Decentralization of Health in the Indian State of West Bengal

Analysis of Decision Space, Institutional Capacities and Accountability

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1 Table of Contents

2 List of Tables

3 List of Figures

4 List of Boxes

5 List of Acronyms

Acronym	Definition
ACC	Accountability
ACMOH	Assistant Chief Medical Officer for Health
ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
AWW	Aanganwari Worker
BDO	Block Development Officer
BHFWS	Block Health and Family Welfare Samiti
BMOH	Block Medical Officer for Health
BPHC	Block Primary Health Center
BPHN	Block Public Health Nurse
BUD	Budgeting
CAP	Capacity
CMOH	Chief Medical Officer for Health
CMC	Community Health Center
DAP	District Action Plan
DoHFW	Department of Health and Family Welfare
DHFWS	District Health and Family Welfare Samiti, called Zilla Swasthaya Samiti (ZSS) in West Bengal
DM	District Magistrate
DS	Decision Space
GoWB	Government of West Bengal
GP	Gram Panchayat
HR	Human Resources
HSDI	Health System Development Initiative, 2005-2010
IAS	Indian Administrative Service
LS	Local Support
M&E	Monitoring and Evaluation
MO	Medical Officer
MOHFW	Ministry of Health and Family Welfare
NRHM	National Rural Health Mission
PHC	Primary Health Center
PMU	Project Management Unit
PRI	Panchayati Raj Institution
PS	Panchayat Samiti
RCH2	Reproductive and Child Health 2
RKS	Rogi Kalyan Samiti
SOD	Service Organization and Delivery
SOP	Strategic and Operational Planning
ULB	Urban Local Body
WHO	World Health Organization
VHSC	Village Health and Sanitation Committee
ZP	Zilla Parishad

6. Executive Summary

1.1. India has embarked on a substantial program of decentralization following the 73rd and 74th Amendment Acts to the Constitution, which call for establishing and significantly empowering Panchayati Raj Institutions (PRIs) at district, sub-district (block), and village and urban local levels. The World Bank's India program is interested in these developments and is considering how it should support the GoI's objectives in these governance reforms. A wide range of support mechanisms is possible, including lending and analytical work, and focusing on national- or state-level activities and direct support for local governments or actions through specific sectors, such as the health sector.

1.2. Although the legal foundation for decentralization has been established, the degree to which this has been implemented around the country varies. Since health sector responsibilities are, constitutionally shared by both national and state governments, there is considerable variation among states regarding the degree of decentralization within the state to the levels of blocks and districts. Compared to other states, West Bengal has formally granted relatively greater powers to sub-state levels, with PRIs said to wield greater influence over civil service officials in planning and service delivery decisions.

1.3. Decentralization is seen by some to be a key instrument for improving service delivery across a range of sectors. In the Health Nutrition and Population (HNP) sector, decentralization issues are increasingly gaining in importance. Recent national initiatives, like the National Rural Health Mission and the Reproductive and Child Health (2) Program, call for significant engagement of state-, district-, block-, village-, and urban local-level governments in planning and service delivery management. These new programs have aimed at increasing the quantum of health services that the government delivery system can provide in rural areas, investing more in infrastructure, human resource supply, and other critical inputs such as medicines, with a renewed emphasis on deconcentration of spending decisions. Notable measures included constitution of facility-level stakeholder committees (*Rogi Kalyan Samitis*), formulation of health plans across all administrative units (village, blocks and districts), provision of untied funds/maintenance grants to all tiers of health facilities and Village Health and Sanitation Committees, released directly and spent by the facilities and VHSCs, and forming health and family welfare societies at the block and district-levels to oversee all aspects of health programs planning and implementation.

1.4. This study was designed to assess the current status of actual decentralization within the state of West Bengal as a basis for discussions with state officials on feasible health sector interventions which the Bank could support in future to impact decentralization as well as health systems performance. It was also designed to assist the Bank in a more general understanding of the process of decentralization in India as a complement to earlier studies of decentralization conducted in the states of Uttar Pradesh and Orissa. As with those previous studies, this study is based on surveys of officials at the district level and below to assess relationships between the range of decisions that local health authorities were able to make (which this report refers to as "*decision space*"), their levels of *institutional capacities* (such as skills, staffing and experience), and their *accountability* to local elected officials. These three elements are currently of

considerable concern in the development and implementation of decentralization processes around the world.

1.5. The study examines the concept of decision space in a special manner. Decision space is the range of choices that respondents report actually making within the range of choices that they are officially — by law or regulation — allowed to make. Prior studies showed that there were significantly different choices made by officials even if they were granted the same formal (or *de jure*) range of choices. This is important, because a review of formal decision space reveals relatively limited decision space for some key health system functions that officials at the block and district levels have. For instance, local officials have very little choice over hiring, firing, transfers, and incentives for permanent human resource staff, while they have greater control over contract workers as well as strategic and operational planning and some aspects of budgeting. What we examined was how decentralization was affecting the ability of local officials to make their own decisions *within* the formal decision space.

1.6. The study focused on five functional areas of decisions about health systems — strategic and operational planning, budgeting, human resources, service organization/delivery, and monitoring and evaluation. Prior studies in other countries and Indian states had found that decentralization of decisions, capacities and accountability varied considerably among these functional areas. In West Bengal, the formal decision space allowed for a significant range of choice over planning, service organization, monitoring and evaluation and less range over budgeting and human resources. The survey questionnaire asked specific questions about what choices the respondents had actually made within the possible choices granted by the formal range of choices.

1.7. The study involved a survey of health administrators, health workers and local elected officials in six purposefully selected districts[1] to represent different socio-economic statuses, geographic areas and political party affiliations. Specific surveys were designed for different types of officials, workers and Panchayati Raj Institutions (PRIs functionaries). The report is based on the responses of 209 officials (48 health workers, 68 health administrators, and 93 PRI functionaries/office-bearers in the categories displayed in Table 1).

[1] The six districts are the following: Jalpaiguri, Uttar Dinajpur, Barddhaman, Bankura, Birbhum and Purba Medinipur.

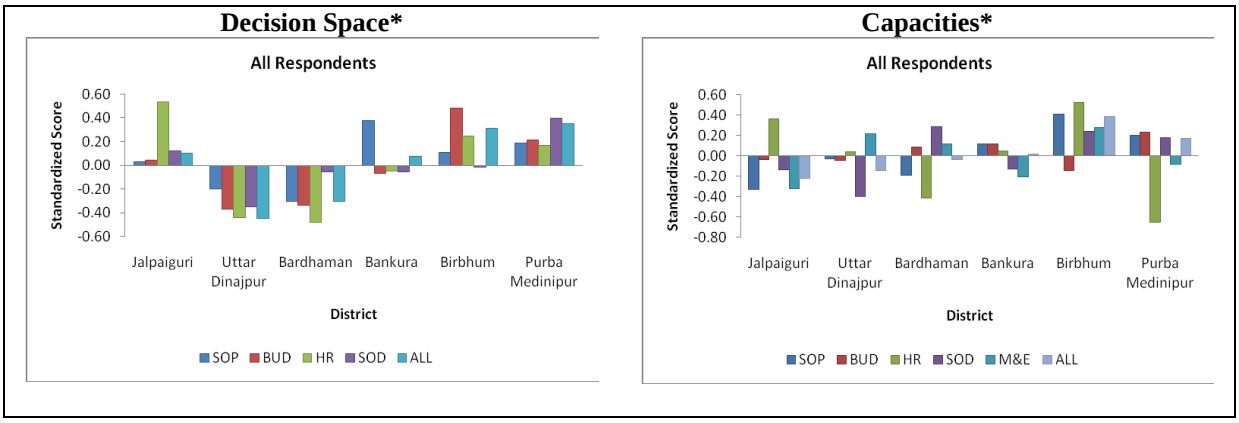
Table 1. District-, block- and village-level health sector decision-makers in West Bengal

Sector/role	Districts	Blocks	Village	Urban Local Bodies
Health sector	▪ Chief/Assistant Chief/Deputy Chief Medical Officer for Health ▪ Project Management Unit members ▪ Hospital superintendent	▪ Block Medical Officer for Health ▪ Medical Officer for Health ▪ Block Public Health Nurse	▪ Auxiliary Nurse Midwife ▪ Health Supervisor/Assistant	▪ Medical Officer ▪ Hospital superintendent
PRI	▪ *Zilla Parishad* Chairman (*Sabhadhipati*) ▪ Health & Environment Sub-Committee Chairman	▪ *Panchayat Samiti* Chairman (*Sabhapati*) ▪ Health & Sanitation Committee member ▪ Health & Family Welfare/*Rogi Kalyan Samiti* member	▪ *Gram Panchayat* Chairman/Vice-Chairman (*Pradhan*/*Upa Pradhan*) ▪ *Gram Panchayat* member	▪ Municipality Chairman ▪ *Swasthya Upa Samiti* member

1.8. The survey asked specific questions designed to identify health officials who had exercised greater or lesser degrees of choice within their officially sanctioned "decision space", assess skills, experience and education of both health sector and local elected respondents (or their staff) — as well as the degree to which locally elected PRI officials are involved and/or considered in decisions about the local health system. Use of semi-structured surveys to probe into these issues allowed statistical analyses to quantitatively assess relationships among the dimensions of decision space, capacities and accountability. While it was originally hoped that these relationships could also assess which relationships might improve health sector performance, the poor quality of data on block and district level performance prevented any significant assessment of the effectiveness of these different elements of decentralization.

1.9. The survey found the following:

1.9.1. **There was high variation in the degree of local decision making, institutional capacities and accountability among the six districts studied.** As in the studies in UP and Orissa, the West Bengal study found significant variations among the six districts within each dimension of decentralization of decision space, capacities and/or accountability. For instance, the following table shows the variations for decision space and capacities:



* SOP = Strategic/Operational Planning; BUD = Budgeting; HR = Human Resources; SOD = Service Delivery/Organization; M&E = Monitoring and Evaluation

1.9.2. **Respondents with greater use of decision space were also those with greater institutional capacities and greater responsiveness to local elected officials).** Significant relationships among the three dimensions suggest a *strong synergy.* In those districts in which officials reported making more decisions on their own (i.e. taking a greater range of decision space), were also those with higher levels of institutional capacities and more responsiveness to local elected officials. The results clearly show that there is a strong relationship among the three dimensions for nearly all functions.

Table 2. Associations across dimensions of decentralization (summary scores of all respondents)

Function†	DS/CAP††		DS/ACC††		CAP/ACC	
	ρ	N	P	N	ρ	N
SOP	0.41 **	112	0.11	52	0.14	135
BUD	0.16 *	112	0.30 **	98	0.06	143
HR	0.16	74	0.18	55	0.11	52
SOD	0.12	112	0.17 *	112	0.21 **	195
ALL	0.34 **	112	0.26 **	112	0.35 **	195

**: significant at $p < 0.05$; *: significant at $p < 0.10$

† SOP = Strategic/Operational Planning; BUD = Budgeting; HR = Human Resources; SOD = Service Delivery/Organization

†† DS only applicable to health officials

1.9.3. **For each dimension of decentralization the different functions tended to be closely associated.** In other words, officials reporting high levels of decision space for strategic and operational planning also tended to report high use of their formal decision space for budgeting, human resources, and service organization. And officials with high levels of capacity or accountability in one function also reported high levels in the other functions as shown in Table 3.

Table 3. Associations within dimensions of decentralization

1st Function†	2nd Function	DS††			CAP¶			ACC¶¶		
		ρ		N	P		N	ρ		N
SOP &	BUD	0.22	**	112	0.13	*	195	0.13		97

1st Function†	2nd Function	DS††			CAP¶			ACC¶¶		
		ρ		N	P		N	ρ		N
	HR	0.28	**	87	-0.01		92	0.17	*	127
	SOD	0.50	**	112	0.17	**	195	0.04		135
	M&E				0.33	**	65			
	LS				0.30	**	72	0.10		52
BUD &	HR	0.32	**	87	-0.14		92	0.17	*	100
	SOD	0.19	**	112	0.04		195	0.09		143
	M&E				0.34	**	65			
	LS				0.22	*	72	0.04		98
HR &	SOD	0.21	*	87	0.09		92	0.16	*	138
	M&E				0.10		52			
	LS							0.25	*	55
SOD &	M&E				0.22	*	65			
	LS				0.18		72	0.16	*	112

**: significant at $p < 0.05$; *: significant at $p < 0.10$

† SOP = Strategic/Operational Planning; BUD = Budgeting; HR = Human Resources; SOD = Service Delivery/Organization; M&E = Monitoring and Evaluation; LS = Local Support; PRI = PRI decision-making

†† DS only applicable to health officials

¶ LS in CAP only applicable to PRI officials

¶¶ LS in ACC only applicable to health officials

1.9.4. **Although survey respondents reported making their own decisions on planning and budgeting, there is reason to believe that these decisions were not necessarily responsive to local needs.** According to interviewer reports and observations made by the research team health sector planning is often viewed as a routine, tokenistic exercise that may not adequately be meeting basic objectives. Many health sector respondents, for instance, characterized the identification of vulnerable pockets — an important aspect of local need assessment — as being conducted in a "pre-determined" fashion involving largely copying content from earlier plans into current District Health Action Plans. Preparing budgets and financial planning was also found to be commonly viewed as a purely administrative requirement consisting of simple projections from the previous year's sanctioned budget and with allocations made mechanically/without systematic review. Inadequacies in financial planning within local planning instruments currently promoted under NRHM can be inferred from the finding that hardly any respondents — even high-level officials such as CMOHs — were able to provide accurate verbal estimates of the extent of allocation/utilization of funds received (those provided were often found to be inconsistent when cross-checked with budgets/ District Health Action Plans).

1.9.5. **Health administrators who make more decisions on their own tend to have greater institutional capacities, but not necessarily greater responsiveness to local PRI officials.** Analysis of the health administrators found that the synergies among the different functions were stronger between decision space and capacities and weaker for responsiveness toward PRI officials (see also Table 2 above). This suggests that capacities have some influence on the confidence that health officials express in making their own decisions. However, those PRI officials with greater capacities tend to be more effective in influencing their health administrators. In addition, the degree of local support provided by PRI officials to the health

sector — such as in supporting new health sector activities or actively participating in health sector-related development schemes — is linked to the degree of accountability demanded by those same PRI officials. This finding suggests the fundamental importance of capacities for local decision making and for accountability, and enhances arguments for capacity building for both heath administrators and local elected officials and for encouraging greater support from PRI for health activities.

1.9.6. **The study highlights the lack of significant role of local officials in human resources management in any area but contracting lower level staff.** The human resources findings suggest that the relatively small decision space for human resources may limit the synergies and consistency of findings in this function. In West Bengal as elsewhere in India, district managers have little say over HR hiring, postings, transfers, etc, particularly in the case of doctors and nurses, unless they are contracted workers such as village health workers (ASHAs).

1.9.7. **For health administrators, capacities in monitoring and evaluation are consistently associated with the other functions suggesting the importance of capacity building in this area.** One of the more consistent findings is that among health administrators the monitoring and evaluation capacity is significantly associated with strategic and operational planning, service delivery, and budgetary capacities.

1.9.8. **Greater decision space for service delivery decisions by health administrators is consistently related to other functions (planning and human resources), suggesting an important argument for expanding decision space in service delivery**.

1.9.9. **Personal experience was important for PRI officials and health workers for all three dimensions of decentralization; however, personal experience for health administrators was not significantly related to the three dimensions of decentralization.** We found that the personal experience of PRI officials and health workers was related to the three dimensions of decentralization. However, health administrators with more personal experience did not report having greater decision space, institutional capacity or accountability. This result suggests that it takes time for PRI officials and health workers to learn to make use of their formal decision space, and that a lot of this learning is from practical experience. In some of the PRIs where there had been a recent change in political leadership and several first-time elects, PRI representatives seemed to be completely unaware of the role they could play in planning, management and monitoring health services. In other words, the real constraining factor was not lack of autonomy in the formal rules, but local inability to take advantage of these rules and fully exercise decision space because of lack of capacity.

Table 4. Respondent experience and dimensions of decentralization

Respondent Category	DS		CAP		ACC	
	ρ	N	ρ	N	ρ	N
Health Administrators	0.08	65	-0.02	65	-0.19	65
Health Workers	0.29**	48	0.27*	48	0.14	48
PRI	N/A		0.27**	93	0.03	93

1.9.10. **Greater contact between health administrators, workers and PRI officials may be important in overcoming barriers to accountability and local support for health activities.** While the research team found a considerable lack of mutual trust or desire by health and PRI officials to work jointly on health sector matters, it was observed that PRI involvement at the block level was better than at the district level. One reason may be that Block Development Officers are in closer contact with PRI officials (both physically located within the *Panchayat Samiti* and interacting daily to a greater degree with PS officials than at the district level). At the village and urban local unit levels also, among both health workers and PRI officials sampled in this study, measures of personal experience were positively associated with those individual's decision space and/or capacities; for higher-level health administrators, no such connections were observed. These workers and officials have more constant contact through regular meetings and through outreach in the community. The local health workers tended to more highly rate interactions with PRI officials such as calling relations "generally cooperative" or that PRI officials "helps as and when necessary", than higher-level health sector administrators.

1.9.11. **Rules, regulations and bureaucratic red tape seem to restrict the ability and interest of PRI officials to get involved in the decision making process at local levels.** Although PRI members in general were felt by the research team to be motivated, enthusiastic, energetic, and aware of local health problems and vulnerabilities, the current maze of rules, regulations, and bureaucratic red-tape (which the decentralization process has not been able to simplify) continue to thwart greater involvement. The process of submission of utilization certificates, for instance, appears to be excessively complicated, often leading to delays in release of funds such as those related to JSY activities. Additionally, instances of deliberate delay and non-cooperation by other line departments (notably the Public Works Departments) under the guise of "technical" interventions, may add to the problem.

1.10. These findings suggest that, in the context of West Bengal, the pre-conditions that many feel are necessary for decentralization to be an appropriate policy lever for improving health services are present. Administrators and workers in the health sector who take greater responsibilities, more actively tailor choices to local conditions, or whose decisions are not subject to as much revision from above, for example, also do so in the context of local health systems characterized by greater institutional capacities (e.g., better processes, adequate stock of resources) and with a higher degree of accountability towards PRIs for those decisions. Similarly, PRI officials who more actively demand accountability for health official decisions appear to have greater capacity to do so. Further, each dimension of decentralization appears to build on itself. Those who are more active decision-makers in one function, for instance, tend to be more active in another; the same is applicable in terms of capacities and accountability.

1.11. However, there are several significant restrictions on effective local decision making. First, the formal range of choice over some areas is very limited — especially in the human resources function where there is little formal choice but also in planning and budgeting where reported choice is limited by formulaic processes and regulations. In addition unnecessarily complicated regulations have limited the incentives and ability for PRI officials to participate meaningfully in the process of accountability.

1.12. **Recommendations.** This study was unable to relate any of the characteristics of decentralization to the performance of the health system. Indeed the literature on decentralization has very few studies that have been able to convincingly show that decentralization changes have improved or made worse health system performance. In addition this study is a cross sectional study so the relationships shown cannot attribute causality to any of the findings. Therefore the recommendations that are made are tentative and based on logical implications of the findings along with the authors' judgments from observing and studying several other experiences with health system decentralization.

1.12.1. **Capacity building, especially in weaker districts, among both health administrators, health workers, and PRI officials is likely to have spill-over effects in improving decision making and accountability in the local health sector**. The study's principal finding is that there are synergies among these three dimensions of decentralization. While it might be useful to recommend that all three dimensions be strengthened, it is likely that starting with capacities is an effective means of influencing the other dimensions. Capacity building should first focus on the weaker districts so that they may work toward improving all three dimensions. The weakest district identified by this survey was Uttar Dinajpur. Within the districts targeted orientation is strongly warranted among the first-time elects and representatives from reserved categories, and among freshly appointed frontline health workers.

1.12.2. **There are two key functional areas where capacity building for health administrators should be focused.** The study findings of the importance of the role of capacities in *service delivery* and *monitoring and evaluation* in relation to other functions suggests that more training and/or recruitment of experienced staff in these areas should be a major initiative in capacity building at the district, block, village and urban local units.

1.12.3. **Capacity building for PRI officials and health workers should focus on enhancing their knowledge of their roles in supporting local health initiatives and advocacy for local priorities.** Frontline health workers and PRI officials at lower levels of the system have more contact and experience working together; therefore, they could be involved in joint advocacy and support activities, as well as in monitoring and evaluation initiatives, which have been shown to be particularly important at *the Gram Panchayat level*. Experience with community involvement in monitoring and evaluation in other settings (in India and internationally) has been shown to have positive impacts on performance. This effort would strengthen the accountability component of decentralization.

1.12.4. **There is room for enhancing the local decision space especially if more uniform capacities can be achieved.** The functional area with the least formal decision space is human resources. The partial evidence that decisions made over contract personnel at the lowest level are consistent with accountability suggest that expanding the local choice over more areas of human resources could be a means of improving local level decision making in other areas.

1.12.5. **Rules and regulations for decisions involving greater accountability to local elected officials should be streamlined to reduce time and complexity and enhance local participation.** Rules and regulations needs to be streamlined and simplified, particularly those

related to disbursal of funds and human resources policies that encourage local decision-making in short time.

1.12.6. **Mentoring and Information Exchange among districts.** Dissemination of effective processes and programs among peers has been shown to be an effective means of changing decentralized unit behavior. Promoting exchange of information between those districts where health and/or PRI officials have higher levels on all dimensions of decentralization with those with lower levels may be a productive means to demonstrate to districts what can be done to make more effective use of authorities under decentralization as well as suggest ways to do it.

1. Introduction

1.1 Study motivation and research questions

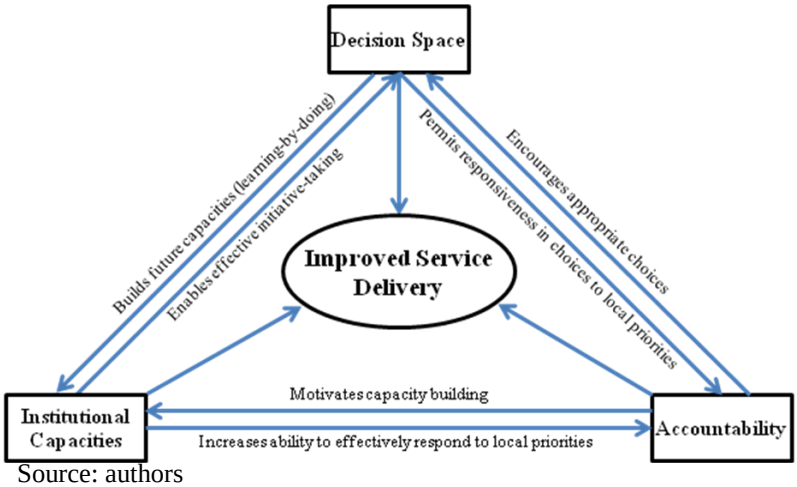
For over a quarter of a century, decentralization policies have been implemented on a large scale throughout the developing world. While motivations for, and forms of, decentralization are diverse, those concerned with development often focus on its promise of improving governance arrangements and delivery of services. As a reform measure that is consistent with theories of fiscal federalism, public choice, and "New Public Management", it is hoped that decentralization can encourage both greater efficiencies in service delivery (in, for example, reducing bureaucratic red tape or making better use of information available only at the local level) and quality of choices made (e.g., encouraging innovation; permitting better targeting of/responsiveness to local priorities and preferences) (Tiebout 1956; Oates 2005; Peckham, Exworthy et al. 2005). Additionally, forms of decentralization that promote greater citizen participation — such as political "devolution" of authorities to locally elected bodies – is expected to make administrative sector structures more accountable to local preferences (Mills and World Health Organization 1990; Tendler 1997; Manor 2003; Shah 2004; Shah and World Bank 2006; Yilmaz and Serrano-Berthet 2008).

Decentralization-oriented policies have resonated with particularly force in the health sector. Decentralization of decision-making authority to local levels of the system is consistent with a long-standing emphasis on grassroots investment in primary care and outreach services that began with the Alma Ata Conference on Primary Health Care in 1978, was reinforced in the World Bank's 1993 World Development Report, and has been most recently re-emphasized in the 2009 World Health Report (World Health Organization and United Nations Children's Fund 1978; World Bank 1993; Saltman, Bankauskaite et al. 2007). Organizational decentralization is also in line with the concept of health sector "stewardship" which shift emphasis from direct service delivery (i.e., "rower" or government-by-control) to overseer of health system governance arrangements (i.e., "enabler"/"steerer" or government-by-contract) (World Health Organization 2000). The principles of New Public Management further support the idea of local governance providing better service if new management techniques are used at local levels (Osborne and Gaebler 1992).

