

TAKING URBAN UPGRADING TO SCALE: WHERE ARE THE BOTTLENECKS?

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Abstract

This paper discusses the challenges to expanding successful, small-scale urban upgrading initiatives in developing countries, where “scaling up” comprises inclusion (upgrading efforts reach the vast majority of the target population with improved services within a reasonable time frame), and institutionalization (a system of actors and institutions—public, private, and/or civic—is in place that has the necessary capacity and resources to carry out upgrading indefinitely). Despite frequent identification of scaling up as a central challenge to effective upgrading efforts in the literature, no systematic assessment of obstacles to scaling up was identified. This paper presents a taxonomy of scaling-up bottlenecks and applies it to the case of the Slum Networking Project (SNP) in Ahmedabad, India. Despite demonstrated success in 27 slum communities, the SNP has had difficulty expanding its activities to a substantial proportion of the city’s 2,431 low-income neighborhoods. The analysis presented in this paper suggests that insufficient resources and a lack of “political will,” which are often cited as explanations for the failure to scale up, are relatively insignificant in the Ahmedabad case. Instead, a disconnect between the bundle of infrastructure services offered by the Ahmedabad Municipal Corporation and the priorities of slum households, along with the remuneration policies for the Slum Networking Project’s NGO partners, are among the principal explanations for the SNP’s slow rate of expansion.

Keywords: slums, upgrading, India, demand assessment, scaling up

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Section 1: Introduction

A persistent challenge for cities in the developing world is devising effective, sustainable strategies for supplying low-income households with reliable infrastructure services. Poor neighborhoods often pose technical challenges for infrastructure investment because of their density and location on marginal lands. Affordability concerns, especially given the current emphasis among development agencies on greater cost recovery through user fees, are paramount in low-income areas. Many sector professionals are also convinced that effective service delivery to poor neighborhoods requires the skills of social intermediation professionals who can facilitate communication between households and service providers. In short, urban service providers face some of their greatest challenges and resource needs in neighborhoods where revenue potential is thought to be the most limited.

Given these challenges, it is perhaps not surprising that, despite several decades of efforts to improve conditions in poor urban areas, roughly a third of urban households in developing countries are still considered slum-dwellers (UN, 2000).¹ A large and growing “best practice” literature, however, indicates that effective upgrading efforts do exist; the majority, however, most are time-bound efforts that benefit only a small segment of those in need of improved services.² Effective strategies are in need of scaling up that “turn[s] what works for 1000 people into a successful program for 10,000, then 10 million, then 100 million.”³ Indeed, a principal mandate of the World Bank/UNCHS Cities Alliance (2001) is to “focus on scaling up successful approaches.”

Two striking features of the upgrading literature are (1) the frequent references to scaling up as a principal challenge and (2) the dearth of systematic analysis into the impediments for scaling-up of particular programs. “Best practice” cases rarely discuss how scaling-up bottlenecks have been addressed, and even less documentation is available dealing with scaling-up failures. In this paper, I present a taxonomy of scaling-up challenges derived from a review of empirical work in the published and processed upgrading literature; I then use this taxonomy to analyze an upgrading program in western India. The following section presents this four-part taxonomy and a brief review of relevant literature. In section 3, I describe the Slum Networking Project (SNP) in Ahmedabad, India. The failure of the SNP to scale up in Ahmedabad despite its well-publicized success is analyzed in sections 4-6, using the taxonomy presented in section 2. Section 7 summarizes my findings and conclusions.

Section 2: Review of scaling-up bottlenecks

The term “scaling up” is used with a variety of meanings, the most common of which is simply to expand a given initiative to benefit a larger number of individuals. This seems to be the spirit in which much of the urban upgrading literature of the 1970s and 1980s discussed the need for “replicability” of projects (World Bank, 1972; Cohen, 1988).⁴ Following Davis and Iyer (2002), I use the phrase “scaling up” to comprise:

- (1) Inclusion: Upgrading efforts reach (or are expected to reach) the vast majority of the target population with improved services within a reasonable time frame.
- (2) Institutionalization: A system of actors and institutions (public, private, and/or civic) is in place that has the necessary capacity and resources to carry out upgrading indefinitely.

