Institutional Synergies in the Delivery of Urban Upgrading Services: Lessons from the Slum Networking Program in Ahmedabad, India
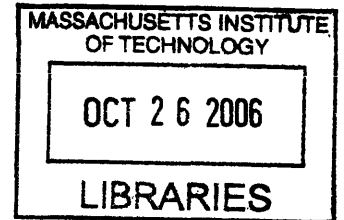
by

Taimur Samad
B.A. Sociology and Politics
Brandeis University, 1998

Submitted to the Department of Urban Studies and Planning in
Partial Fulfillment of the Requirements for the Degree of

MASTER IN CITY PLANNING
AT THE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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ABSTRACT

This thesis examines factors associated with the limited success of the Slum Networking Project (SNP) implemented in the city of Ahmedabad, India between 1995 and 2001. The SNP was conceived as a partnership between associations of slum residents, the Ahmedabad Municipal Corporation (AMC), non-governmental organizations (NGOs), trade unions and the private sector with the aim to increase access to basic services in slums. This analysis reflects upon three central assumptions in the literature associated with service delivery to the urban poor through the lens of the SNP experience.

First, the thesis asks why a promising and innovative public-private partnership ultimately proved unsustainable. The thesis suggests that public-private partnerships in service delivery to slums are most likely to work when: (i) the likelihood of conflict is recognized and mitigated; and (ii) participants have strong professional or economic incentives – beyond philanthropy – to make the partnership work. Second, this thesis examines how participation and community involvement under the SNP evolved in a nonlinear fashion. This analysis demonstrates that participation and beneficiary involvement emerged out of conflict, negotiation and with the critical, if imperfect, assistance of third-party facilitation and intermediation. Third, this thesis asks why the SNP has been unable to achieve scale through and assessment of: (i) parallel mechanisms for service delivery to the poor and the political incentives that govern these programs; and (ii) the demand for the bundling of service options under the SNP. The thesis demonstrates that the attractiveness of the SNP to slum dwellers is tempered by both the lack of flexibility in service options and competing alternative instruments for service provision, each with a strong political constituency.

Thesis Supervisor: Professor Bishwapriya Sanyal
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Title: Ford International Associate Professor of Law and Development

ACKNOWLEDGEMENTS

I attended MIT between 1999 and 2001 and am delivering this thesis as the final requirement for my Masters in City Planning degree in May 2006. This may be a record. That I have been able to close this circle is concurrently a relief and a surprise and, as one might imagine, there are too many people to whom I am indebted in this process.

I would like to first thank Professor Jennifer Davis for her infinite patience with this student who always seemed to find a way to allow 'perfect' to be the enemy of 'good'. Thank you for always keeping the light on for me. I would like to also thank Professors Judith Tendler and Bish Sanyal for encouraging an intellectual inquisitiveness and rigor during my years of study that I carry with me to this day. I am also tremendously grateful to Professors Sanyal and Balakrishnan Rajagopal for finding the time amongst their many responsibilities to help this aging student finally complete this aging thesis.

I must recognize the generous support from the South Asia Regional Office of the Water and Sanitation Program which financed the '*In search of good governance: Experiments from South Asia's water and sanitation sector*' study. This thesis is principally a product of primary research I conducted as part of a broader MIT team led by Professor Jennifer Davis.

I am also tremendously grateful to the hundreds of slums residents, AMC staff and NGO workers from Ahmedabad who were infinitely gracious in sharing their story.

I would like to also recognize my friends and family. Sakina and Adam, I am truly proud that our friendships have withstood the test time, and grown stronger. More recently, I must thank colleagues Abhas Jha, Dan Hoornweg, David Sislen, Jack Stein and Fitz Ford for pushing me along with encouragement and support and not letting me drop the ball.

Mishka, my wife, deserves more than special mention. You are my compass and my home. Thank you. I must also thank Maya, my 16 month old daughter at the time of this printing, who has recently learned how to say 'NO' demandingly. I found this tight-lipped and determined 'NO' to be the best response as I questioned over the last few weeks whether I should give up trying to juggle the thesis and a demanding work schedule.

I must end where I started, with my mother. Her story of struggle and strength is certainly far more interesting that what is contained in this manuscript. I cannot begin to recount how tremendously important her fight has been for me. It has, simply, meant everything. I hope this belated thesis, and the degree that will follow, fills her with the same pride she felt when the son she fought to raise was accepted to MIT now so many years ago.

ACRONYMS

AMC	Ahmedabad Municipal Corporation
ASAG	Ahmedabad Study Action Group
BJP	Bharatiya Janata Party
BPMC Act	Bombay Provincial Municipal Corporations Act
CBO	Community-based Organization
CEMEX	*Cementos Mexicanos*
CODI	Community Organizations Development Institute
DfID	Department for International Development
DMC	Deputy Municipal Commissioner
FPI	Foundation for Public Interest
HUDCO	Housing and Urban Development Corporation Ltd.
KIP	Kampung Improvement projects
Lpcd	Liters per capita per day
Mgd	Million gallons per day
MHT	Mahila Housing Trust
MLA	Member of Legislative Assembly
MPA	Member of Parliamentary Assembly
MoU	Memoranda of Understanding
NGO	Non-governmental Organization
NIUA	National Institute of Urban Affairs
NOC	No Objection Certificate
NSDP	National Slum Development Program
ODA	Overseas Development Agency
O&M	Operations and Maintenance
SEWA	Self Employed Women's Association
SHADRA	Strategic Help Alliance for Relief to Distressed Areas
SNC	Slum Networking Cell
SNP	Slum Networking Program
SPARC	Society for the Promotion of Area Resource Centres
UNICEF	United Nations Children's Fund

TABLE OF CONTENTS

CHAPTER 1
SUMMARY

1.1 Summary

This thesis examines factors associated with the limited success of an innovative slum upgrading project implemented in the city of Ahmedabad, India between 1995 and 2001. The Slum Networking Project (SNP) was conceived in 1995 as a partnership between associations of slum residents, the Ahmedabad Municipal Corporation (AMC), non-governmental organizations (NGOs), trade unions and the private sector. The early story of the SNP is one of a bold vision to implement a citywide slum upgrading program by combining the efficiency of private sector management and the community outreach capacity of non-governmental organizations with the political will of an increasingly well-managed municipal administration with forward-looking leadership. However, the story of the SNP is also one of a fragile and ultimately failed alliance between the public and private sector. It is the story of a functional, but at times contentious, process community participation and NGO intermediation. And regrettably, the SNP story is also one of the ultimate inability to provide basic services on a large scale to Ahmedabad's slum population.

The SNP experience is instructive in that it challenges and adds nuance to the conventional wisdom associated with the large scale delivery of urban upgrading services. More specifically, the analysis of the SNP experience in this thesis reflects upon three central assumptions in the literature associated with service delivery to the urban poor.

First, this thesis asks why a promising and innovative public-private partnership in the delivery of urban upgrading services proved unsustainable. In doing so, the thesis will examine the common view that multi-stakeholder partnership is critical for large scale implementation of urban upgrading efforts. The SNP is a unique example of collaboration across public, private and civic actors. However, this collaboration was fundamentally fragile and ultimately difficult to sustain. This thesis explores important lessons that emerge from the Ahmedabad experience with partnership and reflects upon the conditions under which such partnerships might succeed or fail. The thesis demonstrates that multi-stakeholder participation in upgrading is most likely to work when: (i) the likelihood of conflict is recognized and mitigated; and (ii) participants have a strong professional or economic incentive – beyond philanthropy – to make the partnership work.

Second, this thesis explores the debate around community participation in the design, implementation and maintenance of urban upgrading interventions. The policy literature is universal in its endorsement of participation as a key to success and the SNP experience demonstrates that community participation in the service delivery process was critically important to the sustainability of investments. However, the process of participation and community involvement was neither linear nor harmonious, as much of the literature intimates. Instead, the thesis demonstrates how effective participation and beneficiary involvement emerged out of conflict, negotiation and with the critical, if imperfect, assistance of third-party facilitation and intermediation.

Third, this thesis asks why the SNP has been unable to achieve scale.[1] In this regard, the thesis will consider two key factors: (i) the inability to align incentives across different political constituencies within the municipality; and (ii) the lack of flexibility in technical options. The thesis argues that the attractiveness of the SNP to slum dwellers is tempered by competing and alternative instruments for service provision, each with a strong political constituency. Also, the thesis suggests that the lack of flexibility and choice in the menu of infrastructure services limits the effective demand for SNP services amongst large pockets of slum residents.

It is important to acknowledge that this thesis makes the explicit assumption of measuring the success of slum upgrading initiatives by the degree to which they are able to implement on a large scale. This assumption is framed by the serious challenge of large and growing urban slum populations in developing countries throughout Asia, Latin America and Africa. Recent estimates by the Cities Alliance[2] (2005) suggest that over 900 million people across the world live in slums with substandard access to basic services. It is estimated that this figure will double in less than 25 years if comprehensive strategies are not in place that enable large scale upgrading and effective prevention. Nonetheless, the thesis recognizes that scale is but one variable against which success can be measured. In many respects, this thesis attempts to identify 'process-oriented' success factors by seeking to better understand how effective partnerships and collaboration in the delivery of services might function. The hope is of course that these 'process' lessons may be instructive to governments and development practitioners who aim to develop effective strategies for the large scale implementation upgrading programs.

1.2 Structure of Thesis

This thesis is organized into a background chapter, three analytical chapters and a concluding chapter summarizing key lessons and policy recommendations. Chapter 2 examines recent economic and political trends in Ahmedabad to enable the reader to understand the context in which the SNP evolved and was implemented. This background chapter will also describe in greater detail the SNP's design, methodology and outcomes between 1995 and 2001.

Each analytical chapter is organized around a key area of debate in the literature associated with the large scale delivery of urban upgrading interventions. These chapters begin with a review of relevant literature followed by an analysis of SNP case material with the view of either questioning or adding nuance to the academic and policy literature in this area. Chapter 3 will extract lessons from the breakdown in the multi-stakeholder partnership framework for SNP implementation. Chapter 4 examines how effective community participation during SNP implementation evolved out of conflict and negotiation. Chapter 5 analyzes two key factors which hampered the ability of SNP to deliver large scale urban upgrading services: (i) competing sources of financing for slum upgrading; and (ii) the lack of flexibility in the menu of basic infrastructure services.

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[1] Imparato and Ruster (2003) define 'scale' in upgrading as the ability to reach at least 10 percent of the slum population.
[2] The Cities Alliance is a multi-donor program that aims to support city governments in the developing world to eradicate slums and prepare and implement city development strategies.

1.3 Methodology

Field research for this thesis was conducted during the summer of 2000 and January 2001 as part of the Water and Sanitation Program – South Asia (WSP-SA) collaboration with the MIT Department of Urban Studies and Planning to assess cases of ˙Good Governance in the Water and Sanitation Sector in South Asia'. I was part of this MIT research team led by Professor Jennifer Davis. The principal product from this study was a publication entitled ˙In Pursuit of Good Governance: Experiments from South Asia's Water and Sanitation Sector˙ for which I served as a co-author.[3] Certain findings summarized in this thesis reflect conclusions reached in the WSP-SA study and the study has been cited accordingly in this thesis. This thesis also aims to assess why the SNP was unable to deliver urban upgrading services on a large scale. A published article by Professor Jennifer Davis, building on findings from the same WSP-SA research project, examined similar themes in relation to the SNP initiative.[4] I provided research support in association with the preparation of this article. The article is also appropriately cited in this thesis where data and findings overlap.

I conducted over 110 field interviews and focus group discussions were conducted with slum residents, current and former AMC officials, SAATH, NGOs, private sector representatives, contractors, SEWA and MHT staff, local politicians, consultants, academics and journalists. A list of all interviews is included in the bibliography to this thesis.

This thesis draws upon results from a sample household survey of slum residents in Ahmedabad conducted in July and August of 2000.[5] Two separate surveys were conducted in two cohorts of Ahmedabad slum residents. The first survey was conducted with a random sample of 177 residents in eight slums in which SNP had been implemented. The second survey was conducted with a random sample of 147 residents in slums not having received services through the SNP. Professor Davis had developed these surveys in consultation with NGO workers and select CBO activists. Slum residents that have participated in the SNP were asked about the quality of prior water and sanitation services, the performance of SNP infrastructure, the responsiveness of SNC and AMC staff, petty corruption, property and water tax payment, and general household information. Similarly, slum residents not participating in the SNP were asked about the performance of existing infrastructure services, the responsiveness of AMC staff, petty corruption, property and water tax payment, and general household information.

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[3] See Davis, Jennifer, A Gosh, P. Martin, T. Samad, S. Tankha and B. Zia. *In Pursuit of Good Governance: Experiments from South Asia's Water and Sanitation Sector*. New Delhi, India: Water and Sanitation Program – South Asia, April 2003.

[4] See Davis, Jennifer. "Scaling up urban upgrading: Where are the bottlenecks?" International Development Planning Review 26 (2004): 305-323.

[5] The sample household survey was supervised by Jennifer Davis, then Assistant Professor in the MIT Department of Urban of Urban Studies and Planning, in the context of the WSP-SA research project cited above. I provided assistance to Professor Davis in the supervision of field work and data analysis. The surveys were fielded by enumerators from the Foundation for Public Interest, Ahmedabad (FPI). Permission to use results of this survey was secured by the author from Professor Davis.

I administered a series of focus group discussions in each slum sampled for participation in the survey with the assistance of FPI enumerators. Focus group discussions were conducted prior to survey implementation in order to obtain background information on each slum. Participation in the focus groups was voluntary and effort was made by the enumerators to ensure that a balance between men and women residents was kept. Group interviews were conducted during the morning and afternoon hours in slum settlements and, therefore, participants were disproportionately women. Focus groups were structured around a series of participatory appraisal tools and residents in both cohorts of settlements were asked to perform and discuss a series of participatory appraisal tools. These tools were designed by the author of this thesis to solicit information on the history of infrastructure investments in the slums, the current quality of infrastructure services and the process by which the SNP was implemented.

I collected primary data and documentation from various AMC offices. This data and documentation concerns general AMC management and infrastructure investment in Ahmedabad slums. Financial data was provided by the SNC and the Budget Department of the AMC and numerous other AMC departments provided necessary documentation. Data and documentation provided in Gujarati was translated into English by a professional translator.

I have complemented this primary research conducted between June 2000 and January 2001 with a review of newer secondary material between February and May 2006. During this latter period I was able to identify AMC reports and a few published papers or books that examined the SNP experience. I reflect, where relevant, on information and findings from these sources in the thesis.

Nonetheless, this thesis is primarily concerned with the conception and early implementation of the SNP between 1995 and January 2001 for a number of reasons. First, the public-private partnership implementation model that is the subject of Chapter 3 applied to the SNP during the period between 1995 and 1998. After this point the SNP continued to implement without private sector partners. Second, my review of the secondary literature in 2006 found that the SNP has not achieved any drastic improvement in performance – when measured by the ability to implement at scale. Chapter 5 of this thesis demonstrates that the SNP grew at a slower pace, as measured by number of slums and beneficiaries reached, between 2001 and 2006 in comparison to the period between 1995 and January 2001. Therefore, the assumption underlying this thesis – that the SNP has not been able to implement on a large scale – holds. Third, the two periods under discussion are regrettably differentiated by the tragic Gujarat earthquake on January 26, 2001. A preliminary review of AMC reports demonstrates that in the period following January 2001 municipal capital investment resources were disproportionately diverted away from existing programs like the SNP and towards rehabilitation and reconstruction expenditures.

CHAPTER 2

BACKGROUND:
ECONOMIC TRANSITION, CITY GOVERNANCE AND THE SNP

2.1 Ahmedabad in Transition

Ahmedabad is the largest city in the State of Gujarat with a projected population of 3.6 million in 2001 within city limits and a total 4.7 million residents in the broader Ahmedabad metropolitan area (AMC, 2006).[6] The city is a major industrial and commercial center in Western India where cotton textile manufacturing has traditionally been the dominant industrial activity. In 1976 the textile industry accounted 80 percent of the city's workforce and 50 percent of the city's income (Kundu and Mahadevia, 2002). Between 1985 and 1994, 62 of the city's 85 textile firms ceased operation and were liquidated due in part to structural obstacles in the modernization of the industry, tariff regimes and quotas imposed by developed country importers and global competition (Bhatt, 2003).

This change in the economic structure of the city brought with it socio-economic dislocations amongst the urban poor, including the loss of over 67,000 jobs in the textile sector. A large, though never accurately estimated, number of workers and entrepreneurs in auxiliary and informal sectors are believed to have experienced considerable job losses and diminished economic opportunity due to the closures.

Since the mid-1990s the textile sector has witnessed a consolidation around a core group of operating firms. By 2003, the textile sector accounted for only 12 percent of industrial employment, down from over 80 percent of all employment in the late-1970s. Additionally, those textile units still in operation were facing razor thin profit margins in the face of the global competition for export markets (NIUA, 2001).

The decline of the textile sector is important not only because of obvious impacts on employment and poverty. The industry and its affiliated textile labor unions have traditionally been central actors in civic politics, municipal administration and service provision. Members of leading textile families have been served as municipal commissioners and as council members. Additionally, these textile families have led or contributed to major philanthropic initiatives in the city (Tripathi, 1998).[7] It is in the context of this tradition of civic action that the Managing Director of Arvind Mills[8], Sanjay Lalbhai, agreed to participate in the SNP pilot in Sanjaynagar. In essence, the SNP took shape at the same time that the city's traditional philanthropic business community was engaged in a restructuring process and facing serious external competition and reduced profits.

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[6] These figures are based 2001 Census data.

[7] In years leading up to the launch of the SNP leading textile firms including Arvind Mills and the Ashima Group of Industries were involved in collaborations with the AMC to redevelop C. G. Road, a major commercial and business artery in the city's Western zone, and to upgrade and maintain public parks. See Dutta (2000) for more details.

[8] Arvind Mills is one of Ahmedabad's oldest and largest textile firms.

Ahmedabad has in large part been able to recover from this process of economic recession and transition through diversification and the emergence of new manufacturing and service sectors. In particular, the city has witnessed the growth of petrochemicals, metallurgy and engineering, construction, trade and related service sectors in parallel to the decline of the textile industry. These emerging industries, with a few exceptions, have generally been populated with small and dynamic firms with linkages to the informal sector (NIUA, 2001). The net result of these changes, however, has likely been an increase in casual wage and informal sector employment. Overall industrial employment has decreased roughly 12 percent between 1998 and 2003 (AMC, 2006). A recent study estimates that approximately 77 percent of the urban labor force in Ahmedabad operates in the informal sector (Rani and Unni, 2002).

Despite this movement towards informality and away from the formal manufacturing sector, urban poverty has declined considerably in recent years. Urban poverty in Gujarat has declined precipitously from 39.6 percent in 1987-88 to 15.6 in 1999-00 (AMC, 2006).[9] However, parallel evidence also suggests that, despite state-wide improvement in the 1990s in the incidence of urban poverty, pockets of poverty persist in Ahmedabad's slums. An analysis of 191,000 slum households found that approximately 60 percent of all residents were living below the poverty line (Kundu and Mahadevia, 2002).

During this period of economic adjustment and ultimate revival the Ahmedabad Municipal Corporation (AMC) was also facing a crisis in its ability to effectively govern the city. In 1986 the municipal boundary was extended to include a large area of urban agglomeration along the city's eastern periphery. This expansion increased the area under AMC administration from 98.15 km^2 to 190.15 km^2. The newly incorporated area was unplanned, densely settled with poor residents, without adequate infrastructure and contained numerous small and medium industries. After 1986 the area under AMC administration was aptly described as three distinct cities. The 'first city' is the densely packed medieval city center with narrow lanes and decaying infrastructure. The 'second city' is the Eastern periphery described above. And the 'third city' is the largely middle class and wealthy Western periphery separated from the first two by the river Sabarmati (Yagnik et. al., 1997).

In the mid-1980s and early 1990s the AMC began to experience considerable financial constraints associated with this growing mandate. Expenditure requirements increased dramatically without commensurate increases in revenue generating capacity due in large part to the physical expansion of the city. The result was an increase in the deficit from Rs. 96.5 million to Rs. 359.1 million between 1984 – 1994 (AMC, 2003). The AMC was subsequently unable to meet pressing requirements for the upgrading and expansion of city infrastructure during this period. The city came under severe criticism from the State and Central governments and numerous citizen groups for persisting to finance 'discretionary' functions, such as medical colleges, hospitals, bus transport and secondary education, while basic service provision remained inadequate (Tripathi, 1998).

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[9] Disaggregated data on poverty in Ahmedabad was not available. However, Ahmedabad accounted for approximately 25 percent of Gujarat's urban population in 2001 and would subsequently account for a large proportion of the aggregate fall in poverty.

The administrative and financial crisis in the city government, however, took longer to reverse. In November 1993 the term of the elected local body in Ahmedabad expired. Rather than conducting fresh elections, the AMC was placed under the control of an Administrator appointed by the State Government. This was largely a result of the financial and administrative crisis in the city and the desire of the recently elected BJP-led State Government to consolidate its political influence in Ahmedabad. Without an elected wing of the AMC the Municipal Commissioner was given considerable discretion to initiate financial and administrative reforms.
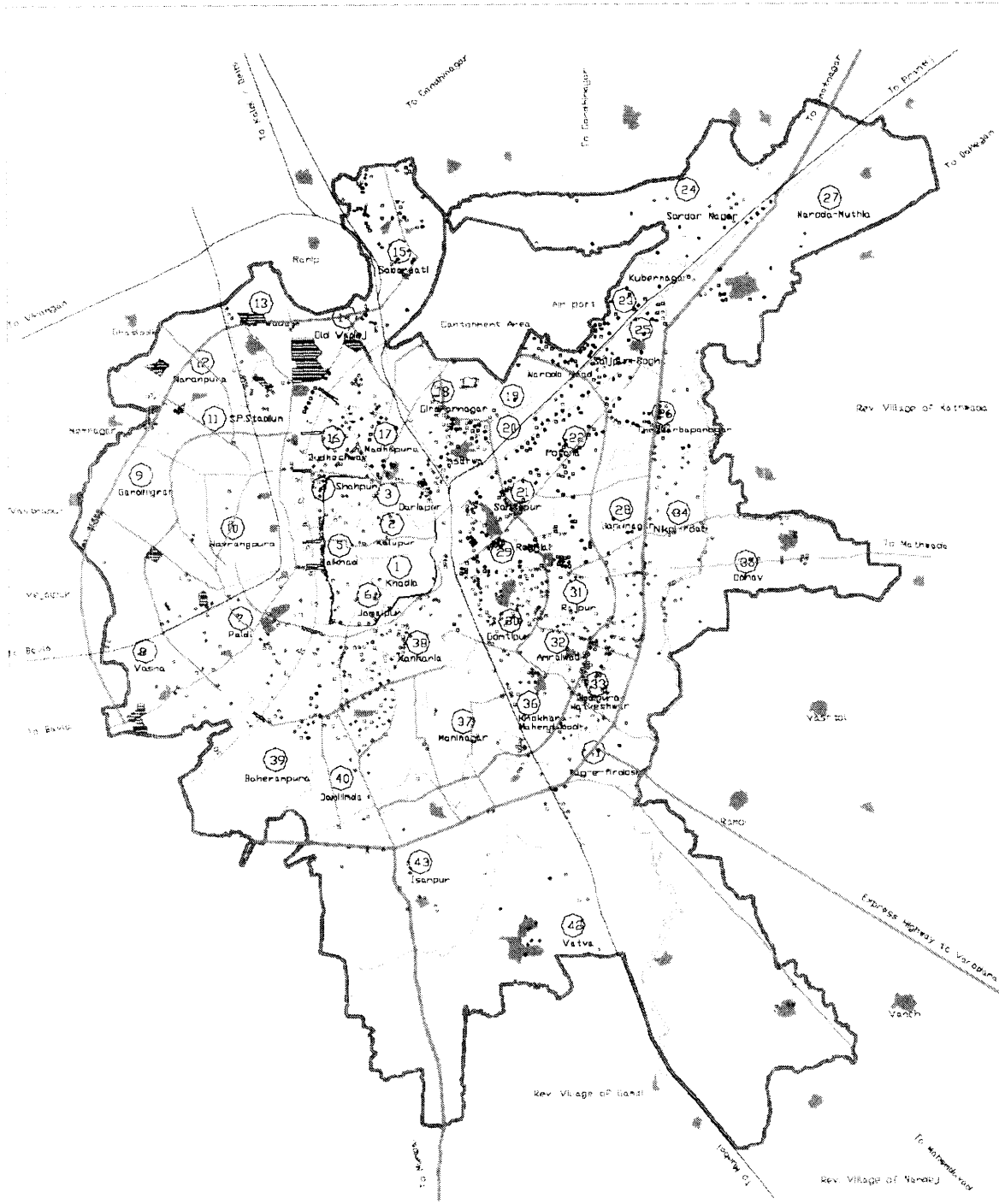
The AMC was subsequently able to reach financial sustainability in a dramatically short period of time. At the close of the 1995-6 fiscal year the AMC had a surplus of Rs. 612 million after having a running a deficit of Rs. 359 million in the previous fiscal year. The corporation continued to sustain this strong fiscal performance since the mid-1990s. Own-source revenues have increased from Rs. 5.62bn to Rs. 8.1bn between the 2000-01 and 2004-05 budget years, a net increase of over 43 percent. Conversely, in the 2003-04 and 2004-05 budget years the corporation maintained a surplus of Rs. 767 million and Rs. 1.5bn, respectively (AMC, 2006).

