUAs at the outlet level. Bihar tried an alternative model of PIM wherein WUAs are envisaged to be an extended arm of the

state. WUAs in Bihar legislatively have a larger role to play, given direct sharing of irrigation fees between farmers and the state is envisioned. Lastly, Haryana is an instance of formally organized *warabandi* with WUAs created at outlet level without any change in irrigation management practices (Narain, 2009, p. 164).^{cxxxii} However, there are not many empirical studies from the Central Indian state of Madhya Pradesh on PIM except work of Pandey (2006) whose work is a mainstream anthropological study and discusses the social cultural setting of one village in the project, Bassi and Kumar (2011) and Pangare, Hooja and Kaushal (2003) have looked at institutional aspects again from a mainstream perspective. Overall, these works have not taken a critical approach and delved into ideational aspects, which determine actor's function and actions. Thus this research focused on this under researched region.

From the above discussion different ideational realms viz. neoliberalism, developmental interventionist state (statism), and communitarianism that have been propagated at the national level for irrigation management during different time periods becomes salient. Furthermore, from the above discussion, it becomes evident that reproduction of policy narratives, ideas and structure do not happen on its own. Rather is performed by actors who in this research have been categorised under the typology ideational brokers, decision makers, and theorists. Furthermore, any ideology manifests itself in practice differently and is contingent on actors who are spearheading an approach/idea/value/belief system. A lot has already been written about merits and demerits of these ideologies -neoliberalism, communitarianism, and statism (Gadgil & Guha, 1995; Kamat, 2004; Kohli, 2001; M. Leach et al., 1999; McCarthy & Prudham, 2004; Mitchell, 1991; Moore, 1989; Ostrom, 1990; Sangameswaran, 2009, p.; inter alia). Here the focus is through discussing the empirical case of Madhya Pradesh *how* idea/ideology behind irrigation management has changed in state narrative, but this has not led to change in practices for irrigation management. Consequently there are multiple rationalities on how irrigation system ought to be governed. These different rationalities or ideational realms have resulted in adoption and perpetuation of different understanding on participation, corruption, role of state in irrigation management, as all actors have embraced the propagated beliefs selectively. The rest of this section substantiates through empirical findings why different ideational realms clash with each other.

PIM in Madhya Pradesh was not donor driven, though was supported by donors through ICEF funding, and later through World Bank's funding. The state level ideational processes -structural factors and role of political office bearer- that led to enactment and implementation of this programmatic idea (PIM) was discussed in chapter five. This chapter illuminated that PIM process in Madhya Pradesh was top-down, with focus of state government on shifting responsibility for

irrigation management from Water Resources Department (WRD) to farmer organizations. There was pressure to decentralize irrigation management in the Congress Party led state government (see chapter five). Other scholars have also identified top-down implementation of PIM as a problem in India for instance in Andhra Pradesh and Haryana (see Gulati et al., 2005; Narain, 2003; Nikku, 2006). This work departs from the above literature by carefully teasing out *why* top-down implementation still prevails by focusing on structural and cultural ideational factors that guide ideational realm of actors in Madhya Pradesh. Furthermore, focus has been on the guiding elements of ideational realms and how they can be differentiated. Moreover, in this work I have emphasized how multiple rationalities clash with each other and consequently has made the current approach to irrigation policy redundant.

To elaborate, as an offshoot of the predominant neoliberal ideational realm and confidence that decentralization will deliver result led to enactment of the PIM Act in Madhya Pradesh in 1999. Consequently, in year 2000 locally democratically elected farmer organizations (WUAs) were granted greater authority over management decisions legislatively and farmer organization made a subject of new form of governance in the state narrative. It is noteworthy, however, that first generation farmer organizations (*sinchai panchayats, Krishak Samitis*) constituted at the micro level through USAID and World Bank funding were not successful in the state (see chapter seven). However, overlooking this learning, policy makers initiated PIM in the state. Importantly, it is only with constitution of these second-generation farmer organizations that efforts to activate participatory governance structure at intermediate level were made in the state which was the main concern of this research. Notably, elections for intermediate level -distributory and project- committees have been held only once in the state and thus this research focused on understanding roadblocks to decentralization.

Through empirical findings I illustrate that the senior bureaucracy in the state have used the narrative of poor functioning of farmer organization at the micro level i.e. of WUAs as a reason for non-implementation of intermediate level farmer organizations i.e. distributory committee and project committee (see chapter eight and nine). Furthermore, senior bureaucrats substantiating their experience of SAS with similar major irrigation project in the state argue that the Act was drafted and implemented in haste; and suddenly after the first WUA and distributory and project committee elections it was felt in the capital that the entire system was becoming unstable (Interview, June 6, 2011). The above citation highlight that with change in idea of irrigation management in state narrative, there was change in worldview of bureaucracy, who perceived that greater political participation of distributory and project committee would make the system unstable. Thus, not

surprisingly, a very senior bureaucrat in WRD, Bhopal posits that in the first term (i.e. post 2000) the project committee presidents commanded considerable authority and power, and they were not using this power judiciously rather for self-interest - the post became politicized (Interview, February 8, 2011). So, one dominant bureaucratic worldview that emerges is that farmer organizations were corrupt and perceived to be gate keeping. As a consequence of internalization of this worldview by senior bureaucracy, election for distributory and project committee were not held in the second and third term. Interestingly, as noted in chapter seven, earlier junior bureaucracy was also a stronger gatekeeper. At the field level, there was clash in viewpoint on resource management between junior bureaucracy and WUAs (mostly WUA presidents). Thus, there were divergent rationalities on the subject. It is also worth noting that in absence of distributory and project committee in SAS Project, a considerable amount of decision making (about water and financial allocation) that should have been delegated to distributory and project committee members, now remain with engineers of the WRD who work in the SAS Project (see chapter nine). The reluctance of the executive engineer towards PIM and WUAs is in consonance with Irrigation Commission of 1972 findings. As after the commission recommended greater focus on OFD work, many engineers and bureaucrats were against this decision of decentralizing the micro level for water management (see chapter four). The above discussion highlights two fold problems with current approach to irrigation in India. First, there has been change in irrigation policy, but not much change in approach to implementing policy. Second, multiple ideational realms on irrigation management has led to emergence of multiple worldviews of actors on how resource can be governed and these worldviews are in conflict with each other. To substantiate further, several progressive senior officials in Bhopal argue that one of the reasons for lack of intermediate level decentralization has been the haste with which PIM was implemented.

“Till we have person oriented business approach, we will always have multiple way of working. Every individual has their own line of thought; and person-to-person thinking changes and accordingly how policy is implemented changes. But this is not right, change in policy should happen if the system demands so and not because an individual thinks so (...) The basic aspect is that before implementing PIM, there should have been a pre-preparation stage on PIM, wherein lot of capacity building on PIM should have been done and serious efforts for system rehabilitation were required. Control of the irrigation network ought to be given to farmers slowly i.e. handing over of the system immediately after elections was too fast and WUAs were not prepared to take over this responsibility (...) Earlier to maintain the earthen system, with the aid of farmers we use to use layer the soybean waste and mud on the bunds of canals, to control seepage. Through this system there was a joint system of responsibility created, however, gradually this withered. We are expecting farmers to take up too much work on one hand. On the other hand most of the engineers are now past fifties, therefore age is catching up and they are not interested in going out in the field. If new people join then things will change (...)

PIM in Madhya Pradesh has been implemented hastily that is my opinion. But I am not an authority on this subject; I am not a social scientist but then one needs to start thinking on this line to change things (...) Moreover, once implemented in haste; the focus has been on positive reporting. My personal opinion is that all reporting (including donor reporting) on PIM are on positive side. I have not seen a single report discussing problems from the department's side" (Senior bureaucrat, WRD, Bhopal, December 16, 2011, emphasis added).

To recall, WUAs were constituted in Madhya Pradesh within six months of enactment of the PIM Act (see chapter nine). Another senior bureaucrat in Bhopal who is well respected for his work on initiating PIM in the state, echoed similar viewpoint: 'it was sudden and top down; it did not give enough time to farmers to understand the situation and farmers were not prepared to take up this new responsibility' (Interview, WRD, Bhopal, June 7, 2011). The above citations elucidate that at the state level there is a realization that implementing PIM without deliberative discussion -i.e. have consenting worldview- with all concerned actors, viz. farmers and junior officials has slowed down the reform process as the irrigation bureaucracy has not been comfortable with this directive that took the power away from them to control these irrigation networks. Interestingly, another meeting with this senior bureaucrat eight months later evoked similar sentiments about PIM but with a more positive perspective of WRD. The senior bureaucrat in the second meeting observed that the problem has been poor capacity building of WUAs. Furthermore, in the later interview, he put the onus of poor progress of PIM in the state on slow learning curve of WUAs and thus, the need for WRD to work on this aspect (Interview, WRD Bhopal, June 7, 2011; February 9, 2012). From above discussion, the influence of structure in influencing worldview of the second bureaucrat is evident as there is a felt need to have positive reporting for the work being done. Also, the focus has been on portraying WRD officials in positive light and to put the onus of poor implementation of PIM on poor learning curve of farmers. To recall, many of irrigation reports in the eighties had also blamed farmers for poor management (see chapter four). This is reflective of circular thinking within irrigation bureaucracy who initiates reforms but is not prepared to take it to its logical end (and tries to ensure that power remains in hands of WRD) an outcome of their worldview that is still influenced by statist thinking. Additionally, positive reporting on this subject is indicative of a dominant narrative that is being created by state and international donors to continue work without taking any drastic measures that may change the status quo. I had also demonstrated this through farmer testimonies in chapter eight.

Moreover, empirical findings elucidate that policy makers ideational realm i.e. understanding of farmers as a homogenous category, who could be organized by top-down designing of institutions of political participation, has not been accurate (see chapter seven and eight, and nine). Boelens,

Getches and Gil (2010a) also make similar observation about top-down implementation of institutions which aim to apply externally imposed cultural and political values on rural communities in South America. Findings of this research establish that that the particularities of the local cannot be clubbed within one predominant worldview of farmers, which is driven only by their rational interest and thus they are expected to collectivize in order to avail irrigation services. Rather farmers operate under different worldviews, which has been informed by different ideologies governance that they have experienced (see chapter seven and eight). Furthermore, the empirical findings also illustrate that though the neoliberal idea of PIM propounded by international organizations gained salience in policy narrative at the national and state level, diffusion of the values, norms, beliefs that embody the idea has been slow at the project and farmer organization level. There is a clear mismatch in understanding between policy that the state is perpetuating, and actual perception of junior bureaucracy and farmer/ farmer organization on the ground, on how irrigation management ought to be undertaken (c.f. Saravanan, 2010). The lens of ideational realm facilitated in underscoring that though international institutions like the World Bank have influenced policy making, but so has the irrigation bureaucracy, in equal measure, by evading the question of decentralizing the intermediate level, primarily based on the argument that WUAs are corrupt and not ready to take up this role (see chapter nine). This is indicative of the strength of the worldview of state (irrigation) bureaucrats who have used their interpretation of legislation on PIM for implementation both at the state level, as discussed in chapter five, and at the project level as discussed in chapter eight and nine. Clearly, at least a section of bureaucracy is still functioning under statist belief of having command and control over the irrigation systems and has thus evaded the question of devolving 3Fs (Funds, functions, and functionaries) at intermediate level.

Moreover, weak political will (or rather *strategic* political will) has further hampered intermediate level decentralization. Given, weak/strategic political will to change the status quo - this minimalist interpretation has not been questioned either by the political office bearers or senior bureaucracy. Not questioning the status quo has also been favourable for the political office bearer, as farmers approach local Members of Legislative Assemblies (MLAs) to ensure their access to irrigation water and likewise it is in the interest of MLAs to appease their constituents. Chapter seven to nine had highlighted the norms and values of patron client relationship that embody the worldview and relationship between MLAs, farmers and farmer organization members. Hence, not surprisingly, the MLAs do not want to disturb the status quo. Likewise, many senior bureaucrats posit that intermediate level decentralization is not in interest of MLAs, as a project committee president in a project like SAS would command greater authority (given the expanse of the project) than the constituency of a legislative assembly (see chapter nine).^{cxxxiii}

The conceptual frame of ideational realm in this research also facilitated in demonstrating how a dominant narrative (neoliberal, statist) for irrigation management has been reproduced in the policy arena, and how this has resulted in a mismatch between field realities - what impersonal state structure envisages and what junior bureaucracy perceives. Saravanan (2010) and Swain & Das (2008) have also made similar observation by undertaking an institutional and economic analysis however their work focuses on salience of institutional constraints on actors actions. The above findings are in consonance with experiences on participatory irrigation management from other countries like Indonesia where irrigation bureaucracy has been reluctant to share responsibilities, specially senior bureaucracy (c.f. Suhardiman, 2008; Suhardiman & Mollinga, 2012). Moreover, the idea behind modifying the institutional structure was to create a sustainable structure for resource governance. However, reworking of institutional structure has not reduced the financial crisis of bureaucracies as I had indicated through discussion in chapter eight that the collection of irrigation revenue has not improved since involvement of farmer organizations.

Furthermore, based on empirical findings discussed in chapter five to nine it can be succinctly argued that tardy reform process has been *deliberate* as there has been minimalistic implementation of the PIM Act by the competent authorities/ engineers. For instance, according to the Act at least two general body meetings in a year need to be held for a WUA. The competent authority/sub engineers have through their day-to-day functioning interpreted number of general body meetings as maximum rather than a basic minimum and there is almost no awareness about the general body meetings amongst farmers. Thus, there are multiple understanding and implementation of the idea of participation that is framed by different worldview (discussed in chapter seven to nine). Similarly, Table 10.1 elaborates different interpretation of corruption and elections that different actors have.