As reforms of decentralization have become increasingly common, however, it has become evident that greater local-level authority, by itself, may not result in improved local-level service delivery. On the one hand, there is a difference and, at times, a disconnect between formal delegation of powers and actual exercise of those powers at the local level — which this study hereafter will term "decision space". In some contexts, decentralization occurs only "on paper", wherein decision powers effectively remain highly centralized. On the other hand, an enlarged field of action within which to make choices may not translate into a more effective exercise of powers if local-level oversight capacities are lacking, or local decision-makers are not held accountable for their choices to address local health needs. If local-level capacities are lacking, for example, health sector decision-makers may eschew innovation in favor of continuing to operate as if bound by central rules and norms, or they may make choices in ways that are ill-informed and/or -executed. If mechanisms of accountability to local health priorities are absent, the service delivery benefits from the choices that are made may be captured by only a few and not improve delivery performance on a wider scale. In short, for decentralization to be a means

of improving service delivery, the "necessary ingredients" include not only an appropriate degree of local decision-making power, but commensurate institutional capacities to enable decision-making, and adequate mechanisms of accountability to ensure that choices made are oriented to bettering services. Optimal linkages between "ingredients" of decentralization and health sector performance are illustrated in Figure 1.

Figure 1. Synergies between decentralization and service delivery



Source: authors

The goal of this study is to examine the ways in which decentralized decision-making in West Bengal's health sector is consistent with the framework presented in Figure 1, above. To do so, it addresses the following research question focused on relationships between the three dimensions of decentralization illustrated as anchor points in Figure 1: Are the "necessary ingredients" of decentralization in place in West Bengal, creating enabling conditions under which decentralized service delivery may be expected to improve services? That is, do the degree of decision space, strength of institutional capacities and strength of mechanisms of accountability work together synergistically?

This study does not focus on relationships between these three dimensions of decentralization and a primary goal of decentralization: improved service delivery. Although effects of decentralization on service delivery are of ultimate interest to policymakers, data limitations precluded meaningful analyses of relationships between dimensions of decentralization and indicators of health systems performance (see Section 2.7 for further discussion of this study limitation).

1.2 Conceptual frameworks

This study adapts a "decision space" approach for analyzing health sector decision-making in a context of decentralized service delivery (Bossert 1998). Though responsibilities for health sector decision-making have been officially at least partially "devolved" to PRIs across India (see section 1.3), it is well-known that decision-making processes vary widely both across and within states. Understanding how these processes vary is therefore crucial to gaining a coherent picture of what health sector devolution means in practice. The decision space approach represents a unified methodology to assessing three important dimensions of decision-making processes — the decision space of officials to make choices, the institutional capacities present to effectively make choices, and the mechanisms of accountability in place to shape choices.

The following section first discusses each dimension, in turn, then presents an overview of the study approach and methodology.

1.2.1 Decision space

Decentralization involves both formal redefinitions of relationships of authority and informal practices that may affect formal changes; both the formal and informal sides combine to define the effective "decision space" of local officials. In any country undergoing decentralization, new laws, regulations, and governmental decisions are generally drafted to redefine lines of authority and hierarchical relationships. The formal regulatory mechanisms govern the degree to which increased powers or ranges of choice are accorded over different functions. Fiscal decentralization of revenue and/or expenditure assignments, for example, may or may not occur alongside decentralization of administrative functions such as human resources management practices or the organization of services delivered. Analogously, greater local-level authority by health officials over administrative functions (e.g., recruitment and hiring of nurses) may not be matched with greater authority over fiscal decisions needed to exercise those powers (e.g., deciding on the number of and budgeting for funded posts). Table 1 provides an overview of common health sector functions that may be affected by decentralization (particular sub-functions that are addressed by this study are underlined).

Table 1. Health sector decentralization — functions commonly affected and determinants of choice

Function	Sub-functions	Key determinants
▪ Planning	▪ Design of area plans	▪ Degree of local input required/provided
▪ Budgeting and management of finances	▪ Regular budgeting	▪ Ability to allocate resources according to locally determined priorities
	▪ Collection/use of user fees for financing	▪ Ability to set/modify/allocate user fee finances
	▪ Collection/use of other local revenues for financing	▪ Ability to use locally-generated resources (apart from user fees) for financing
▪ Administration of human resources	▪ Hiring/firing	▪ Ability to hire/fire staff at different levels (doctors, nurses, non-medical staff, etc.)
	▪ Posting/Transferring	▪ Ability to post/transfer staff
	▪ Promoting/demoting	▪ Ability to promote/demote staff
	▪ Contracting	▪ Ability to contract non-salaried personnel for services
	▪ Salary range	▪ Ability to modify salaried workers' salary scale
	▪ Provider payment mechanisms	▪ Ability to implement alternative forms of provider payment
▪ Services organization and delivery	▪ Central schemes	▪ Ability to choose over/modify implementation of nationally determined standards and programs
	▪ Facility rules	▪ Ability to set facility rules at local level
	▪ Procurement	▪ Authority levels granted/exercised over procurement
	▪ Hospital autonomy/governance	▪ Degree of independence in hospital management
▪ Monitoring and evaluation	▪ Use of HMIS	▪ Requirements for HMIS reporting
		▪ Ability to use HMIS information for local decision making
	▪ Performance management	▪ Requirements for performance management

Source: authors

Beyond what is written in official documents, the actual exercise of authorities may vary among localities for a variety of reasons. On the one hand, higher-level authorities may attempt to maintain a tight grip over local-level decisions by introducing red tape related to officially "local" decisions. Central authorities can also use fiscal decision space to affect administrative decision space. Greater ability to organize or contract for services according to local conditions, for instance, may mean little if the preponderance of financing is channeled through central programs with strict rules and regulations and/or local own-source revenues are minimal. Conversely, higher-level authorities may choose to largely abide by decisions made by lower-level officials; in the extreme, lack of enforcement of formal relationships may lead to "bending the rules". On the other hand, local-level authorities may be more or less inclined to take full advantage of powers officially accorded to them. Particularly pro-active local officials, for example, may use authorities to innovate in order to adapt service delivery to local conditions. Others may continue to rely on the center for direction, resulting in practices that largely emulate pre-decentralized relationships of authority. In short, local officials may be *de facto* more or less permitted or inclined to exercise powers that they enjoy *de jure*. Addressing this study's two basic questions about decentralization therefore involves examining the actual exercise of powers by various officials at local levels of the system.

1.2.2 Institutional capacities

Capacity may be defined as "ability of individuals, organizations or systems to perform appropriate functions effectively, efficiently and sustainably" (UNDP 1998). The concept of "institutional capacities" has come to encompass a variety of different capabilities — administrative, technical, organizational, financial, human/personnel — at multiple levels of aggregation — system, organizational, and individual. Broadly speaking, systems-level capacities focus on macro-level structures (e.g., legal rules) that shape health sector governance, organizational-level capacities focus on processes within institutions that affect service delivery (such as mechanisms for planning and monitoring), while individual-level capacities focus on personal skills and training (see Table 2, below). At both the system and organizational levels, processes and resources are important components to institutional capacities. Additionally, some capacities are relevant at multiple levels of aggregation, such as the adequacy of human/financial resources or the use of health information for decision-making. As this study is focused on district-level (and below) decision-making in health, it also focuses primarily on institutional capacities at the organizational and individual levels.

Table 2. Levels, dimensions and indicators of institutional capacities

Level	Dimensions	Capacity indicators
System	▪ Policy (systems have a purpose) ▪ Legal/regulatory (rules, laws, norms, standards) ▪ Management/accountability (who oversees and who implements) ▪ Resources (human, financial, information)	▪ Health policies/legislation established ▪ Sector-wide strategy articulated ▪ Formal/informal coalitions and/or multi-sectoral collaboration in place
Organizations	▪ Mission/strategy (e.g., role, mandate) ▪ Culture (e.g., management values and styles) ▪ Processes (e.g., .use of information for management; inter-relationships; planning and implementation, monitoring and	▪ Strategic and operational plans in place ▪ Trained/supported staff ▪ Functional: management systems (e.g., available supplies; supervision undertaken); financial management

Level	Dimensions	Capacity indicators
	evaluation) ▪ Resources (human, financial, information)	systems (e.g., available resource); information systems (e.g., timely analysis of health information for decision-making); service delivery systems
Individuals	▪ Education/training ▪ Skills	▪ Years of education/training ▪ Skill set of staff

Adapted from: (Boffin 2002)

1.2.3 Accountability

Accountability revolves around answerability and enforcement. It can be defined as a relationship between parties in which one or more parties has obligations to answer/justify questions regarding decisions and actions, with mechanisms of enforcement in place that can effectively be directed towards the answerable party (e.g., sanctions) (Brinkerhoff and Bossert 2008; Yilmaz and Serrano-Berthet 2008). There are many ways to dissect and examine dimensions of accountability, including focusing on directions and objects of accountability. As presented in Table 3, directions of accountability include: those between administrators within the state apparatus, whether "upward" accountability from lower to higher levels of the system or "horizontal" accountability among different branches of government at a given level of the system; and those between the state apparatus and citizens/citizen representatives, which can be termed "downward" accountability. Objects of accountability include those oriented for process, such as procurement and financial management mechanisms to ensure proper use of state funds, and those focused on performance, such as achievement of targets for specific outcomes.

In the context of locally devolved decision-making in West Bengal, this study uses the term "accountability" in a very specific way: it focuses on the "downward accountability" of local administrators, primarily in the health sector but also for general administrators, to locally-elected Panchayati Raj Institutions (PRIs) bodies. As indicated in the last column of Table 3, other forms of accountability, such as upward accountability within the Ministry of Health or accountability for performance, are largely captured in the other concepts of decision space and capacities. It is recognized that this study's use of the term is limited on several fronts. In particular, the study does not attempt to evaluate whether accountability to citizens' representatives (i.e., PRI bodies) constitutes downward accountability to local citizens themselves. Indeed, the degree to which the latter holds true depends in large part on the quality of "political" accountability at the local level, or the extent to which governments respond to electoral concerns such as in delivering on electoral promises and aggregating/representing citizens' interests (Brinkerhoff and Bossert 2008). Thus while this study's use of the term "accountability" is conceptually clear, it comes at the price of providing only a limited analysis of accountability. It is also left to the reader to decide on the extent to which downward accountability to citizens' representatives in West Bengal, PRI bodies, translates into accountability to citizens themselves. This issue is further complicated by the reported strength of one political party — Communist Party of India (Marxist) — which may restrict the decision space of local elected officials who are party members. Assessing this influence was beyond the scope of this study.

Table 3. Dimensions of accountability

Dimension	Definition	Examples of mechanisms	Relationship to study terminology
Directions of accountability	▪ To other actors within the status apparatus: "upward" / "horizontal" accountability	▪ Directives from above ▪ Executive/legislative separation of powers	▪ Decision space: degree to which MOHFW exerts control over lower-level processes
	▪ To citizens and their representatives: "downward" accountability	▪ Elections of local governments ▪ Oversight of local administrators by locally elected representatives	▪ Accountability: of health sector/other administrators to PRI bodies
Objects of accountability	▪ Process: respecting rules and regulations	▪ Financial accountability	▪ Capacity: use of formal accountability mechanisms
	▪ Performance: achieving outcomes	▪ Performance agreements to achieve agreed-upon health goals and targets	▪ Capacity: adequacy of monitoring and evaluation systems

Source: authors' adaptation from (Yilmaz and Serrano-Berthet 2008).

It should be noted that lines between different forms of accountability are often blurred, either in theory, in practice, or both. In terms of direction of accountability, for instance, it is not uncommon for local health administrators to be employed by the government (e.g., on a permanent employee basis by the government of West Bengal), but also report to and/or be held formally accountable for certain activities by local government officials (or, conversely, be directly employed by local governments but receive technical oversight from higher-level officials). As a result, local civil service administrators or workers involved in policymaking and/or service delivery are both politically accountable to local governments (e.g., in terms of appointment) but upwardly accountable to Ministries of Health (e.g., in terms of salary level). As an example, frontline Accredited Social Health Workers (ASHAs) in India are accountable to both village-level *Gram Panchayat* PRI bodies and the State Department of Health and Family Welfare (Hammer, Aiyar et al. 2006). Similarly, being accountable for performance is likely to depend, in part, on respecting the financial or administrative rules and regulations that govern performance targets. The distinctions made in Table 3 are nonetheless useful for disentangling different elements of accountability as well as making clear which elements of accountability are addressed — and which are left out — by this study.

1.2.4 Relationships between decision space, capacities and accountability

As related in the introductory section, many suggest that decision space, institutional capacities and (downward) accountability need to work in tandem for health sector decentralization to improve service delivery. Equipping local authorities with greater discretion to provide or oversee public sector services provides local institutions the flexibility to be more responsive to preferences and needs of constituents. However, without adequate institutional capacities, officials may not be able to respond any more effectively to local needs than under centralized regimes. An insufficient stock of accounting personnel, for instance, may result in historical budgeting practices rather than the preferred strategic planning/budgeting process, or inability to collect/compile/analyze performance data might result in planning practices that are divorced of local conditions. Similarly, adequate mechanisms of downward accountability may be important in orienting decisions to improving delivery of services. As noted by Shah (2004) in reference to

fiscal decentralization, "institutions of accountability are the key to the success of decentralized decision making" (Shah 2004). Greater control over local-level decisions and resources can be a motivating force for citizens to participate in, and oversee, local decision-making processes. In short, the promise of decentralization for improving service delivery lies in synergies between decision space accorded to local authorities, institutional capacities to allow exercise of those authorities, and adequate mechanisms of (downward) accountability to ensure that local decisions are in line with local needs and priorities.

By measuring decentralization along all three lines of decision space, institutional capacities and accountability, this study attempts to translate into empirical analysis the theoretical linkages. While the study methodology is more fully described in Section 2, Table 4 illustrates the essence of this approach. For each dimension of decentralization, health sector functions can be related to decision space, capacities and accountability. Specific processes related to each can be thought of as representing narrow (low), moderate or wide (high) decision space (capacities/accountability) within the context of health sector decision-making in West Bengal. In terms of budgeting, for instance, narrow decision space might reflect allocation of line items that by-and-large conform to central norms or standards; wide decision space could reflect allocations that, while overseen by central authorities, are left largely to localities to determine. We re-emphasize that these subjective valuations of narrow/low, moderate and wide/high are relative to the context of West Bengal and not to the realm of possible governance arrangements found in health systems outside of India (or even relative to other states of India).

Table 4. Unified methodology for assessing decision space, capacities and accountability

Function / Illustrative Indicator	Dimension	Level of decision space (DS), capacity (CAP) or accountability (ACC)		
		Narrow/Low	**Moderate**	**Wide/High**
Planning				
▪ Local involvement in planning	DS	Local health administrator mainly defer to central planning norms/targets	Local health administrators make some local-level adaptations to central planning norms/targets	Local health administrator mainly include locally defined strategies and targets
	CAP	No training in planning for health administrators; no involvement of other sectors	Some health administrators trained in planning; some involvement of other sectors	All health administrators trained in planning; other sectors routinely involved
	ACC	Locally elected officials play no or minimal oversight role (e.g., via *Samitis*)	Locally elected officials play some oversight role but also defer to civil service administrators	Locally elected officials exercise active oversight role alongside civil service administrators
Budgeting				
▪ Preparation of regular budget	DS	Budget line items conform mainly to central norms	Local revisions made to budget line items but most allocative decisions made by higher authorities	Local revisions made to budget line items with minimal revisions made by higher authorities
	CAP	Previous year's achievements not reviewed to inform budgeting process		Previous year's achievements reviewed to inform budgeting process
	ACC	Locally elected officials not involved	Locally elected officials involved but input restricted by other local administrators	Locally elected officials provide significant inputs to and final authorization of budget
HR				
▪ Management of human resources	DS	All HRM functions handled centrally for permanent staff; no ability to contract non-permanent staff	Some HRM functions handled locally for permanent staff (e.g., posting, promotion, incentive payment); ability to contract some cadres of non-permanent staff (e.g., ancillary staff)	Most/all functions handled locally (including salary levels); ability to contract most/all cadres of non-permanent staff
	CAP	No/few managerial staff trained in HRM; no performance evaluation mechanisms used	Some managerial staff trained in HRM; performance evaluation mechanisms used variably	Most/all managerial staff trained in HRM; performance evaluation mechanisms used regularly
	ACC	Locally elected officials not actively involved in vested HRM powers (e.g., monitoring and certifying doctor	Locally elected officials actively involved in some of their vested HRM powers	Locally elected officials actively involved in most of their vested HRM powers

Function / Illustrative Indicator	Dimension	Level of decision space (DS), capacity (CAP) or accountability (ACC)		
		Narrow/Low	**Moderate**	**Wide/High**
		facility attendance)		
Service Organization				
	DS	Little local-level adaptation to services (e.g., no/few modifications to facility hours; no development of non-mandated programs)	Some local-level adaptation of services	Significant local-level adaptation of services
	CAP	No mechanisms in place to ensure quality of services (e.g., patient complaint procedures; inter-sectoral collaboration)	Some mechanisms in place to ensure quality of services but not consistently used	Mechanisms in place to ensure quality of services and consistently used
	ACC	Locally elected officials not involved and/or involvement not acted upon (e.g., no action taken regarding service complaints)	Locally elected officials somewhat involved and/or involvement sometimes acted upon	Locally elected officials very involved and/or involvement usually acted upon
Monitoring and Evaluation				
	DS	Local officials have no ability to influence monitorable performance parameters, which are set at the centre	Some local adaptation of centrally set monitorable parameters	Significant local-level adaptation of monitorable parameters
	CAP	No/little local-level use of monitoring mechanisms (e.g., HMIS, budget execution, HRM); no/little performance feedback from above	Some use of monitoring mechanisms/performance feedback from above	Regular use of monitoring mechanisms/performance feedback from above
	ACC	Locally elected officials are not involved/given any feedback about performance of health programs and facilities in their area	Locally elected officials are involved/given feedback about performance of health programs and facilities but without formal authorities	Locally elected officials are empowered to monitor and demand feedback/action related to performance of health programs and facilities

1.3 Background to India/West Bengal Health Sector

It has been 15 years since the passage of the 73rd and 74th constitutional amendments re-invigorated the process of decentralization in India. These amendments have given greater autonomy — and endowed constitutional status — to *Panchayati Raj* Institutions (PRIs) in areas such as functional and fiscal power and responsibility, local planning and development and local electoral processes.

In West Bengal, the West Bengal Panchayat Act, 1973 gives each level of the three-tiered PRI system specific authorities and responsibilities in several sectors, including health care, with large areas of overlap or co-responsibility with state level authorities. However until the early 2000 these acts and constitutional amendments were not translated into concrete implementation arrangements to include local government in the planning, implementation and monitoring of health services.

The major formal authority for decision making and implementation of health activities remained the responsibility of the state civil service. Major positions at the state and district level are occupied by officials who are members of the national Indian Administrative Service (IAS), who are trained to be administrators of the system and not specific technical experts in any of the many substantive functions of the government programs[1]. In the health sector, responsibility over the health system administration, public health programs at the district-level, and grass-root medical facilities below district level, are held primarily by the Chief Medical Officer for Health (CMOH). The CMOH reports to the Director of Health Services (DHS) at the state DoHFW Secretariat. CMOHs are supported by a variety of cadres with similar responsibilities, including Assistant Chief Medical Officers (ACMOHs) and Deputy Chief Medical Officers (DYCMOHs).

Over the last ten years, the state of West Bengal has implemented a series of state and national level health policy initiatives, which have significantly changed the role of different levels of government in the delivery of services, increased the extent of decentralization, and brought PRI functionaries onto a common platform with health officials.
in Box 1 presents primary decision-makers currently involved in the health sector in West Bengal[2].

The first of these initiatives was the State ***Health Sector Strategy (HSS), 2004-2013.*** The GoWB's Department of Health and Family Welfare (DoHFW) launched the Health Sector Strategy, 2004-13, with the following key objectives:

- To improve the access of poor and unreached groups to curative, preventive, promotive and rehabilitative health services;
- To reduce maternal and child mortality and the burden of communicable, non-communicable and nutrition-related diseases and disorders; and
- To ensure quality at all levels of health and medical care services.

The HSS repeatedly emphasized the role of PRIs in health services service delivery, for example claiming that: "the DoHFW is determined to strengthen de-concentration and decentralization in health planning and management as a key development in ensuring improved targeting of

services to the most needy and so ensure improved equity of access (HSS, p. 3)". The strategy envisioned a new approach to delivering primary services, with enhanced community participation, and with the objective of bringing primary care services closer to the community. Decentralization is listed as one of the key "Strategic Priorities" (Strategic Priority n. 3), with the premise that "health of the community is safer in the community's hands".[3] During the preparation of the HSS, in 2002, all centrally sponsored schemes were merged into one Society, the Zilla Swasthaya Samiti (ZSS), or District Health and Family Welfare Society (DHFWS), at the District level, which in 2005 became the executive body of the District Health Mission constituted under the NRHM. Except the HIV/AIDS program which still has a separate society, all other programs (e.g., RCH2, Immunization, Disease Control (Leprosy, TB, Blindness)) were merged, although budgets remained separated. Each Samiti has representatives from Panchayati Raj Institutions (local governing bodies), and the health administration as lead members (see below).

Subsequent to the HSS, in 2005 the state launched the ***Health System Development Initiative,*** to be implemented over the five-year period 2005-06 to 2009-10 [4]. The HSDI seeks to translate key aspects of the HSS into specific investments/programs, and policy/institutional reforms, which are specified in a "Matrix of Milestones." The HSS's Strategic Priority number 3 on Decentralization has been renamed "Organization and Management Systems", and includes, together with decentralization, HR reforms and HMIS strengthening. Under the decentralization subset, the following have been the main achievements over the last 5 years:

a) Formation of Rogi Kalyan Samitis (RKS) from Medical College till Block Primary Health Care level health facilities, with representatives from local institutions. Each RKS would have representatives from the respective levels of general administration, PRI, and health administration as lead members. The relevant government orders (dated November 7, 2005 and March 1, 2006) explicitly delineated the roles and functions of a RKS which, taken together, painted a comprehensive management structure at the facility level.

b) Increase responsibilities of the Gram Panchayats in planning and monitoring service delivery. All subcentres (SCs) territorial borders were reshaped to coincide with the GP borders, and in each GP a Headquarter SC was created to coincide with the GP Headquarter. GPs have been made responsible for maintaining SCs and Primary Health Centres PHCs)[5], recruiting Accredited Social Health Activists (ASHAs), and bringing together various stakeholders (ANMs, Anganwadi workers, and ASHAS) to improve delivery of preventive services at the grass-root level. On the 4th Saturday of each month, a meeting is scheduled at Gram Panchayat level with all grass-root workers to take stock of progress and bringing convergence.

Finally, in 2005-6 the Indian government launched the ***National Rural Health Mission,*** 2005-2012. NRHM seeks to expand and reorganize the basic health care delivery system to provide effective healthcare to rural people throughout the country. The core NRHM strategies in West Bengal included: (i) introduction of an Accredited Social Health Activist (ASHA) in every village to act as a bridge between the ANM and the village community; (ii) preparation of Village Health Plans and District Health Plans, with allocation of flexible ('untied') funds to each facility from the lowest level Subcenters to District Hospitals; (iii) revamping and expanding the rural health care infrastructure; (iv) a cash benefit to women who utilize antenatal

care and institutional delivery facilities (*Janani Suraksha Yojana*), intended to overcome the financial disincentive to seek institutional delivery.

Under NRHM, decentralization has further progressed in two directions: (1) further devolution of powers and resources to local institutions, and (2) deconcentration of powers and resources to the districts and lower levels of health administration. The first direction was extremely important in the context of local oversight and solutions. Several approaches have been simultaneously followed to meet these objectives: (a) empowering District and block level Samitis (societies), and RKS at the facility level by providing them with increased institutional capacity[6] and untied funds[7]; (b) Creation of Village Health and Sanitation Committees in each village, which have been given untied funds year to spend on locally decided priorities.

NRHM radically increased the amount of funds managed by the DHFW Samiti (Society). These Samities now act as the principal hub of channelizing off-budget fund which account for about 20 percent of total health spending by government. Samitis are not only receiving more funds, but are also entrusted with more autonomy on how the untied funds would be spent. In other words, the reform process now asks the Samitis, the face of decentralization, to change their role – from a mere fund-router to a resource manager.

While such initiatives by the central and various state governments in India have demonstrated an active commitment towards decentralizing "funds, functions, and functionaries" to local governments and to support local planning, there is still limited evidence about the process of decentralization and its likely impacts. Moreover, little is known systematically about the actual 'divergence' from formal institutional arrangements aiding effective decentralization, and as we have raised in the research questions, how far does local stakeholders actually exercise the roles and functions expected of them.