This fiscal turnaround was a result of substantive reforms in Octroi[10] and property tax assessment and collection and the floating of a municipal bond. Ahmedabad was the first municipal administration in India to issue municipal bonds based the strength of a single A rating.[11] The Corporation and the State Government have also been able to initiate a number of administrative reforms in the AMC. These reforms include the hiring of professional staff, loosening of rigid human resource policies, strengthening of the decentralized city administration and, under the mandate of the 74th Amendment to the Indian Constitution, the institution of women and scheduled caste reservations for councilor and mayoral seats.[12]

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[10] The Octroi tax is levied on goods moving in and out of a local government's jurisdiction. Assessment for the tax is based on the market value of the good. Establishing rates for assessment and managing collection for the Octroi tax is solely the responsibility of local governments. Local governments in India rely heavily on the Octroi tax for revenues. In Ahmedabad approximately 40 percent of total revenues come from this tax.
[11] The AMC has subsequently been able to improve its rating to AA.
[12] The AMC is not entirely responsible for this last reform effort. The federal parliament, or Lok Sabha, passed the 74th Amendment to the Indian Constitution in 1994. The Amendment requires municipalities to institute a decentralized form of city government with 33 percent of elected seats reserved for women and scheduled castes respectively. Implementation of these provisions has varied throughout the country. In the 1995 municipal elections the AMC ensured that the 33 percent reservations for scheduled caste and women were followed in the election of ward councilors.

SLUM LOCATIONS IN AMC

AHMEDABAD CITY DEVELOPMENT PLAN (2006-2011)

CENTER FOR ENVIRONMENTAL
PLANNING & TECHNOLOGY

GUJARAT ECOLOGY COMMISSION

N

The Ahmedabad Municipal Corporation

The Ahmedabad Municipal Corporation (AMC) is constituted by parallel administrative and political wings (see Figure 2.1 for organizational chart). The administrative wing is led by the Municipal Commissioner and includes all administrative and revenue departments, technical projects, and zone and ward offices. The AMC has 5 zone and 43 ward offices. Since 1990 the corporation has been engaged in a process of decentralization of service delivery, planning and revenue mobilization functions from the central office to each of the zones. As a result the zones have been empowered with separate administrative, revenue, planning and technical departments that report to the Deputy Municipal Commissioner for each zone. Unlike other municipalities in India, the AMC provides a broad canopy of services to residents. Core AMC services include, but are not limited to, primary education, public transport, general hospitals, water supply, sanitation, roads and solid waste management. The AMC also provides peripheral services such as medical education, public parks, libraries and community development. Despite having achieved financial sustainability in recent years the wide scope of these expenditure demands strains the ability of the AMC to invest in core public goods such as water, sewerage and solid waste management.

The parallel political wing is constituted of 129 local councilors, three from each ward. Since the 1995 elections the councilors have been elected through equal quotas for women, schedule caste and 'at-large' candidates. Councilors are members of various technical and thematic sub-committees that oversee the work of different departments and projects, e.g. health, water and sanitation, transportation etc. Sub-committees aggregate into a 12 member Standing Committee. Seats in the standing committee are distributed in accordance with the proportion of each political party's representation in the pool of councilors. The majority party occupies the seat of the Standing Committee chairman. The Standing Committee, amongst many other duties, monitors the performance of AMC departments and projects, sanctions policy decisions, approves the annual budget and oversees the hiring and promotion of senior AMC staff. The mayor is also from the majority party and is selected from within the pool of councilors. Both the political and administrative wings technically report to the mayor. However, the policy making, sanctioning and veto power of the mayor is limited and the mayor serves primarily a ceremonial role.

The AMC is governed by the Bombay Provincial Municipal Corporations Act (BPMC) of 1949. The BPMC Act contains a series of laws, by-laws and regulations that specify the responsibilities and procedural requirements to which AMC is held accountable. These provisions in the BPMC Act can be altered by laws and regulations established by higher levels of government or internal policy decisions in the form of General Body resolutions. These latter resolutions are the primary policy making tool used by both the political and administrative wings. Resolutions are formally submitted and approved in the Standing Committee. However, there is considerable negotiation between the two wings on the content of these resolutions. The Standing Committee has greater leverage in policy making. The Municipal Commissioner, however, controls the functions of all departments and offices and has discretion over the extent to which policies are in fact implemented.

Conversely, the commissioner often requires the Standing Committee to approve policy decisions that further his administrative or public investment agenda. In sum, there is a negotiated balance of power between these two branches of the AMC.

During the 1990s the administrative wing has been able to secure disproportionate control over the policy and administrative processes in the AMC. This is largely attributable to the imposition of Administrator Rule in Ahmedabad by the state government between 1993 and 1995 in response to severe fiscal crises facing the city in the early part of the decade. During this period the political wing was suspended and a series of policy and procedural changes were made to curtail the discretionary powers of the political wing. Nonetheless, since the local elections in 1995 and the reinstatement of the political wing, there has been a gradual shift towards greater balance in the distribution of real political power between the administrative and political wings.

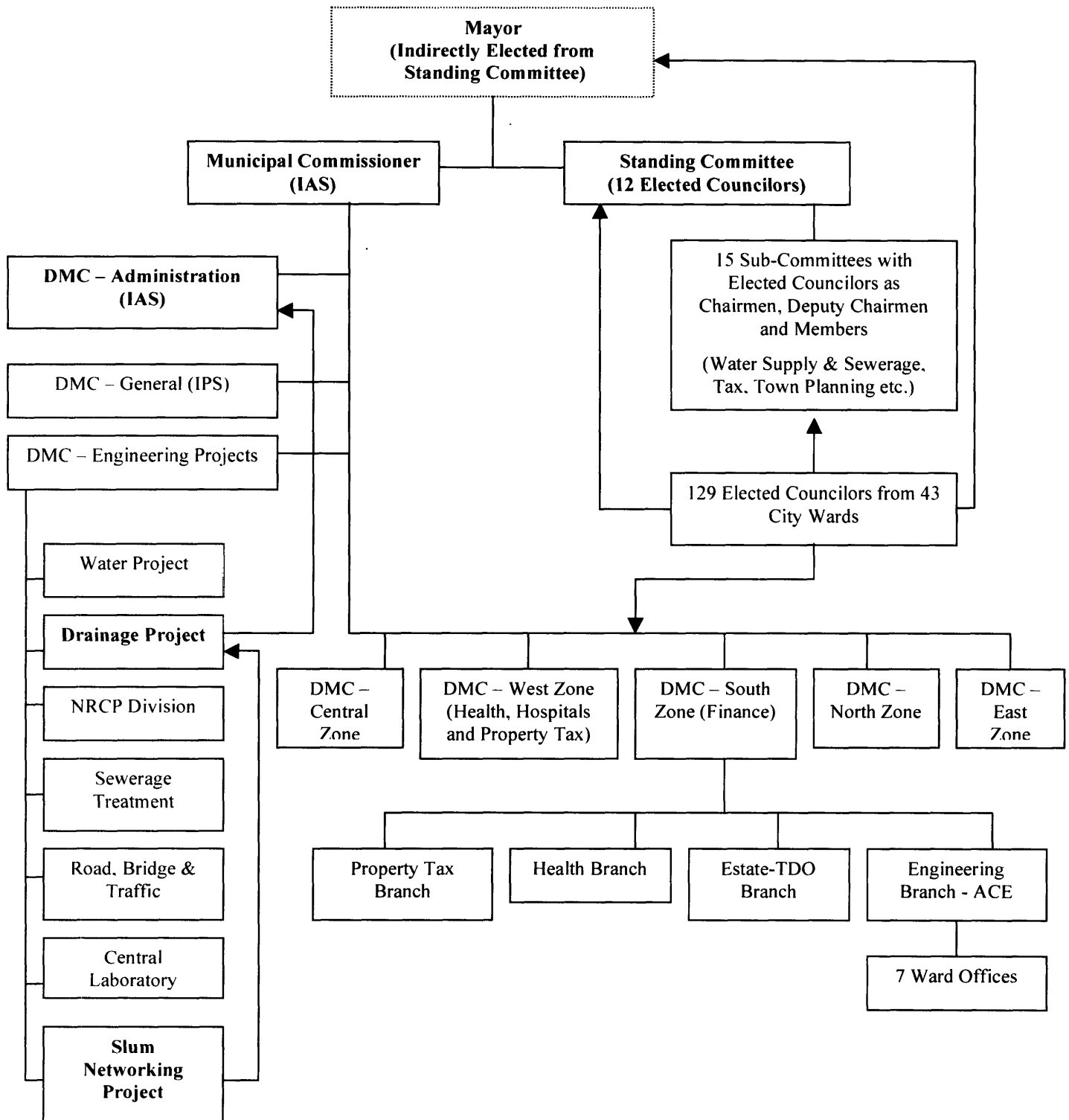## 2.2 Slums and Access to Basic Services for the Poor

Ahmedabad's economic turnaround and improved financial governance since 1993 has been slow to make an impact on the quality of life of the urban poor. The number of residents living in slums has remained steadily at 41 percent. This is despite the fact that the AMC has generated considerable financial resources earmarked for investments in basic infrastructure. The corporation floated a municipal bond to generate revenue for investments in basic water and sanitation infrastructure in the city's eastern periphery. However, an area of approximately 19 km^2 in the East Zone has no access to water and sanitation trunk infrastructure.

Alongside these dislocations and the dramatic expansion of the city came the proliferation of slums and chaals.[13] The percentage of housing characterized as slums increased between 17.2 percent in 1961 and 25.6 percent in 1990 (Mehta and Metha, 1990).[14] A 1991 study found that there were approximately 1029 slums and 1383 chaals in the city comprising over 41 percent of the city's population. The high percentage of residents living in slums compares unfavorably with Bangalore (22.2 percent), Hyderabad (29.2 percent) and Pune (38.8 percent). More recent estimates suggest an overall decrease in the number of slum settlements, but not in the ratio of residents living in slums. The AMC estimates that as of 2001 Ahmedabad contained over 710 slums and 1383 chaals accounting for nearly 42 percent of the city's population (ASAG, 1991 and AMC, 2006)

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[13] In Ahmedabad the term slum is used to refer to wide variety of informal housing settlements that have unclear land tenure, no household water and sanitation connections and housing structures are generally constructed with temporary or non-permanent materials. A 'chaal' is a form of multi-story or row housing settlements particular to Ahmedabad. Textile firms have constructed chaals primarily for their workers. Each housing unit in a chaal has a single room with no connections to water and sanitation services. Housing units in chaals are generally constructed from permanent or semi-permanent materials (concrete, wood, fixed roofs etc.). The land tenure situation in chaals varies. However, a large proportion of chaals are on AMC land. For the purpose of this analysis the term 'slums' will be used in reference to both slums and chaals.

[14] Mehta and Mehta (1990) account for slums and not chaals in these calculations.

Figure 2.1: Organization Chart AMC

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                    ┌─────────────────────────┐
                    │         Mayor           │◄──────────────┐
                    │ (Indirectly Elected from│               │
                    │   Standing Committee)   │               │
                    └─────────────────────────┘               │
                              │                                │
        ┌─────────────────────┴──────────────────┐            │
┌─────────────────┐              ┌─────────────────────────┐  │
│    Municipal    │              │   Standing Committee    │  │
│  Commissioner   │              │  (12 Elected Councilors)│  │
│     (IAS)       │              └─────────────────────────┘  │
└─────────────────┘                        │                  │
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Mayor (Indirectly Elected from Standing Committee)

Municipal Commissioner (IAS)

Standing Committee (12 Elected Councilors)

DMC – Administration (IAS)

DMC – General (IPS)

DMC – Engineering Projects

15 Sub-Committees with Elected Councilors as Chairmen, Deputy Chairmen and Members

(Water Supply & Sewerage, Tax, Town Planning etc.)

129 Elected Councilors from 43 City Wards

Water Project

Drainage Project

NRCP Division

Sewerage Treatment

Road, Bridge & Traffic

Central Laboratory

Slum Networking Project

DMC – Central Zone

DMC – West Zone (Health, Hospitals and Property Tax)

DMC – South Zone (Finance)

DMC – North Zone

DMC – East Zone

Property Tax Branch

Health Branch

Estate-TDO Branch

Engineering Branch - ACE

7 Ward Offices

The AMC did invest in a bulk water supply project in the spring of 2000 that brought needed water from the Malee River through a closed pipeline. The Raaska Project provided essential summer relief to consumers suffering from serious water shortages in late 1999 and early 2000. However, citywide trends in water supply suggest that residents are receiving less water. Table 2.1 illustrates that over a ten year period between 1989 and 1999 total water supply in the municipality has remained relatively constant and, therefore, the amount of water available on a per capita basis has steadily declined. The fact that the AMC had provided new water connections at a steady rate during this 10 year period seems to have had little impact on the overall water supply situation. AMC estimates suggest that current water supply in Ahmedabad is approximately 99.9 MGD or 130.09 LPCD, up only slight to from pre-Raaska levels.[15]

Table 2.1: Average Daily Water Supply and New Water Connections

Year	Million Liters	Liters per Capita	New Connections
1989-1990	453.69	151.91	7094
1990-1991	367.41	123.03	6359
1991-1992	423.44	147.19	5924
1992-1993	424.35	144.33	6224
1993-1994	415.52	138.20	5704
1994-1995	427.00	138.78	5628
1995-1996	426.31	132.07	4986
1996-1997	415.04	125.41	5610
1997-1998	406.12	119.60	4865
1998-1999	447.82	128.45	4472

Source: AMC (1999)

There is strong evidence to suggest that the distribution of water within the Ahmedabad water supply system is highly inequitable. Table 2.1 provides LPCD data from ten wards in the city. Five of these wards have the lowest LPCD levels in the city and, conversely, the other five wards have the highest water supply levels. The five wards with high water supply levels are all located in the West Zone of the city which is disproportionately home to middle and high-income households. Ahmedabad calculates LPCD data using the total estimated population for the city and ward. Therefore, within a given locality those consumers without access to a reliable connection will naturally receive a smaller volume of water. Slum consumers are dependent upon a combination of overused and poorly maintained public taps, informal household connections that frequently leak, and off-site

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[15] These figures for current water supply levels are based on calculations conducted by A.M. Patel, Assistant Engineer, Mechanical Department – AMC (January 17, 2001). The figures are weekly averages for water supply between January 10 – 16, 2001. MGD and LPCD are abbreviations for 'million gallons per day' and 'liters per capita per day'.

water connections in commercial or residential areas where access is neither regular nor secure.

Table 2.2: Average LPCD in 1998-99 for 10 City Wards

Ward	LPCD
Naroda Muthiya	46.29
Saijpur Bogha	52.41
Khadia	59.23
Jamalpur	59.23
Maninagar	84.94
Navrangpura	148.60
Paldi	155.40
Vadaj	195.94
Sabarmati	204.40

Source: AMC (1999)

The sanitation situation in the city is similarly inequitable. Estimates for toilet connections from 1991 suggest that approximately 66 percent of residents have access to household toilet connections.[16] The remaining consumers are either without any form of basic sanitation or are dependent upon substandard public toilets. It is safe to conclude that these consumers are disproportionately poor and live in slums and other informal settlements. Data from the survey of slum households conducted in association with this study was also analyzed. The results suggest that only 35 percent of slum residents have access to household toilets. The remaining 65 percent of slum households use public toilets or other informal mechanisms for basic sanitation. A separate survey of 1200 women living in slums found that approximately 63 percent of households rely on public toilets.[17] Additionally, this study found that none of these women were satisfied with the quality of public toilet services because they were either unclean, had broken doors, lacked flowing water or experienced regular sewerage overflows (Mahadevia and D'Costa, 1997).

Table 2.3: Source of Primary Sanitation Service

Sanitation Solution	Frequency	Percent	Cumulative Percent
Private Toilet	52	35.4	35.4
Shared Private Toilet	1	.7	36.1
Public Toilet or Latrine	79	53.7	89.8
Other	15	10.2	100.0
Total	147	100.0	

Source: Mahadevia and D'Costa (1997)

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[16] This data was originally generated by the Government of India Census 1991 and was extrapolated from the Statistical Outline of Ahmedabad City: 1998-99 released annually by the AMC.

[17] Analysis done by author based the data collected through household surveys as part of the WSP-SA study.

2.3 Case Study: The Slum Networking Project

The concept of the Slum Networking Project (SNP) was initially conceived by Himanshu Parikh, an independent Ahmedabad-based consultant engineer and urban design specialist, based on similar experiences in slum upgrading in Indore and Vadodara.[18] Both interventions involved a series of integrated investments in basic water, sanitation and transport infrastructure in target slums. However, the Indore and Vadodara projects lacked the concept of slum upgrading through broad alliances among private, public and civic actors that was unique to the SNP. Interestingly, the motivation to implement a slum upgrading program in Ahmedabad evolved out of discussions between Parikh and the Managing Director of Arvind Mills[19], Sanjay Lalbhai during a four month period in early 1995.

The initial concept for the SNP that emerged from these discussions was that of a pilot project targeting a small area that would ultimately serve as the laboratory for broader city-wide upgrading initiatives. The broad objectives, as outlined in a concept note prepared by Parikh in April 1995, were to: (i) improve the basic physical and non-physical infrastructure facilities within one or two contiguous slum settlements in the city, covering 1500 families; (ii) facilitate the process of community development; and (iii) build a city level organization for slum networking and infrastructure development (Tripathi, 1998).

The SNP aims to achieve these objectives through two interrelated components, physical development and community development. The physical development component includes investment in a bundle of basic infrastructure services including: (i) roads and paving; (ii) household water supply; (iii) networked sewerage and household toilets; (iv) storm drainage; (v) street lighting; (vi) solid waste management; and (vii) landscaping and tree planting.

Each household is entitled to one water and sewerage connection and one toilet. Households cannot apply for multiple connections regardless of the willingness to pay for additional connections. The project also mandates individual connections for all households. Clusters of households cannot elect to share water, drainage or toilet connections to reduce costs. In the event of a pre-existing water connection or toilet the household can deduct the estimated cost of this product from its financial contribution. However, SNP regulations require that the previously existing piece of infrastructure must have been obtained legally and located in a manner that is compatible with technical designs for network infrastructure to be provided under the project.[20] Beneficiaries could not choose items selectively from the menu of services and must receive all services as a

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[18] These preceding interventions included the Indore Slum Upgrading Project, financed largely by the UK Government's Overseas Development Administration (ODA, now referred to as DfID), and the Vadodara Slum Networking Project financed equally by community contributions and UNICEF. Parikh served as a consultant on both interventions. See Tripathi (1998) for greater detail on the Indore and Vadodara initiatives.

[19] Arvind Mills Ltd. remains s one of Ahmedabad's largest textile manufacturing firms and the flagship enterprise in the Lalbhai Group of companies.

[20] These conditions for pre-existing connections were rarely met as slum residents are not eligible to legally apply for water and sewerage connections given the informal nature of their occupancy status.

bundle. This provision is partly the result of technological constraints. Obtaining toilets without water connection can exacerbate public health risks. However, little technical justification exists for requiring all communities to pay for and receive landscaping or street lighting investments.[21]

The community development component involved a series of five interrelated initiatives including: (i) community mobilization and the formation of neighborhood and women's associations; (ii) community savings and cost-recovery mobilization; (iii) youth education and skills training; (iv) community health and education; and (v) income generation and facilitating access to credit.

After elaborating a project design, Parikh and Arvind Mills sought to secure partnerships for the pilot project. Between April and September 1995 a series of discussions were held with the AMC and SAATH, a non-governmental organization active in a cluster of slums in the city. By late 1995, a series of institutional and financing arrangements were agreed upon with a minor change in the scope of the proposed project. Upon the recommendation of AMC managers, it was agreed that SNP would pilot the initiative in 3-4 slums and aim to reach a total of 3,300 households. The AMC also initiated discussions at this time with all parties to expand the pilot activities into a citywide upgrading initiative and asked that eligibility requirements and implementation arrangements for the pilot be developed with the view that they could be replicated in any citywide upgrading program (Tripathi, 1998).

The original implementation model identified he SHADRA Trust, a special purpose entity created, financed and subject to managerial oversight by Arvind Mills, as the executing agency for the physical component of the project.[22] SHADRA was to assume all responsibility for procuring and supervising independent contractors to provide the bundle of basic infrastructure services in project community. Similarly, the implementation model identified SAATH as the executing agency for the community development component. Key AMC functions would include: (i) providing co-financing of up to 40 percent of total costs; and (ii) facilitating approvals of designs, access to technical documents and plans and technical coordination with line departments.[23] An active role for communities through local community-based organization (CBOs) was also envisioned through the formation of resident associations and savings groups (See Figure 2.2). In order to participate, CBOs would need to be registered with the local government. The SNP design envisions CBOs as local intermediaries that will assist in the collection of financial contributions, motivate community members and facilitate the daily operations of the project.

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[21] The project also did not allow for flexibility and choice in the technical specifications for each infrastructure item on the menu. Technical specifications for road paving materials, manholes, toilet fixtures and related items were standardized. Chapter 4 of this thesis will examine in greater detail the implications of these regulations and how communities and intermediaries effectively applied pressure on AMC to relax these specifications.

[22] SHADRA is an acronym for the Strategic Help Alliance for Relief to Distressed Areas.

[23] Chapter of this thesis will explore how this stylized account of discrete responsibilities, particularly those of AMC, was not universally shared across all actors.

