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Basic Services, Low-Income Settlements and the Local State: How
Collectively-Organized Initiatives Redress Inequalities

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ABSTRACT OF THE DISSERTATION

Basic Services, Low-Income Settlements and the Local State: How
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Basic service security is inadequate for many urban households situated in urban slums in low and middle income countries. Given the local state's slow and inadequate efforts to improve service provision, households and collectively-organized resident groups often resort to employing their own strategies to secure services. This study draws on the experience of the collectively-organized Basti Vikas Manch initiative (hereafter BVM, English: Slum Development Network) in four slums in Hyderabad, India. The broad goal of the BVM is to bring about greater transparency and public participation in local government decision-making regarding basic service provision to slums. Although much of the literature on basic service access inequality describes the complete absence or antagonism of the public sector, it is the slow and uneven pace of public improvements relative to needs that motivates slum residents in Hyderabad to engage local agencies to provide better service access.

The dissertation takes the form of an introductory essay and three standalone papers. The introductory essay reviews the mechanisms by which inequalities in basic service access degrade quality of life for low-income urban households, explains why basic service is worse in slums, and traces the historical arc of policy responses to substandard service conditions. Using data from a survey of 752 Hyderabad slum households, and synthesizing the exit-voice-loyalty and collective action frameworks, Paper 1 models household participation in solitary and collective strategies to improve service security. Paper 2 uses data from structured interviews and program files to document the origins of the BVM, the engagement strategies it employs, and the implications of the BVM for other slum upgrading programs. Paper 3 develops a typology which reorients collective service access strategies identified in disparate literatures with reference to the extent of pressure they exert on the local state to improve service provision. This study argues that strategies to change the choice architecture of the state are the most promising to mediate the oft-cited tension between short-term and long-term service needs.

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DEDICATION

To M.C.G. and L.W.P.

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Introduction: The Importance of Basic Service Access, Why it is Worse in Slums, and the History of Policy Responses

Overview

My dissertation draws on the experience of the *Basti Vikas Manch* (hereafter BVM, English: Slum Development Network) initiative in four slums situated in Hyderabad, India. The broad goal of the BVM is to bring about greater transparency and public participation in local government decision-making processes with respect to slums, particularly in regard to basic service provision. As opposed to the slum areas described in much of the literature on basic service access inequality, the government formally recognizes the right of residents to live and receive services in each of the study areas. Slum households in Hyderabad do receive some level of basic service provision from public agencies. It is the slow and uneven pace of public improvements relative to needs, rather than the complete absence or antagonism of the public sector, which demonstrates the need for residents to engage local agencies to provide better service access.

The dissertation takes the form of an introductory essay and three standalone papers. The introductory essay reviews the mechanisms by which inequalities in basic service access degrade quality of life for many low-income, urban households. In this chapter, I also draw on the broader academic literature and the experience of housing settlements in the study to explain why basic service is worse in slums, a phenomenon that is often assumed. The chapter concludes by summarizing the historical arc of public policy responses to substandard living conditions in slums across low and middle income countries (LMICs), thus providing context for the BVM initiative in Hyderabad. I provide summaries of the three core papers of the dissertation below.

Paper 1: Synthesizing the Exit, Voice and Loyalty and Collective Action Frameworks to Assess Household Strategies to Improve Basic Service Security

Levels of basic service security remain insufficient for many urban households situated in slums in low and middle income countries. Given the slow and inadequate response of the

local state to improve provision, households often must proactively employ strategies to secure services. In the context of many slums, participation in collective action—or collective voice—has been hailed as the most effective means to improve local public goods provision. However, households' incentive to participate has rarely been modelled. At the same time, households may employ standalone exit, voice, or loyalty (EVL) strategies. Despite the common usage of the collective action and EVL frameworks to understand service deficiencies in urban environments, potential trade-offs or complementarities between these two strategies have not been considered.

Using data from a survey of 752 households in three slums in Hyderabad, India, I jointly consider participation in solitary and collective strategies to improve basic service security. Collective voice, the outcome of interest, is measured via participation in a collective action initiative in these slums, the Basti Vikas Manch. Descriptive findings show that households employ multiple standalone and collective strategies simultaneously. I subsequently use multivariate regression to model collective voice and satisfaction with collective action as a function of households' utilization of a range of standalone voice or loyalty mechanisms and control for other factors which influence participation in urban collective action. Acute experience of basic service deficiencies is the most important predictor of collective voice, while knowledge of local conditions and age of the household head are also consistently associated with participation. The modelling also suggests that there is some substitution in strategies employed, but little strategic complementarity. Future research should explicitly test the presence of effective thresholds of participation in collective action.

Paper 2: Balancing Practical and Strategic Needs to Improve Slum Engagement with the Local Public Sector

Urban public sector service provision remains woefully insufficient to meet the needs of slum residents across low and middle income countries (LMICs), particularly in India. There are

several directions from which Indian local government engagement has originated: bottom-up resident movements, intermediary NGOs, and top-down initiatives by state and central government agencies. The success of these efforts, however, has been mixed, and scholarship on engagement has been overwhelmingly pessimistic.

This study contributes to the constructive literature documenting ways to bridge the enduring gaps between residents of slums and adequate service provision. I use data collected over multiple years of fieldwork to document the origins and engagement strategies of the Basti Vikas Manch (BVM), a unique slum development platform operating in four notified slums in the greater urban area of Hyderabad, India.

I trace the development process of the BVM, which was co-initiated and supported by intermediary NGOs. Still, the initiative's development represents a true cross-section of slum residents when placed in the context of the literature on slum collective action movements and urban governance reform in India. BVM groups accomplish short-term service outcomes through several unique features. They employ not only intensive learning and exploitation of the formal structures of local public agencies, but also engagement with local power brokers that escalates from constructive cooperation to increasingly adversarial techniques as needed. Moreover, I evaluate the BVM not only by its ability to satisfy short-term livelihood necessities, but also in terms of its self-professed goal to affect long-term transformation in state-society relations. Results from this study can inform broader policy efforts to support low-income community engagement with urban public sector agencies across LMICs.

Paper 3: Engaging the Local State: Collective Strategies to Improve Basic Service Security in Slums

Despite significant effort by policymakers and scholars, slum residents globally continue to suffer from short-term basic service deficits of a collective nature. The blame for these deficits is generally attributed to the incompetence and neglect of the local state, either because it is

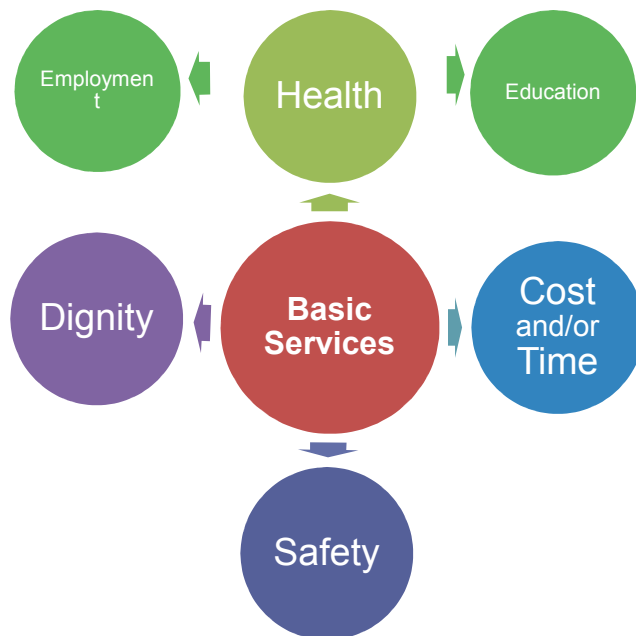
unresponsive to top down pressure or because it is simply moving slowly to improve service provision. In the absence of effective public service provision by local agencies, a wide range of bottom-up strategies has been proposed in piecemeal fashion to overcome service deficiencies.

In this study, I develop a conceptual framework that synthesizes disparate strategies to ensure integrated basic service security. I draw on fieldwork conducted in four semi-formal settlements in Hyderabad, India to illustrate how these strategies interact, with a focus on the collective nature of service access. I then propose a typology to reorient collective service access strategies with reference to the extent of pressure they exert on the local state to improve service provision. Within this typology, I argue that a category of strategies intended to change the choice architecture of the state are the most promising to mediate the oft-cited tension between short-term and long-term service needs.

The Importance of Basic Service Access

The demand for basic service access is usually conceptualized as deriving from a desire to avoid adverse outcomes rather than to enable utility-enhancing activities. Households are left vulnerable to at least four negative outcomes when they receive insufficient basic service provision from the local state (Figure 1). Previous studies in LMICs have empirically documented adverse health, cost, safety and dignity outcomes resulting from a lack of basic service access. While a voluminous literature documents the effects of insufficient basic service access on health and cost burden, the issues of safety and dignity have more recently been recognized. Below I discuss the tenor of these findings, using drinking water and sanitation services as primary examples, to illustrate the importance of enhancing basic service access in housing settlements like the study areas.

Figure 1. Outcomes of Basic Service Access



Health and Human Resources

The most direct adverse consequence of insufficient basic service access is impaired health in the form of morbidity, and in many cases mortality. Globally, 1.8 million children die

each year due to a lack of clean water and sanitation services, and this mortality figure dwarfs the casualties associated with violent conflict worldwide (UNDP, 2006). At the household level, a robust literature has empirically established the relationship between piped water and health. In-home piped water access substantially reduces the incidence of diarrheal disease (Jalan and Ravallion, 2003; Clasen et al., 2007; Aryal et al. 2012), stunting (Checkley et al. 2004), infant mortality and under-five mortality (Leipziger et al. 2003). Access to adequate wastewater disposal also lowers mortality rates (Massaqoi et al., 2014).

Good health is also a baseline requirement for individuals to carry out livelihood maintenance and enhancement activities, most notably education for children and employment for adults. If children become ill from ingesting polluted water, they are less likely to retain information learned in school or attend school consistently. Moreover, children are sometimes more likely to attend if a clean water source is present at the school. While these factors are sometimes employed as control variables in models of school attendance (Yamano and Jayne, 2005), studies focusing on the direct relationship between water access and education are still largely confined to the grey literature (UNICEF, 2012). The literature documenting the positive effect of water access on employment outcomes and economic productivity, on the other hand, is quite robust (Berggren and Dankvardt, 2013; Koolwal and Van de Walle, 2013).

It is important to note that the connection between basic service access and household economic outcomes does not only work through the pathway of health. In addition, the resources provided by service access can function as direct inputs to productivity. For instance, scholars have documented the enhancement of household employment and productivity via stable access to electric power (Dinkelman, 2011; Grogan and Sadanand, 2013) and water (Kiendrebeogo, 2012) in LMICs.

Monetary and Temporal Cost

In addition to impairing health—and relatedly livelihoods—insufficient basic service access imposes a higher cost burden on certain households. When the public sector underprovides a vital service relative to need, households must obtain the service via another means. The additional monetary and temporal costs borne by underserved households is again vividly illustrated in the case of potable water access.

Inconvenient water service can impose a significant time cost. Because they do not receive in-home service, urban households in LMICs are often forced to spend hours waiting for or walking to obtain water from public taps, which only provide water at certain times of day (Thompson et al., 2000; Sorenson, Morssink and Campos, 2011 ; Meeks, 2012). The opportunity cost of physically obtaining water is time that could potentially be devoted to more productive activities or leisure, and this cost is usually borne by women or children.

Even more onerous than a time burden, households may be compelled by public sector underprovision to pay a higher monetary cost for a service that is supposed to be provided at low cost or no cost. Households often rely on private water vendors for service. Vending is here defined as any resale or further distribution of public utility water or water from other sources. Vended prices are often much higher than the public utility price, due to the real cost of supply or the collusion of cartels (Kjellen and McGranahan, 2006). In any case, paying the market price for water imposes a serious financial constraint on households, costing nearly 10% of household income according to some studies (Whittington, Lauria and Mu, 1989). Vended services obtained from private providers are also often of dubious quality compared to public services.

Physical Security/Safety

Lack of stable and convenient access to basic services can also lead to physical insecurity or decreased safety. A number of service deficits put urban households at risk.

Access to electrical power which provides public lighting is a general security concern regardless of the context (Giles-Corti and Donovan, 2002). More specific to low-income urban areas, an increasingly recognized imposition is placed on women who do not have access to an indoor toilet. The need to defecate at a public toilet or in the open, particularly at night, exposes women to risk of harassment or physical assault (Desai, McFarlane and Graham, 2014). Although less publicized, children are also systematically exposed to safety hazards such as open sewers and wastewater drainage canals that are not properly maintained by local public agencies in low-income urban areas (Satterthwaite, 2014).

Dignity and Rights

Finally, insufficient provision of basic service access by the local state can lead to lower perceived dignity and diminished experience of effective rights. The effect of basic service deficits on dignity and rights is more difficult to quantify than other outcomes, but is still an important experiential consequence. For instance, women often report suffering a loss of dignity in addition to safety when they must resort to open defecation. Degradation of perceived dignity due to lack of service access often elicits feelings of being treated as sub-human (Landau, 2006; Hoffman and Coffey, 2008). More positively, residents' effective right to the city involves their demanding more than the status quo of services offered by the state, so that they actively work for a greater set of rights as well as a more inclusive urban system (Harvey, 2003). Efforts to ensure the right to the city, however, assume that the public sector has already satisfied the baseline basic service needs of residents (Bhan, 2009; Parnell and Pieterse, 2010). In other words, satisfaction of these needs is a necessary but not fully sufficient condition to realize a city where low-income residents have rights equal to those of other occupants.

Defining the Slum and Characterizing the Living Conditions of Slum Residents

In urban areas of LMICs, the consequences of insufficient basic service access are most acutely experienced by households residing in housing settlements commonly labelled as 'slums' or 'informal settlements'. On the positive side, these areas often provide cheap housing for rural migrants and other disadvantaged households. At the same time, slums may facilitate vibrant micro-economies that attract and retain substantial and longstanding middle income populations. More negatively, these settlements typically have a questionable, tenuous or contested legal status vis-a-vis the state. Many such housing settlements are characterized by narrow and crowded streets, poor basic service access, an unstable or hazardous built environment, and heightened crime. Despite heterogeneity, this generic profile of informal settlements fairly describes the average Indian slum (Karn and Harada, 2002; Awasthi and Agarwal, 2003; Bapat and Agarwal, 2003). Indeed, the Indian government defines a slum partly by the presence of basic service deficiencies (MHUPA, 2012).¹

Between 25-75% of all urban households in LMICs, regardless of economic status, live in informal settlements. One estimate suggests that by 2030 there will be two billion people living in slums, whereas there were only one billion around the turn of the century (Neuwirth, 2004). Part of the uncertainty surrounding attempts to make a more precise count of informal settlement residents stems from the many different, and often contested, practices used to label areas as slums.

Due to its pejorative connotation, there is a fierce debate about the use of the term 'slum' itself (Gilbert, 2007). Moreover, Peattie argues that use of the term 'informal' to describe particular housing settlements encourages dualistic thinking and obscures a focus on underlying issues of legitimacy and legality (1987). Peattie defines informality as part of a logic of metropolitan organization. Within this logic, there is a complex continuum of legality and

¹ As defined by the Indian Ministry of Housing and Urban Poverty Alleviation, a slum is a "compact settlement of at least 20 households with a collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions" (MHUPA, 2012).

illegality, where legitimacy matters more than the dichotomous legal status granted by the state. Similarly, Roy argues that it is more important for households to fall under the government's strategic state of exception than to be formally authorized (2007). More negatively, Yiftachel characterizes housing informality as creeping apartheid practiced by the state (2009). He equates informal settlements with gray spaces that are in 'permanent temporariness.' Unlike Roy and Peattie, he sees state sanctioning or tolerance as necessarily perpetuating an unproductive and unjust uncertainty for slum dwellers. Similarly, Marx, Stoker and Suri use global data on slum residence and economic outcomes to question the longstanding assumption that slums serve as transitory residences facilitating upward economic mobility for households from rural areas (2013).

I use the term slum and 'semi-formal' settlement interchangeably to describe the housing settlements studied in this analysis. I do not choose a side in this debate for two reasons. First, as noted above, the term 'slum' is an official designation of the Indian government and is commonly used in India by all stakeholders. Second, and more importantly, the relationship between the four housing settlements extensively involved in the BVM and local government is not explained neatly by the dominant narrative of the literature on the legitimacy of slums or informal settlements. Each settlement is a 'notified slum' recognized by the Indian government. Moreover, each was established in 1970 or earlier, has a fairly permanent built environment, and received some level of basic services from nominally responsible public agencies before the institution of the BVM. Rather than the complete absence or antagonism of the public sector, it is the slow and uneven pace of public improvements relative to needs and infrastructure obsolescence that demonstrated the need for an intervention like the BVM in these areas.

Why is Basic Service Access Worse in Slums?

The largest obstacle to basic service security—the poor service provision capacity and performance of local government agencies—is a factor shared by most residents of urban areas

in LMICs. But access is also much worse in slums than in other areas of the cities in which they are situated. In addition to the general incompetence or neglect of government service providers in the city, there are numerous endogenous obstacles to basic service access that tend to be more prevalent among slum communities than the general urban population. These obstacles have been documented in a piecemeal fashion in the extant literature and have typically emphasized access to single services such as drinking water.

By contrast, I develop a typology that synthesizes and orients barriers to a range of basic services by the degree to which these barriers are endogenous to communities (see Table 1). More endogenous barriers are more difficult to address through residents' efforts or via local government policies. For instance, even concerted local government programs are unlikely to overcome endemic poverty in slums, whereas the local bureaucracy's potential to alter institutional barriers is often high. I explain the problems presented by these barriers and their prevalence across informal settlements. I then illustrate how these obstacles work in detail using empirical evidence from the four study areas.

Economic: Poverty

The most intuitive explanation for heightened basic service insecurity among slum residents is that they simply do not have the money to pay for adequate services. Households in slums do tend to have low incomes. More than 95% of the households in each of the study areas reported incomes below the national urban poverty line (BVM Household Survey, 2014). Danieri and Takahashi also provide evidence from Bangkok that informal settlements in higher income zones in the city have better access to services, controlling for other factors (1999). Conversely, cash-strapped government agencies may have little incentive or ability to extend coverage to areas predominantly occupied by low income households who cannot pay for public services.

Empirical research, however, has shown repeatedly that poor households often pay more for basic services in absolute terms than middle or high income households. Studies employing contingent valuation techniques suggest that under-served households are willing to pay the going price for public service provision, especially if payment smoothing programs are available and bribes to public officials are not required (for instance, see Whittington et al 1989; Whittington et al 1990; Strassman, 1994).

Table 1. Endogenous Barriers to Basic Service Access in Slums

<i>Category</i>	<i>Rationale</i>
Economic: Poverty	Slum households simply do not have enough money to pay for basic services.
Social: Group identity discrimination	Government agencies do not extend services to certain ethnic, racial, religious, or caste groups in slums.
Political: Shallow or captured representation	Slum dwellers sell their political voice in exchange for one-off assistance or empty promises. And/or the service concerns of slum dwellers are presented to local government by ineffective or corrupt representatives.
Spatial: Intra-city and intra-slum geography	Slum areas (or particular neighborhoods within them) are located in undesirable or physically inaccessible areas of the city that are hard to reach with basic service infrastructure.
Institutional: Extent of government recognition	Local government agencies cannot or will not extend basic service provision to slums that are <i>de jure</i> or <i>de facto</i> unrecognized by the state.

In the context of Hyderabad, Raghavendra shows high willingness to pay for household water service among unconnected households (2006). The presence of robust tanker markets in Hyderabad also demonstrates high willingness to pay in areas receiving sub-standard piped service. Due to unreliable supply from the public utility, the average reported household budget

for water in the study areas was nearly 20% higher than the official cost of government water supply to slums.² In other words, slum households are more than willing to pay for services at the rate the government charges—they already do so.

Despite the clear demand by slum dwellers for public services (and the lack of evidence showing that they are unreliable payers), supply side concerns regarding resident poverty may contribute to insufficient provision in the study areas. Slums house low-paying customers—by public statute, they pay 50% of the rate charged in other areas—and also present high upkeep costs due to a history of shoddy infrastructure provision and maintenance by public agencies. Hyderabad's Water Board also operates at a chronic fiscal deficit and thus frequently, vocally threatens to cut off service to non-paying customers (Mungara, 2013), including large swathes of the urban area such as the Secunderabad Cantonment Board (Hindu, 2014). In fact, some of the direct burden for revenue shortfall from basic service provision has perversely fallen on slum dwellers, perhaps because they are easiest to target (TOI, 2014).

On the other hand, some low income households may not want to receive official, public service because the cost of being recognized by the government is greater than the benefit (Crane, 1994). In the case of the study areas, however, government recognition has already been granted and demand for public service is clearly present. Via the BVM platform, slum households in the study areas have repeatedly lobbied government agencies to enable households to enroll in service programs and pay for public services (Bholakpur BVM, 2014). Households do not hesitate to use their official government identification cards and payment records as points of leverage in engagement with local government agencies.

In short, despite the seemingly intuitive nature of the poverty obstacle, public service shortcomings cannot be broadly attributed to poverty across informal settlements or in the study

² Stating that residents of informal settlements are willing to pay the normal public rate does not mean that they do not want or need to pay less than that rate. For instance, the residents of Mohammed Nagar in Bholakpur filed a petition to the public water utility in 2011 requesting free water. Residents argued that even the government water rate typically charged for slums (half the normal rate) imposed an undue cost burden on them. The utility denied this request, so residents kept paying the standard slum rate.

areas. Indeed, despite nearly all households living below the poverty line in the study areas, willingness to pay for public services appears much higher than the willingness of public agencies to provide such services.

Spatial: Intra-city and Intra-slum Geography

Basic service access is also influenced by a slum's location within an urban area and a neighborhood's location within a slum. Numerous studies mention in passing the tendency of slums to be located unfavorably with respect to the larger urban spatial structure, but systematic analyses of this phenomenon are surprisingly few. Slums, as a subset of low-income housing developments, tend to originate in relatively low-rent locations that are undesirable and/or unregulated by the urban government (Blaikie et al., 2004; Grant, 2001; Berquist, Daniere and Drummond, 2014). Over time, as urban form expands and undeveloped land becomes scarcer, the land on which many slums are founded gains value (Berner and Korff, 1995; Sanyal and Mukhija, 2001). This process can actually improve public service provision levels organically over time. Daniere and Takahashi (1999) show that older informal settlements in Bangkok tend to be centrally located, and that residents in older settlements tend to have better access to public services irrespective of targeted public interventions in slums.

The relationship between slum-level or intra-slum geography and levels of service provision is fairly intuitive. Within cities, Hillier, Greene and Desyllas (2000) find that a slum's integration with the surrounding built environment, particularly the road network, is key for internal infrastructure development. Regardless of external linking infrastructure, public agencies find it more difficult to extend the internal infrastructure necessary for basic service access to slum areas that are "compact settlements" where households are "crowded together" (MHUPA, 2012).

The initial formation of slums with respect to land value and desirability is quite evident in several of the study areas. The founding of Rasoolpura was performed without government

authorization. The slum is situated on the fringe of the defunct Begumpet airport in an area of nebulous governance between the boundaries of the Secunderabad Cantonment Board and Greater Hyderabad Municipal Corporation. Due to a much larger-scale dispute over civic responsibilities, Rasoolpura's geographic position straddling the remit of these two local agencies has led both to deny responsibility for provision of water, sanitation and sewerage services throughout the slum (Hindu, 2014). Although much smaller in size, Ambedkar Nagar slum is situated at the bottom of a ravine directly bordered by a *nala* (open drain), and encroaches on Hameed Khan Kunta Lake. This slum originated during a construction boom in Banjara Hills in the 1960s-1970s, when residents were initially protected from eviction from government land by wealthier residents (Ramoji, 2014). Ambedkar Nagar suffers from a more typical spatial disadvantage than Rasoolpura; its siting at the bottom of a ravine makes access to the slum difficult. In the present day, the Greater Hyderabad Municipal Corporation cites the narrowness of roads within the slum as the reason why it cannot provide door to door solid waste management and water service. In short, the initial slum sitings in Rasoolpura and Ambedkar Nagar have an enduring impact on contemporary basic service access conditions, though via different mechanisms.

Acute geographic obstacles within slums can also lead to sub-optimal service provision outcomes. The neighborhood of Anna Nagar is located at the furthest geographical extreme of Rasoolpura slum, bordering a defunct airport. A lack of pressure maintained in the piped network serving this peripheral area leaves residents with public water service only once every 15 days. In Bholakpur, the government agencies nominally responsible for improved public toilet provision in Mohammed Nagar neighborhood, as well as community hall construction in Indiramma Nagar neighborhood, maintain that they cannot transport the construction materials necessary to build these services due to the neighborhoods' narrow and uneven road network.

Social: Group Identity Discrimination

Sub-standard service access is also attributed to caste, ethnic, racial or religious discrimination. Until after World War II, research shows that piped, public water networks were primarily extended to the areas that housed rich colonizers and their close allies in most cities (Njoh and Akiwumi, 2011). In contemporary LMICs, variation in public service provision to urban neighborhoods is still demarcated along lines of race and ethnicity (Vithayathil and Singh, 2012; Zaki and Amin, 2009; Bakker, 2007; Bakker, 2009; Gandy, 2004).

Explicit discrimination by contemporary public service agencies is rare; it is more often covert. Data from the baseline survey in the four study area slums suggests that two are predominantly Muslim and Other Backward Caste (Bholakpur and Rasoolpura), one is very predominantly Hindu and Scheduled Caste (Ambedkar Nagar), and one is a near-even split (Addagutta). Within each slum except Ambedkar Nagar, however, there is substantial diversity of caste, class and religion at the neighborhood level. Except for the case of Bholakpur, sub-slum neighborhoods are not neatly divided along communal lines (Aiza, 2014). Even if it was desirable, targeting by government agencies at the neighborhood scale seems logistically improbable. Overt racial or caste based discrimination also did not feature in resident complaints regarding basic service security in the study areas. Indeed, joint engagement of local government agencies by residents across communal lines has been more successful in bringing about service improvements than more homogenous group efforts.

This does not mean that varying service conditions in informal settlements are entirely unrelated to differences in group identity. Indeed, evidence of past discrimination is strong. In the study areas, discrimination encouraged segregation that impacted dwellers' initial decision to locate in slums (and subsequent restraints in relocation). For instance, Bholakpur's residents describe the initial formation of the slum in 1948 as largely the result of Muslims fleeing post-independence, communal violence in the Hyderabad area (Chand and Moinuddin, 2014).

Subsequent difficulties in obtaining collective basic service security may be attributed to the initial formation of the slum.