Table 10. 1: Diverse understanding on key issues in actors' ideational realm

Actors	Diverse meanings/understanding on key issues in actors' ideational realm		
	Participation	Corruption	Elections
Farmers	<ul style="list-style-type: none"> - Participation as voting - Value that can change reality - Delegation of irrigation work to farmer organization 	<ul style="list-style-type: none"> - Is a given, structural issue; normalized - Is <i>gandagi</i> - Negative value 	<ul style="list-style-type: none"> - Muse of people with money & time, interest in politics - Provides resources & opportunities - Casting vote as directed (womenfolk)
Farmer organizations (mostly viewpoint of WUA president members)	<ul style="list-style-type: none"> - Substantial participation: ability to exercise greater authority & decision making in functioning of WUA - Gatekeepers 	<ul style="list-style-type: none"> - (Petty) corruption are 'adjustments' - Embedded in quotidian living - Corruption as commission 	<ul style="list-style-type: none"> - Opportunity to improve local condition. Facilitates substantial participation - Opportunity to initiate into politics - Greater power and authority
Senior	<ul style="list-style-type: none"> - Procedural matter: through 	<ul style="list-style-type: none"> - Farmer organization 	<ul style="list-style-type: none"> - Handing over responsibility of

<i>Actors</i>	<i>Diverse meanings/understanding on key issues in actors' ideational realm</i>		
	<i>Participation</i>	<i>Corruption</i>	<i>Elections</i>
bureaucracy	quorum's - Convenience and efficiency, apolitical participation - Check & balance mechanism	are corrupt - Hesitant to talk about their own corruption or of corruption at macro level	management to farmers - Voting for material gains by constituents (farmers) - Contestation and populism
Junior bureaucracy	- Instrumental participation: Implementing rules regulation strategically - Procedural participation: nominating women members	- Local corruption as minor malpractices	- Increase in burden of work - Dual reporting - Lesser control over farmers
International organizations like the World Bank, ICEF	- Co-participation model relying on beneficiary contribution - Apolitical participation - Mainstreaming gender	- Systemic issue that needs to be corrected - Elections & greater representation can reduce corruption	- Elections deepens democracy, provides voice to the unheard - Creates greater transparency and accountability
NGO Saadhan	- Co-participation model - Encourage & enable political participation of constituents	- Need to be corrected & exposed - Reporting to authorities can reduce corruption - Strong leaders, collective voice can reduce corruption	- Tool for empowerment - Opportunity to create appropriate check & balances that can facilitate greater transparency
International consultancy	- Minimalist procedural issue	- Normalized & essential part of being	- Procedural issue

From Table 10.1 it is evident that there are multiple meanings associated with participation, corruption and elections and this has led to perpetuation of multiple rationalities on how water ought to be governed. Notably, different understanding of participation can be clubbed under Arnstein (1969) ladder of participation which categorizes participation as citizen power, tokenism and non-participation and differentiates different levels - politicized and depoliticize- of participation. For instance, in Table 10.1, the understanding of bureaucracy on participation is non-participation, while international organisations enunciate depoliticized participation, which when implemented becomes for tokenism. Corruption and elections can also be viewed from similar lens of politicization or depoliticization. From the above table, different understanding of corruption, for instance, illuminate that in quotidian living, corruption has been depoliticized and become 'part of being' in actors ideational realm. Furthermore, as elaborated in empirical chapters, actors contend that corruption is a structural issue to be corrected, however, none of the actors attached negative value to their own corrupt practices. In context of corruption, a common ideational realm is that the individual corruption is acceptable and has been normalized in quotidian living. It is the structural corruption, which is viewed originating at macro level that is a problem. Furthermore, it can be concluded from Table 10.1 that actor's ideational realm is crisscrossing social identities, especially at the local level,

as far as understanding of key terms like participation, corruption, elections are concerned. Additionally, a common viewpoint at the local level of junior functionaries of the department, farmers and even some of the project officials of SAS is that that PIM is not working. The next section discusses different worldviews that have been a hindrance for carrying out irrigation reforms.

Command and control mind-set

Command and control mind-set here is referred to the worldview of bureaucracy who still are guided by the beliefs and values of developmental interventionist state and have not adopted the 'new' beliefs of leaner state that neoliberalism envisages. To substantiate, few senior officials of WRD in Bhopal posit that one of the major roadblocks to smooth implementation of PIM in the state is temperament of officials i.e. there command and control mind-set.

"There is conflict between what WUAs want to do and what engineers want them to do. The WUAs are interested in overseeing more work related to irrigation management, but the engineers have not let go of the idea of control over the irrigation system and thus don't want WUAs to take over" (Interview, June 6, 2011).

"Bureaucrats are powerful and misuse their power. After the enactment of the PIM Act they were supposed to function as support team but it has not happened and this has slowed down the process of reforms" (Interview, December 16, 2011).

The above citations evince that WRD officials are wary of giving up power and control they had over irrigation networks (c.f. Sengupta, 2006), as before reforms, they were sole managers of irrigation systems. It also becomes evident from the above citation that the progressive officials in the state capital acknowledge the gap between what the legislative change demanded from officials and the actual reality, that is the *mansikta* (mind-set) of a predominant section within WRD which was not ready to give up this idea of control - a predominant structural worldview that was also evident at the national level (see chapter four, five and nine). Additionally, empirical evidence demonstrates anxiety and unwillingness of department officials to share work with first generation farmer organizations like *sinchai panchayat* that were constituted in 1980s and 1990s at the micro level; despite knowing that during the earlier period, legislatively the role of farmer organizations was limited to being assistants to department officials (see chapter seven). Furthermore, the command and control mind-set of the state bureaucracy stems from non-discursive politics of command, which the bureaucracy practiced, by knowing that they enjoyed surrogate rationality to maintain social order (Kaviraj, 2010, p. 149), discussed earlier in chapter four.

Additionally, senior bureaucracy during interviews were more open to discussion on participation and few officials who are pragmatic/progressive posited that the problem with reform process has

been the departmental focus till now i.e. its mode of functioning as a civil works and construction department which is an outcome of developmental interventionist state ideology of Nehruvian era which focused on construction of large dams. There is a need to refocus department's (work) orientation and have two-streamlined divisions, i.e. construction and service oriented. The bureaucrat posits that 'if we combine service and construction section, then the system will get damaged. System efficiency can only be achieved if the focus is on improving service delivery' (Interview, December 16, 2011). Furthermore, progressive officials in Bhopal argue that junior bureaucracy or irrigation staff in projects sites have not adopted management and participation terminology and this has been a hindrance for smooth implementation of PIM (c.f. Lipsky, 2010). To simply put it, the (junior) bureaucracy has not showed any willingness to decentralize. The philosophy that officials in SAS project function under are - if work happens fine, if does not then it is fine as well.^{cxxxiv} However, as I had demonstrated through findings of chapter eight it is not only the junior bureaucracy that has showed unwillingness to decentralize. Even senior bureaucracy in Bhopal and SAS Project, Vidisha were sceptical to decentralize the intermediate level. Farrington et al (1999) have made similar observation through their work in context of watershed management in India.

Further, evidence indicates that participation has been constrained by (strategic) practices of *recentralization* not only at the WUA level, but also at the intermediate level: WRD at the state level has not conducted distributory and project committee elections in the second and third term (see chapter eight). The position of project committee president in major irrigation projects, commands control over the distribution and management of entire irrigation system, and for instance in projects like SAS, can have decision making power over the irrigation water of a constituency which in some cases is greater than the constituency that a MLA commands. Therefore it is not surprising that the political office bearers are threatened by this new appointment. Whilst for bureaucracy the decision to decentralize has been top-down as well, to an extent, as the Madhya Pradesh has tried to follow the national trajectory of decentralization, as elucidated in chapter five. Thus, at the state level, this decision of not holding elections is partly influenced by worldview of political office bearers and partly by the irrigation bureaucracy. As both these actors' are averse to the idea of losing power and control they had over irrigation systems (and farmers thereof). Clearly the worldview political office bearers and (at least) sections of bureaucracy is still influenced by the ideology of developmental interventionist state.

Moreover, politicians enjoy power that farmers bestow on them by approaching them to improve their access to irrigation water in case of conflict. Overall, given the subtle and not so subtle efforts made to recentralize, it is evident that two influential actors (bureaucrats and politicians) do not

want to let this project of participation lead to a deeper social or political change, as it is not in their interest. Furthermore, the national level discussion on genesis of PIM and role of international organizations in influencing policy making at national level makes it evident that at the national level, PIM policy was devised without taking into account the complexity at local level (discussed in chapter four). In other words, it can be safely posited that the PIM policy-making process is blind to these multiple worldviews/rationalities that exist in the society, and these worldviews determine the relationship between bureaucracy and farmers. Additionally, the empirical chapters demonstrate that even farmers/farmer organizations are also not interested in decentralizing irrigation management. Thus, a collective worldview on decentralization is the unwillingness to decentralize, as actors believe that it will not work given power differentials and lack of legitimacy of the idea in actor's ideational realm (see chapters, seven to nine). Given, this status quo I argue through this research that one needs to rethink the idea of decentralization, as it is redundant/a failure in current socio-political context of Madhya Pradesh (also see chapter nine). Moreover, the essence of democratic decentralization through participatory practices, the way it has been implemented, cannot be viewed as a project that could lead to deeper social or political change in the SAS Project region. Rather participatory practices that have emerged in this region needs to be viewed in light of constraining bureaucratic worldview, evident from their perceptions. Thus, a larger question to ponder is why promote participation, when actors who have to take forward this idea are not interested in it?

Checklist mind-set for conducting capacity building

The above-discussed empirical findings establish that current approach to irrigation management is not in sync with worldview of farmers, farmer organization and bureaucracy. Perceptions and existing mind-sets do not change easily. It requires regulations that can support change and are not ambiguous or are tailored to take forward a certain idea of change. In this context, capacity building efforts undertaken under SAS Project and the two select WUAs need a mention. A senior progressive bureaucrat in WRD reflecting on the training programme carried out by Madhya Pradesh WALMI posits that the training programmes leaves a lot to be desired. 'The trainers are not innovative and undertake training programmes with a checklist mind-set' i.e. programmes only done with objective of completing on record that training programme has been conducted. The components and method of training is uninspiring and repetitive, and does not spark much interest/enthusiasm among WUA presidents. To elaborate:

"If we think that by doing workshop or publishing literature, the ethos of PIM will be imbibed, we are mistaken. In actuality, we need to go back to basics and start from the

first few letters rather than the end. The manner in which work is being done (i.e. the way participation is being implemented) in field needs to be re-evaluated. Awareness has increased, but we still need to work towards ensuring some basic minimum understanding about the ethos of participation and how work ought to be done” (Interview, December 16, 2011).

Furthermore, a WALMI faculty reflecting on the capacity building programme for WUAs posits:

“We have created dependency by creating government committees for the last sixty years. Frankly speaking, all the capacity building that we are doing currently is generating only awareness amongst WUAs about their role and functions. There is no effort being made through our capacity building programmes to make them technically capable to handle management aspects. These issues need to be addressed. WALMI is going to do it, given that it is the core agency for capacity building. Earlier WALMI was the nodal agency for WRD, but was transferred to rural development department in 1997-98. So, our priorities changed and we now work on a broader domain including non-irrigated area for water management. Thus our focus was diverted to watershed management and rainfed agriculture i.e. there has been a gradual shift from command area to non-command areas. This shift in focus has affected work in command area. As there are limited specialities and services available, so there has been lesser focus on irrigation in the last decade or so” (Interview, August 30, 2011).

From the above citations, two things become evident: structural constraints (i.e. who they report to) have influenced the functioning of WALMI, as with transfer to rural development department WALMI officials did not give adequate attention to training programmes of WRD. Secondly, worldview of WRD officials who implement PIM on ground needs to be broadened if this neoliberal project has to succeed. What also becomes evident from the above discussion is that too many (structural) changes can divert the focus of concerned actors’ to perform consistently given multiple ideologies for governance. Additionally, capacity building measures till now have been only for tokenism and only for WUA presidents and competent authorities. These training programmes are carried out in WALMI, Bhopal and the Territorial Constituency (TC) members and farmers are not part of this process (see chapter eight). Thus, lack of awareness, interest and consequently participation of TC members or the general body of the WUA towards WUA functioning is not surprising (see chapter five and eight). The above discussed was the approach of WALMI to capacity building which conducts programmes in an instrumental manner.

The approach of the international consultancy hired under World Bank was even worse (discussed in chapter five and nine). Interestingly, the senior bureaucrats of WRD in Bhopal were hesitant to talk about the performance of this consultancy firm with respect to SAS Project (or any other project) as WRD terminated their contract because of poor performance and there was an on going enquiry of

the same in 2011-2012 (Interview, December 16, 2011).^{cxv} While the ICEF funded Saadhan's work was appreciated by the farmers but not by bureaucracy (see chapter nine).

Interestingly, these organizations for capacity building were operating under three different ideologies viz. statism (WALMI), neoliberalism (International consultancy), and communitarianism (Saadhan).^{cxvi} However, none of them were able to change the narrative for irrigation management in the project area or the worldview of farmers/farmer organizations/junior bureaucracy as discussed in this work. Overall, hegemonic participatory turn at the international level has resulted in creating rhetoric of participation at the national and state level, however with little results on ground.^{cxvii} Moreover, it is essential to recognize that actors' worldview are not going to change from token capacity building programmes, deeper thought into standpoint of actors, multiple rationalities and why or when they initiate action ought to be taken.^{cxviii} This requires broadening the perspective/approach to understanding institutional change. A broader focus on deliberative discussion with receiver's (farmers) and implementers of change (junior bureaucracy) could be one approach. However, this deliberative discussion cannot be necessarily achieved through crafting of institutions as suggested by Ostrom (1992) which is an offshoot of mainstream institutional approach and envisages efficient resource management through institutional crafting.