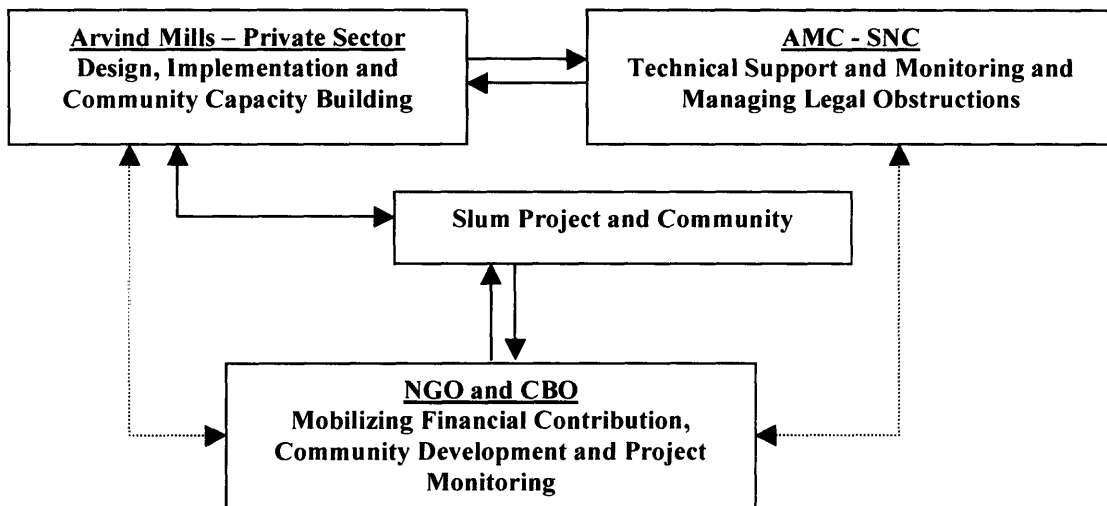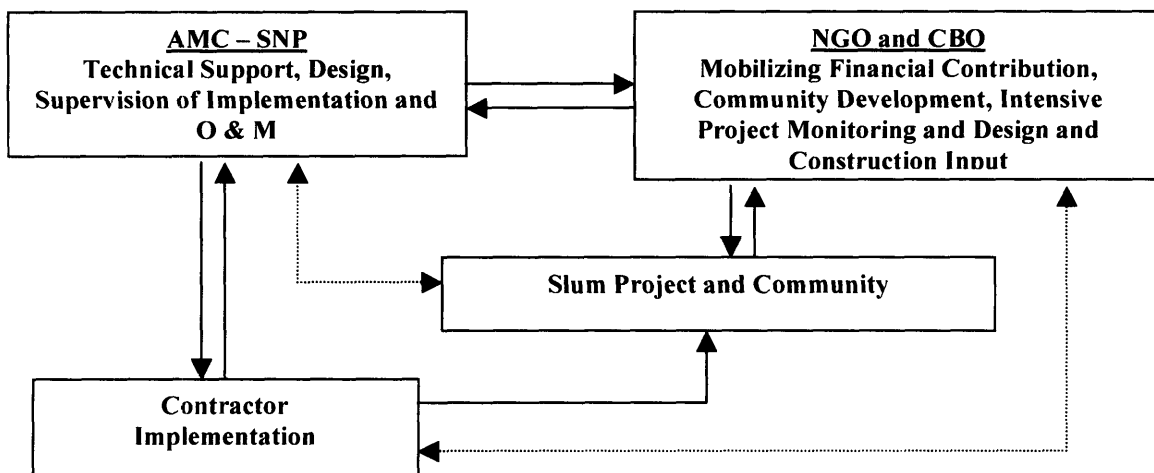**Figure 2.2: Original Implementing Arrangements (1995 – 1997)**


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┌─────────────────────────────┐        ┌─────────────────────────────┐
│  Arvind Mills – Private Sector │  →   │        AMC - SNC            │
│  Design, Implementation and  │  ←   │ Technical Support and Monitoring and │
│  Community Capacity Building  │      │ Managing Legal Obstructions │
└─────────────────────────────┘        └─────────────────────────────┘

        ┌─────────────────────────────┐
        │  Slum Project and Community │
        └─────────────────────────────┘

        ┌─────────────────────────────┐
        │        NGO and CBO          │
        │ Mobilizing Financial Contribution, │
        │ Community Development and Project │
        │         Monitoring          │
        └─────────────────────────────┘
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Figure 2.3: Revised Implementing Arrangements (1997 – 2001)


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┌─────────────────────────────┐        ┌─────────────────────────────┐
│         AMC – SNP           │  →   │        NGO and CBO          │
│  Technical Support, Design,  │  ←   │ Mobilizing Financial Contribution, │
│ Supervision of Implementation and │ │ Community Development, Intensive │
│          O & M              │      │ Project Monitoring and Design and │
└─────────────────────────────┘        │      Construction Input     │
                                        └─────────────────────────────┘

        ┌─────────────────────────────┐
        │  Slum Project and Community │
        └─────────────────────────────┘

┌─────────────────┐
│   Contractor    │
│ Implementation  │
└─────────────────┘
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The institutional arrangements outlined in Figure 2.3 above applied between 1995-97, the period during which Arvind Mills was involved in the project. After 1998, and the breakdown of the public-private alliance between the AMC and Arvind Mills, the corporation took on a more active role in SNP implementation. Figure 2.3 below outlines implementation arrangements between 1997 and 2001.[24] Key changes to the implementation model included the role of AMC as the central executing agency for the SNP. The municipal corporation also involved the prominent Ahmedabad trade union, Self-Employed Women's Association (SEWA) and the affiliated SEWA Mahila Housing Trust (MHT). The involvement of SEWA as a financial intermediary emerged from early lessons in Sanjaynagar, the initial pilot community, where approximately half of the residents were either unable or unwilling to make the financial contribution of Rs. 2100 to the AMC. SEWA's role was to serve as a savings intermediary that would channel community contributions to the AMC upon the completion of works. SEWA also made available on a limited basis loans to beneficiaries for the required SNP financial contribution. MHT served in a similar coordination and facilitation capacity as SAATH during this period.

In parallel with this transition in executing arrangements, the municipal corporation established and staffed a Slum Networking Cell (SNC) within the municipality to manage and implement the upgrading initiative. The cell consists of a combination of engineering staff, zoning and planning officials and a management professional and reports to the Deputy Municipal Commissioner for Administration, a senior official in the municipality. The AMC created a separate unit to implement the SNP in order to insure for greater flexibility, innovation, intensity of effort and autonomy from mainstream engineering projects and offices. From 1997-98 onwards the SNC operated as the primary executing agency for physical investments and in this regard it oversees the formulation of infrastructure system design, contracting and monitoring of technical work and obtaining governmental approval to execute the project in any given slum.

Financing arrangements for the SNP mirror the broad stakeholder participation model of the project. Table 2.4 outlines the financing arrangements prior to the exit of Arvind Mills from the project. An overall cost per beneficiary household was estimated at Rs. 7,580, of which the AMC contributed that largest share (40 percent). Cost estimates for infrastructure were based on the Indore experience where total infrastructure costs per family were estimated at Rs. 4,305 (Parikh, 1995). However, estimates for recurring expenses and the community development component do not seem to be based on either past project experience or a detailed unit costing exercise. The requirement that NGOs finance 30 percent of the community development was also not clearly justified by Parikh or AMC officials. The remaining 70 percent financing for this component was paid by SNC to the participating NGO based on notarized progress reports.

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[24] Based on a review of secondary AMC documentation, this basic implementation model continued to apply to the SNP after 2001. However, the scope of the thesis applies to the period 1995-2001. Secondary documentation from SAATH, SEWA and MHT also suggest a declining engagement between 2001-06.

**Table 2.4: Estimated per Household Cost and
Co-Financing Arrangement, 1995-97 (in 1995 Rupees)[25]**

Components	Estimate Costs	Households	Private Sector (Arvind Mills)	AMC	NGO
Physical Infrastructure	6100	2100	2000	2000	0
Community Development	1000	0	0	700	300
Survey and Design Costs	150	0	0	150	0
Recurring Costs	330	0	100	230	0
Total	7580	2100	2100	3080	300
Percentage	100%	27.5%	27.5%	41.0%	4.0%

Source: Compiled by Author from SNC Records (2000)

After the breakdown in the alliance between the AMC and Arvind Mills (discussed at length in Chapter 3), the corporation took a more active role in project implementation and financing. Table 1.5 below outlines co-financing and implementation arrangements for the period 1998-01. During this period the AMC assumed greater financial responsibility for the implementation of physical works components. Additionally, the AMC assumed responsibility for the private sector contribution in the event that a private sector sponsor could not be identified. In fact, with the exception of minor site-specific support from the Lions Club and the State Bank Employees Union, private sector co-financing has not materialized beyond the initial pilot activity with Arvind Mills. Cost estimates were also revised upwards to include higher estimate costs for on-site community infrastructure and the cost of connecting to trunk infrastructure. Despite these adjustments, the size of the community contribution was held constant at Rs. 2,100.[26] AMC financing came principally from its own capital expenditure budget. The SNC would apply for National Slum Development Program (NSDP) loans once a sub project was approved for implementation. However, only three projects were cleared for NSDP loans between 1998-01, each after considerable administrative delays.[27]

Cost Recovery

Community contributions were meant to be collected by CBO activists and deposited in incremental stages with SEWA, the project's financial intermediary. Intermediary NGOs would assist CBOs in the record keeping and collection process and monitor overall compliance with community co-financing commitments. SEWA would subsequently release funds to the AMC after each stage (e.g. provision of drainage, sewerage and water connections) of the project had been completed. Community members were not allowed to withdraw these deposits and were only returned in the event that the project is not completed.

[25] 1 US$ = 35.18 Indian Rupees in 1995
[26] Data on cost estimates are from SNC records reviewed during field research.
[27] Information on NSDP loan approvals was provided during an interview with Utpal C. Padia, Assistant Municipal Commissioner, Finance (June 7, 2000).

**Table 2.5: Estimated per Household Cost and
Co-Financing Arrangement, 1998-01 (in 1998 Rupees)[28]**

	Estimate Costs	Households	Private Sector	AMC	NGO
Physical Infrastructure	9100	2100	2000	3000	0
Connection to Main Infrastructure	4500	0	0	4500	0
Community Development	1000	0	0	700	300
Survey and Design Costs	150	0	0	150	0
Recurring Costs	330	0	100	230	0
Total	15080	2100	2100	8580	300
Percentage	100%	14%	14%	57%	2%

Source: Compiled by Author from SNC Records (2000)

In order to encourage participation the project, and to create incentives for downstream investments in housing and infrastructure, participating slums under SNP are provided a 10-year tenure guarantee. This provision is in effect a moratorium on eviction or partial confiscation of land and does not confer an exchangeable leasehold or freehold deed to the occupant. It is unclear whether this provision is legally binding or whether the AMC can issue a moratorium on land that is owned by either another branch of government or a private landholder.

The AMC has outlined a process by which it would evaluate the eligibility of candidate slums. Slum settlements on AMC land can be authorized for SNP investments through a 'no-objection certificate' issued by the Municipal Commissioner. Slum settlements on state or federal government land require permission from these agencies and cases are forwarded to relevant agencies for approval. The AMC does not officially seek approval from property owners for candidate slums located on private lands. However, the SNP will not provide services on private land for which litigation is currently pending. Additionally, slums on land designated for alternative use, e.g. roads, schools, hospitals etc., based on city master plans or those for which an existing land use plan has not been developed are considered ineligible for inclusion in the project. Lastly, slums can also be refused permission to participate on technical grounds, i.e. if the settlement is located on land that cannot be accessed with minor improvements to existing trunk infrastructure.[29]

The scope and targets for the SNP quickly evolved from the pilot concept envisioned by Parikh and Arvind Mills in April 1995, to a citywide slum upgrading program. The AMC, led by Municipal Commissioner Keshav Varma and Deputy Municipal Commissioner P. U.

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[28] 1 USS = 42.50 Indian Rupees in 1998

[29] The eligibility framework for inclusion in the SNP was distilled from interviews with P.U. Asnani, Advisor to AMC and former Deputy Municipal Commissioner (June 8, 2000) and Anand B. Patel, Deputy City Engineer and Manager SNC (January 17, 2001). It is important to note that these eligibility rules are not formally documented within the SNC and are in fact the de-facto eligibility guidelines that have evolved under implementation.

Asnani, sought in September 1995 approval from the Corporation's Standing Committee for a comprehensive slum upgrading program that aimed to cover the more than 2,000 slums identified in the city. The AMC estimated that the pilot phase covering four settlements would be quickly scaled-up to cover all slum areas within a period of seven years at a total cost of Rs. 3.25bn. or US$ 93 million (Tripathi, 1998).[30]

The SNP has not been able to meet these ambitious targets. As of December 2005, the project has been completed in 28 slums and was under implementation in 13 additional settlements. These 41 settlements account for approximately 8,700 households and 43,515 residents (AMC, 2006). These beneficiaries account for only 3 percent of the entire estimated slum population within AMC jurisdiction. Evidence also suggests the pace of implementation slowed between 2001 and present. Through January 2001 the SNP had completed work in 9 settlements and was engaged in 15 additional settlements. In the subsequent five year period between 2001-05 the SNP engaged only 13 new slums.[31]

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[30] The true investment requirements for a citywide upgrading program are difficult to determine because of the absence of accurate data on the number of slum residents and the actual infrastructure gap in those settlements. However, if we accept estimates that 41 of all residents in Ahmedabad live in slums and chaals then the approximate investment requirement for a citywide program would be approximately US$ 102 million in AMC areas alone and US$ 137 million for the metropolitan area.

[31] It is important to note that the January 2001 Gujarat earthquake is an important factor that may explain a slowing in the pace of SNP implementation as budgetary resources would have been directed to reconstruction activities.

CHAPTER 3

THE FRAGILITY OF PARTNERSHIPS: WHY THE ALLIANCE BROKE

The literature around upgrading identifies the importance of building broad inter-institutional partnerships and strategic alliances across the public and private sectors in order to sustain citywide upgrading programs. This literature broadly organizes the potential for private sector engagement around two models: (i) project sponsor or 'good corporate citizen' model; and (ii) building and sustaining market share model (See Imparato and Ruster, 2003; Cities Alliance, 2003; Kessides, 2001 and World Bank, 2002).

The project sponsor model in urban upgrading programs involves firms that provide financial support out of philanthropic motivations, to improve corporate image or to target a specific area of high visibility or importance to the firm (e.g. a slum settlement where firm employees are disproportionately located). In a developed country context this model might be aggregated across an association of firms motivated by concern that a city's poor image could ultimately deter investment and adversely influence the location choice of firms and skilled employees. However, this type of aggregation of the project sponsor model is rare in developing country cities.

The market share model of private sector involvement in upgrading focuses on firms and activities that aim to ultimately enhance firm profitability by creating access to, or sustaining presence in, certain markets. Based on a description of multiple possible private sector roles by Imparato and Ruster (2003), I have identified five potentially distinct sub-categories within this model including: (i) technical, architectural and project management service providers; (ii) financial service institutions; (iii) private sector utilities or small-scale infrastructure services providers; (iv) land owners and developers; and (v) firms seeking market share and product penetration.

Partnerships involving public and private stakeholders in the delivery of urban upgrading or low-income housing programs are infrequent along either the project sponsor or market share models. However, the few examples from the policy literature point to two important lessons. First, 'good corporate citizen' partnerships have limited scalability, as no real citywide examples have emerged in the literature. Burra (2005) has expressed concern that such partnerships are isolated in part because they are driven by nonreplicable factors such as charismatic leadership and involve high transaction costs. Second, market share models seem to possess greater promise in terms of sustainability and scalability, but engender heightened risks.

Prahalad (2005) has most recently analyzed one such example of for-profit collaboration between CEMEX, a multinational cement manufacturer based in Mexico, and local agencies. CEMEX found that its market share in the formal sector declined as much as 50 percent after the 1994-95 crisis whereas its informal sector market share dropped by only 10 percent during this period. This experience led the firm to invest in an innovative distribution model targeting the self-help incremental housing improvement market by forming over 2,000 community kiosk offices throughout the country that coordinate small savings and credit groups that procure secure construction material and receive technical

advice from CEMEX-financed construction staff. The model has required close coordination with city governments in each participating municipality to facilitate access to building permits and the resolution of related regulatory issues. Imparato and Ruster (2003) identify similar examples of 'market share' collaboration in the for-profit microcredit sector in Latin America which is increasingly collaborating with national and local agencies to provide incremental housing finance in the context of community infrastructure improvement projects.

However, market share models of collaboration come with important risks. In Mumbai, for example, the Slum Redevelopment Authority launched in 1995 a scheme to encourage on-site redevelopment of low-rise slum settlements by creating incentives for private developers to invest. Burra (2005) found that participating developers would gain access to a number of units above and beyond those constructed for the relocation of the target slum population. Despite its promise, there are concerns that the scheme has been manipulated by developers and original slum dwellers have been expelled or bought-out at below market rates.

The risk of conflict is likely equally prevalent in both models. An emerging literature concerned with inter-institutional arrangements in the implementation of development programs suggests that constructing 'broad strategic coalitions' is inherently difficult and likely to result in tension and conflict. Sanyal and Mukhija (2001) find that inter-institutional pluralism in the delivery of housing services in Mumbai led to conflict between project actors. The authors suggest that this should come as little surprise to development practioners and future initiatives that rely on multiple inter-institutional relationships should both anticipate and take steps to mitigate likely conflict. The story of early tension and escalating conflict between public and private actors under the SNP model told below speaks to the difficulty of building broad networks of interests around citywide programs as the literature recommends.

3.1 A Mismatch in Incentives and Goals

Arvind Mills' participation in the Slum Networking Project (SNP) was largely focused around project sponsor model motivations. The dialogue between Arvind Mills and Parikh, described in section 2.3 above, ultimately led to the signing of a memorandum of understanding (MoU) between the two parties under which they agreed to jointly pilot the SNP in one or two settlements in the city. Dutta (2000) suggests that Lalbhai, who comes from an established Ahmedabad family with a long tradition of involvement in civic affairs, was motivated primarily by philanthropic concerns and viewed his association with the SNP as an extension of this tradition.

In his preface to a comprehensive review of the early SNP experience (Tripathi, 1998), Lalbhai suggests that Arvind Mills' involvement in the SNP was motivated out of pragmatic civic and business concerns. He notes that the firm has grown into global company with diverse business concerns and enormous investments in the city. Addressing housing and quality of life concerns in the city, Lalbhai suggests, is in the interest of Arvind Mills. Lalbhai may certainly have been motivated in part by more narrow firm interests. The original MoU signed with Parikh suggests that a central eligibility criteria

would be the presence of Arvind Mills' employees in these settlements. Sanjaynagar, and the three other pilot areas selected after the collaboration with the AMC was formalized, all contained a large proportion of Arvind employees.

Additionally, some questioned the idea that Lalbhai was motivated exclusively by philanthropic and civic concerns. For example, Parikh argues that, during initial discussion with Lalbhai, the two discussed Lalbhai's view that the private sector could bring to bear modern managerial and high quality technical capacity to meet the market demand for affordable housing and services. What the private sector currently lacked was a clear 'business model' for profitably engaging this lower-end of market for affordable housing and infrastructure services.[32] Importantly, the role of the Arvind subsidiary, the SHADRA Trust, in the SNP model was one of an implementing agency and not merely a financing entity. The extent to which a business, or market-share, orientation drove Lalbhai, however, is unclear as numerous published accounts of the early SNP collaboration do not mention such motivations.[33] At minimum, it may be concluded that Arvind Mills was motivated by a desire to learn from the pilots how private sector management efficiency and a results orientation could be applied to the delivery of basic services to the urban poor.

The extent of Arvind Mills' commitment to implementing the SNP at scale was tested early. After signing the April 1995 MoU, Parikh and Arvind management engaged the AMC to discuss collaboration in the pilot. What they encountered was a highly receptive and motivated group of senior municipal administrators eager for innovative and big ideas. Within four months of the original MoU the AMC had bought into the idea of a citywide upgrading program based entirely on the SNP model. In September 1995 the Municipal Commissioner forwarded an ambitious proposal to the Corporation's Standing Committee for an Rs.3.25 billion seven-year program that would cover all slum areas in the city (Tripathi, 1998).

In April 1995 Arvind Mills had committed US$60,000 to implement pilots in 1 or 2 areas covering 1000 households according to the terms of the MoU. By September 1995, however, the AMC had pushed through a seven-year citywide program with an estimated private sector contribution of US$18 million. This represented a radical change in scope. Arvind management had expressed concerns in September and October 1995 to AMC officials about the drastically expanded scope of the program. AMC officials assured Arvind management that the Corporation viewed Arvind's commitment as limited to pilot projects covering approximately 1000 slum households beyond which, if Arvind could not continue to participate, the AMC would either seek support from other private entities or finance the works themselves.[34] Tripathi (1998) suggests that tension between these strategies of starting small to facilitate learning and moving to scale quickly emerged again in mid-1996 when SHADRA staff and AMC management clashed over the Municipal Corporation's desire to allow the national media to publicize the SNP experience. While SHADRA wanted to wait until the pilot was able to provide relevant lessons, AMC

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[32] Interview with Himanshu Parikh (July 11, 2000).
[33] See Bhatt (2003), Tripathi (1998), Tripathi (1999) and Dutta (2000).
[34] Interview with P. U. Asnani, former Deputy Municipal Comissioner (June 8, 2000).

management moved ahead with the publicity to draw attention to the major reforms underway in the city.

These early tensions in the alliance stemmed from a basic mismatch in goals and incentives. Arvind and the trust were driven by the idea of being able to demonstrate that a model of private sector led urban upgrading could work. AMC management, on the other hand, were looking for big solutions to big problems and were willing to make serious financial commitments to implement these ideas. AMC managers were also likely motivated by the desire to maintain the perception that they were turning Ahmedabad around. After the remarkable and highly visible fiscal recovery engineered by Municipal Comissioner Keshav Varma and his deputies in the early 1990s, the SNP provided another opportunity to demonstrate that the municipal management team was leading a process of significant reform in the city.

It was in this environment of mismatched goals, the rapid scaling up of pilots into a citywide initiative, and doubts about Arvind Mills' long-term role that questions were raised within the AMC about whether the Trust should in fact be so closely involved in implementation. The AMC, in this context, created the Slum Networking Cell (SNC) and staffed it with a group of engineers charged to 'facilitate' the trust's work. Section 3.2 below discusses how new conflicts between the SNC and the SHADRA Trust, combined with these early fissures, ultimately led to the dismantling of the alliance.

3.2 Public-Private Conflict Unmitigated

Tension and conflict between the AMC and the SHADRA Trust emerged soon after the SNP was approved in September 1995. A key area of early concern was the rigidity built into the AMC budget process and the difficulty of releasing funds allocated by the municipality for the SNP. According to one account narrated by Tripathi (1998), the Trust requested in October 1995, in accordance with provisions in the MoU and the Standing Committee resolution, an initial 20 percent contribution to initiate project preparation and outreach activities. Navigating AMC's internal budgeting process was complex and new for the Trust. Their initial request went largely unattended in the municipality for four months only to be told that the existing fiscal year budget did not authorize SNP expenditures and that the Trust would have to wait three more months until the start of the new fiscal year, on April 1, 1996. The trust relied on its close relations with P. U. Asnani who also encountered resistance from budget officers not accustomed to working with intermediary institutions in a flexible manner. Asnani was ultimately able to work out a compromise that broke up AMC's contribution into smaller installments – a strategy more palatable to AMC budget officers – and resources were released.

Minor tensions continued to arise early during implementation. In one particular case in January 1996, SHADRA Trust staff struggled to gain access to base maps and obtain permission to carry out surveys. Without a regularly accessibly interlocutor, the Trust had to turn to Asnani to intervene who made technical material and information available.[35] It was around this time that Asnani and AMC managers began to realize that a more stable

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[35] Interview with P. U. Asnani, former AMC Deputy Municipal Comissioner (January 6, 2001).

interlocutor for the Trust was required and by March 1996 the Slum Networking Cell (SNC) was formed.