A related obstacle to service provision at the neighborhood scale is a low level of collective cohesion. Sahu argues that effective collective action takes place in Hyderabad along communal lines (2012). In the absence of communal solidarity in diverse areas, households tend to rely on hierarchical structures where patrons or brokers mediate access to services, which leads to elite capture of public resources. More homogenous slum neighborhoods may more easily agree on effective collective management institutions and thus obtain a broader base of public services (Jha, Rao and Woolcock, 2007; Dasgupta and Beard, 2007).³ As is more fully explained in subsequent sections of the dissertation, the BVM was designed and operates as an explicitly cross-communal mechanism for collective action in the study areas. There is no apparent distinction in participation along communal lines within neighborhoods, and even neighborhoods with dominant group identities work together to scale up their concerns to address public service deficiencies.

Institutional: Extent of Government Recognition

Slums are often defined by their uncertain or adversarial relationship with the local state. The extent of government recognition influences tenure security, which in turn affects collective service security. At both the household and slum scale, research shows that greater security of tenure leads to enhanced investment in basic service infrastructure (Strassman, 1994; Nakamura, 2014). While overt strategies of settlement clearance have become less common, the extent to which the local state recognizes and provides for residents within a given slum area remains highly variable.

³ However, widespread participation in slum-level or neighborhood decision making regarding resource allocation is by no means a panacea for equity. Dasgupta and Beard (2007) find that decision making authority is evenly spread instead of narrowly restricted by brokering/patronage relationships in several Indonesian slums. Allocation to the most disadvantaged households in these slums, however, is still restricted.

The central government of India makes a formal distinction between notified, recognized, identified and unidentified slums. Notified housing settlements receive the most robust government provision and thus, on average, have better service provision (MHUPA, 2008). Krishna, Sriram and Prakash, in a study of slums in Bangalore, suggest that strategies to upgrade services should vary based on government notification status (2014). Mehta also shows that the extent of state recognition of a slum dictates access to public water service (2012). Proactive government schemes in Hyderabad to eradicate slums and/or resettle slum residents have been rare in comparison to other Indian cities. As described more fully in the remainder of the dissertation, the Urban Community Development department of the Greater Hyderabad Municipal Corporation was in fact internationally recognized as a progressive leader in 'sites and services' for slum upgrading in the 1970s-1980s (Moser, 1989). When local agencies have pursued clearance strategies, they have confined these efforts to peri-urban areas that are disconnected from key infrastructure rather than settlements in core urban areas (Kar, 2014a).

While the progressive stance of Hyderabad's local government with respect to slums is no longer evident, public service agencies are present and semi-active in all four slum areas. Each of the study areas are notified slums and face no current threat of clearance.⁴ Present government recognition, however, does not suggest that the process of sanctioning occurred without proactive efforts by residents. Interviews with community leaders in Addagutta reveal a long struggle with local government agencies for formal tenure status in the 1970s-1980s (Veerama, 2014; Ourhyd.com, 2013). Interestingly, the only source of contemporary contestation of the right to live in the study areas originates from slum residents themselves rather than from the government. The majority of slum residents contends that a small number of households are squatting illegally in Rasoolpura along the *nala* that bisects the slum, in the

⁴ Using data from a survey of residents, however, I found no evidence of a relationship between measures of security of tenure (tenure length and lack of desire to move from the slum) and present service access levels at the household scale.

Mondibanda neighbourhood of Addagutta, and in Ambedkar Nagar bordering the *nala* and lake (Kar, 2014b). This squatting is obstructing collective goals for the use of the land in these areas, including the construction of community halls. Thus, while tenure security may not factor as a major concern at the scale of the slum itself, it continues to impact present service security for select households.

Political: Shallow or Captured Representation

The final endogenous factor explaining deficient basic service access in slums is political under-representation. Under-representation in slums most commonly results from vote banking or hierarchical client-patron dynamics. In a robust, electorally competitive democracy such as India, or even a nominal democracy such as Bangladesh (Banks, 2008), local politicians cannot afford to completely ignore the numerical mass of slum dwellers. At the same time, in the absence of a fully-functioning local bureaucracy, slum dwellers often cannot avoid using political channels as a primary means to satisfy their service needs (Harriss, 2005).

Vote banking means that slum dwellers exchange votes or political support for a cheap “price,” and is common in India (Edelman and Mitra, 2008; Nijman, 2008; Banks, 2008; De Wit and Berner, 2009). The payoff to slum residents usually comes in the form of one-off service improvements, consumable goods, or cash rather than long-term service maintenance. There is both visual and anecdotal evidence that politicians have attempted to treat the study area slums as vote banks.⁵ The initial, illegal occupation of Ambedkar Nagar in the 1970s was sanctioned by local power brokers so that slum dwellers would move into the area and serve as loyal voters (Ramoji, 2014). Moreover, in the fiercely contested national and state elections conducted in May 2014, representatives from Congress and other parties contacted BVM

⁵ There is possible evidence of vote obstruction in the study areas, although it is not proven that this was intentionally carried out by bureaucrats and politicians. In CBN Nagar neighborhood in Rasoolpura, the polling place for the May 2014 local elections was originally placed in an obscure location different than that specified by the election board and anticipated by voters (Ramoji, 2014). This issue, however, was successfully resolved via resident petitions to the Secunderabad Cantonment Board in advance of the election.

leaders and requested that they mobilize slum residents to vote for certain politicians (Kar, 2014c).

Self-conscious of this pattern of vote banking in slums, the BVM projects itself as a staunchly non-political platform. Before the May 2014 election, the BVM gave a training to slum dwellers that encouraged them not to sell their vote. Moreover, slum dwellers in Addagutta strongly challenged their representative from the national assembly in a high-profile incident preceding the elections. His demonstrative denial of the legitimacy of their claims was reshow on local television news and is cited by some as the reason for his loss in the subsequent election (Kar, 2014c).

A more complex mechanism that affects shallow political representation and poor service provision in slums is patron-client relationships (Banks, 2008). Patrons are often affiliated with political parties, but in some cases act as third-party brokers mediating between slum residents and government agencies, politicians or NGOs. Reliance on patrons encourages vertical rather than horizontal mobilization, and, as with vote banking, tends to effect one-off or narrow service gains improvements rather than sustainable, broad based gains.⁶ For instance, De Wit and Berner (2009) document how patronage insubstantially improves service conditions for slum residents in Chennai, Mumbai and Bangalore, while Landy and Ruby portray a similar situation in Hyderabad slums (2005).

The literature tends to characterize any type of leadership in slums as parasitic patronage. It does not account for the possibility that slum leaders may have incentives aligned with bringing about substantial service improvements for residents, or that residents can hold

⁶ Not all scholars perceive patronage networks to be entirely perverse, however. For instance, Thachil shows that large political parties in India directly provide social services to low-income households, including those in slums, through third party organizations (2014). Third party service levels tend to be superior to public sector provision and represent a low cost to politicians because they are facilitated by devout political volunteers. At the same time, the long-term efficiency of maintaining parallel service networks is questionable, and political patronage networks are inevitably less durable than the local state.

leaders accountable.⁷ Across the four study areas, reliance on patronage varies. When incentives are properly aligned, evidence from the study areas suggests that well-connected leaders can be deeply committed to improving services and fostering genuine, broad-based public participation. Subsequent sections of the dissertation analyze in more detail the relationship between leadership and long-term progress in improving service access in the study areas.

Synthesis of Obstacles in the Study Areas

Slum residents clearly experience these obstacles to service access simultaneously. In the study areas, ubiquitous poverty (or the perception of it) is a barrier to service security from the supply side. Intra-slum differences in poverty, however, are relatively indistinguishable from institutional and social obstacles. Disparities in intra-city and intra-slum geography, on the other hand, seem to be the clearest explanation for proximate differences in service. Present intra-slum geography is in turn often influenced by the extent of government recognition and ethnic/religious discrimination historically experienced in the slums. While discrimination or recognition does not present an obstacle to current service security, it fundamentally shaped slum siting and years of insecurity that led to under-investment in service infrastructure. On the other hand, shallow political representation in the form of vote banking presents an immediate obstacle to basic service access, but awareness of and mobilization around this issue in slum communities is reducing the threat. Most surprisingly, and contrary to the literature, the influence of informal, politically-connected slum leaders in ensuring stable service access appears positive and constructive.

The most dire service crises within the study areas result from the presence of multiple, clear obstacles. For instance, residents of the neighborhood of Anna Nagar in Rasoolpura tend

⁷ In addition to the motives of slum level leaders, the qualifications and motives of neighborhood leaders and non-leader residents dictate the extent to which leadership in the organization for better services resembles a patron-client structure (Chand, 2014; Veerama, 2014).

to have higher incomes than the settlement average, but are uniquely situated near a national defense area. The Secunderabad Cantonment Board claims that proximity to the defense area makes the neighborhood ineligible to receive public service improvements (Anjama, 2014). This unique spatial and institutional obstacle, combined with the presence of patronized leadership in Rasoolpura, helps to explain lower levels of service access in this neighborhood than in the remainder of the slum. Similar confluences of obstacles or advantages dictate variation in basic service levels at the slum and neighborhood scales across the study areas.

Historical Policy Responses to Slum Basic Service Access Deficiencies

Most government agencies have historically maintained policies to ignore, marginalize or eradicate slums. Gradually, adversarial policies have given way to efforts to promote and empower slum residents, at least on paper. In the present day, virtually all governments and development stakeholders nominally recognize that slum residents face outsized obstacles to adequate basic service access and agree that basic service deficits must be addressed via policy interventions. For instance, the national government of India now promotes a detailed slum policy and attempts to monitor slum conditions in official records through a separate slum census. It also makes distinctions between types of slums and operates schemes to assist those with the worst service access (MHUPA, 2008).

Mukhija organizes historical public sector policies toward slums in LMICs into successive eras (2003). Through the 1950s, informal settlements were seen as uniformly negative, so public policies of either wilful negligence or slum clearance were ubiquitous. This changed around the time when John Turner popularized the idea of self-help housing in the 1960s. Existing housing in slums began to be seen as a productive tool of development rather than as insufficient and illegal shelter. Anarchists and later free market proponents embraced the concept of self-help, though criticized by Marxists. In the 1970s, both groups enthusiastically promoted 'sites and services' strategies for improving housing conditions. Strategies

emphasizing the decentralization and privatization of slum upgrading became popular in the 1980s and early 1990s. Since 2000, more politicized strategies emphasizing collective action within slums and non-reliance on governmental and non-governmental patrons have come into vogue. Understanding the historical arc of slum policy and policy evaluation is essential to understanding the context in which the *Basti Vikas Manch* initiative originated and operated. Below, I summarize the tenor of this historical narrative.

Clearance and Relocation

For as long as slums have existed, the default policy employed by local governments across LMICs has been to either ignore undesirable housing settlements or to attempt to clear them (Mayo, Malpezzi and Gross, 1986). In some urban areas in LMICs, including Delhi, a policy of clearance continues to the present day (Dupont, 2008). Starting in the 1950s, Western countries began and LMICs followed in employing urban redevelopment and public housing schemes (Zhang and Fang, 2004). These schemes continued slum clearance but paired it with the provision of new residences in dense housing units, usually in more peripheral locations (Hall, 2003). Resident claims of inadequate compensation for cleared land/housing and the inconvenient geography of relocation are pervasively associated with slum clearance policy (for instance, see Agbola and Jinadu, 1997). While pairing clearance with the direct provision of public housing to the evicted represents a progressive improvement on clearance without any recompense, it is clearly still far from ideal.

Self-help/Sites and Services

Seeing the failure of a physical strategy to displace and/or replace informal settlements, the anarchist John Turner developed a strategy of improvements to housing in existing areas (Hall, 2003). Using empirical evidence from Peru and other LMICs, Turner deconstructed the idea that slums were bastions of squalor and despair in need of a public-sector overhaul. He

instead stressed the initiative, ingenuity and optimism of these communities, and argued that slum residents should be supported to stay in and upgrade their existing residences. In his early work, Peter Ward (1976) also advocated for *in situ* upgrading as an alternative to the strategy of paired demolition and public housing that had become the default policy option. Ward distinguished between informal housing sub-types in recommending policies. For instance, he maintained that in Mexico City, *ciudades perdidas* (shantytowns) had much greater potential for viable upgrading than other squatter settlements in terms of physical attributes, resident aspirations and institutional support. By the 1980s, government provision of ‘sites and services’ had become the dominant policy for slum upgrading supported by influential stakeholders in the multilateral development community, including the World Bank (Mayo and Gross, 1987). In fact, one of the great success stories of the early literature on slum upgrading programs in LMICs was a sites and services campaign carried out by the Greater Hyderabad Municipal Corporation (Moser 1989; Rakodi, 1989; Rao, 2000). Jennifer Davis, on the other hand, has critically reviewed the slum upgrading literature using supporting evidence from the Slum Networking Project in Ahmedabad, India (2004). She attributes the failure to scale up successful programs to four factors: resource constraints, a lack of knowledge or shared understanding about program elements, resistance among key stakeholders, and untested implementation conditions.

Private Property Rights

Rather than public provision of physical infrastructure, Hernando De Soto’s theory of tenure legalization posits that government issuance of legal property rights to slum dwellers is the key to basic service improvements (1989). De Soto advocated for governments in LMICs to unilaterally legalize land-holdings—or give land title certificates—to those living in legally uncertain conditions. De Soto argues that giving people formal ownership unlocks the ‘mysterious’ value of the capital embedded in their property, making them wealthier, more

secure and more likely to invest in service improvements in the process. De Soto's argument is the most controversial and most simple 'solution' to the issues posed by informal housing in LMICs.

This powerful proposal, however, has been contested in the literature and in practice. Peattie argues that while De Soto focuses on wealth legalization, it is actually wealth transfer that matters (1987). Simply granting vulnerable households land titles will not provide them with the real value of their land because the state still holds authorizing power over this asset. Moreover, as Roy points out, assuming that local government agencies that have enforced 'legal apartheid' by not granting land titles will recant and promote legalization in good faith is naïve at best (2005). In other words, the disadvantaged situation of slums reflects a complex political struggle, and a purely administrative technique will not solve the problem.

Inclusive Re-development

Another strategy that incorporates market principles to improve living conditions in informal settlements is inclusive re-development (Mukhija, 2003; Tian, 2008). Unlike previous re-development efforts, this strategy entails the clearance of existing housing stock and the subsequent rebuilding of housing by private developers on the same site, with the support of local government officials. Upgraded housing units are reserved for existing tenants, with additional units being sold for profit by the developers who bear the re-development cost. The profit incentive is key in this policy both for residents (who get a much more marketable and valuable housing unit after years of inconvenience) and for the developer(s). While this strategy is compelling, its generalizability is limited. Inclusive re-development requires not only the alignment of the incentives of residents and public sector officials, but also the interests of politicians, non-profits and private developers.

Constructive Engagement with Local Government

Due to failed or incomplete improvements effected by previous policies, an additional strategy to improve basic service conditions in slums has emerged. This policy aims to facilitate lines of communication between slum residents and local government agencies to improve services, and may be initiated by the state itself or by external actors. As opposed to previous policies in which governments have aimed to directly providing housing, physical infrastructure or legal assistance, this strategy follows a larger shift in development policy toward capacity building (Grindle, 1997).

Many studies argue pessimistically that when initiatives promote constructive engagement between low-income residents and government agencies, these arrangements are invariably co-opted by local power brokers and NGOs who, at best, function as progressive patrons (De Wit and Berner, 2009; Harriss, 2007; Jha, Rao and Woolcock, 2007; Landy and Ruby, 2005; Zerah, 2009). Despite the preponderance of negative examples, however, improvements in slum conditions have resulted from constructive communication between local government agencies and disadvantaged communities in a diverse range of urban contexts in LMICs (Dasgupta and Beard, 2007; Dodman, Mitlin, and Co., 2010; Carmin, Anguelovski, and Roberts, 2012; Berquist, Daniere and Drummond, 2014). None of these successful initiatives were controlled by government stakeholders, but at the same time none of them operated without the support of a mediating entity between low-income housing settlements and local government agencies. The BVM in Hyderabad reflects the result of a capacity building strategy, and functions as a platform to represent the service concerns of slum residents to local government agencies. The remainder of the dissertation explains how and why households participate in the BVM, how the BVM operates, and how the initiative fits into a larger framework of collective service upgrading strategies.

Conclusion

In this introductory chapter, I review the pathways via which inequalities in basic service access degrade the quality of life and livelihoods of disadvantaged urban households in low and middle income countries. These basic service deficiencies are experienced most acutely in housing settlements known as slums. I discuss varying characterizations of slums and explain why households in slums tend to experience worse basic service provision from the public sector than other neighborhoods. I rely on both the academic literature and the experience of the housing settlements involved in the BVM initiative in Hyderabad to explain the nature of obstacles to basic service access that are specific to slum communities. I conclude this chapter by discussing the historical arc of policy responses to basic service deficits in slums. This narrative provides the necessary context for understanding the origin and operating logic of the BVM initiative in Hyderabad, which I analyse in the remainder of this study.

As I explain more fully in Paper 3, this study's focus on resident-based initiatives is not intended to downgrade the importance of 'top down' state reform that improves local public service provision to slum dwellers. In the ideal long run, the local state would increasingly take on primary service provision responsibilities, and initiatives such as the BVM would become ancillary. From a normative perspective, the Indian government also has little remaining excuse for its profound neglect of public service provision given the recent growth in the Indian economy (Carbonnier & Sumner, 2012). While efforts have been made to channel more resources to address basic service inequalities (Government of India, 2011), the status quo remains unjust. Accordingly, top down reform must be pursued by policy makers and advocates simultaneously with the encouragement of 'bottom up' efforts (Joshi, 2013).

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**Chapter 1: Synthesizing the Exit, Voice and Loyalty and Collective
Action Frameworks to Assess Household Strategies to Improve Basic
Service Security**

Introduction

Levels of basic service security remain insufficient for many urban households situated in slums⁸ in low and middle income countries (Neuwirth, 2004; Marx, Stoker and Suri, 2013). Given the slow and inadequate response of the local state to improve provision, households often must proactively employ strategies to secure services. In the context of many slums, participation in collective action has been hailed as the most effective means to improve local public goods provision (Botes and Van Resburg, 2000; Carpenter, Daniere and Takahashi, 2004), yet households' incentive to participate has rarely been modelled. Documenting the factors that incentivize participation, or collective voice, is particularly crucial given that urban collective action is difficult to sustain and ineffectual if participants do not view their initial efforts to be effective (Olson, 1965; Walton, 1998).

At the same time, households may employ standalone exit, voice, or loyalty strategies to improve service security. Applied to the urban service context, the exit, voice, and loyalty (EVL) framework conceptualizes individuals as addressing their own service needs by exiting the service provider relationship, voicing their displeasure to the public service provider, or expressing loyalty by not employing exit or voice. Despite the common usage of the EVL and collective action frameworks to understand basic service deficiencies in urban environments, potential trade-offs or complementarities between these two strategies have not been considered.

Using data from a survey of 752 households in three slums in Hyderabad, India, I jointly consider participation in solitary and collective strategies to improve service security. In addition to integrating the two frameworks, my research is distinct from previous studies in its measurement of participation in an actual collective action movement rather than hypothetical

⁸ There is a fierce debate about the use of the term 'slum' or 'informal settlement' to describe particular urban living conditions. The term slum is generally perceived by scholars to be pejorative in nature (Gilbert, 2007). I continue to use the term for two reasons. First, as noted above, the term slum is an official designation of the Indian government and is commonly used in India by all stakeholders. Second, and more importantly, the relationship between the four housing settlements extensively involved in the BVM and local government is not explained neatly by the dominant narrative of the literature on the legitimacy of slums/informal settlements, as described in the body of the paper.

participation. Collective voice, the outcome of interest, is measured via participation in a collection action initiative present in the slums, the *Basti Vikas Manch* (BVM). The BVM was inspired by water and sanitation deficiencies in the three slums and exists to improve basic service provision by local public sector agencies. More than twelve percent of household heads participated in the BVM as of March 2014.

Descriptive findings show that households employ multiple standalone and collective strategies simultaneously. I subsequently use multivariate regression to model collective voice and satisfaction with collective action as a function of households' utilization of a range of standalone voice or loyalty mechanisms, and I control for other factors which influence participation in urban collective action. Routine participation in the BVM is the primary outcome of interest in the model, which involves regular attendance at a sub-settlement BVM meeting. A secondary outcome of interest is individuals' belief in the effectiveness of their participation. About 12% of respondents routinely attended BVM meetings. Acute experience of basic service deficiencies is the most important predictor of participation in and satisfaction with collective action, while knowledge of local conditions and age of the household head are also consistently associated with participation and satisfaction. Other factors are associated with participation or satisfaction, but not both. The modelling suggests that there is some substitution in strategies employed to secure basic services, but there is no evidence of complementarity. Additional research is needed to explore households' reasoning in trading off or packaging different strategies to secure basic services in urban environments in low and middle income countries (LMICs), and to establish an evidence base for an effective threshold of participation in collective action.

Applying the Exit, Voice, and Loyalty Framework to Urban Service Security

The exit, voice and loyalty framework is one theory proposed to explain how urban residents in low and middle income countries (hereafter, LMICs) respond to insufficient service

levels provided by public sector agencies. Hirschman first hypothesized, in the context of the firm-customer relationship, that customers express their dissatisfaction with firms in one of three ways (1970). Consumers may actively decide to exit by changing the firm from which they received a given good/service. Alternatively, they may actively use their voice to make known to the firm their displeasure with the good/service, with an implicit threat of exit if conditions do not change. Finally, the consumer may passively remain loyal to the firm while considering the active employment of voice or exit.

Other scholars have since applied Hirschmann's framework of exit, voice and loyalty (hereafter, EVL) to numerous other contexts, including the relationship between urban households and public service providers in LMICs (Paul, 1992; Mehrotra, 2006; Acey, 2009). The characterization of the initial framework of Hirschman and its application to how low-income urban residents respond to public service providers, however, has not been consistent. Particularly, scholars have defined the terms exit, voice and loyalty differently and taken varying stances on the exclusivity of the three strategies.

Paul conceptualizes voice and exit strategies to obtain better public services as either 'weak' or 'strong.' Individual strategies can be used as either substitutes or complements, and the choice of strategies depends on the service desired (1992). For instance, Paul suggests that voice but not exit strategies can be used to improve public urban water supply. Mehrotra, on the other hand, asserts that the urban poor have no opportunity for employment of exit strategies, but that voice mechanisms can be effective (2006). Acey proposes yet another different definition of EVL. In her view, exit, voice and loyalty are all potential options for urban households to improve their basic service access, but the three methods are discrete, non-overlapping strategies (2009).⁹ Acey distinguishes her framework in the EVL-for-services

⁹ Acey's conceptualization of the potential to obtain improved urban service directly contrasts with other scholars, as she defines exit from one service provider to another as an explicit option. Support for the potential movement between service providers is increasingly being recognized (for instance, see Spencer, 2008), although the opportunity for exit may not be as robust for urban basic services other than water.

literature by empirically testing it using data from a survey of 784 households in 18 neighborhoods in 7 municipalities in Lagos and Benin City, Nigeria (2009).

In the context of Hyderabad's slums, I posit that multiple EVL strategies may be employed simultaneously by residents. I also argue that there is a continuum of strategies, from least effective to most effective, with four possible responses: complete loyalty, desired exit, individual voice, and collective voice. Proposing this normative continuum addresses Ackerman's criticism that many applications of the EVL framework to the situation of disadvantaged urban residents lead to isolated strategies that are insufficient to substantially improve service conditions. Only co-governance strategies that facilitate participation in the core activities of the state will put pressure on local government bureaucrats to remain directly accountable to residents (2004). This description of co-governance exactly matches the activities and aims of the collective voice strategy employed by the BVM, as described more fully below.

In this study, I define loyalty as the non-pursuit of voice or exit strategies to improve service provision. Unlike previous scholars, I use desired exit from the slum, rather than actualized exit from the public sector as a service provider, as a possible reaction to poor public service provision, since slum residents do not have access to a feasible alternative provider for any service besides water. Tiebout developed an influential framework that conceptualized households as unconstrained 'voter-consumers' who choose their residential location based on the bundles of services which different neighbourhoods or municipalities offer (1956). In the context of slums, however, scholars such as Bardhan have argued that Tiebout's framework is not appropriate. Slum residents typically cannot easily exit from their existing locations (Marx, Stoker and Suri, 2013), nor do they have any practical leverage over the bundle of services that municipalities provide (Bardhan, 2004).

In the study areas, data was not available to directly measure observed resident exit in order to improve services. However, the survey data shows that the average length of stay in

current residence was well over 20 years. Additionally, nearly two-thirds of residents expressed that they had considered, either mildly or seriously, moving away from the slum due to poor service access. The combination of long tenure and dissatisfaction with their current service levels suggests that the option to move to an area with better access was constrained, and this finding was supported by structured interviews with residents. I define desired exit as expressing a strong desire to move from the slum and employing no other voice strategies. Like Paul, I sort voice strategies into two categories. Individual voice is identified as voting in local elections on the basis of water and sanitation service conditions, directly contacting a local public official about a basic service matter, or employing both strategies. Collective voice is defined as regularly attending neighbourhood meetings of the BVM. Throughout the paper I further discuss the actual employment of these exit, voice, and loyalty strategies, in isolation and combination.

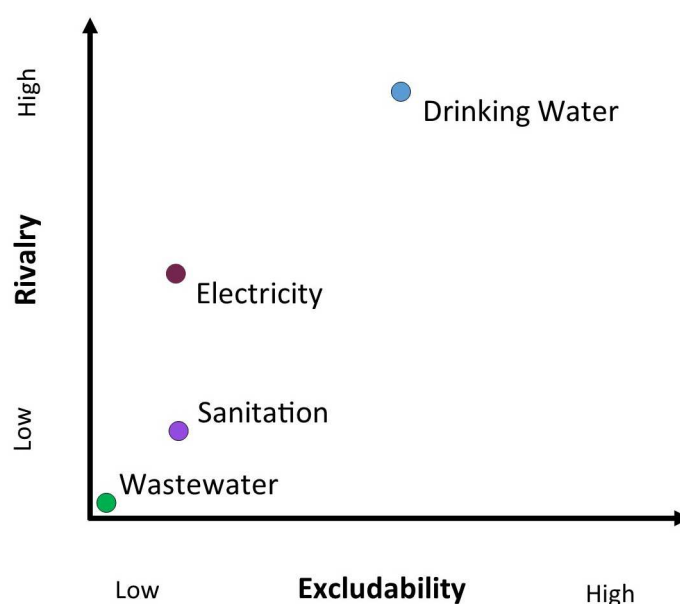
Public Goods, Participation and the Challenges of Collective Action

I have asserted that utilizing collective voice is likely to be more effective than other EVL strategies to bring about service improvements in the study areas. This claim, however, requires explanation given the inherent difficulties in organizing and maintaining collective action. I address this concern by establishing that action at the supra-household level is necessary, and by demonstrating how classic criticisms of collective action are addressed in the local context.