Both criteria include an element of subjectivity, which arguably makes them difficult to operationalize in practice. Assessment that focuses on easier-to-measure indicators, however, can miss important aspects regarding the effectiveness and sustainability of upgrading initiatives—and there is little use in understanding how to scale up ineffective programs. For example, in an assessment of one award-winning upgrading program in Indore, India, Verma (2000) draws sharp distinctions between the favorable evaluations of external agencies, which focused largely on construction targets, and an “on the ground” assessment that found many of the target population still unserved and the quality of services deteriorating.

This notion of scaling up is based on the idea that successful upgrading initiatives do exist and the current challenge is to understand why they are not expanded and institutionalized. A review of the published and processed literature yields a set of explanations for the failure to scale up that can be grouped into a taxonomy with four general categories: resource constraints; a lack of knowledge or shared understanding about program elements; resistance among key stakeholders; and untested implementation conditions. Each of these categories is discussed briefly below.

2.1 Resource constraints

Insufficient resources—particularly funding—are frequently cited as the reason that slum upgrading programs are ended or stall before they reach a substantial proportion of the urban poor. Olanrewaju, for example, (2001) identifies uncertain funding as the principal reason for the stalling of upgrading efforts in 41 low-income settlements in Lagos. Even where funding is “stretched” to accomplish more, *e.g.*, through relaxed technical standards or the use of labor contributions, financial resources are still often considered wanting. Reviewing upgrading programs in sub-Saharan Africa, Fekade (2000) notes that in spite of “increasingly adaptive realistic standards” initiatives had limited impact because bi- and multi-lateral support organizations “failed to sustain funding.”⁵ Resource constraints may also relate to human

capacity (technical, administrative, social intermediation, *etc.*), organizational or institutional capacity, supply chains, financing, land availability, or other limitations that render a smaller, successful program infeasible at a larger scale. The World Bank's sites and services projects, for example, fell short of benefiting their millions of target beneficiaries in part because insufficient land was available for the self-help construction programs (Werlin, 1999). Gough (1996) documents deficiencies in building materials and labor as hampering progress in self-help housing construction in Pereira, Colombia.

2.2 Knowledge and shared understanding

Upgrading initiatives often include a wide array of activities, from renovation or construction of network infrastructure and housing to community development and microenterprise promotion programs. While challenging to manage at the pilot phase, as an initiative expands so too do the difficulties of ensuring that implementation personnel fully understand program elements and the roles they are expected to play in scaling up. In one sense, this category of bottlenecks could thus be viewed as a form of organizational capacity (Section 2.1). A lack of knowledge among implementation personnel is often attributable, however, not to shortcomings within implementing organizations, but to fundamental differences among the philosophies of other stakeholders that translate into unclear directives to implementation staff on the ground.⁶

2.3 Resistance

Related to but distinct from the issue of knowledge and shared understanding, resistance is often implicated in *ex-post* analyses of slum upgrading initiatives. This category refers to impediments to scaling up that result from key stakeholders' blocking the expansion or "mainstreaming" of an effective upgrading initiative, despite having full understanding of its elements. Land unavailability for upgrading programs—which was mentioned as a potential resource constraint in Section 2.1—may not be a true physical shortage but instead the result of influential stakeholders resisting the types of reform necessary to improve access by households. As Farvacque and McAuslan (1992) note, "politicians, senior public servants, traditional rulers, existing landowners," as well as "[a]rmies of lower and middle civil servants, have a substantial stake in the confused, multi-layered and irrational systems" of land management in developing countries. Elected officials may also discourage meaningful beneficiary participation in upgrading programs in an effort to retain power among their constituents (*e.g.*, Barrett 2000).

2.4 Untested implementation conditions

To the extent that the characteristics of residents or communities, institutional arrangements, and/or policy frameworks for pilot upgrading initiatives are not representative of those extant in the target population, scaling up will be impeded. For example, upgrading programs are often launched in communities in which the likelihood of success is high, either because of particular characteristics of residents (*e.g.*, education levels, wealth, or a history of collective action), or because of support from

influential stakeholders. When extended to new areas/communities, the initiative encounter difficulties because of unique characteristics of the areas or persons served (*e.g.*, technical challenges, social conflicts). Revisiting the issue of land availability once again, an upgrading pilot project might be successfully implemented in the small proportion of a city's slum neighborhoods with tenure security; yet the program cannot reasonably expected to scale up given the existing policy framework.