Rather than facilitating smoother implementation, however, SNC engineers and SHADRA Trust staff frequently clashed over roles and responsibilities. A key area of conflict involved the appropriate role for SNC engineers. The original Standing Committee order creating the SNC established that the cell would be responsible for assisting the Trust in accessing necessary information, obtaining clearances from within the AMC and approving completed works prior to disbursements to contractors. SNC engineers were also meant to be stationed on-site. Trust managers and engineers, however, felt that this approval function was redundant and that SNC engineers were technically inferior to their own staff. They also found little utility in having SNC engineers on-site because they were unresponsive to consumers and operated as site supervisors, rather than in a truly collaborative manner with SHADRA staff.[36] Trust staff soon began discouraging SNC staff from visiting the site regularly.

At the same time that Trust officials were developing an understanding of the unique operating environment in slums, they were made answerable to SNC engineers that lacked any prior experience or interest in working in slum areas. Engineers initially assigned to the SNC maintained a bureaucratic isolation and were unwilling to accept that executing capital investments in slums areas was any different from implementing investments in regular AMC areas.[37]

Conflict emerged soon and with some frequency. By April 1996 the AMC Estate Department finally released a land use map for the Sanjaynagar area identifying right-of-way and other necessary reservations for land use. SHADRA had been advocating for the release of these maps for over four months. Not surprisingly, the plans were grossly over-dimensioned and called for the relocation of up to 75 of Sanjaynagar's approximately 240 households. Word of the scale of the proposed resettlement leaked through AMC and SHADRA officials to residents who were understandably infuriated by the plans. A series of high-level meetings and site visits were subsequently organized involving Asnani, senior AMC staff, Lalbhai and senior SHADRA managers to assess whether in fact such extensive resettlement was required. Despite objections from the Estate Department, Asnani was able to negotiate, and have approved by the Municipal Commissioner, a major reduction from 75 to 11 in the number homes scheduled for resettlement. A revised map was issued in June 1996.[38]

In another instance, B.K. Rathod, an SNC engineer undertook a random spot-check of works in Sanjaynagar and found a few damaged stoneware pipes discarded by Trust staff after being deemed unsuitable for use. Although damaged pipes had not been used in the actual works, Rathod encouraged community leaders to submit an official complaint for

[36] Interview with Himanshu Parikh (July 11, 2000)
[37] Views on the attitudes of early SNC engineers was confirmed by P.U. Asnani (June 12, 2000) and Anand Patel, Deputy City Engineer, SNC (June 20, 2000)
[38] Account is based on interviews with P.U. Asnani (June 12, 2000), Himanshu Parikh (July 11, 2000) and Tripathi (1998).

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substandard material used by SHADRA and even assisted them in drafting the letter. SNC engineers were accustomed to using only more expensive cast iron or galvanized pipes. SHADRA, in collaboration with Parikh, had decided on a strategy of mixing the use of stronger cast iron and galvanized pipe in high pressure parts of the distribution network with low-cost stoneware pipes in less critical areas. This design adaptation emerged from consultations between SHADRA and residents who expressed a preference for lower-cost material that could be easily maintained in parts of the network linking to household connections (Tripathi, 1998). This conflict – like many other minor disagreements between SHADRA and SNC engineers during this period – had to be resolved by Asnani, who in this case dismissed SNC objections.

Towards the completion of the pilot project in Sanjaynagar in April 1997, however, a series of new, and ultimately impassable, conflicts emerged. Immediately prior to the project completion the AMC Estate Department released a new version of the Sanjaynagar land use plan on which the northern boundary of the settlement was different from the certified map provided by the AMC the previous July. The revised boundary would require the resettling of one further household. In parallel, the AMC decided to rehabilitate the secondary road along this northern boundary and in doing so damaged the asbestos cement pressure pipes laid by SHADRA to service the settlement. Again, a different set of AMC engineers responsible for the road construction objected to the use of such lower-cost pipe and refused to repair or replace it. After weeks of lobbying the AMC with little success, SHADRA ultimately self-financed both the resettlement case and the rehabilitation of the water pipe. In this case, SHADRA could not rely on the sympathetic hearing that it usually would receive from Asnani as he had retired from the service.

That conflict characterized the collaboration between the AMC and the SHADRA Trust during the implementation of the pilot project is perhaps not surprising. Both institutions were engaged in an initiative that implied a vastly different organization of work to what they were accustomed. While AMC management was keen to evolve new operating relationships with private actors, this spirit of experimentation did not initially filter down to SNC staff. SHADRA, on the other hand, saw the AMC role as a facilitator and a public sector interlocutor that would simply cut red tape that they encountered during implementation. The Trust wanted full control over SNP implementation without having to deal with technical oversight or guidance from SNC engineers.

The inability to evolve routine, lower-level mechanisms to manage and mitigate conflict is likely a key determining variable for why the alliance did not work. Both SHADRA and SNC staff used Asnani, the Deputy Municipal Commissioner, to mitigate and intermediate even minor conflicts or disagreements. This reliance on key personalities, and not on institutions or negotiated informal institutional arrangements, was ultimately untenable. By mid-1997, Asnani had retired and Arvind Mills and the SHADRA Trust had decided that Sanjaynagar pilot would be its last suggesting that the AMC was neither ready nor capable of such a partnership.

The following chapter, however, demonstrates how the SNC did in fact evolve over time a series of formal and informal mechanisms with external NGO and local community

associations to reflect consumer preferences and manage the inevitable conflict that emerges from inter-institutional collaboration.

CHAPTER 4

CONSTRUCTING PARTICIPATION: CONLFICT, NEGOTIATION AND EMBEDDEDNESS

The literature on slum upgrading emphasizes the importance of community participation to the success of slum upgrading initiatives.[39] It has been argued that beneficiary participation is perhaps the single most important factor in determining the overall quality of implementation of slum upgrading programs (Imparato and Ruster, 2003). Similarly, Kessides (2001) identifies participation as one of four keys to the success of such operations. Participation is defined by the author as the successful outcome of mechanisms that enable residents to express their demand for services and participate in the design and implementation of such programs. The Cities Alliance (2003) echoes this belief, citing `effective community participation` as one of the keys to successful upgrading strategies. Similarly, the World Bank's Urban Development practice identifies the participation of slum communities as one of 12 keys to the successful scaling up urban upgrading (World Bank, 2002).

The benefits of participation, according to this policy literature, are extensive including the likelihood that community involvement will enhance the feasibility of project designs, increase community ownership and cost-recovery, ensure adequate maintenance of investments and promote community capacity building (Imparato and Ruster, 2003). In fact, a prominent case literature analyzing successful upgrading projects confirms this assessment. The national *Baan Mankong* urban upgrading program in Thailand and its predecessors have reached 53 of the country's 75 provinces utilizing a highly participatory implementation model through which associations of community organizations design and implement community infrastructure and social programs (Boonyabancha, 2005). Similar assessments have attributed the success of the series of Kampung Improvement projects (KIPs) to the role community participation (Surjadi and Darrundono, 1998 and World Bank, 1995).

Yet how do beneficiary demands actually get reflected in project decisions? The policy literature tends to see participation along a linear spectrum ranging from little or no participation to complete community control over the development process. Goethert (1998) suggests that moving along a spectrum towards full community control increases the likelihood that development interventions will be responsive and effective. Recent reviews of participation experiences in slum upgrading programs in Latin America echo the view that maximizing opportunities for direct citizen engagement and control over design and implementation is highly correlated with effectiveness (Imparato and Ruster, 2003). This orientation in the literature suggests that the policy concern around participation in urban upgrading should be about maximizing the *intensity* and *degree* of citizen involvement.

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[39] The `success` of upgrading operations is defined, for the purposes of this analysis, as a combination of the ability to improve the quality of basic services in slums in a demand-responsive manner and the capacity to achieve these results at scale.

The assumption behind this literature is that beneficiaries are both willing and capable to directly manage upgrading interventions. However, a modest development literature does caution against this linear view of participation. Cira (2002) warns that the involvement of community-based organizations (CBOs) in urban upgrading initiatives must be carefully managed ensuring that CBOs are cautiously selected, adequately trained and carefully monitored. Similarly, the author questions the logic that urban slum residents are capable of independently managing upgrading initiatives and argues for a greater role of intermediaries or interlocutors between public agencies and civic groups.

Similarly, in an analysis of upgrading initiatives in Bangkok's slums, Lee (1998) points to the limitations of community associations to operate independently. Lee observes that successful cases of upgrading in Bangkok have involved NGO intermediation in areas of technical capacity building, advocacy with municipal governments and resource mobilization. Additionally, Gulyani and Connors (2002) find, in a review of slum upgrading experiences in 10 African countries, that different forms of NGO and external intermediation have served to build community capacity and improve the efficiency of upgrading services.

An analysis of limited case material tells a more complicated story about the process by which participation or demand-responsiveness is constructed. Enhancing the responsiveness of upgrading interventions to slum residents may not simply be a function of increasing their involvement or control over decision-making. Instead, a body of evidence suggests that conflict and negotiation play an important part in 'constructing participation'.

In the case of the Dharavi Redevelopment Plan in Mumbai, India, Sanyal and Mukhija (2001) describe how an intermediary NGO (SPARC) mobilized to protect slum residents from eviction. The authors describe how conflict and negotiation between SPARC, government officials and private contractors reduced the scale of relocation of Dharavi residents and led to improved financial arrangements for beneficiaries, thereby reducing housing costs. The authors also argue that this process of conflict and negotiation, while costly in terms of project delays and higher costs, increased inter-institutional knowledge and understanding and created mechanisms to channel beneficiary demands. Russell and Vidler (2000) find that cases of successful delivery of upgrading services under the Million Houses Programme in Sri Lanka emerged not amongst community organizations that exerted the greatest control but rather in those instances where community, groups, NGOs and local governments engaged in complex and time-consuming negotiations over the allocation of financing.[40]

The Slum Networking Project (SNP) case tells a similar story of responsiveness to beneficiary demands emerging from a complex process of conflict and negotiation, often

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[40] An important caveat to Million Houses Programme example is that the program was largely ineffective outside of these few settlements. Russell and Vidler attribute this to instability caused by macro-political environment, local government's unwillingness to respond to community demands and the political motivations of NGOs and the competition created between them and local Community Development Committees (CDCs).

with the active involvement of an NGO intermediary. The remainder of this chapter examines in close detail case experience to demonstrate how participation and demand-responsiveness was constructed.

4.1 From Rigid Designs to Adaptive Implementation

The formal process for designing each SNP subproject does not provide opportunities for slum residents to influence project design. Residents are not allowed to recommend technology options or influence the original design document. Despite this rigidity in the formal design process slum consumers, NGO intermediaries and SNC engineers have negotiated informal adaptations in project design that reflect the requirements and preferences of slum residents. How did consumers advocate for and secure changes in the relatively rigid design parameters outlined for the project? Why was the SNC willing to entertain community demands when it was mandated to follow standard design documents?

The preparation of detailed designs for each participating slum is the responsibility of a private consulting firm which surveys each site and prepares design documents to be used by SNC engineers and private contractors. The SNC uses a private firm for design work because it lacks in-house capacity to design infrastructure projects in slum settlements. The design firm maintains only nominal contact with slum residents during the design process and no assessment of community preferences is provided to the firm to inform the design process. Community activists consistently report that the having no input into the preparation of designs and many have never seen design documents. SNC engineers are also only nominally involved in the design process and they maintain that there is no reason for either community members or SNC staff to be involved. SNC engineers suggest that technical designs should not be influenced by 'individual preferences'.[41]

SNP guidelines require that infrastructure provided under the program strictly follow design documents. Future repairs or alterations to this infrastructure are the responsibility of ward offices. SNC engineers and project contractors claim to rigidly follow these technical designs. However, there is substantial evidence to suggest that alterations in the design are made during implementation through a process of negotiation between slum residents, intermediary NGOs and the SNC engineers. Alterations in design occur through two processes. First, a host of minor 'on-the-spot' changes take place during the process of implementation without significant disturbance in the pace of work. A rapid feedback and decision-making process has evolved to execute these changes. Second, more substantial design changes are made based on a technical evaluation of the alterations being proposed by consumers.

Intermediary NGOs, CBO activists and SNC engineers had established systems for information processing in order to make 'on-the-spot' changes to designs. During the installation of water supply pipes in Pravinagar-Guptanagar, for example, community activists closely monitored the private contractor installing the pipeline to a cluster of homes in the settlement. Activists recorded observations and concerns about the setting,

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[41] Details of the design process were provided in an interview with Anand Patel (January 17, 2001). Opinions regarding the design process were provided during interviews with Ashok K. Gangwani, Assistant Engineer – SNC (July 21, 2000).

depth and path of the water pipeline and subsequently communicated this information to Laojibhai, the SAATH intermediary, through informal meetings during or at the end of each workday.

Laojibhai would synthesize and filter this information and communicate a polished version to SNC engineers. In addition to relaying concerns, Laojibhai also would make tentative recommendations for alterations in the setting or depth of the water pipeline.[42] Through this process of monitoring and information processing SNC engineers were alerted to potential problems with the water pipeline before the contractor covers the relevant portion of the line and moves on to the next site. SNC engineers have learned to trust Laojibhai's feedback and will take a closer look at particular complaints and instruct the private contractor to take corrective action (e.g. raising the height or adjusting the path of a pipeline).[43]

Why would SNC engineers respond to technical recommendations from slum residents with no formal training? MHT workers suggest that, while slum residents do not have technical training, they have been involved in protracted struggles to obtain water and sanitation services. Additionally, they have endured floods and malfunctioning informal infrastructure. Through these experiences slum residents have accumulated critical knowledge on the topography in the slum and the performance of prior informal infrastructure.[44] This knowledge is an asset to SNC engineers as they attempt to solve technical problems in slums areas where they are not accustomed to working.

SNC engineers were also been willing to make quick adjustments in project design to accommodate consumer preferences in cases where the changes did not necessarily improve the quality of the infrastructure investment. While monitoring the construction of a drainage line, Bhavlavlinagar residents recognized that the trench being dug to lay drainage pipes would disrupt informal water supply to all households in the settlement. Activists communicated to SNC engineers their desire to keep the informal connections active. SNC engineers in the field inspected the trench in question and ordered the drainage contractor to redirect the drainage pipeline to avoid disrupting the water connections. The drainage contractor was also instructed to consult with SNC engineers before disrupting informal water connections in the future.[45]

A second category of more substantial changes in project design were made during implementation upon the request of slum residents. In Ganshamnagar, for example, residents requested stone paving, rather than the more sturdy concrete paving, on all main roads in the slum after discovering that in other completed SNP project areas ward offices were slow to repair damaged concrete paving. By installing stone paving on all alleys and roads, residents would be able to make repairs cheaply and independently from the technical assistance of ward offices. SNC engineers and MHT workers initially objected to this demand claiming that the stone paving would not withstand heavy traffic. However,

[42] Interview with Laojibhai Patel, SAATH (August 5, 2000).
[43] Interview with Anand Patel (January 17, 2001).
[44] Interview with Bijal Bhatt, Coordinator - MHT (January 5, 2001).
[45] Focus group interview with Bhavlavlinagar female activists (January 17, 2001).

after repeated demands from activists and residents, the SNC sanctioned these changes in areas of low vehicular traffic and made adjustments in procurement, subcontracting and work schedules to accommodate these requests.[46]

In another case SAATH intermediaries and consumers in Pravinagar-Guptanagar requested SNC engineers to consider adjusting the location of the water connection. The design for all SNP projects specifies that water connections are to be located in the toilet unit. However, over 250 households in Pravinagar-Guptanagar asked to move the water connection from the toilet area to another location in the unit. Over a period of four weeks SAATH representatives and local leaders held numerous meetings with SNC engineers to make the case for this design alteration. Again, the SNC agreed to this request and procured additional pipe and materials necessary for the design alteration at no additional cost to residents.[47]

Substantial changes in design have also been made to accommodate the preferences of slum consumers when these alterations require SNC engineers to compromise the technical standards specified for the project. For example, consumers frequently request that drainage chambers not be constructed directly in front of their homes. Residents fear they will be disproportionately affected in the event that the chambers overflow. In many instances the SNC engineers and NGO intermediaries are able to convince residents that it is technically necessary to locate the chamber in the specified location. However, certain residents in almost all SNP settlements have not accepted this reasoning and threaten to delay construction if the design is not altered. In such cases the SNC has adjusted the location of drainage chambers originally to be placed near the entrance of residential units. In other cases the SNC has reduced the number of chambers and adjusted the location of the remaining chambers to accommodate consumer concerns.[48]

Similarly, participating slum residents and partner NGOs have objected to the SNP policy requiring that all alleys in the settlement be wider than eight feet. Widened alleys allow SNC engineers to create adequate distance between water and drainage lines thereby mitigating the chances of polluting drinking water. Greater alley width reduces congestion and facilitates the movement for commercial and emergency traffic. Compliance with the widening policy, however, required many households to significantly reduce the size of already small units. In other cases, residents were unwilling to bear the expense of relocating a toilet or room that encroaches upon the projected path for the paved alley. In sum, road widening has become a significant obstacle in numerous SNP slums. Rather than waiting indefinitely for residents to agree on widening, however, the SNC has made technical adjustments to service households in locations where widening to eight feet would result in excessive loss of property. One solution has been to widen only to 6 feet and lay water and drainage pipes as far apart as possible. Where a width of 6 feet is not possible the SNC has run half-inch water lines directly from nearby feeder pipes to the households in the alley. Lastly, in a small number of cases the SNC provided drainage

[46] Interview with Ghanshamnagar female activists at MHT offices (January 5, 2001).
[47] Interview with Laojibhai Patel, SAATH (January 18, 2001)
[48] Interview with Anand Patel, Deputy City Engineer - SNP (August 8, 2000).

connections to all units in the narrow alley and set up individual water connections for each unit at the entrance of the lane.[49]

By altering the location of drainage chambers or being flexible on alley width SNC engineers have implicitly acknowledged that project technical specifications need to be adapted to meet community preferences. In most cases SNC engineers were influenced by a combination of organized consumer and intermediary NGO pressure, monitoring reports and advocacy. Choosing to make such technical compromises is a departure for government engineers accustomed to strictly following technical guidelines without being responsive to consumer preferences.

4.2 Pressure and Negotiation in the Maintenance of SNP Infrastructure

Operations and maintenance work on SNP infrastructure is strictly the responsibility of AMC ward offices. Settlements participating in the SNP, however, have found that ward offices are largely unresponsive to their O&M needs after SNP infrastructure has been installed and have subsequently requested that the SNC provide technical assistance as O&M requirements arise. The SNC has assisted participating slums to secure O&M services despite having no such obligation. The cell has either taken direct responsibility for O&M work or has advocated with ward offices on the behalf of SNP settlements. In both cases the SNP is most likely to extend such support in the period between the installation of SNP infrastructure and the finalization of each project.[50] In fact, participating slum settlements have learned to prolong this buffer period between construction and project closing by withholding the last installment of community contributions due to the AMC. During this period, which has been anywhere between three to nine months, settlements ensure that all infrastructure is fully functional. However, the nature of this support is distinct from that provided by the ward offices. The SNC works in close consultation with residents and intermediary NGOs to identify and solve these O&M problems.

The willingness and ability of AMC ward offices to provide O&M services in slums is limited. In cases of routine maintenance certain ward offices do extend technical assistance in slums. In Hanumanagar, for example, community activists have developed a strong relationship with ward office engineers and laborers and through these relationships they have been able to secure assistance from the ward office to clear clogged drainage lines.[51] However, most slums report that ward offices are extremely unresponsive to both minor and major maintenance needs. During the summer of 2000, drainage lines in Ramraman Chaal, for example, had been blocked for 25 days. Despite having registered four complaints during this period, residents had received no assistance from the ward office. In frustration with the ward office, residents collected Rs. 50 from each affected households and had the clogged line cleared by a private contractor.[52]

[49] Interview with R.C. Metha, Assistant Engineer – SNP (January 11, 2001).
[50] The completion date for each project is the date upon which it is 'inaugurated'. Inauguration happens only after all physical work is done, AMC bills are cleared and a majority of outstanding community contributions have been submitted. The project does not wait for late contributions from 1-2 households.
[51] Interview with Nagrajbahi, Hanumanagar activists (January 9, 2001).
[52] Interview with Ramraman Chaal activists (July 28, 2001).

Slum residents are consistently dissatisfied with the responsiveness of ward offices to their O&M needs. In a survey of slum residents not participating in the SNP it was found that over 54 percent of residents with legitimate O&M requirements did not report malfunctioning infrastructure in the belief that corrective action would not be taken by the ward offices. Conversely, only 64 percent of residents that did register O&M complaints believe that the malfunctioning infrastructure was adequately repaired.[53]

SNP slum settlements frequently call upon the SNC engineers or participating NGOs to assist in mobilizing ward offices to respond to routine O&M complaints. In such instances the NGO or SNC engineers act simply as intermediaries or advocates between the slums and the relevant ward offices. In Sineshwarinagar, for example, residents recently experienced poor water pressure over a three-week period. Community activists approached the MHT for assistance after receiving no response from the local ward office. MHT workers visited the site and consulted with the SNC engineers and concluded that the ward office needed to increase pressure by increasing the volume of water passing through nearby main water supply lines. Anand Patel[54] requested officers in the local ward office to make appropriate adjustments. After three calls to the ward office to check up on progress, Patel was able to get ward staff to increase the water pressure in the slum.[55] In this case the SNC served as an intermediary capable of exerting social or professional pressure upon the otherwise unresponsive ward staff.

In other cases intermediary NGOs have been more active in ensuring that ward offices address routine O&M complaints in SNP slums. In Pravinagar-Guptanagar, for example, residents rely heavily on SAATH to process maintenance requests. Consumers with malfunctioning infrastructure are instructed to lodge a complaint with the ward office and provide the receipt from this complaint to SAATH. An NGO worker or community activist will register the complaint if the resident is not able to travel to the ward office. SAATH subsequently monitors complaints on a daily basis. When complaints are not addressed within 3-4 days SAATH workers make repeated visits to the ward office until a commitment to perform the maintenance work is secured. In the event of a recurring O&M problem SAATH workers produce the multiple complaint receipts submitted over time and make the case to ward staff that more substantive corrective action is required.[56] The ability of SAATH to ensure that ward offices respond to O&M complaints can be traced, in part, to the persistence and accurate record keeping. SAATH expends considerable energy and time submitting, monitoring and following-up complaints. An average slum resident usually cannot afford to spend such time pursuing these complaints. Over time ward staff have also begun to promptly perform routine maintenance work in Pravinagar-Guptanagar so as to avoid vocal, persistent and often aggressive attention of SAATH workers.

When more substantial maintenance requirements arise in participating slums, however, consumers, local activists and intermediaries pressure SNC for direct technical assistance.

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[53] Data from non-SNP household survey of 147 residents as part of field work for this thesis.
[54] Anand Patel was the Manager of the Slum Networking Cell between 1998 and 2001.
[55] Interview with Bijal Bhatt, Coordinator – MHT (January 5, 2001).
[56] Interview with Laojibhai Patel, SAATH (January 18, 2001).