There are two reasons that supra-household strategies are likely to be more effective than household or individual efforts. First, basic service infrastructure improvements are typically subject to economies of scale (see Schmalensee, 1978). In other words, the infrastructure necessary to improve provision is most efficiently supplied at a collective scale. Efforts to demand improved infrastructure for service provision are likely to be more effective if they are carried out by a critical mass of residents who can justify this scale of infrastructure investment by the public sector. The BVM was designed as a collective effort after previous,

ineffective and uncoordinated household efforts to improve infrastructure in the slum areas. Reported experience from residents of the study areas has also proven that grievances regarding basic services in the settlements are taken more seriously by respective government units if these claims were made by a large number of households, rather than single families (Ramoji, 2014).

Figure 2. Public Goods Characteristics of Intra-slum Basic Services



Second, after the public sector has provided service infrastructure, access functions as close to a pure public good at the neighborhood scale. This is the scale at which the BVM fundamentally operates. Pure public goods have two key characteristics; their use is non-excludable and non-rivalrous.¹⁰ Basic services do not have public goods characteristics at all

¹⁰ Drinking water is often incorrectly used as an example of how an urban basic service functions as a pure public good. At the city scale within LMICs, Barraque and Zandaryaa show that, in fact, urban water resources and water services function as impure public goods, but in different ways (2012). In cities where water is delivered exclusively through utility infrastructure, water service functions as a club good. There is no rivalry among existing customers, but connection to the service is highly excludable. On the other hand, in urban areas where utilities do not effectively provide water service to residents, water at least partially functions as a common pool resource, where there is rivalry in consumption but no excludability. Ostrom provided the classic explanation for how non-state, non-private sector actors can engage in collective action to manage common pool resources. Common pool resource management is

scales. The provision of basic services is highly excludable and rivalrous to different areas of a city. Indeed, differentiation in service provision within the city helps to explain the presence of slums. Although basic service provision *to* the settlements is clearly both rivalrous and excludable, observation suggests that provision *within* the settlements is relatively non-excludable and non-rivalrous on a very local level. In fact, water is the basic service with the fewest public good characteristics, whereas wastewater management is closest to a pure public good. Figure 2 shows the public goods characteristics of different intra-slum basic service improvements commonly requested in the study areas.

Precisely because services provided within a slum by the public sector have public goods characteristics, participation in the BVM is potentially subject to the classic shortcomings of collective action. The canonical theory of collective action posits that rational, self-interested individuals will not act to achieve common group interests, even if there is group consensus regarding desired outcomes (Olson, 1965). Instead, individuals will attempt to free-ride on the efforts of others to obtain the collective outcome. Individuals have the incentive to shirk responsibility or break rules to collect the optimal amount of a collective good, the point where the marginal benefit derived from the good equals the marginal cost. If individuals act only with respect to their own narrow interest, this will lead to sub-optimal aggregate provision of the desired outcome unless the group can either cheaply monitor individuals, positively incentivize them by other means such as social norms, or sanction them. In this case, the desired outcome is collective service improvements. For this reason, Walton suggests that urban collective action is best employed to obtain clearly divisible goods (1998).

Others object to collective action as a solution because of social dynamics. Contrary to the assumptions of much of the literature on collective action, a sense of community among geographically proximate urban residents is not automatic (Botes and Van Resburg, 2000;

made easier by the presence of clearly defined resource boundaries, collective choice arrangements that are open to many stakeholders, easy monitoring, graduated sanctions for cheating, clear conflict-resolution mechanisms, and minimal government interference with the right to organize (1991).

Beall, 2001). Despite commonalities in experience and needs, solidarity is by no means guaranteed among slum households. Even when collective action movements and 'community-based' organizations are formed, they may simply reflect or exacerbate local divisions rather than unify otherwise disparate groups. Because collective action is difficult to coordinate, sustain and is very time-consuming, some scholars bemoan the 'tyranny of participation' (De Wit and Berner, 2009).¹¹

How well does collective action theory explain participation in the BVM? Taking part in BVM activities is entirely voluntary, excluding the three slum conveners who are paid R2,000 per month (US\$30) by the Citizens First program. Routine participation in the BVM involves attendance at a regularly-held (on average, weekly) sub-settlement BVM meeting, semi-routine (on average, monthly) slum-wise BVM meetings, as well as several ad hoc activism or awareness events a month. Although the language of membership is used by residents with respect to their involvement in BVM activities, there is no formal membership system that could elicit formal sanctions for shirking or free-riding. Moreover, most if not all of the benefits derived from the direct activities of the BVM, in the form of infrastructure or other service improvements derived from engagement with public sector agencies, are jointly experienced and non-excludable. The incentive to free ride on other residents' participation in the BVM thus appears substantial.

The term 'collective' is used loosely by scholars, who often make no attempt to define a particular scale of experience or activity, though it is implied that collective action at least involves multiple households. The specific type of collective action measured in this paper is regular attendance at neighbourhood-level BVM meetings, which on average involve the participation of individuals from 10 to 15 representative households. Individual participation in

¹¹ As an alternative, they maintain that patronage or clientelism 'offers a less costly alternative for redress of grievances that suits the purposes of both the state and the urban poor' (Walton, 1998, p. 471). Relying on local elites may also be a social norm (Walton, 1998). In more extreme cases, participation in basic service upgrading may be captured by local elites and it may be difficult to get non-elites to be 'emancipated' in order to participate (Rigon, 2014). I discuss the issue of patronage dynamics with reference to the study areas and BVM in a separate paper.

the BVM is not the norm but is substantial. In the March 2014 survey, the average level of household attendance at sub-slum BVM meetings was twelve percent. This level of participation was present three years after the Citizens First project began, but only six months after the BVM began the focal point of activism. As Granovetter suggests, levels of participation tend to rise non-linearly as more people join, so participation in the BVM may increase over time (1978).

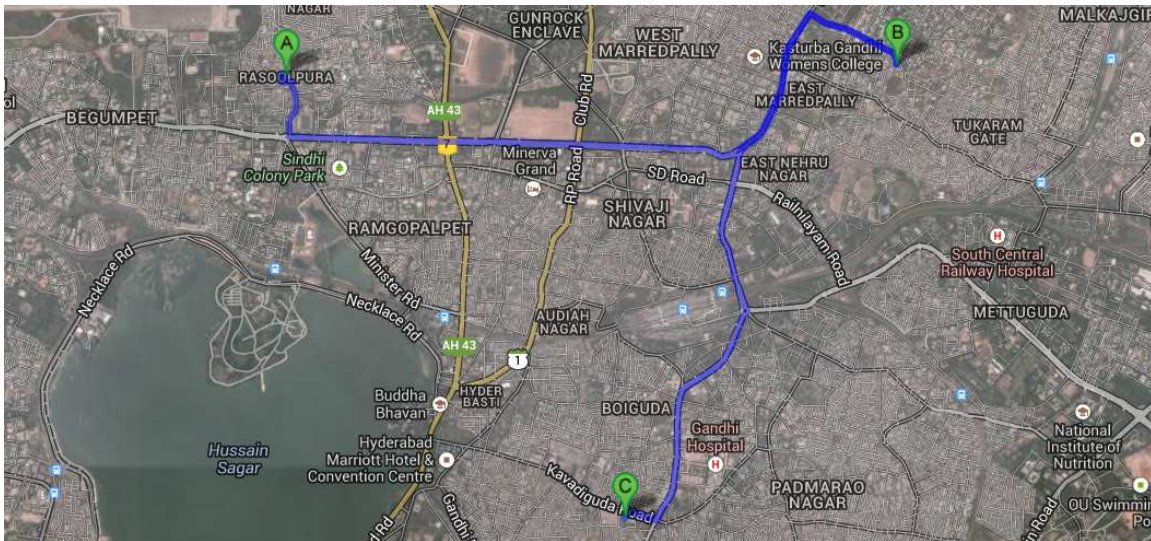
Given the downsides of individual participation in collective action, however, the question remains: why does anyone participate? While I directly model individual reasons for participation below, there are several potential explanations for aggregate levels of participation. Acey suggests that relative income disparities may dampen the ability to use voice to improve service provision (2009). As noted above, nearly all residents in the three study areas have incomes below the national poverty line, so relative inequality does not appear to present a major obstacle as shown in other studies (Nguyen et al., 2015). Collective action to improve service provision is also easier to coordinate among slum residents who have uniformly low incomes because the employment of their time has a lower opportunity cost (Walton, 1998). Moreover, while each slum is fairly large, the vast majority of collective BVM activities occur in the 15 to 20 sub-slum neighborhoods in each settlement where monitoring of neighbors' activities is possible. Shared norms of reciprocity or social capital can provide the incentive to participate in networks of civic engagement (which offsets individual pecuniary incentives), or conversely may increase social costs to non-participants (Putnam, 1993; Carpenter, Daniere and Takahashi, 2004). As Olson suggests, effective collective action is much more plausible in smaller groups, such as at the neighbourhood scale in the study areas.

Background on Study Areas and the *Basti Vikas Manch*

The primary data for this analysis were derived from a randomized survey of households conducted in March 2014. The survey was administered in three large slum areas situated within twenty kilometres of each other in the core urban area of the Secunderabad-Hyderabad

twin city region, within the newly-created Telangana state of India (see Figure 3).¹² The slums of Addagutta and Bholakpur are located within the remit of the Greater Hyderabad Municipal Corporation (GHMC), which is the governing body of the city proper of

Figure 3. Location of Three Survey Areas within Hyderabad



A: Rasoolpura, B: Addagutta, C: Bholakpur (Map Credit: Google Maps, 2014)

Hyderabad. The slum of Rasoolpura is situated on the contested border between the GHMC and the Secunderabad Cantonment Board (SCB). While cantonments are special government entities governed by the military, the SCB oversees public service delivery to a substantial area of non-military development. The effective metropolitan area of Hyderabad is the sixth largest in India, with about ten million residents. This area is dominated by the city itself, which is the 4th largest in the country with about seven million residents (Census, 2011). Within this large region, these three slums house upwards of 150,000 people.

The survey was carried out as part of the 'Citizen First Campaign on Water Supply Sector Reforms,' which is a capacity building program funded by the UK charity WaterAid. The

¹² Another slum community, Ambedkar Nagar, was informally incorporated in the BVM program in October 2013, but was not included in the household survey.

initial inspiration for the citizen's campaign and the BVM was a tragic water contamination incident in Bholakpur. In 2009, water and sewerage lines were provided by the Hyderabad Metropolitan Water Supply and Sewerage Board (HMWSSB), the public agency responsible for these basic services throughout the urban area. These lines broke and the water running to the slum through public pipes became dangerously polluted. The utility did not detect this contamination or warn residents. Residents' consumption of the e-coli infused water led to the death of at least 14 people in the housing settlement, as well as hundreds of cases of serious illness (Iftekhar, 2011; Times of India, 2010). The incident not only drew the attention of local, regional and national media, but also mobilized local community members to demand better services and forced local government agencies to pay more attention to resident complaints.

The Hyderabad-based NGO Joint Action for Water oversaw the local administration of the first phase of the capacity building project (2010-2013), which emphasized resident awareness and enhanced testing of water quality in the slums. The first phase also featured an attempt to activate government-sponsored ward committees. In theory, the committees exist as official, local platforms to solicit and address resident concerns. In practice however, residents are not allowed to participate in committee activities and thus resident concerns regarding service delivery are not addressed by the committees (Kennedy, 2008).

To comply with best practices, local administration of the second phase of the program (2013-2016) shifted to two other Hyderabad-based NGOs: the South Asian Consortium for Integrated Water Resources (SaciWATERs) and the Society for Participatory Development (SPD). SaciWATERs conducts a number of research and advocacy programs around water resource issues across South Asia, whereas SPD's activities are circumscribed to the metropolitan area of Hyderabad. Given the failure to activate ward committees, the second phase of the project introduced the *Basti Vikas Manch* (BVM, translates "Slum Development Platform") as a collective action network. The BVM intervention provides no hardware for improved service provision but rather emphasizes training for residents only; the impetus for any

service improvement necessitates participation on the part of residents. In the short term, the BVM operates to aggregate resident concerns regarding a broader range of service conditions beyond water quality, and ultimately beyond WASH, and works to constructively engage local government agencies to improve these services. More strategically in the long term, the BVM aims to increase residents' rights awareness and capacity to hold the local state accountable without external assistance. Current levels of rights awareness among residents are low. For instance, data from the household survey shows that less than one tenth of households in each slum were aware of their ability to utilize the Right to Information (RTI) act, which is widely viewed as a fundamental tool for holding the public sector accountable in India (Peisakhin and Pinto, 2010).

This analysis focuses on internal factors within the three study areas which influence household participation in the BVM. External factors, however, can also influence the enabling environment for collective action. Walton theorizes three exogenous influences on the likelihood of collective action: external economic structure, state policy, and the general degree of activity by civil society stakeholders (1998). In a separate paper, I argue that local state policy and civil society conditions in the greater Hyderabad area are conducive to collective action. This paper also explains how the local institutional environment necessitated the creation of the BVM movement and evaluates the success of the BVM in the study areas.

The Need for Service Upgrades: Evidence from the Household Survey and Rasoolpura

Each of the three study settlements has existed since 1970 or earlier, over which time each of the areas has obtained official status as a 'notified' slum recognized by the Indian government. Given their long history, each of the areas has a fairly permanent built environment. Moreover, residents in each area received some level of basic services from nominally-responsible public agencies before the institution of the BVM. Thus the classic obstacles to service access stemming from the illegality, government clearance or non-

recognition of slums, which understandably dominate the literature on slums and squatter settlements (Peattie, 1987; Roy, 2005), are not major concerns in the context of the study settlements. Rather than the complete absence or antagonism of the public sector, it is the slow and uneven pace of public improvements relative to needs and infrastructure obsolescence that demonstrate the need for service improvements in these areas.

Still, the need for improvement in basic service security in each of the settlements is profound. Households in the settlements are almost uniformly economically disadvantaged—more than 95% of households surveyed in each settlement reported being below the national poverty line. I further illustrate the need for improvements to basic service conditions by discussing trends in existing water, sanitation and hygiene conditions and practices from the household survey, as well as photographic evidence from qualitative fieldwork conducted in two geographically proximate neighborhoods of Rasoolpura slum, Gun Huts Bazaar and Indiramma Nagar, in 2013-2014.

Figure 4. Public Water Taps in Indiramma Nagar, Rasoolpura



(Photo Credit: Greg Pierce, 2013)

No household in the study areas has a 24-hour a day, in-home tap water connection. Most households rely on intermittent supplies to their property or proximate public standpipes like the one shown in Figure 4. At best, water is available at these tap points for a few hours every other day. Oftentimes, supply has very low pressure; it can take up to five minutes to fill a ten liter jug. Yet households pay an average of 180 rupees (US\$3) per month for water supply from various sources, a cost that is equivalent to more than three percent of their maximum income.¹³ The average household budget for water in the study areas is nearly 20% higher than the official cost of government water supply to slum households. Because of past water quality incidents and due to the emphasis on water quality in the first stage of the Citizens' First program, nearly one fifth of households test the water for quality before they consume it. Yet, due to resource constraints, a little more than one-third of households take measures to purify their water, and this treatment is often insufficient to address the potential contaminants.

As is the case with water supply, no households have adequate sanitation infrastructure within their homes. Thus nearly all households rely on poorly-maintained and sparse public toilets rather than indoor plumbing. Among in-use toilets, more than ten percent are never cleaned, and the decrepit state of public toilets is visible throughout the slum areas (as seen in Figure 5).¹⁴ In addition to health concerns, the physical security of adult women and girls who rely on poorly monitored outdoor toilets at night is also questionable, and causes significant physical and mental discomfort to residents.

Environmental hazards such as ubiquitous open drains (*nalas*), shown in Figure 6, make it difficult to maintain hygienic and sanitary residences. During the monsoon season, one fourth of households report experiencing sewage overflow from *nalas* into their dwellings. Moreover, one fifth stated that their children played in or near a *nala*, greatly increasing their risk of

¹³ This calculation is based on the average household size and near-uniform status below the poverty line reported in the survey. The national poverty line is 1000 rupees per person (US\$16) per month in urban areas.

¹⁴ Direct questioning regarding open defecation practices was unsuccessful, but reporting on neighbors' toilet use in a limited sample of households suggests that the proportion of open defecators was at least 20%.

sickness of injury. Proximity to a *nala* was by far the most important factor associated with child illness in the survey. Moreover, less than half of households report regular hand washing, and less than half of these use soap.

Figure 5. Public Toilet Block in Gun Huts Bazaar, Rasoolpura



(Photo Credit: Greg Pierce, 2013)

The continued presence of a large, open *nala* transecting the entire settlement of Rasoolpura perhaps best illustrates the changing but largely insufficient public provision of functioning basic service infrastructure in the study areas. Until 2011, only a narrow wooden bridge spanned the *nala*, which routinely overflowed and become impassable during monsoon season. Besides the public health concerns stemming from this open sewer, it was physically perilous to attempt to cross the *nala*. After a two-year effort by residents involved in the Citizens First project, the SCB installed an additional metal section of bridge in 2011. The SCB paid 4 lakh rupees (US\$6,670) for the physical infrastructure, and labor was provided by a local

volunteer force of over 200 people. However, as Figure 6 shows, the area remains highly unsanitary, and continues to pose major hazards to residents. Given that the public agency responsible did not provide a solution adequate to the scale of the problem, residents are forced to continue to lobby the government to provide better service on an ongoing basis.

Figure 6. Open Drain Transecting Rasoolpura Settlement



(Photo Credit: Greg Pierce, 2013)

Data and Methods: Modelling Participation of Urban Residents in Collective Efforts to Improve Environmental Services

Having detailed the need for basic service security and how scholars have employed the EVL and collective action frameworks to explain strategies employed in the study areas, I now turn to how these individual and collective strategies have been modelled statistically. I derive the primary data for this analysis from a data collection effort conducted in March 2014 as an assessment of WASH conditions in the slums, since no survey of households was originally

conducted by JAW at the outset of the Citizens First program in 2011. The data collected also roughly serve as a baseline survey for the BVM initiative.

I designed the household survey and consulted SaciWATERs on sampling methodology based on fieldwork that I conducted in the study areas in August 2013. The total sample size for the survey was 789 households (Bholakpur= 252, Addagutta= 373, Rasoolpura=160), with five percent coverage of the population for the first two slums and three percent coverage for the latter.¹⁵ Within each slum, sampling was stratified to mirror the prevalence of the caste-class distribution and housing type composition reported in the national 2011 slum census. Within each slum, the number of surveys conducted was in proportion to neighborhood size, based on previous mapping of the areas and enumeration of households by SaciWATERs and SPD fieldworkers.

The survey contained a total of 42 questions and took an average of 25-30 minutes for residents to complete. SaciWATERs hired two individuals, one Muslim male and one Hindu female, to conduct the surveys in the slum areas. Enumerators administered the surveys verbally in the two relevant local languages—Hindi or Telugu—depending on household preference. Survey response rates were very high in each slum, above 99%. Appendix 1 contains a full copy of the survey instrument used. Enumerators conversed with one individual in each household¹⁶ and asked a series of structured and open-ended questions regarding household structure, household socioeconomic status (SES), household water access, household public sanitation/hygiene perceptions, civic engagement and political awareness.

Of the total responses, 752 of 789 (95.3%) contained full data for all variables used in this analysis and thus form the final sample reported in the remainder of the analysis. Missing data on tenure length, age of eldest householder and child illness explain most of the households excluded from the final sample. In any case, there were no significant differences in

¹⁵ This disparity in coverage was due to a hold up in funds distribution from WaterAid around the time of the survey.

¹⁶ The sex of respondents varied significantly across slums (Addagutta= 52% male, Bholakpur= 61% male, Rasoolpura= 19% male). This disparity likely reflects differences in the relative acceptability of females' participation in social activities across slums, as more fully described in Chapter 3.

the prevalence of the outcome of interest (attendance at regular BVM meetings) between included (n=752) and excluded (n=37) respondents. Those excluded from the final sample due to missing data were, however, significantly less likely than households included in the final sample (at the .05 level) to indicate that they voted in local elections based on WASH issues or contacted a government official regarding a basic service issue. This disparity seems to suggest an unsurprising, slight underrepresentation of households in the final sample that were less likely to engage in active strategies to improve basic service conditions.

The conceptual model of participation is based on the literatures on EVL strategies and participation in urban basic service upgrading efforts, and selection of variables from the survey is conducted to best match the conceptual model. I first report descriptive statistics and bivariate correlations between participation/satisfaction with collective action, individual EVL mechanisms, and the control variables. I then use logistic regression to predict the probability that the individual regularly attended BVM meetings, controlling for other explanations of participation. I employ the following logistic regression equation:

$$\text{Logit}(P^*) = \beta_0 X_0 + \beta_1 X_1 + \alpha + \varepsilon$$

where P^* = the probability of BVM attendance, X_0 = a vector of control variables, β_0 = a vector of estimated parameters on the control variables, X_1 = a vector of voice-exit-loyalty variables, β_1 = a vector of estimated parameters on the voice-exit-loyalty variables, α = the log odds of BVM attendance, and ε = a random error term.

In a secondary model, I specify the dichotomous dependent variable to reflect whether the individual attended BVM meetings and deemed the BVM effective (1) or did not (0). Alternatively, I considered using a multinomial logistic regression model to simulate an absolute hierarchy of discrete exit, loyalty or voice strategies employed by individuals (such as proposed by Acey, 2009). I ultimately decided against this approach because, aside from the ideal of collective voice, there is no normative basis for ranking other voice or exit strategies. Moreover,

most individuals in the sample clearly employ multiple strategies jointly rather than choosing discretely between alternatives.

Conceptual Model and Descriptive Findings

Despite a vast qualitative literature establishing the importance of participation in local upgrading initiatives, few previous studies quantitatively model the individual choice to participate in collective action to improve urban services among urban residents of LMICs. Besides integrating EVL strategies, my modelling approach is also distinct from previous studies in two ways: it focuses on participation in an actual, rather than hypothetical, collective action movement, and it focuses on slum dwellers, who most need improvements in basic service security. Only Hooper and Ortolano (2012) measure actual involvement in a slum upgrading initiative. They test the correlates of participation as an enumerator in the Tanzania Federation of the Urban Poor, which is affiliated with Slum Dwellers International. However this study, perhaps because it focuses on leaders, has a very small sample that only allows the authors to conduct bivariate analysis.

Table 2. Comparator Studies

<i>Study</i>	<i>Outcome</i>	<i>Location (sample size)</i>
El-Zein, Nasrallah and Nuwayhid, 2006	Willingness to Participate: Frequency of meeting attendance to deal with top-priority environmental problem (hypothetical)	Households in a low-middle income neighbourhood in Beirut, Lebanon (N=111)
Lall et al., 2002	Willingness to participate: Definite or probable participation in community initiative to improve urban services (hypothetical)	Households throughout Bangalore, India (N=2900)
Hooper and Ortolano, 2012	Social movement participation: Binary variable indicating participation as an enumerator in the Tanzania Federation of the Urban Poor	Slum households in Kurasini ward, Dar es Salaam, Tanzania (N=81)

I model household participation in the BVM by drawing on the few empirical studies of participation, the broader literature on service deficit redressal (including EVL) strategies, and qualitative fieldwork I conducted in the three study areas. EVL strategies are the main independent variables of interest, but there are at least four other categories of factors which may explain variation in attendance at BVM meetings: individual/household socioeconomic characteristics, social group matching, personal experience and knowledge of local service deficiencies, and differences between slums. Table 3 shows descriptive statistics for all variables. There are no correlations in independent variables above $R=0.3$ except for the settlement indicator variables, suggesting that the model is well specified. Moreover, the mean variance inflation factor of the variables was 1.39, well below standard thresholds for concern regarding collinearity of the independent variables.

The primary outcome of interest in the model is regular attendance at a neighborhood BVM meeting. About 12% of respondents indicated that an adult in their household routinely attended BVM meetings. A secondary outcome of interest is belief in the effectiveness of their participation. Respondents who indicated regular attendance were asked if they believed that the activities of the BVM improved local service conditions. Perceived effectiveness of the BVM among residents is a desired outcome irrespective of observed effectiveness (for instance, see Russ and Takahashi, 2012). Moreover, perceived effectiveness may in turn influence the quality of basic services obtained through collective action (Marks, Komives and Davis, 2014). About five percent of all respondents both attended BVM meetings and deemed them effective; this represents a little less than half of the sub-sample who attended BVM meetings.

Table 3. Descriptive Findings and Bivariate Correlations

<i>Variable Name</i>	<i>Average</i>	<i>Correlation to BVM Attendance</i>
<u>Outcomes of interest</u>		
Attend	12.4%	NA
Attend and deem effective	5.3%	NA
<u>Individual Voice and Exit Strategies</u>		
Vote based on water and sanitation	63.8%	-.05
Contacted government official	10.6%	.03
Did not consider exit	38.4%	.03
Mildly considered exit	53.6%	.02
Strongly considered exit	8.0%	-.08**
Tenure length	23.3 years	.07*
Employed no observed strategies	13%	NA
<u>Individual and Household Socioeconomic Characteristics</u>		
Male	48.5%	.06
Household size	5.0 members	-.05
Eldest age	41.6 years	-.07*
<u>Social Cohesion</u>		
Match with social majority group	67.6%	.06*
<u>Experience/Knowledge of WASH Deficiencies</u>		
Child illness	11.8%	.09**
Know neighbors' toilet habits	26.6%	.20***
<u>Settlement Area</u>		
Addagutta	47.6%	-.10***
Bholakpur	31.5%	.15***
Rasoolpura	20.9%	-.05

* if p-value <.10, ** p-value <.05, *** p-value <.01

Individual Voice and Exit Strategies

The independent variables of interest capture different household voice and desired exit strategies. The first voice variable indicates whether individuals vote in local elections based on the status of WASH provision, which is the main focus of the Citizens First program. Voting is a formal mechanism by which residents can hold government officials/parties to account for poor public services to some degree (Moreino-James, 2007; Munshi and Rozenweig, 2008). Nearly two-thirds of respondents indicated that they based their vote moderately on WASH issues, with less one percent indicating that it was their main criterion. This mild voice mechanism was uncorrelated to participation.

By comparison, directly contacting a government official in the last year about a service matter represents a more active step taken in the EVL framework. The direct contact of local government officials by low-income residents has been shown to improve basic service provision in the context of Hyderabad (Caseley, 2006). Not surprisingly, given the greater initiative and knowledge of the public bureaucracy required, only about ten percent of the sample indicated that they had taken this step to voice their concerns. This moderate voice mechanism was also uncorrelated to participation.