The establishment of *ad hoc* organizational arrangements or the granting of “policy holidays” is an institutional manifestation of this same scaling-up bottleneck. In an effort either to ease implementation (*e.g.*, bypassing cumbersome bureaucratic procedures) or to experiment with innovative upgrading strategies (*e.g.*, testing new technical designs or standards), upgrading projects often receive special considerations that preclude a “real world” test of these strategies. The widely acclaimed Kampung Improvement Project (KIP) in Indonesia, for example, was administered through KIP project units that existed outside of the standard institutional framework for urban service delivery. The skills and capacity developed in the units was thus lost once external support for the project was withdrawn, and upgrading efforts largely ceased (OED, 1994).

A final component of untested implementation conditions concerns the nature of household preferences. More than thirty years ago Turner (1968) highlighted the frequent disconnects between planners' perceived and slum-dwellers' actual preferences, and consultation with households for planning and implementation has increased considerably since then. Nevertheless, if upgrading programs are designed using information about the priorities of a subset of non-representative households, scaling up may be impeded. Practitioners often argue that choosing socially cohesive neighborhoods with high levels of articulated demand for a pilot phase is important in order “to conscientiously achieve rapid success, to maintain a certain momentum and to encourage those involved” (UNCHS, 1996). Yet implementation manuals and project budgets for scaling up that are based on experiences from these relatively easy pilot sites are likely to provide inadequate guidance and resources for the challenges that lie ahead.

2.5 Summary

The taxonomy presented in this section was developed using published and grey literature accounts of dozens of upgrading initiatives throughout the developing world. In the following section, I apply this taxonomy in a diagnostic fashion to a specific case in Ahmedabad, India. After describing the elements of Ahmedabad's Slum Networking Project (SNP), I investigate why the program has fallen far short of its community enrollment targets, using this four-part framework to structure the analysis.

Section 3: Study site and methodology

The Slum Networking Project (SNP) in Ahmedabad, India, is an urban upgrading initiative that has generally been considered a success story, both locally and among international development circles.⁷ The implementing agency of the SNP, the Ahmedabad Municipal Corporation (AMC), is well acquainted with the challenge of providing infrastructure services to the poor. Once called “Manchester of the East,” Ahmedabad’s economy was built on textile production until the industry declined rapidly in the 1980s. During this same period, the Corporation almost doubled its service area (from 98.15 km² to 190.15 km²) to include an eastern periphery that was largely unplanned and lacked physical infrastructure. During this economic downturn and the city’s rapid expansion, the proportion of residents living in low-income slums and *chaals* increased dramatically.⁸ By 1991, a total of 1,029 slums and 1,383 *chaals* had been documented in Ahmedabad, comprising over 41% of the city’s 3.6 million residents (ASAG, 1991).

Since its incipience in 1997, the Slum Networking Project has extended a bundle of services to roughly 30,000 low-income residents in Ahmedabad slums. Residents have organized into community-based organizations (CBOs), made cash contributions toward the costs of the project, and worked with AMC and NGO staff to upgrade their communities from “slums” into “colonies.” The Slum Networking Project (also called *Parivartan*) pairs technical staff from the AMC with NGOs and private corporations to offer a set of infrastructure, environmental, and social services to slum households at affordable prices.⁹ The services offered by the SNP include private water supply and sewerage connections, private toilets, paving of streets and alleys, storm water drainage, community garbage bins, community street lighting, and community tree plantation. The project’s costs are met using subsidies from federal and state programs, as well as from the AMC itself, along with contributions from households and NGOs (Table 1). Three NGOs are currently involved in the project: the Self-Employed Women’s Association (SEWA), the Mahila Housing SEWA Trust (MHT), and SAATH.¹⁰