In Melaninagar, for example, a cluster of 15-20 households had been experiencing poor water pressure during summer months. After receiving no response from the ward office residents approached MHT workers for assistance. Affected consumers also contacted the SNC to request technical assistance. Despite having no obligation to assist Melaninagar residents SNC staff became engaged in an effort to improve water supply to the cluster of homes currently receiving inadequate service. MHT workers and SNC engineers jointly examined the water supply system in the location over a period of one week and concluded that the overall water pressure in the ward was extremely limited. They decided that a separate rider line extending from the water mains to the affected household was the most feasible mechanism to provide reliable water supply to these consumers. Because the SNC had officially 'closed' all accounts in Melaninagar, however, it could not sanction the required maintenance work without going through lengthy contracting procedures. In order to avoid further delays the SNC arranged for maintenance work to be implemented through the ward office while it provided the required budget. The ward office subsequently committed its 'on-call' labor while the SNC supervised the installation of the rider line.[57]

The SNC, intermediary NGOs and consumers have not always agreed upon appropriate maintenance responses in the event of malfunctioning infrastructure. In these cases, however, the eventual resumption of service has emerged from intense negotiation between residents, intermediaries and SNC engineers in the process of problem analysis. In the summer of 2000 Pravinagar-Guptanagar residents experienced serious malfunctioning in the drainage lines installed by SNC contractors. Drainage lines remained blocked for over six months and affected over half of the approximately 600 households in the slums. SAATH workers and community activists claimed that the malfunction was the product of faulty construction by the SNC contractor. These actors subsequently advocated that the contractor be dismissed and the SNC bear the full cost for the replacement of a long stretch of drainage pipe and a series of drainage chambers. SNC engineers, however, did not initially agree with this assessment. They claimed that residents had improperly disposed of solid waste into the drainage system and thereby were largely responsible for the reported malfunction. The engineers also maintained that the severity of the malfunction was overstated because water supply had not yet been extended to the settlement. Once water flowed through the drainage system, they suggested, the magnitude of the clogging would be greatly reduced.

The standoff between SNC engineers, SAATH and Pravinagar-Guptanagar residents continued and escalated over a period of approximately four months. The severity of the disagreement was such that SAATH considered seriously rethinking its involvement in the SNP. Additionally, the SNC suspended work in the slum for short periods of time due to verbal and physical confrontations between residents and SNC engineers and contractors. By November 2000, however, the SNC, SAATH and community activists had agreed to collectively analyze the drainage problem and arrive at an appropriate solution. Primarily, SAATH began a campaign to educate residents on the appropriate use of the drainage system. In a separate instance of clogging on a peripheral drainage line, SAATH workers had ward office laborers excavate the waste material that was blocking the line. Before

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[57] Interview with Bindiyabhen, community activist Melaninagar and Bijal Bhatt, Coordinator MHT (January 5, 2001).

disposing of this material, SAATH convened a meeting of residents to demonstrate that depositing solid waste in the drainage lines can cause clogging and more permanent damage to the drainage system over time.

The project actors subsequently agreed to test the SNC claim that the blocked drainage lines were a function of inadequate wastewater flow. Water supply infrastructure had been installed by that point and water service was initiated. Over a period of two weeks community activists and SAATH workers monitored the performance of the drainage line. It was found that regular wastewater flow did significantly reduce the extent of clogging. However, clogging persisted in a 15-20 meter stretch of drainage pipeline located on the primary feeder line that deposits all drainage from the slum into the off-site drainage mains. This problem area was far shorter than the approximately 150 meters of drainage lines and chambers that SAATH and local consumers initially claimed to be faulty. After a few days of monitoring and excavation around this site SNC engineers, SAATH workers and community activists found that a drainage chamber and the attached pipeline were not sunk at the requisite depth and as a result serious breaks and cracks had developed in the lines and chamber. The chamber and pipeline were inhibiting the free flow of waste material down a natural decline and, because they were located on the critical feeder line, caused considerable clogging throughout the slum. The SNC ultimately conceded that the drainage contractor improperly installed the malfunctioning chamber and attached pipeline and a new contractor was subsequently hired to reconstruct the chamber and pipeline in the affected area.[58]

The SNP has extended O&M support to participating slums despite having no procedural obligation provide these services. In routine maintenance cases SNC engineers or NGO workers serve as organizational intermediaries between affected residents and unresponsive ward offices. In cases of more substantial infrastructure breakdowns SNC engineers, NGO intermediaries and consumers have collaborated to provide maintenance services. The SNP institutional framework and the deep professional connections established between SNC, NGO and community representatives enables these actors to generate more detailed information on the nature of the technical problem. Additionally, intermediaries and SNC engineers push each other to arrive at the correct analysis of malfunctioning infrastructure. The fact that these actors disagree on the nature of the problem creates opportunities for a more rigorous and precise analysis of the breakdown. The unexpected and sometimes contentious process of collaboration and negotiation in the delivery maintenance services under the SNP has ultimately improved the sustainability and quality of services in SNP communities.

4.3 Horizontal Accountability: NGOs, Non-Compliance and the Threat of Exit

Both SAATH and MHT have used the threat of 'non-compliance' and 'exit' to hold engineers accountable for poor performance. NGOs practice non-compliance by ceasing to perform critical intermediary roles such as fielding and filtering community complaints,

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[58] Information on the Pravinagar-Guptanagar drainage maintenance case was drawn from interviews with Laojibhai Patel, SAATH (August 10, 2000 and January 18, 2001), Rajendra Joshi, Managing Trustee – SAATH (August 3 and 8, 2001), Anand Patel, Deputy City Engineer - SNC (January 17, 2001), and Arvind M. Bhavsar, Assistant Engineer – SNC (August 4, 2000).

mobilizing financial contributions from consumers and collecting information on the performance of installed infrastructure. These tasks are critical to the efficient functioning of each SNP subproject. Without the presence of NGOs to organize community concerns, for example, SNC engineers have found themselves inundated with complaints that require considerable time to process and address. Engineers are neither accustomed nor inclined to deal with these complaints. In other instances CBO actors and consumers have organized to stall the process of project implementation by disrupting the work of contractors.

The threat of exit is used primarily by NGOs and not directly by consumers in instances where SNC engineers have consistently failed to execute their responsibilities under the project. NGO exit is a concern for SNC engineers for the same reason that non-compliance is undesirable. Engineers feel that they cannot perform critical intermediary tasks that NGOs currently execute. The threat of NGO exit is used in both direct and indirect forms. In the course of a project an NGO may threaten to withdraw from all involvement in the project. A more indirect 'exit signal' is sent through the unwillingness of NGOs to work in additional slums. NGO actors realize that there is pressure for the SNC to deliver on disbursement targets. By sending a signal that they are not enthusiastic about scaling up their partnership with the cell the NGO can exert pressure upon the SNC to address consumer concerns or alter the process by which the engineers work.[59]

During the summer of 2000 a serious conflict emerged in Pravinagar-Guptanagar over faults in the drainage system installed through the SNP.[60] Initially, The SNC refused to concede that it was partially responsible for these malfunctions by not adequately supervising the work of the drainage contractor hired to install the system. After months of antagonism over the malfunctioning system SAATH stopped performing critical intermediary responsibilities. Laojibhai Patel, the SAATH fieldworker in Pravinagar-Guptanagar, asked all consumers to direct their concerns regarding project implementation to SNC engineers. As a result, SNC engineers were inundated with both warranted and unwarranted complaints and questions on all aspects of the implementation. Engineers were not permitted to perform basic project duties until they could respond to all concerns in a manner that would satisfy consumers. The most antagonistic of these complaints concerned the malfunctioning drainage lines. SNC engineers were unable to provide an adequate explanation for the malfunction and community complaints escalated into outright physical conflict on five occasions.[61] The SNC engineer responsible for technical work in Pravinagar-Guptanagar, Arvind Bhavsar, found this situation untenable and communicated to SNC managers that he would not work with hostile community members.

SAATH also used the threat of exit to influence the SNC to take responsibility for the malfunctioning drainage system in Pravinagar-Guptanagar. The SAATH Managing Director, Rajendra Joshi, sent strong signals to AMC officials and SNC managers that the

[59] The use of 'exit' or 'non-compliance' strategies should be viewed in the context of the ambitious targets placed on the SNC by senior AMC management between 1997-2001. SNC engineers operate under this pressure to 'deliver' which is somewhat unique in the public sector context. Chapter 4 will consider the issue of targets in greater detail.

[60] A detailed account of the Pravinagar-Guptanagar conflict is provided in section 3.2 of this thesis.

[61] Interview with Arvind Bhavsar, Assistant Engineer -SNC (August 4, 2000).

NGO would seriously consider pulling out of the SNP after Pravinagar-Guptanagar was completed. This signal concerned SNC managers because SAATH was already developing plans to escalate its involvement in a cluster of slums in the surrounding Pravinagar-Guptanagar area. Lastly, during this period of conflict SAATH discussed with donors and other AMC officials the possibility of eliminating the role of the SNC altogether and entrusting project implementation to the NGOs themselves. There was, in fact, some support for this idea among external consultants and senior advisors to the AMC. Additionally, the SNC had already invested considerable time and resources to provide upgrading services in Pravinagar-Guptanagar. Unlike other SNP settlements, the SNC made considerable 'off-site' investments in trunk infrastructure to make Pravinagar-Guptanagar functional. A bore well and a water distribution network were installed in the vicinity of the slum. Not being able to complete the project at this stage was highly undesirable for SNC managers under pressure to deliver.

SAATH's strategy of non-compliance in the course of the project and the threat of exit from the initiative convinced SNC managers that they needed to negotiate with the NGO in order to ensure that the Pravinagar-Guptanagar project was completed. It was clear that they could not proceed without some resolution to the problem and a resumption of intermediary functions by SAATH workers. The SNC agreed to examine the quality of construction of the drainage system, found that considerable repairs were required to fix the malfunction and performed the necessary work.[62]

The Pravinagar-Guptanagar case is an illustration of how an NGO can enforce accountability through non-compliance and the explicit threat of exit. There are, however, numerous examples where NGO actors use the threat of non-compliance implicitly alongside persistent efforts to enforce accountability. In the case of Ganshamnagar, described in greater detail above, MHT received complaints from residents that water pressure was low in a cluster of 125 households in the slum. The responsibility for O&M work after the construction of SNP infrastructure rests officially with AMC ward offices. Nonetheless, MHT workers pressured the SNC to intervene claiming that the problem was a function of the original construction. After a period of intensive lobbying the SNC agreed to survey the problem area and concluded that insufficient water pressure in the trunk water supply for the ward was the primary cause for low pressure in Ganshamnagar. A 'feeder' line needed to be installed to insure that these households received adequate water supply. MHT and the SNC again debated as to who should take responsibility for the feeder line for more than three weeks. As the MHT lobbied the SNC it implied that its own credibility was at stake and if the SNC did not address the problem it would have to reevaluate its intermediation role in other and future SNP settlements.[63] The SNC ultimately complied and installed the feeder line.

[62] Information on SAATH strategy was provided by Laojibhai Patel, SAATH (January 18, 2001) and Rajendra Joshi, Managing Trustee - SAATH (August 8, 2000 and January 13, 2001). Information on the SNC response to this strategy was provided by Arvind Bhavsar, Assistant Engineer -SNC (August 4, 2000) and Anand Patel, Deputy City Engineer – SNC (January 17, 2001).
[63] Interview with Ganshamnagar activists and Bijal Bhatt, Coordinator - MHT, (January 5, 2001).

Three related factors explain the ability of SAATH and MHT to hold the SNC accountable. These include: (i) the 'top-down' pressure that engineers feel to complete projects; (ii) the deep inter-institutional relationships developed between NGOs, SNC and communities during implementation; and (iii) the fact that the work of SNC engineers is structured around limited and specific tasks. In normal circumstances, it is conceivable that government engineers would not be subject to intense pressure from senior managers to deliver on slum upgrading targets and could easily chose to ignore intermediary and community complaints. Similarly, the deep inter-institutional relationships and the focus of engineers on a limited set of tasks are a function of the institutional strategy to implement the upgrading program through a special purpose entity rather than existing line departments. The following sections of this chapter will examine more closely how these deep inter-institutional relationships evolve, the incentive structures that sustain them and how they have enhanced the responsiveness of the SNP to beneficiaries.

4.4 SNC Engineers: From Bureaucratic Insulation to Embeddedness

The first three sections of this chapter demonstrate how complex and often contentious relationships between project beneficiaries, NGO intermediaries and SNC engineers have increased the responsiveness of SNP to consumers. Through these negotiated and close relationships the project has been able to 'construct' or institutionalize a form of participation. A key variable in this equation has been the willingness of engineers to engage in non-traditional relationships with NGO and community actors. Most engineers in the cell, however, are drawn from a larger pool of AMC engineers that are not inclined to work closely with poor consumers or organizational actors outside the corporation. How is it, then, that SNC engineers have become responsive to consumers and NGO actors? Were they selected or recruited from a pool of engineers more inclined to work with consumers and external actors? Or did SNC engineers learn to cooperate once involved in the project? Lastly, what motivates SNC engineers to work closely and intensely with external actors?

SNC engineers are, in fact, more responsive to slum consumers that engineers in other departments of the AMC. Slum residents having participated in the SNP were asked to compare the helpfulness, politeness and honesty of SNC engineers and AMC engineers with whom they have interacted during and prior to participating in the project. These three attributes examined concurrently serve as proxy indicators for the concept of 'responsiveness'. Approximately 95 percent of slum residents that have interacted with SNC engineers believe that they are helpful and polite. Similarly, 91 percent of those surveyed considered SNC engineers to be honest. However, only 64 percent and 61 percent of these respondents considered other AMC engineers with whom they have interacted to be helpful and polite. Additionally, only 51 percent of those surveyed believe that AMC engineers are honest (Davis, 2004).[64]

Interestingly, AMC officers responsible for establishing the SNC did not make a significant effort to recruit engineers or operational staff inclined or trained to work with poor consumers and intermediary NGOs. The Deputy City Engineer responsible for managing

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[64] Data from survey of sample survey of SNP households conducted as part of the fieldwork for this thesis. These findings are also reflected in Davis (2004).

the daily operations of the project, Anand Patel, was targeted by senior AMC officials and promoted out of seniority. Patel was promoted and placed in charge of the SNC because he had exhibited an ability to execute projects effectively and without considerable delay. However, Patel's success in prior projects was not a function of any particular ability to cooperate with consumers or external actors.[65] The Additional City and Assistant Engineers recruited into the SNC all had long and uneventful careers in the AMC. In some cases these officers were transferred to the SNC as a punishment for ineffectiveness or because they did not assimilate into the culture of the department or office from which they were moved.[66] Junior engineers and technical supervisors were mostly hired directly out of university and lacked any training or experience in working with poor communities.

Unsurprisingly, SNC engineers were not initially responsive to community needs. During the initial years of the project NGO workers expressed concern that SNC engineers were unwilling to consider them equal partners. Engineers conversely were cynical about the contribution that NGOs actually made to the project. It seemed to one NGO worker that the SNC simply, "wanted the NGO to absorb community complaints without having to respond to legitimate concerns expressed by slum residents. They did not want to be held responsible to consumers."[67] SNC engineers concede that they initially questioned the extent to which NGOs and slum consumers could be of assistance on issues of project design or implementation and frequently were frustrated when required to interact with slum residents.[68] SNC engineers entered the project with a highly predetermined conception of the division of responsibilities between project actors. According to this vision, supervision and decision-making on all issues relating to the implementation of physical infrastructure projects was exclusively the domain of SNC engineers. The fundamental operating principle for the project, therefore, was the execution of discrete tasks performed independently by each actor rather than close cooperation between these actors (Davis, et. al, 2003).

It did not take long, however, for these roles to blur. Over time SNC engineers have come to prefer greater cooperation in the execution of project tasks. Most tasks performed in the project now involve close interaction between consumers, NGO intermediaries and SNC engineers. SNC engineers have moved towards a greater embeddedness with slum communities and project NGOs while abandoning the bureaucratic insulation to which they are accustomed.

The cooperative orientation of the SNC has emerged out of both necessity and preference. SNC engineers increasingly depend upon community activists and NGO workers to

[65] Opinions regarding the conditions of Anand Patel's promotion are those of P.U. Asnani, Special Advisor to the AMC and former Deputy Municipal Commissioner, Administration - AMC (June 8, 2000).
[66] Interview with Anand Patel, Deputy City Engineer, SNC (January 17, 2001). The fact that mid-level engineers in the SNC were 'discarded' by other departments did not always affect the SNC adversely. Certain mid-level engineers sent to the SNC were not performing well in other departments. They had shirked responsibility elsewhere and were sent to the SNC as a punishment. The SNC is considered a punishment because it offers engineers fewer opportunities t extract rents. However, other mid-level engineers were transferred out because they were too honest for the project or zone offices.
[67] Interview with Laojibhai Patel, SAATH (August 10, 2000).
[68] Interview with Ashok Kumar Gangwani, Assistant Engineer – SNC (July 21, 2000).

perform critical management, monitoring and coordination services during the implementation of the project. The project has assigned an Assistant Engineer and Technical Supervisor to each site. Both staff members are required to be on site during morning hours and in the central SNC office in the afternoon. With only a few exceptions, these engineers and supervisors were responsible for one slum project at any give time. Despite this strong field presence the SNC found that it required community activists and consumers to perform monitoring and supervision tasks during implementation. SNC engineers were not simply 'out-sourcing' these functions to community members but rather a close interaction between both sets of actors emerged.

In Bhavlavlinagar, for example, female community activists regularly monitored the work of contractors working in the settlement. During the installation of toilet connections the activists discovered that the contractor was using excessive sand in the concrete mix. The contractor rebuffed the activists claiming that they were not trained or empowered to supervise his work. Nonetheless, the activists were confident in their objection because they had learned about the appropriate sand-concrete ratio through training provided by the MHT. Work was suspended for a day and the activists shared this objection with SNC engineers. The activists and engineers then examined the toilet connections in question and found that the concrete mix was of poor quality. The contractor was ordered to reset the toilets with a new concrete mix.[69]

In other slums, community activists were entrusted by SNC engineers to store and keep an inventory of materials delivered prior to installation. Early in the project the SNC noticed that materials such as pipes, stones and cement mix were stolen from different sites. An inventory system was developed and community activists were responsible for authorizing the receipt and release of construction material. In Shivajinagar, for example, community activists stored material in their homes and kept accurate records. When contractors required pipes or stones for road paving they signed out for the required quantity.[70] This system for inventory control not only protected against theft but also ensured that contractors were accountable for the material they removed from the inventory (Davis, et al., 2003).

SNC engineers also learned to cooperate closely with NGO workers in implementation. The project initially assigned only three basic and discrete functions to participating NGOs: (i) motivate residents to join the project; (ii) assist in the collection of community contributions; and (iii) extend community development services in slums. Collaboration between SNC engineers and NGO workers during implementation emerged largely out of necessity. Engineers encountered considerable delays during implementation because slum residents were not adequately prepared for the infrastructure installation process.

In the early stages of implementation in Pravinagar-Guptanagar, for example, SNC engineers arrived on site and issued their daily orders to contractors to install drainage lines in a particular cluster of the settlement. Installation of drainage lines, however, required that informal water supply connections be disconnected for months until new connections

[69] Interview with Razia Bano, CBO activist – Bhavlavlinagar (January 17, 2001)
[70] Interview with Sushmabhen, CBO activist – Shivajinagar I (January 9, 2001).

were operational. Residents were not given adequate warning by SNC engineers and, therefore, disrupted construction for days until they could make alternate arrangements for water supply. Residents in Pravinagar-Guptanagar also confronted SNC engineers on implementation issues as diverse as the location of pipeline and which stones would be laid in front of their homes. It became clear to the engineers over time that they could not manage the implementation process independently. As a result the SNC and SAATH developed a joint-management system for the project. Under this arrangement SNC engineers and SAATH workers would plan installation work two weeks in advance. SAATH workers would subsequently prepare residents by discussing the planned construction, outlining exactly how they will be inconvenienced and assisting them to make alternate arrangements for water supply. SNC engineers would also speak with residents and answer questions during these informal 'orientations'.[71] As the SNC opened up the planning process NGOs and consumers were able to shape the construction schedule to suit local preferences. SAATH workers and SNC engineers ultimately evolved an arrangement by which they jointly issued daily orders to contractors.

SNC engineers may have been pushed to work closely with consumers and intermediary NGOs out of necessity. However, they had come to prefer an organization of work that is fluid and embedded rather than procedural and insular. The organization of the SNP requires that SNC engineers immerse themselves in the same slum community over a period of 2 to 3 years. Those engineers that wanted to insulate themselves simply could not due to the organizational structure of the project. In the process of this immersion, engineers developed close relationships with community activists, NGOs and consumers. These relationships were occasionally confrontational but more often characterized by receptiveness and trust. In sum, the classic picture of a distant, isolated bureaucrat was inverted in the SNP. This 'role reversal' did not go unnoticed by consumers. They regularly responded with extreme gratitude. It was not uncommon for SNC engineers to be offered a meal or beverages during the workday. Engineers are invited to special functions and were treated with respect. Most importantly, SNC engineers were motivated by the fact that they were responsible for making a substantial impact in the lives of the urban poor.[72] These sentiments were perhaps expressed best in the words of an SNP engineer speaking about his work:

> At the end of each project we feel that we have really accomplished something. People give us so many blessings. We see and feel this sentiment. Getting that respect from people is far more satisfying than constructing a bridge or a pumping station. Such activities also have a positive impact on people but not in the same way as upgrading. With upgrading the impact is immediate and very visible. We are making an important contribution to their lives.[73]

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[71] Information on collaboration in Pravinagar-Guptanagar planning was shared during interviews with Laojibhai Patel, SAATH (January 5, 2001) and Arvind M. Bhavsar, Assistant Engineer – SNC (August 4, 2000).
[72] This interpretation of the attitudes of SNC engineers was culled from interviews with numerous engineers in the cell including Ashish Kumar Chandra, Technical Supervisor – SNC (January 11, 2001) and R.C. Metha, Assistant Engineer – SNC (January 11, 2001) in particular.
[73] Interview with Anand Patel, Deputy City Engineer - SNC (January 17, 2001).

4.5 NGOs, CBOs and Intermediation

This chapter has detailed a series of cases where NGO and CBO intermediation has institutionalized the participation of slum residents and both increased the responsiveness and effectiveness of SNP investments. This section describes in greater detail the institutional strategies for intermediation employed by SAATH and MHT. The section also examines how CBOs and community activists were engaged with NGO and AMC engineers in processes of conflict and negotiation. The section demonstrates that CBOs collaborating in the SNP do not possess considerable institutional capacity and are often no more than a collection of one to three highly motivated activists. These activists are a critical piece of the 'participation' puzzle. However, their role as 'freelancing activists' questions some of the assumptions in the literature around the organized participation of communities in urban upgrading projects discussed at the beginning of this chapter.

Both SAATH and MHT facilitated project implementation by coordinating the collection of financial contributions, mitigating confrontation between the SNC and slum residents, and advocating for the interests of consumers. However, the models for intermediation adopted by each NGO were quite distinct.

SAATH chose to become closely involved in the daily management and implementation of the upgrading project in Pravinagar-Guptanagar and assigned a field worker, Laojibhai Patel, to the slum on a full time basis. Laojibhai would be present in the settlement throughout the day. Slum consumers most often would take complaints and concerns associated with implementation directly to him and he would subsequently filter these concerns and communicate only the most important issues to the SNC engineers. Laojibhai would collate, filter and package community concerns and observations collected each day through monitoring and interactions with residents. The 'packaging' of complaints would occur primarily during evening meetings with CBO activists. Patel and the activists would collectively strategize as to which concerns should be focused upon with SNC engineers over the ensuing days. These strategy sessions not only prioritized problems but also generated potential solutions.

Patel was subsequently able to translate these filtered concerns into tangible action during morning meetings with SNC engineers and contractors. In these meetings work orders were given to contractors and decisions were made on how implementation of particular works would proceed. This system of close observation, information gathering, strategizing and feedback serve as the principle mechanism through which SAATH has been able to increase responsiveness in the project. Recurring concerns that were not resolved through this system were addressed during regular, unscheduled meetings and negotiations between SAATH's Managing Trustee, Rajendra Joshi, and Anand Patel.