I did not directly measure exit using data from the present survey round, and actualized exit is highly constrained in any case (Bardhan, 2004; Hooper and Ortolano, 2012).¹⁷ Instead, enumerators asked residents if they had considered leaving their current slum settlement due to local environmental conditions. Residents were given the choice between indicating that they had never considered leaving, somewhat considered leaving or considered it strongly. Over half of respondents indicated that they had mildly considered leaving whereas less than ten percent had strongly considered it. As expected, indicating a strong desire to leave the current slum is associated negatively with engagement in the BVM. As an additional, indirect measure of desire

¹⁷ The question regarding desired exit was also asked last in the survey so that it did not affect responses to other questions. If we observe attrition in future survey rounds, we may be able to calculate correlations between those who actualized exit and explanatory factors recorded in the baseline survey data.

to exit the current slum/service provider, I include tenure length as an independent variable. In theory, tenure length could suggest loyalty or constraint, or both factors. The average length of stay in respondents' current residence was twenty-three years. The combination of long tenure and dissatisfaction suggests that the option to move to an area with better access was constrained. The positive bivariate association between tenure length and BVM attendance, however, suggests a desire to engage among those longer situated in a given area.

It is instructive to further explore the relationships between individual voice and desired exit strategies and collective voice. Table 4 shows that there are both commonalities and disparities in individual strategies employed among those who do not attend the BVM, those who attend and find it ineffective, and those who attend and find it effective. One of the most striking differences appears in voting on the basis of WASH between those who attend and find the BVM effective and the rest of the sample. Another is the difference in strongly desired exit between those who attend the BVM and those who do not. In both cases, those who demonstrate more engagement with and belief in collective action appear to substitute these individual EVL strategies for expressing collective voice. By contrast, contacting government officials appears to be a mild complement to collective engagement. The robustness of these findings to the inclusion of control variables is demonstrated in a multivariate regression below.

It is clear that few households remain passive or loyal in the face of basic service deficits. Among the entire sample, only 13% employed no observable voice or exit strategies. The data do not allow us to assess whether those respondents expressed loyalty, the achievement of EVL through an unobserved strategy,¹⁸ or disinterest in service improvements. Levels of non-strategic allocation are much higher among residents of Addagutta and Bholakpur than in Rasoolpura. The heightened level of NGO activity and rights awareness among residents of Rasoolpura may explain this disparity (Bhumi, 2013).

¹⁸ For instance, there are less readily observable collective mechanisms to secure basic services, such as those offered by unofficial political organizations operating at the ground level, which are not measured here (Thachil, 2014).

Table 4. Individual Voice and Exit by Attendance and Perceived Effectiveness

<i>Name</i>	<i>Attend_effective</i> (n=40)	<i>Attend_ineffective</i> (n=53)	<i>Not attended</i> (n=659)
Vote on water and sanitation***	37.5%	73.6%	64.6%
Contacted govt. official	15.0%	11.3%	10.3%
Did not consider exit	40.0%	43.3%	37.9%
Mildly considered exit	57.5%	54.7%	53.3%
Strongly considered exit*	2.5%	2.0%	8.8%
Average tenure length	24.7 years	26.6 years	22.9 years

* if p-value <.10, ** p-value <.05, *** p-value <.01 of differences across categories

Individual and Household Socioeconomic Characteristics

In addition to the employment of individual EVL strategies, there are a number of individual and household socioeconomic factors¹⁹ that previous studies have shown to affect levels of participation in collective action. The gender of the survey respondent in a given household may affect reported participation (El-Zein, Nasrallah and Nuwayhid, 2006; Hooper and Ortolano, 2012; Lall et al., 2002). This gender difference is often attributed to underlying differences in the perceived importance of EVL strategies and WASH outcomes (Acey, 2010). In the study sample, however, there is a nearly even split between the gender of respondents and there is no significant correlation to participation.

Children place an additional time and care burden on adults. Accordingly, larger household size is assumed to negatively affect levels of participation (El-Zein, Nasrallah and Nuwayhid, 2006). Similarly, the age of the eldest member of the household is used as a proxy

¹⁹ The survey did not collect continuous income data for households because accurate income data is notoriously difficult to collect in LMICs (Deaton and Grosh, 2000). Moreover, poverty line status is not included in the model because poverty is nearly uniform among those surveyed. While data on education level were collected, there were too many missing responses to make use of this SES indicator. Instead, I include a question measuring specific knowledge of local service conditions which may capture some of the potential effect of generic education.

for the care burden and the potential openness of the household to new initiatives such as the BVM (El-Zein, Nasrallah and Nuwayhid, 2006; Hooper and Ortolano, 2012; Lall et al., 2002). There is a statistically significant relationship in the expected direction between the age of the eldest household member and participation.

Social Group Matching

Previous research at multiple scales has also shown that proxies of social cohesion, most commonly measured in terms of ethno-linguistic similarity, affect the level of public goods provision in LMICs (for instance, see Alesina and LaFerrara, 2002; Habyarimana et al., 2007). Quantitative models of participation in local collective action initiatives (Lall et al., 2002; Hooper and Ortolano, 2012) and qualitative research in Hyderabad (Sahu, 2012) also suggest that social familiarity facilitates collective voice.

In the survey, respondents identified with one of four social groups which are relevant in the local context: scheduled caste, scheduled tribe, other backward caste or other.²⁰ I use this data to create a variable that indicates whether a respondent's social group matches that of the majority group in the slum. About two-thirds of respondents are in the majority social group. I hypothesize that matching positively affects an individual's propensity to participate in collective action, and this hypothesis is borne out mildly in a bivariate correlation.

Experience/Knowledge of WASH Deficiencies

Acute experience of basic service deficiencies and knowledge of local WASH conditions may also explain variation in the level of collective voice (Acey, 2009; El-Zein, Nasrallah and

²⁰ Hyderabad has an uncharacteristic religious makeup compared to other large Indian cities. The city has a much larger Muslim population than average due to the historical rule of the Nizam in Hyderabad. Vithayalil and Singh speculate that religion may also function as a dividing line between and within communities in Hyderabad (2012). While the household survey did not directly ask respondents to state their religion, the OBC designation is highly correlated with identification as a Muslim. Accordingly, in this study, I use OBC status as a proxy for identification as a Muslim.

Nuwayhid, 2006). According to one BVM convener, individuals who are either unaware of the mechanisms connecting basic services and health and livelihood outcomes or who will only be satisfied with immediate outcomes are least likely to participate in the BVM (Nayeem, 2014). Conversations with residents suggest that many of them 'learn the hard way' the importance of basic service access through experience of WASH deficiencies before they become actively involved in addressing them.

The story of Sonya,²¹ a middle-aged women from Addagutta settlement, illustrates this process. Until the fall of 2011, Sonya was wholly uninvolved in local community initiatives to improve basic services. During the 2011 monsoon season, however, the sewage from a nearby *nala* overflowed into her home. Her teenage son contracted a liver infection from the spillover. Subsequent treatment for the infection has cost her 2.5 lakhs (roughly \$4,000). Soon after the initial incident, she started attending BVM meetings and contributing to group efforts to address sanitary deficiencies throughout the slum. She now serves as a prominent BVM leader and also contributes her own money and effort as the president of a women's Slum Level Federation in Addagutta.

I operationalize knowledge of WASH practices by using data from a survey question that asks individuals if they are aware of whether their neighbors regularly use a toilet. There is little cause for concern regarding the endogeneity of sanitation knowledge and participation because the pre-BVM phase of the Citizens First program focused exclusively on water supply issues. In addition, the survey was conducted before BVM activity around a larger range of basic services began. Direct observation of water-borne illness to measure acute experience is not possible using data from the household survey. Instead, I use the prevalence of child illness in a given household within the last six months as a proxy for health impacts from WASH deficits. About one fourth of respondents indicated that they are aware of their neighbors' toilet use habits,

²¹ All names of individuals provided in this study are pseudonyms, unless otherwise noted.

while one tenth have experienced a recent illness. Both these measures, moreover, are strongly positively correlated with participation in the BVM.

Finally, I control for potential exogenous and unobserved variation in the propensity to participate across the three study sites by including indicator variables for the slum of residence. The survey data show that households in Addagutta are much less likely, and households in Bholakpur are much more likely, to participate in the BVM than residents of Rasoolpura.

Multivariate Findings

I use binary logistic regression²² to further examine the relationship between individual EVL strategies and participation in collective action while holding other explanatory factors constant. Table 5 presents the results of two models. The primary specification models BVM attendance (Model 1), while the secondary specification models effectiveness in the BVM (Model 2). I report odds ratios, coefficients and standard errors for each independent variable, as well as measures of model fit and explanatory power.

Table 5. Binary Logit Model of Attendance and Belief in Effectiveness

	<i>Model 1: Attendance</i>		<i>Model 2: Attend and consider effective</i>	
Independent Variable	Coefficient (Standard Error)	Odds Ratio	Coefficient (Standard Error)	Odds Ratio
<u>Individual Voice and Exit Strategies [excluded category: did not consider exit]</u>				
Vote on water and sanitation	-0.32 (0.25)	0.73	-1.13*** (0.40)	0.32
Contacted government official	0.50 (0.39)	1.66	0.57 (0.54)	1.76
Mildly considered exit	0.00 (0.26)	1.00	0.14 (0.43)	1.15

²² The significance of statistical relationships and overall model fit reported in the logit specification is robust to alternative dichotomous model approaches, such as probit regression.

Strongly considered exit	-1.37* (0.79)	0.25	-1.58 (1.16)	0.21
Tenure length	0.02* (0.01)	1.02	0.01 (0.01)	1.01
<u>Individual and Household Socioeconomic Characteristics</u>				
Male	0.20 (0.25)	1.22	0.18 (0.41)	1.19
Household size	-0.05 (0.09)	0.95	-0.01 (0.13)	0.99
Eldest age	-0.02** (0.01)	0.98	-0.04** (0.02)	0.96
<u>Social Cohesion</u>				
Match with social majority group	0.18 (0.27)	1.19	0.90* (0.53)	2.45
<u>Experience/Knowledge of WASH Deficiencies</u>				
Child illness	0.77** (0.32)	2.16	1.51*** (0.43)	4.54
Know neighbors' toilet habits	1.00*** (0.27)	2.70	1.38*** (0.43)	3.97
<u>Settlement Area [excluded category: Rasoolpura]</u>				
Addagutta	0.10 (0.43)	1.10	-0.94 (0.70)	0.39
Bholakpur	0.29 (0.40)	1.34	0.13 (0.56)	0.88
Constant term	-1.91*** (0.73)	NA	-2.54*** (1.16)	NA
Model Statistics	N=752; Prob>F=0.000; Pseudo R ² =.09		N=752; Prob>F=0.000; Pseudo R ² =.23	

* if p-value <.10, ** p-value <.05, *** p-value <.01

In the primary model (Model 1), the relationships between independent variables and participation appear largely unaffected by the inclusion of controls. As observed in bivariate correlations, a strong desire for exit has a negative relationship with participation, whereas tenure length is positively associated with collective voice. Voting and contacting strategies are not significantly related to BVM attendance. Moreover, the only socioeconomic variable strongly associated with participation is the age of the eldest household member, in the expected negative direction. The most influential and positive factors influencing individual participation are experience of illness and detailed knowledge of WASH deficiencies. Contrary to bivariate findings, the relationship between social cohesion and attendance is not found to be significant, and unobserved differences in settlement areas play no significant role in explaining the exercise of collective voice.

Model 2 narrows the outcome of interest to predict individual satisfaction with participation in collective action. In comparison to the primary model of participation, the direction of the relationship between all independent variables, and the outcome remains the same, save the indicator variable for residence in Addagutta. The magnitude of these relationships demonstrates less stability across models, and the secondary model is better explained than the primary model.

In terms of individual EVL strategies, strong desire for exit and tenure length are no longer significantly correlated to the perceived effectiveness of collective action. By contrast, as suggested in Table 4, voting in local elections on the basis of water and sanitation shows a substantial trade-off with perceived effectiveness. As in the primary model, the only socioeconomic variable associated with perceived effectiveness is the age of the eldest household member, and controls for settlement area play no apparent role. The most dramatic difference between the two models is the role of social cohesion, which plays a substantial positive role in improving perception of the effectiveness of participation. On the other hand, experience and detailed knowledge of local WASH deficiencies remained the most influential

and positive factors influencing individual perception, and the effect of these factors only grows in magnitude as compared to the primary model.

Discussion

What can we learn about participation in and the perceived effectiveness of collective action from the combined results of these models? The evidence for mechanisms of substitution and complementarity between individual EVL factors and collective action is suggestive but inconclusive. Those who strongly desired exit from their settlement clearly substituted this sentiment with participation. Moreover, the allocation of votes based on WASH conditions appears to represent a clear trade-off with participatory satisfaction, perhaps suggesting that formal political channels deliver results more quickly than collective voice. Evidence for the complementarity of individual and collective strategies, however, is weaker. Longer tenure in a given settlement only correlates weakly with participation in collective action.

In contrast to findings from previous studies, socioeconomic factors and differences in settlement area do not play a large role in predicting participation. This may be due to the relative uniformity of poverty, insufficient WASH conditions and levels of collective activity at baseline across the three areas. Given that SES factors are largely impervious to policy interventions, however, their lack of importance in this analysis is encouraging. On the other hand, the role of experience and knowledge of WASH deficiencies greatly influences participation in and perceived effectiveness of collective action. These twin mechanisms suggest both that those most in need of improved services are most optimistic about the BVM, and that education regarding WASH issues may enhance the quantity and quality of collective action.

More pessimistically, social group factors exogenous to households are associated with the perceived effectiveness of participation, as previous studies have found. Minority group members view participation in the BVM as less effective than majority group members, likely

due to intra-social group sharing or collaboration. The prospect of genuinely inclusive collective action may be limited in the long term if minority group members participate less.

Twelve percent of households in the study areas reported regularly participating in the BVM. This level of participation might be construed as high given the effort's recent initiation or low considering the higher prevalence of employment of other EVL strategies (which also entail lower commitment). Regardless, there is a lack of clarity regarding necessary or effective levels of participation in collective action. Future research should explicitly test the presence of effective thresholds of participation in collective action (Granovetter, 1978; Macy, 1991), which to date has only been carried out rigorously in the context of protest settings (Yin, 1998). Additional research can also build on findings from this study by assessing whether and how households consciously decide to package or substitute different voice, exit and loyalty channels.

In any collective action effort, participation is not the ultimate outcome of interest. In the case of the BVM, sustained, basic service security is the end goal. Still, as argued in this analysis, participation in collective action is an important and necessary first step to improve basic service security in the context of housing settlements like the study areas. Joshi notes the challenges in moving beyond organizing efforts to hold government service providers accountable for measuring the actual impact on the responsiveness of service providers (2013). I provide more detail in companion papers to this study regarding the impact of the BVM, among other collective strategy options, on sustained and improved collective service provision. Analysis of data from future household survey rounds in the study areas may also shed light on the causal effect of the BVM on service outcomes.

Conclusion

I use data from a survey of 752 individuals in separate households conducted in three notified slums in Hyderabad, India to test the relationship between individual and collective

strategies, particularly participation in the BVM, to improve basic service provision. As opposed to previous research, the study design brings together and evaluates the practice of voice- exit loyalty and collective action strategies to address basic service deficiencies in urban slums simultaneously. I find that few households remain passive or loyal in the face of these deficits. In fact, multiple voice and exit strategies are often employed at once by the same individuals. Multivariate regression modelling suggests that there is some substitution in strategies employed, but little strategic complementarity.

The most influential predictors of attendance and perceived effectiveness of the collective action mechanism relevant in the study areas, the *Basti Vikas Manch*, are not individual EVL strategies. Rather, acute experience of basic service deficiencies and detailed knowledge of poor WASH practices are the most consistent and weighty factors. In other words, the BVM has been relatively effective in attracting the households in these slums with the most acute basic service needs. Moreover, this result suggests that providing education and raising awareness regarding WASH deficiencies and residents' rights is likely to be the most effective policy to increase participation and effectiveness in similar initiatives.

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**Chapter 2: Balancing Practical and Strategic Needs to Improve Slum
Engagement with the Local Public Sector**

Introduction

Urban public sector service provision remains woefully insufficient to meet the needs of slum residents across low and middle income countries (LMICs). This shortcoming is particularly perplexing in the context of urban India, where a democratic political system and robust civil society activity suggest that the opportunity for engagement with the public sector is ample. Efforts to engage Indian local governments to provide better services have originated from several directions: bottom-up resident movements such as the National Slum Dwellers Federation, intermediary NGOs such as the Society for the Promotion of Area Resource Centers, and top-down initiatives by state and central government agencies such as the establishment of ward committees. The success of these efforts, however, has been mixed, and scholarship on engagement has been overwhelming pessimistic.

In this study, I first review the literatures on slum collective action movements and urban governance reform measures in India. I then detail data collection techniques and research methods employed in fieldwork that I conducted in 2013-2014. I use this information to explain the origins of and engagement strategies employed by a unique slum development platform, the *Basti Vikas Manch* (BVM), operating in four notified slums in the greater urban area of Hyderabad, India. Finally, I analyse the BVM process by the extent to which it addresses shortcomings identified within previous public sector engagement strategies, and suggest areas for future policy intervention.

This study contributes to the constructive literature documenting how enduring gaps between residents of slums and adequate service provision can be bridged. The institutional fracturing of the city's formerly innovative Urban Community Development (UCD) department, which oversaw slum upgrading programs, and the more recent, ineffective attempts of slum residents to participate in ward committees help to explain the need for an independent effort to improve infrastructure in Hyderabad's slums. The more proximate inspiration of the BVM,

however, was an acute failure of publicly-provided water and sanitation services, which occurred in May 2009 and led to the death of 14 slum residents.

While the BVM was co-initiated and supported by intermediary NGOs, I find that the platform largely crosses communal lines and draws on a large cross-section of slum residents' needs and opinions. BVM groups are also successful in effecting short-term service improvements through several unique features. First, BVM groups invest in learning and exploiting the nuances of how local government and political structures actually function. Second, BVM groups employ an engagement strategy with local power brokers that gradually escalates from constructive cooperation—but not co-option—to increasingly adversarial techniques when necessary.

There is, however, an inherent tension in the collective action platform's remit. This tension reflects potential trade-offs in pursuing interventions that meet both practical and strategic needs (1989b). The immediate aim of the BVM is to obtain better basic service provision from local government agencies. More ambitiously, the BVM aims to serve as a platform that secures a broader set of rights for slum residents and produces greater transparency and public participation in government decision-making processes. Accordingly, I evaluate the BVM not only by its ability to satisfy short-term practical necessities, but also by the terms of its self-professed goal to strategically effect long-term transformation in state-society relations.

While acknowledging the limitations of such a movement without simultaneous, larger-scale reforms within the public sector, this study informs policy efforts to support low-income community engagement with urban public sector agencies across LMICs. Despite its flaws, the example of the BVM most broadly illustrates that public sector engagement efforts in other cities, whether in India or in other LMICs, must be tailored to the context of the local bureaucratic and political opportunity structure. This study also shows, contrary to much of the

literature, that such movements can balance cooperative and combative engagement with local power brokers and can navigate the tension between meeting practical and strategic needs.

The BVM at the Intersection of Urban Accountability and Slum Upgrading Initiatives

As Roy argues, categorizing efforts to improve local public sector responsiveness to low-income communities as exclusively top-down or bottom-up often simplifies the complex reality of interventions (2009). Multi-directional interventions are also necessary from a policy perspective. As much of the voluminous literature on accountability and participation asserts, and De Wit, Nainan and Palnitkar succinctly summarize, “decentralization is hardly ever successful if merely implemented from the top by the state” (2008, p. 80). While top-down efforts may effect change, a high degree of participation and input by community members is essential for a slum upgrading initiative to truly represent local desires and fulfil local needs. At the same time, unassisted ‘self help’ or internal ‘community- based’ efforts may accurately represent local concerns but are unlikely to effect change. Dependence on, or at least collaboration with, intermediary institutions external to low-income urban communities is usually necessary to bring about collective improvements in service provision, and is evident even in most of the successful efforts labelled as bottom-up (Lee, 1998;). The *Basti Vikas Manch* can only be understood as a product of both relatively recent top-down government accountability reforms, and decades of bottom-up and intermediary slum upgrading programs in Hyderabad specifically, and India more broadly.

Top-down Urban Accountability Mechanisms

The Indian central government did not pass legislation granting urban areas status as official governing entities—urban local bodies (ULBs)—until 1992, much later than most comparable LMICs and in stark contrast to its own long-established, rural administrative structure (Parliament, 1992). Since the onset of national reforms to enable local urban

administration, state governments and ULBs across India have nominally adopted the language of decentralization, accountability and participation in decision-making regarding urban service delivery (De Wit, Nainan and Palnitkar, 2008; Kennedy, 2008).²³ The government's emphasis on decentralized service delivery has taken place concurrently with rapid urban population growth in India.

The largest cities within India, including Hyderabad, are structured as municipal corporations. Wards serve as the most basic administrative units within municipal corporations.²⁴ The most widespread institutionalized, devolution of control in large cities has occurred through the establishment of ward committees, with municipal corporators serving as the head of these committees. Ward committees are designed to allow residents of the ward to voice their service needs and preferences at committee meetings, and corporators are supposed to subsequently communicate these concerns to zonal or city level officials in local public agencies.

In practice, however, there is growing disenchantment with the design and performance of this lowest level of official decentralization, whether in the form of ward committees or even more localized arrangements.²⁵ De Wit, Nainan and Palnitkar (2008), in a review of ward committee performance across major cities in India, and Ghosh and Mitra (2008), in a review of committee performance in urban areas of West Bengal, found them to be completely non-inclusive at worst, and at best ineffective in meeting the full spectrum of local needs. Ward committees in Hyderabad, as described more fully below, do not function much better.

²³ Many local government agencies have successfully shifted their responsibilities to civil society groups, without altering the status quo in service delivery to marginalized groups (Sridharan, 2008).

²⁴ Similarly, local government service agencies such as the Hyderabad Metropolitan Water Supply and Sewerage Board are organized hierarchically with deputy managers supervised by area commissioners, which in turn serve under the agency's commissioner.

²⁵ For instance, the Municipal Corporation of Greater Mumbai created advanced locality management (ALM) units at the street and/or building association level to improve collective, basic service maintenance. Ward level meetings are also held to connect MCGM officials to ALM leaders. In terms of scale, however, ALMs remain limited to certain areas within the city (there are 648 ALMS on paper but only 150 are active), which are overwhelmingly middle or upper class wards with large Christian and Parsi communities (Zerah, 2009).

A host of other local initiatives have emerged to improve the representation of resident concerns to ULBs in India. Information and communications technologies have been touted by some as a means to improve internal state service provision (Muralidharan, Niehaus and Sukhtankar, 2014). In the urban context, e-governance mechanisms promise to improve accountability by enabling residents to quickly and easily voice grievances to local agencies. Often when these reforms are made, however, the technology remains inaccessible to uneducated residents and the bulk of the public bureaucracy remains unresponsive to grievance claims. The urban middle and upper classes have, however, found a semi-institutionalized means to make their concerns heard by local public agencies: resident welfare associations (RWAs). These associations are often based within single residential communities, and thus function similarly to homeowners associations in other countries. Scholars have documented the robustness and diversity of middle class collective action to improve neighbourhood conditions performed through RWAs (Kamath and Vijayabaskar, 2009), although these collectives largely remain undemocratic (De Wit and Berner, 2009). There is no equivalent institutional form to effectively air grievances for residents of low-income residential developments.

Hyderabad and Urban Governance Reform

Mirroring much of urban India, the city and greater urbanized area of Hyderabad-Secunderabad (hereafter, Hyderabad) have undergone profound change since the early 1990s. The effective metropolitan area of Hyderabad is the sixth largest in India, with about ten million residents. This area is dominated by the city proper, which is the 4th largest in the country with about seven million residents (Census, 2011). The surrounding metropolitan area, however, is growing much faster than the city core (Sahu, 2012). The Hyderabad City Development Plan published by the Greater Hyderabad Municipal Corporation (GHMC) projects the population of the surrounding urban area will match the city core by 2021 (n.d.).

Between 2001 and 2011, the city corporation was also re-classified from 24 to 150 wards. Additionally, the Hyderabad Municipal Corporation was expanded to become the Greater Hyderabad Municipal Corporation (GHMC) in 2007, and continues to expand via the ad hoc annexation of peripheral settlements (The Hindu, 2013). The Secunderabad Cantonment Board (SCB) is geographically contiguous with the GHMC and oversees the largest military cantonment in the country. The SCB operates as an independent governing entity from the GHMC, although residents of both entities receive basic services from most of the same sectoral agencies, such as the Hyderabad Metropolitan Water Supply and Sewerage Board (HMWSSB). Adding to the administrative complexity, the state of Andhra Pradesh, of which Hyderabad was the joint capital, formally split in June 2014. Hyderabad now serves as the permanent capital of the new state of Telangana, and the temporary capital of the remaining territory of Andhra Pradesh.

Among large ULBs, the GHMC in Hyderabad have been reputed as operating at the forefront of governance reforms to enhance the representation of resident concerns. The most highly-publicized reforms took place when the state was controlled by the Telugu Desam Party between 1995-2004 under the leadership of Chandrababu Naidu (Kennedy, 2008). Reforms included the launching of an e-governance platform for resident complaints (*E-seva*), enhanced property tax collection via RWAs, and the privatization of solid waste management. The HMWSSB has also been lauded for internal reforms enacted during the early 2000s. Representation techniques instituted by the HMWSSB included a 24-hour customer care number, a designated customer window for new water and sanitation connections at the board's office, and a citizen charter. These reforms were found to facilitate active resident engagement through formal accountability mechanisms that have been utilized by both the middle class and the poor, and have resulted in better perception of staff, lower wait times, and improved objective service outcomes (Caseley, 2003). The relevance of these city-scale reforms to the lived experience of slum dwellers in the study areas is discussed below.

Top down, governmental programs are also often targeted directly at improving service conditions in and public sector responsiveness to slum residents. For instance, the central government of Indonesia sponsors the Urban Poverty Project to enhance community participation in local government allocation decisions (Beard and Dasgupta, 2006; Dasgupta and Beard, 2007). Much more recently, the Indian central government initiated the Basic Services for the Urban Poor and Rajiv Awas Yojana (“Slum Free India”) programs to improve urban representation and service conditions across low income urban communities (Wankhade, 2012). The relevance of top-down slum programs in Hyderabad, however, is limited. I discuss global trends in slum upgrading policy more fully in a separate paper.