Box 1: District-block and village-level stakeholders

Table 5. District-, block- and village-level health sector decision-makers in West Bengal

Sector/role	Districts	Blocks	Village	Urban Bodies	Loca
IAS	▪ District Magistrate*	▪ Block Development Officer*			
Health sector	▪ Chief/Assistant Chief/Deputy Chief Medical Officer for Health ▪ Project Management Unit members ▪ Hospital superintendent	▪ Block Medical Officer for Health ▪ Medical Officer for Health ▪ Block Public Health Nurse	▪ Auxiliary Nurse Midwife ▪ Health Supervisor/Assistant ▪ Accredited Social Health Activist** ▪ Aanganwadi worker**	▪ Medical Officer ▪ Hospital superintendent	
PRI	▪ *Zilla Parishad* Chairman (*Sabhadhipati*) ▪ Public Health & Environment Sub-Committee Chairman	▪ *Panchayat Samiti* Chairman (*Sabhapati*) ▪ Public Health & Sanitation Committee member ▪ Health & Family Welfare/*Rogi Kalyan Samiti* member	▪ *Gram Panchayat* Chairman/Vice-Chairman (*Pradhan*/*Upa Pradhan*) ▪ *Gram Panchayat* member ▪ Village Health and Social Committee member*	▪ Municipality Chairman ▪ *Swasthya Upa Samiti* member	

* Interviewed but excluded from final analysis (see Endnote 1)
** Included in sampling frame but no interviews were able to be implemented for this cadre

Responsibility over most health and medical facilities **at the district-level** are held primarily by Chief Medical Officer for Health (CMOHs). CMOHs are involved in general planning, supervision, and coordinating implementation of all programs. The CMOH: is the member-secretary of the District Health & Family Welfare *Samiti* (DHFWS); a special invitee in the meetings of the *Janaswathya-O-Paribesh Sthayee Samiti* (Standing Committee on Public Health & Environment, responsible for deciding on public health and sanitation initiatives and programs and for overseeing functioning of health facilities and delivery of services) of the *Zilla Parishad* (ZP); and advises the ZP president (*Sabhadhipati*) and the district administration on policy matters and daily activities related to health service delivery. The CMOH also supervises the functioning of the NRHM District Program Management Unit (DPMU), and coordinates between the activities of different health programs and interventions. While the ACMOH is generally in charge of similar functions at the sub-division level, DyCMOHs, who generally number three or four in a district, assist the CMOH in specific areas such as implementation of RCH services, HMIS, national disease programs (e.g., TB, leprosy and blindness) and personnel and general administration.

The ZP Chairman (*Sabhadhipati*) chairs the ZP Standing Committee on Public Health & Environment, the DHFWS, and the district-level hospital's *Rogi Kalyan Samiti* (RKS). On paper, the ZP Chairman, together with civil service (DM, BDOs) and health (CMOH/BMOH), also participates in consultative processes of local need assessment, identifying local vulnerabilities and deciding on health service delivery improvement measures. As a member of the RKS, the ZP Chairman also provides opinions and decides on the priority expenditure under available funds and routine activities/functioning of the district-level hospital.

At the **block level**, Medical Officers (MOs) are doctors at the Primary Health Center- (PHC), Block Primary Health Centres (BPHC), Rural Hospitals (RH), and Sub-Divisional/State General Hospitals (SDH/SGH). MOs are usually fresh MBBS appointees in PHCs, and on seniority-basis are promoted to upper-level health facilities. In SDH/SGH hospitals, as well as District hospitals, superintendents are in charge of administration, primarily concerned with curative service provisions. Based on their place of posting, these officials participate in the activities of the RKSs, and advise/consult with and report to the BMOH/ACMOH/CMOH regarding general service delivery, facility-level planning and budget/financial expenditures specific to the health facility. Block Public Health Nurses (BPHNs) are public health workers, who assist the BMOH in planning, supervision, implementation and feedback/reporting of national public health programs.

The *Panchayat Samiti* (PS) serves functions largely similar to the ZP (described above) at the block level. Like the ZP president, the PS Chairman (*Sabhapati*) chairs the PS Health and Family Welfare Society and the RKSs of block level hospitals, and the PS has a sub-committee of elected members which oversees public health functions; a major part of the functions/powers/responsibilities of these bodies are similar to those in the district-level ZP. PHC MOs are expected to attend *Panchayat Samiti* meetings

In urban settings, the sub-committee on public health/health cell in the ULB looks after the public health as well as functioning of urban health centers/health posts. The sub-committees are headed by a chairman-in-council, with the local ACMOH (often) as an invited member and comprises of elected members to the ULB, municipal sanitary inspector and health officers/medical officers as invitees. Urban health centers and public health programs in the ULBs are mostly supported through separate funds from the municipal affairs department apart from supplementary funds from the health department.

Auxiliary Nurse Midwives (ANMs) are the front-line health workers **at the village/sub-centre level**. ANMs hold a minimum level of education of 10^{th} pass and receive one and one-half years of specialized training. Senior ANMs with at least five years of experience can receive additional training to supervise and provide technical assistance to ANMs. ANMs receive some professional training at the time of joining and are supposed to have received specific training in planning and management of funds of the sub center (a responsibility they share with the *Gram Pradhan*). On paper, they should be involved in developing the Village Health Plans, oversee the activities of Village Health and Social Committee (VHSC) (a GP standing committee) wherever existing and provide a monthly log of activities and performance indicators to the BMOH.

On the PRI side, *Gram Panchayats* (GPs) are headed by GP *Pradhan* and attended by other GP members. All GP members are supposed to receive short term training on PRI roles and responsibilities. The GP *Pradhan* is a member of the Block Health & Family Welfare *Samiti* (BHFWS) (with roles and responsibilities analogous to those of the DHFWS) and the RKS of the local Primary Health Center (PHC). Additionally, GP members are involved in creating awareness among the local people about the main aspects of public health and helping in different aspects of curative and preventive care, including family planning and child nutrition under the Integrated Child Development Scheme (ICDS) and midday meal scheme, overseeing and helping in implementing the schemes of maternal & child health care (RCH) and disease control (TB, malaria, etc.), maintaining the birth-death register and assist/advise/monitor daily activities and functions of ANM and other health workers in local health facilities.

2.

2. Methodology

The following analysis builds on the "decision space" approach that analyzes and distinguishes between the *de jure* (formal) range of choice (i.e., decision space that that officials at different levels of government are granted by legislation, decrees, and other government regulations) and the *de facto* range of choice that they report actually exercising in their positions (Bossert 1998). The formal range of choice was assessed through reviewing key legislation, previous literature and reliance on knowledge of expert informants who have worked in or with the Ministry of Health and other government offices. The *de facto* range of choice was assessed primarily through a survey of 225 officials (48 health workers, 68 health administrators, 93 PRI functionaries/office-bearers and 16 civil service administrators[8]) carried out in six of West Bengal's 18 districts. This survey asked specific questions about health sector choices made by officials and stakeholders in five functional areas — strategic and operational planning, budgeting, human resources, service organization/delivery, and monitoring and evaluation. It also gathered data on two additional themes — local support provided to the health sector and PRI decision-making processes — to complement and enrich the analyses focused on health functions. The content of the questions covered decision space, institutional capacities to make those choices, and accountability of decision-making to locally elected officials.

2.2 Study design

2.3 Survey development

The research instrument used in West Bengal is semi-structured, containing both closed- and open-ended questions. Development of survey items (questions) was based on modifying similar questionnaire instruments developed by Harvard School of Public Health and used elsewhere in India (Uttar Pradesh and Orissa), as well as in other developing countries (e.g., Pakistan, Vietnam). To develop the questions specific to West Bengal, Sumit Mazumdar from CSSSC met with Thomas Bossert, Paolo Belli to review and modify those administered previously. Drafts were exchanged by e-mail to decide on the final instruments. The instruments used for key officials were designed for specific enquiry about the choices they have been able to make, the restrictions on those choices imposed by higher authorities, the processes by which decisions are made, and the skills, experience, training and other capacities they have for making those decisions. The instruments were reviewed by experts at the Bank and officials within the Government of West Bengal Departments of Health and Family Welfare and *Panchayats* and Rural Development for final adjustment or inclusion of needs according to needs before finalization. Each survey instrument was designed to elicit information about decisions made by local-level officials during the current year.

2.3.1 Dimensions of decentralization

The survey instruments operationalized the concepts of decision space, institutional capacities and accountability, as follows:

- **Decision Space (DS)**: Decision space relates primarily to health administrators/workers and other civil service officials and was reflected by assessing respondents and higher-level authorities involvement in local decisions. Two broad elements of decision space were assessed. The first relates to the range of decisions over which respondents reported making choices, such as the threshold level up to which a particular MO reported conducting procurement. Among this group of questions, making greater use of

permissible authority and/or choices that go beyond the *status quo*, such as a CMOH using contracting mechanisms to fill human resources needs, is interpreted as creating a wider decision space. The second element relates to the degree to which locally-made decisions are affected or accepted by higher-level authorities, such as whether budgets prepared by CMOs were later subjected to state-level revisions.[9]

- **Capacity (CAP)**: As institutional capacities reflect attributes of individuals, processes and systems, questions of all three elements were asked of respondents. Individual-level attributes in capacities relate primarily to administrative and technical capacities of local health sector stakeholders, such as adequacy of staff skills. Additionally, a more active degree of involvement reported by respondents in activities for which they are expected to participate (e.g., prevalence/coverage surveys under centrally sponsored schemes for ANMs) is interpreted as higher capacity. In terms of processes, capacities reflected practices felt to be associated with higher or lower capacities, such as use of data, monitoring and evaluation by health administrators to make decisions or degree of multi-sectoral/stakeholder involvement in developing strategic plans. System-level attributes reflected resource-related capacities, such as availability of funds, infrastructure or staff.
- **Accountability (ACC)**: As emphasized in Section 1.2.3, accountability, as conceptualized in this study, relates to the degree to which non-elected officials are held accountable by elected bodies. Among PRI respondents, accountability was assessed by examining the degree to which respondents were actively involved in health sector affairs (e.g., whether they complained about bad performance of doctors and what happened), as well as the degree to which these respondents felt their views were acted upon by non-elected decision-makers (e.g., whether PRI views were represented in final strategic plans). For non-elected officials, accountability was defined as the degree to which respondents reported PRI involvement in health sector decision-making.

2.3.2 Decision-making functions

The health functions analyzed are broad and contain several sub-themes. Strategic and operational planning, for example, involves processes related to setting future health programs, formulating/projecting budgets, and determining long-term priorities. Table 15 of Appendix I presents the number of questions that appear in the research instruments for each category of respondent, dimension of decentralization and health function. The following provides a brief overview of the content of each function and sub-themes (as well as the two additional themes of local support and PRI decision-making previously identified):

- **Strategic and Operational Planning (SOP)**: This theme relates to development of multi-year (strategic) and annual (operational) plans at the district level (e.g., NRHM District Action Plan). Questions focus on technical planning processes for future activities. Examples of specific topics and/or survey questions include: the degree to which respondents, other stakeholders and other bodies (e.g., GPs) are involved in developing plans, whether planning training had occurred, whether and/or how respondents established local priorities; and whether monitoring/review mechanisms are in place/are used for planning.
- **Budgeting (BUD)**: This theme relates to the allocation of funds for current and future activities. Questions focus on allocation of funds disbursed centrally as well as supplementary funds raised locally (if applicable). Examples of specific topics and/or survey questions include: whether respondents are involved in budgeting processes;

criteria used to allocate disbursed funds to programs and activities; whether respondents have sufficient personnel with accounting training; and if respondents can request/receive supplementary allotments from central authorities if required.

- **Human Resources (HR)**: This theme relates to the appointment/management, deployment and oversight of health sector personnel. Questions focus on mechanisms to ensure adequate hiring/posting/oversight/training of personnel. Examples of specific topics and/or survey questions include: use of performance management tools; Human Resources Management (HRM) processes such as requesting/filling new posts, transfers, and use of contracting; resources available for personnel motivation.
- **Service Organization and Delivery (SOD)**: This theme relates to implementation of current programs and activities that are both centrally mandated (or expected) and locally initiated. Questions focus on the extent to which services and programs are actually delivered and/or adapted locally. Examples of specific topics and/or survey questions include: whether respondents carry out centrally mandated (or expected) programs without any local adaptation, or whether such programs are locally reshaped to adjust to local priorities; whether respondents initiated new/non-centrally mandated programs or services; procurement practices.
- **Monitoring and Evaluation (M&E)**: This theme relates to use of data for monitoring and evaluation of current activities. Questions — all of which are considered indicators of capacity — focus on who participates (and to what extent) in monitoring and evaluation.
- **Local Support (LS)**: This theme relates to support provided to the health sector by PRI and other civil society bodies. Specific topics and/or survey questions include: availability and use of PRI-generated funds for the health sector; and support of/cooperation by PRI bodies for health sector initiatives. Questions asked of civil service administrators are considered indicators of accountability, while those asked of PRI officials are considered indicators of capacity.
- **Decision-making in PRIs (PRI)**: This theme — only applicable to elected officials — relates to the functioning of PRIs. Questions focus on the nature of involvement in PRI meetings and decision regarding funds and activities. Examples of specific topics and/or survey questions include: how often elected bodies meet; how decisions are made; to what extent guidelines from above affect decisions.

2.4 Sampling approach

Purposive sampling strategies were used to select both area-level sampling units and individual-level respondents. Area-level units of analysis were selected based on a purposive, multi-stage stratified sampling strategy. Six districts were selected in the first stage, followed by two blocks from each selected district and one GP from each of the selected blocks. Additionally, from each of the selected districts, two Urban Local Bodies (ULBs) were selected for the urban respondents. Districts were purposively selected on the basis of socio-economic indicators expected to affect health system performance but not be directly related to health sector decentralization (in terms of decision space, capacities and accountability). Based on this approach, the 18 districts of West Bengal were stratified into two clusters — 'High-ranking' and 'Low-ranking' — based on the unweighted average of rank scores in per capita income and level of urbanization (see Table 13 in Appendix I).[10] Within each of these clusters, one district was selected in which the ZP represented the opposition to the ruling party (the Communist Party of

India (Marxist) (CPIM)) of West Bengal. Selection of the remaining two districts within each cluster took into consideration variation in geographical representation of the agro-climatic zones of the state. At the sub-district level, blocks were selected to maximize geographical variation (e.g., for districts with a north-south spread, one block each was chosen from the northern and southern part of the district, respectively). A similar approach to selection of ULBs was followed if possible. Selection of GPs was random from existing GPs in the selected blocks. Table 6 presents the selection of area-level sampling units.

Table 6. Districts sampled and characteristics related to area-level criteria for selection

Rank	ZP political orientation	Geographical orientation	Districts	Blocks	GPs	ULBs
High	Ruling party	North	▪ Jalpaiguri	▪ Kalchini ▪ Malbazar	▪ Satali ▪ Moulani	▪ Alipurduar ▪ Dhupguri
		South	▪ Bardhaman	▪ Jamuri ▪ Purbasthali-I	▪ Bahadurpur ▪ Nadanghat	▪ Kalna ▪ Memari
	Opposition	South	▪ Purba Medinipur	▪ Contai-I ▪ Panskura-I	▪ Dulalpur ▪ Radhaballavchak	▪ Haldia ▪ Tamluk
Low	Ruling party	West	▪ Bankura	▪ Chatna ▪ Kotulpur	▪ Dhaban ▪ Madanmohunpur	▪ Bishnupur ▪ Sonamukhi
		Southwest	▪ Birbhum	▪ Nalhati-II ▪ Dubrajpur	▪ Nowapara ▪ Paduma	▪ Bolpur ▪ Rampurhat
	Opposition	North	▪ Uttar Dinajpur	▪ Chopra ▪ Itahar	▪ Sonapur ▪ Marnai	▪ Islampur ▪ Kaliyaganj

The districts included — Jalpaiguri, Uttar Dinajpur, Barddhaman, Bankura, Birbhum and Purba Medinipur — are broadly representative of the geographical, socioeconomic and political diversity in the state. Jalpaiguri is at the extreme north, largely agricultural and has a considerable proportion of scheduled caste/tribe population. It also in terms of development and health indicators compared to the state average. Uttar Dinajpur is one of the poorest districts and is consistently bottom-ranking across a number of fronts, including low literacy levels and poor performance in development indicators. Barddhaman is one of the best-performing districts in the state, and traditionally a powerhouse in terms of agriculture and/or industry and political importance. Its proximity to the state capital (about 100 kilometers away) adds to its strategic advantage. Bankura and Birbhum both exhibit considerable intra-district heterogeneity in development processes and outcome indicators. Bankura has a large proportion of vulnerable social groups, widespread poverty in certain pockets and, recently, was affected by the Maoist disturbances. Birbhum, like Barddhaman, has backward pockets that coexist with above-average blocks or regions. Finally, Purba Medinipur (a new district carved out of the erstwhile Medinipur) is a relatively progressive district and benefits from proximity to Kolkata. In recent years, the district has been witness to a significant political transformation with a notable swing of popular support placing the opposition parties at the control of most of the local governments, as well as in the parliament constituencies.

It should be noted that often the ranking of the districts alter in view of the indicators chosen, except for the persistent low-rankers (e.g., Uttar Dinajpur) and top-notch performers (e.g., Barddhaman). Furthermore, while we have duly considered intra-district representation in

selecting sub-district sample respondents (from blocks and *Gram Panchayats*), an extent of arbitrariness exists. Given considerable intra-district variation in the processes and outcomes of our interest, this may sometimes lead to findings which cannot be easily generalized. This is a limitation of any sample survey in heterogeneous areas, and thus any generalization should be made cautiously.

At the individual level of analysis, the study sampled pre-identified categories of officials involved in health sector decision-making at each area unit of analysis from which to sample. For some categories, such as CMOs or BMOs, sampling was universal within that sample unit (i.e., only one relevant respondent exists at that level of the health system or PRI structure). For other categories, such as ANMs or members of the VHSC, efforts were made to conduct random sampling (e.g., selecting sub-centres at random from within the GP and interviewing the relevant ANM). A list of potential respondents was provided to the field investigators, and if any such pre-selected respondent was unavailable/post vacant, investigators were instructed to select an alternative respondent (of that category) from the next nearest facility or for PRIs, the vice-president/chairman.

2.5 Survey implementation

The surveys were administered during the period September to October, 2009 with official letters of introduction obtained by the survey administrator (the Centre for Studies in Social Sciences, Calcutta (CSSSC)) from the DOHFW. Survey administration was conducted by six teams of interviewers: one for each district and two field investigators per team. The research teams also collected data on performance in financing, human resources and health system indicators from both provincial and national sources. Out of a sampling size of 240 respondents, 225 interviews were completed in entirety (for a response rate of 93.7%).[11] After the survey was completed, the authors conducted discussed preliminary findings with the interview team to finalize the data coding plan.

2.6 Data analysis

The study draws primarily on statistical estimations to analyze relationships between decision space, capacities, and accountability, as well as qualitative observations made by interviewers during the course of questionnaire implementation. The following describes the process used to transform the survey instruments into data points as well as an overview of the statistical estimation techniques used for analysis.

All survey items (questions) included in the analysis were scored on a Likert scale with values ranging from one (representing narrow (low) decision space (capacity/accountability)), two (representing moderate decision space/capacity/accountability), to three (representing wide (high) decision space (capacity/accountability)). Scoring of survey questions resulted from a collaborative process between within the HSPH/CSSSC team. From these individual questionnaire items, two sets of composite indicators of decision space, capacities and accountability were generated. The first set of composite measures comprises summary scores of decision space, capacity and accountability calculated for each respondent *within* a given function.[12] The second set of composite measures comprises summary scores of decision space, capacity and accountability calculated for each respondent *across* all functions. For both sets of measures, composite scores were calculated as the unweighted mean (average) of all relevant

individual questions provided by a given respondent[13]; function-specific summary scores therefore ranged continuously from one to three.

The composite scores described above were then standardized within each respondent category. Because the respondents sampled have varying roles in health sector decision-making, survey instruments varied by type of respondent. While scores for decision space, capacities and accountability within a set of respondents are comparable, those across categories are not.[14] To address the lack of comparability of scores across respondent categories, scores for composite indicators were standardized within sets of respondents who received identical questionnaires (see Table 14 of Appendix I for a listing of sets of respondents with identical questionnaires; see Table 15 of Appendix I for a listing of the number of questions for each respondent category by function and dimension of decentralization). Scores were standardized by differencing individuals' scores from their respective group mean and dividing by the standard deviation of scores from their group.

To conduct aggregate- (area-) level analyses, aggregate indicators were calculated from the standardized scores of individual-level composite indicators. To account for area-level differences in the number of respondents sampled within each category, a single standardized score for each set of respondents with identical questionnaires was calculated based on the unweighted mean of all applicable respondents within a given district. District-level scores in decision space, capacities and accountability were then calculated as the unweighted mean of those scores.[15]

There are two major assumptions made by the above-described methodology. First, it fundamentally assumes that the three dimensions of decentralization analyzed (decision space, capacities and accountability) can be meaningfully summarized quantitatively into singly composite scores, whether function-specific or across all health functions. Second, because summary scores are calculated as unweighted averages of individual survey questions, it assumes that the content of each question is equally important within a given decentralization dimension/health function. Among health workers, for example, responses to certifying/nominating JSY health insurance beneficiaries receives as much weight in decision space in service organization/delivery as suggesting changes/modifications to a set of four services identified by the questionnaire (e.g., immunization days).[16]

Bivariate (pairwise) Pearson correlations of coefficients were performed to conduct statistical tests of association presented in the findings. Given the relatively small sample sizes at both the individual and area-level units of analysis, correlations are interpreted by this study as statistically significant at the 10% level of confidence.

Quantitative findings drawn out through the above-described analytic plan are complemented with qualitative observations made during the course of questionnaire implementation. Field interviewers documented summary reports on various study themes (i.e., decision-making processes, capacities of different group of respondents, convergence or divergence of responses between different types of stakeholders, etc.) based on their observations made during interviews and ensuing discussions with the respondents. Qualitative observations based on these reports,

as well as observations made by the CSSSC-affiliated author of this report, are included alongside presentation of quantitative findings.

2.7 Limitations

This study has five primary limitations. First, the validity and reliability of the study's measures of decentralization are not known. This study relies on an exploratory survey methodology to measure the extent of decentralization that has not been widely replicated. Because there is no "gold standard" to measure the study themes of health sector decision space, institutional capacities or accountability across a range of health functions, the validity and/or reliability of the quantitative measures of these dimensions cannot be assessed.[17] The surveys are therefore not akin to many widely applied household surveys (e.g., the Demographic and Health Survey) for which many trial instruments have been tested over time and in different contexts to validate the content of questions. Indeed, because formal decision space over various health sector functions varies widely by country context and depends greatly on what kinds of individuals are involved in decision-making, it would be difficult to validate unless it underwent repeated applications in the same country and under the same formal decision space legal context over time. Nonetheless, previous experience with similar instruments in other states of India as well as the consultative process by which questionnaires were developed provided reassurance of the validity of our decision space, capacity and accountability measures. Local knowledge of stakeholder roles and responsibilities — as well as the health system itself — aided the CSSSC/HSPH team in focusing on the most salient aspects of each health function/dimension of decentralization; this helped ensure "content validity". Previous experience with implementing similar surveys in other contexts in India (Orissa and Uttar Pradesh) also aided the CSSSC/HSPH team in effectively posing questionnaire items.

Second, the survey relies on self-reported data which, in the context of statistical analyses, may result in biases and/or diminished reliability. As with any self-assessments, the validity and reliability of the data revolves in large part around the degree to which answers provided by respondents correspond to what actually happens in practice. While the survey administrators stressed their hope that respondents would answer according to what they actually do and not necessarily what is written in official rules or regulations, there was no way to verify veracity of answers or reliability. The study had neither the necessary time nor resources to collect "objective data" on decision space, institutional capacities or accountability to complement that collected by the survey. It was not possible, for example, to corroborate performance management practices reported by health officials' with documentation (e.g., employee reports) related to those practices. However, it should be noted that this limitation would apply equally to commonly utilized alternative methodological choices, such as unstructured interviews, focus group discussions, or expert valuations. Further, interviewer reports suggested that respondents were generally cooperative and reported honestly. Indeed, elected representatives were perceived as being particularly enthusiastic and willing to provide honest answers, likely because they perceived this study to be a window of opportunity to air their views. While those in the civil service tended to view the study more as instruments of protocol requiring administrative attention, interviewers still believed that they were providing honest answers.