In other instances, Laojibhai Patel would anticipate potential complaints based on his familiarity with the project cycle and schedule of proposed work. In these cases he sought clarification from SNC engineers prior to receiving consumer complaints. In January 2001, for example, water supply to a cluster of 150 households in Pravinagar-Guptanagar was

interrupted due to a malfunctioning water valve. Through consultation with SNC engineers Patel discovered that repairs would take up to four days. He also obtained from the engineers a detailed explanation of the condition of the valve, how the malfunction was specifically affecting water supply and the process by which repairs were to be made. On the third day of interrupted water supply when consumers approached Patel he was able to provide an accurate explanation for the malfunction and explain actions being taken towards restoring supply.[74]

MHT, on the other hand, was far less involved in the daily management of project implementation in participating slums. Until early 2001, MHT had only 2-3 field workers responsible for intermediating in over a dozen participating slums. These workers focused disproportionately on the collection of monthly savings to be applied towards the Rs. 2,100 community contribution. Ongoing technical monitoring and problem solving in these settlements was almost entirely the responsibility of CBO activists and SNC engineers.

MHT did play a more active intermediating role in conflicts of greater magnitude. For example, the trust had been working in Kailashnagar for a number of months when the former Deputy Municipal Commissioner for Administration, M.K. Das, ordered the SNP to scale back its work in the slum based on Das' interpretation of an SNP policy stating that eligible slums should have no more than 25 percent of households with permanent concrete roofing.[75] According to DMC-Admin, Kailashnagar did not satisfy this condition for eligibility despite the fact that the Municipal Commissioner had already issued a 'no objection certificate' (NOC) for work in the slum and project planning and implementation was underway. MHT intervened on the behalf of Kailashnagar residents by organizing demonstrations and engaging in meetings with senior AMC officials objecting to the use of 'roofing type' as a proxy measure for poverty.

A compromise was brokered after considerable negotiation between MHT and the AMC. It was decided that the SNP would no longer apply the concrete roofing condition in considering whether a particular settlement would participate. However, all households with concrete roofing would be required to contribute Rs. 5000 rather than Rs. 2100 for average slum households.[76] MHT intermediation was critical to securing project investments for Kailashnagar residents.

By early 2001 both SAATH and the MHT were in the process of adapting procedures for intermediation. SAATH had planned to scale back its daily involvement in the management and implementation of individual slum projects while encouraging collaborating CBOs to increasingly assume more responsibility for these functions. Conversely, MHT was planning to hire more field workers to intensify its presence in participating slum. This policy change was, in part, motivated by a number of post-construction O&M complaints

[74] Interview with Laojibhai Patel, SAATH (January 10, 20001)

[75] The project uses concrete roofing as a proxy indicator for poverty and claims that the non-poor should not avail services through the SNP.

[76] Interviews with Bijal Bhatt, Coordinator - MHT (January 5, 2001) and Anand Patel, Deputy City Engineer - SNC (January 17, 2001). The compromise to charge households with concrete roofing a higher contribution was agreed to in principle but never was implemented.

in slums where MHT had been active. MHT had subsequently come to believe that it must become more closely involved in technical aspects of project design and implementation to insure adequate construction quality.

It is important to note that both SAATH and MHT had strong incentives to achieve constructive intermediation roles that would effectively increase responsiveness and improve physical outcomes in participating slums. More specifically, both organizations were strongly motivated by a desire to maintain their legitimacy as advocates for the urban poor.

SAATH was, at the time of field work for this study, a young organization engaged in only a few slums throughout the city. The organization recognized that its performance in Pravinagar-Guptanagar would shape perceptions about its ability to work on a large scale on slum upgrading initiatives. Cultivating this legitimacy and establishing a track record as a service delivery organization was extremely important for SAATH as it attempted to engage new slums and appeal to external donors for financial support (Davis, et al., 2003). Communities seemed to understand this dynamic and used it to push SAATH to be better advocates for their interests. In Pravinagar-Guptanagar, for example, the SNC asked SAATH to communicate the schedule of work to residents to facilitate ease in implementation on behalf of the SNC. However, contractors and engineers frequently slipped the implementation schedule inconveniencing and frustrating residents. At issue, according to SAATH, was the organization's ability to produce reliable intermediation services. SAATH was also concerned that visible setbacks in Pravinagar-Guptanagar would create adverse perceptions in other neighboring slums where it intended to work.[77]

The organization lobbied actively with the SNC for greater accountability in setting and meeting deadlines for construction and repair work. When this did not work, SAATH communicated construction deadlines to consumers but instructed them to approach SNC engineers directly in the event that deadlines were not met. Responding to subsequent consumer concerns placed tremendous pressure on engineers and SNC managers ultimately agreed to hold engineers and contractors accountable to deadlines by insisting on unpaid overtime work and delaying payments when deadlines were not met.[78]

Organizational incentives facing MHT were considerably different than those for SAATH. MHT, as part of the Self Employed Women's Association (SEWA) network of organizations, benefited form the legitimacy that SEWA has earned from years of organizing poor women workers in Ahmedabad's slums. Unlike SAATH, the organization is not concerned about 'building' legitimacy – but rather maintaining it. Slum residents expect MHT to exert considerable influence on the AMC on the basis of this affiliation with SEWA. Women activists in SNP slums that work with MHT were also part of a broader network of activists from hundreds of settlements in the city (Davis, et al., 2003).

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[77] Interview with Rajendra Joshi, Managing Trustee – SAATH (June 17, 2000). SAATH was in the process of planning and negotiating with a cluster of slums surrounding Pravinagar-Guptanagar to participate in the SNP. The NGO was particularly concerned that these settlements would reconsider their engagement with SAATH.
[78] Interview with Laojibhai Patel, SAATH (January 18, 2001).

News of perceived failure of MHT in one settlement spreads quickly through these networks and could potentially damage the credibility of the SEWA network.

MHT competence was challenged in the Kailashnagar case described above. The standoff between AMC officials and Kailashnagar residents persisted for weeks and residents were able to mobilize SEWA activists from other slums to join in public demonstrations against the AMC. As the case became more visible MHT managers were subject to considerable pressure from within the SEWA organizational network to resolve the case in favor of the slum residents and a compromise was ultimately negotiated.[79] The threat to the SEWA network's legitimacy created a heightened sense of urgency for MHT managers.

The incentive structures faced by community activists engaged in the SNP process was different than those faced by NGO intermediaries. Not surprisingly, the most effective institutional form for these activists to successfully represent communities was also different. The SNP officially requires that a registered CBO exist in each participating slum responsible for managing community contributions and mobilizing beneficiary involvement. However, in almost all participating SNP slums the relevance of formal community associations is ambiguous at best. Approximately 55 percent of residents surveyed in participating slums consider themselves members or office bearers in a local CBO.[80] In practice, however, only a small proportion of these members were active in any local association. Community activists in participating SNP slums confirm that there were no regularly scheduled CBO meetings and no transparent procedure for electing representatives. In certain cases the CBO was simply a paper entity created to satisfy the SNP requirement for an institutional partner in participating slums. In other cases, where the CBO either predated the SNP, the form of the group resembled an informal collection of two or three activists rather than a representative and formal community association (Davis et. al., 2003).

Nonetheless, individual or small groups of community activists have assumed important mobilization and intermediation roles despite the absence of vibrant or robust community associations. It is, therefore, worth examining the mechanisms by which these smaller informal groups of community activists are able to perform these functions.

In Shivajinagar, for example, female residents organized into the Shivaji Mahila Mandal, a women's community group, in 1993 to secure access to water and sanitation services for the slum's 100 households. CBO leaders claimed that all women in the slum were members. However, since its inception no more than five female activists from the slum had been involved in the affairs of the association. No formal procedures for decision-making and conducting business were in place. A group of three female activists associated with the community organization assumed responsibility for networking with then SNC during the initial phases of information gathering and applying for inclusion in the project. These same activists took primary responsibility for collecting community contributions, monitoring contractors during implementation and interacting with SNC engineers to

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[79] Interview with Bijal Bhatt, Coordinator - MHT and Varsna Thaker, Field Worker – MHT (January 5, 2001). Details of the Kailashnagar case are provided in section 4.5 in the previous chapter.
[80] Data from sample survey of SNP areas conducted as part of field work for this thesis.

express consumer preferences. Sushmabhen, the most prominent of the activists, had instructed residents not to directly approach the engineers or contractors with complaints. Consumers directed their concerns to Sushmabhen who spoke with SNC engineers and contractors on a daily basis. It was subsequently her responsibility to provide residents with information and feedback regarding their concerns. Having only a few active members in the CBO suited Sushmabhen because such an arrangement simplified the process of coordinating tasks.[81]

Conversely, in Bhavlavlinagar a community organization was formed in order to comply with SNP requirements. The CBO claimed a membership of 15 individuals of whom 13 were women and only four had been actively involved in implementing the SNP in the settlement. Bhavlavlinagar activists were disproportionately involved in the monitoring of physical works and advocating for adaptations in design to suit consumer preferences. These activists did not, however, intervene in collecting community contributions due to a past experience in the settlement where residents were defrauded by a neighbor promising to secure water and drainage connections. Razia Bano, a prominent activists and one of the few literate women in the slum, was the focal point for community complaints. Much like Sushmabhen in Shivajinagar, Razia Bano was responsible for fielding, filtering and communicating community concerns to SNC engineers. Razia Bano and her neighbor, Merajbibi, also took full responsibility for monitoring the work of contractors. Each day either of the two women wound spend hours overseeing the work of the contractor in the slum and reporting what they saw to the SNC engineer. The one active male resident was responsible for communicating with the SNC engineers when major concerns requiring more extensive negotiation and bargaining arose (such as the desire to adapt the project design). These activists all claim that the small number of active CBO members made coordination easier and eliminated opportunities for misunderstanding or distrust.[82]

It is evident that a small group of residents in participating SNP settlements perform coordinating and monitoring tasks originally assumed to be the responsibility of more formal community associations. These small groups of activists have developed informal norms and procedures that govern how they will perform monitoring, communication and advocacy tasks associated with the project. Additionally, these activists see little utility in the formal organizational procedures, such as elections or regular meetings, often assumed to be essential to vibrant civic associations. In many respects this finding is unsurprising as residents of poor urban slum settlements would not necessarily have abundant time to devote to community activities. More importantly, these findings question the literature around participation that advocates for a maximum degree of community control and management of development interventions.

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[81] Interviews with Sushmabhen, CBO activist – Shivajinagar (January 9, 2001) and Hiren Sureshbhai, Technical Supervisor – SNC (January 9, 2001).
[82] Interview with Razia Bano and Merajbibi, CBO activists – Bhavlavlinagar (January 17, 2001).

CHAPTER 5

WHY DIDN'T THE SNP ACHIEVE SCALE?

The SNP has not been able to achieve scale in the delivery of basic services to Ahmedabad's slums. Table 5.1 below demonstrates that the program has completed work in 28 slums in over a decade of implementation. In the period between 2001 and 2005, the SNC has engaged only 13 new slums. In total, the SNC estimates that the 41 slums engaged include approximately 8,703 households and 43,515 residents. These 41 slums represent less than 6 percent of all slums within AMC boundaries and less than 2 percent of all slums and chaals in this same jurisdiction. The over 43,000 slums residents being served account for less than 5 percent of all slum residents and approximately 2 percent of all estimated residents in slums and chaals.[83] The achievements are clearly far below the citywide slum upgrading program envisioned in 1995 by AMC administrators. At the time, AMC managers estimated that the SNP would reach all slums within five years at a cost of 1995 US$ 93 million.

Table 5.1: SNP Progress

Period	New Slums Engaged	Slums Completed During Period	Under Implementation an Period Close
Pilot Phase: 1995-1997	1	1	0
1997-2000	26	9	15
2001-2005	13	18	10
Total	41	28	

Source: AMC Records and AMC (2006)

This chapter explains why the SNP was unable to reach scale. The policy literature on urban upgrading in recent years has been deeply concerned with how to achieve scale. However, the literature is not always consistent and fails to focus on a limited set of key variables. Imparato and Ruster (2003), for example, outline 10 keys to achieving scale in upgrading operations including political will, a clear subsidy structure, strong local capacities and integrated area-based planning and implementation frameworks.

Similarly, the World Bank (2002) outlines 12 keys to implementing large scale upgrading programs covering many of these same themes while also pointing out the importance of developing upgrading-specific knowledge and institutional capacity and the need for multiple mechanisms or programs within the context of a citywide upgrading program. Similarly, Cities Alliance's (2003) guidance on scaling up upgrading focuses on seven keys including the importance of sustainable financing built into municipal budgets, mobilizing non-public sector, and private resources and focusing on preventative measures including creating access to open and transparent land markets.

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[83] Data on population is based on 2001 Census population estimates analyzed in AMC (2006). A figure of 710 is used for the number of slums. This is the lowest and most recent estimate made on the number of slums by the AMC. In 1991 it was estimated that 1029 slums existed in the AMC jurisdiction (ASAG, 1991).

This policy guidance is normative but fails to serve as guidance for action. A municipality, sate or country attempting to implement a broad upgrading program would have to expend considerable political capital and resources to get all of these fundamentals right. What really matters? Which policy or program actions can trigger a chain reaction ultimately leading to the implementation of large scale upgrading programs? Davis (2004) attempts to synthesize the policy dialogue around four keys to upgrading including: (i) overcoming resource constraints; (ii) institutional knowledge and capacity; (iii) political will and mitigating political resistance; and (iv) avoiding a reliance on non-replicable factors, e.g. piloting in areas with unusually strong community organizations. Similarly, Kessides (1997) focuses in on four key variables including participation, sustainable long-term financing, land market reform and a flexible financial sector responsive to demand for micro-enterprise incremental housing finance.

Despite the general lack of prioritizing of key variables, there is agreement throughout this literature on the factors for success with the exception of three important fault lines. First, the literature often concurrently advocates for integrated area-based infrastructure strategies and the importance of 'flexibility' and 'beneficiary' choice from a menu of infrastructure options. While these two approaches are not necessarily incompatible, they respectively imply either a 'bundling' or 'menu' approach to services provision. Second, the policy literature is divided on the issue of how land tenure regularization affects the sustainability and scalability of upgrading initiatives. Third, there is no consensus on the relative importance of special-purpose implementing units in contrast to the mainstreaming of upgrading programs into municipal line departments. The conclusion of this thesis reflects on these institutional debates using the lens of the SNP experience.

Conclusions reached in this chapter build on parallel studies that address in part the bottlenecks to scaling up the SNP by Davis, et al. (2003) and Davis (2004). This chapter aims to describe and analyze in greater detail two of the key obstacles to achieving scale in the SNP identified in these previous studies: (i) the role of parallel programs and competing politicians; (ii) the lack of flexibility in project menu options. Section 5.1 will examine how parallel entitlement programs for the urban poor with clear political constituencies compete and the SNP and limit its ability to achieve scale. Section 5.2 will consider the debate around the bundling of infrastructure services under upgrading programs and assess whether bundling either helps or hinders the scalability of the SNP.

5.1 Competing Programs and Aligning Political Incentives

The policy literature on urban upgrading suggests that political commitment is critical to the success of citywide upgrading programs. Political will in this literature is associated fundamentally with a change in public sector orientation towards the urban poor – from hostility and exclusion to a willingness to integrate slums into the fabric of the formal city (Cities Alliance, 2003). More specifically, political will is associated with the ability to designate sufficient and sustained financing, establish ambitious and comprehensive

strategies and clear targets, coordinate multiple entitlement programs that target slums, and engage in necessary policy, legal, regulatory reform.[84]

There is little debate that political support and strong leadership is essential to the success of upgrading urban informal settlements at scale. However, much of this literature does not consider the often complex relationship between competing political interest groups that frequently characterize the political landscape of developing country cities. Instead, the literature sees political will as an endowment that either exists or does not. A more likely situation is one where pockets of political will exist alongside resistance and competition. The interesting question would then be not whether political will exists but rather under what conditions have political constituencies been likely to either support or resist citywide upgrading programs.

The case of Ahmedabad suggests that the politics of urban governance is perhaps more complicated than the literature suggests. Political will coexists with pockets of implicit resistance (Davis, 2004). I describe below how political will for citywide upgrading did exist for a sustained period of time but was then undermined by three parallel subsidized programs for financing urban infrastructure for the poor that received support from local, state and national politicians.

There were very clear indications that senior AMC management, including a series of Municipal Commissioners and Deputy Municipal Commissioners, were strongly committed to the SNP through 2001. In chapter 2 of this thesis I described how AMC management quickly transformed the idea of a pilot program into a citywide upgrading program. The program established a clear target of reaching the city's 300,000 slum households in five years. We know now, however, that after five years of operation the SNP had reached no more than 5,300 households and, after over a decade of implementation, just over 8,700 households.[85]

The allocation of adequate resources to SNP activities was, however, not a constraint in this process (Davis et al., 2003 and Davis 2004). Budget allocation and expenditure data over six fiscal years between 1996-97 and 2001-02 is presented in Table 5.2 below. The project consistently received more resources in each year despite exhibiting a limited ability to absorb these funds. Draft budgets are first made under the direction of the Municipal Commissioner and subsequently shared with the standing committee for discussion and adjustments. Only after this process is the budget document shared publicly. In preparing the budget the Commissioner asks all departments to prepare draft department budget outlining the desired level of expenditure. Each year the SNC hesitantly requested only moderate increases in its budget allocation upon having received strong signals from the Deputy Municipal Commissioner for Administration (DMC-Admin) to scale up the initiative. The Municipal Commissioner and the political members of the standing

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[84] See Cities Alliance (2003), World Bank (2002), Cira (2002) and Imparato and Ruster (2003) for a more detailed discussion on political will in upgrading programs.

[85] Original targets set by the AMC are outlined in a Slum Networking Project brochure published by the AMC on an unspecified date. Data on households with SNP services is provided by Deepak Trivedi, Assistant Naanger – SNC.

committee would further increase SNP budget allocation. Based on guidance from the DMC-Admin, for example, the SNC requested Rs.70.5 million for the 2000-01 period. This amount was increased to Rs.75.5 million by both the Municipal Commissioner and the political wing with little consideration for the ability of the project to absorb the resources.[86] Budget allocations for the fiscal year 2001-02 were also hugely ambitious.

Table 5.2: Annual Budget and Utilization for SNP (Approx. Numbers)

Year	Budget (Rs.)	% Increase	Expenditure (Rs.)	% Utilization
1996-97	2,000,000	-	70,000	3.5%
1997-98	10,810,000	440.5%	1,645,000	15.2%
1998-99	46,121,000	326.7%	12,773,000	27.7%
1999-00	51,992,000	12.7%	11,458,000	22.0%
2000-01	75,555,000	45.3%	-	-
2001-02	200,000,000	164.7%	-	-

Source: AMC Records[87]

The cumulative total for the first five years of full implementation, excluding the start-up year of 1996-97, was over Rs.384 million. Given the initial cost-sharing formula, outlined in Table 2.4 of this report, this would have enabled the SNC to reach approximately 123,000 households, or an estimated 41 percent of the total slum population in the city. If we use the revised cost-sharing formula developed after Arvind Mills' exit from the alliance, the project would still have been able to reach an estimated 45,000 households or approximately 15 percent of the entire slum population of the city. Either of these figures would qualify as upgrading at scale. Additionally, given the willingness of AMC officials and political representatives to continuously increase the budget despite poor expenditure outlays, it is not inconceivable that in the latter scenario the project would have received even more allocation if it could have demonstrated a strong implementation record.

What explains this trend to expand the SNP budget at this rate? A more prudent strategy would be to either freeze or decrease the budget allocation for the project and critically examine why utilization was low. Political representatives have generally been unwilling to question the performance of projects targeted to the poor out of concern for being perceived as 'anti-poor'. Between 1995 and 2000 the political wing of the AMC was controlled by the BJP with a Congress Party minority. The Congress Party consistently accused the BJP of pursuing a policy agenda that disenfranchised the poor.[88] Increasing the SNP budget was, therefore, a highly visible way to respond to this criticism. Since the late 2000 the political wing has been controlled by the Congress Party, which claims to be pro-

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[86] Interviews with Anand Patel, Deputy City Engineer – SNC (January 17, 2001) and Deepak Trivedi, Assistant Manager – SNC (August 1 and 8, 2000).

[87] Data obtained from Deepak Trivedi ,Assistant Manager – SNP (August 8, 2000). Expenditure levels for fiscal year 2000-01 were not yet final at the time of my field research but, according to Trivedi, they were between 20 percent and 30 percent of the budgeted amount for that period. Budget figures for fiscal year 2001-02 were obtained during conversations with P.U. Asnani and Anand Patel.

[88] Interview with Yousuf Khan, Staff Reporter – Times of India (July 22, 2000).

poor. It has been suggested that the dramatic increase in the SNP budget for the fiscal year 2001-02 was in part sanctioned by the Congress Party to strengthen its pro-poor image.[89]

It is more likely, however, that senior AMC administrators were the real drivers behind this budget inflation. First, the budget process, as described above, is led by AMC administrators and not the political wing. The AMC is responding to many concerns when it increases the SNP budget. Primarily, the municipality has been engaged in a ˈmodernizationˈ process since 1994 which includes the reform of the municipal finances and the implementation of major infrastructure projects throughout the city. Since 1994 successive Municipal Commissioners have introduced slum upgrading into the AMC budget as part of this broader modernization agenda. More recently, AMC administrators have also been motivated by the possibility of securing external financing for urban upgrading. Discussions in 2000 between the Government of Gujarat and both the World Bank and the Asian Development Bank focused on the possibility of leveraging financing potentially through a new national slum upgrading facility had catalyzed an otherwise dormant effort to develop a state slum policy.[90]

If political will had created adequate access to finances, what explained the poor expenditure data? Part of the answer lies in the presence of alternative and competitive service delivery mechanisms for the poor, each with an important political constituency. For many years prior to the SNP slum consumers had used, albeit imperfectly, a variety of mechanisms to obtain water, sanitation and other basic infrastructure services. These included provision thorough three types of mechanisms: (i) illegal self-provision and informal contractors: (ii) AMC ward offices; and (iii) the system of discretionary political grants allocated by local, state and central government politicians.

The assumption among SNP designers and SNC staff was that all three instruments are unattractive to slum residents and that they would immediately opt to access an integrated bundle of services. However, evidence suggests that slum residents are far more strategic in how they access differing instruments for service provision.

Informal mechanisms to access water and sanitation services in Ahmedabad vary between self-provision and provision by illegal contractors. Provision through informal means is generally the most costly but also the most readily available mechanism. Many slum settlements have lost money in deals with unscrupulous informal contractors who fail to implement or complete services for which they are contracted.[91] Informal provision usually

[89] This view was echoed during interviews with Bhartiben Patel, BJP Local Councilor to the AMC (January 15. 2001). Amit Shah, Congress Party Local Councilor to AMC (January 16. 2001) and Leena Mishra, Principal Correspondent, Time of India (January 16, 2001).

[90] Opinions on the attitudes and approach of recent AMC administrators towards slum upgrading and information regarding ongoing state and city-level negotiations with multi-lateral agencies was provided during interviews with P.U. Asnani, Advisor to the AMC (January 06, 2001). The World Bank has recently restarted discussions with the Government of India on a National Slum Upgrading facility that would support state-level programs and policy reforms.