Moreover, uncritical approach to capacity building has led to: first, introduction of this term in the policy lexicon without taking into account marginal differences between the proclaimed goals and methods of community development and community capacity building; second, application of the term community is done uncritically and universally to rationalize top-down interventions by national/state government and organizations like the World Bank; third, motive of this approach need to be clarified as changing organizational structure does not by itself alter the power differences at the local level; fourth, an underlying assumption in the term capacity building is that there people who have deficient capacities, skill sets, knowledge (Craig, 2007). Thus, conceptualization of capacity building programmes ought to be rethought as it currently is premised on the idea that local community is power deficient and thus needs to be empowered by building capabilities by the state and international institutions. The current approach to participatory irrigation management policy is from the standpoint of what farmers lack (i.e. be able to do operation and maintenance and other activities on the canal) and thus aims to embody a productive form of power, which can put them into action. This approach is not working as demonstrated in this work, as political projects of the governed do not match with the desires and plans of the governors (c.f. McKee, 2009, p. 472). The above discussion also evinces that policy makers would have to go

beyond traditional binaries for instance, citizen/subjects, and private/public while conceptualizing irrigation policy.

Statist mind-set?

A section of farmers in the two select WUAs of the SAS Project have a statist mind-set and expect the state to provision irrigation water as irrigation infrastructure is state property and its operation and maintenance ought to be undertaken by state representatives (see chapter seven to nine). Although, as elaborated in chapter eight and nine, statism – a notion based on the logic of political order- is not the only mind-set that farmers have. Rather as Kaviraj (2010) elucidates logic of social order which is premised on pre-capitalist social and bargaining relations also gain primacy in actors ideational realm. In chapter nine, this rationale was teased out while discussing farmer's viewpoint on irrigation management in SAS project, wherein farmers apprised that the system is being managed, as there are established/acceptable practices for managing water.

Furthermore, handing over the operation and maintenance of irrigation network of SAS to WUAs was like handing over a system to the populace, which is mired with problems and required major responsibilities. It was assumed by the state/donor organizations that farmers would collectivize and spontaneously organize themselves if they perceive it in their interest; however, this has not happened in context of functioning of the two WUAs -Betwa and Saraswati (see chapter seven and eight). There is a need to re-evaluate how irrigation between upstream and downstream farmers ought to be organized. To substantiate, discussion with farmers, junior bureaucracy in SAS Project and in the state capital are indicative of the fact that practice of *warabandi* without proper infrastructure is not practical in all regions and without proper infrastructure, though it is still being voiced in policy circles and workshops as viable management approach. To elaborate, in January 2012, I had participated in an all India seminar on 'sustainable management of irrigations system through participatory irrigation management: techno-legal issues of farmer organizations' in Kota, Rajasthan to observe the proceedings. Mostly senior bureaucrats from WRD/irrigation department of most of the states' participated and the discussion in the seminar delved into how PIM can work, and not much discussion was paid to structural and cultural issues, which are hampering implementation. In fact not much recognition was given to problems in implementing PIM, which reflected the rhetorical approach that officials have without any interest in recognizing problems or initiating change. To elaborate, a senior official of Ministry of Water Resources, New Delhi posited, 'we don't accept that PIM has failed or is failing. There is scope for PIM in major and medium projects. There are teething problems but there has been work going on' (Presentation, January 6, 2012).

Recent scholarship has also questioned, for instance, the relevance of following *warabandi* in large-scale irrigation systems. Chambers (2013, p. 158) in fact connotes metal *warabandi* boards as 'monuments of top-down ignorance and folly'. Although, to give credit to the executive engineer of SAS Project, he did recognize the futility of following *warabandi* without proper infrastructure (Interview, February 10, 2012); but is trapped in the state structural directives that are top-down and at times far from the field reality. Here, again the futility of top-down policymaking as evinced by national and international donors becomes salient. Empirical findings illuminate that bureaucracy has developed their own strategic practices to evade some of these follies. However, given the power that irrigation bureaucracy commands, they have also used these strategic practices to restrict implementation of decentralization to suit their own purpose.

PIM has failed in SAS project, and status of other projects in Madhya Pradesh is similar. Experience from Andhra Pradesh and Haryana also indicates that there have been problems with its implementation. Interestingly, Bassi and Kumar (2011) in context of Madhya Pradesh have argued that PIM will be more effective 'if few institutional changes are made which are suitable for the end users'. However, as this research has demonstrated that these are *not* teething problems and issues will not resolve by instituting change at the micro level. Decentralization needs to be scaled at different level (see chapter nine) *or* given the current *mansikta*/ ideational landscape of actors the idea is redundant in its current form.

Overall, based on empirical findings I argue that it is *not* only organizational affiliations that determine how actors' perceive and act on a particular policy i.e. fulfil their ideational role for instance as decision makers or constituents organizations. Rather actors' work at interface of different realms. Thus, despite efforts made to instil greater participation and commitment of farmers towards irrigation management in the state narrative (Madhya Pradesh), there has not been much change in the field reality, as institutions created i.e. WUAs as an outcome of decentralization at the micro level have not resulted in desired change, and this narrative of failure has been used by the bureaucracy to further stall the reform process at the intermediate level. Given that senior bureaucracy has not showed willingness to decentralize, it would be foolhardy to expect the junior bureaucracy to initiate a participatory paradigm, as they expect the leadership at the senior level need to set the norm. Senior bureaucracy's unwillingness to decentralize in Madhya Pradesh was also evinced by an expert on irrigation management at the national level, who is also chairperson of the working group of major and medium irrigation and command area development for the Twelfth Five Year Plan.

“Madhya Pradesh has a long way to go, as senior officials don’t want to work (...) if farmers perceived any benefit/economic good was created by the system they would work, but they know they have no powers (...) PIM could work if it was part of much larger initiative to bring greater performance orientation in bureaucracy. If there were clear benchmarks for performance and there was view of verifying it. It is critical to holding irrigation bureaucracy accountable (...) if the bureaucracy wanted PIM to work, then it would work (...) Irrigation department of all the states are hoodwinking the political leadership. Ministers have no way of finding out what is the truth for instance about actual canal irrigated area in the country” (Interview, April 13, 2012).

The above citation again highlights the critical role that irrigation bureaucracy plays in restricting implementation of PIM not only in Madhya Pradesh but also in other states. In this context, salience of history is critical, as actors’ worldview are not developed ahistorically as demonstrated in this work.

10.2 Theoretical and analytical strength of ideational realm

This research demonstrates the utility of using the conceptual frame of ideational realm to understand the complexities that irrigation management sector in India is mired with. Using the lens of ideational realm I highlight not only the divergent worldview that are at play but also illustrate how ideas that gain salience through policy directives at national level may not be able to have envisaged impact (stickiness) at state or local level due to actors’ ideational realm that are guided by multiple worldview, norms, and values.

Ideational explanation facilitate in understanding not only how reform process shape but also shed light on how idea of farmer participation is legitimized by actors, in different *contexts* - an aspect that is overlooked while designing institutions. Ideational variables -relevant for this paper- that defines actor’s ideational realm are norms, beliefs, values, culture, ideology, and structure. It is noteworthy that some of these variables are also identified as institutional variables. The difference is that in mainstream approach to institutional change these variables are looked at objectively to see how they relate to actions, whilst an ideational approach undertakes this endeavour in an interpretative way (Parsons, 2007, p. 100). Using this approach I have gleaned the underlying dynamics that shapes ideational realm of actors. Ideational approach is useful to discern different rationalities and goes beyond institutionalist explanations that articulate salience of a singular rationality, which are tied to values, rules and regulations that an institution inscribes to. Moreover, non-institutional variables and exogenous and endogenous factors are left out of institutionalist account (Gorges, 2001). I do recognize conceptual advances made by new institutionalists like Denzau and North (1994) by referring to conceptual models and cognitive maps to explicate institutional change. However,

Denzau and North's (1994) claims are from rational institutionalism perspective wherein salience of (material) structural logic as determinant of action is elaborated. Furthermore, difference between institutionalist claim and ideational claim is that institutionalist claim that institutions shape action and thus do not give space for multiple interpretations and perceptions. Whereas ideational claims explains action as a result of people interpreting their world through certain ideational elements (Parsons, 2007, pp. 71, 96). Moreover, origin of ideas i.e. social, economic and historical factors that shape them are by themselves crucial as an explanatory variables (Gorges, 2001). Thus, Ideational approach facilitates in overcoming the over deterministic role of institutions which give primacy to singular rationality and posit that institutions sort out ambiguities that arise and these ambiguities in environmental conditions are just unintended consequence of institution building at the outset. Another difference between ideational and institutional approach is that institutionalists see ambiguity in environmental conditions only at the beginning while ideational scholars view ambiguity throughout (Parsons, 2007, p. 98). Having said that it needs to be noted that sociological institutionalism has strands of ideation elements in its approach wherein it is argued that conventions that take on a rule like status in social thought and action (Parsons, 2007, p. 100; Powell & DiMaggio, 1991, p. 9). Although, the problem is that in conceptualization of sociological institutionalism these rules and conventions take on an overly deterministic focus on all-defining cultural norms (Schmidt, 2008, p. 304). Ideational approach is also better informed than institutional approaches like rational choice theorists who give primacy to rational preferences of actors, or the historical institutionalists who argue for self-reinforcing path dependent outcome of institutions (Schmidt, 2008, p. 304). Overall, ideational analysis is useful to fill gaps in institutional theory – rational choice, historical, organizational or sociological institutionalism wherein scholars have posited difficulty in explaining institutional change (Campbell, 2004; Schmidt, 2008). Ideational approach also connoted by few as discursive institutionalism or ideational institutionalism (Schmidt, 2008) facilitates in better understanding of political action compared to other institutionalist approaches. Ideational analysis is also different from structural analysis as its defining feature is starting from the ambiguity that arises due to environmental conditions. Readers will notice that I have outlined structure as one of the ideational variable in this work. The reason for putting structure with other ideational variables like norms, beliefs, values is to distinguish it from taken for granted explanation of structure for instance, material or legislative structures. As demonstrated through the empirical findings, structure can be something more intersubjective which structures and is structured by human interactions. For instance, PIM Act necessitates that management committee meeting of WUAs ought to be held every month. However, sub engineers and WUA presidents have an intersubjective understanding of *how* monthly meetings ought to be done, and thus paperwork is kept up-to-date, but actual meeting are done on as-required basis. Moreover,

given multiple sites of governing (farmers, farmer organizations, junior bureaucracy) after creation of WUAs, there are multiple power nodes that are generated given diverse meaning attached to participation (see table 10.1), which is indicative of how structuring of structure happens. Thus, structure cannot be taken for granted as an explanation. Rather it is the interaction between structure and social cultural context that needs to be emphasized.

Conceptually the focus in this work has been on providing clearer definition of ideational variables and the utility of operationalizing it. Focus has been on detailed elaboration of ideational variables to elucidate how they influence both the policy implementation and outcome and thereby result in tardy reform process at micro level, which has been used as benchmark to not decentralize the intermediate level by the legislative and executive arm of the state. Furthermore, ideational literature deals with these variables from the perspective of *actors* position (and thereof their realm-*mansikta*/mind-set), which is in contrast to discursive institutionalist who employ ensemble of ideas, concepts and categorizations of beliefs, norms, etc. to make sense of *underlying* institutional patterns (Weiner, 2007, p. 20 emphasis added). Additionally, the concept of ideational realm as demonstrated through this research overcomes the fuzziness of ideas that comes with ideational analysis by providing clearer definition of ideational variables, which is one of the critiques of ideational approach (Schmidt, 2008). Process tracing in ideational analysis also facilitates in elucidating how ideas are tied to action. In this dissertation I elucidate how multiple interpretation of key terms -participation, corruption, state control, elections- has been generated, deliberated and legitimized by actors who are carriers/implementers or recipients of ideas.

Furthermore, ideational approach in this dissertation illuminated that ideational factors 'programmes, frames, paradigms and public sentiments' are shaped by context which is determined by structural and cultural elements and thus shape policies and its implementation. The conceptual frame facilitated in highlighting the objective as well the subjective ideational realms as key drivers for understanding how actors perceive their interest, role, and devolution of 3Fs of decentralization. This conceptual frame is useful to demonstrate not only relationship of idea with action of actors, but also facilitates in demonstrating how actors reproduce apolitical notion of participation (c.f. B. Agarwal, 2001; Arnstein, 1969; Gaventa, 2004). This interpretation is divergent from other literature wherein it is argued that institutions reproduce a certain idea for instance, social exclusion (c.f. De Koning & Cleaver, 2012). Rather I argue that it is actor's ideational realm or *mansikta* that reproduces and propagates certain idea -be it of participation or of management or corruption or elections- in light of structural and cultural elements.