Third, the study is particularly limited in its assessment of accountability. Although the study hopes to assess downward accountability of local health systems to citizens (see Section 1.2.3 for

a definition of "downward" accountability), it is limited to measuring downward accountability of health systems to elected PRI officials. As highlighted in Section 1.2.3, there are many reasons that accountability to PRI officials may not equate with accountability to local citizens themselves (particularly in the context of West Bengal in which the CPIM has historically dominated local politics). To reiterate one of the primary take-home messages of that section, it is left to the reader to decide on the extent to which downward accountability to citizens' representatives in West Bengal, PRI bodies, translates into accountability to citizens themselves.

Fourth, the study is limited in its ability to relate dimensions of decentralization to indicators of health sector performance. Although efforts were made to collect administrative data related to health sector performance, such as vacancy rates among health cadres or budget execution rates, these data were not available to the study team below the district level of aggregation, and even at the district level intermediate indicators of governance performance (such as data on absenteeism, or drug stock outs, or budget execution) were not available. Further, collecting individual-level performance data, such as individual performance evaluation reports, was beyond the scope of the study. As a result, the only health systems performance data available for analysis were service delivery (such as immunization coverage) district-level indicators. Because of severe sample size constraints at the district level of analysis (n = 6 for all quantitative findings), the study was unable to meaningfully analyze in a quantitative way associations between dimensions of decentralization and service delivery.

Finally, while qualitative findings reported in this study are informative and supplement quantitative findings, they are not the culmination of a rigorously designed qualitative research strategy. Conclusions drawn from qualitative findings should therefore be interpreted with caution.

3 Presentation of survey findings

3.2 Sample characteristics

As indicated in Table 7, a total of 209 health sector and PRI member respondents were interviewed across six districts and 12 blocks in West Bengal (Table 16 and Table 17 in Appendix I provide more detail on respondents sampled). Of those 209 respondents sampled, 195 were retained for analysis. The reduction of approximately 15 respondents included for analysis was due to two main reasons: respondents of some categories were not able to be interviewed across all districts (e.g., PRI VHSC members), and some respondents interviewed were not of categories to which the semi-structured questionnaires had been tailored (e.g., PMU members).[18] Exclusion of those respondents was not found to qualitatively affect findings described in this section.

Table 7. Sample size

District	Health Administrators		Health Workers		PRI Officials		All Respondents	
	Sampled	Analyzed	Sampled	Analyzed	Sampled	Analyzed	Sampled	Analyzed
Jalpaiguri	12	12	7	7	16	13	35	32
Uttar Dinajpur	11	10	9	9	17	16	37	35
Bardhaman	14	13	9	8	15	14	38	35
Bankura	8	7	7	7	15	14	30	28

Birbhum	10	10	9	9	15	13	34	32
Purba Medinipur	13	13	7	7	15	13	35	33
Total	68	65	48	47	93	83	209	195

Selected characteristics of the respondent pool retained for analysis are presented in Table 8. Both health and PRI officials averaged around 43 years of age. While almost all health administrators interviewed were men, a substantially greater percentage of women made up the PRI pool of respondents (40%) and the large majority (around 90%) of frontline health workers interviewed were women. In terms of formal education, almost all health administrators possessed a college or graduate education (the vast majority holding a MBBS). Around 50% of health workers had finished high school, and around 30% held a graduate degree. Around 90% of health workers reported having received additional professional training, such as nursing or ANM training. Almost 55% of PRI officials held a graduate degree, while around 30% had completed secondary school. Around 10% of PRI officials reported having received additional professional training. In terms of length of service, both health administrators and workers averaged at least 10 years of work experience (close to 20 years in the case of health workers), with 4 and 10 years of that service, respectively, at their current post. Close to 60% of PRI officials interviewed were first-time electees. Additionally among PRI respondents, close to one-half represented the Communist Party of India (Marxist), 30% represented the Indian National Congress, 20% represented the All India Trinamool Congress, and the rest represented other parties. Just over one-half of respondents held reserved seats (for reasons of caste or gender).

Table 8. Respondent characteristics

	Age	**% male**	**Education***			**Years of service / # times elected**		**N**
			Low	**Medium**	**High**	**Total**	**At post**	
Health Administrators	41.4	0.97	0.00	0.02	0.98	11.9	4.0	65
Health Workers	43.2	0.11	0.20	0.52	0.28	18.6	10.7	47
PRI Officials	42.7	0.60	0.14	0.31	0.54	1.7	N/A	83

* Health Administrators: low/medium = less than university; medium = Bachelor's; High = graduate; Health Workers: low = less than high school; medium = high school; high = graduate; PRI Officials: low = less than secondary; medium = secondary/high school; high = graduate

3.3 Associations between decision space, capacities, and accountability

One of the two major goals of this study is to address the question: is there evidence that the "ingredients" of health sector decentralization — decision space, capacities, and accountability — work together synergistically. This study's methodology permits statistical estimation of the degree of association between those three dimensions of decentralization. The following sections present the results of those estimations at both the individual- (respondent-) and district-level of analysis.

3.3.1 Individual-level findings

The following sections present estimations conducted at the individual/respondent unit of analysis. These include correlations between dimensions of decentralization, between health

functions, and between dimensions of decentralization/health functions and respondent experience. Each is presented, in turn.

3.3.1.1 Inter-dimension correlations

The following results relate to estimated statistical relationships *between* dimensions of decentralization (i.e., decision space, capacities and accountability) both *within* a given function (e.g., does decision space within one function correlate with capacity in that same function?) and *across* all functions (i.e., is decision space across all functions correlated with capacity across all functions?). The tables presented in the main text refer to findings that pool data across all three broad categories of local health sector decision-makers: health administrators, health workers and PRI officials. Given the substantially different role between health administrators, health workers and elected officials in decentralized service provision, notable differences in findings between these three broad categories of officials are also highlighted in the main text with corresponding statistical tables presented in Appendix I.

As indicated in Table 9, composite measures of each of the three dimensions of decentralization for a given health function are generally positively correlated with other dimensions, even if many are not of statistical significance. When data are pooled across all respondents, there is consistent evidence of synergies between dimensions of decentralization: all three pair-wise correlations of summary scores of decision space, capacities and accountability (the rows labeled "ALL" in Table 9) are statistically significantly positively correlated with each other ($\rho = 0.26$ to 0.35). This finding is consistent with the assumptions underpinning Figure 1 that synergies between the dimensions of decentralization exist. While there is comparatively less statistical evidence of inter-dimension synergies on a function-by-function basis (i.e., many inter-dimension correlations are not statistically significant within each individual health function), it is notable that these associations are nonetheless all positive as well.

Further investigation of findings by type of local decision-maker (i.e., health administrators, health workers and PRI officials) reveals the following. First, among health administrators, relationships between overall decision space and the two other dimensions of decentralization appear to relate primarily to the strategic and operational planning: there is a significant relationship between decision space and capacity within strategic and operational planning ($\rho = 0.41$) while there is also a significantly positive correlation of decision space with accountability at the 10% confidence level ($\rho = 0.24$). Among health workers, correlations between decision space and capacities within both strategic and operational planning/budgeting are significant ($\rho = 0.41$ and 0.40) as is decision space and accountability in budgeting ($\rho = 0.46$). Collectively, these findings suggest that an emphasis on integrated planning and budgeting of financial resources for health services may be warranted to capitalize on synergies between dimensions of decentralization within these health functions.

Second, findings among PRI officials are somewhat similar to findings among health administrators: although no capacity/accountability correlations are significant within any one health function, there is a statistically significant positive correlation ($\rho = 0.37$) in relation to the composite cross-function indicators. This finding suggests that the exercise of downward accountability (to PRIs) is associated with greater institutional capacities. Again, this finding is

consistent with assumption made by Figure 1 for conditions needed for decentralization to realize its objectives.

Table 9. Associations between dimensions of decentralization, by respondent category

Function[†]	DS/CAP[††]		DS/ACC[††]		CAP/ACC	
	P	N	ρ	N	ρ	N
All respondents						
SOP	0.41 **	112	0.11	52	0.14	135
BUD	0.16 *	112	0.30 **	98	0.06	143
HR	0.16	74	0.18	55	0.11	52
SOD	0.12	112	0.17 *	112	0.21 **	195
ALL	0.34 **	112	0.26 **	112	0.35 **	195
Health Administrators						
SOP	0.41 **	65	0.11	52	0.11	52
BUD	-0.01	65	0.24 *	65	0.08	65
HR	0.15	52	0.18	55	0.11	52
SOD	0.16	65	0.15	65	0.43 **	65
ALL	0.25 **	65	0.17	65	0.49 **	65
Health Workers						
SOP	0.41 **	47				
BUD	0.40 **	47	0.46 **	33	-0.17	33
HR	0.32	22				
SOD	0.05	47	0.19	47	-0.04	47
ALL	0.46 **	47	0.38 **	47	0.09	47
PRI members						
SOP					0.15	83
BUD					0.17	45
HR						
SOD					0.17	83
ALL					0.37 **	83

**: significant at $p < 0.05$; *: significant at $p < 0.10$

[†] SOP = Strategic/Operational Planning; BUD = Budgeting; HR = Human Resources; SOD = Service Delivery/Organization

[††] DS only applicable to health officials

Box 1. Summary of findings — inter-dimension correlations

- There is statistical evidence of synergies among the three dimensions of decentralization: decision space, capacities and accountability. This suggests that individuals and local health systems with greater capacities tend to take more innovative decisions and are held more accountable for those decisions to local elected officials.
- Overall synergies among the three dimensions of decentralization may depend on the role of local decision-maker and stakeholder involved. Among health officials, strong relationships with decision space were found within strategic and operational planning and/or budgeting. For PRI officials, no strong relationships were found between capacities and accountability within a given health function, but an overall positive relationship was found.

3.3.1.2 Inter-function correlations

The following results relate to estimated statistical relationships *within* each dimension of decentralization (i.e., decision space, capacities and accountability) *across* functions (e.g., how does decision space within one function correlate with decision space in another?). As with findings from the previous section, Table 10 suggests that correlations between functions and within dimensions of decentralization are generally positive. When data are pooled across all respondents, there is consistent evidence that decision space, capacities or accountability in one function is positively related to that same dimension of decentralization in another function. For decision space, all inter-function correlations are positive and statistically significant (most at the 5% level of confidence).[19] Similarly for capacities, the majority of inter-function correlations are significantly positive. While there is comparatively less strong evidence of significantly positive correlations in accountability, the vast majority are nonetheless positive and several are significant. Significantly positive coefficients of correlation range from relatively modest (e.g., $\rho = 0.17$ for capacities in service organization and delivery) to relatively strong (e.g., $\rho = 0.50$ for decision space in service organization and delivery).

Two main implications can be drawn from these findings. First, as in the previous section, they provide further statistical evidence that is consistent with the premise that underlies Figure 1. Second, they suggest that the summary measures of decision space and capacities presented in Table 9 are quite good reflections of decision space and capacities that exist within a particular health function. The overall measure of decision space, in other words, reflects synergies that exist between decision space in various health functions, as do overall measures in capacities and accountability.

Further investigation of findings by type of local decision-maker suggests the following. Several correlations having to do with strategic and operational planning are significant among health administrators (with those coefficients of correlation ranging from 0.27 to 0.46), and are somewhat more widespread across functions among health workers ($\rho = 0.40$ to 0.64). In terms of capacity, several correlations among health administrators are significantly positive ($\rho = 0.22$ to 0.34). Of particular note, three of the four statistically significant positive correlations in capacity relate to monitoring and evaluation. This implies that capacities in monitoring and evaluation of health sector activities are positively correlated to planning processes for those activities, budgeting to make those activities possible, and actual delivery of services. This finding may suggest the critical importance of this function to other aspects of capacity and a possible entry point for interventions. Additionally, local support (considered a measure of accountability among health administrators) is significantly correlated with accountability in both human resources and service organization and delivery at the 10% level of confidence ($\rho = 0.25$ and 0.26, respectively). Indeed, local support is significantly correlated with the summary measure of accountability of health sector functions ($\rho = 0.16$; $p = 0.09$; estimate not shown in Table 10). This finding suggests that the degree of local support provided by PRI officials to the health sector — such as in supporting new health sector activities or actively participating in health sector-related development schemes — is linked to the degree of accountability demanded by those same PRI officials.

A mixed picture emerges for inter-function correlations in accountability among health administrators. On the one hand, there are some statistically significant positive correlations

involving strategic and operational planning, human resources, service organization/delivery and local support (ρ = 0.25 to 0.31). On the other hand, there is a statistically significant negative correlation (at the 10% level of confidence) between accountability for budgeting and for service organization/delivery (ρ = -0.23). This would suggest that health administrators who report higher levels of accountability in budgeting (measured by a higher degree of involvement of PRI officials in budgeting decisions) also perceive a lower level of accountability in the organization and delivery of services (measured through such indicators as attendance at *Samiti* meetings and degree of involvement of PRI officials in such service delivery activities as coverage surveys and maternal death audits). One interpretation of this unusual finding is that, while some administrators feel that the PRI has a legitimate interest in how funds are budgeted (as in most democratic systems funding may be seen as a political decision), they may also feel that the operations and organization are more technical and administrative and that, as professionals, they should be able to make decisions without recourse to PRI officials. This would be consistent with the legacy of a British system that, in theory, separated administration from political policy decisions and created a professional administrative staff with expertise in organization and administration. Whatever the explanation, it is notable that this finding represents the only significant negative correlation found among all the statistical estimations analyzed for this report.

On the other hand, there is no evidence of significant inter-function correlations in capacity among health workers, which suggests that broad-based capacity building aimed at this cadre may be of particular need. As with capacity, there is no evidence of significant inter-function correlations in accountability among health workers, which is not surprising given the lack of synergy between capacity and accountability for health workers noted in Section 3.3.1.1.

Among PRI officials, there is also evidence of synergies between functions in terms of capacity and accountability. On the capacity side, local support in particular correlates significantly with two other functions (strategic and operational planning (ρ = 0.30) and budgeting (ρ = 0.22)). This suggests that planning and budgeting practices associated with higher capacity (e.g., consultative processes to determine health priorities; using data to inform planning/budgeting; having a higher budget execution rate) is positively linked with actual support extended by PRI officials for health sector activities (e.g., mobilizing funds; attempting to get additional staff posts filled). On the accountability side, there is evidence of positive associations between service organization/delivery and budgeting/human resources (ρ = 0.46 and 0.24, respectively). This suggests that PRI involvement in at least some aspects of local service delivery that comprise the study's measures of accountability (such as deciding about funds for health services/activities, having an active role in staffing decisions, and overseeing provision of those funded and staffed services) may work together synergistically.

Table 10. Associations within dimensions of decentralization, by respondent category

1st Function†	2nd Function	DS††			CAP¶			ACC¶¶		
		ρ		N	ρ		N	ρ		N
All respondents										
SOP &	BUD	0.22	**	112	0.13	*	195	0.13		97
	HR	0.28	**	87	-0.01		92	0.17	*	127
	SOD	0.50	**	112	0.17	**	195	0.04		135
	M&E				0.33	**	65			

1st Function†	2nd Function	DS††			CAP¶			ACC¶¶		
		ρ		N	ρ		N	ρ		N
	LS				0.30	**	72	0.10		52
BUĐ &	HR	0.32	**	87	-0.14		92	0.17	*	100
	SOD	0.19	**	112	0.04		195	0.09		143
	M&E				0.34	**	65			
	LS				0.22	*	72	0.04		98
HR &	SOD	0.21	*	87	0.09		92	0.16	*	138
	M&E				0.10		52			
	LS							0.25	*	55
SOD &	M&E				0.22	*	65			
	LS				0.18		72	0.16	*	112
Health Administrators										
SOP &	BUD	0.27	**	65	0.05		65	0.23		52
	HR	0.32	**	65	-0.09		52	0.31	**	44
	SOD	0.46	**	65	0.12		65	-0.02		52
	M&E				0.33	**	65			
	LS							0.10		52
BUD &	HR	0.20		65	-0.09		52	0.15		55
	SOD	0.05		65	-0.04		65	-0.23	*	65
	M&E				0.34	**	65			
	LS							0.19		65
HR &	SOD	0.17		65	0.24	*	52	0.02		55
	M&E				0.10		52			
	LS							0.25	*	55
SOD &	M&E				0.22	*	65			
	LS							0.26	**	65
Health Workers										
SOP &	BUD	0.14		47	0.19		47			
	HR	0.14		22	0.10		40			
	SOD	0.54	**	47	0.19		47			
	M&E									
	LS									
BUD &	HR	0.64	**	22	-0.22		40			
	SOD	0.40	**	47	0.15		47	0.22		33
	M&E									
	LS							-0.27		33
HR &	SOD	0.34		22	-0.12		40			
	M&E									
	LS									
SOD &	M&E									
	LS							0.02		47
PRI Officials										
SOP &	BUD				0.16		83	0.02		45
	HR							0.10		83
	SOD				0.20	*	83	0.08		83
	M&E									
	LS				0.30	**	72			
	PRI				0.15		83			

1st Function†	2nd Function	DS††		CAP¶			ACC¶¶		
		ρ	N	ρ		N	ρ		N
BUD &	HR						0.21		45
	SOD			0.04		83	0.46	**	45
	M&E								
	LS			0.22	*	72			
	PRI			0.23	**	83			
HR &	SOD						0.24	**	83
	M&E								
	LS								
	PRI								
SOD &	M&E								
	LS			0.18		72			
	PRI			0.04		83			

**: significant at $p < 0.05$; *: significant at $p < 0.10$

† SOP = Strategic/Operational Planning; BUD = Budgeting; HR = Human Resources; SOD = Service Delivery/Organization; M&E = Monitoring and Evaluation; LS = Local Support; PRI = PRI decision-making

†† DS only applicable to health officials

¶ LS in CAP only applicable to PRI officials (see Section 2.3.2)

¶¶ LS in ACC only applicable to health officials (see Section 2.3.2)

Box 2. Summary of findings — inter-function correlations

- There is consistent evidence from both health administrators and PRI officials that levels of decision space, capacities or accountability in one health function (e.g., strategic and operational planning) are synergistically related with levels of those same dimensions of decentralization within another function (e.g., budgeting or human resources).
- Among health administrators, cross-function relationships are strongest in terms of decision space and capacities. Of particular note among health administrators, capacity in monitoring and evaluation correlates positively with three of four other health functions suggesting the importance of capacity in this functional area.
- Among PRI officials, cross-function relationships extend to both capacities and accountability. Of particular note, capacity in local support correlates positively with three of four other health functions suggesting that greater PRI involvement may be an entry point to strengthening overall local health systems capacities.

3.3.1.3 Dimensions of decentralization and respondent experience

Individuals with greater personal experience may be more willing to make use of their decentralized decision-making authority compared to those with less experience. On the health official side, for example, individuals with greater experience may be inclined to make innovative decisions whereas those with less experience may feel more comfortable in making decisions that stay safely in the *status quo*. Similarly, on the elected officials side, the degree to which PRI members hold health officials accountable may be in part a function of those members own experience. On both sides, greater personal experience may also go hand-in-hand with greater capacities to make decisions that are likely to improve local health system performance. This section explores possible relationships between the professional experience of our respondents and dimensions of decentralization (experience of respondents was measured through indices combining aspects of respondent education, age, and length of service in their respective positions).[20]

As indicated in Table 11, there is evidence of synergies between experience and dimensions of decentralization among both health workers and PRI officials, although no evidence among

health administrators. Specifically, both decision space and capacities are positively and significantly correlated with the health worker index of experience (ρ = 0.29 and 0.27, respectively) and capacities are positively correlated with the PRI official index of experience (ρ = 0.27). While there may be several explanations for the lack of relationships among health administrators, one reason might be that health administrators operate at higher levels of the system compared to health workers: With a greater number of other stakeholders involved in decision-making at those levels of the system, one respondent's personal experience may not greatly impact the decision space, capacities or accountability that operate at that level of the health system.[21] Conversely, as frontline workers interacting with relatively fewer other stakeholders in decentralization, a health worker's personal experience may more greatly impact those dimensions of decentralization, particularly their own decision space and capacities. Compared to health administrators, for example, the greater opportunity of health workers to interact with PRI officials on a day-to-day basis may result in greater influence in the decentralization process at that level; greater personal capacities, in turn, may therefore facilitate greater involvement in decision-making and contribution to institutional capacities. Among PRI officials, the relatively recent assumption of greater health sector responsibilities under decentralization (particularly in the context of NRHM) may drive the relationship between experience and capacities. While it is not known why similar relationships do not exist in terms of accountability, it could be that the degree to which PRI officials exert greater influence over decisions (which is encapsulated in the study's concept of accountability) is slower to develop in conjunction with personal experience than possessing greater capacities to make appropriate decisions.

Table 11. Respondent experience and dimensions of decentralization

Respondent Category	DS		CAP		ACC	
	ρ	N	ρ	N	ρ	N
Health Administrators	0.08	65	-0.02	65	-0.19	65
Health Workers	0.29**	48	0.27*	48	0.14	48
PRI	N/A		0.27**	93	0.03	93

**: significant at $p < 0.05$; *: significant at $p < 0.10$

Box 3. Summary of findings — respondent experience and dimensions of decentralization

- There is evidence from both health workers and PRI officials that respondent experience is synergistically related to wider decision space and/or higher capacities; no such evidence is found among health administrators.

3.3.2 District-level findings

The following sections present findings at an aggregated (area) unit of analysis. These include district-level levels of decentralization/health functions, as well as correlations between levels of decentralization reported by health officials versus those reported by PRI officials. Each is presented, in turn.

3.3.2.1 Comparative levels of decision space, capacities, and accountability

The following presents levels of decision space, capacities, accountability both within and across functions aggregated to the district level (see Section 2.6 for detail on the methodology used to aggregate respondent-level scores to the aggregate level). This permits comparison of levels of dimensions of decentralization across districts. Findings that pool across health and PRI officials

alike are presented in the following section, with references made to findings that consider district levels of decision space, capacities and accountability separately for the three broad categories of officials interviewed (i.e., health administrators, health workers and PRI officials; findings that disaggregate by these three categories of officials are presented in Figure 6 – Figure 9 of Appendix I).

Figure 2 – Figure 5 present snapshots of levels of decision space, capacities and accountability across districts. On the left of each figure, bar charts present standardized scores of each dimension of decentralization, by district. Charts on the right of each figure arrange districts according to their rank order for each dimension of decentralization and health function (with lowest-ranking districts assigned a "1" and highest-ranking districts assigned a "6"). These latter charts facilitate a comparison of districts in relation to each other. In some districts, survey results suggest widespread convergence among all officials interviewed of levels of decision space, capacities and accountability. In Birbhum and, to a somewhat lesser extent, Purba Medinipur, levels of each dimension of decentralization are generally in among the top of the districts sampled (and disaggregated analyses suggest general convergence in valuations made by health administrators, health workers and PRI officials; see Figure 6 – Figure 9 of Appendix I). Conversely, levels in Uttar Dinajpur are almost universally in or at the bottom. In other districts, such as Bankura or Purba Medinipur, levels appear to vary by category of respondent, across health functions, or both. The following highlights key findings from these comparisons on a district-by-district basis (more detailed analysis of district-level findings are presented in Table 23 in Appendix I):

- **Birbhum**: generally high-scoring across all three dimensions of decentralization and in relation to all three categories of officials.
- **Bankura**: while generally high scoring, characterized by differences in dimensions of decentralization by categories of officials: generally high scoring across all three dimensions among health administrators (with exception of M&E capacities), while ranked middle-of-the-road or lower among health workers. Ranked particularly low in capacities and average in accountability in relation to PRI officials. Divergences in rankings between health administrators and health workers/PRI officials may be partly a function of sampled districts proximity to Kolkata: their close proximity may create conditions conducive to decentralization among administrators in the health sector (e.g., through good lines of communication) while such attributes don't spill over to frontline health workers or elected PRI officials.
- **Purba Medinipur**: while generally high scoring, characterized by differences in dimensions of decentralization by categories of officials: generally above-average among health administrators (particularly in decision space), middle-of-the road among health workers, and mixed for PRI officials (high capacities but below-average accountability).
- **Uttar Dinajpur**: almost universally among the lowest-ranked districts across all functions, dimensions of decentralization and categories of respondents. Exceptions include a relatively high ranking in M&E capacities by health administrators and high overall capacities ranking by health workers. The latter finding is explained in large part by Uttar Dinajpur's exceptionally high ranking in HR capacity which is centered on availability of two cadres of health workers (2nd ANM and ASHAs). While health worker data suggest that Uttar Dinajpur is not lacking for these personnel, exclusion of

this function from the overall capacities indicator drops Uttar Dinajpur to a below-average ranking in capacities. These findings are not surprising given this district's relative level of poverty (see also Section **Error! Reference source not found.**).