Bottom-up or Intermediary Slum Upgrading Programs

I now turn the focus from top-down initiatives to post-1980 bottom-up or intermediary efforts to improve Indian urban public sector responsiveness and thus basic service provision for low-income residents. Low-income urban residents often cannot rely on direct access to bureaucrats and politicians, or on semi-institutionalized groups like RWAs to improve their service access (Van Teeffelen and Baud, 2011). Negotiated, informal relationships rather than formal, transparent mechanisms remain the poor’s primary means for grievance redressal. Most studies argue pessimistically that intermediary spaces for engagement between low-income residents and government agencies are invariably co-opted by local power brokers and NGOs who at best function as progressive patrons (De Wit and Berner, 2009; Harriss, 2007; Jha, Rao and Woolcock, 2007; Landy and Ruby, 2005; Zerah, 2009). While mediation that involves a large degree of capture is still deemed better than no representation whatsoever, these relationships hardly transform the status quo of underrepresentation and service under-provision.

De wit and Berner illustrate the range of patronized intermediation using three examples in urban India: the Mumbai Slum Adoption Programme, the Bangalore Urban Poverty Alleviation

Program, and an association of Self Help Groups in Chennai (2009). At one extreme, the adoption program in Mumbai was envisioned as ‘community led’ but in practice was initiated by the city’s municipal corporation through its 24 ward offices. The scope of the program was limited to solid waste removal. Community-based organizations nominally involved were found to be functionally dormant, and reliable service required slum households to pay R10/month, as well as additional bribes to local power brokers. Basically, NGOs and ward officials used the process to enrich themselves and slum residents only benefitted if they paid more than a market price. More progressively, NGOs involved in the Bangalore intervention formed slum development teams in consultation with slum residents to improve service conditions. While individual teams were effective in their remit, they focused on one sector in one slum and did not produce a long-term model of intermediation. Most promisingly, a network of 25 self-help groups (SHGs) of women in Chennai slums was supported by NGOs to develop a system to contact the city’s municipal corporation regarding basic service deficiencies. While some groups dissolved over time, in most SHGs women worked together despite diverse backgrounds and reported finding the representation process empowering. Consequently, the network expanded its remit to address domestic violence and education issues.

Other positive examples of intermediation derive from the experience of Slum Dwellers International (SDI), which operates a network of grassroots associations active in thirty countries. SDI units attempt to balance short-term service delivery goals with strategies to make the state more responsive in the long term (Mitlin, 2008). For instance, a partnership between three organizations in Mumbai—SDI’s local chapter, the National Slum Dwellers Federation and Mahila Milan—has managed to avoid political capture and negotiate with local power brokers to build new basic service infrastructure in slums and effectively lobby for new policies from government. The partnership remains grounded in local concerns via the monitoring and engagement of SHGs and enumeration by residents (Appadurai, 2001; Roy, 2009), although Zerah questions the initiative’s success (2009). In a more loose coalition, the Karnataka Slum

Dwellers Federation and the NGO Forum in Bangalore have developed a system with grassroots networks to quickly put pressure on the state and/or politicians to provide better basic services when egregious deficits arise (Gopakumar, 2014). In short, despite the preponderance of negative experiences, counter-examples suggest that constructive communication between local government and disadvantaged urban communities can bring about the gradual satisfaction of residents' practical and strategic needs (Dasgupta and Beard, 2007; Dodman, Mitlin, and Co, 2010; Carmin, Anguelovski, and Roberts, 2012; Berquist, Daniere and Drummond, 2014).

Hyderabad and Slum Upgrading Efforts

Ironically, the Hyderabad Urban Community Development Project carried out by the UCD was one of the great success stories featured in the early literature on slum upgrading programs in LMICs (Moser 1989a; Rakodi, 1989; Rao, 2000). Initiated by UNICEF in 1967, the self-help housing program established slum welfare committees led by existing slum leaders and local CBOs, reflecting the contemporaneous global trend in a 'sites and services' approach to slum upgrading (for instance, see Mayo and Gross, 1987). In 1976, the UCD also granted squatters *patta* (title deeds) to the land upon which they resided. Since that time, however, local experts have observed that the UCD has become ineffective as a result of institutional turmoil (Burra, 1999; Das, 2014; Maringanti, 2014).²⁶ The UCD still nominally supports SHGs and slum groups, but these are non-operational due to election uncertainty. On paper, well-funded ward committees also exist to communicate resident service concerns to the public. However, only municipal corporators and government officers are allowed to attend committee meetings, effectively ruling out public participation, and it often requires the involvement of a member of the national legislature to access committees' funds for service upgrades (Kennedy, 2008; Chand, 2014).

²⁶ Repeated requests by the author to interview current officials within the UCD were ignored.

As in the past, current efforts to improve service conditions in Hyderabad slums and low income communities draw on international and national support. The national Ministry of Housing and Urban Poverty Alleviation, via funding obtained under the *Rajiv Awas Yojana* program, purports to carry out infrastructure improvements within all 1476 slums under the remit of the GHMC (GHMC, 2012). A report by the GHMC also recommends ‘upgradation’ and ‘redevelopment’ in more than 99% of slums. Robust community consultation and participation in planning meetings is also reported to have been mediated by the GHMC. The country’s Urban Poverty Reduction Strategy, required by the UNDP, also involves the UCD in a ‘National Strategy for the Urban Poor’ (CGG, n.d.). Despite the promising rhetoric of these initiatives, none of the residents I interviewed had heard of or observed the operation of these programs on the ground. From the perspective of the slum residents whom I interviewed, there was no coherent, effective representation of community concerns regarding services to local government agencies. This is the gap that the BVM aimed to fill.

Data and Methods

I collected the majority of the data I analyze in this study via fieldwork conducted in Hyderabad in 2013-2014. All of my fieldwork was carried out with support, and often translation assistance, from staff of the two intermediary NGOs involved in the BVM, the South Asian Consortium of Integrated Water Resources (SaciWATERs) and the Society for Participatory Development (SPD). The four slums involved in the BVM —Addagutta, Ambedkar Nagar, Bholakpur and Rasoolpura—comprise the study areas.

The character of my visits to the study areas varied from formal transect walks and pre-arranged large-group meetings to informal conversations with individual residents in local BVM offices. I also attended neighborhood, slum-wide and all-slum meetings associated with the BVM program. To describe the history of basic service conditions and engagement efforts carried out in the study areas over the period 2008-2014, I draw on previously unanalyzed

program files maintained at the SaciWATERs Hyderabad office and at BVM offices in the study areas. The most relevant program data to this study were paper records of representations and media reports on basic service conditions in the study areas.

To corroborate my own observation and analysis of primary program documents for this study, I conducted semi-structured interviews with 26 individuals. These individuals included all SaciWATERs and SPD staff involved in the BVM (5), BVM conveners in each informal settlement (4), BVM locality leaders at the neighborhood scale (9), female non-leader slum residents (5) and representatives from other NGOs and government officials (3). Finally, I utilize data from an anonymous survey of 31 BVM leaders that I designed. The survey was administered by myself and SaciWATERs staff on August 3, 2014 at an all-slum BVM summit (see Appendix 1). The survey queried leaders' reasons for joining the BVM, current satisfaction with the initiative, and the major successes and challenges of the BVM in their locality.

To analyze the data, I employ the research method of process tracing. This method is a subset of case study analysis that typically utilizes multiple observations over time within a single case rather than across disparate cases (George and Bennett, 2005; Tansey, 2007; Méndez-Lemus and Vieyra, 2013). Process tracing draws on data sources such as archival documents, elite interviews and other historical sources to establish the course of an intervening causal process. While I do not propose a sampling logic for this study, analysing multiple periods within the case of the BVM does allow me to establish some replication logic. Moreover, tracing differences in the process and consequent outcomes across slums involved in the platform also provides some sense of conditional probabilities for outcomes, rather than the deterministic relationships often assumed in single case studies (Sekhon, 2004).

As outlined by Yin, there are several reasons for using the case study approach rather than other methods to analyse a phenomenon such as the BVM initiative (2003). Most importantly, the study aims to trace out the 'how' and 'why' of basic service deficits and collective response mechanisms employed at several scales, which could not be modelled

neatly in a quantitative format. It is impossible to entirely divorce the outcomes of interest and the contextual conditions at the neighbourhood, slum and inter-slum scales, suggesting that individual and household level survey analysis alone would not capture the full complexity of the situation. Huchon and Trichot vividly illustrate the complexity of scale in interventions for low-income urban communities in the context of Hyderabad (2008). Moreover, given the importance of the outcomes of interest and the cost entailed in the hypothesized means to obtain them, the intervention is not suitable to experimental or case-control research designs.

Origin and Motivation of the BVM: How the Platform Started²⁷

Before analysing the performance of the BVM, it is important to explain how and why the platform originated. The long-term institutional fracturing of the UCD and the more recent, ineffective attempts of slum residents to participate in ward committees help to explain the need for an independent effort to improve service delivery in Hyderabad's slums. The more proximate inspiration of the BVM, however, was an acute failure of publicly-provided water and sanitation services.

In May 2009, water and sewerage lines provided by and maintained by the HMWSSB mixed with each other. Consequently, the public water supply within Bholakpur was polluted with E. coli. Residents were not notified of this problem, and consumption of the contaminated water led to the death of at least 14 people in the slum, as well as hundreds of cases of serious illness (Iftekhhar, 2011; TOI, 2010). This incident of public provision failure drew the attention of local and national media, and even years later is referred to in public debates in Hyderabad (Deccan Chronicle, 2014).

The Bholakpur water tragedy motivated the slum's residents to demand better public services and effectively forced local government agencies to pay more attention to these complaints. The incident also prompted Jasveen Jairath, founder of the influential collective

²⁷ Information derived from interview with Mohammed Munawar Chand on July 16, 2014.

action platform Save Our Urban Lakes (SOUL) and a prominent activist regarding water equity in the Hyderabad area, to work with community leaders in several slums to foster collective action for better public service provision. The prompting of a tragedy to bring about collective action among low-income urban residents has numerous precedents (Walton, 1978). This initial period of activism and engagement with the government led to a more formal capacity-building program to improve water, sanitation and hygiene (WASH) conditions in three large slums. This program, the 'Citizen First Campaign for Water Supply and Sanitation Accountability' (Citizens First program, 2013), was funded by the UK charity WaterAid.

The Study Areas as Semi-formal Settlements

The housing communities involved in the Citizens First program—Addagutta, Ambedkar Nagar, Bholakpur and Rasoolpura— are situated north of Hyderabad's historic core, but are still centrally located in the urban area of the twin city of Hyderabad-Secunderabad. Addagutta, Ambedkar Nagar and Bholakpur are located within the remit of the Greater Hyderabad Municipal Corporation (GHMC), while Rasoolpura is situated on the contested border between the GHMC and the Secunderabad Cantonment Board (SCB). Together these settlements house more than 150,000 people.

The status quo of the relationship between the study areas and local government pre-dating the Citizens First program is not explained neatly by the dominant narrative of the literature on informal settlements and service provision. Each settlement is recognized as a notified slum by the Indian government. Notification confers a moderate degree of legitimacy on residence in these communities (Nakamura, 2014). Moreover, each settlement has been in existence for 40 to 50 years, has a fairly permanent built environment, and received some level of basic services from the nominally responsible public agencies before the existence of the program. To illustrate this legitimacy, Figure 7 shows a government sign recognizing Ambedkar Nagar's notification status, with HMWSSB-provided water tanks beneath it. In other words, the

classic concerns regarding clearance, illegality, or lack of formal recognition from the government that have dominated the literature on slums and service provision are not especially pressing in the study areas. Rather than the complete absence or antagonism of the public sector, it is the slow and uneven pace of public improvements relative to needs and infrastructure obsolescence that demonstrate the need for an intervention such as the Citizens First program in these areas.

Figure 7. Ambedkar Nagar Settlement, Government Sign and Water Tanks



(Photo credit: Greg Pierce, 2014)

First Phase: Water Quality Improves but Broader Engagement Stalls

The Hyderabad-based NGO Joint Action for Water (JAW) oversaw the initial phase of the Citizens First program (2010-2013). Since inception, the program has emphasized enhancing the capacity of slum residents to improve their WASH conditions, not providing hardware or funds. The first phase aimed to increase resident awareness and compel the

government to conduct more consistent testing of water quality to ensure that the tragedy in Bholakpur did not recur. JAW distributed water quality testing and purifying kits and conducted intensive water-testing trainings for residents in Addagutta, Bholakpur and Rasoolpura, but kits were distributed more broadly in 76 Hyderabad area slums. In Bholakpur, for instance, JAW disseminated 250 chlorine kits, and five volunteers in the community immediately began testing public water taps on a regular basis and reporting the results to HMWSSB engineers.

Co-production with the government, rather than the strident antagonism perhaps merited by the 2009 incident, elicited a positive response from the state. Because of this constructive engagement, the utility began to take the knowledge and efforts of the community seriously. As Mitlin suggests, co-production can lead to subsequent mainstreaming of service tasks by local government agencies (2008). Water board officials have subsequently taken on sole responsibility for testing water quality four times per month. The agency also keeps a separate file for quality complaints from Bholakpur residents, and water quality across the three main slum areas involved in the JAW program has substantially improved.

In Bholakpur, the first phase of the Citizens First program also monitored promised public investment in water and sanitation infrastructure. Following the 2009 incident, the Chief Minister of the former state of Andhra Pradesh sanctioned 12 crore rupees (US\$2.4 million) to improve water and sewerage line reliability in the area and ensure that there was sufficient pressure to flush the underground piped system in the event of future contamination. Despite the money being sanctioned, a Right to Information (RTI) act filed by JAW in 2011 revealed only 4.5 crore rupees (US\$900,000) had actually been spent for this purpose. Subsequent pressure applied by JAW and slum community members ensured that a full set of new water lines and valves were installed.

In addition to improving water quality across slums and enhancing investment in Bholakpur, the first stage of the program also envisioned a broader resident platform that constructively engaged with official government efforts to improve the representation of

concerns regarding service delivery and other rights. In an October 2012 letter to the SCB inviting the agency's representatives to a roundtable, JAW stated that it was 'aiming to build a vibrant citizen based platform around civic issues and governance in 75 slums of Hyderabad,' including several in the historic core. JAW described its activities in the Citizens First program as 'documenting water quality, quantity and sanitation issues and bringing the issues into the forefront regularly through newsletters, briefing papers, water quality updates and website updating' (JAW, 2012).

In a parallel effort, residents of the three slum communities—with the support of JAW—attempted to participate in the ward committees representing their settlements. Beginning with a city-wide event in March 2012, slum residents made repeated written and verbal attempts to invite government officials and local politicians to allow open attendance at ward committee meetings, and to coordinate the activities of the ward committees to better address resident concerns. After tepid response from a range of local power brokers, the effort to work directly with the government through already-established means to scale up service concerns was abandoned by 2013, and residents began to openly question the government's commitment to this process (BVM, 2013).

In 2013, WaterAid also decided to transfer support of the Citizens First program from JAW to SaciWATERs and SPD. This decision to switch to local implementers complied with NGO best practice. My interviews with slum leaders primarily revealed gratitude for rather than frustration with JAW's involvement in the first phase of the program (Chand, 2014a). The failure to activate ward committees, however, coincided with more general dissatisfaction by WaterAid regarding the scope of progress made by the Citizens First program. While successful in mainstreaming government water quality testing and targeted investments in Bholakpur, other desired features of the initiative had not materialized. JAW's training for residents to improve WASH conditions was deemed too complicated, and was not adopted by slum residents. Moreover, the spread of program resources across 75 slums made only water quality testing

and advocacy feasible, rather than a more ambitious range of activities. Most importantly, the level of resident understanding of the service issues and involvement in collective action was shallow (Citizen First, 2013). Consequently, implementers of the second phase decided to focus program efforts on a few promising slums (Das, 2014).

Program documents also directly articulate this shifted emphasis. The first newsletter disseminated by SaciWATERs described the history of the program as follows:

“During [the] first phase, intervention was implemented in three wards by introducing drinking water quality monitoring which was performed by the community themselves. This resulted in initiation of establishing a system in smaller pockets. In order to increase the collective strength of the communities, regular dialogues and capacity building on WASH issues [in the second phase] were initiated so that [the] reach of this platform can increase. With the grounding of Basthi Vikas Manch, the community witnessed its strength in identifying the problem and a pathway of resolving the issues by an interface with the government officials directly” (BVM, 2013).

JAW contracted out much of the work in the first phase of the program to local CBOs, which received payment for conducting the activities requested by WaterAid (JAW, 2012). This hierarchical system did not encourage a significant proportion of slum residents to get involved and take ownership of the engagement process. By contrast, the second phase aimed to conduct “regular training for members to build the capacity which ensures the well-built knowledge base of upcoming policies and schemes to leverage support from public bodies and guide the communities for sustainable livelihoods” (Ramoji, 2014). The envisioned means to ensure greater participation was the *Basti Vikas Manch* (BVM), or slum development platform. The long-term aim of the BVM, according to a letter to a government district collector, was “to empower the slum dwellers for accessing their entitlements” (Rasoolpura BVM, 2013a). In short, the second phase of the program aimed to increase resident involvement and expand the scope of services and rights demanded from the public sector.

BVM Activation

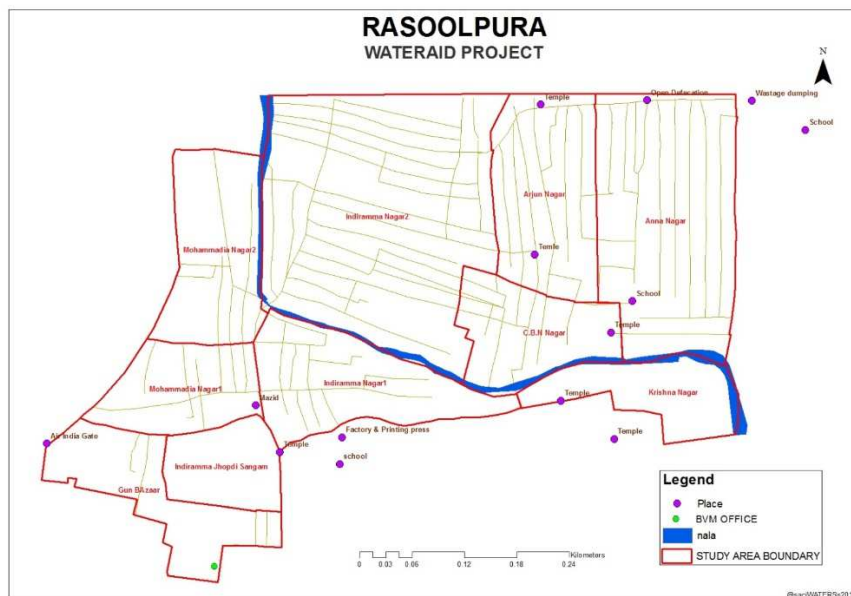
Representatives from SaciWATERS and SPD initiated the BVM phase of the Citizens First program almost as if the program was starting rather than continuing the activity of JAW (Maringanti, 2014). As six months had lapsed between the first and second phases of the program, SaciWATERS and SPD conducted inception meetings to re-start the initiative in Addagutta, Bholakpur and Rasoolpura. These meetings provided an open forum for residents to enumerate and map their most pressing concerns pertaining to basic service provision. As a part of each inception meeting, open-ended conversations with all the key participants of the first phase were also organized. These conversations were geared to re-imagine the purpose of the initiative. Following the inception meetings, transect walks were conducted in each slum that identified service issues unique to each slum and sub-slum neighborhood. Public provision of household water and sanitation service, solid waste collection, public toilets and school sanitation had insufficiencies common to all neighborhoods. Shortly after the initiation of the BVM in the three program slums, the smaller slum of Ambedkar Nagar also started a BVM group without formal inclusion in the Citizens First Program. The adoption of the platform in Ambedkar Nagar was largely based on slum residents' contact with Jasveen Jairath, one of the original founders of the program.

The Scale and Core Activities of the BVM

BVM groups are organized at the slum scale, but the core activities of the BVM take place at the scale of the neighborhood. Except in Ambedkar Nagar, which contains 5,000 residents, each of the other three slums are comprised of between 15 to 25 neighborhoods. These neighborhoods contain between one to three thousand people. The boundaries of each neighbourhood are geographically contiguous and indistinguishable to an outside observer. Neighborhoods are also considered porous within a one or two street radius even to some

residents. Local government agencies collect data for administrative purposes based on these sub-slum neighbourhood boundaries, but do not release these data to the public or upon request. Figure 8 shows a map of the neighborhoods (delineated by bold red lines) in Rasoolpura created by SaciWATERs staff based on resident input.

Figure 8. Self-Identified Neighborhoods in Rasoolpura Settlement



(Map Credit: Reproduced with permission from Nani Babu, SaciWATERs, 2014)

Weekly meetings are held in each neighborhood in the slums where the BVM has been activated. The meetings serve to solicit resident concerns and identify shortcomings regarding public services in the neighborhood. These concerns are aggregated to the BVM group at the slum level, and then used to file 'representations' with the relevant public agencies.

Representations are service concerns or grievances of local slum residents presented to local, state and national government agencies. The process of representation in the BVM involves soliciting the basic service concerns of local residents at the neighborhood scale, putting these concerns in writing, and filing formal requests for service upgrading with local government agencies on a routine basis, usually weekly. Representations utilize formal grievance

mechanisms built into many public agencies such as the Metro Water Board (Caseley 2006; Davis, 2004), but are more accessible to slum dwellers.

To monitor progress on addressing service needs, staff from the supporting NGOs visit each slum area weekly, if not more often. Beyond this routinized activity, other capacity training or engagement strategies are carried out on an ad hoc basis and at different scales. For instance, in Bholakpur and Addagutta, NGO staff have helped stage slum-wide events and public demonstrations annually on World Toilet and World Water Day that have been publicized by the local press. Smaller-scale events are based purely on local demand. For instance, neighborhood BVM leaders conducted a training session in Rasoolpura for youth explaining how to write a representation letter to and follow up with a local government agency regarding basic service issues.

Process: Representativeness

By design, the BVM exists as a platform to represent the concerns of all slum residents regarding basic services to local government agencies. Scholars have demonstrated that greater breadth and depth of participation can positively affect the outcomes of collective action for basic service provision, not just ensure equitable voice (for instance, see Marks, Komives and Davis, 2014). Thus, in order to be truly representative or effective, the BVM must reflect a broad cross-section of resident concerns. Given the lack of consensus in the literature on how to evaluate representativeness, I employ the commonly-used dimensions of numerical participation, leadership, and communalism.

Numerical participation

The BVM solicits the broadest range of participation from residents possible. Accordingly, involvement in ongoing BVM activity does not require membership, dues or any other requirements. Moreover, in addition to transect walks and awareness efforts conducted by

supporting NGOs at the outset of the BVM initiative, slum-level conveners continue to spend much of their time soliciting input from a wide range of local residents, including non-participants. When neighbourhood and slum-wide BVM meetings are held, BVM leaders publicize them to other residents both by word of mouth and via text messaging.

As of March 2014, across the three large study areas about 12% of households routinely attended neighbourhood meetings, the key activity of the BVM. These meetings take place weekly or more often, depending on the slum area. Despite a vast qualitative literature on the importance of participation in slum programs, surprisingly few studies specify appropriate or necessary levels of numerical participation to ensure desired outcomes. Given the large size of the slums and the relative novelty of the BVM initiative, however, the average level of numerical participation observed seems fairly robust.

This pooled average, however, masks variation in participation across slums. In Rasoolpura, numerical attendance at neighbourhood meetings is relatively small (less than 10% of all households in each neighborhood). On the other hand, there are active BVM units in each of its 10 neighborhoods, and each neighbourhood contributes to slum-wide BVM strategy (Aiza, 2014; Nayeem, 2014; Kar, 2014). Similarly, in Addagutta, fifteen of the twenty neighborhoods are active in the BVM movement, but overall participation is around 10%. By contrast, overall neighbourhood meeting attendance in Bholakpur is nearly 20%, but this participation is largely concentrated in five of fifteen neighborhoods.

Leadership

Representativeness can also be assessed by the nature of leadership. Even when local programs escape political capture, they are often dominated by influential male residents who lead autocratically. All NGO staff involved in the initiative are female, whereas the three slum-level BVM conveners are male. Survey evidence also suggests an imbalanced gender representation in leadership and satisfaction (BVM Leaders Survey, 2014). At the same time,

women reported more trust in BVM leadership than men. As with participation, however, the neighbourhood scale reveals more variation in gender equity. In Bholakpur, a heavily Muslim area, the BVM is dominated by men. Only two out of twenty neighborhood leaders are women and neighbourhood meetings are sometimes exclusively attended by males, although participation of women is slowly increasing. On the other hand, in Addagutta, more than two thirds of neighbourhood leaders are women. Even more drastically, in Ambedkar Nagar, there is no paid convener of the BVM, and the platform's five recognized leaders are all women. Similarly, within Anna Nagar neighbourhood of Rasoolpura, all leaders are women and no men participate actively in the BVM. To ensure representativeness, female participation and leadership in the BVM must be increased. Enhancing gender equity in the BVM may require drawing on the experience of other influential women's groups in Hyderabad (Kennedy, 2008), as has taken place in Anna Nagar.

Scholars also express scepticism regarding the representativeness of local initiatives when leader-resident interactions mimic patriarchal or patron-client type relationships (for instance, see Fritzen, 2007; De Wit and Berner, 2009). The BVM was explicitly structured to preclude patron-client relationships and reduce the extent of elite capture (Jairath, 2013). Participants in the first phase of the Citizens First program elected each of the three slum-level coordinators through a democratic vote. Coordinators receive R12000/month (US\$200) in personal compensation from the BVM, as BVM work is supposed to be their primary occupation. No other local participants in the BVM receive any monetary compensation for participation. The only funds exchanged between the implementing NGOs and local BVM groups come in the form of reimbursement for refreshments provided at neighborhood or slum meetings, or much more rarely, for the equipment used at BVM offices.

Despite these safeguards, concerns remain regarding co-option. The slum conveners in Bholakpur and Addagutta are tightly affiliated with the Telangana Rashtra Samithi (TRS) political party, and their leadership at the slum level promotes their own political and

administrative agenda (Maringanti, 2014). At the same time, both are home-grown leaders who continue to live within their respective slums and appear highly committed to improving slum service conditions via participatory processes. For instance, the convener of Addagutta has lived in the settlement since 1979, and was instrumental in the process of the slum obtaining notification from the local government. In repeated interactions, he attributed the success of the BVM to the efforts of women leaders. Residents of Addagutta also stressed the democratic and accountable aspects of the BVM to a greater extent than the other study areas. Ironically, the BVM convener in Rasoolpura, who is the least politically connected and most involved in other NGO initiatives, has proven to be the least democratic in leadership style. Many of his attempts to improve service conditions are conducted individually via interactions with government employees, politicians and the media, rather than including other residents in collective action. Moreover, he has openly expressed resentment regarding female activism at times. Looking forward, safeguards must be put into place to ensure that the rotation of slum-level conveners, as was envisioned by the program implementers, actually takes place (Kar, 2014c). If the BVM does not function democratically with regard to changes in leadership, the sense of broad-based ownership of the platform may diminish.