The concept of ideational realm is comparable to scholars who undertake actor oriented approach like Cleaver (2002, 2012) who argue through the notion of bricolage that actors work within 'bounds of circumstantial constraints' and thus institutions could be crafted at the micro level to achieve desired change. However as findings of this research indicate decentralization cannot be achieved by focusing only on micro level, as it is difficult to craft institutions at intermediate level, given multiple rationalities that are at play. It is noteworthy that both the concept of ideational realm and bricolage as explicated by Cleaver emphasize relationality with other actors i.e. people's consciousness and actions are shaped in web of human connection (c.f. Cleaver, 2002; Cleaver, 2012, p. 40). However, the notion of ideational realm also sheds lights on structural elements (along with cultural elements) and thus facilitate in understanding how ideas are legitimated.

Moreover, this work evinces causal explanation for lack of intermediate decentralization, rather than just provide an explanation. To recall, chapter three had listed one of the criticism that ideational researchers face is of providing weak causal explanations. This drawback is overcome by demonstrating policy making as a two-step process. As a first step the focus was on elaborating how certain idea for irrigation management was established during the colonial period, which resulted in establishment of a dominant ideational realm for irrigation management. I also demonstrate how post-independence, the focus was on doing away with the colonial idea of governance and greater focus on democratic and welfare-oriented approach. This led to initiation of multiple narratives on irrigation policy in India which was operationalized by ideational brokers. Consequently, in the late 1960s there were varieties of idea championed for irrigation management by experts, bureaucracy and international organizations; however, during this period there was limited decentralization (see chapter four). It's only in the 1990s at the national level with a weak Indian state and pursuance of neoliberal policies that idea of participatory irrigation management was championed with great rigour by organizations like the World Bank and adopted by the bureaucracy, which led to adoption of the idea of participatory irrigation management (see chapter four). Similarly, for Madhya Pradesh an exposition of how policy is promoted as an outcome of the endogenous and exogenous factors is provided to demonstrate causality (see chapter five). Empirical findings in chapter six to nine further elaborate the causal effects of top-down designing of institutions. To elaborate, it is acknowledged that change does not happen overnight. Causality of ideas in this work has been established by elucidating different learning curves for actors'. For instance, change in ideational realms of farmers over the years, or bureaucracy's internalization of the idea of participation and then its operationalization. Furthermore, change in ideas has not lead to change in practices of water management, but as demonstrated through this work change in ideas has led to change in approach to irrigation management. This has changed actors' viewpoint on the interface between state and

society i.e. the intermediate level. Moreover, change in ideas, in fact, has led to change in functioning of actors, for instance, junior bureaucracy now have to indulge WUA members, which was not the case earlier.

Overall, this dissertation further advances understanding of ideational literature by arguing the need to pay attention to structural and cultural ideation factors i.e. to understand the interdependence of categorical inequalities as this facilitates in understanding how ideas are generated, deliberated and legitimized and thus provides response to the central research question on reasons for poor reform process are the multiple ideational realms that are being pursued by actors (see chapter five to nine).^{cxxxix} Thus, on one hand functioning of junior bureaucracy elucidates how they establish minimalist interpretation and implementation of the PIM Act as a status quo. On the other hand farmers also exercise their agency and restrict their participation as they view this top-down designing of institutions is not for their benefit. This viewpoint of farmers of giving greater salience to quotidian realities is also formed by their assessment of process of irrigation management, which they perceive ought to be with the state. Thus, it becomes evident that actors' have interpreted idea of democratic decentralization propagated by the state for irrigation management differently and have taken it forward to fulfil their vested interests. This approach of studying roadblock to institutional change overcomes the limitations of other institutional approaches that give salience to one factor over other like rational interest, social explanations or institutional path dependency.

Ideational approach followed in this dissertation can also be compared and contrasted with legal pluralists who bring forth centrality of water rights in analysis of institutions of water management to posit how WUAs lack incentives and rights for management of irrigation system or reluctance of irrigation agencies to cede authority (Meinzen-Dick & Bruns, 2000, p. 37). The legal pluralists don't make dualistic interpretations of legal or customary rights, for instance, as an explanation for poor functioning of WUAs. Moreover, their argumentation does not illuminate why certain ideas gain primacy over other as they focus on how laws and institutions relate to social practices. But they miss to give salience to structural and impersonal forces like ideology, which influences implementation of decentralization.

Having discussed the salience of the notion of ideational realm, it is prudent to acknowledge its limits as well. To wit, ideational realm, worldview, mind-set have been defined and interpreted by scholars differently that is to say, fuzziness of this concept can be its strength as well as weakness, as lack of common intersubjective understanding of the concept among scholars leads to problem in implementing this as a methodological approach. Moreover, causality is difficult to establish through this approach as one is taking about variables like ideas, norms, and culture. Given the discussion is

about something intangible, it is difficult to measure compared to institutions or structures and thus at times scholars have critiqued this approach to be tautological, static and monolithic (Parsons, 2007, p. 94). Although, as demonstrated through this work causality can be hard to establish but *can* be done and similarly, variance has also been demonstrated through this work, establishing multiple understanding of participation, corruption, elections, for instance, among actors.

10.3 Future research areas and limitations of this research

This dissertation has argued for moving away from a policy prescription model of designing of institutions as propagated by international institutions like the World Bank and the Indian state alike, as it is argued that this prescriptive model has not worked on the ground. Although, as is evident from empirical findings this model has been pursued by the Indian state at the behest of international organizations with great fervour. The relation between World Bank and the Indian state, specifically the irrigation department will be intriguing to research, as they have continued funding of certain programmes despite known problems.^{cxl} It is obvious that there has been certain degree of accommodating action from both actors' to ensure a way forward. I am aware of the tied funding argument for pursuance of a certain policy; however, the answer is not that simple and needs to be delved further. I had sought appointment with World Bank official to understand this conundrum but unfortunately, I was not given an appointment. The other donor agency, ICEF has already wound up its operation in India, and some of the relevant people who spearheaded the ICEF funding in Madhya Pradesh have since moved to other organization outside India, hence were not approachable. The research findings could have been richer from these discussions and that is a limitation of this research.

Additionally, role of political office bearers in stalling the reform process need to be studied in depth (also suggested by Mollinga, 2003; Nikku, 2006). This research had aimed to do this, but lack of access to MLAs despite several attempts made in this direction is a shortcoming of this research. However, I was able to interview one former MLA of this region who provided some insights into the issue from the time when he was an MLA in the 1980s – when the project was commissioned.

Another empirical research issue is to study how did Soybean cultivation start in this region and its impact on changing irrigation practices in this region. If it was not for Soybean being practiced rainfed in this region, then the irrigation management system (perhaps) would have been different and farmer would have also availed water during *khari* season, which could have made the water management practice more efficient and sustainable.

10.4 Concluding remarks

Overall, this research posits that having a blanket (one size fits all) approach to institutional change based on expert advice without taking into account field realities can go awry. It is critical to bear in mind the processes by which institutions are created -to wit if they are an outcome of a deliberative discussion process or rather were created at the behest of an organizational mandate or ruling- as that has an effect on institutional life later on. Further, if institutions are created without bearing in mind the deliberative discussion process then diverse worldview of actors can be a major roadblock for successful implementation of any policy, as is evident from the case of intermediate level decentralization in SAS project. Thus, approach/viewpoint to devising irrigation policy needs to be rethought.

This dissertation underscores that political/democratic decentralization that the state sought to undertake, ought to be viewed through the lens of ideational realm to understand why reforms are tardy. This research also discusses how top-down regulation can initiate processes for a certain institutional change, but with little problem resolution on the ground as ideational realm of actors curtailed full implementation of the policy. There has been minimalistic implementation of PIM by the bureaucracy and weak political will to decentralize has further hampered the decentralization process. Thus, this research contends that mere policy formulation is not going to ensure effective management. Rather there needs to be cohesion between actors' worldview to ensure smooth implementation of policy. Furthermore, initiating a governance structure at the intermediate level is a problem not affecting irrigation sector. Rather other sectors like health, education, forests are facing similar institutional design problems as well. Thus, this study merits paying attention to actors' ideational realm to find an interface for building institutions for democratic decentralization.

Democratic decentralization is potentially a good notion, however, the manner in which decentralization and participation has been pursued currently is apolitical. Further, at present there are too many committees (*panchayats*, village forest committee, seed committee, etc.) at the micro level. Most often these committees are headed by elites of the village who have become new gatekeepers of information and/or resources. This has resulted in disenchantment and *burai* (acrimony) at the village level about farmer organizations, and farmers are wary of outcome of participatory approaches, which are depoliticizing participation (as demonstrated through this work) but politicizing the local community. As discussed in this work, categorical inequalities determine who gets elected for a committee post (like WUA president) or who has access to information. The depoliticizing effect of participation has also created lesser accountability and transparency for functioning of these committees. Decentralization in its current form is not a panacea as it is

envisaged to be. This failure needs to be recognized rather than connoting emerging issues as mere teething problems. Working from this standpoint, salience of decentralization at different levels needs to be recognized, as an important aspect to address issues of devolution at different levels and this cannot be done without taking into cognizance divergent worldviews of actors as otherwise institutional change that is envisaged will not gain legitimacy in actors ideational realm.

Overall, this work demonstrates that enactment of PIM legislation has been viewed as an end in itself to solve the maladies that irrigation sector in India is facing and consequently, hegemonic pursuance of this approach has foreclosed exploration of alternative ideas, which could enable better irrigation management. An alternative perspective could be having a 'problem shed approach' as articulated by Mollinga, Meinzen-Dick, & Merrey (2007) rather than watershed or hydraulic approach to irrigation management. To elaborate, focus could be on improving decision-making power, and deliberation at local level/project level to resolve quotidian problems. For instance, farmers of SAS Project do not want *warabandi* as they are aware that it is not practical to implement in the region. Therefore, instead of focusing on enforcing it as was done by one of the district collectors in early 2000, it is pragmatic to work with the existing system of water distribution to ensure equity and efficiency. Additionally, a problem-shed approach can ensure quicker and faster resolution of conflicts. In the empirical chapters, I had discussed how Saraswati WUA has been delineated on hydraulic basis and the distance between upstream village of the WUA and downstream village of WUA through all-weather road is about forty kilometres. Given, the distance, it is practically not viable for farmers to approach WUA president for day-to-day matters. Here again, the futility of having large WUA delineated on hydraulic principle becomes salient. Overall, it becomes evident that by making PIM an end in itself has resulted in diversion of focus from exploring other alternatives that could facilitate in achieving the goal of better irrigation management. Findings also reveal that farmers are not interested in participation and neither is bureaucracy and thus both these actors have overridden the legislative mandate of implementing PIM ruling by initiating strategic practices that just accentuate symbolic and procedural mode of participation. However, does not resolve the quotidian irrigation problems of an area.

^{cxix} Literature review of select cases Mexico, Philippines, Turkey and Colombo indicates salience of structural elements; organizations (international donor agencies, national or provincial bureaucracies); actors (experts and individuals working with donor organizations, bureaucrats, political office bearers, user groups) in shaping policy on decentralizing irrigation management (see chapter two).

^{cxx} Additionally, prevalence of top-down idea of participation in Madhya Pradesh is also evident from the funding that state governments need for large-scale irrigation promoted. Most of the state government are dependent on CADP funding and as discussed in chapter four and five and earlier in this chapter, CADP is

promoted and funded by central government and provides funds and ideas for the state to adopt participatory approach to irrigation. Given lack of adequate funding with state departments, a senior official of WRD, Bhopal elaborated the plan of using CADP fund for building capacity and enhancing farmer participation (Interview, December 20, 2011). Apart from that the capacity building was also funded by World Bank's MPWSRP in select projects that has a strong PIM component in its project design.

^{cxvxi} In Karnataka, *Sahayog* - another NGO - has facilitated/ served as an intermediary between farmers and irrigation bureaucracy. *Sahayog* had sensitized and mobilized the farming community to imperatives of reform process. Their work was later taken up by *Pragathi* (an offshoot of *Sahayog*) that was made by farmers who were disenchanted with the rift among the professional leadership of *Sahayog* (Narain, 2009, p. 128).

^{cxvxi} In Haryana, Water Resource Consolidation Project (WRCP) was initiated after an agreement between government of Haryana and the World Bank. Under this project in 1994, it was mandated that farmers contribute in operation and maintenance activities in large irrigation systems by collecting irrigation fees. PIM, however, has been ineffective in Haryana; there has been no change in equation between farmers and the irrigation department, or reorientation of bureaucracy (Narain, 2003, p. 217). Moreover, no effort has been made to change this status quo.

^{cxvxi} This finding can be contrasted with finding of Narain (2003, p. 217) in Haryana, who posits that water management problems in Haryana were not only below the outlet, where the focus of reform had been. Rather one needs to also look at reforms at the middle and system level, which is in control of the irrigation department.

^{cxvxi} This finding is in accord with a recent Central Water Commission evaluation of the SAS Project that observes:

'It is also felt that the sub-engineers who were the main instrument in maintenance of the irrigation system have withdrawn themselves from this work after the transfer of maintenance of the system to farmer organizations. Without any powers under the act, sub engineers feel let down by the department and feel humiliated in working in the changed scenario. Presidents of the farmers' organizations have also started thinking that sub engineers will have to work under them as per their will and wishes. These wrong notions of the farmers have to be removed and they should be made to work in close association with the sub engineers and seek technical guidance from them in running and maintenance of the system' (*Gol, 2006b, pp. EC-9*).

^{cxvxi} Chapter five had discussed how this particular consultancy was selected over NGOs who initially were hopeful of being awarded the institutional development contract for another term under MPSWRP programme of the World Bank.

^{cxvxi} As already discussed in chapter five, Saadhan did try to broker that paradigm but they were not given funding to continue their work of capacity building post 2007.

^{cxvxi} Scholars in the edited volume by Cooke and Kothari (2001) have also questioned hegemonic participatory development discourse.