- **Jalpaiguri**: among lower-ranked districts in terms of capacities and accountability by both health and PRI officials (exceptions include relatively high accountability ranking by health workers). Conversely, Jalpaiguri is among higher-ranked districts by health officials in terms of decision space. This suggests a particular disconnect between health official decision space to make innovative decisions and capacities to do so. Consistent with such findings, Jalpaiguri has the lowest-ranked capacities in M&E.
- **Bardhaman**: generally among low-middle-ranked districts with some divergence between levels reported by health and PRI officials. Data from health officials (both administrators and workers) result in one of the sample's lower ranking on decision space and middle-of-the-road/slightly below average rankings for capacities and decision space. Conversely, data suggest PRI officials have slightly higher capacities and one of the top-ranked districts in terms of accountability.

Figure 2. District-level decision space

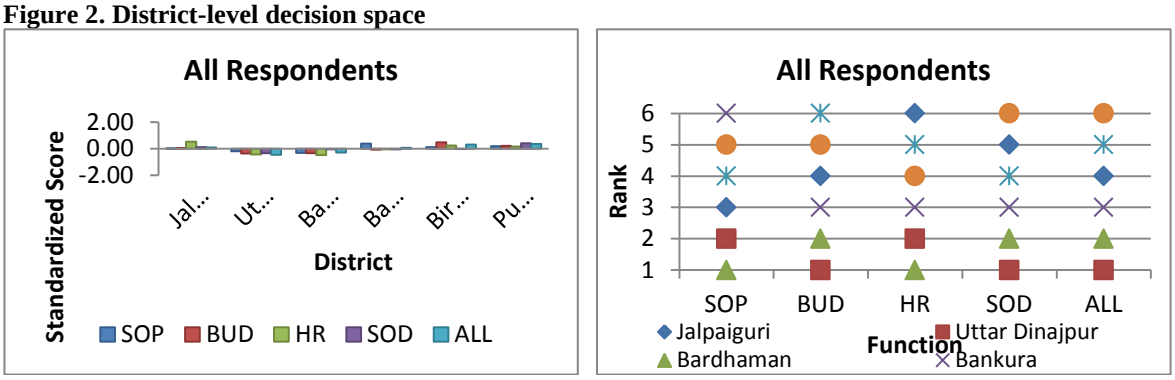


Figure 3. District-level capacities

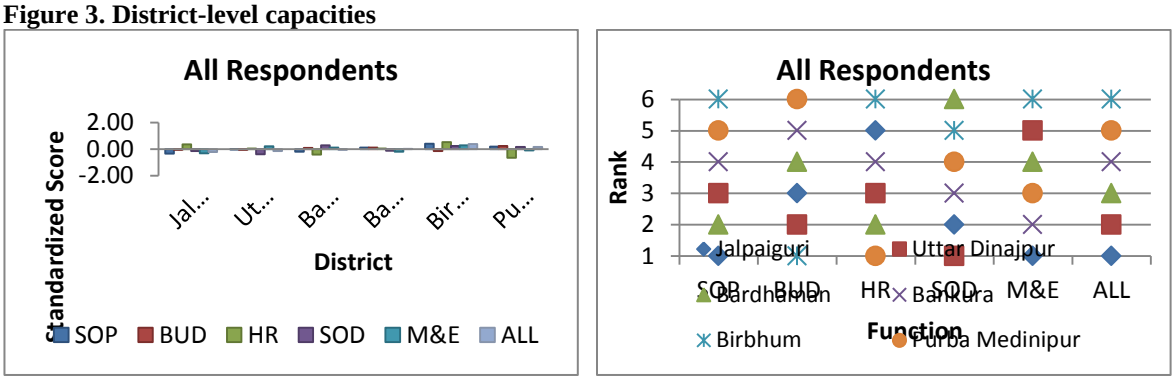


Figure 4. District-level accountability

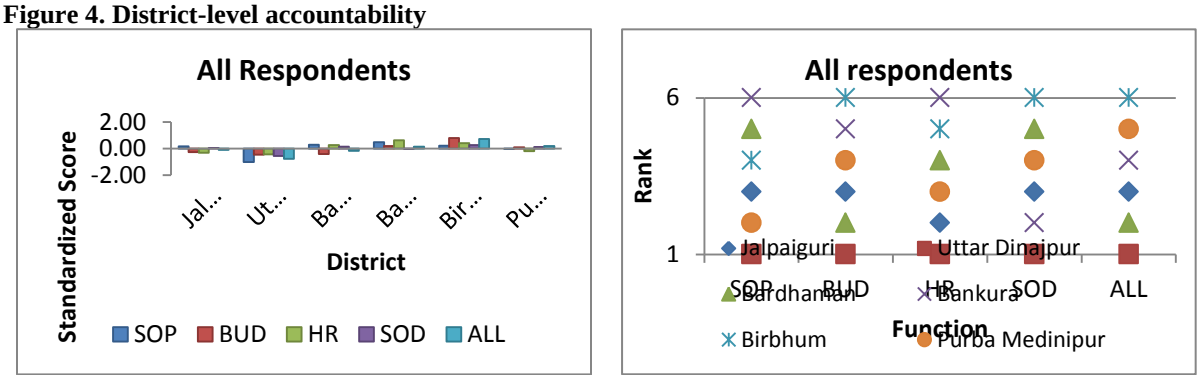
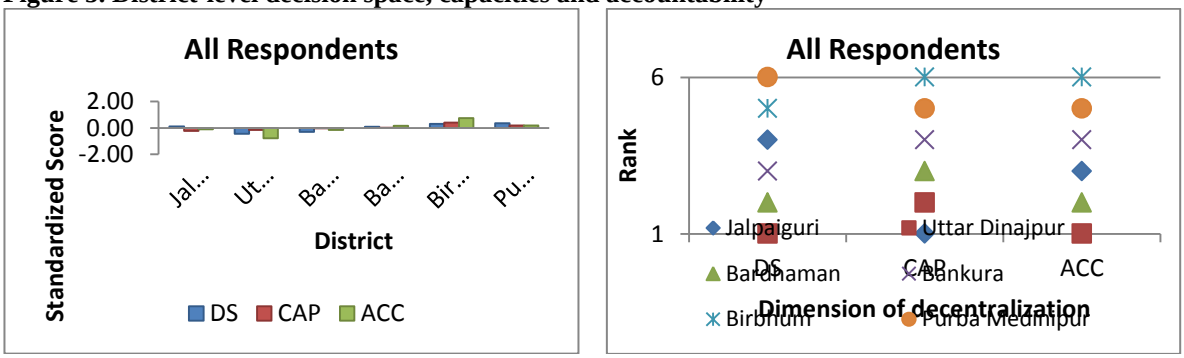


Figure 5. District-level decision space, capacities and accountability



3.3.2.2 Inter-stakeholder correlations of dimensions of decentralization

While the preceding sections have presented evidence consistent with synergies between dimensions of decentralization within three broad categories of local decision-makers (health administrators, health workers and health officials), such synergies may or may not exist across respondent categories. Such cross-stakeholder synergies may be important for decentralization to achieve objectives of improved service delivery as described in Figure 1. The following presents results from estimations comparing levels of dimensions of decentralization reported by health officials (health administrators and health workers) to those reported by PRI officials.

As indicated in Table 12, there is some evidence of synergies between levels of decentralization reported by both health and PRI officials within a given district. Specifically, district-level accountability reported by health officials (combined health administrators and workers) is highly correlated with that reported by PRI officials ($\rho = 0.80$) and significant at the 10% level of confidence even with a (district-level) sample size of six. This suggests that the degree of accountability that health officials feel is present in their district is quite similar to the degree of accountability that PRI respondents report exercising. Conversely, there appears to be very little association between the strength of capacities among health officials and that of PRI officials ($\rho = 0.21$ depending on whether capacities in PRI decision-making is included in the district-level PRI measure of capacities) or the degree of local support health officials feel is present versus that PRI officials report extending ($\rho = 0.07$).

Table 12. District-level associations between dimensions of decentralization reported by health and PRI officials

CAP[†]		ACC			LS	
ρ	N	ρ		N	ρ	N
0.21	6	0.80	*	6	0.07	6

**: significant at $p < 0.05$; *: significant at $p < 0.10$

Box 4. Summary of findings — inter-stakeholder correlations of dimensions of decentralization

- Both health officials and PRI representatives report consistent views of the degree of accountability between them. However, they differ in their reporting on their capacities and on the level of local support.

4 Conclusions and recommendations

4.2 Summary of major findings

In West Bengal, India and around the world, countries are re-organizing health systems in increasingly decentralized ways. However, as suggested by Figure 1 (see Section 1.1), a combination of ingredients must work together synergistically for decentralization to realize its potential as a policy that will improve delivery of services. Decentralization's "necessary ingredients" may include an appropriate endowment of decision-making space for local decision-makers to adapt local health systems to local health priorities, sufficient institutional capacities for local officials to make decisions that are consistent with improved performance, and adequately developed mechanisms of accountability to ensure that decisions respond to area-wide health needs. This study has attempted to shed insight on the degree to which decentralization of health services in West Bengal is conducive to improving service delivery by addressing two main research questions: do the "necessary ingredients" of decentralization work together in ways that can be expected to improve service delivery.

This study finds consistent evidence that the three dimensions of decentralization that were analyzed work together synergistically. Quantitative analyses of indicators of dimensions of decentralization — decision space, capacities and accountability —across a variety of health functions — strategic and operational planning, budgeting, human resources and service organization/delivery — finds statistical evidence of a variety of synergies. It finds that, for certain functions and among certain local decision-makers, one dimension of decentralization in a given function is positively related to another dimension of decentralization in that same function. Among health officials, for example, decision space in strategic and operational planning is positively linked to capacities in that same function. The study also finds evidence suggesting that synergies exist not only *across* dimensions of decentralization but *between* them. That is, the degree of decision space, capacities or accountability in one health function (e.g., budgeting) is synergistically related to the degree of that same dimensions within another function (e.g., strategic and operational planning). As important as relationships between functions study findings suggest that decision space, capacities and accountability across all health functions are synergistically linked — a finding that applies to both health and elected officials alike.

These findings suggest that, in the context of West Bengal, the pre-conditions that many feel are necessary for decentralization to be an appropriate policy lever for improving health services are present. Administrators and workers in the health sector who take greater responsibilities, more actively tailor choices to local conditions, or whose decisions are not subject to as much revision from above, for example, also do so in the context of local health systems characterized by greater institutional capacities (e.g., better processes, adequate stock of resources) and with a higher degree of accountability towards PRIs for those decisions. Similarly, PRI officials who more actively demand accountability for health official decisions appear to have greater capacity to do so. Further, each dimension of decentralization appears to build on itself. Those who are more active decision-makers in one function, for instance, tend to be more active in another; the same is applicable in terms of capacities and accountability.

While these findings are encouraging, qualitative observations made by interview teams during the course of study suggest that there are reasons to treat them with caution. A first reason relates to the actual quality of health sector decision-making — an aspect that the quantitative analyses are not able to fully explore. Although the quantitative findings documented positive synergies within and between various health functions, it may be that the overall quality of planning surrounding these functions remains sub-standard. According to interviewer reports and observations made by the research team, for example, health sector planning is often viewed as a routine, tokenistic exercise that may not adequately be meeting basic objectives. Many health sector respondents, for instance, characterized the identification of vulnerable pockets — an important aspect of local need assessment — as being conducted in a "pre-determined" fashion involving largely copying content from earlier plans into current District Health Action Plans. Preparing budgets and financial planning was also found to be commonly viewed as a purely administrative requirement consisting of simple projections from the previous year's sanctioned budget and with allocations made mechanically/without systematic review. Inadequacies in financial planning within local planning instruments currently promoted under NRHM can be inferred from the finding that hardly any respondents — even high-level officials such as CMOHs — were able to provide accurate verbal estimates of the extent of utilization of funds received (those provided were often found to be inconsistent when cross-checked with budgets/ District Health Action Plans).

A second reason has to do with the quality of involvement of stakeholders outside the health sector. Though decentralized institutional arrangements encourage participation of the PRIs in health sector decision-making, a lack of awareness by and previous experience of PRI members may continue to be stumbling blocks. In some cases, interviewers noted a reluctance of health officials and other civil service administrators to encourage greater PRI participation within designated inter-sectoral bodies and committees, such as RKSs and D/BHFWSs. More often than not, discussions with respondents suggest that health officials dominate the proceedings of these bodies with PRI functionaries having little or non-significant roles during proceedings. In other cases, and perhaps partly as a result, PRI members often appeared to view the health system as too "technical" and best managed by health officials. Further, though PRI members in general were felt to be motivated, enthusiastic, energetic, and aware of local health problems and vulnerabilities, the current maze of rules, regulations, and bureaucratic red-tape (which the decentralization process has not been able to simplify) continue to thwart greater involvement. The process of submission of utilization certificates, for instance, appears to be excessively complicated, often leading to delays in release of funds such as those related to JSY activities. Additionally, instances of deliberate delay and non-cooperation by other line departments (notably the Public Works and Public health Engineering departments) under the guise of "technical" interventions, may add to the problem.

Such dynamics and processes may help explain a considerable lack of mutual trust or desire by health and PRI officials to work jointly on health sector matters. At the same time, it was observed that PRI involvement at the block level was better than at the district level. One reason may be that Block Development Officers are in closer contact with PRI officials (both physically located within the *Panchayat Samiti* and interacting daily to a greater degree with PS officials than at the district level). The BDO is therefore often instrumental as a bridge linking health

sector administrators (e.g., BMOH) and PRI officials, perhaps resulting in a higher degree of convergence of perceptions.

Additionally, the study finds that an individual's own personal capacities may also be an important element in the above-described synergies of decentralization. Among both health workers and PRI officials sampled in this study, measures of personal experience are positively associated with those individual's decision space and/or capacities; for higher-level health administrators, no such connections were observed. These findings are consistent with qualitative observations made by interviewers during survey administration. Outreach workers have greater exposure to health services beneficiaries and PRI officials which, over time, likely leads to better relations than with higher-level health administrators. Indeed, regular meeting on the fourth Saturday of each month between of the ANMs/HAs and PRI officials are well-attended by ANMs/HAs where they are seen to follow both the letter and spirit of requirements to provide monthly reports of activities and discuss any problems faced. These respondents tended to more highly rate interactions with PRI officials such as calling relations "generally cooperative" or that PRI officials "helps as and when necessary", than higher-level health sector administrators. Among PRI officials, it was observed that the majority of the freshly elected members and those elected from reserved constituencies were wanting in independent decision-making as well as familiarity with health sector roles and responsibilities. This further suggests that personal experience is particularly important among these health sector decision-makers.

These findings suggest that future capacity building endeavors might be tailored differently to different cadres of local decision-makers. For those who are closer to actual services delivered, such as frontline health workers and PRI officials at lower levels of the system, focusing on training and education on roles and responsibilities under decentralization may be a productive policy option to improve services. For higher-level officials (e.g., health administrators and district-level PRI members), a focus on system-wide processes may be more productive (e.g., adequate use of monitoring and evaluation mechanisms). However, the study found resistance to decentralization among these officials and that therefore they would benefit from greater interaction with PRIs.

4.3 Policy recommendations

Findings from this study suggest a number of policy recommendations that can be made to strengthen the process of decentralization and ultimately, it is hoped, improve health sector performance. Policy recommendations for West Bengal as a whole as well as the districts sampled in this study are provided, below.

4.3.1 Overall

This study suggests a strong compatibility exists among the three dimensions of decentralization analyzed: decision space, capacities and accountability. Though the study is unable to assess causality in such relationships, the interaction between the dimensions of decentralization is suggestive that policy changes that affect one of the dimensions might encourage changes in another.

While in the long-term an end goal of policy interventions might be a greater exercise of decision space or local accountability by local officials, it is likely that a number of capacity-building interventions are more feasible types of policy change that can be undertaken by the government of West Bengal in the short-term and/or for external partners to encourage. Capacity-building options motivated this study's findings include:

1. **Training and education on roles and responsibilities under decentralization should be focused on frontline health workers and PRI officials.** The strongest linkages between personal experience and exercise of authorities, capacities and degree of accountability are found among health workers and PRI officials. This suggests that these local decision-makers may experience the greatest benefits from further training and education in decentralized service delivery. Examples include follow-up training for health workers in interacting with PRI officials (e.g., role of ANMs during VHSC meetings; role as co-administrator of annual maintenance grants), and technical assistance to PRI officials on their roles (e.g., in monitoring and certification of doctor attendance or approval of casual leave of health officials). Qualitative observations made by interview teams support this recommendation, as a majority of the freshly elected PRI members and those elected from reserved constituencies were felt to be wanting in familiarity with, and willingness to independently exercise, their roles and responsibilities in health sector decision-making. Targeted orientation among such PRI members — such as providing orientation in the scope of public health programs beyond the provision of drinking water and basic sanitation — might therefore be particularly useful.
2. **Capacity building oriented towards building institutional processes should be directed at health administrators.** Relatively weak linkages between personal experience and decentralization among health administrators suggest that further training on roles and responsibilities specific to decentralization may not be necessary or warranted. Instead, capacity building initiatives at higher levels of the system (e.g., district, block) should focus on strengthening area-wide processes that are likely to lead to better performance. Based on this study's findings, two specific recommendations can be made:
    a. **Focus on strengthening of monitoring and evaluation.** As capacity in M&E among health administrators was found by this study to be consistently related to capacity in all dimensions, policy initiatives to strengthen M&E capacity might have a multiplier effect in capacity building and might be an entry point for capacity-building initiatives. For example, the DOHFW could develop and disseminate standards for M&E processes at different levels of the system (e.g., expected regularity with which expenditures, staff attendance, etc. are monitored).
    b. **Continued emphasis on building capacities in strategic and operational planning.** With capacities in strategic and operational planning linked to higher decision space in that same function among health officials of all cadres, capacity building in this function could serve as an entry point for capacity-building initiatives. As an example, the DOHFW could consider a refresher course in NRHM planning and subsequent provision technical assistance in developing DHAPs.
3. **Ensure coherence between capacity building initiatives oriented towards health officials and those aimed at PRI officials.** This study did not find linkages between capacities reported by health officials and those reported by PRI officials. Given that

local health sector decision-making involves both sets of officials — and that this study consistently finds synergies between capacities and other aspects of decentralization — this suggests that greater attention should be given to simultaneously building capacities of stakeholders working in the health sector and those elected by local constituents.

4. **Emphasize local support to the health sector as a means of promoting greater accountability.** This study found linkages between the degree of local support made by PRI officials to the health sector — both financial and in terms of active involvement in promoting health sector activities — with the degree of accountability exercised. It also found positive associations between both accountability over health functions and local support with district-level health sector performance. However, there was also a notable disconnect between perceptions of local support provided between health and PRI officials. This combination of findings suggests that advocacy for increasing local support to the health sector could help bring health sector and PRI officials on the same page, further strengthen the degree of accountability felt by both and, to the extent that accountability is independently linked to performance, promote better health sector performance itself. Examples of policy initiatives oriented towards local support include exchange of information between districts on innovative partnerships between PRIs bodies and the health sector to promote new health activities, or advocacy towards the government of West Bengal to establish separated PRI/ULB budgets devoted to health sector activities in under-performing districts.
5. **Districts that are consistently weak along all dimensions and performance should be given priority for capacity building as the entry point for reform**. According to this study's findings, the district of Uttar Dinajpur should be given highest priority in capacity building on all fronts. More detailed recommendations are made in the following section on a district-by-district basis.

In addition to capacity building the study suggests that policies related to decision space and accountability might be pursued. These include:

1. **Promote exchange of information among health officials in high decision space with those with low decision space on how to exercise greater choice.** In districts, where officials report low decision space it may be the result of inertia or lack of information about the possibility of making more decisions and/or decisions that are not simply extensions of those handed down from higher levels (that is, those that take local circumstances into greater account). In such cases, informing officials in districts with low decision space that their counterparts in districts with high decision space are making more use of their formal abilities — and that it is possible to do so — might be a means to improve decentralized decision-making. Among the districts sampled in this study, Birbhum is a good candidate for hosting exchange of such information with districts where decision space is low (e.g., Uttar Dinajpur).
2. **Promote exchange of information between health and PRI officials on exercise of accountability building on existing block-level synergies.** This study demonstrates that health officials generally view the level of accountability exercised by PRI officials similarly to the degree to which PRI officials feel they are able to exercise accountability. For accountability, more information about higher levels of accountability might overcome lack of interest in improving relationships between administrators and elected officials might spark new initiatives in the low accountability districts. Qualitative

observations made by study interviewers further suggest that blocks, with the BDO in close proximity to PRI officials and often instrumental as a bridge linking block-level health and PRI officials, may be the most appropriate level of the system at which to promote exchange of information.

4.3.2 District-by-district

- **Birbhum**: given highly rated decision space, capacities and accountability by all categories of officials, the government of West Bengal could consider using as site for capacity building activities directed at other districts and inter-district information exchanges.
- **Bankura**: need for across-the-board capacity building focused on PRI officials to bring in alignment with capacities of health officials. May be able to channel PRI capacity-building initiatives through health officials given the relatively high levels of accountability felt by health officials.
- **Purba Medinipur**: need for capacity-building among health workers to bring in alignment with capacities of health administrators and PRI officials and balance relatively high degree of decision space.
- **Uttar Dinajpur**: capacity building on all fronts and among all stakeholders/decision-makers involved. Given the relative poverty of this district (with a per capita income the lowest of all district in West Bengal) and weak health system infrastructure, capacity building in decentralization likely needs to be part of a larger program of health system strengthening.
- **Jalpaiguri**: need for across-the-board emphasis in capacity-building among both health and PRI officials, particularly in light of relatively wide decision space assumed by health officials. Among health administrators, a particular emphasis on capacities in monitoring and evaluation among health administrators is also warranted.
- **Bardhaman**: Need for capacity-building focused at health officials to bring into alignment with those of PRI officials. A particular emphasis on capacities in strategic and operational planning and human resources (particularly among health workers) is warranted. May be able to use particularly high levels of accountability exercised by PRI officials as springboard to strengthen oversight of capacity initiatives among health officials.

4.3.3 For upcoming decentralization initiative and further analysis

As the government of West Bengal seeks to further strengthen health sector decentralization, results from these findings may be of use in informing the shape of the State's upcoming initiative on decentralization. In addition to considering the recommendations cited, above, further qualitative research into understanding why some districts appear to rate highly on both decentralization and health sector performance dimensions and some rate poorly on both could be of great use. Findings from this study suggest that such investigations would be most useful in the districts of Birbhum (i.e., a relatively high-performing district) and Uttar Dinajpur (i.e., a relatively low-performing district) to understand key factors affecting or driving findings from this study. Follow-up studies could investigate which institutional environment factors related to processes of decentralization contribute to their observed performance, and whether observed performance in terms of decentralization appears to be related to health systems performance and quality of service delivery.

[1] The AIS officer at the district level is called the District Magistrates (DMs) — who is the most powerful district-level government official. District Magistrates are entrusted with a variety of responsibilities (e.g., overseeing law and order; revenue collection/taxation; and planning), including some health sector-related functions. Officially designated as district head they are responsible as well as accountable for all the development related activities in the district including health. They usually leave much of the decision making about health to the CMOH, however they are required to approve budgets and human resource recruitment, transfers, contracts, and performance reviews and sometimes make modifications in decisions of the CMOH.

[2] Brief descriptions of the roles of these decision-makers are also discussed in Box 1, with further description of decision-making processes related to the health functions analyzed provided in Appendix II. Additional detail on roles and responsibilities of each cadre of official is presented in Appendix III

[3] See also Notification No. Strategic Planning System Reform Cell/106 dated February 23, 2004.

[4] The UK Department For International Development has supported HSDI in the form of a budget support grant of GBP 97.5 million, released in five annual tranches.

[5] In November 2005, the GOWB decided to hand over infrastructure maintenance of all primary health care facilities to PRIs. Since then, funds for maintenance and construction of all facilities ranging from Subcentres to Rural Hospitals have been channeled through the PRIs, and not the Public Works Department.

[6] A District Program Management Unit in each district (as well as its block-level counterpart, the BPMU) has been constituted under the aegis of NRHM, across all districts and blocks in the state. DPMUs are staffed by a program coordinator, an accounts manager, a data entry operator and a statistical manager. The DPMU is purely a contractual unit, with most of the members/staff contracted locally. The DPMU assists the CMOH in providing an up-to-date summary of health sector programs and health service statistics, helps in preparing the action plans/annual budget, and maintain accounts of the funds received under NRHM and other nationally sponsored programs (such as RCH-II).

[7] A regular annual flow of flexible fund from NRHM (Rs. 500,000 to a District Hospital, and Rs. 100,000 to each of the other facilities) and a part of collection from user charges (40%) go to RKS.

[8] As indicated in endnotes 1 and **Error! Bookmark not defined.**, non-health civil service administrators were excluded from analysis. The remainder of the report will refer only to health and PRI respondent officials.