[91] Focus group discussions with community representatives in Ganshamnagar (January 8, 2001), Shivaginagar (January 9, 2001), Hunamanagar (January 9. 2001) and Sharif Khan Pathan ni Chaal (January 10. 2001).

occurs in the form of illegally tapping into nearby water and drainage mains. The research for this study found very little evidence of water vending or resale. Additionally, there are no good estimates available on the actual number of illegal connections or the volume of water lost to these connections. However, AMC ward office staff suggests that illegal connections are 'widespread' in slum areas. The AMC officially estimates that 15-20 percent of water passed through the system is lost to leakage and illegal connections.[92] However, ward office staff estimate that the actual volume of lost water is considerably higher than 20 percent and slum residents consistently report that informal water and drainage facilities are often unreliable.

Nonetheless, informal provision remains attractive to slum residents for three interrelated reasons. Primarily, no slum is barred from obtaining illegal services. Secondly, slum residents can install pipe that is much larger and cheaper than what is regulated by the AMC. This enables them to cut costs and also obtain more water than the amount currently rationed by the municipality. Lastly, and most importantly, illegal connections are essentially secure. The AMC does have the right to disconnect illegal connections when they are discovered. However, it has been the practice to refrain from disconnecting the poor and ward office staff suggest that when they do disconnect a cluster of illegal connections they face unbearable public pressure. Senior AMC officials have also turned a blind eye to illegal water and drainage connections with an understanding that trying to disconnect these connections would be politically explosive.[93]

There is also evidence to suggest that local ward councilors encourage illegal water and sewerage connections through two mechanisms. First, local councilors finance the extension and repair of trunk mains or the installation of improved pumping facilities in areas near constituent slum communities through discretionary budgets. Slum residents subsequently tap into these mains or, in cases where informal connections already exist, benefit from an improved quality of service. Councilors have identified this as an important strategy to maximize benefit from limited discretionary budgets. Additionally, councilors are often legally constrained from providing household water and sewerage connections to certain slums that are on private or non-AMC public lands. Second, when own-resources are not available, councilors advocate with ward offices for similar investments in the repair, maintenance or upgrading of trunk infrastructure near slum areas.[94] By linking discretionary political financing or leveraging ward resources for such investments, local councilors are encouraging illegal connections, decreasing the true cost to consumers of connecting informally, and improving the quality of service received illegally.

A second mechanism for slums to access services is through AMC ward offices. The issue is eligibility. In 1976 the AMC conducted a census of all slums and chaals in the city. Each slum household was provided with written documentation indicating their inclusion in the

[92] Interview with A.M. Patel, Assistant City Engineer, Mechanical Department, AMC (January 17, 2001).
[93] Interviews with Rashmikant Mahida, Additional City Engineer, North Zone – AMC (January 10, 2001) and P.A. Dixit, Deputy Municipal Commissioner, West Zone – AMC (July 5, 2000).
[94] Local councilors Amit Shah (January 16, 2001) and Bhartibhen Patel (January 15, 2001) both confirmed targeting investments in Rajivnagar, Pitaji ki Chaali, Maachipir and numerous other slum settlements. They also confirm that such strategies are not unique and frequently used by colleagues.

census. In the early 1980s the AMC passed a resolution enabling all slums 'registered' under the 1976 census to access public services legally and many of these slums have since obtained household water and drainage connections by submitting applications to ward or zone offices. Slums formed after this date or those incorporated into the city in 1986 are not eligible under this regulation. The AMC has subsequently introduced resolutions that extend the deadline for slums beyond 1976 to 1986 and then 1989. Despite these resolutions, there was very little clarity amongst AMC zone and ward staff about which eligibility procedures applied.

The ability of slum settlements to access services through ward offices, however, was somewhat limited by the preoccupation of ward staff with operations and maintenance work and eligibility requirements associated with property tax payment. Zone offices have had access to a considerable budget for capital works. For example, during the 2000-01 fiscal year, the East Zone of the AMC had access to approximately Rs.63 million for water, sanitation and upgrading related capital works.[95] Some of this budget was earmarked for pooled infrastructure such as pumping stations or overhead tanks. However, a considerable proportion of this budget was specifically for water, sanitation and upgrading infrastructure in poor areas. These budget items for the all five city zones, put together, far exceeded the 2000-01 SNP budget. For the fiscal year 2000-01, this combined budget was Rs. 324 million.

The problem, however, is not necessarily the size of the budget. Zone and ward offices are consumed by O&M activities. Technical staff in these offices suggests that they spend over 75 percent of their time on maintenance. Therefore, when it comes time to utilize capital budget allocations, emphasis is placed on larger, less time-consuming projects with limited transaction costs. Larger projects also confer higher rents to technical staff as water, drainage and other slum upgrading services have relatively small capital values. Working in slums also requires an intensity of interaction with residents that AMC engineers generally try to avoid.

Secondly, if any consumer is to gain access to water and sanitation services through the ward office they are to submit an application along with a copy of their most recent tax bill. This bill must indicate that the consumer is current in the payment of property taxes. A slum household most commonly has an annual property tax bill of Rs. 264. AMC tax officials suggest that payment rates from slums and chaals is extremely low. In fact, tax collectors do not even pursue pending bills from slum residents.[96] Therefore, many slum households may have been defaulting on their property tax for multiple years. Bringing this account current implies a substantial financial cost in addition to the connection fee and cost of materials borne by the household under ward office provisions.

Despite these obstacles, local councilors exert considerable political pressure on ward offices to direct ward-level capital expenditure budgets to their constituencies and overlook eligibility requirements. AMC ward-level staff concede that in many cases they simply do

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[95] Data on zone budgets was provided by Mahindra Sokhdia, Assistant Manager, Budget Department – AMC.

[96] Interview with Debashish Banerjee, Assistant Manager, Tax Department – AMC (January 17, 2001).

not pay attention to eligibility requirements in determining who obtains access to services. Variables such as political influence, technical feasibility and the constant pressure applied by slum residents and their political representatives are often more important.[97]

The third mechanism for service provision to slums involves a range of political grants earmarked specifically for water, sanitation and upgrading services in slums and chaals (Davis, et al., 2003 and Davis, 2004). These grants operate at three levels of government and offer a full subsidy to consumers. Political grants in India are earmarked resources assigned to elected local, state and central government representatives and originate in numerous state and federal government welfare and poverty alleviation programs. Representatives must spend grants on basic infrastructure projects targeting the poor within their constituencies. However, the system of political grants receives little oversight and politicians have a considerable discretion in the targeting and use these grant resources. Table 5.3 provides data on the value of political grants disbursed in Ahmedabad for the fiscal year 1999-00. The total volume of these grant resources exceed those available under the SNP and each level of grants is either administered by the representative local councilor or, in the case of the state and federal grants, by influential local councilors.

Table 5.3: Estimated Political Grants AMC during Fiscal Year 1999-2000 (in 2001 Rs)			
Source	Representatives	Grant per Representative (Rs)	Total Grant (Rs)
Municipal Councilors	129	500,000	64,500,000
Members of State Assembly	12	2,500,000	30,000,000
Members of Lower and Upper Houses of Parliament	-	20,000,000	35,000,000
TOTAL			129,500,000

Source: AMC Records[98]

Political grants are currently being used to provide infrastructure upgrading services in slums, generally as complete grants to consumers without any community contribution. Slum residents must have political capital with local councilors to access these resources and informal community representatives are engaged in a constant process of bargaining, strategizing and negotiatiation with councilors. Political grants are ostensibly subject to the same eligibility criteria that apply to service provision through ward offices. However, as is noted above, opportunities to circumvent these criteria are common.

Additionally, local councilors have become strategic in how they utilize these resources. For example, a councilor for AMC's Vasna ward described how he has combined his councilor works budget over two years with modest ward capital investments to provide

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[97] Information regarding the practice of ward offices with regard to applying eligibility criteria was provided during an interview K.B. Shah, Additional City Engineer, East Zone – AMC (January 11, 2001).

[98] These figures are estimates made by Dilip Shah, Planning Officer – AMC during an interview. There are approximately 12 members of the state assembly with from Ahmedabad. Some of these members have constituencies that overlap slightly into areas that are not officially part of the AMC. The members of the lower and upper houses of the central government's parliament are free to distribute their Rs. 20,000,000 grant anywhere in the state from which they have been either elected or nominated. The AMC planning officer estimated that approximately Rs. 35 million would come in from these sources in 1999-2000.

sewerage connections to 800 households in Soneshwarnagar. In order to maximize these resources the councilor requested and was able to collect Rs. 300 from these residents. In a similar manner, the same councilor was able to extend sewerage connections to between 500 and 600 homes in Haroibnagar by combining his councilor resources with MP resources. In this case, the local councilor was able to negotiate with the AMC Tax Department a significantly reduced payoff for a group of households that needed clear large tax arrears prior to receiving benefits.[99] Other councilors too have worked out collaborative arrangements amongst themselves to pool grants. Three councilors in Maninagar agreed to pool their works budgets and make collective allocation decisions. The have jointly invested using this pooled arrangement in footpaths, streetlights, rider lines for low pressure, tree guards, bus stands and public benches in and near slum areas. These councilors have found that the pooling of resources also helps to attract larger sums from MLA and MPA grants.[100]

Councilors are understandably protective of their role in the face of competition from the SNP. In late 1999 and early 2000, prior to the 2000-01 budget cycle, senior AMC administrators attempted to redirect local councilor development resources to the SNP budget citing the need for greater coherence and transparency in expenditures in slums. Most councilors strongly resisted. A period of intense dialogue and lobbying between councilors, BJP party leaders and AMC administrators ensued. One compromise proposed by a group of councilors was that they would agree to provide their grant resources to the SNP if the project would significantly reduce the community co-financing requirement from Rs. 2,100. Other councilors refused on the grounds that the SNP has proved too slow, citing delays in the approval of slum applications and the inability to work in many slums areas due to land tenure limitations. The AMC proposal was ultimately abandoned in March 2000.[101]

In the cases described above, local elected councilors have demonstrated a flexibility and innovativeness in the use of discretionary grants to improve services in slums. They have also been effective in leveraging discretionary MLA and MPA grants and directing ward capital expenditure budgets to low-income areas. Additionally, councilors are able to use political pressure to navigate around regulatory obstacles and eligibility criteria that would have otherwise prohibited these expenditures from reaching slum areas. The volume of resources that councilors directly manage and leverage from higher levels of government and ward capital budgets, not to mention the downstream cost-savings they bring to those connecting informally, far exceeds SNP allocations on an annual basis. In 1999-2000 the SNP budget was approximately Rs.52 million as compared to Rs.129.5 million in politician grants during the same period and Rs. 324 million for ward office capital budgets in 2000-01. These latter expenditures likely crowd-out and dampen demand for the SNP in many slums.

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[99] Interview with Amit Shah, Local Councilor (January 16, 2001).

[100] Interview with Bhartibhen Patel, Local Councilor (January 15, 2001).

[101] This account is based on interviews with P.U. Asnani, former Deputy Municipal Commissioner (January 6, 2001), Dilip Shah, Planning Officer, AMC (January 12, 2001), Amit Shah, Local Councilor (January 16, 2001) and Bhartibhen Patel, Local Councilor (January 15, 2001).

The lessons that emerge from the SNP suggest that slum upgrading operations that aim to achieve scale need to carefully assess the landscape of political interests and the competing entitlement programs for the poor that these interests endorse.

5.2 Does the Bundling of Upgrading Services Increase Effectiveness?

The SNP was designed with the view to provide a standard bundle of infrastructure services in all participating slums. The 'bundling' of upgrading services under one intervention enables greater cost-efficiencies and the wholesale upgrading of settlements. Maximizing cost-effectiveness is critical in the constrained fiscal situation that countries and municipalities with serious slum populations find themselves. The policy literature frequently argues for integrated, area based approaches that involve the bundling of multiple infrastructure services.[102] The case literature also provides important examples of how such strategies have been successful. Imparato and Ruster (2003), for example, describe how the Guarapiranga project in Sao Paolo, Brazil was able to successfully reach over 176 slum areas with water, sewerage, stormwater drainage, street lighting and electricity, road and green space infrastructure by bundling the provision of all services in a large, geographically contiguous area.

However, others have expressed concern over integrated infrastructure strategies. Gulyani and Connors (2002) warn that in Africa such interventions have been associated with poor cost recovery given higher overall costs, excessively high technical standards and low-levels of community involvement because, the authors argue, such projects have tended to limit beneficiary choice. The case for greater flexibility, similar to that for integrated strategies, is supported by a case literature. An analysis by Boonyabancha (2005) of the series of upgrading initiatives implemented by the Community Organizations Development Institute (CODI), and its predecessor the Urban Community Development Office, in Thailand suggests that these programs reach scale because of the high degree of flexibility afforded to communities in the choice of infrastructure services. Others have argued that a 'menu' approach is consistent with the incremental manner in which slum residents themselves invest in improvements in housing and basic infrastructure.[103]

The SNC assumes that the bundling of services is advantageous to both the AMC and slum residents. Staff suggests that the package of services is far superior to any alternative set of services that could be availed through either the zone offices of the AMC or the informal market for infrastructure services. SNC staff also believes that the particular package of services offered under the SNP matches the demands of eligible slum consumers in the city. Subsequently, the SNC sees little need for project beneficiaries to decide on appropriate levels of service.[104]

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[102] See Imparato and Ruster (2003) and Budds and Teixeria (2005).
[103] In the case of Ahmedabad, this point was made by Rajesh Shah, Managing Director, VIKAS – an NGO with extensive experience in Ahmedabad's slum communities that has refused to collaborate with the AMC under the SNP because of the design rigidities imposed by the bundling approach.
[104] Interviews with Deepak Trivedi, Assistant Manager - SNC (June 8, 2000) and D. S. Gor, Assistant City Engineer - SNC (June 20, 2000).

The project attempts to accommodate slum residents that have already obtained infrastructure services by deducting the estimated cost of providing this service from the overall required community financial contribution. However, participants are only entitled to deductions for services obtained formally from the AMC and not for those services obtained through informal or private service providers. Moreover, residents with such connections must assume the cost of disconnecting and removing this infrastructure. SNC engineers also have the discretion to remove legally obtained services that do not conform to design parameters specified for the project.[105] In no case, however, have slum residents been able to opt out of one of the eight infrastructure and upgrading services in the SNP package.

Evidence suggests that SNP participants would be more selective in the choice of service options if given greater discretion. In particular, results from the household sample survey in SNP areas point to a clear community preference for a bundle of four core infrastructure services – water supply, sanitation, stormwater drainage and road paving. In response to a question asking respondents to identify services provided under the SNP, large majorities identified water (89 percent) sanitation (67 percent), drainage (75 percent) and road paving (70 percent).Very few residents, however, were able to identify the three remaining services (solid waste, street lighting and landscaping investments). The same sample was asked to identify the most significant service provided under the SNP. Over 75 percent of respondents either identified water supply, sanitation, drainage or road pavement. Conversely, less than 2 percent of respondents identified any of the other services offered under the project (Davis, 2004).[106]

Focus group discussions in slums that had not participated in the SNP illustrate a similar divide in preferences between 'core' and 'secondary' upgrading services. In four randomly selected slums large groups of residents were asked to collectively identify and rank required upgrading services. The ranking was based on the hypothetical scenario that each group had to agree upon an allocation of Rs. 2,100 between these services. Unsurprisingly, each of these focus groups allocated a considerable amount to the provision or improvement of water, sewerage, toilet, electricity and road pavement services. Conversely, limited resources were allocated to landscaping, garbage removal, streetlighting and other secondary upgrading services. More interestingly, each community expressed substantial demand for the incremental improvement of existing infrastructure alongside the provision of new infrastructure services.[107]

SNP participants also expressed a preference for basic infrastructure services in a form otherwise not permitted by the project. In Sharif Khan Pathan, for example, over 10 percent

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[105] For example, in participating slums the SNC has removed legally constructed toilets that cannot be interfaced with the drainage lines laid during the project. These toilets are often set at a depth below that of the new drainage lines and, therefore, the flush system may not function properly. Over time the SNC engineers have made a greater effort to avoid destroying previously constructed toilets by resetting them at the appropriate elevation.

[106] Results are based on data from the household baseline survey in SNP areas conducted in June 2000 during field work this thesis and also partially cited in Davis (2004).

[107] Four communities participated in these focus group discussions between July 27 and 30, 2000. The four slum settlements represented are Vorana Rojana Jhopra, Sindhi Camp, Sukhipura I and Salatnagar.

of the residents requested to convert individual household water and drainage connections into shared connections between groups of 2-4 households in order to minimize community contribution requirements. Similarly, in Ganshamnagar a large proportion of households also requested shared water connections given cost considerations. In both cases, however, the SNC refused to grant these requests. Additional requests for shared connections have been received by the SNC intermediary NGOs. However, the SNC has not sanctioned these requests because it believes that residents will ultimately quarrel over the distribution of water or the maintenance of a shared toilet unit. Only in a handful of cases involving households in extreme poverty or families living in adjoining units had the SNP approved shared connections.[108]

This evidence suggests that the packaging or bundling of services in the SNP seems unresponsive to the beneficiary demands. Given the flexibility to choose from a menu of services, SNP consumers would likely focus on a core bundle of infrastructure services and seek a larger variety of technical and delivery options for these services. Additionally, residents would selectively choose non-core services offered under the SNP. What explains these diverse preferences?

The SNP was originally formulated to meet the infrastructure upgrading needs of over 2,400 informal settlements in Ahmedabad.[109] Of these settlements, however, only 110 have submitted an application to participate in the four years since the project was initiated. The slow pace at which slum settlements have joined the SNP cannot be attributed to any one factor. However, evidence suggests that the mandatory bundling of services in the SNP is a fundamental cause for the slow expansion rate.

Primarily, the number of informal settlements entirely without any basic infrastructure services is likely far below the figure of 2,431 cited by the city. Of these informal settlements approximately 1,400 are row tenements or 'chaals' built by industrial houses. The SNP is yet to receive an application from any of the city's chaals. SNC staff believes that a vast majority of chaal residents have already secured access to informal or formal water and sanitation services. Many of the remaining 1,000 slums have also secured access to services through both formal and informal mechanisms. In Ahmedabad's West Zone 67 out of a total 224 slums are eligible to receive SNP services. Of these eligible slums, only 7 are entirely without services (Davis, et al., 2003 and Davis, 2004). The remaining slums have obtained some combination of basic infrastructure services through ward offices, political representatives or the informal market.[110] The target group for a full bundle of the SNP services, therefore, may in fact be far smaller than anticipated. However, there is perhaps a considerable market for a partial bundle of services in these areas.

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[108] Interviews with Ghanshamnagar activists (January 5, 2001), Sharif Khan Pathan activists (January 10, 2001) and Anand Patel (January 17, 2001).

[109] This figure has since been revised downwards to approximately 2100 as the AMC now estimates that in addition the number of slums has been reduced from 1029 as reported in 2001 (based on 1992 data) to 710. However, for the purpose of this analysis the figure of 2,431 is used as these were official AMC figures at the time of field research in 2001.

[110] Interview with Anand Patel, Deputy City Engineer - SNC (January 11, 2001). Figures are based on a preliminary analysis of West Zone conducted by the SNP and zone office staff.

The infrastructure histories for the 16 slums surveyed as part of this analysis illustrate a great diversity in the process by which settlements have accessed services. In each case slums have secured access to some combination of basic infrastructure services while lacking access to others. Almost all slums not participating in the SNP have expressed a demand for the repair or improvement of poor and malfunctioning infrastructure already in place. Over the last 15 years residents of Vorana Rojana Jhopra, for example, have secured access to informal sewerage lines and have had their roads paved. They lacked adequate water, garbage collection and toilet facilities and were willing to pay for these services. However, they were unwilling to join the SNP if required to replace existing sewerage infrastructure. In contrast, residents in Shantinagar have legally obtained household water and sewerage connections in 1977 and 1980. More recently, they have paved lanes in the slum through the discretionary budget of a Member of Parliament and have self-provided toilet facilities. However, the slum needs to upgrade the decaying sewerage lines and polluted water connections. Over the last 10 months Shantinagar residents have made repeated complaints to the ward office for the repair of these lines. The ward office claims that they are unable to assist in Shantinagar because effective repair would require the replacement of a considerable portion of both the sewerage and water infrastructure for which they do not have adequate resources.[111]

The bundling of infrastructure services under the SNP may well have the effect of excluding slums and chaals that have secured partial services, require serious upgrading of specific malfunctioning infrastructure or would benefit from the community development program. The AMC does not maintain an adequate inventory of infrastructure conditions in all slums and chaals. However, the rapid assessment of slums in the West Zone suggests that this cohort of slums may be very large. Introducing greater flexibility and choice in the menu of options would likely encourage more slums to participate and facilitate the scaling-up of the SNP.

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[111] Focus group discussions with Vorana Rojna Jhopra and Shantinagar on July 29, 2000.

CHAPTER 6
CONCLUSION AND POLICY RECOMMENDATIONS

I have aimed through this thesis to examine the factors associated with the moderate success of a slum upgrading project implemented in the city of Ahmedabad, India between 1995 and 2001. In this regard, I have aimed to examine the policy debate around three themes prominent in the urban upgrading literature through the lens of the Slum Networking Program (SNP).

First, this thesis has asked why a promising and innovative alliance between private, public and civil society actors was ultimately unsustainable, leading to the departure of Arvind Mills Ltd., the alliance's private sector champion. Second, the thesis has looked more closely at how the Ahmedabad Municipal Corporation (AMC), local NGOs and community activists were able to negotiate and evolve complex inter-institutional relationships in implementation. Third, this thesis reflects upon two related factors associated with the inability of the SNP to implement on a large scale. This chapter will synthesize key findings in these three areas of analysis and comment upon potential policy implications.

Building Public-Private Collaboration

A key variable that defined the relationship between the AMC and Arvind Mills was a fundamental mismatch of objectives and incentives. What was unique about this mismatch, however, was that the Municipal Corporation, and not Arvind Mills, was the more aggressive and ambitious partner. The AMC quickly saw the SNP's potential and cast the project as a citywide upgrading program through which it aimed to eradicate all slums in the city over a seven year period with a proposed investment of over US$90 million. Arvind Mills, on the other hand, was caught off guard by the ambitiousness of AMC management. The original MoU signed by the textile house was for a modest pilot program covering 1,000 households through which it could demonstrate the value of private sector project execution in slum upgrading.

The tension between these two visions first emerged as the AMC started to solicit publicity for its citywide program before the project had broken ground in the pilot area. These tensions only deepened as the AMC took a more assertive role in supervision and implementation through the Slum Networking Cell (SNC). The emergence of a supervisory and implementation role for the SNC appears to reflect a realization within the AMC that Arvind Mills and the SHADRA Trust would remain only marginal partners as the latter members of the alliance did not share the citywide upgrading vision that had taken hold in the municipality.

Chapter 3 of this thesis examined two incentives structures for private sector engagement in urban upgrading programs: (i) a project sponsor or 'good corporate citizen' model; and (ii) a market share model. The project sponsor model involves private sector firms motivated principally by philanthropy. The literature review conducted in association with this study found no evidence of private sector participation in upgrading programs on a large scale in cases where the fundamental interest driving the participating firm was to enhance its corporate image. The literature review did, however, encounter an emerging body of case

evidence of firms engaging on a large scale in upgrading and low-income housing programs where the primary motivation was profit, i.e. building and sustaining market share.

It is not entirely clear where Arvind Mills stood along this spectrum of philanthropic and profit-seeking interests. Did it initially take an active executing role through the SHADRA Trust because it lacked confidence in AMC implementation capacity? Or was the firm looking to develop a new business model to meet the demand for low income housing and basic services in Ahmedabad's slums? This investigation did not mobilize enough evidence to definitively answer these questions. However, the fact the issue of scale became an underlying source of tension between the AMC and Arvind Mills would suggest that the firm was perhaps more motivated by philanthropic concerns. A private sector entity with a more assertive and clear 'profit-motive' may have reacted more receptively as the Municipal Corporation committed significant financing to a citywide upgrading program.