^{cxvxi} To elaborate, WALMI officials train farmer organization members and it assumed that they would embody the ideas of the ideational realm of neoliberalism while undertaking their duty.

^{cxvxi} Till now, scholars have attributed institutional change to either structural changes, local political/social context, or actors rationality however, scholars by using this either/or criterion have missed delving into the interdependence and interaction of structural and cultural factors (c.f. Berman, 2013, p. 227).

^{cxl} Other authors have also suggested greater understanding of this relationship (See Chambers, 2013; Levine, 2013; E. Shah, 2012).

11 Appendices

11.1 Appendix I: Method of data collection and analysis

This research draws together evidence collected ethnographically and from archival sources to elucidate salience of history to understand current irrigation management practices. Additionally, by focusing on cognitive factors like perception, beliefs, values of farmers/farmer organizations on irrigation management, I on one hand deconstruct the narrative around irrigation management to illustrate salience of farmer ideational realm as situated in the local socio-cultural context in the SAS Project as a roadblock to intermediate level decentralization. On the other hand, interviews with junior and senior bureaucracy highlight the situatedness of their ideational perspective in history, state functioning and local context. Key informants for this research were identified purposefully to ensure representative from all actors considered crucial for the research design, namely, senior and junior bureaucracy, farmers/farmer organization, NGO personnel, and experts on the subject.

In this note, I focus on three broad points that were not tackled in the research design discussed in chapter one, viz. how the fieldwork was conducted, i.e. how the respondents were identified and interviews conducted, and my own ideational perspective on the same. Secondly, I elaborate how the data was analyzed. Third, I briefly discuss issues that constrained data collection during fieldwork.

I arrived in the state capital, Bhopal and initiated my field research with setting up a meeting with the project director of Water Resources Department (WRD) with help of a former colleague from work. The project director was helpful and encouraged me to talk to some other senior officials of WRD who could provide me more information on the subject. Given, that focus of my work was on intermediate level decentralization, at the outset, I initiated contact with all relevant offices of WRD like Chief Engineer E&M, PIM Directorate, in Bhopal who could have played some role/provided information on intermediate level decentralization issue. This initial contact was crucial, as the Indian bureaucracy is not known to share information easily, and from my own experience with the Madhya Pradesh bureaucracy, as part of my previous work, I knew that I would have to be constantly in touch with them and make my presence felt in order to access information/have discussions. To elaborate further on the process, I always used to set appointment with officials in advance, however, despite setting up appointment, many a times the concerned officials would not be in their office, and it was normal to wait for an hour or more in such circumstances. Getting any information from the Indian bureaucracy is not easy, especially for an independent researcher. Given my conceptual framework, I started reflecting on how they perceived me, as a female, foreign university student from Delhi and

thus, an outsider, and therefore were unwilling to share too much information with me, although, I had put in a formal requisition with the project director to access basic secondary information from WRD. This is also a signifier of the ideational realm of bureaucrats who know that they have a position of power and authority and thus were in general unapologetic about not sticking to appointments or providing information.

Apart from WRD, I also contacted Water and Land Management Institute (WALMI), faculty at Indian Institute of Forest Management (IIFM), key Non-Government Organizations (NGOs) working on the subject and discussion with these officials/experts facilitated in narrowing down the case study site i.e. the Samrat Ashok Sagar (SAS) Project which is close to the state capital.

While in the field I was critical of my own worldview and did not allow my subjectivities influence the trajectory of my data interpretation or how my field research was conducted. Rather it was the intersubjectivity that I paid attention to while undertaking field research. To elaborate, I conducted my fieldwork in the heartland of BJP. Politically my views are contrasting to that of right wing fundamentalist party. However, as a researcher, I chose SAS area, as that was the ideal case study site for my research. However, that did not constrain me for being objective as a researcher about my work in the field area. Furthermore, having selected the case area, I was critical of my actions, or how I presented myself in the field and not to be biased by my precepts. I initiated myself in the SAS Project by setting up meeting with executive engineer of the SAS Project, who gave me an overview of the project and also introduced me to two sub engineers who accompanied me to two WUAs in which they were secretaries. I am aware that going to villages with government officials can give an impression to farmers that you are somehow associated with state/not independent. I was aware of this association, and had immediately made note in my diary to avoid similar situation in future and also to clarify my position with farmers and womenfolk later, which happened over long discussions over a period of time. Nevertheless, the introduction to the SAS Project area through the two sub engineers was useful for me to understand the area and later I selected two WUAs (Betwa and Saraswati) for in depth research. In my initial days I also got in touch with NGO Saadhan, which had undertaken capacity building programme in this project (see chapter eight). During these initial days I also selected my first field assistant who was a local farmer from Sadhai village of Betwa WUA. He was educated, had a Masters degree, was well travelled, and knew the project area well and thus was a perfect candidate for field assistant. Moreover, my field assistant had also worked as a community organizer for the international consultancy firm that the World Bank had recruited under Madhya Pradesh Water Sector Restructuring Project (MPWSRP). As mentioned in empirical chapters (six, seven and eight) the SAS Project area farmers are wealthy and many farmers live in close by

towns and visit villages from time to time. Here, the experience of my field assistant with the international consultancy firm came handy to set up appointments with Water User Association (WUA) presidents and other Territorial Constituency (TC) members. My field assistant facilitated and introduced me to WUA members of the two selected WUAs and also to members of the intermediary level farmer organization i.e. the distributory and project committee members of the SAS Project. However, after few months my first field assistant expressed his unwillingness to work, as he wanted to prepare for a state exam and was busy with agricultural activity. I was in the middle of fieldwork at this point and though I already knew all the major actors in the region who were part of farmer organization. I thought it would work best, if I could find another field assistant to facilitate my work. This time, one of the fieldworker of NGO Saadhan helped me in finding a field assistant. My experience with my two field assistants was interesting and made me cautious and critical of how I interacted with local community and also made me reflect about their perception about me. My first assistant was a Brahmin and the second one a *dalit* (lowest caste group). There was perceptible difference between how the two field assistants approached big landholding upper caste farmers (mostly *rajputs*). Taking cue from this experience and not a believer/practitioner of caste system personally, I chose not to tell my last name (as it is indicative of one's caste) and I was critical of the caste discussion - an important factor in those parts.

Overall, in the initial few months of my field work I focused on making myself aware of the area, farming practices, farmers, farmer organization members both pre and post constitution of the PIM Act. Given, that the area in the two WUAs is quite large with many villages, I did not find it fruitful to live in one village. As somehow farmers could have perceived that I was biased against one community/village. This was a good decision in retrospect as over many months of field interviews and informal discussion with farmers I realized that there were many categorical inequalities (as discussed in empirical chapter) that divided the farmers and living in one area could have restricted my access to information. Additionally, given that the research focus was on intermediate level decentralization, I found it useful to live in a close by town, which also made my access to officials facile. Moreover, many a times meeting with WUA members was set in nearby towns as they used to either live there, or preferred meeting in town.

During the initial few months into data collection, it became evident that awareness of farmers about farmer organizations was poor. Additionally, a generic question that farmers asked was how was my work going to be beneficial to them. Given, that this question was asked frequently I always clarified my position as a researcher. Moreover, I also took this opportunity to apprise farmers and womenfolk about role of farmer organization, rights of farmers as envisaged in the Act. Additionally, I

used to meet WRD officials regularly for follow up interviews/discussion, and I took that as an opportunity to bring to their notice some of the quotidian problem in the two select WUAs, for instance, inaction by WUA after flooding of farmer fields. Moreover, compared to the officials in WRD, Bhopal the junior officials in SAS Project were much more forthcoming with sharing data, after approval of their reporting authority.

I maintained field diaries for the entire duration of my research, in which I noted not only my field interviews, but also made notes from my observation in the field, WUA president meetings at executive engineer's office, etc. I also prepared regular monthly progress reports to share with my supervisor and tutor. These reports facilitated me to structure my thought and work while in the field and were also useful to initiate myself into data analysis later. Additionally, I used a voice recorder to record (almost all) my interviews, by taking consent of my interviewees. The interviews were conducted in English or Hindi depending on the preference of the interviewee. Select interviews were transcribed by a transcription agency.

Post completion of my fieldwork phase, I immersed myself in the data I had collected i.e. listening to audio files, perusing transcripts, field notes and the other secondary data I had collected. Given that I conducted mostly semi-structured interviews with open-ended questions. The responses of interviewee to a question were woven through out an interview, and thus I analyzed interview transcripts, field notes, for common recurring themes or outliers, categories and patterns that evinced causal relationships and facilitated responding to the primary research question. Additionally, I have used the secondary data collected from the project office, to corroborate field findings. Although, it is recognized that whilst undertaking interpretative research, farmers or officials perception/construction of social reality with respect to irrigation management is a determinant of their ideational realms. To elaborate, farmers and junior officials alike perceive late 2007 to 2010 as scarcity years. Although, data on opening and closing of the canals presented in Appendix VII illustrates that intensity of scarcity was not same in all these years, however, it is the perceived scarcity that determines ideational realm, was an important insight that corroboration with secondary data provided in this context.

There were several impediments to fieldwork. Here I will elaborate few that I perceive affected my work. First, about two months into my fieldwork, while in the field, I got sick and was diagnosed with Typhoid, and this slowed down my work considerably. Secondly, accessing secondary information from government organizations was a major hurdle, especially old information. To elaborate, after the first round of WUA elections in 2000, WRD had organized training programme through RCVP Noronha Academy of Administration. However, the officials of the Academy were not able to provide

any documentation of the training programme of that time. They apprised that any document, which is more than five years old, is purged to maintain space and organize information. Therefore, details on various components of this training programme are not available. Ideally, the library ought to have had one copy of the training programme for their records.

Getting any information from the Indian bureaucracy is not easy, especially for an independent researcher. Given my conceptual framework, I started reflecting on how they perceived me, as a female, foreign university student from Delhi and thus, an outsider, and evinced unwillingness to share too much information with me, although, I had put in a formal requisition with the project director to access basic secondary information from WRD. Additionally, from past experiences, I was critical of how I conducted myself in the field and being aware that they were being guarded about giving data was due to their inter-subjective realm. I through constant interactions, meetings, and waiting in their offices, spoke to them and alleviated their concerns. Moreover, by doing so I did not give in to the norms of the social (bureaucratic) order. Rather by persevere and pursuance I managed to elicit information. In fact, one of the respondents even suggested that I should use RTI to get information (Personal interview, December 16, 2011), which is indicative that not all in the bureaucracy are corrupt and few officials were warming up to the idea of greater transparency and accessibility. On the other, this remark by a senior bureaucrat elucidates his acknowledgement of problem that WRD faces today- the resistance to open and share information. The officials are aware that the state structure provides them a (iron) veil that they can use to restrict access to information. If an independent researcher faces this problem, it is not too hard to imagine how access to information is restricted for farmers and WUAs (discussed in chapter six, seven and eight). Interestingly though this particular official of WRD with whom I had been following up with for many months for data with little success in a conference that I was attending on PIM where he was also present remarked that I should stop collecting information now as I have already collected information to do five PhDs (Field notes, January 2012). From the above encounter, it is clear that some of the WRD officials were not comfortable to share information and were wary of the subject I was researching.

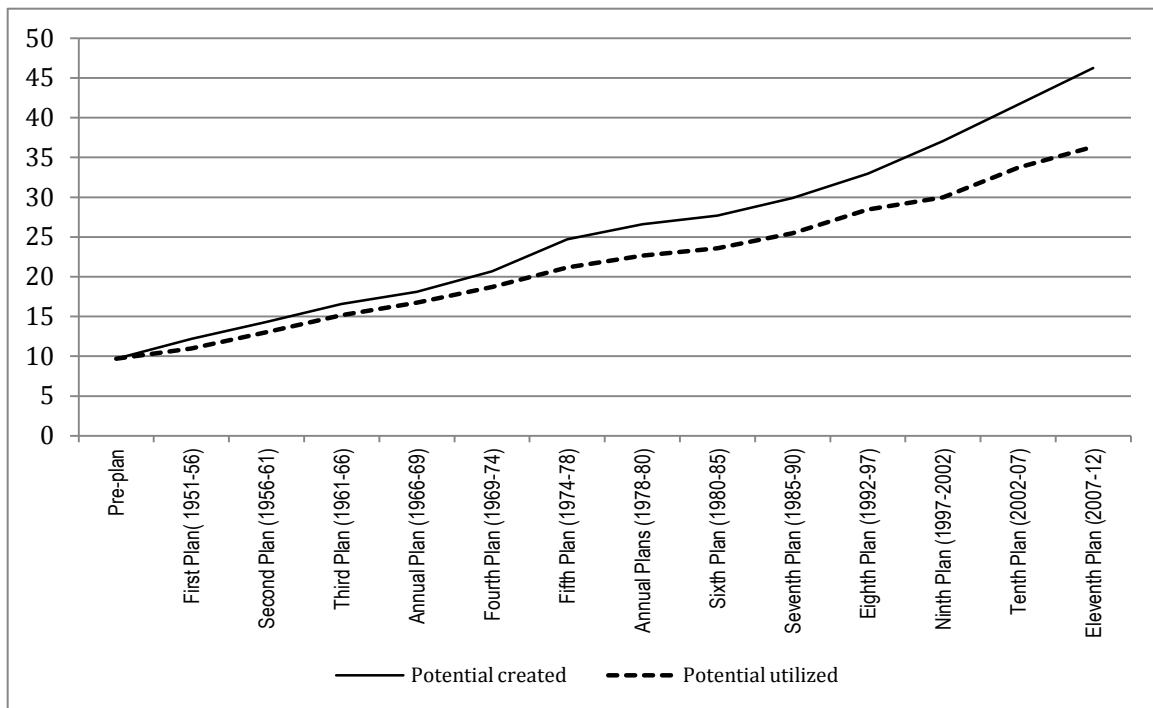
Furthermore, two excerpts from my field diary with two different officials in Bhopal one a WRD official and another expert on the subject highlight the dilemmas of a researcher studying ideational realm of actors:

“(...) Interestingly, Mr. X categorized SAS Project as an instance of very active project that has good coordination between WUAs and engineers. During the interview I pointed out that my field impression is slightly different and there is not much awareness amongst farmers about the project or even among WUA members about what their roles and

responsibilities are. Mr. X's response to this question was that if I want to see really good active participation of farmers and WUA then one ought to go to Harsi project close to Gwalior district (...) Although, interestingly Harsi project was recently evaluated by Mr. Y and he noted that everything is not right there either. Another professor from IIFM made similar remarks. He was part of the team that was constituted for internal review of Harsi Project by World Bank, Washington D.C (Field diary, February 9. 2012).