Communalism

Another common threat to representativeness is communalism. In the Indian vernacular, communalism equates to group formation based on a polarizing attribute, such as political party, religion or ethnicity/caste. It is difficult to exogenously construct social cohesion and foster collective action (Botes and Van Resburg, 2000). Communal networks generally crowd out participation in more democratic representative processes—such as the BVM—in Hyderabad (Sahu, 2012). Indeed, Landy and Ruby analyse the organization of slum residents to obtain benefits from the public distribution system in Old Hyderabad; they conclude that communal

identity always trumps spatial identity, and that broad-based resident welfare initiatives are infeasible (2005).

Replicating the Hyderabad urban area, the study areas are comprised of a mix of communal identities. While more than four-fifths of Bholakpur residents identify as Muslim and Other Backward Caste, these percentages are about two-thirds in Rasoolpura, with some neighborhoods comprised of predominantly Hindu and Scheduled Caste residents. On the other hand, Addagutta is a near even split in terms of caste and religion, whereas Ambedkar Nagar is tilted toward Hindu and Scheduled Caste. At the neighbourhood scale, differences in group identity are more pronounced and in fact often serve as the basis for defining a given neighborhood.

The BVM, both officially and in the rhetoric of its leaders, stresses its acommunal design. Formal representations made to local government agencies are often signed with a bolded disclaimer stating that the BVM is an independent entity unaffiliated with politics (Rasoolpura BVM, 2013a). BVM activities also aim to engage with government agencies via formal, transparent mechanisms rather than communicating directly to politicians or bureaucrats to ask for service improvements, since the latter process often results in local 'capture' of a project (Nayeem, 2014).

The relationship between the BVM and political parties is more complicated. Both the BVM leaders in Bholakpur and Addagutta publicly affiliate themselves with the TRS political party. Local BVM groups also make political statements occasionally. For instance, in early 2014 before major state and national elections, the Rasoolpura BVM drafted a letter to Chandrababu Naidu, the leader of the TDP political party and current chief minister of the new state of Andhra Pradesh, condemning the "attack on [the] Adivasi Basti with involvement of your party corporator" (Rasoolpura BVM, 2013c). At the same time, participation in the platform clearly transcends political affiliation. Neighborhood BVM leaders in Bholakpur personally

identify with four opposed political parties, but stated that the relative ineffectiveness of their parties to improve slum conditions led them to prioritize BVM activities.

The BVM's general acommunalism is powerfully and indisputably demonstrated by its record of representations on behalf of a diverse range of issues, residents and neighborhoods. In Rasoolpura, one representation made by the BVM to the GHMC was jointly given to ensure the provision of street lights before the Ramadan [Muslim] and Ganesh [Hindu] festivals (Rasoolpura BVM, 2013b). The BVM group in Bholakpur led a joint session for slum residents called 'No Note for My Vote' with the Association for Promoting Social Action and the Election Watch commission to ensure open voting in the 2014 state and national elections. In my interviews, slum residents also frequently mentioned that local political cadres are opposed to the growth of the BVM because it does not align with a particular party.

Process: Meeting Practical Needs

I turn from analysing the BVM's representativeness based on a broad base of residents and their concerns, to the platform's effect on desired outcomes. In this type of engagement initiative, the definition of success or failure is not obvious (Joshi, 2013). Donor, local implementer, and resident objectives and definitions of success are also likely to differ. Accordingly, I judge the BVM based on external criteria. As outlined by Mitlin (2008), the long-term success of initiatives such as the BVM requires a unique combination of patience and subversion to meet both practical and strategic needs (Moser, 1989b). Accordingly, I evaluate the BVM in terms of its ability to simultaneously satisfy livelihood necessities and effect long-term changes in resident rights and local government responsiveness. Efforts to meet practical needs take place in three time frames: short-term improvements in service outcomes via the existing BVM structure, medium-term sustainability of engagement efforts without NGO support, and long-term complete transfer of responsibility to government agencies.

Short Term

In the short term, the BVM operates to communicate immediate basic service needs to local government agencies and incentivizes them to address these needs promptly. During the period of February 2010 to August 2014, BVM groups filed 500 formal representations with local government agencies.²⁸ The strategy of representations epitomizes the unique way in which the Citizens First program learns the local government system and exploits new opportunities. The main government forum to which BVM groups make representations is the *prajavani* of the Greater Hyderabad Municipal Corporation (New Indian Express, 2013). The *prajavani* has been under-utilized by Hyderabad's residents since its establishment in February 2013 (Cityplus, 2013).

Filing representations, however, is more of an output than an outcome, and representations have uneven success in achieving service outcomes. The most successful representations were for one-off, short-term requests. For instance, representations made to the GHMC to do a special sweeping of streets in advance of Ramadan (for localities in Bholakpur and Rasoolpura), to state power agencies to replace light bulbs and power lines (for localities in Addagutta, Bholakpur and Banjara), and to the HMWSSB to address contaminated drinking water (for localities in Addagutta, Ambedkar Nagar and Bholakpur), all quickly achieved their aims. Other issues raised via representations, such as the covering of *nalas* (open drains) and the provision of ration cards to eligible households, have only partially succeeded. For instance, in Indiramma Nagar neighborhood of Rasoolpura, the BVM successfully lobbied the GHMC over a period of several years to fund the construction of a bridge that spans the main *nala* in the slum, allowing for safer passage across the environmental hazard. Still, the GHMC has not

²⁸ As an alternative measure of success, in the six months between the origin of the BVM phase and the end of 2013, the BVM leveraged approximately \$18,500 of investment from public agencies that would not have otherwise been spent in the study areas. This compares to \$15,600 dollars in program costs for the same period (Kar, 2015). In other words, whether judged as a direct resource transfer from WaterAid to slum communities or via a full cost-benefit analysis, the BVM appears to be economically sound.

devoted sufficient resources to cover the *nala*, so it continues to overflow in the monsoon season.

Repeated representations by BVM units regarding issues such as school sanitation (in Bholakpur and Rasoolpura) and the construction of community halls and health centers (in Addagutta, Bholakpur and Ambedkar Nagar) have received scant response. The lack of progress in resolving these service deficiencies may be because their resolution depends upon the joint responsibility and coordination of local and national agencies. Representations also appear less successful if made to national agencies, which easily ignore local concerns.

Moreover, representations may bring about the minimum response to address a basic service deficit rather than a resolution that lifts the provision burden from residents. For instance, in Ambedkar Nagar, the efforts of the BVM succeeded in convincing GHMC contractors to take responsibility for solid waste management in the slum, but waste pickup only occurs once at a week at a single, public collection point rather than from individual households. Accordingly, households are forced to continue to haul their trash over substantial distances to the collection point, which has now become an environmental hazard. Still, the potential for accomplishment of lasting change in basic service security via representations should not be understated. In the Gun Huts Bazaar area of Rasoolpura, representations filed by residents successfully pressured the SCB to devote 7-8 lakhs (\$11,700-\$13,300) to clean up a public schoolyard in the neighborhood, which was previously filled with trash and stagnant water, and to regularly pick up waste in this area. This site's status as an unauthorized trash dump had lasted for 40 years, but it took only nine months of collective pressure to fully resolve the issue.

From the perspective of residents, assessing short-term effectiveness involves a comparison to the status quo in the slums before the initiation of the BVM. Among BVM leaders, self-reported satisfaction with the platform's progress on achieving service outcomes was fairly high (4 out of 5 on a Likert scale). Several factors influence levels of satisfaction: both length of

time involved in the BVM and pre-BVM level of involvement in slum upgrading are strongly, positively correlated to higher levels of satisfaction with the initiative.

Medium Term

Beyond the scope of the second program phase (through 2016), the goal of WaterAid and the implementing NGOs is for the platform's work to carry on without external support. Since complete devolution of the platform to slum residents has always been envisioned, the implementers have consistently provided training to increase the capacity of BVM conveners, neighborhood BVM leaders and non-BVM leaders to engage the government for better services (BVM, 2013; Ramoji, 2014). Implementers also constantly remind residents that the initiative must ultimately be sustained locally, echoing the ideal outcome in the literature on NGO capacity building (Bhan, 2009).

There is little evidence that the program will operate without external support in the near future. In the 2014 survey, leaders of the BVM identified insufficient funds as one of the biggest challenges to current operation of the program. Moreover, in a survey of households conducted in March 2014, more than 99% of households—only 12% of which participated in the BVM—indicated that they were unwilling to fund the continued activity of the BVM (BVM Household Survey, 2014). These findings may support the assertion of Berner and de Wit (2009) that NGOs can never truly devolve power to local communities.

On the other hand, there is some cause for optimism regarding sustainability at the slum level. In Bholakpur, while BVM leaders indicate that they benefit from the support of the program, they are making explicit efforts to build a larger base of participants and eventually collect fees for program activities when external support is withdrawn. Moreover, the female BVM leaders in Ambedkar Nagar, who do not receive any funds from the Citizens First program, have actually requested more autonomy from program implementers and work on their own agenda in any case. Neighborhood-level BVM groups must consider creative means to raise

funds for continued operations, or a system of dues, to prepare for the complete autonomy of the platform.

Long Term

In the longer term, the goal for the BVM is to not only be entirely self-run, but also for the vast majority of its current activities to become unnecessary due to the existence of reliable local public sector service provision. Ideally the efforts of the community (and top-down reform) incentivize local government agencies to provide services without continual prompting by a collective effort such as the BVM (Allaby and Preston, 2005). The BVM attempts to accomplish this long-term handoff to local government by treating local public officials as potential allies rather than inevitable enemies (Kar, 2014a). In fact, some public sector workers, such as sanitary scavengers, are like slum residents in that they are closer to being victims of bureaucratic ineptitude than perpetrators of it (Ramoji, 2014). At the same time, if cooperative efforts are unsuccessful in eliciting public sector response, BVM groups do not hesitate to engage in confrontation and shaming of public agencies and officials. The ultimate goal of all engagement, whether cooperative or adversarial, is to increasingly incentivize government officials and politicians to provide better services to slum residents. As detailed above, this mainstreaming of service tasks by the public sector has been successfully achieved with respect to water quality testing and to some extent solid waste collection. Government mainstreaming of other services will serve as a key indicator of success in the future. Long-term familiarization and influence with the local government and political power structure will also leave slum residents less sensitive to political and bureaucratic turnover, which is common throughout urban India.

Process: Meeting Strategic Needs

In addition to meeting practical needs and bringing about government mainstreaming to meet these needs in existing program areas, the BVM maintains more strategic aims. Given its ambitious remit, the platform can be evaluated in terms of its capacity to increase the scale of its operations intensively (taking on a larger remit within existing program areas) and extensively (reaching more program areas with its remit).

Intensive Scaling

Slum dwellers' holistic needs comprise more than consistent access to water, sanitation and a hygienic built environment. The concept of the right to the city, as articulated by scholars, calls for urban residents not just to passively receive the services statutorily offered by the state, but to actively demand a greater set of rights and a more inclusive urban system (Harvey, 2003; Silver, 2014). NGO implementers cited the idea of the right to the city in envisaging that the Citizens First program would bring about more than improvements in basic service access, including better livelihoods and a recognition of slum dwellers' power (Jairath, 2013). Dissatisfaction with progress on this broader remit led to the creation of the BVM as a platform. Without directly invoking the language of the right to the city, slum residents clearly embrace a more ambitious agenda than WASH. Representations filed by the BVM have expanded to improve basic health care (via the construction and maintenance of government-mandated local health centers), electricity, solid waste management and education.

Participation in the BVM has also raised a broader range of concerns among residents without the prompting of program implementers. In the Anna Nagar neighbourhood of Rasoolpura, for instance, residents have incorporated transportation emergency services into the set of concerns that their BVM group seeks to engage local government about. In Ambedkar Nagar the BVM spends much of its effort demanding a new public school in the area, and in Bholakpur women's concerns regarding domestic abuse are being raised. At the same time,

the remit of the BVM may be broadened too far. The Gun Huts Bazaar neighborhood of the Rasoolpura BVM has made the construction of a community college by the district education office a priority. While the desire for area youth to have access to secondary schooling is understandable, this effort appears relatively fruitless at the slum level. Coordination of BVM units across the slums, if not coalitions at larger scales, is required in order to elicit a government response.

Existing BVM groups have found that they can effectively increase the scale of their efforts via partnerships with other local organizations or initiatives. As mentioned above, the BVM in Bholakpur held a joint session with another NGO operating in the slum, the Association for Promoting Social Action, and the government's Election Watch commission to ensure that residents' votes in 2014 state and national elections were not sold to political parties. In the Anna Nagar neighborhood of Rasoolpura and across Addagutta more broadly, self-help groups (SHGs) of women are also instrumental in working with the BVM to achieve a broad set of goals, including reductions in domestic violence against women.

Extensive Scaling

A focus on extensive scaling, before program design has demonstrated effectiveness or elicited interest from the supposed beneficiaries, is a common mistake made by NGOs (Uvin, Jain and Brown, 2000). The first phase of the Citizens First program exhibited this type of over-extension. Program implementers always envisioned the spread of the program across slums as a citizens' collective movement. In 2010, implementers from JAW immediately aimed to quickly scale up collective action across seventy-five slums and failed to intensify it. The second phase, on the other hand, has made intensive efforts to activate the BVM in three slums and has consequently gained the trust and enthusiasm of residents. This divergence in outcomes suggests that growth in programs is better pursued via demand from local communities rather than supply from program implementers.

The spread of the BVM to Ambedkar Nagar in 2013 already demonstrates horizontal scaling of the initiative. The success of the BVM in Ambedkar Nagar has prompted other slums in Banjara Hills (Uday nagar, Gouri Shankar nagar and Singari kunta) to request the involvement of local implementers, and residents from these areas have attended city-level meetings and leaders trainings of the platform (BVM, 2013). Housing settlements in the old city of Hyderabad, particularly those seventy-plus slums briefly involved in the initial stages of the Citizens First program, are also requesting training to start BVM groups in their areas (Kar, 2014a/c).

Conclusion

This study explains the origins of and engagement strategies employed by the *Basti Vikas Manch* in four slums situated in Hyderabad, India. Drawing on extensive fieldwork, I assess the outcomes of the BVM process in terms of three key dimensions identified from the literature on top-down public sector reforms and bottom-up slum upgrading programs: representativeness, meeting practical needs, and meeting strategic needs. I find that the BVM effectively balances cooperative and combative engagement with local power brokers to improve conditions for slum residents. Moreover, the BVM navigates the tension between meeting practical and strategic needs in the urban public sector. I also identify shortcomings internal to the BVM and recommend means to redress them that will enhance slum dwellers' basic service security.

At the same time, as the Basti Vikas Manch platform relies on the agency and efforts of slum residents to engage local government, it should not be expected to realize complete transformation of the status quo in the study areas. The effect of participatory initiatives in bringing about better services and large scale social change is either limited or enabled by social and administrative structure (McCourt, 2012). Of course, the onus should not be laid entirely, or even primarily, on disadvantaged residents to improve their basic service deficits,

much less their access to a broader set of rights and opportunities. As further discussed in the conclusion, simultaneous reforms within local government are also required.

In terms of policy, efforts to revitalize the Urban Community Development of the Greater Hyderabad Municipal Corporation is likely to have the biggest positive effect on slum dwellers in Hyderabad. The UCD historically functioned as a comprehensive forum for slum dwellers to register complaints regarding public sector service delivery and other civic rights. Participants in the contemporary BVM, on the other hand, must often register representations with multiple agencies to address one issue. Moreover, endemic shortcomings in the functioning of existing infrastructure suggest that local government agencies need to develop separate units that prioritize maintenance in addition to new construction (Ramoji, 2014). There is, however, some room for optimism regarding current conditions in Hyderabad. While political parties continue to interact with slum dwellers in an arbitrary and non-democratic fashion, urban bureaucratic systems in Hyderabad increasingly following on-paper protocols (Kar 2014b).

This study also contributes to a broader understanding of the interface between resident platforms and urban governance structures in LMICs. Other urban initiatives to improve basic service access for low-income communities can adopt elements of the BVM's constructive engagement strategy, and the flexible employment of a range of tactics based on detailed knowledge of the nuances of the local public sector. Such initiatives, however, face unique challenges depending on the broader urban system. The development of the BVM has taken place in the larger context of profound administrative and political change. The effect of political and bureaucratic turnover on resident service outcomes has not been well-quantified at the scale of the urban area, despite the prevalence of this issue across vibrant, decentralizing democracies. Attempting to foster similar initiatives in more closed political and bureaucratic contexts, however, will require different insights. In addition to learning from initiatives employed in open contexts such as the BVM, future research can draw on insights from the literature on

non-violent protest formation in autocracies to recommend potentially effective engagement strategies with local government agencies in closed societies.

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Chapter 3: Engaging the Local State: Collective Strategies to Improve Basic Service Security in Slums

Introduction

Despite significant effort by policymakers and scholars, slum residents in low and middle income countries (LMICs) continue to suffer from short-term basic service deficits of a collective nature that diminish health and livelihood outcomes (Sverdlik, 2011). The blame for these deficits is generally and rightfully attributed to the incompetence and neglect of the local state, which may be insulated from or unresponsive to top down pressure, or simply moves slowly to improve service provision (Bogaert, 2011; Nijman, 2008). Within cities, slums are generally the areas of greatest need for service enhancements (Marx, Stoker and Suri, 2013; Neuwirth, 2004).

In the absence of effective public service provision by local agencies, a wide range of bottom-up strategies has been proposed in piecemeal fashion to overcome service deficiencies in slums. Yet most studies fail to discuss how short-term strategies compare with each other, or recognize the magnitude of their impact on basic service access. Moreover, many studies continue to focus on a single service outcome, such as water access, whereas slum residents clearly experience simultaneous, related service gaps (for instance, Black and Fawcett, 2008). Seminal conceptual frameworks for understanding how individuals or households leverage resources to address service access deficiencies include the capital assets framework proposed by Rakodi (1999), the vulnerabilities framework posited by Moser (1998) and the capabilities framework advanced by Sen (1999). Moreover, recent studies have combined fieldwork and syntheses of existing scholarship to propose typologies of strategies for collective tenure security (see Krishna, Sriram and Prakash, 2014) and collective adaptation to climate change (see Berquist, Daniere and Drummond, 2014) in informal settlements.

Yet few scholars have attempted to conceptually organize mechanisms that contribute to the intransigent problem of collective basic service upgrading. While slum and intra-slum boundaries are largely indistinguishable by sight to outside observers, it is clear both from resident experience and from the nature of the services in question that mechanisms to

overcome them are inherently collective. In other words, basic service deficiencies are rarely limited to single households or even small groups of households. Similarly, in many cases it is infeasible that single or small groups of households can effectively employ strategies to address collective service deficiencies.

To address these shortcomings in the literature, I develop a conceptual framework that synthesizes the disparate strategies identified in the literature to bring about collective basic service security. I propose a typology that reorients collective service access strategies with reference to the extent of pressure they exert on the local state to improve service provision. I draw on fieldwork which I conducted in four notified slums situated in Hyderabad, India to illustrate how strategies interact in practice. In the context of the study areas, basic service claims are most often raised collectively, whether at the neighbourhood or slum scale. Within this typology, I argue that a category of strategies that alter the incentives of public agencies (or individual public officials) to align them with those of slum residents—a process which changes the choice architecture of the state—is the most promising to mediate the oft-cited tension between short-term and long-term service needs. Within this category of strategies, I elaborate on several understudied tactics that are prominent in the collective efforts of Hyderabad’s slum residents and have applicability to other slum contexts, including the filing of media reports and formal representations.

The Fieldwork Context: Hyderabad and the *Basti Vikas Manch*

The fieldwork for this study was conducted in conjunction with a capacity building program, the “Citizen First Campaign for Water Supply and Sanitation Accountability” funded by the UK charity WaterAid. Initiated in 2010, the program was originally designed to improve basic service conditions in three large slums— Addagutta, Bholakpur and Rasoolpura— within twenty kilometres of each other in the core urban area of the Secunderabad-Hyderabad twin city region in the newly-created Telangana state. However, a fourth, much smaller slum, Ambedkar Nagar,

was informally included in program activities in 2013, and the experience of slum residents in this area is included in this study. The three large slums each contain between 40,000-60,000 people, whereas Ambedkar Nagar houses around 5,000. Within each of the large slums, there are 15-20 self-identified neighborhoods containing several thousand people.

Each of the four study settlements has existed since 1970 or earlier, over which time each of the areas has obtained official status as a 'notified' slum recognized by the Indian government. Given their long history, each of the areas has a fairly permanent built environment. Moreover, residents in each area received some level of basic services from nominally-responsible public agencies before the institution of the BVM. Thus the classic obstacles to service access stemming from the illegality, government clearance or non-recognition of slums, which understandably dominate the literature on slums and squatter settlements (Peattie, 1987; Roy, 2005), are not major concerns in the context of the study settlements. Rather than the complete absence of the public sector, it is the slow and uneven pace of improvements relative to needs and infrastructure obsolescence that demonstrate the need for a more robust understanding of strategies to change the status quo.

The initial impetus for the citizen's campaign was a tragic water contamination incident in Bholakpur. In 2009, water and sewerage lines provided by the Hyderabad Metropolitan Water Supply and Sewerage Board (HMWSSB), the public agency responsible for these basic services throughout the urban area, became mixed and water running to the slum was dangerously polluted. Intake of the E. coli infused water led to the death of at least 14 people in the informal settlement, as well as hundreds of cases of serious illness (Iftekhhar, 2011; TOI, 2010). The incident not only drew the attention of local and national media, but also mobilized local community members to demand better services and forced local government agencies to pay more attention to resident complaints.

The Hyderabad-based NGO Joint Action for Water oversaw the first phase of the project (2010-2013), which understandably pursued a narrow remit to enhance resident awareness of

and more vigilant government testing of water quality in the slums. The second phase of the program (2013-2016), overseen by two other Hyderabad-based NGOs, the South Asian Consortium for Integrated Water Resources (SaciWATeRs) and the Society for Participatory Development (SPD), more ambitiously introduced the concept of the *Basti Vikas Manch* (BVM, translates “Slum Development Platform”) as a collective action network. The BVM intervention provides no hardware for improved service provision but rather emphasizes training for residents only; the impetus for any service improvement necessitates participation on the part of residents (Figure 9). In the short term, the BVM operates to aggregate resident concerns regarding a broader range of service conditions beyond water quality, and ultimately beyond WASH, and to constructively engage local government agencies to improve these services.

Figure 9. Meeting at BVM Office, Addagutta Settlement



(Photo credit: Greg Pierce, 2014)

The greater purpose of the BVM is to increase local knowledge of the local government bureaucracy in Hyderabad where it actually functions, and with this information, to exploit opportunities to hold government offices accountable to their service remits. While the BVM interacts adversarially with public sector agencies and employees when necessary, the fundamental tactic of the BVM is to constructively engage with local offices to bring about reform or improvement. Moreover, the experience of the BVM in the study settlements suggests that even very poor households in these areas do have the resources and utilize leverage to improve their conditions, albeit in a limited fashion.²⁹

This implicit optimism undermines the negative determinism expressed in much of the literature on slum upgrading efforts. For instance, Mitlin and Satterthwaite unilaterally assert that local governments cannot be productively engaged in slum improvements efforts (2012). Within low-income communities, Rakodi assumes that a capital assets framework will exclude the ‘poorest of the poor’ from livelihood improvements by definition, since these households have no capital assets to leverage (1998). The closest endorsement in the literature of the operating framework adopted by the BVM is that of De Wit and Berner (2009). They maintain that slum residents choose which efforts (including self-organized, CBO, NGO or government initiatives) to devote time and resources to and, given constraints, have to ‘gamble’ or invest their time in a limited number of efforts that they deem most promising.

Defining Basic Services and Collective Basic Service Security

Before further discussing the allocation of effort to strategies to improve basic service access, it is necessary to define which services are ‘basic.’ The initial focus of the Citizens First program was to enhance water, sanitation and hygiene (WASH) services in the slums. While progress in WASH services remains the primary outcome by which WaterAid evaluates the program’s performance, the BVM platform itself has taken on a broader, long-term service remit

²⁹ In a separate study, I fully evaluate how the BVM operates in terms of participation and effectiveness, and explain how it fits into the larger spectrum of slum development efforts.

that includes all amenities which local government agencies have promised to deliver. For instance, in its official charter, the Secunderabad Cantonment Board (SCB), which is nominally responsible for providing most services in Rasoolpura settlement, states that it will “make reasonable provision [for residents] within the cantonment” for public toilets, garbage disposal and drainage (Secunderabad Cantonment Act, 2006). In addition to drinking water and sanitation provision, improved drainage, solid waste management and electricity provision have emerge as core service concerns of the BVM initiative. Different government agencies have promised and provided some level of infrastructure for each of these services across all the slum areas.

In addition to their simultaneity, the interdependent nature of service needs has become apparent. The joint effect of access to services such as water, sanitation and hygiene (WASH) on health and well-being is widely accepted (Black and Fawcett, 2008). The joint nature of service need in the study areas, however, extends even beyond WASH and beyond what has been explicated in the extant literature. For instance, in Ambedkar Nagar, waste water, drinking water quality, and solid waste management are intricately related (Ramoji, 2014). The Greater Hyderabad Municipal Corporation (GHMC) only responded to the wastewater issue and fenced off the *nala* (open drain) bordering the slum (see Figure 10). The fencing has actually compounded the slum’s solid waste and cleanliness crisis because the GHMC does not provide trash collection to the slum (although it does do so for other parts of the city), and residents had formerly disposed of their trash in the *nala*. If the government had addressed these needs jointly, this would not have been a problem. Instead, the ad hoc efforts of government agencies to address these problems has actually exacerbated rather than ameliorated them.

Figure 10. Open Wastewater Drain before Fence was Installed, Ambedkar Nagar Settlement



(Photo credit: Greg Pierce, 2014)

Despite the presence of multiple, interrelated needs, the immediate goals of slum residents with respect to service needs are fairly modest and are usually tied to relative progress against existing conditions, rather than a uniform standard of outcomes. Conditions also vary substantially across and within slums. I illustrate this in the case of efforts to improve drinking water provision in several sub-slum neighborhoods. The A-1 neighborhood of Addagutta, receives 5-6 hours per day of water service from HMWSSB. Individual households also maintain dug wells (with less clean water) that serve as a backup to this supply. Residents of this neighborhood deem this level of service satisfactory, as it matches the access to potable water that most non- slum residents in other areas of the city receive. By contrast, in Mohammed Nagar neighborhood of Bholakpur, HMWSSB only supplies households with water service for one hour every other day. Residents deem this level of service inadequate and have taken mild steps to lobby the agency to improve this service, although this is not the

neighborhood's top service priority. Meanwhile, in the Anna Nagar locality of Rasoolpura, HMWSSB only provides service once every 15 days. The need for improvement here is urgent and residents have taken numerous steps to improve service. Still, residents of Anna Nagar have expressed that they would be happy with 2-3 hours of water provision every other day, far below the level of service received in Addagutta.