[9] For elected officials, decision space related to the degree to which locally-made decisions were affected by higher-level elected authorities (e.g., whether respondents follow directions of their political parties in terms of planning, managing or monitoring health facilities), but relatively few questions along these lines were asked of these officials.

[10] Ideally, districts should be selected based on indicators that are exogenous to decentralization but may affect health sector performance. Further, from socio-economic indicators available at the district level, variables having the least intra-item correlation are good candidates because they maximize the ability of composite indicators to capture distinct dimensions of socio-economic status. This rationale led to selection of per capita income and level of urbanization as constituent indicators of the composite indicator used to rank districts.

[11] Of the 15 interviews considered to be non-responses: three respondents refused to provide answers, 10 respondents were not in-position/absent/could not be contacted, and two interviews were incomplete and excluded from analysis.

[12] For example, capacity in strategic and operational planning among PRI respondents was assessed through six questions, including: the basis of the respondent's assessment of the top three problems/challenges in public health in their locality, the normal frequency of assessing health priorities in their locality, and the degree of involvement of other stakeholders (health officials, other civil servants, and PRI bodies) in overall health sector planning exercises.

[13] Some questions had multiple parts or were closely related to each other (e.g., "Are you involved in procurement of any of the following items: a. Civil Works; b. Equipment (Diagnostic/OT); c. Equipment (Hardware/Stationery); d. Transport & Communication; e. Drugs; f. Other). Because composite indicators of decision space, capacities and accountability were calculated as the unweighted mean of each question, inclusion of each of those sub-questions would risk providing them undue weight. In these instances, the unweighted mean of the sub-questions was calculated prior to inclusion in the calculation of the overall composite indicator decision space, capacities or accountability.

[14] For instance, narrow decision space in budgeting for a CMOH is nonetheless almost certainly categorically higher than budgeting decision space for an ANM. Yet because the study's ANM questionnaire does not include budgeting decision space questions relevant only to CMOHs, an ANM and CMOH might end up with exactly the same score. A non-standardized decision space score would therefore erroneously equate the two and could bias statistical estimations.

[15] For example, two respondents of the GP *Pradhan*/*Upa-Pradhan* category were sampled in Purba Medinipur (equating to 13% of Purba Medinipur's PRI respondents) whereas four of that same category were sampled in Uttar Dinajpur (or 24% of Uttar Dinajpur's PRI respondents). If scores were not first averaged within each respondent category before averaging within the district, scores for the GP *Pradhan*/*Upa-Pradhan* in would be more heavily weighted in Uttar Dinajpur compared to Purba Medinipur.

[16] Methodological alternatives to construction of composite indicators were considered but rejected for statistical reasons. In particular, the feasibility of factor/principal components analysis approaches was constrained by the variations in survey items by category of respondent: because the number of respondents with identical questionnaires is relatively small in relation to the number of questions for each dimension of decentralization by function/overall (see Table 15), factor/principal component analyses were not feasible.

[17] (Construct) validity can be characterized as measuring what it is that one seeks to measure; reliability can be characterized as measuring well what it is that one measured. While a high degree of construct validity implies a high degree of reliability, the converse is not necessarily true.

[18] Categories of respondent excluded from analysis are: health administrators and workers without identifiable categories (n = 4) and non-elected PRI members, including Block Public Health Supervisors, ULB health inspectors, DPHC coordinators (ZP) and VHSC members (n = 10).

[19] Since decision space questions for PRI officials were too few in number to use for analysis, findings relating to decision space are applicable only to health officials.

[20] Standardized indices were created across three broad categories of stakeholders: health administrators, health workers and PRI officials. Component variables of each were: health administrators: age and years experience in total, in the area, and at post; health workers: age, years experience in total, in the area, and at post, and previous experience in similar post; PRI officials: education level, number of trainings received in general responsibilities and public health, respectively, and number of times elected. Cronbach alpha coefficients of reliability were 0.78, 0.79 and 0.63, respectively.

[21] Alternatively, it could be that relationships do exist among health administrators but that the research instrument failed to adequately capture relevant aspects of this experience in its quantitative scales.

5 Citations

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6 Appendix I

Table 13. Socio-economic ranking of districts in West Bengal

Districts	PCI (in Rs.)	% Urban	Rank Score	Cluster
Bardhaman	**23770**	**37.5**	**2.5**	
Haora	22566	50.4	2.5	
Darjeeling	23967	31.8	3	
Hooghly	22398	33	4	**High-**
Nadia	19981	21	6.5	**ranking**
Jalpaiguri	**19104**	**17.9**	**7.5**	**districts**
N-24 Parganas	16503	54.2	8	
Paschim Medinipur	20914	9.9	8.5	
Purba Medinipur	**20914**	**9.9**	**9.5**	
S-24 Parganas	17760	15.6	10	
Dakshin Dinajpur	17895	11.6	10.5	
Murshidabad	17486	12.2	11	
Bankura	**18236**	**7.3**	**13.5**	**Low-**
Maldah	18644	7.2	13.5	**ranking**
Cooch Bihar	16658	8.8	14.5	**districts**
Uttar Dinajpur	**14046**	**11.6**	**14.5**	
Puruliya	16182	9.8	15.5	
Birbhum	**16466**	**8.5**	**16**	

Table 14. Respondent categories with identical questionnaires

Health Administrators	Health Workers	PRI
▪ CMOH / ACMOH / DYCMOH / BMOH	▪ BPHN	▪ GP *Pradhan*/*Upa-Pradhan*
▪ MO / Supervisor	▪ ANM / Health Assistant	▪ GP member
▪ PMU member	▪ Health Supervisor	▪ *Panchayat Samity Sabhapati*
		▪ *Karmadhaksha* member
		▪ ZP *Sabhadhipati*
		▪ ULB member
		▪ VHSC / non-PRI

Table 15. Number of questionnaire items by respondent category, health function and dimension of decentralization

Respondent category	SOP			BUD			HR			SOD			M&E			PRI			LS			Total		
	DS	CAP	ACC	DS	CAP	ACC	DS	CAP	ACC	DS	CAP	ACC	DS	CAP	ACC	DS	CAP	ACC	DS	CAP	ACC	DS	CAP	ACC
Health Admin	**5**	**9**	**2**	**8**	**3**	**3**	**7**	**3**	**3**	**6**	**3**	**3**		**5**							**5**	**26**	**23**	**16**
CMOH/BMOH	5	9	2	8	3	3	7	3	3	6	3	3		5							5	26	23	16
MOH/Superintendent	4	9	2	6	2	2	5	1	2	6	3	2		4							5	21	19	13
PMU member	4	9	2	5	2	3	3	0	2	5	3	2		4							5	17	18	14
Health Workers	**4**	**4**		**6**	**1**	**1**				**2**	**3**	**1**										**12**	**8**	**2**
ANM	3	4		5	1	1				2	3	1										10	8	2
H. Assistant/Supervisor	3	4		5	1	1				2	3	1										10	8	2
BPHN	2	3		5	1	1				2	3	1										9	7	2
PRI		**6**	**3**		**3**	**2**			**6**		**9**	**4**					**7**			**4**		**3**	**29**	**15**
ZP *Sabhadhipati*		6	3		2	1			4		6	3					4			4		3	22	11
PS *Sabhapati*		6	3		2	1			4		6	3					4			4		3	22	11
GP *Pradhan*/*Upa-Pradhan*		6	2		3	2			6		9	4					5			4		3	27	14
GP member		6	2		2	0			5		8	4					3			4		3	23	11
ULB Chairman		6	1		2	1			4		6	3					5			4		3	23	9
Karmadhaksha member		6	3		2	0			3		5	3					3			4		3	20	9

Table 16. Respondents sampled — by detailed category of official

Respondent Category	Jal.	UD	Bard.	Bank.	Birb	PM	Total
Health Administrators							
CMOH / ACMOH / DYCMOH / BMOH	5	5	6	4	5	5	30
MOH / Superintendent	4	4	4	1	3	6	22
PMU member (DPC, DAM/BAM)	3	1	3	2	2	2	13
Other		1	1	1			3
Health Workers							
BPHN	1	1	2	1	1	1	7
ANM/Health Assistant	4	6	4	4	6	4	28
Health supervisor/other	2	2	3	2	2	2	13
PRI Officials							
GP *Pradhan*/*Upa-Pradhan*	3	4	3	3	3	2	18
GP member	2	2	1	2	2	2	11
P *Samati Sabhapati*	2	2	2	2	1	2	11
Karmadhaksha member	2	3	3	3	3	3	17
ZP *Sabhadhipati*	1	1	1		1	1	5
ULB member	3	4	4	4	3	3	21
VHSC/NON-PRI member	3	1	1	1	2	2	10
Total	35	37	38	30	34	35	209

Table 17. Respondents retained for analysis — by detailed category of official

Respondent Category	Jal.	UD	Bard.	Bank.	Birb	PM	Total
Health Administrators							
CMOH / ACMOH / DYCMOH / BMOH	5	5	6	4	5	5	30
MOH / Superintendent	4	4	4	1	3	6	22
PMU member (DPC, DAM/BAM)	3	1	3	2	2	2	13
Other							
Health Workers							
BPHN	1	1	2	1	1	1	7
ANM/Health Assistant	4	6	4	4	6	4	28
Health supervisor/other	2	2	2	2	2	2	12
PRI Officials							
GP *Pradhan*/*Upa-Pradhan*	3	4	3	3	3	2	18
GP member	2	2	1	2	2	2	11
P *Samati Sabhapati*	2	2	2	2	1	2	11
Karmadhaksha member	2	3	3	3	3	3	17
ZP *Sabhadhipati*	1	1	1		1	1	5
ULB member	3	4	4	4	3	3	21
VHSC/NON-PRI member							
Total	32	35	35	28	32	33	195

Table 18. Likert scale coding criteria for health administrator survey items

Question (Health Administrators)	Dimen-sion	Narrow/low	Medium	High
Strategic and Operational Planning				
What is the basis of your assessment of the [current top three problems/challenges in public health in your district/block]?	CAP	No data-driven methods		Any data-driven methods
What is the normal frequency of assessing district/block health priorities?	CAP	DK/none	Ad-hoc/No defined frequency	Any 'defined' frequency
Which is the main planning document/exercise that is undertaken for public health in your district/block?	CAP	DK/Unaware		Stating any plans
Do you have a NRHM DHAP/Facility Action Plan/Urban Area Health Plan?	CAP	No/DK		Yes
How would you describe the involvement of the following persons/officials in developing and formulation of the Plan? c. DM/BDO d. MLA/MP	CAP	Not involved/No Role	Presence, but no active role	Active role, provides help/cooperation
How do you decide on the vulnerable blocks/GPs/areas and local health sector priorities for identifying in the DHAP/Overall Health Planning?	CAP	Pre-decided/DK		Local conditions/information only
While submitting the DHP/BHP for the current financial year, was the targets/achievements/drawbacks of previous year's Plan reviewed?	CAP	No/DK		Yes
Are the DHP/Other Heath Plans used to benchmark achievements/targets for health sector program/service delivery?	CAP	No/not done in practice/DK/etc.		Yes
Do you use the performance/outcome indicators and/or service statistics in identifying local needs and incorporate them into the Annual Plans? Do you use information on population health/ health-related information provided by the PRIs in identifying vulnerable/thrust areas during the planning?	CAP	No/DK		Yes
How would you describe your involvement in the overall health sector planning exercise at the district/block level? How would you describe your involvement in the development of the NRHM DHAP?	DS	No direct role		Any direct role
How far can you establish local health priorities in the Plan in deviance from the template/Proforma?	DS	Can't establish local priorities in deviance from template		Can establish local priorities (in deviance from template)
Did the higher authorities ask for any revisions/review in	DS	Asked for revisions		Not asked for revisions/DK

Question (Health Administrators)	Dimen-sion	Narrow/low	Medium	High
the DHAP/~~BHAP~~ after it was submitted to them last year?				
Are you involved in planning and/or decision-making for the following: a. Establishment of new health facilities; b. Revision /Realignment/Inclusion /Exclusion of health programmes and service delivery; d. Any Special Area Programmes	DS	No		Yes
During the last year (2008-09) have you decided/initiated/recommended: a. Construction of new health facilities b. Upgradation of existing facilities	DS	No		Yes
Who (or which body) finally drafted/was responsible for developing the NRHM Health Plan/Facility Action Plan/Urban Area Health Plan?	ACC	Individual alone		Samiti/other sub-committee
How would you describe the involvement of the following persons/officials in developing and formulation of the Plan? a. Sabhadhipati (ZP)/Sabhapati (PS) b. Janaswasthya Karmadhyaksha	ACC	Not involved/No Role	Presence, but no active role	Active role, provides help/cooperation
Budgeting				
Generally, is it possible to fully spend/allocate funds meant for health sector in your area within the stipulated time?	CAP	<=75%	76-89%	>=90%
Is the budget decided at the meetings of DHFWS/BHFWS?	CAP	No/DK		Yes
Do you have the required financial managers/accountants at the DPMU/Block /ULB/ Health facility for formulation/processing and monitoring of programme budgets and outlays?	CAP	No/DK		Yes
Are your financial managers/accountants technically equipped/professionally trained for their jobs?		No/DK		Yes
Do you think that the accountants of the DPMU/working under the DHFWS/BHFWS need further training/career development programs/specific trainings on managing accounts under the NRHM?		Yes		No
On what basis is the funds meant for health programmes and improvement of service delivery allocated across the health facilities in the district/block?	DS	State guidelines/directions only mentioned/DK	State guidelines / directions & local decisions / needs	Local needs/priorities only mentioned
On what basis expenditure under the following funds/expenditure heads is sanctioned by the individual	DS	State guidelines/direction/DK		Based on any locally made decision-making process

Question (Health Administrators)	Dimen-sion	Narrow/low	Medium	High
health facilities? a. Untied Funds; b. AMG; c. RKS Funds; d. User charges; e. NRHM Flexi-pool funds				(e.g., by DHFWS, RKS)
What role do you generally play in decisions regarding disbursal/expenditure of funds meant for health sector development in our District/Block/ULB?	DS	Following guidelines/DK		Any other responses denoting active involvement
Are you involved in formulating/preparing any other sub-district health budget?	DS	No other sub-district budgets	Other sub-district budgets but not involved in formulating them	Other sub-district budgets and involved in formulating them
Have you made any attempt to mobilize additional financial resources for health facilities/health sector development from other government departments?	DS	No attempts		Any attempts
How would you describe your role in deciding/developing the budget?	DS	No involvement		Any supervision/'formal' role
Generally, is the annual budget ceiling/maximum amount pre-specified by higher authorities, along with the respective heads of a/c?	DS	Yes (fixed budget/heads of a/c)		No (flexibility)
After the approval of the budget, are you allowed to make requests for additional allotments?	DS	No/DK		Yes/attempted, tried
In your opinion, what is the role of ZP/PS/GP/ULB functionaries for deciding and expenditure of funds under the Untied Funds and/or AMG meant for health facilities?	ACC	Not involved/No Role/lack of interest etc.	Occasional involvement, not much cooperation/'formal' role, etc.	Active role, guidance, joint decisions, provides help/cooperation etc.
How would you describe the involvement/participation of the following officials in formulating/developing health budget and financial planning for health sector? a. PRI/ULB President/Chairman; c. Karmadhaksha/Other Health Sub Committee members; d. Other people's representatives	ACC	Not involved/No Role/DK	Presence, but no active role	Active role, provides help/cooperation

Question (Health Administrators)	Dimen-sion	Narrow/low	Medium	High
During the ~~last~~ annual budget, were suggestions [for specific heads of inclusion/budgetary provisions made by ZP members/PS members/members of the Sthayee Samiti /Upasamiti RKS] incorporated into the final budget placed for approval to the State Dept. of H&FW?	ACC	No involvement or involved but suggestions not accepted; DK	Involved and suggestions rarely/sometimes accepted	Involved and suggestions mostly/always accepted
Human Resources	CAP	No		Yes
Do you participate in performance evaluation/appraisal of: a. Senior MO/Superintendents; b. CMOH/ACMOH/BMOH; c. BPHN/Staff Nurse; d. Other Grade II/III clerical/non-tech cadre; f. Contractual staff	CAP	No		Yes
How often do you meet with all: a. DM/ADM/BDO b. PRI functionaries (for health sector matters) c. Other people's representatives Health Officials/workers in your district/block	CAP	Don't meet	Meet but not on set schedule	Regularly scheduled meetings
Are there any performance evaluation mechanisms for officials at different levels in the department?	CAP	No/DK		Yes
Does the department maintain records for your and other staff's performance for the last five years?				
Are you involved in planning and/or decision-making for the following: c. Appointment/transfer of physicians and health workers; e. Contractual appointment of specialists	DS	No		Yes
Do you have the power to recruit/contract/suspend: a. technical staff (accountants/DEO/MIS/paramedics); b. non-technical staff (outreach/survey workers/drivers)?	DS	No		Yes
Do you have the power to propose/recommend/ contracting Grade –I/II officials?	DS	No		Yes
During the last year, to modify central schemes and state programs to your own needs have you been able to reallocate staff (temporarily) to different assignments	DS	No		Yes
Can you use untied funds at the district/block/ULB/Facility level for bonus/incentives to health dept. staff (including outreach/contractual workers)	DS	No/DK		Yes
Have you contracted doctors/specialists/others to fill vacancies under NRHM	DS	No		Yes
Were [any requests you made for] the following approved: a. Changed duty hours of MOs/PHN/ANMs; b. Request/recommend creation of new posts; c. Request/	DS	Requests not approved	Requests partially approved	Requests approved

Question (Health Administrators)	Dimen-sion	Narrow/low	Medium	High
recommend ~~filling~~ up of vacancies				
Do you generally discuss with PRI/ULB functionaries before any appointments/transfer/suspension of medical officers and other health workers in your district/block?	ACC	No	Sometimes/occasionally	Regularly
Are you involved in planning and/or decision-making for the following: c. Appointment/transfer of physicians and health workers; e. Contractual appointment of specialists	DS	No		Yes
Do you have the power to recruit/contract/suspend: a. technical staff (accountants/DEO/MIS/paramedics); b. non-technical staff (outreach/survey workers/drivers)?	DS	No		Yes
Do you have the power to propose/recommend/ contracting Grade –I/II officials?	DS	No		Yes
During the last year, to modify central schemes and state programs to your own needs have you been able to reallocate staff (temporarily) to different assignments	DS	No		Yes
Can you use untied funds at the district/block/ULB/Facility level for bonus/incentives to health dept. staff (including outreach/contractual workers)	DS	No/DK		Yes
Have you contracted doctors/specialists/others to fill vacancies under NRHM	DS	No		Yes
Were [any requests you made for] the following approved: a. Changed duty hours of MOs/PHN/ANMs; b. Request/recommend creation of new posts; c. Request/ recommend filling up of vacancies	DS	Requests not approved	Requests partially approved	Requests approved
Do you generally discuss with PRI/ULB functionaries before any appointments/transfer/suspension of medical officers and other health workers in your district/block?	ACC	No	Sometimes/occasionally	Regularly
Do the ZP/PS/GP/Municipality in your area monitor and certify the attendance of: a. Doctors; b. Paramedics/Other health workers?	ACC	No/DK	Monitor but can't approve/certify	Monitor and approve/certify
Do the ZP/PS/GP/Municipality in your area approve Casual Leave for: a. Doctors b. Paramedics/Other health workers	ACC	No/DK		Yes
Service organization/delivery				
Have you carried out the following activities in your district/block/ULB/health facility during 2008-09: a. Maternal death audits/follow-up; b. Prevalence/coverage survey under centrally sponsored schemes (TB, Leprosy,	CAP	No		Yes

Question (Health Administrators)	Dimen-sion	Narrow/low	Medium	High
Blindness, and Vector-borne diseases); c. Other Health surveys; d. Coverage surveys (Vit. A, pulse polio, UIP); e. Family planning; f. Reproductive/Sexual health (RTI/STI); g. Adolescent health				
Do you have any standard Grievance Redressal Process in the department?	CAP	No/DK		Yes
How would you describe the Inter-departmental convergence in your district/block/ULB regarding implementation of health sector programmes?	CAP	Requires much improvement		Satisfied/better than before
Are you involved in procurement of any of the following items/heads for the health facilities in your district/block/ULB? a. Civil Works; b. Equipments (Diagnostic/ OT); c. Equipments (Hardware/Stationery) ; d. Transport & Communication; e. Drugs (IV/Vaccines/Injectables); f. Others (specify)	DS	No/DK		Yes
During 2008/9 did you (and your staff) initiate any new programs or new ways of providing services that were not already in existence or ordered by State Department of Health and Family Welfare or Centrally Sponsored Schemes?	DS	No		Yes
If you disagree with any of the state health department /central scheme guidelines or have alternative ideas regarding service delivery or other operational aspects (diverging from the stated mechanisms) is it possible to table your views/ideas to higher authorities?	DS	No		Yes
Have you been able to change/modify: a. OPD/Pay Clinic schedules; b. Immunization days; c. Outreach activities (ANM/AWW); d. Any other activities (specify) from those dictated by central/state norms	DS	No/Haven't tried/Tried but not successful		Tried and successful
During the last year (2008-09) have you decided/initiated/recommended: c. Repairs/renovation of existing facilities; d. Addition of new services (diagnostics/clinics/patient services)	DS	No/DK		Yes
Have you initiated any scheme/services under the PPP with private bodies/SHGs/NGOs?	DS	No		Yes
How would you describe the role of DHFWS/BHFWS in financial planning, programme implementation and	ACC	Expresses problems		Feels does a good job

Question (Health Administrators)	Dimen-sion	Narrow/low	Medium	High
improvement of health service delivery in your area?				
Do you regularly attend the meetings of DHFWS/BHFWS?		No	Sometimes/irregularly	Regularly/Yes etc.
Do you organize meetings attended by the intended beneficiaries of JSY and/or PRI/ULB functionaries?	ACC	No		Any meetings organized
Are the PRI functionaries/members of Upasamiti/Sthayee Samiti involved in the above activities?	ACC	No/rarely/DK	Sometimes	Very involved
Monitoring & Evaluation				
Is there a routine system in your district/block to monitor health coverage and outcome indicators (IMR, Immunization coverage, DOTS, ANC, Institutional delivery)?	CAP	No routine system	Routine system but not personally reviewed on a regular basis	Routine system that is personally reviewed
How often do you monitor/review the following aspects of health service organization at the district/block/ULB/health facility: a. Expenditure under budget heads; b. Expenditure under non-budget/untied funds/flexi-pool heads; c. Staff attendance-MOs/paramedics; d. Drug/Vaccines stocks/Cold chain equipments; e. Medical kits for FRUs; f. Civic works/Infrastructural requirements	CAP	Not involved/doesn't monitor	Ad hoc/irregular monitoring	Regular monitoring
How often do you monitor/review the following aspects of health service delivery/strategic monitoring at the district/block/ULB/health facility: Ia. Performance indicators (IMR, MMR, Institutional delivery, Immunization, ANC etc.); b. Bed turnover rate; c. Bed occupancy rate; d. Successful implementation of Referral chain; e. OPD/clinic attendance	CAP	Not involved/doesn't monitor	Ad hoc/irregular monitoring	Regular monitoring
How often do the DHFWS/BHFWS monitor/review the performance/outcome indicators?	CAP	Not involved/doesn't monitor	Ad hoc/irregular monitoring/annually	Regular monitoring < annually
Do you periodically receive comparative performance statistics from other blocks/districts/ULBs/health facilities? Are the data helpful in implementing health programs and other aspects of service planning and implementation?	CAP	No	Not regularly but helpful or receive statistics (regularly) but not helpful	Yes/regularly and helpful
Local support				
Has [the ZP Sabhadhipati/PS Sabhapati/ULB Chairman/MP/MLA] supported any new activities/health schemes in your district/block/ULB/Health facility during the last three years?	ACC	Not a priority		Supports activities
Did the MP/MLA in your area devote funds for health	ACC	No/DK		Yes

Question (Health Administrators)	Dimen-sion	Narrow/low	Medium	High
sector during the last three years?				
How would you describe the degree of participation of ZP/PS/GP functionaries/ULB members for development schemes at the grassroots, especially for health sector?	ACC	DK/Unsatisfied	Somewhat satisfied	Satisfied
Do you think that the PRI/ULB functionaries/RKS members are oriented/ aware of their roles and responsibilities for health sector reforms and development?	ACC	Not at all/no	Somewhat aware	Fully aware/yes
Do you generally receive any important suggestions/help and cooperation from PRI/ULB functionaries?	ACC	No/rarely	Sometimes	Often/yes