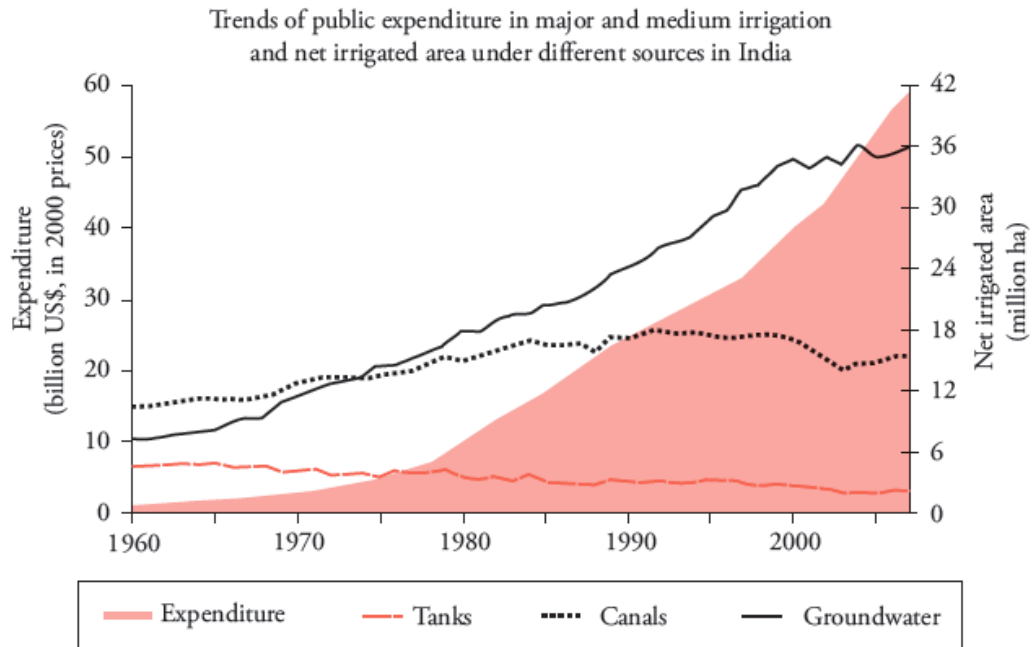
From the above notes it is clear, that the WRD official, initially praised the SAS Project, but when I questioned him further about the project, based on my knowledge/field experience, he instantly encouraged me to see another project and discounted the success of SAS Project. Although, my meeting with another expert on the same day had brought forth that all was not well in the Harsi project either. There are many instances like the one narrated above and I was always in a dilemma whether to question the officials and present alternative facts as that might constrain my access to them in future. To resolve this dilemma, early on in my fieldwork I decided to be as transparent and maintain sanctity of an independent researchers, which entailed that I would share any information I had, if this facilitated in questioning what the interviewee was putting forth.

11.2 Appendix II: Irrigation potential created and utilized in India since the pre-plan period



Source: Data compiled from Gol (1992a, 2001a, 2009b)

11.3 Appendix III: Accelerating investment and decelerating irrigation benefits



Source: Shah (2011, p. 74)

11.4 Appendix IV: Box on Irrigation Act 1931 and Irrigation Rules 1974

The Madhya Pradesh irrigation Act 1931 defined the irrigation management regulations in Madhya Pradesh along with the Irrigation Rules of 1974. Under the Irrigation Act 1931, 'rights in the water of any river, natural stream or natural drainage channel, natural lake or other natural collection of water vests with the government' (GoMP, 1931, Section 26). The water supply under the Act was under the discretion of the executive engineer, and payment of water was done according to the area irrigated based on the prevalent demand rates (GoMP, 1931, Section 38). The Madhya Pradesh Irrigation Act is supplemented with Irrigation Rules 1974 to give operational guidelines for users. The 1974 Irrigation Rules, however, are unclear about distribution of water below outlet. Although, they indicate that in ordinary circumstances distribution of water for irrigation beyond the outlet will rest with the beneficiaries, who can divide and allocate it among themselves. In case of disagreement between farmers, the irrigation panchayats were responsible for ensuring proper distribution (GoMP, 1975, Rule 219). Further, in case of disagreement, the irrigation *panchayats* with the aid of *amin* and in discussion with beneficiaries' (i.e. the farmers) were to resolve the dispute by coming to a mutual agreement that the beneficiaries were bound to abide by (GoMP, 1975, Rule 220).

Moreover, another issue that becomes evident on perusing through legal writings is the willingness to initiate *warabandi* for distribution of water at least in letter for several decades now. The Irrigation rules of 1974 that were formed for Irrigation Act of 1931 were corrected in 1982 through a departmental notification, wherein any reference to *osrabandi* was deleted from the irrigation rules, and corrected with the term *warabandi*. For instance, in section 75(C), (D)(4), (E) & (G), paragraph number 220, 221, 222 the words *osrabandi* were corrected to *warabandi* vide notification number F-27-8-81.MM-39 dated November 6, 1982. Similar deletion was done in rule 213(a), vide, Irrigation department's notification number F-27-8-81-MM-39 dated November 6, 19x82 (GoMP, 1975). This deletion seems to be in consonance with the thinking at the national level.

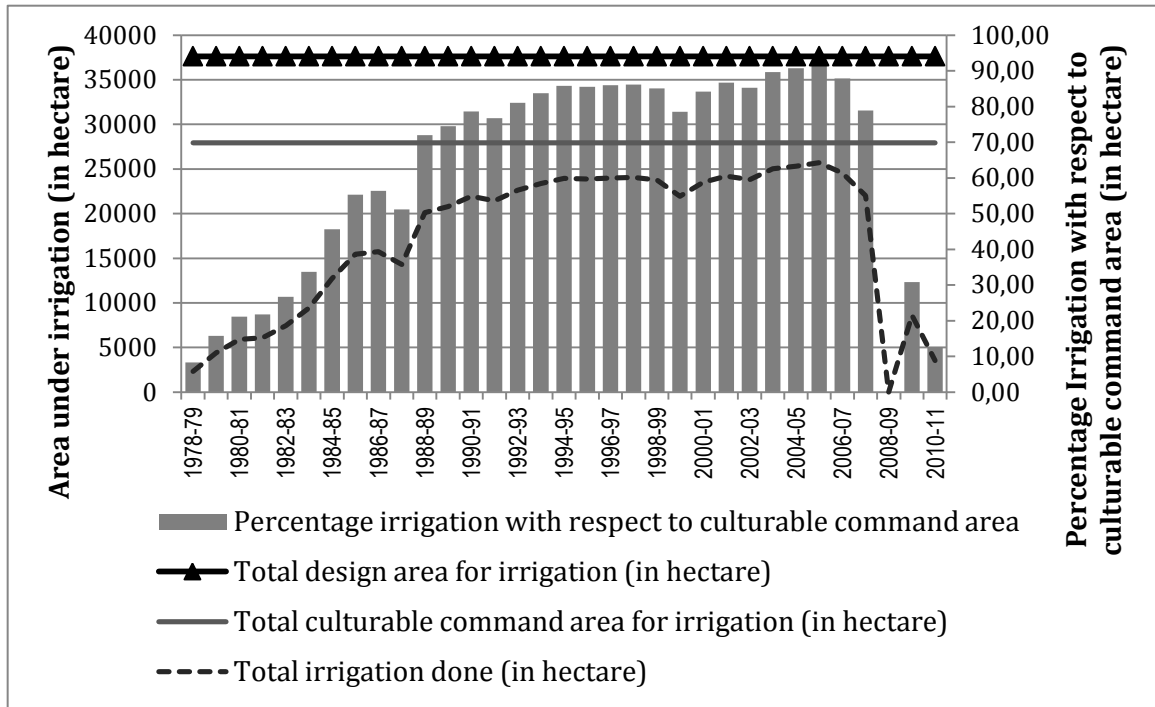
Overall, the irrigation Act has been powerless and was not able to provide enough directions to the irrigation *panchayats* that were initiated in the state. The same is elaborated through the status of irrigation *panchayats* in Chapter six.

11.5 Appendix V: Opening and closing dates of canal system

Year	Opening of canal	Water level (Ft)	Closing of canal
1978	October 27, 1978	1502.15	March 31, 1979
1979	November 1, 1979	1493.00	April 2, 1980
1980	October 28, 1980	1502.65	April 1, 1981
1981	October 30, 1981	1499.40	March 30, 1982
1982	November 1, 1982	1501.41	March 30, 1983
1983	November 1, 1983	1504.85	April 25, 1984
1984	November 1, 1984	1501.90	March 31, 1985
1985	November 1, 1985	1506.40	March 31, 1986
1986	November 1, 1986	1502.20	March 1, 1987
1987	November 1, 1987	1499.65	March 14, 1988
1988	October 27, 1988	1502.30	April 10, 1989
1989	November 1, 1989	1498.30	March 31, 1990
1990	October 29, 1990	1505.30	April 4, 1991
1991	October 25, 1991	1504.60	March 29, 1992
1992	November 3, 1992	1497.40	March 30, 1993
1993	November 11, 1993	1503.10	March 29, 1994
1994	October 29, 1994	1506.50	March 29, 1995
1995	October 29, 1995	1501.10	April 8, 1996
1996	November 12, 1996	1505.20	March 22, 1997
1997	November 30, 1997	1503.70	April 6, 1998
1998	November 1, 1998	1506.20	March 31, 1999
1999	November 1, 1999	1504.40	March 31, 2000
2000	November 1, 2000	1501.40	March 31, 2001
2001	October 28, 2001	1501.60	March 13, 2002
2002	October 29, 2002	1497.00	April 1, 2003
2003	November 6, 2003	1504.40	March 29, 2004
2004	November 1, 2004	1505.10	March 7, 2005
2005	October 27, 2005	1506.40	March 1, 2006
2006	November 1, 2006	1506.60	March 31, 2007
2007	October 10, 2007	1488.80	December 14, 2007
2008	Not opened	-	NA

Source: SAS Project Office, Division No. 2, WRD, Vidisha

11.6 Appendix VI: Year wise actual irrigation done against culturable command area in SAS Project



Source: Design by author based on data from SAS Project Office, Division No. 2, WRD, Vidisha

11.7 Appendix VII: Distribution of landholders by the size of their landholdings in 1980-81 in India

Category of Landholders	Size of landholders	Average size of landholding in the category
Marginal	Up to 1 ha	0.39
Small holders	1 to 2 ha	1.43
Medium holders	2 to 4 ha	2.76
Upper medium holders	4 to 10 ha	5.97
Large (rich) holders more than 10 hectares	more than 10 ha	17.24

Source: Data from Agriculture Census of India 1980-81 cited in Dhanagare (1995, p. 75)

11.8 Appendix VIII: Pre (1976-77) and post (2003-04) PIM cropping pattern in SAS Project

<i>Pre project cropping pattern</i>			
Cropping season	Crops	Area (in hectare)	Percentage area cropped
<i>Kharif</i>	Soybean	0	0
	<i>Jowar</i> (Sorghum)	151.668	5.7
	Maize	286.07	1.02
	Paddy	40.146	0.14
	Groundnut	89.356	0.32
	<i>Arhar/toor</i> (pulses)	376.974	1.35
	Others	181.398	0.65
	Total	2565.612	9.19
<i>Rabi</i>	Gram	4984.434	17.85
	<i>Masoor</i>	913.114	3.27
	Wheat	11990.565	42.94
	Peas	57.935	0.21
	Others	2086.627	7.47
	Rabi	20032.675	71.74
Other crops	Vegetable, fodder, fruits, etc.	5325.113	19.07
Grand total		27923.4	100
<i>Post PIM cropping pattern</i>			
Cropping season	Crops	Area (in hectare)	Percentage area cropped
<i>Kharif</i>	Soybean	12155	43.53
	<i>Jowar</i> (Sorghum)	112	0.4
	Maize	163	0.58
	Paddy	26	0.09
	Groundnut	12	0.04
	<i>Arhar/toor</i> (pulses)	35	0.13
	Others	73	0.26
	Total	12576	45.04
<i>Rabi</i>	Gram	9672	34.64
	<i>Masoor</i>	2626	9.4
	Wheat	10520	42.94
	Peas	212	0.76
	Others	1064	3.81
	Total	24094	86.28
Other crops	Vegetable, fodder, fruits, etc.	2690	9.63
Grand total		39360	140.95

* Culturable Command Area of the project (in hectares) = 27924.4

Source: CWC (2006, pp. 273-274)

11.9 Appendix IX: German Summary (Deutsche Zusammenfassung)

Die vorliegende Dissertation befasst sich mit den Prozessen, die 1999 zur Einführung des partizipatorischen Bewässerungsmanagements im indischen Bundesstaat Madhya Pradesh führten. Die Arbeit zeigt auf, warum die Entscheidung, Farmerverbände zu gründen kein Ergebnis eines deliberativen Prozesses war, sondern den Landwirten eher von oben verordnet wurde, was zu sich zähl hinziehenden Reformen führte. Diese Forschungsarbeit legt dar, wie Verordnungen von oben nach unten zwar zu bestimmten institutionellen Veränderungen führen können, jedoch an der Ursache des Problems wenig ändern. Außerdem soll erläutert werden, warum und inwieweit die ideelle Vorstellungswelt der Akteure ein entscheidender Faktor für das Verständnis (und die Gestaltung) institutioneller Reformen ist, da die Dezentralisierung in Madhya Pradesh die hierarchischen Grenzen eher verstärkt als abgebaut und somit ein schwieriges Feld für politische Umsetzungen geschaffen hat.