To some degree, residents and the BVM initiative allow government agencies to both strategically dictate the scope of services and to under-deliver on their promises. Seen from a survival perspective, slum dwellers are rational to revise their claims to be modest in the short term. Moreover, Indian government agencies serially over-promise on their remits, even above what they could deliver with minimal corruption, so efforts to hold them to even a portion of their remits are actually quite ambitious. I more fully explain the relationship between pursuing practical and strategic aims, with specific respect to the BVM, in a separate study. In short, the relationship between incremental service progress and long-term transformation in slums is not antithetical (Silver, 2014).

The concept of collective basic service security proposed in this paper reflects an imperfect world, but one in which purposeful action from stakeholders can yield improvement. It builds on seminal conceptual frameworks for understanding how low-income individuals, households and communities leverage strategies to redress service deficits, which are more flexible than simple notions of binary access (Mehta, 2014). Sen's capabilities framework identifies complex obstacles to basic service security while the vulnerabilities framework posited by Moser (1998) and the capital assets framework suggested by Rakodi (1999) outline household strategies to secure services.

Sen argues that standards of well-being should focus on the capability to function rather than static levels of goods or services (1999). Applying this to the context of collective service provision, focusing on the presence of existing service levels does not tell us what a community can do with the services provided or whether it has the leverage to alter the status quo. Moser

similarly develops a five-fold asset vulnerability framework for evaluating the well-being of low-income households, but more positively focuses on what low income actors at a given scale (including communities) have rather than what they lack (1998). Echoing sites and services programs historically implemented for slum residents, Moser is more interested in enabling urban low income actors' own creative efforts than proposing that alternative providers fill residents' passive service deficiencies. Rakodi explicitly builds on the ideas of Moser to develop a livelihood strategies framework that explains household reactions to poverty and deprivation (1999). She outlines how six different types of capital can be used to secure a livelihood; decisions by households to employ particular strategies are analogous to allocation choices in portfolio management.

Direct application of the capabilities, vulnerabilities, or capital assets frameworks to collective service needs in the study areas is possible. However, the term collective basic service security is more descriptive of the framework outlined in this study. Collective security emphasizes the interrelated nature of service needs and focus on strategies which improve services for neighborhoods or entire settlements, rather than individuals or households.

Data and Methods

This study relies on two main sources of information: peer-reviewed scholarship and primary data from fieldwork conducted in Hyderabad, India. To build the typology of strategies to improve collective basic service security, I extensively reviewed and synthesized the conceptual literature on frameworks for urban households to secure basic services in LMICs. I also identified empirical studies from disparate literatures that propose or assess standalone strategies to secure service access in LMICs. In addition to extensively reviewing the secondary literature, I collected primary data for this study via fieldwork conducted in Hyderabad in 2013-2014. Over the course of two years, with the support of SaciWATERS staff, I conducted numerous site visits to each of the study areas, including transect walks and attendance at sub-

slum, slum-wide and all-slum meetings associated with the BVM program. To describe basic service history and current conditions, I also rely on Citizens First program data and media files, maintained by local BVM groups and SaciWATERs project staff, over the period 2010-2014.

To corroborate my observations and analysis of primary program documents for this study, I conducted semi-structured interviews with 26 individuals. These individuals included all SaciWATERs staff and SPD staff (5), BVM conveners in each informal settlement (4), locality leaders in each sub-slum community (9), female non-leader slum residents (5) and representatives from other NGOs and government officials (3). These interviews were supplemented by numerous informal conversations with SaciWATERs staff and the conveners. To further understand basic service challenges, socioeconomic status and civic awareness in these communities, I designed a survey of 789 households in the three core slums involved in the Citizens First program. While I more fully analyze this data in a separate study to predict household participation in the BVM, results from the data are also used here to illustrate trends in basic service deficits across the areas.

This study develops a typology that reorients collective service access strategies with reference to the extent of pressure they exert on the local state to improve service provision.³⁰ Typologies do not simply list phenomena; they provide a parsimonious, categorical framework for describing complex mechanisms (Doty and Glick, 1994). They are also distinguished from more generic forms of classification in their multi-dimensionality and theoretical motivation (Bailey, 1994). The research approach combines deductive and inductive approaches in the sense that the typology developed re-conceptualizes the range of existing categories of strategies, but the study also proposes new categories based on primary data collection.

³⁰ There are few scholars who argue that the state should not be the primary provider of basic services (for instance, see Lee, Walter-Drop and Wiesel, 2014).

The Spectrum of Collective Strategies

While communities such as those in the study areas face profound obstacles to collective basic service security, they also have agency to employ strategies that can improve their security. When the local state does not provide an adequate level of basic services to low-income communities, the literature across LMICs suggests a wide range of strategies to improve collective service security, from directly challenging or ignoring the state to completely bypassing it. Given the partial solution presented by each of the service provision strategies described above, it is unrealistic to assume that communities can or should employ a single strategy. Consequently, it is also unrealistic to assume that strategies will be employed in a way that allows for easy causal determination by researchers.

In the interest of an integrated and empirically realistic approach, I outline the full range of strategies proposed across multiple literatures, and draw on examples from the study areas to demonstrate how these strategies work and interact in more detail. This typology contributes to existing scholarship at a minimum simply by organizing strategies that have been documented in a piecemeal fashion previously. More than simply listing strategies, however, I provide direction for future research and policy by focusing on strategies which can be employed collectively, and by organizing the strategies with respect to the amount of pressure they ultimately place on the local state to provide services. Table 6 summarizes the strategies and examples of their application in Hyderabad.³¹

³¹ Although rarely discussed in the context of service provision, local exit is a viable strategy for households to improve services and puts the least pressure on the state. Tiebout famously conceptualized households as unconstrained 'voter-consumers' who choose their residential location based on the bundles of services which different neighbourhoods or municipalities offer (1956). More practically with reference to basic services among slum residents, Hirschmann argued that urban residents have the option to voice their concerns, express loyalty or 'exit' (1970). I explore the motivations of slum residents with respect to Hirschmann's typology in a separate study. Other scholars, however argue more pessimistically that potential residents cannot easily 'exit' from their existing locations, especially in slums. Bardhan argues that residents of urban areas in LMICs do not have freedom of choice in where they locate, nor do they practically dictate the bundle of services that municipalities provide (2004). In the study areas, data is not available to directly measure the extent of exit as a household strategy to improve service security, given that only existing residents were interviewed. However, the baseline survey shows that the average length of stay in current residence was well over 20 years. At the same time, nearly two-thirds of residents expressed that they had seriously considered leaving their residence due to poor service access. The combination of long tenure and high dissatisfaction suggests that households' ability to move to an area with better access was constrained, and this finding is supported by qualitative interviews with residents. In any case, since exit involves the relocation of

Table 6. Typology of Collective Strategies with Reference to Pressure Placed on the State to Reform

<i>Source of Service Improvement</i>	<i>Mechanism</i>	<i>Application in Study Areas</i>
<u>Little to no pressure to reform: Bypassing the state</u>		
NGOs	Mimicking the functions of the state, relying on external capacity	Besides the BVM, NGO involvement in service provision is deep but not spread
Self-reliance	Mimicking the functions of the state, relying on internal capacity	Not employed
Social business	Relying on external capacity, but with some aim to social service function	Only in very limited fashion for healthcare in one slum
Private vendors	Relying on external, only profit incentive	Present in limited fashion for water, but not other sources
<u>Low and indirect pressure for reform: Engaging the state on its own terms</u>		
Local co-production	Helping government agencies provide services or providing information to the government regarding service needs	At the initial stages of improving a particular service
Voting behavior	Basic faith in the state implied, but certain politicians not attuned to basic service needs are voted out	Two thirds of residents indicate they vote on basic service issues
<u>Medium to high pressure: Changing the choice architecture of the state</u>		
Medium to high pressure, indirect	Complaints about lack of information or service are made but direct request to government for improved service is not	Strategies employed fairly routinely are media reports (monthly) and RTI filings and protest (several times a year)
Medium to high pressure, direct	Complaints about lack of service and details regarding requested are made directly to relevant government agency, some with threat of legal reprisal	Strategies employed very routinely is representations (weekly or even daily) and very rarely are Lokayukta/Public Interest Litigation

individual residents away from their existing communities, it is excluded from the typology of collective strategies outlined here.

Moreover, I do not include illicit strategies to obtain services. For instance, in the slum of Rocinha in Rio de Janeiro, neighborhoods routinely make illicit connections to the public electricity grid to secure power service with the full knowledge of city officials (Neuwirth, 2004). Of course, advocating for illicit methods of obtaining services is not ideal, but represents a better scenario for livelihoods than not obtaining services at all.

There are two caveats to this typology. First, when discussing collective strategies, I do not discount the difficulty of organizing and sustaining collective action. In a separate paper, I explain how households in low-income, urban housing settlements are incentivized (or not) to participate in collective action, using the example of the BVM. For the purpose of this study, however, I assume rather than show proofs that urban collective action is possible. Moreover, by focusing on strategies that slum communities can employ to improve their own conditions, I am not attempting to ignore or downgrade the potential for 'top down' state reform, which affects local government agencies and improves basic service conditions for slum dwellers. Indeed, top down reform should be pursued by policy makers and advocates simultaneously with the encouragement of 'bottom up' efforts (Joshi, 2013). Accordingly, before discussing non state-led strategies, it is important to acknowledge that endogenous local state reform remains the most direct and sustainable means for slum communities to secure collective basic service security. In the ideal long run, the local state would increasingly take on service provision responsibilities that would not require prompting from local communities. Minimal exertion would be necessary by residents to ensure service security; communities could rely solely on institutionalized lines of grievance redressal or via face-to-face interactions with government workers already presently working in their neighborhoods. This typology of strategies to secure services would become obsolete in the day to day lives of slum dwellers and their employment would be reserved for emergencies, much as they are for most urban dwellers.

When local public sector agencies are effective in providing basic services, there is no need for alternative providers. Equally important, the state provides a greater scope for accountability and dependability than for non-public providers or community leaders (Grindle, 2003/2004). There are numerous examples of endogenous, improved urban public service provision to low-income neighborhoods in the literature. For instance, internal governance reforms have led to drastic water service improvements by the public sector in diverse contexts, such as Pnomh Penh, Cambodia and Porto Alegre, Brazil (Biswas and Tortajada, 2010; Odete

and Cordeiro, 2003; ADB, 2010). The empirical literature, however, remains littered with many more cases of incomplete reform or inactivity than success. Accordingly, my focus in this research is on circumstances in the short term where the local state is either not experiencing top down pressure to improve services, is unresponsive to pressure, or where reforms are not occurring quickly enough to address short-term needs.

There also appears to be little chance of substantial reform or improvement in public sector provision of basic services to the study areas in Hyderabad in the near future. As I detail in a separate paper, since the 1980s, the public sector in Hyderabad has devoted less attention to improving slum conditions. According to some, the neglect shown to enhancing service provision has resulted from the hollowing out of the local institutions that are designated to serve the slums (Maringanti, 2014). The public administration in Hyderabad has also experienced substantial exogenous turmoil in recent years, including the management of the technical complexities of the splitting of the state, Andhra Pradesh, of which Hyderabad was the capital. Residents of the study areas echo broader reports that the political and administrative change associated with the split has led to less stability in engagement with particular civil servants (New Indian Express, 2014). While the ruling party of the new Telangana state has promised to overhaul and split the GHMC with the goal of improving service provision, these plans are generally viewed as ill-advised and their potential effect is in any case unclear (Mahesh, 2014). In short, the hope is slim for short-term reform and service improvements via the public sector in Hyderabad. Accordingly, it appears necessary in the short term for slum residents to use whatever means are most expedient to improve collective service security.

Little to No Pressure to Reform: Bypassing the State

Much of the literature on basic service access in slums has emphasized approaches that directly bypass the state. Means to improve service access which bypass the state include relying on private markets, NGOs, social business models or own local resources. In the context

of higher income countries, alternative service providers can sometimes compete with local public agencies for revenue and thus encourage or force urban public sector reforms (Shirley and Walsh, 2001). In LMICs, however, the local urban state rarely responds to pressure via market capture, and thus slum communities must rely on these alternative service avenues in perpetuity.

Private Sector

In theory, where public services do not adequately satisfy resident demand, private sector providers may enter the market and compete with the public provider on a small scale. The most robust literature on private providers of basic services for slum communities focuses on water markets maintained by individual or corporatized vendors. There is substantial conflict over whether private vendors play a positive or negative role in ensuring basic service security. In a global survey of urban water vending activity, Kjellen and McGranahan maintain that water vending is not ideal (2006). In their view, vendors act as parasites by siphoning water from vulnerable weak public delivery systems. Vended prices are also often much higher than public water (Kimani-Murage and Ngindu, 2007) due to real shortages of private supply or the collusion of cartels.

While vending in slums is typically frowned upon or banned by public sector providers via barriers to entry, vendors only thrive when the public sector fails to deliver. Vendors must earn the trust of local neighborhoods to stay in business, and may better serve the daily budgeting decisions made by slum households than public utilities (for instance, see Collins et al., 2009). Whittington et al. first demonstrated the utility of water vending to low-income communities in a willingness to pay study conducted in Ukunda, Kenya (Whittington, Lauria and Mu, 1989; Whittington et al., 1990). While prices were high and represented a significant proportion of household income (households spend nine percent of income on vended water),

vendors did not make a large profit, and their service substituted for inadequate public provision of water.

Private water tankers are ubiquitous in Hyderabad, where neighborhoods across the socioeconomic spectrum suffer from inadequate public provision (TOI, 2012; Soares, 2015). Despite this situation and the clear crisis of water access in the slums, residents reported surprisingly little reliance on vending activity. Most slum communities only resorted to reliance on private tankers during the dry season in areas where water did not come through the public pipes for multiple days. There are at least three reasons for this lack of reliance. First, the slums have a minimal level of publicly-provided infrastructure in place, whereas the tanker economy is more robust in peri-urban communities with no formal recognition and no government infrastructure (Prakash, 2014). Second, the extreme density of the study area makes it impractical for private tankers to provide household service within slums (Ramoji, 2014). Finally, there appear to be substantial resource-sharing economies in the slums. In Anna Nagar, water comes through the HMWSSB pipes every 15 days during the dry season. To address this problem, however, residents state that they ration their supply and share water if anyone runs out.

As opposed to other strategies that apply to a range of basic services, the demand for private provision, which enhances security of access to basic services other than water, seems to be close to nil in the study areas. Whereas the drinking water is absolutely necessary for survival, access to other services can be ignored or delayed indefinitely in times of scarcity. Based on interviews, collective desire for contracting private sewage managers (Solo, 1999) or waste collectors (Hayami, Dikshit and Mishra, 2006) is not sufficient to entice private suppliers to provide these services, despite anemic public supply. In the face of GHMC refusal to provide door to door solid waste collection, the local BVM platform in Ambedkar Nagar settlement has hired a resident to perform this service. However, the lack of a critical mass of residents'

willingness to pay a market rate for the service is an obstacle to this private market's sustainability in the long term, not a lack of willing vendors.

NGOs

Even when they function to supply part of a market, private providers tend to under-supply the services needed for slum communities to experience security. In cases of state and market failure, much of the literature turns to the role of organized civil society groups, or non-governmental organizations (NGOs), to fill the service gap. NGOs that provide basic services range from large international organizations to small community based groups. Whereas public and private service providers have long been villainized in their relationship to slum communities, reliance on NGOs to meet basic service needs has only more recently been viewed as problematic. When NGOs take on the core responsibility of providing services, they often struggle to reconcile this obligation with donor funding cycles and unstable relationships with local government agencies and communities (Allaby and Preston, 2005). Accordingly, Mitlin asserts that NGOs are better suited as watchdogs or advocates for basic service access for residents than as direct service providers (2001), and Batley suggests that NGOs more effectively function as co-producers or mediators between government and slum communities (2006).³²

There is a range of NGO activity to enhance collective basic service security in the study areas. The creation and capacity building of Citizens First program has taken place only with the support of NGOs, both in terms of funding and implementation. While the first phase of the program was overseen by a Hyderabad-specific NGO named Joint Action for Water, the funder WaterAid insisted that administration of the program change when the first funding cycle concluded. SaciWATERS, which supports research and activism across South Asia, and SPD, which is limited to Hyderabad, now jointly support the program. While the turnover in

³² On the other hand, Gopakumar notes that government agencies will sometimes contact or even contract NGOs to carry out basic service improvements (2014).

management was pursued in order to comply with international best practice, it also resulted in a several-month delay of activities in the slum areas to improve service provision.

On the other hand, many NGO efforts in the study areas, and in the literature more broadly, appear ad hoc and short-term. The experience of NGOs in Rasoolpura settlement illustrates this range of commitment. The Indian NGO Bhumi selected Rasoolpura settlement as a site to improve education, livelihood and water and sanitation services based on the long-term potential to partner with local leaders (Bhumi, 2013). On a more ad hoc basis, the local NGO Sittoor coordinated with the Secunderabad Cantonment Board (SCB) in 2007 to subsidize the construction of water tap and toilet connections in the Anna Nagar locality of Rasoolpura. This was one-off rather than ongoing assistance, but substantially improved infrastructure quality. Less promisingly, an unnamed international NGO visited Rasoolpura in 2013 and donated very sophisticated water quality filters to 30 households in Gun Huts Bazaar locality, but provided no further support to these households and no other assistance to other households in the neighborhood or the slum as a whole.

Social Business

Social businesses represent the final category of external means to enhance basic service security in the slums. Social businesses are designed to provide goods or services to underserved communities without the goal of profit (as in private markets), but also while avoiding reliance on external funding (as NGOs do). Social businesses are distinguished from the more general category of social entrepreneurs who operate for-profit but also have a 'social' aim. They are also distinct from the realm of corporate social responsibility (CSR), where large for-profit entities typically pursue token social aims for tax and public relations purposes (Yunus, Sibieude and Lesueur, 2012). Social businesses may be initiated by humanitarian-minded individuals lacking substantial capital, business entrepreneurs seeking a new market, or multi-national corporations attempting to repair their public image and break into a new market. The

application of social business to service delivery is still rare but has proven essential to several low-income communities that suffered from inadequate public provision (for instance, see Pierce, 2013).

In the study areas, the role of social businesses in collective basic service security appears minimal. However one local community organization, the Miriam Health Clinic, has located in Mohammed Nagar area of Bholakpur in the absence of a government health clinic and started a small social business that charges a nominal price for basic health care services. The prospect for further social business expansion in healthcare appears necessary given the GHMC's failure to provide nominally-required *angawadis*—local healthcare centers—throughout the slums. Waste management may be another potential entry point for social business, although at present both the demand and supply for this service is nascent. As with NGOs, slum residents cannot count on social businesses to meet all of their basic service needs, but they can represent a viable means to fill part of the gap, particularly if they are operated by local residents.

Local Resources

Despite all of the options for obtaining service security from a mix of the public, private, non-profit or hybrid sectors, the idea of self-organization and production of services within slum communities in urban areas remains a compelling idea (Cowden, Mihelcic and Watkins, 2006). Self-management of water service, for instance, can be viable if the resources necessary for the production of services are local, freely available and renewable (see Bakker, 2009). Examples of successful self-management, however, are more prominent in the rural than urban water literature.³³ While there is ample evidence for the success of collective action in demanding and

³³ Ironically, where self-management has been 'scaled up,' it has been accomplished with external institutional support, as in the case of the national implementation of the Yacupaj project in Bolivia. This program largely relied on the community to self-manage water distribution after physical infrastructure systems were built by government and donors (Sara et al., 1996). Wade suggests that institutional and environmental factors make water self-management even more problematic for communities in South Asia (1988).

receiving better basic services in the study areas, there is little prospect of pure self-management of resources and distribution of services given the lack of raw resources available within communities. In the study areas, the only prospect for self-production is raw water production during the monsoon season. The provision of all other basic services needed by slum residents requires an investment of resources and technology that is beyond the scope of the communities themselves to provide, and again underlines the fundamental long-term dependence of slum communities on the public sector to ensure basic service security.

Low or Indirect Pressure for Reform: Engaging the State on its Own Terms

The first group of strategies completely bypasses the state and thus applies no pressure on local government agencies to improve service security for slum residents. By contrast, a second group of interventions suggests an implicit belief in the state to deliver services, but engages local agencies on their own terms. These strategies may place pressure on individual politicians or bureaucrats, but the structure of local government service delivery itself avoids pressure to reform. Such low or indirect pressure strategies include local co-production and voting in government elections.

Co-production with the Local State

Urban co-production³⁴ occurs when households, communities or local interest groups assist the local government in providing basic services (Levine, 1984). The approach implies both a basic belief in the local government's intentions and a recognition of its limitations. Residents volunteer their time and resources to carry out part of the local government's role and

³⁴ The concept of co-production to enhance basic service provision has been extended transnationally (for instance, see Duquette-Rury, 2014). The importance of direct transnational remittances to sending country economies has long been understood and promoted as a strategy to ensure sending country household livelihood security. Recently, sending country governments have designed programs to improve local basic service security, which are funded by households who have emigrated to another country. This type of partnership has been labelled transnational coproduction and has been institutionalized in localities across at least ten different countries, but not yet in India.

thus reduce the demands for service delivery on the state. In the context of LMICs, Joshi and Moore define institutionalized co-production as the delivery of public services through longstanding relationships between the state and citizen groups (2004). They argue that such partnerships as the Citizen Police Liaison Committee in Karachi, Pakistan and the Ghana Public Road Transportation Union should not be dismissed as suboptimal service delivery forms. These co-production partnerships draw on vastly different levels of citizen involvement to improve service outcomes in different political contexts and technical sectors. On the other hand, Isham and Kakkonen assess coproduction as a model for urban neighborhoods in LMICs to secure water and sanitation services, but remain skeptical regarding its effectiveness because of the high time commitments demanded from community members (1998). Further, the success of collective action in co-production remains dependent on the quality of both public service institutions and locally-based institutions, without transforming the capacity of either party.

There is ample evidence of both physical and informational co-production with government agencies in the study areas. For instance, a partnership between the HMWSSB and residents improved collective water service security for 200 households in the A-section locality of Addagutta. While HMWSSB engineers identified a borehole location, supplied a pump, and supplied two water mains, the trenches for the mains were dug by a rotating group of residents over a period of 10-15 days. The public agency manages the infrastructure on an ongoing basis and charges the standard rate for service. In short, the community performed tasks in the government's remit, and received a short-term infrastructure upgrade.

Since data gathering to inform basic service provision is often viewed as the responsibility of the state, resident involvement in this function should also be construed as co-production of government services. Providing information to the government also gives residents a more persuasive platform to call for better service delivery from public agencies. This type of co-production has been demonstrated in urban India by the Public Affairs Centre in

Bangalore. The centre relies on data collection performed by local residents and uses this information to publish citizen report cards on public services, which in turn elicit public sector improvements (PAC, 2010).

Systematic, informational co-production has also occurred with regard to water quality testing in Bholakpur settlement—and to some extent in Addagutta and Rasoolpura. In each slum, resident volunteers began testing water quality with chlorine kits and initial training provided by the Citizens First program; they then routinely showed the results to HMWSSB officials. Over time, the agency acknowledged that community testing was accurate. Consistent co-production lasted for several years before the agency took on responsibility for testing quality four times a month and maintaining a separate file for BVM quality complaints. Since government service remains imperfect, community members still co-produce by testing quality on occasion. In other words, slum neighborhoods originally engaged in physical co-production, but the government has largely, if not fully, taken on this role over time to lessen the burden on residents.

Voting Behavior

In theory, residents of democratic countries that hold free and fair elections may also vote to hold incumbent or prospective candidates in public office accountable to the track record of basic service delivery to the slum area or neighborhood that falls under the politician's influence. In practice, slum residents often find it difficult to hold politicians responsible when information regarding public official performance is hard to obtain, and politicians utilize the excuse that the true culprits for poor service are government bureaucrats (Besley, 2006). Since basic service access is one of many pressing dimensions which residents must factor into their local vote choices, the general lack of correlation between voting behaviour and basic service outcomes is unsurprising (Przeworski, Stokes, and Manin, 1999). Research from Mexico shows that voters do not typically hold officials accountable for basic service insecurity through the

vote, but rather through direct protest (Moreno-Jaimes, 2007). It is unclear to what extent urban Indian dwellers expect or demand improvements from their elected officials (Kondo, 2007; Munshi and Rosenzweig, 2008). Some scholars maintain that despite the presence of open elections in India, voting is functionally non-democratic as candidates are chosen by patrons rather than resident preferences based on local issues (Gupta, 2004).

In Hyderabad-area slums, residents vote in official elections at higher rates than the general population, making this mechanism to improve collective service security potentially promising (Kar, 2014a). While some assert that slum votes are cast along communal lines rather than a strategic policy basis (Jairath, 2013), baseline survey data of residents in the three main study areas shows that nearly two-thirds of residents cast their vote in local elections at least in part based on WASH conditions (BVM Survey 2014). In the 2014 Lok Sabha election, local BVM units also successfully lobbied politicians to incorporate WASH into their policy agendas.

A recent field experiment on accountability in Delhi also suggests that information gathering and dissemination regarding local politician performance, if performed by slum localities, may tighten the link between voting and service outcomes. Banerjee et al. distributed mid-term and pre-election newspaper report cards with information on municipal councillors' spending decisions and committee attendance to slum dwellers (2014). Councillors reacted to this enhanced resident knowledge by increasing spending on 'more slum-relevant categories'; political parties also more commonly nominated incumbent councillors who received favorable report cards.³⁵ In other words, voting alone may be ineffective at improving basic service security, but fully-informed voting can make a sizeable improvement to collective service security.

³⁵ When information was provided only to councilors and not slum residents, the effect on their behavior was minimal.

Medium to High Pressure: Changing the Choice Architecture of the State

In cases where the local government is unwilling or unresponsive to indirect resident attempts to improve service—such as co-production or voting— more direct or confrontational measures must be taken by slum communities to influence the status quo of service provision by the state. I apply the concept originally proposed by behavioral economists Thaler and Sunstein of changing the choice architecture to the local state context (2008). Strategies that change choice architecture provide space for urban residents to obtain better service provision from local government by altering the incentives of public officials or entire agencies. I discuss these strategies in terms of the amount of pressure they put on the local state to reform its own practices. Pressure can range from simply making it more convenient, more politically expedient, or legally necessary for the government to provide better basic services. As Joshi argues, pressure mechanisms that can trigger strong sanctions are more likely to improve service responsiveness by providers (2013). The greatest opportunity for changing the choice architecture of the local state will be present among public sectors that are nominally open, democratic and progressive, such as in India. The exact engagement strategies employed depend more heavily on context than no-pressure or low-pressure mechanisms because they require intimate knowledge of the local state. The strategies employed in the study areas, however, expand the potential means of pressure techniques currently explicated in the literature.