During the period June 2000-January 2001, we used a variety of primary data collection techniques to obtain information from slum dwellers, staff of the Ahmedabad Municipal Corporation and its partner NGOs, as well as local politicians, academics, and development professionals familiar with infrastructure service provision in the city’s slums. More than 100 such individuals participated in semi-structured interviews. In addition, we completed 177 surveys with households in eight slums that have participated in the *Parivartan* program, and 147 surveys with households in nine slums that have not enrolled in the program. We also completed a rapid appraisal of conditions in eleven other non-*Parivartan* slum communities. Households were selected for each survey cohort to form a sample that was representative with respect to the proportion of respondents residing in each of Ahmedabad’s five administrative zones. In each slum selected for inclusion in the survey sample, one or more participatory focus group discussions was also held to gather background information on the settlement, including the history of

infrastructure development, as well as qualitative information about the community's interactions with Municipal Corporation staff.

All data collection activities were completed by a team of MIT faculty and graduate students working with a large group of facilitators and enumerators from an Ahmedabad-based NGO. Our surveys and focus-group discussion guides were developed and pre-tested in consultation with the NGO staff and CBO activists. Respondents in *Parivartan* communities were asked about the quality of prior water and sanitation services; the quality of infrastructure services provided through the program; the performance of Municipal Corporation staff; and socioeconomic and demographic information about their household members. Respondents in non-*Parivartan* communities were asked about the performance of existing infrastructure services and the performance of Municipal Corporation staff; their interest in enrolling in the Slum Networking Project; as well as socioeconomic and demographic information about their household members.

The results of our data-collection activities in *Parivartan* slums suggest that, among the communities where it has been implemented, the Slum Networking Project has delivered success in many forms.¹¹ For example, water supply service has improved from shared public taps delivering an estimated 20 liters per capita per day (lpcd) to household connections yielding five times that volume. *Parivartan* households expressed a high level of satisfaction with the services provided through the program, compared both to non-*Parivartan* households and to their own recollections of public service provision before the project. More than three quarters of respondents in *Parivartan* communities reported being “very satisfied” with their current water supply and sanitation services, as compared to 18% who said they were also very satisfied before the project and 20% of respondents in non-*Parivartan* slums (Figure A).¹²

Despite the early success of the Slum Networking Project (SNP), the progress in upgrading Ahmedabad's slums has stalled in recent years. Since its inception in 1997, the SNP has either completed work or is active in approximately 27 of Ahmedabad's 2,432 slums and *chaals*. This accomplishment is laudable, yet is far short of the target initially set by the AMC, which was to reach all of Ahmedabad's 300,000 slum households by the year 2002. Using the taxonomy presented in Section 2, the following three sections seek to explain this disappointing progress in upgrading through the SNP.

Section 4: Knowledge and resource bottlenecks

It is difficult to argue that a lack of knowledge or shared understanding about *Parivartan* is hampering wide adoption of the program in Ahmedabad. The initiative has received extensive attention from

development banks and bilateral donors around the world; has generally been covered favorably in the local media; and has been promoted within slum settlements by the partner NGOs, the AMC, and SNP staff themselves. Through their participation in committees and budgetary review of the Municipal Corporation, the city's elected councilors are repeatedly exposed to information about the Slum Networking Program. All councilors we interviewed were well aware of the program's features and felt that, where it has been implemented, it has been effective. SNP engineers and NGO staff we interviewed gave consistent responses regarding the allocation of responsibilities among the implementing institutions.

Nor has the Slum Networking Project had a lack of financial resources, an element in the second part of our taxonomy. In the mid-1990s, the Municipal Corporation initiated a set of financial reforms, including simplifying the assessment of both *octroi* and property tax, as well as improving tax collection efficiencies.¹³ In 1998 Ahmedabad also became the first Indian municipality to float a municipal bond without a state guarantee. At the close of the 1995-6 fiscal year the Corporation recorded a surplus of Rs. 612 million (US\$13.6m), an amount that has grown steadily since 1996 (AMC, 2000). Not only has the Corporation had ample resources to support the Slum Networking Project, it has increased its budget of the SNP each year since its inception. Indeed, the Slum Networking Project has not been able to use more than 30% of its allocated budget in any given year (Table 2).