Table 19. Likert scale coding criteria for health worker survey items

Question (health workers)	Dimen-sion	Narrow/low	Medium	High
Planning				
Are you aware of any health planning exercise at your facility/in your GP/ULB/Block? If yes, please name the plan (s) you are aware about?	CAP	Not aware	Aware but can't cite bona fide health plan	Aware and can cite bona fide heath plans
If you have received any training for the preparation of the Health Plan, do you think that the experience helped you in preparation of the plan?	CAP	Not involved	Involved but did not receive formal training or involved and received formal training that was not useful	Involved and received formal training that was useful
If [receive guidelines/bulletins etc. from higher authorities explaining your role in VHSC/BHFWS/RKS meetings], are these guidelines helpful in informing you about your role/responsibilities in these meetings?	CAP	Didn't receive guidelines	Received guidelines but not useful	Received guidelines and useful
If [receive guidelines/bulletins etc. from higher authorities explaining your role in monthly GP meetings], are these guidelines helpful in informing you about your role/responsibilities in these meetings?	CAP	Didn't receive guidelines	Received guidelines but not useful	Received guidelines and useful
Do you attend VHSC meetings?	DS	Doesn't attend	Attends but not active participant	Attends and active participant
Do you attend meetings of BHFWS/RKS?	DS	Doesn't attend	Attends but not active participant	Attends and active participant
Are you present in the monthly meetings on health issues at the GP?	DS	Isn't (regularly) present	Irregularly attends	Regularly attends
Are you invited by the following officials in meetings to discuss local health priorities/financial planning etc.: a. BMOH/CMOH/Suptdt./Other Health Dept. Officials; b. PRI/ULB Functionaries	DS	No		Yes
Budgeting				
Are you aware of any annual budget meant for health sector (financial plan) in your facility/GP/Block/ULB?	CAP	No	Somewhat	Yes
Did you participate in the annual budgeting exercise at the PRI/ULB?	DS	Not involved		Involved
Are you regularly consulted regarding expenditure from untied funds/annual maintenance grant/ any other funds received from DHFWS or BHFWS received by your health facility?	DS	Not aware of any funds or aware of some/all funds but not consulted	Aware of any funds and sometimes consulted/plays passive role	Aware of any funds and regularly consulted/plays active role
Did the BMOH consult you while deciding the: a. Priority	DS	No		Yes

Question (health workers)	Dimen-sion	Narrow/low	Medium	High
expenditure for the facility; b. Expenditure for any outreach/other aspects of health service delivery; c. Under the untied funds/Annual Maintenance Grant/any other funds for your facility				
Do you maintain the accounts of expenditure and/or bank a/c details?	DS	No		Yes
Were you involved in decisions for heads of expenditure? If yes, please describe your role in the decision-making process.	DS	No	Yes - follows guidelines	Yes - provides active input
Are you involved/consulted while deciding the planned expenditure under the untied funds received by your facility?	DS	No		Yes
Who (or which committee/body) finally approves the expenditure for your facility/area under the funds received?	ACC	Anyone other than PRI body/member, DK		PRI body/member
Human Resources				
Do you have in-position: a. 2nd ANM at SC/GPHQSC; b. ASHA	CAP	No		Yes
If [you have an in-position 2nd ANM/ASHA,] were you consulted/involved in the selection of a. 2nd ANM at SC/GPHQSC b. ASHA	DS	No		Yes
Service Organization				
Have you taken any measures/planned any actions in view of the [3 most important public health problems/service delivery challenges in your GP/PS/ZP/ULB]?	CAP	Cannot identify any public health challenges	Identifies any public health challenges but doesn't name any actions taken to redress problem(s)	Can identify any public health challenges and names any actions taken to redress problem(s)
In your opinion how interested/enthusiastic are the following in solving the [3 most important public health problems/service delivery challenges in your GP/PS/ZP/ULB]: 1. BMOH/CMOH/Suptdt./Health officials; 2. PRI/ULB functionaries	CAP	Not interested	Somewhat interested	Very interested
Were you involved in the following activities in your health facility during 2008-09: a. Health day; b. Maternal death audits/follow-up; c. Prevalence/coverage survey under centrally sponsored schemes (TB, Leprosy, Blindness, Vector-borne diseases); d. Other Health surveys; e. Coverage surveys (Vit. A, pulse polio, UIP); f. Family planning; g. Reproductive/Sexual health (RTI/STI); h.	CAP	No		Yes

Question (health workers)	Dimen-sion	Narrow/low	Medium	High
Child health (ARI, pneumonia, diarrhea,)				
Do you certify/nominate the JSY beneficiaries to the PRI head? Are you involved in disbursement of JSY funds to eligible mothers?	DS	No		Yes
Did you suggest changes/modifications etc. in any of the following services to the PRI/ULB functionaries: a. OPD/Pay Clinic schedules; b. Immunization days; c. Outreach activities (ANM/AWW); d. Any other activities (specify)	DS	No		Yes
Are you required to submit/seek certification for the following from the PRI/ULB functionaries: a. Outreach/Tour Plan; b. Drug/implements stock at health facility; c. Reporting of routine activities; d. Casual/Planned leave; e. Clearance/NOC for Salary/Allowances; f. Any other activities	ACC	No		Yes
Local Support				
How would you describe the cooperation you have received from PRI/ULB functionaries in discharging your regular duties/activities?	ACC	Not involved, not interested, etc	Cooperates when have time, to best of ability, etc	Cooperates regularly and usefully

Table 20. Likert scale coding criteria for PRI official survey items

Question (PRI officials)	Dimen-sion	Narrow/low	Medium	High
PRI decision-making				
How often do you have ZP/PS/GP/Council meetings?	CAP	Annually	Between annually and monthly	Monthly
How often do you have *Gram Sansad* meetings?	CAP	Never/annually	Not regularly but less than annually	Regularly and less than annually
How often do you have *Ward Committee* meetings?	CAP	Never/annually	Not regularly but less than annually	Regularly and less than annually
How often do you have Sub-Committee meetings?	CAP	Never/annually	Not regularly but less than annually	Regularly and less than annually
How many members of the ZP/PS/GP/Council regularly attend meetings?	CAP	<50%	>=50% - < 100%	100%
How do you decide on the meeting agendas?	CAP	Head alone decides		Members involved
Do you regularly attend the meetings of PS/GP?	CAP	Never/rarely	Not regularly	Regularly
Do you follow the directions/guidelines [that the political party you represent issues/communicates on health issues/administration/strategies related to health sector] while planning/ management/ monitoring health facilities and health issues in your area?	DS	Policy guidelines are issued for health sector activities and respondent usually/always follows them	Policy guidelines are issued for health sector activities and respondent sometimes follows them	Policy guidelines not issued (or respondent doesn't know) or guidelines issued but respondent doesn't follow them
Strategic & Operational Planning				
What is the basis of your assessment of the [top three problems/challenges in public health in your ZP/PS/GP/ULB]?	CAP	Self-experience only	Informal consultation with others (in addition to self-experience or not)	Based on evidence
What is the normal frequency of assessing ZP/PS/GP/ULB health priorities?	CAP	Never	Annually only or not at regular frequency	At regular frequencies throughout the year
Do you have a regular health plan for your district/block/GP/ULB?	CAP	DK/No plan	NRHM plan stated	Any local plan
How would you describe the involvement of the following persons/officials in overall health sector planning exercise? CMOH/BMOH; Janaswasthya Karmadhyaksha/VHSC; DM/BDO	CAP	No role/not present	Ok role/sometimes present	Helpful role/usually/always present

Question (PRI officials)	Dimen-sion	Narrow/low	Medium	High
How do you decide on the vulnerable blocks/GPs/areas and local health sector priorities for identifying in the DHAP?	CAP	Self-experience only	Informal consultation with others (in addition to self-experience or not)	Based on evidence
What procedures are followed once the DHP/BHP is submitted to the higher authorities?	CAP	No feedback		Any feedback
While developing the current year's health plan for your ZP/PS/GP/ULB did you review the targets, achievements and drawbacks of the previous year's Plan?	CAP	No/DK		Yes
Are the DHAP/BHAP or the health plan prepared by PRI (i.e., CHCMI) considered as the standard protocol/guideline for the future planning of activities/ health service delivery?	CAP	No/DK		Yes
How would you describe your involvement in the overall health sector planning exercise at the district/block level?	ACC	No direct role	No specific activities mentioned in role	Direct/active role with mention of specific activities
Were you involved during the preparation of the NRHM District health plan/Block health plan?	ACC	Not aware of plan	Aware of plan but not involved in formulation	Aware of plan and involved in formulation
Did the CMOH/BMOH present the District/Block Health Plan for review by the ZP/PS; DHFWS/BHFWS; RKS of concerned health facilities?	ACC	No		Yes
Budgeting				
On an average, since your tenure as the PRI functionary what proportion of the PRI/ULB Health Budget outlay was utilized?	CAP	<50%	50% - 89%	>=90%
What quantum of funds under the above heads (Q 5a) were spent/allotted within the stipulated time (annually)?	CAP	<50%	50% - 89%	>=90%
Have the funds for JSY been audited in the last three years?	CAP	No/DK		Yes
Do you have specific directives from the PRD/UA dept. regarding the : a. Budget provision; b. Expenditure/utilization of funds; c. Heads of a/c under	DS	Yes		No/DK

Question (PRI officials)	Dimen-sion	Narrow/low	Medium	High
which the budget is to be allotted				
Can you make any revisions/re-allocation of PRI/ULB Health Budget funds between different heads of a/c?	DS	No/DK		Yes
Are you consulted/your approval required for: a. Disbursal of funds under NRHM Flexi-pool; b. Disbursal of funds meant for RKS (untied); c. Untied funds for health facilities (DH/SDH/SGH/RH/BPHC/PHC/SC); d. Maintenance grant for health facilities (DH/SDH/SGH/RH/BPHC/PHC/SC)	ACC	No		Yes
Do you decide about Janani Suraksha Yojna (JSY) funds? Are you required to seek approval from BDO/BMO/anybody else for allotting JSY funds?	ACC	No/DK		Yes
Human Resources				
Are you consulted/your approval required for: e. Salary/benefits of medical officers; f. Salary benefits of other health officials/workers (contractual)	ACC	No		Yes
Do you regularly certify/monitor the attendance of MOs/ANMs/Other health workers?	ACC	No/DK		Yes
Do you participate in performance evaluation/appraisal of: a. Senior MO/Superintendents; c. BPHN/Staff Nurse; d. Other Grade II/III clerical/non-tech cadre; e. Contractual staff; f. Staff at DPMU/BPMU; g. Any other	ACC	No/DK		Yes
If you receive any complaints against health officials and workers (MO/PHN/ANM/other clerical staff etc.), what actions do you take?	ACC	No/DK		Indicates can take action
Were you involved in the selection of : a. 2nd ANM; b. ASHA; c. Health Supervisor in your GP?	ACC	Don't have in-position worker	Have in-position worker but not involved in selection	Have in-position worker and involved in selection
Do you monitor/approve casual leave of ANM/AWW?	ACC	No/DK		Yes
Service Organization/delivery				
How often do you discuss health issues in the ZP/PS/GP/ULB Council?	CAP	Never/rarely	No regular frequency	Regular frequency throughout year
How often do you discuss health issues in *Gram Sansad* meetings?	CAP	Never/rarely	Not regularly	Regularly
How frequent are the meetings of the VHSCs?	CAP	Don't have VHSC or have	No regular frequency	Regular frequency

Question (PRI officials)	Dimen-sion	Narrow/low	Medium	High
		VHSC but never/rarely meets		throughout year
Are the decisions/resolutions of the VHSCs discussed in the GP meetings?	CAP	No/no VHSC		Yes
Do you personally review the planned achievements in these coverage and outcome indicators [if you have] a routine system in your district/block to monitor health coverage and outcome indicators (IMR, Immunization coverage, DOTS, ANC, Institutional delivery)?	CAP	No routine system/DK	Routine system but not personally reviewed	Routine system and personally reviewed
Are you aware about the existence and activities of DHFWS/BHFWS in your PRI/ULB area?	CAP	No		Yes
Do you regularly attend the meetings [of the DHFWS/BHFWS]?	CAP	Not nominated member or nominated member but doesn't regularly attend		Nominated member and regularly attends
How important do you feel is the role played by DHFWS/BHFWS in expediting the: a. Administrative aspects; b. Financial planning/budgeting aspects; c. Service organization /Service delivery aspects	CAP	Not important/don't know	Somewhat important	Important/productive/good role
Have you faced any difficulties/problems in conducting the daily activities of the DHFWS/BHFWS?	CAP	No/missing		Yes/any problems
How would you describe the participation of DM/BDO in the PRI body/ULB council meetings?	ACC	Never/rarely present	Sometimes present	Regularly/usually/always present
Have you been able to influence /were you involved in the following decisions/planning regarding: a. Location of new health facilities; b. Inclusion/exclusion of services in health facilities; c. Placement/transfer of health workers and MOs in facilities; d. Outreach activities (immunization, communicable diseases etc.) for specially targeted populations; e. Contracting services of private sector	ACC	No		Yes
Do you monitor/approve outreach /tour programme of ANM/AWW of ANM/AWW?	ACC	No/DK		Yes

Question (PRI officials)	Dimen-sion	Narrow/low	Medium	High
Have [actions/remedial measures been taken when] you [have] complained/petitioned the CMOH/BMOH and/or the DM/BDO regarding: a. Unavailability of drugs and essential supplies in health facilities in your area; b. Non-functioning of OT/Diagnostic centres/Blood bank/other services; c. Cleanliness of wards/health facilities	ACC	Hasn't complained	Has complained but no action taken	Has complained and action taken
Local Support				
Do you have a separate PRI/ULB budget allotment for health & allied sectors?	CAP	No/DK		Yes
Have you taken any initiative to raise funds from other sources apart from the Own Funds / the funds provided by the ZP/PS/GP/ULB health budget?	CAP	No		Yes
[Can you give an example of...locally generated revenue (taxes/surcharges/rent) in your ZP/PS/GP/ULB [that you can allocate] for development of health care facilities/health service delivery in your area?	CAP	No/DK	Yes but respondent can't provide example	Yes and respondent can provide example
Have you tried to get: a. Additional posts (non-NRHM) sanctioned (MO/paramedics); b. Filling up of existing vacancies for your PRI/ULB area?	CAP	No		Yes

Table 21. Associations between dimensions of decentralization within health functions (pooled across respondent categories)

Function†	DS/CAP		N	DS/ACC		N	CAP/ACC		N
Health Administrators/Workers									
SOP	0.41	**	112	0.11		52	0.11		52
BUD	0.16	*	112	0.30	**	98	0.00		98
HR	0.16		74	0.18		55	0.11		52
SOD	0.12		112	0.17	*	112	0.23	**	112
ALL	0.34	**	112	0.26	**	112	0.33	**	112
All respondents									
SOP	0.41	**	112	0.11		52	0.14		135
BUD	0.11		195	0.19	**	143	0.06		143
HR	0.16		74	0.18		55	0.11		52
SOD	0.12		112	0.17	*	112	0.21	**	195
ALL	0.11		195	0.09		195	0.35	**	195

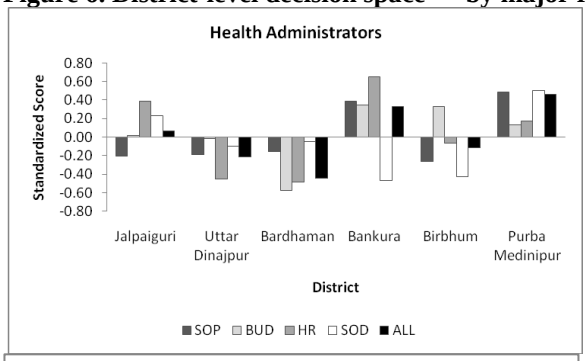
**: significant at $p < 0.05$; *: significant at $p < 0.10$

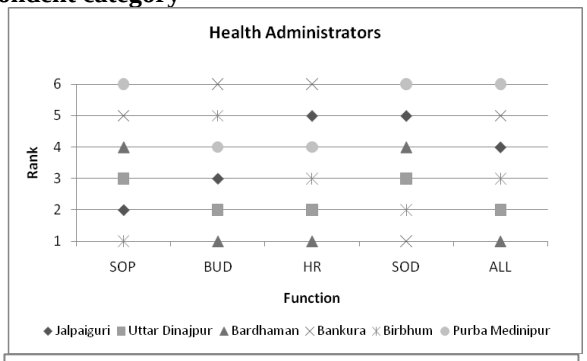
Table 22. Associations within dimensions of decentralization, by respondent category (pooled across respondent categories)

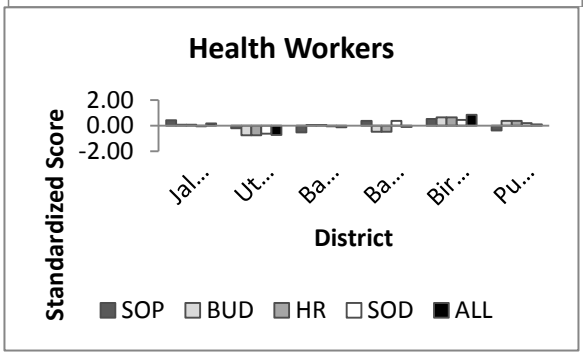
1st Function†	2nd Function	DS		N	CAP		N	ACC		N
Health Administrators/Workers										
SOP &	BUD	0.22	**	112	0.11		112	0.23		52
	HR	0.28	**	87	-0.01		92	0.31	**	44
	SOD	0.50	**	112	0.15		112	-0.02		52
	M&E				0.33	**	65			
	LS							0.10		52
BUD &	HR	0.32	**	87	-0.14		92	0.15		55
	SOD	0.19	**	112	0.04		112	-0.09		98
	M&E				0.34	**	65			
	LS							0.04		98
HR &	SOD	0.21	*	87	0.09		92	0.02		55
	M&E				0.10		52			
	LS							0.25	*	55
SOD &	M&E				0.22	*	65			
	LS							0.16	*	112
All respondents										
SOP &	BUD	0.22	**	112	0.13	*	195	0.13		97
	HR	0.28	**	87	-0.01		92	0.17	*	127
	SOD	0.50	**	112	0.17	**	195	0.04		135
	M&E				0.33	**	65			
	LS				0.30	**	72	0.10		52
BUD &	HR	0.32	**	87	-0.14		92	0.17	*	100
	SOD	0.19	**	112	0.04		195	0.09		143
	M&E				0.34	**	65			
	LS				0.22	*	72	0.04		98
HR &	SOD	0.21	*	87	0.09		92	0.16	*	138
	M&E				0.10		52			
	LS							0.25	*	55

1st Function†	2nd Function	DS	N	CAP		N	ACC		N
SOD &	M&E			0.22	*	65			
	LS			0.18		72	0.16	*	112

Figure 6. District-level decision space — by major respondent category







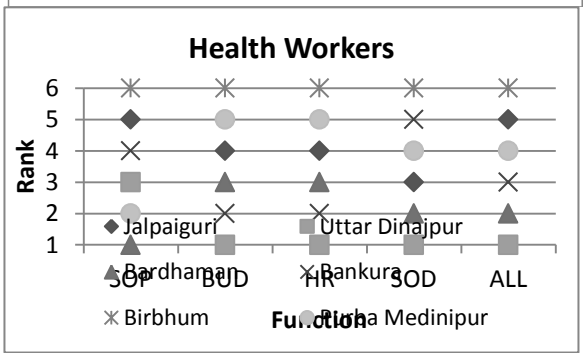


Figure 7. District-level capacities — by major respondent category

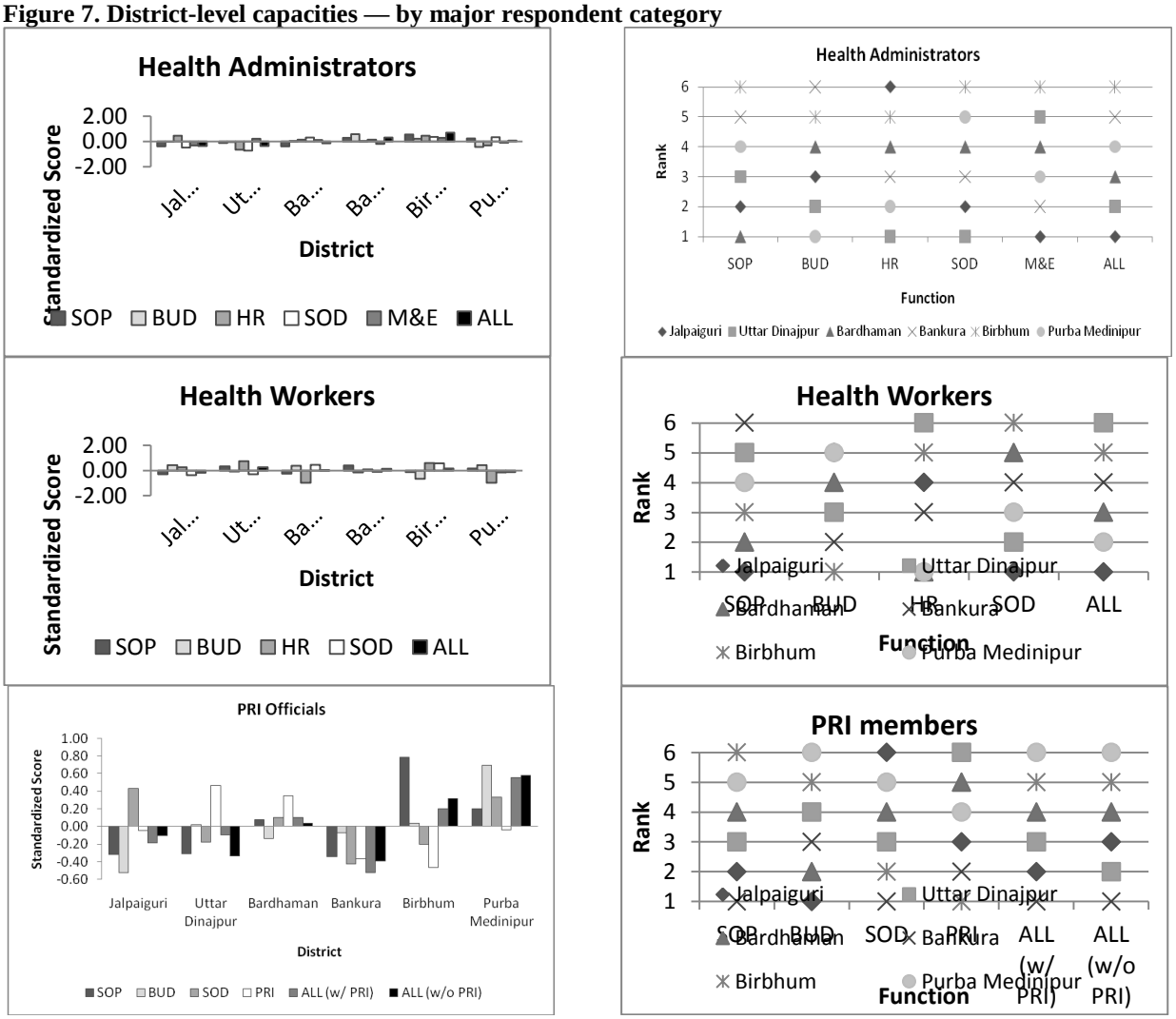


Figure 8. District-level accountability — by major respondent category

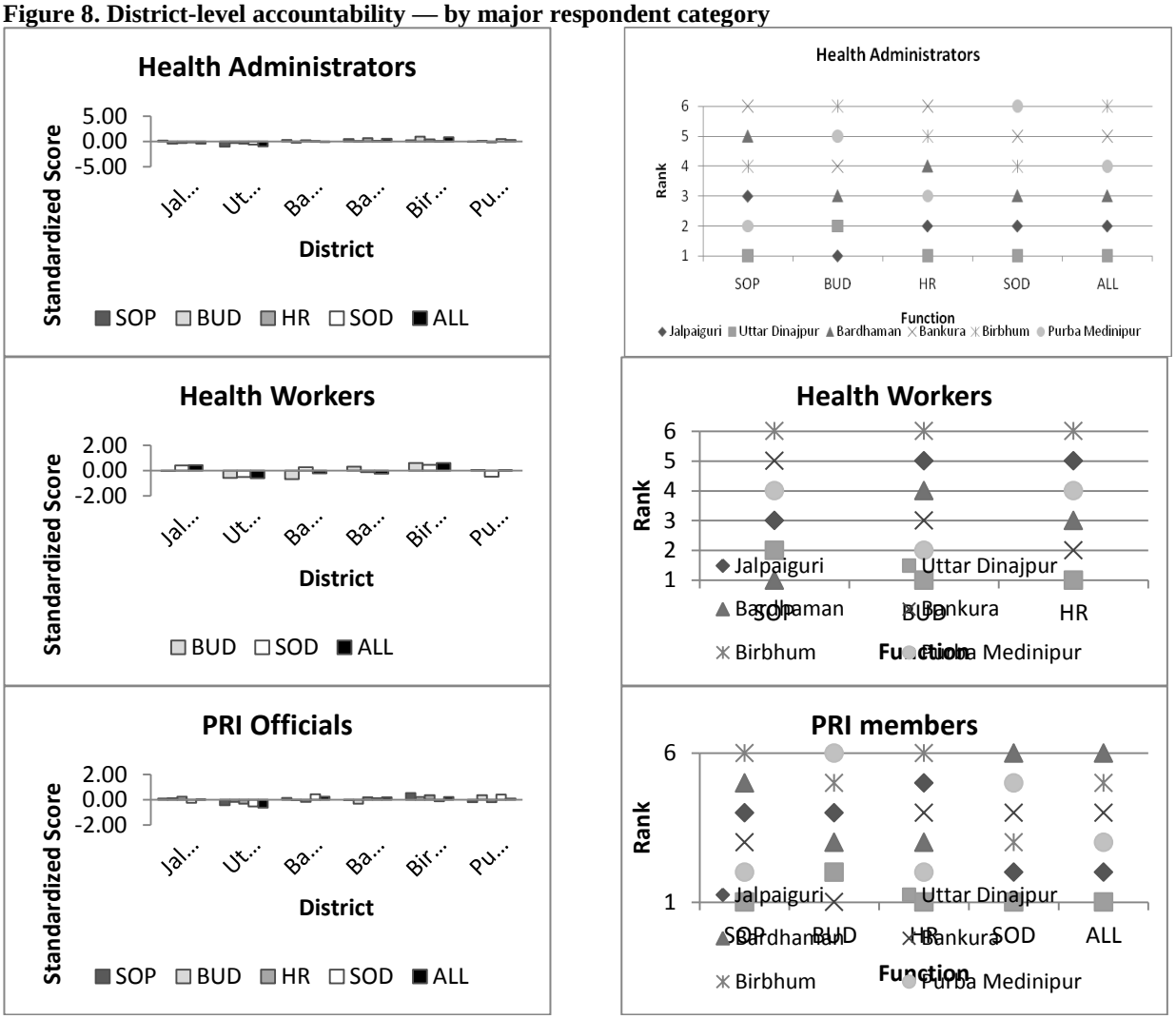


Figure 9. District-level decision space, capacities and accountability — by major respondent category