While initial discord between the AMC and Arvind Mills stemmed from this mismatch in objectives, the unraveling of the alliance had more to do with the inability of the AMC to deliver on its grand vision. AMC technical staff delayed the release of funds, insisted on 'business-as-usual' technical supervision, failed to facilitate timely access to maps and engineering designs, and simply lacked a sense of urgency commiserate with the goals of a citywide program.

That neither the AMC nor Arvind Mills were prepared to work collaboratively with each other should be of little surprise given the vastly different trajectories and cultures of the two institutions. A key theme of this thesis, and the research which it cites, is the assertion that effective inter-institutional collaboration emerges out conflict and negotiation in a nonlinear manner. What became clear as the alliance unraveled, however, was that the two principal actors lacked a strong incentive structure that would have propelled them to seek out and develop more effective mechanisms for collaboration.

Policy makers that aim to encourage public-private partnership in urban upgrading programs must pay closer attention to the incentive structures that govern each actor. The policy literature does not offer a tremendous amount of information regarding the conditions under which strong public-private partnerships will evolve in the sector. This thesis advances the idea that private sector actors focused around the incentive to build and sustain 'market-share' are more likely than 'philanthropically-driven' actors to seek out and build a constructive partnership with the public sector in to deliver upgrading services at scale.

Constructing Participation

This thesis also demonstrates how the SNP was able to construct effective community participation through the negotiation of inter-institutional partnerships between the AMC, local NGOs and community activists. The policy literature on community participation examined in Chapter 4 of this thesis generally suggests that the aim of development practitioners should be to maximize the *degree* and *intensity* of community involvement for optimal results. The case of the SNP reinforces the importance of community participation

and the need for upgrading programs to be responsive to consumer needs. Moreover, the SNP case serves as a point of departure to examine three related themes that add to the discussion around community participation in upgrading programs.

First, the SNP experience demonstrates that increasing the degree and intensity of direct community involvement and control in may not be always feasible or desirable. Analysis in Chapter 4 of this thesis demonstrated that slums residents participating in the SNP program are rarely active members of broader community organizations. CBOs in SNP areas were frequently created to fulfill a project requirement. CBOs that did predate the SNP were principally collections of no more than 3 or 4 core local activists with no formal procedures in place for decision making or conducting business. These activists do not, however, operate independently but are rather held accountable through a series of informal social networks within the community. In most SNP areas these activists play an important role in monitoring project implementation, communicating with residents and relying concerns to NGO partners. In the SNP case, community activists are a critical part of a network of actors that collaborate to advocate for the increased responsiveness of SNP interventions to slum residents.

Second, NGO intermediation has proven critically important to ensuring that slum residents in SNP areas receive improved quality services. NGOs have gained over time leverage and negotiating power with the AMC and have used this to improve and adapt project design, incorporate the use of non-traditional materials, coordinate the implementation schedules for works and secure timely operations and maintenance of SNP infrastructure. Chapter 4 describes the complex and frequently contentious process through which NGO intermediaries have achieved this bargaining power. They have mobilized SEWA network activists to protest the abrupt AMC decision to pull out of Kailashnagar, stopped performing complaint screening tasks when SNC engineers were non-responsive to community concerns, and threatened to exit the SNP program altogether on other occasions. In essence, NGOs moved back and forth along a spectrum from cooperation to non-compliance and protest in order to influence SNC and AMC policy and operational decisions.

Third, the non-linear process of constructing participation in the SNP was held together by a delicate web of mutually reinforcing interests. Without this alignment of interests it would have been likely that conflict between AMC, NGO and community activists would have escalated to a point where the partnership would have no longer functioned. Chapter 4 outlines the incentive structure faced by SNC engineers. From above, the cell felt tremendous pressure from AMC management to implement the upgrading program on a large scale. This pressure kept SNC engineers engaged in the project. From below, SNC engineers soon realized that they could not manage communities without help. They needed engaged NGOs and community activists to serve as intermediaries. NGOs and community activists realized they had this leverage over the SNC and would use this power strategically to advocate for certain policy and operational decision.

Conversely, both SAATH and MHT were motivated by similar incentives associated with the need to build or sustain organizational prestige. Both NGOs, to varying degrees,

benefited from engagement with a Municipal Corporation that had made a strong policy and resource commitment to a citywide upgrading program. They could not ignore the SNP because a demand, albeit not extremely robust, had developed for the project. It is important to note, however, that these systems of interrelated and positive reinforcing incentive structures rest on delicate foundations. A slight policy change at the municipal level or a new stage government program, for example, could disrupt the balance.

A series of critical policy lessons emerge from this analysis of the SNP's experience with participation and intermediation. First, the SNP case confirms that participation and intermediation can have a positive impact on development outcomes. Second, it is equally important to note that the process of constructing effective participation in the SNP case was nonlinear and characterized by cycles of protest, non-compliance and constructive engagement. It was explicitly through this process of periodic conflict and negotiation that communities were able to achieve specific gains. Third, this system of conflict, negotiation and collaboration rests upon a very delicate set of interests. The removal, for example, of strong pressure from AMC management to deliver results could cause the collaboration to unravel.

Implementation at Scale

This thesis has examined two critical factors associated with the SNP's inability to go to scale: (i) the inability to align incentives across different political constituencies within the municipality; and (ii) the lack of flexibility in technical options. A few important policy lessons emerge from this analysis.

First, this analysis has found that the SNP is effectively being outmaneuvered by local politicians and, in many cases, slum communities themselves. Politicians have demonstrated creativity in mobilizing political grants and ward office budgets for both SNP eligible and non-eligible communities. Politicians have also proven more useful in navigating around complex eligibility regulations by negotiating reduced payoffs of property tax arrears, exerting political pressure on ward office staff to overlook eligibility requirements and finding inventive ways to benefit illegal consumers.

Second, a rough analysis of the 'market' for bundled services conducted in this study suggests that it may be far smaller than the AMC estimates. Focus group assessments of the 'infrastructure history' of 17 slums in Ahmedabad conducting as part of this analysis found that communities have been engaged over a long period in an iterative and opportunistic process of trying to access services of time. In this regard, many of the city's slums and chaals likely already have partial access to services. In these areas quality of service remains very poor and certain critical service gaps persist. The SNP has not engaged or understood this market which will likely be willing to pay for a partial bundle of services or the rehabilitation of certain infrastructure. More generally, the bundling of services in the SNP may not respond to the demands of slums without any services. Analysis conducted as part of this study demonstrates that consumers would be more likely to select and pay for a reduced bundle of 3 or 4 core services, rather than the bundle of 8 services offered under the SNP.

Third, politicians and community representatives have in many cases responded to this demand for 'unbundled' services by providing access to, or focusing community efforts on, accessing one service at a time, i.e. water, sewerage or sanitation. Such strategies are more cost-effective in the short-term for consumers and, again, correspond with the iterative manner in which slum residents tend to make housing or service improvements.

Policy makers concerned with achieving scale in implementation can take from the SNP case two very important lessons. First, local politicians should be seen as potential allies who often find creative, demand responsive ways to meet client needs. Additionally, such actors can often identify innovative ways to leverage parallel financing that would benefit slum communities. To work with local politicians, however, practitioners must overcome their distrust of such local actors and create space for them to build political constituencies. Second, the bundling of services should be more flexible and responsive to market demand.

BIBLIOGRAPHY

Ahmedabad Municipal Corporation (AMC). *Statistical Outline of Ahmedabad City: 1998-99*. Ahmedabad, India: AMC, 1999.

Ahmedabad Municipal Corporation (AMC). *Statistical Outline of Ahmedabad City: 2002-03*. Ahmedabad, India: AMC, 2003.

Ahmedabad Municipal Corporation (AMC) and Ahmedabad Urban Development Authority (AUDA). *City Development Strategy: 2006-1012*. Ahmedabad, India: AMC, 2006.

Ahmedabad Study Action Group (ASAG). "A Survey of Slums and Chaals in Ahmedabad, India." Unpublished Report, 1991.

Baker, Judy. "Integrated Urban Upgrading for the Poor: The Experience of Ribiera Azul, Salvador, Brazil (Working Policy Working Paper 3861)." Washington, DC: World Bank, 2006.

Bhatt, Mihir R. "Urban Slums Reports: The Case of Ahmedabad, India" in *The Challenge of Slums: Global Report on Human Settlements 2003*. Nairobi: UNHCS, 2003.

Boonyabancha, Somsook. "Baan Mankong: Going to Scale with 'Slum' and Squatter Upgrading in Thailand," *Environment and Urbanization*, 17 (2005): 21-46.

Budds, Jessica and Paulo Teixeria. "Ensuring the Right to the City: Pro-Poor Housing, Urban Development and Tenure Legalization." *Environment and Urbanization*, 17 (2005): 89-113.

Burra, Sundar. "Towards a Pro-Poor Framework for Slum Upgrading in Mumbai, India." *Environment and Urbanization*, 17 (2005): 67-88.

Cira, Dean. "Urban Upgrading in Latin America and the Caribbean." *World Bank Latin America and Caribbean: En Breve Series*, June (2002), No. 3: 1-4.

Cities Alliance. *Annual Report 2003*. Washington, DC: Cities Alliance, 2004.

Cities Alliance. *Annual Report 2004*. Washington, DC: Cities Alliance, 2006.

Davis, Jennifer, A. Gosh, P. Martin, T. Samad, S. Tankha, B. Zia and G. Prunier. *In Pursuit of Good Governance: Experiments from South Asia's Water and Sanitation Sector*. New Delhi, India: Water and Sanitation Program – South Asia, April 2003.

Davis, Jennifer. "Scaling up urban upgrading: Where are the bottlenecks?" *International Development Planning Review* 26 (2004): 305-323.

Dutta, Shyam S. "Partnerships in Urban Development: A Review of Ahmedabad's Experience." *Environment and Urbanization* 12 (2000): 13-26.

Goethert, Reinhard. "Presentation notes to Thematic Group for Services to the Poor, World Bank." Special Interest Group in Urban Settlements, School of Architecture and Planning, Massachusetts Institute of Planning. Unpublished Report (1998).

Gulyani, Sumila and Genevieve Connors. "Urban Upgrading in Africa: A Summary of Rapid Assessments in Ten Countries." Africa Regional Upgrading Initiative, Africa Infrastructure Department, The World Bank (2002).

Imparato, Ivo and Jeff Ruster. *Slum Upgrading and Participation: Lessons from Latin America.* Washington, DC: World Bank, 2003.

Kessides, Christine F. "World Bank Experience with the Provision of Infrastructure Services for Urban Poor: Preliminary Identification and Review of Best Practices." Transport, Water and Urban Development Department, The World Bank (1997).

Kundu Amitabh and Darshini Mahadevia, eds. *Poverty and Vulnerability in a Globalising Metropolis: Ahmedabad.* Delhi, India: Manak Publications, 2002.

Lee, Yok-Siu F. Intermediary Institutions, Community Organizations, and Urban Environmental Management: The Case of Three Bangkok Slums," *World Development* 26 (1998): 993-1011.

Mahadevia, Darshini and Wilfred D'Costa. *Poverty and Vulnerability in Ahmedabad.* Ahmedabad, India: Oxfam India Trust Monograph, 1997.

Mehta, Meera and Dinesh Mehta. *Metropolitan Housing Market: A Study of Ahmedabad.* New Delhi, India: Sage Publications, 1990.

National Institute of Urban Affairs (NIUA). "Structure and Dynamics of Urban Economy: Study of Linkages between Formal and Informal Sectors in Ahmedabad and Vishakhapatnam." Research Study Series, Number 80. New Delhi, India (2001).

Parikh, Himanshu H. "Slum Networking: A Community Based Sanitation and Environmental Improvement Programme - Experiences of Indore, Baroda and Ahmedabad." Unpublished Manuscript (1995).

Payne, Geoffrey. "Getting Ahead of the Game: A Twin-Track Approach to Improving Existing Slums and Reducing the need for Future Slums." *Environment and Urbanization,* 17 (2005): 135-145.

Prahalad, C. K. *The Fortune at the Bottom of the Pyramid: Eradicating Poverty through Profits.* Upper Saddle River, NJ: Wharton School Publishing, 2005.

Rani, Uma and Jeemol Unni. "Insecurities of Informal Workers in Gujarat, India." SES Papers 30, International Labour Organization, Geneva (2002).

Russell, Steven and Elizabeth Vidler. "The Rise and Fall of Government – Community Partnerships for Urban Development: Grassroots Testimony from Colombo." *Environment and Urbanization* 12 (2000): 73-86.

Sanyal, Bishwapriya and Vinit Mukhija. "Institutional Pluralism and Housing Delivery: A Case of Unforseen Conflicts in Mumbai, India." *World Development* 29 (2001): 2043-2057.

Surjadi, Charles and Haryatiningsih Darrundono. "Review of Kampung Improvement Program Evaluation in Jakarta." Final Report for UNDP-World Bank Water and Sanitation Program by the Regional Water and Sanitation Group for East Asia and the Pacific, UNDP-World Bank (September, 1998).

Tripathi, Dwijendra. *Alliance for Change: A Slum Upgrading Experiment in Ahmedabad.* New Delhi, India: Tata McGraw-Hill, 1998.

Tripathi, Dwijendra. "Slum Networking in Ahmedabad: The Sanjaynagar Pilot Project." Unpublished Manuscript (November, 1999)

World Bank. "Indonesia – Enhancing the Quality of Life in Urban Indonesia: The Legacy of Kampung Improvement Program." Impact Evaluation Report No. 14747, Operations Evaluation Department (1995).

World Bank. "Lessons on Urban Upgrading." Thematic Group on Services to the Urban Poor: Urban Notes (No. 3, October 2002).

Yagnik, Achyut and Ashsis Nandy. *Creating Nationality.* Delhi, India: Oxford University Press, 1997.

Interviews

1.	Barbara Evans	Global Team Leader, Water and Sanitation Program	June 6, 2000
2.	Captain Dilip Kumar J. Mahajan	Staff Officer to the Commissioner, AMC	June 7, 2000
3.	Utpal C. Padia	Assistant Municipal Commissioner (Finance), AMC	June 7, 2000
4.	Gopalsingh M. Khalsa	Deputy Municipal Commissioner, AMC	June 7, 2000
5.	P.U. Asnani	Advisor to the AMC and Former Deputy Municipal Commissioner	June 8, 2000 June 12, 2000 July 20, 2000 January 6, 2001
6.	Deepak V. Trivedi	Assistant Manager, Slum Networking Program	June 8, 2000
7.	Mihir Bhatt	Disaster Management Institute	June 9, 2000, June 10, 2000
8.	H.M. Shivanand Swami	Director, Centre for Environmental Planning and Technology (CEPT)	June 9, 2000
9.	M.K. Das	Deputy Municipal Commissioner - Administration, AMC	June 12, 2000
10.	Harshadray J. Solanki	Assistant Manager – Administration, AMC	June 14, 2000
11.	M.L. Sethi	Office Superintendent – Administration (HRD), AMC	June 16, 2000
12.	Rejendra Joshi	Managing Trustee, SAATH	June 17, 2000 August 3, 2000 August 8, 2000 January 13, 2001
13.	Arpita Chhatrapati	Foundation for Public Interest (FPI)	June 19, 2000
14	D.S. Gor	Assistant City Engineer	June 20, 2000
15.	Anand B. Patel	Deputy City Engineer, Slum Networking Cell, AMC	June 20, 2000 July 20, 2000 August 4, 2000 August 8, 2000 January 17, 2001
16.	Ashok Chatterjee	Distinguished Fellow, National Institute of Design	June 22, 2000
17.	Z.A. Sacha	Director of Vigilance (Assessor & Tax Collector), AMC	June 22, 2000
18.	T.G. Zalawadia	Octroi Superintendent, Octroi Office, AMC	June 22, 2000
19.	Dilip P. Shah	Planning Officer, AMC	June 24, 2000 January 18, 2001
20.	Professor D. Tripathi		June 24, 2000
21.	Akhil C. Brahambhatt	Assistant Manager (Tax)	June 27, 2000
22.	Debashish Banerjee	Assistant Manager (Tax)	June 27, 2000 January 17, 2001
23.	Barot Bhavesh	Assistant Manager (Tax)	June 27, 2000
24.	H.N. Desai	Additional City Engineer, Water Project, AMC	July 1, 2000

25.	Mukesh C. Shah	Deputy City Engineer, Drainage Project, AMC	July 1, 2000
26.	P.A. Dixit	Deputy Municipal Commissioner (West Zone)	July 5, 2000
27.	Dr. S.G. Kangali	Additional Health Officer (West Zone)	July 6, 2000
28.	B.K. Rathot	Additional City Engineer (Water Project) AMC	July 7, 2000
29.	J.K. Modi	Additional City Engineer (Naranpura – West Zone), AMC	July 8, 2000
30.	S.N. Vayas	Additional City Engineer (New Vadaj – West Zone), AMC	July 8, 2000
31.	Himanshu Parikh		July 11, 2000
32.	Gitabhen Patel	BJP Councillor - Bapunagar	July 19, 2000
33.	Hereshbhai Bhavsar	BJP Councillor and Deputy Mayor – Sabarmati Ward	July 19, 2000
34.	Field Visit to Ramdevnagar and Ambicanagar		July 19, 2000
35.	Kiran Desai	Architect	July 20, 2000
36.	Nandkishore Parikh	Deputy TDO, SNC	July 20, 2000
37.	Ashok K. Hgangwani	Assistant Engineer, SNC, AMC	July 21, 2000
38.	Krithik Shah	Ahmedabad Study Action Group (ASAG)	July 22, 2000
39.	Tousuf Khan	Staff Reporter, Time of India	July 22, 2000
40.	Rejesh Shah	VIKAS	July 24, 2000
41.	K.N. Sariya	Retired, Deputy Municipal Commissioner, East Zone, AMC	July 22, 2000
42.	V.P Shah	Assistant City Engineer, AMC	July 22, 2000
43.	Badduruddin Sheikh	Congres Party, Standing Committee Member	July 23, 2000
44.	Rakesh S. Pattiya,	Community Activist, K.K. Vishwanath ni Chaali	July 22, 2000
45.	Arun K. Gulaiswar,	Community Activist, K.K. Vishwanath ni Chaali	July 22, 2000
46.	S.R. Pandit	Deputy City Engineer – North Zone, AMC	July 25, 2000
47.	Dilip Aurora	Deputy City Engineer – North Zone, AMC	July 25, 2000
48.	D.J. Patel	Labor Officer, Industrial Relations, AMC	July 25, 2000
49.	M.L. Sethi	Administrative Officer, AMC	July 25, 2000
50.	Kantibhai, Tarilal and Vinutbhai	Community Activists, Ramraman ni Chaali	July 28, 2000
51.	Dilip Shah	Planning Officer, AMC	August, 1 2000
52.	Manish Trivedi	Assistant Manager, Vigilance, AMC	August 1, 2000
53.	Deepak Trivedi	Assistant Manager, SNC, AMC	August 1, 2000
54.	Nayan Zinzawadia	Sub-Inspector, TDO-SNC, AMC	August 1, 2000 January 4, 2001
55.	Field Visit	Sardarnagar Ward Office, North Zone,	August 2, 2000

		AMC	
56.	Amish B. Shah	Assistant Manager, North Zone, AMC	August 2, 2000
57.	Sunilbhai Shah	Private Contractor to AMC	August 2, 2000
58.	Bhartibhen Patel	Technical Supervisor, SNC, AMC	August 2, 2000
			August 4, 2000
60.	Utpal Padiya	Deputy Municipal Commissioner, East Zone, AMC	August 3, 2000
61.	Mr. Bhagia	Assistant Engineer, SNC, AMC	August 4. 2000
62.	Arvind M. Bhavsar	Assistant Engineer, SNC, AMC	August 4, 2000
63.	Jatin Metha	Deputy City Engineer, East Zone, AMC	August 5, 2000
64.	Anil B. Prajapati	Assistant Engineer, East Zone, AMC	August 5, 2000
65.	Kishore S. Nadaya	Assistant Engineer, East Zone, AMC	August 5, 2000
66.	Jagdish Bhatt	Assistant City Engineer, East Zone, AMC	August 5, 2000
67.	H.M. Patel	Assistant Engineer, East Zone, AMC	August 5, 2000
68.	Vastal Patel	Inspector – TDO, AMC	August 5, 2000
69.	R.C. Metha	Assistant Engineer, SNP, AMC	August 5, 2000
			January 11, 2001
70.	Laojibhai Patel	SAATH	August 5, 2000
			August 10, 2000
71.	B.K Patel	BK Builders	August 6, 2000
72.	Smita Khatate and Varshnabhen	Mahila Housing Trust	August 7, 2000
73.	Poonamchand R. Charan	President. Sri Ram Krishna Association, Pravinagar-Guptanagar	August 10, 2000
74.	S.S. Makwan	Vigilance Officer, South Zone, AMC	August 7, 2000
75.	Mr. Vyasa	Deputy Municipal Commissioner – Administration, AMC	January 4, 2001
76.	Bijalbhen	Mahila Housing Trust	January 5, 2001
77.	Varshnabhen	Mahila Housing Trust	January 5, 2001
78.	Minaxshibhen	Community Leader, Gnashamnagar	January 5, 2001
79.	Darshnabhen	Community Leader, Gnashamnagar	January 5, 2001
80.	Bindyabhen	Community Leader, Melaninagar	January 5, 2001
81.	Sushmabhen	Community Leader, Shivaginagar I	January 9, 2001
82.	Mansighbhai	Community Leader, Shivaginagar I	January 9, 2001
83.	Hirenbhai	SNC, Technical Supervisor	January 9, 2001
84.	Nagrajbhai	Community Leader, Hunumanagar I	January 9, 2001
85.	Rashmikant Mahida	Additional City Engineer, North Zone, AMC	January 10, 2001
86.	Shardabhen	Community Leader, Sharif KhanPathan ni Chaal	January 10, 2001
87.	Champabhen	Community Leader, Sharif KhanPathan ni Chaal	January 10, 2001
88.	K.B. Shah	Additional City Engineer, East Zone, AMC	January 11, 2001
89.	Himanshu Parikh	Contractor to AMC	January 11, 2001
90.	Hiren Sureshbhai	Technical Supervisor, SNP, AMC	January 11, 2001
91.	Ashish Kumargirish	Technical Supervisor, SNP, AMC	January 11, 2001
92.	P.R. Metha	Assistant Engineer, Potiala Ward, North Zone, AMC	January 12, 2001

93.	Bhartibhen Patel	BJP Local Councilor	January 15, 2001
94.	Amit Shah	Local Councilor, Vasna Ward	January 15, 2001
95.	Leena Mishra	Principal Correspondent, The Times of India	January 16, 2001
96.	M.M. Patel	Assistant City Engineer, Kankaria Ward	January 16, 2001
97.	Merajbibi	Community Activist, Bhanlavlinagar	January 17, 2001
98.	Razio Bano	Community Activist, Bhanlavlinagar	January 17, 2001
99.	Mukesh Shah	Deputy City Engineer, Drainage Project, AMC	January 17, 2001
100.	K.N. Parikh	Assistant City Engineer, Water Project, AMC	January 17, 2001
101.	A. M. Patel	Assistant City Engineer, Mechanical Department, AMC	January 17, 2001
102.	Anil Gangwani	SNP Contractor	January 17, 2001
103.	R.S. Patel	Estate & TDO Officer, AMC	January 18, 2001
104.	Fieldvisit to Pravinagar-Guptanagar, Vasna Ward		January 18, 2001
105.	K. Kalishnathan	Municipal Commissioner, MAC	January 18, 2001