With respect to human capital, the project does suffer from under-resourcing among its engineers. The Slum Networking Cell, the Municipal Corporation department charged with administering the program, has no senior engineers able to draft designs for the often complex infrastructure installations that are required in participating slums. Instead, the Municipal Corporation has contracted a private engineering firm to prepare design documents for the program; SNP engineers oversee construction in the slums according to these designs. From the perspective of resource constraints, however, there is no shortage of highly skilled private-sector talent to fill this deficit of design skills within the Corporation.

The SNP is also fortunate to have three NGO partners with qualified staff, good track records, and a high level of credibility in Ahmedabad. SAATH is a young organization originally focused on health programs but with a growing interest in urban infrastructure. Leaders of SAATH are keenly aware that their performance in the SNP will establish its reputation in the field of slum upgrading, with important implications for its funding potential. The Mahila Housing Trust (MHT) is part of the well-known Self Employed Women's Association (SEWA) network of organizations and, therefore, benefits from the legitimacy that SEWA has earned from years of organizing poor women workers in India. SEWA and MHT have sophisticated leadership, as well as a large and well-trained staff. In particular, SEWA's experience with community savings programs has made it the financial intermediary between participating slums and the Municipal Corporation.

Section 5: Resistance

There are many actors in Ahmedabad's political and bureaucratic institutions who might have cause to obstruct progress of the Slum Networking Project. For example, the urban poor provide an enormous potential voting block, and the Slum Networking Project could be viewed as undermining the influence of elected officials in Ahmedabad. Given the extensive publicity that the Slum Networking Program has received, as well as its potential for attracting additional donor funding into the city, it is perhaps not surprising that we documented very little overt resistance to the program from the city's elected officials. At the same time, it is clear that the program is perceived to "belong" to one of the city's principal political parties, and those in opposition parties appear less likely to affiliate themselves with the initiative.

In addition, the majority of Ahmedabad's 129 councilors use funds allocated to them from numerous state and federal government welfare and poverty alleviation programs that are earmarked specifically for infrastructure upgrading in slums and *chaals*. The value of political grants for infrastructure investments disbursed in Ahmedabad in the 1999-2000 fiscal year (US\$2,877,900) was 2.5 times that of the SNP's budget and 11.3 times the SNP's expenditures (Table 2). By reducing the obligations of residents to participate in infrastructure projects funded by these grants (*e.g.*, requiring no cash contributions as does the SNP), politicians are undermining the scaling up of *Parivartan*, despite their public expressions of support for the program.

5.2 Municipal civil servants

Like many South Asian bureaucracies, Ahmedabad's Municipal Corporation is a solidly hierarchical organization with strong norms of duty and deference. In large part because a former Municipal Commissioner expressed a personal interest in the success of the Slum Networking Program, middle-rank subordinates were keen to push the program forward. At the same time, this senior tier of the AMC is also motivated by the possibility of securing external grants and loans for urban upgrading. AMC leadership has thus compelled staff of the Slum Networking Program to provide infrastructure services in as many settlements as possible, as quickly as possible.

Somewhat more surprising is the enthusiasm with which lower-level staff of the SNP have responded to this mandate. In the colony of Maachipir, for example, community members reported that SNP engineers worked around the clock to implement the project in their community. During a malfunctioning of one of the colony's drainage lines, SNP staff worked until the early hours of the morning to correct the technical faults. Maachipir residents report that they have never witnessed such commitment from staff of the Municipal Corporation in the many years that they have been engaged with

ward and zone office engineers. Given the fact that, as in most public service agencies in South Asia, few material incentives are available to senior AMC officials to encourage good performance by employees, one wonders what it is that motivates project engineers in the Slum Networking Program. We have documented elsewhere (Davis *et al.*, 2001) the organizational arrangements and incentive structures that motivate SNP staff; this effort has resulted in a markedly better reputation for SNP staff among slum-dwellers as compared to their colleagues in other AMC departments (Table 3).

Whereas there appears to be no lack of commitment to scaling up *Parivartan* among the SNP, there is considerable resistance to the program from technical staff in the Municipal Corporation's ward offices. Once a slum community is "networked" with infrastructure through the SNP, it becomes part of the operations and maintenance responsibility of one of the AMC's 43 ward offices. Indeed, the philosophy of *Parivartan* is "to integrate the slums into the mainstream of the city" (AMC, 1998). Staff of the ward offices, however, enjoy a poor reputation regarding customer responsiveness, and they have been particularly reluctant to provide post-construction support to *Parivartan* communities.¹⁴ In the newly upgraded community Ramraman Chaal, for example, a drainage line installed through the SNP subsequently became blocked. Despite registering four official complaints over a 25-day period, residents received no assistance from their ward office. Eventually, frustrated residents collected Rs. 50 (~US\$1.10) from each affected household and hired a private contractor to clear the line.