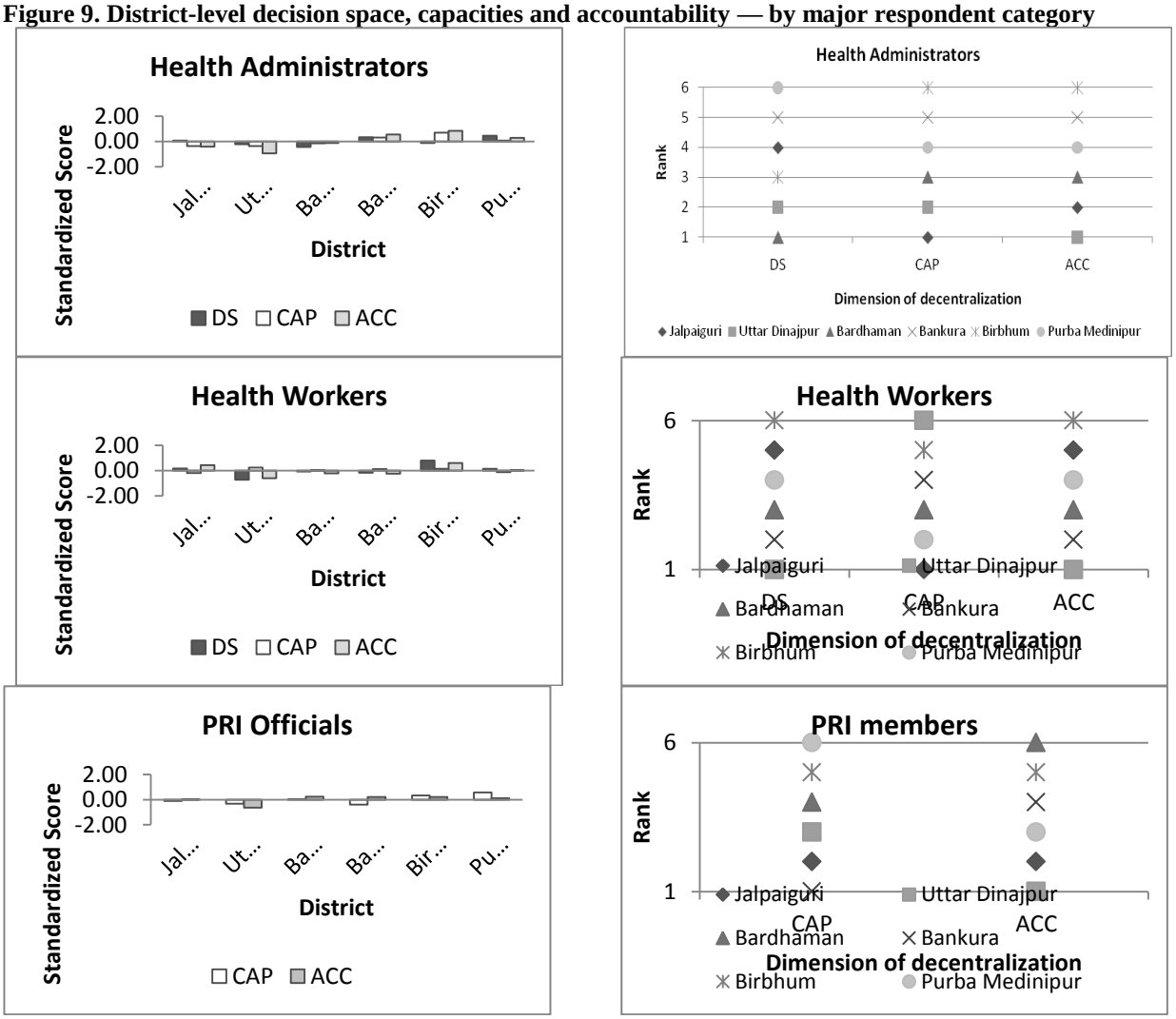


Table 23. Summary of district-level levels in decision space, capacities and accountability, by respondent category

Cat.*	Decision Space	Capacities	Accountability
Birbhum			
HA	▪ Generally below-average and variable function-by-function levels in comparison to other districts	▪ Top- or second-rated in all functions	▪ Top- or second-rated in three of four functions; top-rated overall
HW	▪ Top-rated in all functions	▪ Below-average in two functions/above-average in two functions; 2nd-highest rated overall	▪ Top-rated in both applicable functions / overall
PRI		▪ Below-average in two functions/above-average in two functions; 2nd-highest rated overall	▪ Top- or second-rated in three of four functions; second-rated overall
Bankura			
HA	▪ Top- or 2nd-highest rated in three of four functions (although well below-average in SOD); 2nd-highest ranked overall	▪ Both above- and below-average (particularly low scoring on M&E); 2nd-highest ranked overall	▪ Ranked in top three across all functions; 2nd-highest ranked overall
HW	▪ Across functions, equally above- and below-average; ranked around average overall	▪ Across functions, equally above- and below-average; ranked around average overall	▪ Both above- and below-average; 2nd-lowest ranked overall
PRI		▪ Lowest-ranked in three of four functions and overall	▪ Slightly above average for three of four functions / overall
Purba Medinipur			
HA	▪ Highly ranked/above-average across all functions and overall	▪ Both above- and below-average; slightly above-average overall	▪ Both above- and below-average; slightly above-average overall
HW	▪ Above-average across three of four functions/overall	▪ Both above- and below-average; 2nd-lowest ranked overall	▪ Both above- and below-average; slightly above-average overall
PRI		▪ Highly ranked/above-average across all functions; top-ranked overall	▪ Both above- and below-average; slightly above-average overall
Uttar Dinajpur			
HA	▪ Below-average across all functions; 2nd-lowest ranked overall	▪ Below-average across four of five functions (exception in M&E); 2nd-lowest ranked overall	▪ Lowest-ranked in three of four functions / overall
HW	▪ Lowest-ranked in three of four functions / overall	▪ Both above- and below-average; ranked highest overall	▪ Lowest-ranked in one of two functions / overall
PRI		▪ Both above- and below-average; ranked below-average overall	▪ Lowest-ranked in three of four functions / overall
Jalpaiguri			
HA	▪ Both above- and below-average; ranked slightly above-average overall	▪ Below-average across four of five functions (lowest-ranked in M&E); lowest-ranked overall	▪ Lowest-/2nd-lowest-ranked in three of four functions; 2nd-lowest-ranked overall
HW	▪ Slightly above-average for three of four functions; 2nd highest-ranked overall	▪ Both above- and below-average; lowest-ranked overall	▪ Both above- and below-average; 2nd-highest-ranked overall
PRI		▪ Mainly below-average; ranked below-average overall	▪ Both above- and below-average; 2nd-lowest-ranked overall
Bardhaman			
HA	▪ Mainly below-average across functions; lowest-ranked overall	▪ Although slightly above-average in most functions; slightly below-average overall	▪ Both below- and above-average across functions; slightly below-average overall

Cat.*	Decision Space	Capacities	Accountability
HW	▪ Below-average across all functions; 2nd lowest-ranked overall	▪ Both below- and above-average across functions; slightly below-average overall	▪ Both below- and above-average across functions; slightly below-average overall
PRI		▪ Both below- and above-average across functions; slightly above-average overall	▪ Both below- and above-average across functions; top-ranked overall

* HA = Health Administrators; HW = Health Workers; PRI = PRI Officials

Table 24. Dimensions of decentralization and health sector performance

Performance Indicator	DS		CAP		ACC		LS		
	ρ	N	ρ	N	ρ	N	ρ		N
Budget Execution	0.70	6	0.08	6	0.55	6	0.06		6
MCH score	0.78 *	6	0.22	6	0.70	6	0.76	*	6
Vacancy (all)	0.55	6	0.48	6	0.35	6	0.79	*	6

† SOP = Strategic/Operational Planning; BUD = Budgeting; HR = Human Resources; SOD = Service Delivery/Organization

† SOP = Strategic/Operational Planning; BUD = Budgeting; HR = Human Resources; SOD = Service Delivery/Organization; M&E = Monitoring and Evaluation; LS = Local Support; PRI = PRI decision-making

7 Appendix II

Prior to decentralization, the major formal authority for decision making and implementation of health activities has long been the responsibility of the state civil service in each state. Although each state has its own state civil service, major positions are occupied by officials who are members of the national Indian Administrative Service (IAS). This special administrative cadre is trained to be administrators of the system and not specific technical experts in any of the many substantive functions of the government programs. Under the framework of decentralization, local health sector decision-making processes involve a combination of civil service administrators, health workers and elected PRI officials. Since mid-2002, centrally sponsored schemes are overseen by the District Health & Family Welfare Samiti (DHFWS) and its block-level counterpart, the BHFWS in West Bengal.. Except the HIV/AIDS program which still has a separate society, all other programs (e.g., RCH2, Immunization, Disease Control (Leprosy, TB, Blindness)) are merged, although budgets remain separated. To further support decentralization, Rogi Kalyan Samitis at the District/Block level (for all categories of health facilities from Primary Health Centers and above) oversee community management of public hospitals, while Village Health and Sanitation Committees are expected to develop village-level health plans.

Strategic and operational planning

NRHM District Health Action Plans (DHAPs) are developed on an annual basis. DHAPs are prepared by health administrators and presented to the DHFWS, which has the *Sabhadhipati* (President) of the *Zilla Parishad* as the Chairman of the Governing Body. Further, the Chairman of the Standing Committee on Public Health (*Karmadhaksha*-JOPSS) and the Chairman of the ULBs in the district are members of the committee. The CMOH functions as the member-secretary of the DHFWS and is responsible for functioning of the *Samiti*, including finalizing the DHAP, with inputs from the DPMU (but not to the Zilla Panchayat). The responsibility of consolidating district plans lies with the Health and Family Welfare Society at the State level. Infrastructure development for the health sector is overseen by District Planning Committees that are responsible for overall planning in the district.

Budgeting

Control of budgets still is held at the State or Central level — local governments do not have any choice over shifting heads or from one central scheme to another. The CMOH prepares the budget which is approved by the DHFWS. Under control of ZPs are the Community Health Care Management Initiative, , a separate Public Health Cell, and some budgetary allocations made by the state department for Panchayats and rural development meant for public health and sanitation activities (includes provision of safe drinking water as well under the *Swajal Dhara* scheme, managed by the public health engineering department). The CMOH sends the budget directly to the Health and Family Welfare department at the state level, which then allocates a budget according to the district's needs and their resources.

Local hospital user fees exist for certain services (e.g., ambulance charges, X-Rays, lab tests for families above the poverty line) and it appears that wide local choice is exercised by the CMOH (or hospital superintendent) over setting of fees. The ZSS is responsible for collection and utilization of user fees and it is usually used for repairs and maintenance, purchase of X-Ray rolls, POL for generator/ambulance and emergency drugs.

There are also a variety of facility-level untied grants. First, under NRHM provisions an annual untied grant of Rs. 10,000 has been sanctioned for Sub-Centers with a view to provide financial help for low-cost essential services/tasks. The amount is to be deposited in a bank account jointly operated by the ANM, GP *Pradhan*, and the Executive Assistant of the GP. The expenditure incurred under the untied funds is to be endorsed and approved by the GP. For emergency expenses, *post-facto* approval is required, to be formally approved in the following GP meeting. Second, PHCs receive an annual untied grant of Rs. 25,000. Approved expenditures include minor renovations, purchase of equipment and emergency medicines, and other various operating expenses. Finally, RKSs have access to annual facility maintenance grants for use in PHCs (of Rs. 50,000) and in BPHCs (of Rs. 100,000). The State maintains a list of approved expenditures.

There is an Emergency Drug Fund that is 20% of the total drug budget for a district. The 80% is retained at the state level for bulk purchases. The CMOH has authority to make local purchase of drugs with his/her Emergency fund. The drugs should be on the Master List (EDL) and should be generic drugs.

PRIs have some funds that they can assign to health for equipment purchases mainly. These funds come from the State Finance Commission and are said to be assigned in equal portions to each member of the PRI for use in their wards. ZPs also have separate allocations meant for public health, sanitation and drinking water provision from the State, executed by the JOPSS and the District Public Health Cell. Additionally, GPs and ULBs can, if decided unanimously by the councils and, at times, on the basis of guidelines from respective departments, allocate locally generated revenue (from user charges, taxes etc.) as supplements to health department funds or, mostly in IEC and health promotion activities.

Human Resources

Most HR decisions are made by the DHFWS or RKSs with endorsement by the DM. The CMOH cannot hire or fire permanent employees, he can at most recommend disciplinary actions. The CMOH has some choice of transfer within the district, contract hiring, and suspension for all staff below physicians. The CMOH can recommend transfers or request the State Health & Family Welfare department for new posting and for filling of vacancies, but the final decision rests with the State.

ANMs need to be matriculate and have passed the 18-month ANM course from designated institutes. They are appointed by the directorate of health services, through the district employment exchange.

PRIs have been given the authority to approve casual leave of the ANM and Medical Officers including the CMOH. Frontline health workers such as ANMs, health assistants and ASHA workers requires a No-Objection Certificate (NOC) issued by the GP Prodhan in order to receive their monthly salary. The *Pradhan*, in the 4th Saturday meeting, reviews the attendance register.

Service Organization and Delivery

The central and state requirements control most of the service delivery choices for programs and priorities. However, based on DHFWS/BHFWS decisions, local health officials can introduce new/innovative programs (e.g., contracting services of specialists, health camps etc.) or minor changes in any existing services (e.g., clinic hours, outreach programs, need-assessment surveys, etc.) based on local needs and requirements.

8 Appendix III

Position/Designation/ Committee	Major functions
District Magistrate (DM) / Additional District Magistrate (ADM) / Block Development Officer (BDO)	▪ DMs and ADMs are generally civil service officials from the IAS or senior officers from the state civil service (executive) cadre. BDOs are state civil service officials. The DM/BDO acts as the Chief Executive Officer of the Zilla Parishad /Panchayat Samiti and advises the *Sabhadhipati/Sabhapati*. ▪ District Magistrates are entrusted with a variety of responsibilities (e.g., overseeing law and order; revenue collection/taxation; and planning), including some health sector-related functions. ADMs (mostly the ADMs in charge of Development and/or Zilla Parishads) generally look into specialized functions and have sectoral responsibilities. They assist the DM in deciding about development plans and budgets (including health sector) and human resource recruitment, transfers, contracts, and performance reviews. BDOs have similar powers corresponding to the DM at the block level. ▪ DMs and/or ADMs act in close consultation with the CMOH on matters related to health; at times the DM may request revisions/modifications or provide suggestions as required.
Chief Medical Officer for Health (CMOH) / Block Medical Officer for Health (BMOH)	▪ CMOH/BMOH is involved in general planning, supervision, and coordinating implementation and final deciding authority of all programs at the district/block level. ▪ He is the member-secretary of the District/Block Health & Family Welfare *Samiti* (DHFWS/BHFWS), a special invitee in the meetings of the *Janaswathya-O-Paribesh Sthayee Samiti* (Standing Committee on Public Health & Environment, including Sanitation) of the *Zilla Parishad* (ZP)/*Panchayat Samiti* ▪ CMOH advises the ZP president (*Sabhadhipati*), and the district administration on policy matters and daily activities related to health service delivery. The BMOH correspondingly advises the *Sabhapati* of Panchayat *Samiti* and supervises the functioning of RH/BPHC/PHCs and Sub-Centres and the activities of frontline health workers (ANM/Health Assistants/ASHA workers) ▪ The CMOH also supervises the functioning of the NRHM District Program Management Unit (DPMU) and coordinates between the activities of different health programs and interventions. ▪ The CMOH reports to the Director of Health Services (DHS) at the state secretariat and is in overall charge of the health system administration at the district level. The BMOH reports to the CMOH.
Assistant Chief Medical Officer for Health (ACMOH) / Deputy Chief Medical Officer for Health (DyCMOH)	• CMOHs are supported by a variety of cadres with similar responsibilities, including ACMOHs and DYCMOHs • The ACMOH is generally in charge of similar functions (like the CMOH) at the sub-division level and *de facto* the highest health official in urban areas. • DyCMOHs, who generally number three or four in a district, assist the CMOH in specific areas such as implementation of RCH services, HMIS, national disease programs (e.g., TB, leprosy and blindness) and personnel and general administration.
District Programme Management Unit (DPMU) / Block Programme Management Unit (BPMU)	▪ PMUs are specially constituted support units under the NRHM and all the appointees are purely contractual. DPMU comprises of a District Programme Coordinator, Accounts Manager, Data Entry Operator and Statistical Manager. BPMU does not have a statistical manager. ▪ The DPMU/BPMU assists the CMOH/BMOH in providing an up-to-date summary of health sector programs and health service statistics, helps in preparing the action plans/annual budget, and maintain accounts of the funds received under NRHM and other nationally sponsored programs (such as RCH-II).
Superintendent /	▪ MOs are doctors at the Primary Health Centre- (PHC), Block Primary Health Centres (BPHC), Rural Hospitals (RH), Sub-

Position/Designation/ Committee	Major functions
Medical Officer (MO)	Divisional/State General Hospitals (SDH/SGH) and District Hospitals (DH). They are usually fresh MBBS appointees in PHCs, and on seniority-basis are promoted to upper-level health facilities. MOs in block PHCs (BPHCs), rural hospitals, SD/SG hospitals and medical colleges are senior physicians serving the public sector. ▪ Superintendents are in charge of administration and day-to-day functioning of health facilities from the BPHC upwards. A senior MO is in charge at PHCs. Both these cadres of health officials are primarily concerned with curative service provisions, and aid in implementation of national health program; they are not primarily involved in public health activities. MOs from PHCs extend necessary supervision and guidance to ANMs and designated sub-centres. ▪ Based on their place of posting, these officials participate in the activities of the RKSs, and advise/consult with and report to the BMOH/ACMOH/CMOH regarding general service delivery, facility-level planning and budget/financial expenditures specific to the health facility.
Block Public Health Nurse (BPHN)	▪ BPHNs are public health workers, who assist the BMOH in planning, supervision, implementation and feedback/reporting of national public health programs
Auxiliary Nurse Midwife (ANM) / Health Assistants / Health Supervisors	▪ (ANMs) are front-line health workers at the village/sub-centre level. ANMs hold a minimum level of education of 10th pass and receive one and one-half years of specialized training. Senior ANMs with at least five years of experience can receive additional training to supervise and provide technical assistance to ANMs. Health Supervisors are senior ANMs operating from the Gram Panchayat Head Quarter Sub-Centre (GPHQSC). 2nd ANMs are newly constituted cadre of health workers under the NRHM and have similar responsibilities of ANMs. ▪ ANMs are supposed to have received specific training in planning and management of funds of the sub centre (a responsibility they share with the *Gram Panchayat Pradhan*). On paper, they should be involved in developing the Village Health Plans, oversee the activities of Village Health & Sanitation Committees, wherever existing and provide a monthly log of activities and performance indicators to the BMOH.
Sabhadhipati (Zilla Parishad) /Sabhapati (Panchayat Samit) / Karmadhakshyas	▪ Both the *Sabhadhipati* and *Sabhapati* have executive role and powers in relations with the health sector. ▪ They are the members of governing body of the DHFWS/BHFWS and ratify decisions taken in the Samiti meetings. They are also members of the Rogi Kalyan Samities (explained latter) and jointly decide on the expenditure under untied funds/maintenance grants received by the respective facilities. ▪ Together with civil service administrators (DM, BDOs) and health officials (CMOH/BMOH), they also participate in consultative processes of local need assessment, identifying local vulnerabilities and deciding on health service delivery improvement measures. ▪ They chair the meetings of the PRI standing committee on public health which is responsible for deciding on public health and sanitation initiatives and programmes, and oversee the functioning of health facilities and service delivery.
Chairman, Municipality	▪ Have similar roles and responsibilities as members of RKS/DHFWS/BHFWS like the PRI presidents, but with limited jurisdiction only within the urban area ▪ The ULB chairman, together with the member-in-council in charge of public health (and other sub-committee members) in the ULB, decides on functioning of urban health centres and clinics, provision of drinking water and sanitation and expenditure under the funds received directly by the ULB from the Urban Affairs department and/or other donors/agencies. ▪ In urban settings, the sub-committee on public health/health cell are headed by a chairman-in-council, with the local ACMOH (often) as an invited member and comprises of elected members to the ULB, municipal sanitary inspector and health officers/medical officers as invitees.
Gram Panchayat	▪ *Gram Panchayats* (GPs) are headed by GP *Pradhan* and attended by other GP members. All GP members are supposed to receive

Position/Designation/ Committee	Major functions
Prodhan / Upo-Prodhan / Sanchalak	short term training on PRI roles and responsibilities. ▪ The GP *Pradhan* is a member of the BHFWS and the RKS of the local PHC. Additionally, GP members are involved in creating awareness among the local people about the main aspects of public health and helping in different aspects of curative and preventive care, including family planning and child nutrition under the Integrated Child Development Scheme (ICDS) and midday meal scheme, overseeing and helping in implementing the schemes of maternal & child health care (RCH) and disease control (TB, malaria, etc.), maintaining the birth-death register and assist/advise/monitor daily activities and functions of ANM and other health workers in local health facilities.
Janaswasthya-o-Paribesh Sthayee Samiti (JOPSS) /Upo-Samiti	▪ The standing committee/sub-committee is comprised of elected members to the PRI body, headed by a *Karmadhakshya/Sanchalak* (Working president/Coordinator). It is the topmost decision-making, planning and coordinating body within a PRI on issues related to provision of drinking water and improved sanitation, health service delivery, preventive health programmes (MCH) etc. ▪ The standing committee/sub-committee decides on the PRI budget in public health and advises the PRI president on issues and policy decisions regarding health sector (construction of new health facilities, repair/renovation of existing ones for e.g.)
District/Block Health & Family Welfare Samiti (D/BHFWS)	▪ Societies constituted under the State Health Society in 2005, under the NRHM involving health officials, civil administrators, PRI members, officers from related line departments and representatives of civil society/non-governmental organizations ▪ Major decision-making body on all aspects related to the health sector including planning, budgeting, need assessment, monitoring and evaluation and programme implementation. ▪ Provides a platform for exchange of opinion among different stakeholders and he government officials and decide on local health priorities and suggest remedial measures.
Rogi Kalyan Samitis (RKS)	▪ RKSs are constituted involving different stakeholders (largely similar to the constitution of the DHFWS) for the primary function of administration, improving service delivery, monitoring activities of health department staff, incorporate users demands and grievances etc. ▪ A major responsibility of the RKS is to plan and execute expenditure under the untied funds and maintenance grants received directly by the facility under the NRHM, guided by a specified list of permissible expenses.