I. Fragestellung, konzeptioneller Rahmen und Herangehensweise an die Forschungsarbeit

Dezentralisierung wird weltweit als ein Allheilmittel für eine verantwortungsbewusste Regierungsführung angesehen und von internationalen Organisationen und Staatsregierungen gleichermaßen angestrebt, obwohl weltweite Erfahrungen bewiesen haben, dass dem nicht so ist. Trotzdem wurden demokratische Dezentralisierungsprozesse als Wundermittel für das Bewässerungsmanagement vom indischen Staat und indischen Institutionen in gleichem Maße vorangetrieben. Demokratische Dezentralisierungsprozesse sind nicht nur in Bezug auf Bewässerungsmanagement ein wichtiges Forschungsthema, sondern auch wenn es darum geht, Probleme einer gerechten Ressourcenverteilung zu erfassen, welche heutzutage immer noch für alle Staaten eine Herausforderung darstellt. Demokratische Dezentralisierung betrifft jeden Bereich, wie zum Beispiel das Gesundheits- und Bildungswesen oder auch natürliche Ressourcen wie Wasser, mit deren demokratischer Dezentralisierung sich diese Dissertation befasst. In dieser Arbeit soll es demnach um Prozesse gehen, welche die Umsetzung von Richtlinien für ein dezentralisiertes Bewässerungsmanagement auf mittlerer Verwaltungsebene in Madhya Pradesh beeinflussen.

Im Hinblick auf dezentralisiertes Bewässerungsmanagement wurde das ‚partizipatorische Bewässerungsmanagement‘ (PIM) von internationalen Institutionen und Organisationen wie der Weltbank, der US-amerikanischen Organisation für Entwicklungszusammenarbeit (USAID) und der Ford-Stiftung als großartiges Mittel gepriesen, die weltweit benötigten Bewässerungsdienstleistungen zu gewährleisten. Andere Akteure wenden jedoch ein, dass partizipatorisches Bewässerungsmanagement in der Realität nicht funktioniert, woraus sich folgende

Frage ergibt: Wenn das partizipatorische Bewässerungsmanagement nicht funktioniert, warum wird es dann von internationalen Organisationen und Institutionen sowie den verschiedenen Staaten dennoch zur Verbesserung des Bewässerungsmanagements eingesetzt? Zusätzlich zeigen Forschungsarbeiten zu weltweiter Dezentralisierung, dass deren Ergebnisse auf Mikroebene durch strukturelle und kulturelle Gegebenheiten beeinflusst und geformt werden. Basierend auf diesen Erkenntnissen stellt die vorliegende Dissertation die Behauptung auf, dass die ideelle Vorstellungswelt (die Wahrnehmung einer Person, welche über einen Zeitraum hinweg entsteht und durch strukturelle und kulturelle Realitäten geformt und beeinflusst wird) der Akteure die erfolgreiche Einführung jeglicher Dezentralisierungsprojekte beeinflusst. Es soll weiterhin näher ausgeführt werden, inwieweit soziokulturelle, ökonomische und staatliche Strukturen wichtige Determinanten zur Gestaltung der Lebenswelt eines Akteurs sind. Hinausgehend über die Betrachtung von Vorschriften und Richtlinien einer bestimmten Politik beleuchtet die Dissertation näher, wie sich die Akteure aufgrund dieser Politik und innerhalb der durch diese Politik etablierten Institutionen verhalten. Das Konzept der ideellen Lebenswelt wurde dabei als passend befunden, die wahrgenommenen Realitäten der Akteure und deren Einfluss auf Ergebnisse herauszustellen.¹

Bisher wurden verschiedenste Aspekte der Dezentralisation in Indien erforscht, wobei jedoch Betrachtungen dieses Themas für die mittlere Verwaltungsebene fehlen.² Daher hat es sich die Verfasserin zum Ziel gesetzt zu ermitteln, warum die Dezentralisierung auf mittlerer Ebene des Bewässerungsmanagements trotz unzähliger Versuche von Seiten der indischen Regierung und internationaler Institutionen bisher nicht zufriedenstellend war. Die übergeordnete Forschungsfrage befasst sich deshalb mit den ideellen Lebenswelten von Farmern, Farmerverbänden, gemeinnützigen Organisationen sowie über- und untergeordneter Bürokratie, welche die Dezentralisierung auf mittlerer Verwaltungsebene im Samrat Ashok Sagar Projekt (SAS) in Madhya Pradesh, Indien, am meisten beeinflussen (bzw. blockieren). Dies steht im Kontrast zu bisherigen Forschungsarbeiten, welche sich größtenteils auf institutionelle Hürden für die Dezentralisierung auf Mikroebene konzentriert haben. Die Arbeit zielt darauf ab, die drei folgenden Dimensionen des Forschungsproblems zu bearbeiten:

1. Welche Rolle spielen die verschiedenen Akteure, wie Bürokratie, internationale und gemeinnützige Organisationen sowie Experten, bei der Institutionalisierung einer bestimmten Vorstellung über dezentralisiertes Bewässerungsmanagements innerhalb der staatlichen Politikgestaltung? Und wie verbreitet sich diese spezifische Vorstellung im SAS-Projektgebiet?

¹ (Chhatre, 2008)

² (Mollinga, 2010)

2. Wie wird Partizipation von ausgewählten Akteuren, d. h. Farmern, Farmerverbänden, über- und untergeordneter Bürokratie sowie zwei ausgewählten Farmerverbänden innerhalb des SAS-Projekts (Betwa und Saraswati) wahrgenommen? Welche Hürden bestehen auf mittlerer Dezentralisierungsebene?

3. Welche kulturellen und strukturelle Faktoren formen die ideelle Lebenswelt der Akteure und beeinflussen so die Einführung eines dezentralisierten Bewässerungsmanagements auf mittlerer Staatsebene?

Das SAS-Projekt wurde von der Landesregierung Madhya Pradeshs in den späten 1980ern ins Leben gerufen. Seitdem wurden mehrere Versuche durchgeführt, das Bewässerungsmanagement durch die Einbindung von Farmern in verschiedenen Farmerorganisationen zu dezentralisieren. Dies geschah vorwiegend unter der Schirmherrschaft der Landesregierung sowie mit gelegentlicher (finanzieller) Förderung durch USAID, der Weltbank und der indisch-kanadischen Umwelteinrichtung ICEF. In der langen Laufzeit des SAS-Projektes von den 1980er bis in die 2000er Jahre wurden etliche Farmerverbände und etliche Ebenen (mittlere, kommunale und Mikroebene) zum Zwecke der Dezentralisation gegründet, was das Projekt nun zu einer idealen Fallstudie für die Erforschung von Hindernissen für die Dezentralisation auf mittlerer Verwaltungsebene macht. In dieser Dissertation soll daher der Zusammenhang zwischen Dezentralisierungsrichtlinien und Farmereinbindung im Kontext der Kommunalpolitik sowie unter Einbeziehung der ideellen Lebenswelt der Akteure untersucht werden (gemäß Campbell, 2004 und Berman, 2013), anstatt nur davon auszugehen, dass eine größere Farmerbeteiligung für die Dezentralisierung des Bewässerungsmanagements förderlich ist. Die vorliegende Dissertation argumentiert, dass interdependente strukturelle und kulturelle ideelle Faktoren die ideelle Lebenswelt des Akteurs beeinflussen und sich so auch auf die Durchführung von Dezentralisationsprozessen auswirken. Die ideelle Lebenswelt wird in dieser Arbeit konzeptualisiert als Interpretation einer Situation durch einen Akteur. D.h. die Interpretation, und nicht die Situation selbst, ist die Basis für weiterführende Handlungen eines Akteurs. Ideelle Lebenswelten werden von Weltanschauungen, die der Akteur vertritt und welche seine ideelle Rolle bestimmen, geformt.³ Ideelle Variablen sind Normen, Glaubensvorstellungen, Kultur, Ideologie und Strukturen. Sie werden in dieser Arbeit verwendet, um herauszufinden, wie Lebenswelten von Akteuren durch deren Beweggründe sowie Lebensumstände geformt werden.⁴ Zusätzlich wurde das Konzept der ideellen Lebenswelt von der Autorin weiterentwickelt, um aufzuzeigen, dass das

³ (Campbell, 2004)

⁴ (Berman, 2013)

Konzept als analytischer Rahmen geeignet ist, um die langatmigen Reformen im Bewässerungsmanagement zu erklären.

II. Erkenntnisse und Struktur der Dissertation

Die Erkenntnisse dieser Dissertation dienen nicht nur dem Verständnis, weshalb Reformprozesse im Bewässerungsmanagement der Fallstudie nicht richtig greifen, sondern können auch dazu verwendet werden, Dezentralisierungsprozesse im Allgemeinen zu verstehen. Die Forschungsergebnisse sind bedeutend, da weltweit viel Energie und Ressourcen zur Verbesserung dieser Reformprozesse aufgewendet werden, um Staatsführung und nachhaltiges Ressourcenmanagement effektiver zu gestalten. Diese Forschungsarbeit soll auch die Relevanz umfassender sozio-politischer Beziehungen als Bestimmungsfaktoren der ideellen Lebenswelt der Akteure hervorheben. Die Arbeit argumentiert außerdem, dass sich nicht nur die Zugehörigkeit zu einer bestimmten Organisation darauf auswirkt, wie Akteure bestimmte politische Vorgaben wahrnehmen, sondern dass die Akteure an den Schnittstellen verschiedener Lebenswelten agieren. Diese Schnittstellen werden zu einem bestimmten Ausmaß durch die von einer spezifischen Organisation vorgeschriebene ideelle Rolle sowie durch umfassendere sozio-politische und kulturelle Beziehungen gesteuert und geformt, welche wiederum die ideelle Lebenswelt der Akteure prägt.

Kapitel eins gibt einen Überblick über das Forschungsproblem und stellt die Forschungsmethodik dar. In diesem Kapitel wird erläutert, dass das SAS-Projekt als Fallstudie gewählt wurde, da es für großangelegte Bewässerungsprojekte in Madhya Pradesh repräsentativ ist. Außerdem bietet es verschiedene Analyseaspekte, da es das einzige große Bewässerungsprojekt ist, welches finanzielle Unterstützung vom ICEF erfuhr und weil viele verschiedene Akteure (z. B. über- und untergeordnete Bürokratie, Farmer, Farmerverbände, gemeinnützige Organisationen/ Beratungsunternehmen sowie politische Amtsträger) an diesem Dezentralisierungsprojekt beteiligt waren.

Das Projekt wurde hinsichtlich des Lands und der Lage gezielt als Fallstudie ausgewählt. Um verschiedene Sichtweisen innerhalb der Fallstudie hervorzuheben, wurden zwei Farmerorganisationen innerhalb des Projekts ausgewählt: zum einen Saraswati am flussaufwärts gelegenen Abschnitt, zum anderen Betwa am flussabwärts gelegenen Abschnitt desselben Kanals. Daten für diese Dissertation wurden in Interviews mit Schlüsselpersonen, in Fokusgruppendifkussionen, in Beobachtungen und durch die Auswertung sekundärer Quellen erhoben. Schlüsselinformationen wurden in Interviews mit leitenden Beamten, jüngeren Beamten, Nachwuchsingenieuren, rangniedrigen Funktionären des Wasser Ressourcen Abteilung WRD, Personal gemeinnütziger Organisationen, Mitgliedern der Wassernutzervereinigung (WUA), ehemaligen Mitgliedern der gesetzgebenden Versammlung sowie weiteren Fachexperten ermittelt.

Die Dezentralisation wurde sowohl aus hierarchischer (auf nationaler und staatlicher sowie Projekt-/WUA-Ebene) als auch diachroner Sichtweise analysiert. Die historische Betrachtungsweise ist besonders hervorzuheben, da die Ergebnisse auf im Laufe der Zeit entstandenen Interpretationsprozessen, Mechanismen und diskursiver Wirklichkeit basieren. Die Analyse durch den gewählten ideellen Ansatz hat sich als dabei nützlich erwiesen, herauszufinden, wie die Einbindung von Farmern in das Bewässerungsmanagement institutionalisiert wurde.