Medium to High Pressure, Indirect

The Right to Information Act

The Right to Information Act (RTIA), has been much lauded as a tool for Indian citizens to improve government accountability since it was passed by the national parliament in 2005. The act enables citizens to request and receive information on any government activity in writing from any public agency within thirty days for a cost of only R10 (US\$0.16). Government

agencies can only deny an RTIA request if the information requested affects national security. In theory, slum dwellers filing an RTIA petition can change the choice architecture of the relevant public agency by forcing the agency to disclose information that was formerly either hidden or inaccessible. The mechanism is indirect as it cannot be used to directly request service improvements, but does effectively notify an official or agency that another means of addressing a service access gap is likely forthcoming. The agency then must decide whether to try to ignore the request, provide the minimal requested information or proactively address the underlying service issue.

To date, however, the ability of individuals in urban areas to scale up service delivery concerns via the RTIA has generally looked better on paper than it has functioned in practice due to large delay times, obfuscation and demand for additional funds by government agencies (Panagirya, 2008; TOI, 2014c). Filing RTIA requests can also present a physical security risk, as evidenced by recent incidents in Telangana state (TOI, 2014b). More promisingly, Peiashkin and Pinto conducted a field experiment on access to ration cards among slum dwellers in New Delhi using India's RTIA filings as the experimental treatment. They found that the effect of filing an RTIA on receiving this basic service is almost as large as offering a bribe to a public servant. On average, individuals who bribed public servants got ration cards within two and a half months, those who filed an RTIA within four months, and those who merely requested a ration card did not receive one for a year or more (2010).

Filing RTIA requests is a common strategy to improve basic service provision in the context of the study areas. The employment of this strategy has been possible only through the collective mechanism of the BVM. Awareness of the RTIA among all slum dwellers is very low; only seven percent of households had heard of it in 2014, much less knew how to file a petition (BVM Survey, 2014). BVM groups in each slum, on the other hand, received specific training on how to file an RTIA petition from implementing NGOs. Across the four slum areas, as least fifty

RTIA petitions have been filed, primarily for concerns regarding collective infrastructure but also sometimes as joint requests for household ration cards and water connections.

I analyzed 30 RTIA petitions filed by the Bholakpur and Rasoolpura BVM groups to various public agencies in the period 2009-2014. The petitioned public agencies demonstrated a high degree of non-compliance with the act. The average response time was much longer than the guideline of thirty days, and only 10% of RTIA requests received a response within this timeframe. About half of the time repeated petitions received no reply. In the most blatant attempt to undermine resident concerns, the SCB rebuffed multiple RTI claims filed on behalf of residents of the Anna Nagar in Rasoolpura to receive more information on reliable water service; the SCB claimed that this information was a matter of national security. (While the neighbourhood of Anna Nagar does border a defense area, this does not explain why information regarding water reliability could not be disclosed).

At the same time, the information derived from the requests to which public agencies did respond is used to apply higher-pressure, direct tactics to improve service security. In Rasoolpura, information regarding the SCB's spatial planning and spending on *nalas* informs a multi-pronged effort to compel the agency to cover the main drainage channel that bisects the slum. Moreover, the BVM in Bholakpur has used RTIA requests to monitor spending from a special fund for water infrastructure managed by the HMWSSB, which was originally sanctioned by the chief minister of Andhra Pradesh following the 2009 tragedy. Precise knowledge of the extent of funds spent enables residents involved in the BVM to leverage the agency to spend the remaining resources on current WASH service needs.

Media Reports

Another indirect but relatively high pressure method that residents of slum communities may employ is to provide evidence of insufficient service to influential third parties such as media members. The Indian press does not hesitate to publish reports of government failure or

neglect because such reports do not typically elicit reprisals or sanctions, as they do in other countries. Negative press reports often reflect poorly on specific bureaucrats, politicians or agencies. While some officials or agencies appear immune to criticism, a negative press report can materially damage individuals' reputation or even their career prospects. In terms of choice architecture, a prominent or virulent press report can effectively force an official or agency to take notice of and address a service provision gap they had previously ignored.

The relationship between freedom of press reporting on public sector performance and levels of public service provision has been demonstrated at the national scale (for instance, see Brunetti and Weder, 2003) and at the state level within India (Besley and Burgess, 2001). Although media reporting is ubiquitous, little if any scholarly work has analyzed how local residents feed information on basic service disparities to the media, as well as the effect of this pressure on politicians and bureaucrats (Joshi, 2013). As with RTIA petitions, in the study areas this strategy is largely employed collectively through the BVM. Media members are much more likely to trust and report a story if it is sourced by an organization and affects a larger number of people.

In the slum of Rasoolpura alone, over the period 2010-2014, the BVM informed the media of basic service deficiencies that resulted in at least 130 distinct articles in ten different news sources. (This figure likely under-counts the true number of stories, as it only captures those stories saved via hard copy in the BVM office). Outlets ranged from the online Telugu *E-nadu* to the *Deccan Chronicle*, an English daily newspaper read widely throughout central-south India. BVM members in Bholakpur even more innovatively utilize media; they maintain a Facebook page with nearly daily updates, including many pictures, regarding progress on basic service conditions in the slum. According to BVM members, the 'friends' of the Bholakpur BVM on Facebook include the local member of the national assembly and the municipal corporator (Chand, 2014).

The response to media reports usually comes directly from government agencies or politicians who want to address and quiet concern regarding the publicized issue, rather than indirectly stemming from public outcry about the issue from the general citizenry. In contrast to the long response time common to filing an RTIA petition, shamed government workers or representatives often show up in the slums the day after news reports to attempt to resolve the service provision issue, or at least placate residents so that the issue is not kept in the public eye (Kar, 2014a).

Bringing basic service deficiencies to the attention of the media is not guaranteed to ensure security. Despite the freedom of the press there remains bias; some members of the media are hesitant to report on certain topics or report stories that reflect poorly on certain public figures (Ramoji, 2014). Moreover, media reports are effective at resolving one-off problems or publicizing long standing issues that will not be resolved by a single story; they are not effective for solving long-term crises. Still, the publication of slum dwellers' service deficits boosts the validity of their claims and their capacity to address them holistically.

Public Demonstrations

In addition to utilizing the RTIA and media outlets, slum communities may negatively engage through public demonstrations or *dharnas* (public sit-ins). In contrast to the role of the media, public demonstrations are often assumed as a primary strategy for low income urban residents to raise their concerns, both in the literature and in the popular imagination. Demonstrating is also the most adversarial and precarious tactic used to change the choice architecture of the local state. The government is quickly faced with the choice of ignoring a protest, repressing it, hoping concerns die down without a response or providing some direct placation to protesters.

Alexander documents how residents of informal settlements in South Africa have repeatedly staged local protests regarding unacceptable public service provision aimed at

political power brokers. This adversarial activity has brought about partially-improved service conditions (2010). Even in contexts of fairly extensive civil society repression such as in China, the opportunity for local communities to demand service improvements from the public sector may still be present as long as demonstrations do not expand to broader issues of representation (Ho, 2001). In more repressive regimes, even a hint of protest may engender extreme risk to participants; demonstrations are likely to be worth the risk only when based on a broader set of issues and rights than service security.

Evidence regarding the efficacy of public demonstrations in relation to service security in India is mixed. Despite their ubiquity in New Delhi, Kumar contends that slum dwellers' public demonstrations regarding services are overshadowed by overtly political protests or demonstrations regarding current events, and thus draw little response from public officials (2008). Kumar also suggests that the relationship between slum dwellers and the media may be a key intervening variable determining the 'success' of local public demonstrations, as the media filters the stories that reach the public eye. On the other hand, Gopakumar documents how intra-city protests organized by the Karnataka Slum Dwellers Federation regarding water service security concerns in Bangalore have quickly elicited a positive response from local and regional politicians (2014).

In the study areas in Hyderabad, BVM groups usually organize public demonstrations as a last resort³⁶ after other, less negative means of grievance redressal are exhausted. Demonstrations are viewed as an unsustainable means of engaging with the government in the long-term, as they are adversarial and lose effectiveness if employed frequently. In fact, the threat of a demonstration or *dharna* is used more often than they are actually staged. Demonstrations can draw between 500-1000 slum residents quite easily as they often draw on networks of women's self-help groups present in the slums. As an example, after unsuccessful

³⁶ Very rarely, demonstrations are planned and carried out as part of a primary, premeditated strategy. For instance, slum dwellers from each of the BVM communities gathered collectively in Bholakpur on World Toilet Day in 2014 for an informational event and public demonstration, where they demanded adequate provision of public toilets from the HMWSSB. This event was covered by multiple press sources.

engagement efforts with GHMC officials over a period of two years while community halls were occupied by land grabbers associated with local politicians, residents of Addagutta staged a *dharna* against the land grabs and appropriation of public buildings. The sit-in was successful at finally halting this activity. By contrast, residents of Bholakpur, with support of BVM members from the other study areas, staged an impromptu *dharna* at the GHMC office in August 2014. This protest also occurred only after a range of positive and negative engagement strategies were employed with the government over several years. While the *dharna* was successful at eliciting a promise from the GHMC zonal commissioner to resolve the issue, construction had not begun several months later.

Medium to High Pressure, Direct

Representations

The BVM's primary strategy is to engage directly with government agencies to improve collective basic service security. There are a host of other local initiatives to improve the direct engagement of urban residents to local governments, particularly in India. For instance, ward committees were institutionalized to ensure that the service needs and preferences of residents are solicited, aggregated and communicated to zonal or city level officials. De Wit, Nainan and Palnitkar (2008), in a review of ward committee performance across major cities in India, and Ghosh and Mitra, in a review of committee performance in urban areas of West Bengal (2008), found them to be completely non-inclusive at worst, and at best ineffective at meeting local needs. The situation is no different in Hyderabad. Moreover, e-governance mechanisms promise to improve accountability by enabling many residents to quickly and easily submit grievances to local agencies (Muralidharan, Niehaus and Sukhtankar, 2014). Despite these reforms, however, the technology remains inaccessible to uneducated residents and the bulk of the public bureaucracy remains unresponsive to grievance claims, especially among slum dwellers (De Wit and Berner, 2009).

Given the failure of state-instituted direct grievance channels, the primary mechanism BVM groups employ to make formal requests to address grievances is a different strategy. BVM groups make ‘representations³⁷’ to local, state and national government agencies, most notably the Greater Hyderabad Municipal Corporation (GHMC), the Hyderabad Metropolitan Water Supply and Sewerage Board (HMWSSB) and, in the case of Rasoolpura, the Secunderabad Cantonment Board (SCB). The mechanism of representations involves aggregating the basic service concerns of local residents, putting these in writing, and filing formal requests for service upgrading with local government agencies via their formal concern channels. In short, this strategy involves learning local agency structure in detail and taking advantage of this knowledge.

For instance, in 2013, the GHMC instituted a weekly time period called *prajavani*, where officials from all agency offices must be present, field resident complaints from around the city (the queue of residents is ‘first come, first serve’), and are expected to redress complaints within their remit. When making representations to the GHMC, BVM groups often still obviate the centralized *prajavani* and make representations directly to line departments, particularly when an issue remains unaddressed for an extended period. A local BVM unit will file the same representation with a public agency every month or so over a period of several months before taking a more adversarial approach. According to local community leaders, representations are more successful than pre-BVM attempts to air service deficiencies to local government agencies. Because there is little transparency as to how public officials prioritize one service deficiency over another, the collective nature of the BVM helps to add weight to resident claims.

Table 7 shows the total number of representations made by BVM groups in the four slums over the period of 2010-August 2014 (the last available month), although we note that the BVM has only officially operated in Ambedkar Nagar since October 2013. Moreover, an emphasis on written representations was only instituted when SaciWATERs assumed

³⁷ See Paper 2 for more detail on the filing of representations.

administration of the Citizens First program. As these figures are derived from paper records, they almost certainly undercount the true number of representations.

Table 7. Representations by Slums, 2010-2014

<i>Slum area</i>	<i>Number</i>
Addagutta	152
Bholakpur	196
Rasoolpura	82
Ambedkar-Nagar *	70
Total	500

* Only recorded since October 2013 in this slum

The relationship between the number of representations filed and successful resolution of service deficits is difficult to parse. On average, the more challenging an issue is to resolve, the more representations will be filed regarding the issue. On the other hand, the more representations that are filed regarding an issue, holding all other factors constant, the more likely the issue is to be resolved.

The most immediately successful representations were one-off, short-term requests filed by BVM units to a range of government agencies. For instance, requests made to the GHMC to perform a special sweeping of streets in advance of Ramadan (localities in Bholakpur and Rasoolpura), to the public power provider to replace light bulbs and power lines (localities in Addagutta, Bholakpur and Banjara), and to the HMWSSB to address contaminated water (localities in Addagutta, Banjara and Bholakpur) were all quickly resolved. Other issues raised by slum residents, such the covering of nalas and provision of ration cards to eligible households, have seen more mixed success. Finally, despite repeated representations by BVM units, some issues have gone almost entirely unresolved. There has been little improvement in

school sanitation (in Bholakpur and Rasoolpura) or the construction of community halls/angawadis (in Addagutta, Bholakpur and Banjara).

Still, the potential for lasting change in basic service security embodied by representations should not be understated. For instance, in the Gun Huts Bazaar neighborhood of Rasoolpura, representations filed by residents over a period of nine months were ultimately successful in pressuring the SCB to devote 7-8 lakhs to cleaning up the local schoolyard, which was filled with trash and stagnant water, and to commit to regularly picking up waste in this area. This site's status as a trash dump "for the whole city" had lasted for 40 years, but it took less than a year of collective pressure to address the issue (Aiza, 2014).

Direct Legal Action

The most direct and aggressive tactic to improve service provision that low-income urban residents can pursue is legal action via the judicial system. A legally binding judgment compels public officials or agencies—by the legitimacy of the state—to fulfill service provision claims or face a penalty, typically a fine or criminal charge. This is clearly a high pressure tactic only available to citizens in fairly open societies. Obstacles to low-income communities using this tactic include the expertise needed to file and maintain legal claims, as well as pay legal fees. Moreover, despite the nominally neutral status of the judicial system, research from both South Africa and India has shown that legal claims made by slum dwellers for basic services are often delayed, dismissed arbitrarily, or receive adverse judgments in court (Mehta, 2005; Jairath, 2013).

In Hyderabad, public interest litigation (PIL) has proven to be successful in compelling local government agencies to better manage local water resources. The relevance of PIL to slum communities, however, is limited given its expense, and is thus normally reserved for very high profile cases. By contrast, the *Lok Ayukta* (literally translated 'appointed by the people') is an obscure and little-used mechanism that holds more promise for advancing service security.

Lok Ayukta is an anti-corruption, ombudsman organization instituted at the state level across India. This institution allows any resident to file a claim against a specific public official for only R180 (Lok Ayukta, 2010). Only state-level and local officials can be charged, and visual evidence of negligence is needed to successfully pursue a claim.

In August 2014, BVM participants in the slums received *pro bono* training on the process to file a *Lok Ayukta* claim from a local, activist lawyer. Resident lawyers also participate in both the Bholakpur and Addagutta BVM groups, who have the technical capacity to file *Lok Ayukta* claims. While this tactic has not yet been pursued by slum residents to improve service conditions, several communities have threatened to pursue this tactic if issues of service insecurity remain unaddressed. For instance, communities have mobilized around school sanitation deficiencies in Rasoolpura and the public toilets deficit in Bholakpur and have given government officials a deadline by which they will file a *Lok Ayukta* claim; this has incentivized officials to begin work on these issues. This tactic will likely be employed more frequently in the future.

Discussion of a Multifaceted Approach to Collective Service Improvement Strategies

Evidence from field research in Hyderabad confirms the argument made above, that multiple strategies are often utilized simultaneously by low-income communities suffering from collective, basic service insecurity. Because service needs often have pressing implications for health and livelihoods, the quickest routes to improve basic service security are often taken at the same time as more sustainable strategies are employed. From a policy standpoint, the most effective place for external intervention is in making low-income communities aware and enabling them to pursue a range of strategies via a platform such as the BVM, rather than promoting or compelling residents to pursue a single, favored strategy. Moreover, strategy utilization is dynamic rather than static. Some strategies may be obviously inappropriate or

infeasible in different contexts, and hybrids of the categories proposed in this typology are sure to emerge.

At the same time, some strategies should be encouraged over others. In the context of settlements such as the study areas in Hyderabad, a number of collective strategies have elicited improvements in basic service security. I argue that those strategies that directly aim to change the choice architecture of the local public agencies and their officials are the most worthwhile. These tactics are best at both addressing short-term service needs and enhancing the incentive of the public sector to enhance service provision in the long term. Strategies such as filing representations build institutional memory among BVM groups enabling them to increasingly monitor, document, and identify successful tactics to address service deficiency issues over time.

The steady pressure exerted via direct engagement also gradually alters the incentives of local public sector officials and entire agencies to provide longer-term solutions without constant community monitoring and lobbying (Ramoji, 2014). A broad body of empirical evidence documenting the long-term impact of community information gathering and monitoring of accountable public sector service provision is just emerging (for instance, see Nyqvist, de Walque and Svennson, 2014). Steady collective engagement with local public institutions, despite all its challenges, represents the best opportunity to address practical and strategic basic service needs.

Conclusion

This study synthesizes and re-orientates the disparate strategies proposed in the literature to ensure integrated basic service security among low-income, urban communities. Examples from fieldwork conducted over the course of the past two years in four slum settlements in Hyderabad, India illustrate how strategies interact in practice. Using these data sources, I develop a conceptual framework which organizes short-term service access strategies with

respect to the extent of pressure they exert on the state to improve service provision in the long-term. For settlements in cities where engagement with the local state is possible, I argue that those strategies which change the choice architecture of the state are the most promising to mediate the oft-cited tension between short-term and long-term service needs.

Future policy efforts to enhance collective basic service security across a range of insecure settlement types, whether initiated by local communities, NGOs, or government agencies, can utilize the typology developed in this paper to identify the strategies that are most relevant to their local context. In terms of future research, however, this study raises two issues that remain unanswered. First, while strategies to engage local state agencies have been explicated, addressing service deficiencies that require the response of multiple public agencies simultaneously remains a challenge for low-income resident groups. For instance, in Hyderabad collective strategies were much less likely to produce results if coordination between different scales of government was required. Moreover, while the range of collective strategies proposed is relevant to a range of local contexts, we know much less about how such service improvement strategies have been successfully employed in highly constrained political spaces. More effort must be allocated to developing successful engagement strategies with the local public sector in repressive regimes in order to truly realize the potential for basic service security for all.

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Chapter 4: Appendices

Appendix 1. Basti Vikas Manch Household Survey Instrument

Name of the respondent

Address of the respondent

I. Basic Respondent Characteristics

Sex

0-Female

1-Male

Social group of respondent

1-SC (Scheduled Caste)

2-ST (scheduled tribe)

3-OBC (Other Backward Caste)

4-Other

Socio-economic status

(Circle one if appropriate)

1-APL (Above poverty line)

2-BPL (Below poverty line)

3-Anthyodaya

Land Status

1-Owner

2-Renter

3-Squatter (anyone who does not officially own or rent)

How long have you lived in current household

II. Demographic Characteristics

S.No	Name	Sex	Age	Years of School	Marital Status	Income Earner (Y?N)	Occupation Sources
1							
2							
3							
4							
5							
6							
7							

Marital Status: 1-Married 2-Unmarried 3-Divorced 4-Widow 5-Living Separately

Year school: Ask number of years attended school/college.0=illiterate

III. Household Water Access

1. What are the main sources of drinking water for members of your household?

Numbers in order of volume of use (you can answer more than one):

1-In-Home tap (Manjeera water).....

2-Public tap (Manjeera water).....

3-Private bore well/ well (Ground water).....

4-Private tanker.....

5-Surface water.....

6-Public tanker.....

7-Neighbour.....

8-Others (Please Specify).....

1a. How many days of week and hours of day is Manjeera water available?

(Answer should indicate both hours of day and number of days per week)

1b. Does your use of water sources dry during any season? If so, list alternate ranking in parenthesis above

2. What is the main source of water used by your household for other purposes, such as cooking and hand washing?

Number in order of volume of use (you can answer more than one):

1. Manjeera water.....
2. Public Tap.....
3. Private borehole/well (ground water).....
4. Private tanker.....
5. Surface water.....
6. Others.....

2a. Does this vary during dry season? If so, list alternate ranking in parenthesis above

2b. [If they cook and wash indoors], where does the runoff from this activity go?

This response should be open-ended.

4. How much do you pay for water in one week? Rs.....
5. How long does it take to fetch water (total, 2way trek)? Minutes?

[Only ask this if it is not clear that they obtain their water nearby (within 50 meters)]

6. Who usually goes to this source to fetch the water for your household? Only ask this if it is not clear that they obtain their water nearby (within 50 meters)

- 1-Male adult
- 2-Female adult
- 3-Male child
- 4-Female child

7. Do you treat your water in any way to make it safer to drink?

- 0-No
- 1-Yes

8. What do you usually do to the water to make it safer to drink?

Respondent can answer more than one, but it is likely they will employ only one method:

- 0-Boil
- 1-Cloth/Hand Filter

2-Add homemade substance

3-Add purchased substance (eg: Chlorine) Specify

III. Household and Public Sanitation/Hygiene Perceptions

9. What kind of toilet facility do members of your household usually use?

Number in order of volume of use (you can answer more than one)

1-Indoor toilet with sewage disposal.....

2-Public shared toilet.....

3-Open defecation.....

9a. Do you wash your hands after using the toilet?

0-No

1-Yes, without soap

2-Yes, with soap

5. How long does it take to reach then toilet (total time, 2 way trek)? Minutes.....

Only ask this if it is not clear that use a toilet nearby (within 50 meters).

11. Do you know, how you neighbours dispose of feces?

0-No

1-Yes, do not use toilet

2-Yes, do use toilet

12. For women, is toilet safe to use? (*This question should be open-ended*).

0-No

1-Yes

13. Is the toilet you use cleaned/sanitary regularly?

0-Not at all

1-Somewhat clean

2-Very clean

14. When it rains, does fecal matter or solid waste from nalas/toilet over flow into your home?

0-No

1-Yes

19. Do you children play near or in nalas?

0-No

1-Yes

IV. Health

16. Have you or anyone in your family experienced any stomach illness or diarrhoea in last 6 months?

0-No

1-Yes, mild

2-Yes, severe

17. Has a child missed school in last 6 months due to illness?

0-No

1-Yes

18. Has an adult missed work in last 6 months due to illness?

0-No

1-Yes

19. Have you experienced any skin rash or other discomfort due to use of ground water for washing?

0-No

1-Yes

V. Basthi Vikas Manch (BVM)

20. What is the purpose of Basthi Vikas Manch?

(This question is open ended. Responses can be coded subsequently)

21. Do Basthi Vikas Manch (BVM) meeting take place in your area?

If so, how often?.....

22. Do you or your household attend Basthi Vikas Manch (BVM) meetings?

If so, how often?.....

23. Do you know the name of your Basthi Vikas Manch (BVM) leaders?

0-No

1-Yes (if so, name).....

24. Do you feel that your opinion is valued by the Basthi Vikas Manch(BVM)?

0-Not at all

1-Some what

2-Very Much

25. Do Basthi Vikas Manch(BVM) meeting improve local conditions?

0-Not at all

1-Some what

2-Very Much

26 .How much would you be willing to pay per month for BVM, if they improved WATER/SANITATION services?

RS.....

VI. Capacity Building/Awarness

27. Have you taken any proactive steps to improve water, sanitation, hygiene?

0-Not at all,

1-Some what

2-Very Much

28. Do you know the name of your local SCB representative/ GHMC representative/Ward politician?

29. Have you contacted government authority about any service matter in last 12 months?

0-No

1-Yes

30. In your opinion, has this action been effective?

0-Not at all

1-Some what

2-Very Much

31. What is the familiarity with Right to Information Act (RTI)?

0-Never heard of it

1-Heard but don't details

2-Know details

3-Have filed a petition

32. Do you vote in local elections based on WATSAN, hygiene issues?

0-Not at all

1-Some what

2-Very Much

33. Have you ever considered leaving the slum due to local environment conditions?

0-Not at all

1-Some what

2-Very Much

Appendix 2. Basti Vikas Manch (BVM) Leaders Survey

Gender (Circle one): Male Female

Slum (Circle one): Addagutta Bholakpur Rasoolpura

1. How long have you lived in this slum? _____years _____months

2. How long have you been involved with the BVM? _____years
_____months

3. Before joining the BVM, how involved were you in slum upgrading efforts? (Circle one on a scale of 1-5. 1 being not at all involved, 5 being very involved)

1 2 3 4 5

4. Why did you join BVM? (Circle one on a scale of 1-5 for each. 1 being not at all important, 5 being very important)

1	2	3	4	5	The government needs to recognize and address our concerns
1	2	3	4	5	Others in the community were joining
1	2	3	4	5	I wanted a specific WASH issue fixed
1	2	3	4	5	I trust the BVM conveners and coordinators

5. Do you actively recruit others to join the BVM in your area? (Circle one)

No Yes

6. How satisfied are you with the progress of the BVM currently? (Circle one on a scale of 1-5. 1 being not at all satisfied, 5 being very satisfied)

1 2 3 4 5

7. How would you rate the success of the BVM for (Circle 1 on a scale of 1-5. 1 being not at all successful, 5 being very successful):

1	2	3	4	5	Improving water access/quality
1	2	3	4	5	Improving sanitation access/quality
1	2	3	4	5	Improving drainage/flooding
1	2	3	4	5	Social inclusion
1	2	3	4	5	Training for leaders
1	2	3	4	5	Improving awareness of rights in the community
1	2	3	4	5	Other: _____

8. Rate the challenges facing the BVM regarding (Circle one on a scale of 1-5. 1 being not at all difficult, 5 being very difficult):

- | | | | | | |
|---|---|---|---|---|--|
| 1 | 2 | 3 | 4 | 5 | Too little funds available |
| 1 | 2 | 3 | 4 | 5 | Hierarchy within BVM |
| 1 | 2 | 3 | 4 | 5 | Sustainability of infrastructure improvements |
| 1 | 2 | 3 | 4 | 5 | People cannot allocate sufficient time to BVM activities |
| 1 | 2 | 3 | 4 | 5 | Political obstacles to obtaining our rights |

Other: _____