Kapitel zwei bildet die Grundlage für die folgenden sieben Kapitel dieser Dissertation. Es legt die auf internationaler Ebene vertretene Sichtweise auf Bewässerungsreformprozesse sowie die weltweite Relevanz internationaler Organisationen bei der Förderung der Farmerbeteiligung am Bewässerungsmanagement dar. Das Kapitel unterstreicht, dass Politikgestaltung und Reformprozess nur nachvollzogen werden können, wenn man Historie, Strukturen, Organisationen sowie Personen und ihre lokalen Bedingungen anhand ausgesuchter Fälle untersucht. Im Falle des partizipatorischen Bewässerungsmanagements werden weltweit zwei Ansätze zur Entwicklung von Managementinstitutionen vertreten. Im Kapitel wird dargelegt, dass passende Voraussetzungen für den langfristigen Erfolg von Reformprozessen unabdingbar sind. Außerdem wird die Bedeutung weltweiter Diskurse erörtert, die für ein partizipatorisches Bewässerungsmanagement als geeigneten Ansatz zur Dezentralisierung des Bewässerungsmanagements plädieren. Weiterhin werden die strukturellen und kulturellen Elemente betrachtet, welche die weltweit vorherrschenden Meinungen über Bewässerungsmanagement beeinflussen.

Kapitel drei erläutert Schlüsselbegriffe und den analytischen Rahmens, der angewendet wurde, um Hindernisse bei der Dezentralisierung des Bewässerungsmanagements zu ermitteln. In der Literatur zu ideeller Lebenswelt finden sich nicht genügend Fallbeispiele, welche die Prozesse, die zur Institutionalisierung von Ideen führen und somit politische Ergebnisse im Laufe der Zeit beeinflussten, darlegen. Noch weniger jedoch finden sich empirisch belegte Fälle darüber, wie Konzepte die Motivation und die Lebenswelten der Akteure formen.⁵ Hier knüpft diese Forschungsarbeit konzeptionell an die Diskussionen an: Sie stellt einen Fallstudie vor, in der Konzepte, die in der Vergangenheit relevant waren, den Lernprozess für neue Konzepte (bezüglich des partizipatorischen Bewässerungsmanagements) verlangsamt haben, da die vorherigen Bewässerungsmanagementkonzepte die Beweggründe und Lebenswelten der Akteure auf bestimmte Weise institutionalisiert haben. Zusätzlich wird die in der ideellen Forschung laut gewordene Kritik, dass „Motivationen und Kausalität undeutlich und unklar bleiben“⁶ durch Anwendung des

⁵ (Berman, 2013, p. 217).

⁶ (ibid.).

konzeptuellen Rahmens der ideellen Lebenswelt aufgegriffen und die Kritikpunkte (Motivation und Kausalität) anhand dessen und am Fallbeispiel des partizipatorischen Bewässerungsmanagements verdeutlicht.

Kapitel vier nimmt Bezug auf Kapitel zwei und drei und stellt die Wichtigkeit von Historie, Strukturen, Organisationen und Personen für das Verständnis eines dezentralisierten Bewässerungsmanagements in Indien heraus und unterstreicht die Rolle von Konzepten für die Politikgestaltung. Es wird außerdem diskutiert, dass der Verlauf von Bewässerungsreformen in Indien hinsichtlich der Idee der Farmerpartizipation am Bewässerungsmanagement einer umfassenderen Untersuchung bestimmter Schlüsselaspekte bedarf. Dazu muss das Konzept der Farmerbeteiligung am Bewässerungsmanagement in Indien im historischen Verlauf verstanden, die Befürworter und Träger dieser Idee identifiziert und die Bedingungen, welche zur Übernahme dieses Konzepts zu einem bestimmten Zeitpunkt im politischen Paradigma führten, verstanden werden. Des Weiteren wird die nationale Ebene analysiert, da vorausgesetzt wird, dass Politik der nationalen und Länderebene die Wahrnehmung von Akteuren (Bürokraten) kommunaler Ebenen beeinflussen. Anhand einer Prozessanalyse wird untersucht, wie sich die Konzepte für das Bewässerungsmanagement im Verlaufe der Zeit entwickelt haben, um hervorzuheben, wie unterschiedlich die Entwicklung von Mechanismen und Prozessen für das Bewässerungsmanagement verlief. Die Analyse in diesem Kapitel wird mit Hilfe ideeller Variablen durchgeführt und legt ideelle Paradigmen dar, welche das Bewässerungsmanagement in Indien prägten. Zum Beispiel wird aufgezeigt, wie verschiedene politische Fragestellungen in einem bestimmten Zeitraum – wie z. B. in der Kolonialzeit, nach Erreichen der Unabhängigkeit und nach 1990 im liberalen Zeitalter – darüber entschieden, welche Richtlinien für das Bewässerungsmanagement zu diesem Zeitpunkt wichtig waren.

Kapitel fünf führt näher aus, wie das ideelle Paradigma für die Farmerbeteiligung am Bewässerungsmanagement in Madhya Pradesh durch Diskussionen über den Aufbau von Farmerverbänden erster und zweiter Generation geprägt wurden. Es wird ausgeführt, welche Rolle die verschiedenen Akteure, die das ideelle Paradigma beeinflussten und/oder innerhalb ihres Geltungsbereichs sehr einflussreich waren und so die Dezentralisierung behindern/fördern konnten, spielten. Des Weiteren wird betrachtet, wie die Farmerbeteiligung innerhalb der ideellen Vorstellungswelt der Akteure auf Landesebene beeinflusst wurde, d.h. wie sich die Direktiven der Zentralregierung und Geberorganisationen, welche das Konzept der Farmerbeteiligung am Bewässerungsmanagement einführten, auf das ideelle Paradigma auswirken. Daneben wird aufgezeigt, dass auch weitere endogene Faktoren das ideelle Paradigma prägen, wie die

Bereitschaft der politischen Amtsträger und Bürokraten, die Idee zu tragen und zu verbreiten. Dieses Kapitel verdeutlicht darüber hinaus, wie die vorgenommenen Reformmaßnahmen zur Einführung des Gesetzes über das partizipatorische Bewässerungsmanagement bestimmte Verwaltungsfunktionen gleichzeitig dezentralisiert und wieder zentralisiert haben. Die bürokratischen Strukturen sicherten so, dass die Entscheidungsgewalt im eigenen Geltungsbereich erhalten blieb.

Kapitel sechs stellt den Ort der Fallstudie vor und beleuchtet den sozio-kulturellen und politischen Kontext des SAS-Projekts. Die lokalen Akteure sind in dessen Kontext eingebettet und werden in ihrer ideellen Lebenswelt durch diesen geprägt. **Kapitel sieben** beschreibt diese ideelle Lebenswelt der Akteure, die durch ihre ideelle Rolle (z. B. als Farmer, als Mitglied eines Farmerverbandes, in der Bürokratie) im SAS-Projekt zwischen 1978 – 2000, als Farmerverbände der ersten Generation im Bundesland gegründet wurden, geformt ist. Das Kapitel stellt außerdem heraus, wie das Netzwerk rund um das Bewässerungssystem, welches in den 1970ern vom Staat errichtet wurde, die landwirtschaftliche und soziale Landschaft des SAS-Projekts bis in die 1990er Jahre veränderte und betrachtet den Gründungsprozess von Farmerverbänden der ersten Generation (Sinchai Panchayats und Krishak Samiti) in den Dörfern sowie die ideellen Variablen, die für das Verstehen dieser Farmerverbände wichtig sind. , Das Kapitel beweist,, dass diese Farmerverbände der ersten Generation nicht erfolgreich waren: auf legislativer Ebene waren sie nur mit einer begrenzten Rolle und begrenzten Funktionen ausgestattet; die für die Bewässerung zuständige Bürokratie führte kaum oder keine Maßnahmen durch, um die Gemeinschaft auf diese Organisationen aufmerksam zu machen; die Leiter der Farmerverbände gaben keine Informationen und/oder kein Wissen über die Funktionsweise der Verbände an die lokale Gemeinschaft oder an Mitglieder des Ausschusses weiter; und die Haltung und Wahrnehmung der Bürokratie war ein Hindernis bei der Etablierung einer guten Zusammenarbeit und/oder beim Teilen von Informationen zwischen Bewässerungsbürokratie und Führern von Farmerverbänden der ersten Generation. Des Weiteren wird in diesem Kapitel die Wahrnehmung der Farmer hinsichtlich der Normen zur Nutzbarmachung von Bewässerungswasser sowie ihre Wahrnehmung der Bürokratie und der Funktionsweise von Farmerverbänden betrachtet. Es wird außerdem erörtert, wie diese Standards und Überzeugungen durch den sozio-kulturellen Kontext beeinflusst wurden, dass bis zum Ende der 1990er Jahre alle Vorhaben zur Dezentralisierung des Bewässerungsmanagements ausschließlich auf Mikroebene durchgeführt wurden und dass es keine Versuche gab, das Bewässerungsmanagement auf mittlerer Landesebene zu dezentralisieren.

In Kapitel acht wird die ideelle Lebenswelt der Akteure nach dem Jahr 2000 weiter ausgeführt, als Farmerverbände der zweiten Generation (WUAs) in Madhya Pradesh sowohl auf Projektebene als

auch auf Mikroebene und mittlerer Ebene gegründet wurden. Ziel ist es, näher auf die Gründe einzugehen, die der Staat vorgeschoben hat, um die mittlere Verwaltungsebene nicht zu dezentralisieren, wie zum Beispiel das schlechte Funktionieren der Farmerverbände (WUAs) auf Mikroebene. Die Feldstudien zeigen jedoch, dass die Gründe in Wahrheit vielfältiger sind. In diesem Kapitel wird gezeigt, dass einige der an die WUAs übertragenen Verantwortlichkeiten ihnen Schritt für Schritt durch diskursive Praktiken der untergeordneten Bürokratie auf Projektebene wieder entzogen wurden, wie z. B. Dokumentenverwaltung oder das Zahlen von Gehältern an das Wachpersonal oder Zeitnehmer. In den zwei erhobenen WUA-Fallstudien zeigte sich auch, dass Beamte der untergeordneten bürokratischen Ebene zum Einen versuchten, ihre Vorrechte auf grundlegende strukturelle Bevollmächtigungen zu erhalten und zum Anderen ihre Behörde zur Verwirklichung privater Interessen nutzten, um sich den Zugang zu Kommissionszahlungen, welche sie bereits vor der Etablierung der WUAs genossen, zu sichern. Das Kapitel beleuchtet außerdem die strukturellen und kulturellen ideellen Faktoren, welche wichtig sind, um zu verstehen, warum die Farmerverbände auf Mikroebene (also die WUAs) schlecht funktionieren.

Kapitel neun knüpft an die Diskussionen in Kapitel acht an und wendet sich den verschiedenen ideellen Lebenswelten zu, wie z. B. denen von Farmern oder leitenden und untergeordneten Beamten, welche auf Mikroebene zu schlecht funktionierenden Farmerverbänden geführt haben. Es wird des Weiteren hervorgehoben, dass Farmer keine homogene Gruppe sind, auch wenn dies in den paradigmatischen und programmatischen ideellen Lebenswelten von z. B. Entscheidungsträgern oder Theoretikern noch keine Rolle spielt und daher auch nicht in das Konzept des dezentralisierten Bewässerungsmanagements aufgenommen wurde. Das Kapitel illustriert, dass die Lebenswelten von Farmern und Bürokraten ein Hindernis für die Dezentralisierung auf mittlerer Staatsebene darstellen. Die Erkenntnisse in Kapitel sieben, acht und neun verdeutlichen die Relevanz kolonialer und post-kolonialer ideeller Lebenswelten für das Bewässerungsmanagement und derzeit angewandte Verfahren im Bewässerungsmanagement verdeutlichen. Deshalb fließen auch historische Realitäten, welche die ideellen Lebenswelten prägten, in die Betrachtungen in Kapitel neun mit ein.

In Kapitel zehn werden Schlussfolgerungen dazu gezogen, inwieweit das in dieser Forschungsarbeit dargestellte Konzept der ideellen Lebenswelten für das Verständnis von Hindernissen für die Dezentralisierung auf mittlerer Ebene von Nutzen sein kann. Es werden weiterhin diskursive Praktiken, welche Indikatoren für die komplexe Beziehung zwischen Bürokratie und Farmern/Farmerverbänden in Bezug auf die Dezentralisierung des Bewässerungsmanagements in Madhya Pradesh sind, hervorgehoben. Die Verfasserin hebt ebenfalls hervor, wie formale Strukturen der Dezentralisierung

und Farmerpartizipation Methoden des Bewässerungsmanagements im dynamischen sozial-politischen Ambiente des SAS-Projekts beeinflusst haben oder von ihnen beeinflusst wurden.

Die Forschungsarbeit unterstreicht, wie bestimmte ideelle Ansichten, die vom Staat und staatlichen Akteuren vertreten und unterstützt werden, zum derzeitigen Konzept des Bewässerungsmanagements führten. Die vorliegende Dissertation betont deshalb, wichtig der Kontext für die Ausführung des partizipatorischen Bewässerungsmanagements in einem bestimmten Land oder auf lokaler und regionaler Ebene ist. Gleichzeitig sollte der „Kontrolllistenmentalität“ auf untergeordneter bürokratischer Ebene und der staatlich-orientierten Mentalität der Farmer als ein Hindernis der Dezentralisierung größere Aufmerksamkeit zukommen. Außerdem darf das Verhältnis zwischen den Akteuren (Bürokratie und staatliche Amtsträger), die in einem komplexen institutionell-ideologischen Kontext arbeiten, nicht vergessen werden, um institutionellen Wandel zu verstehen. Die Akteure verfügen über spezifische Identitäten und Subjektivitäten. So führte zum Beispiel das Verständnis von Ingenieuren als Garanten für Wachstum und Fortschritt zu einer Verfestigung einer Mentalität, die auf Befehl und Kontrolle basiert.

12 References

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