For their part, ward office staff justify their reluctance to service infrastructure in *Parivartan* communities by citing improper designs and poor construction by SNP engineers. "We have had no part in installing these things," one ward office engineer explained. "It is not our fault that they are not working properly." Tensions between the Slum Networking Cell and ward offices have escalated over operations and maintenance, with the Cell occasionally stepping in to address service problems even after their formal obligations to *Parivartan* communities have been fulfilled. Despite substantial implications for the long-term sustainability of infrastructure installed through the SNP, it is not clear whether resistance of ward staff has had much impact on the project's scaling up.¹⁵

5.3 NGO partners

The partnership between the Municipal Corporation and the three NGOs participating in *Parivartan* is unique in its allocation of significant power and control to the NGOs, as well as in its production of mutual trust and respect between government and civic professionals (Davis *et al.*, *op cit.*). At the same time, senior leadership in the NGOs is obstructing the scaling-up process by refusing to work in a larger number of slum neighborhoods than is possible, even with current staff resources, for their organizations.

This resistance from the NGO partners has emerged from disagreement about the types of community services that should be offered in the program, and what level of funding should be provided to support

organizations. Slum Networking Project architects originally estimated that approximately US\$22 per household would be required for the community development activities associated with the SNP. Of this amount, NGOs are required to contribute 30% while the AMC makes up the balance. Over time, however, the expectations upon the NGO partners have increased while the resources allocated to them have remained constant. Along with community mobilization, education, training and income-generating activities, NGO staff have taken on virtually full-time positions monitoring construction work and liaising with SNP staff and contractors. Over the past two years, both NGO partners have had to raise external funding to finance their continued participation in the program. One senior NGO member estimates that per-household community development costs for the slums in which she has worked are closer to US\$65 than the US\$22 allotted.

The discrepancy between budgeted and actual community development expenditures stems in large part from the fact that the Slum Networking Project has provided very little guidance regarding what activities the partner NGOs are to undertake. SEWA, the Mahila Housing Trust (MHT), and SAATH each have distinct approaches to working with slum communities that comprise different types of activities and different resource requirements. AMC leadership has allowed partner NGOs to pursue whatever approach they feel to be most effective for successful participation, rather than imposing a standardized set of activities and demanding a uniform approach. At the same time, regardless of the approach pursued by an NGO, its budgetary support from the program remains constant.

Project support for community development work is also constant from slum to slum despite the considerable variation in demand for such intervention among different communities. For smaller, homogeneous communities with a history of collective action, an NGO may need only to educate residents about the benefits and obligations of the project and assist households in establishing savings accounts for their financial contributions. In other settlements where internal conflicts, previous disappointments with infrastructure projects, extreme poverty, or other barriers pose substantial challenges to successful community organizing, an NGO might need considerably more time and resources to help residents prepare for and implement the Slum Networking Project successfully. NGO representatives have suggested that funding for community development be determined on a case-by-base basis, which would not only relieve the financial burden that the organizations currently bear but would ostensibly give greater control to communities over the kind of development activities they would like to have.¹⁶

Frustration with the funding of community development activities in the Slum Networking Project has made NGO staff reluctant to engage in heavy promotion of the Slum Networking Project to candidate communities. “We are holding back,” one representative admitted. “We want the program to expand, but we are more concerned about doing a good job. ... We would rather work in fewer slums with a good

outcome than in more slums with problems.” Representatives from several other civic organizations that declined to participate in the Slum Networking Project said that their decision was driven principally by reports of the insufficient resources allocated to the NGO partners. “We are not SEWA. ... We don’t have that kind of money,” the head of one such organization explained. “I think the project is very good, but the Corporation must see that this kind of [community organizing] work is not easy or fast. It takes good people and money for a really successful experience.”

5.4 State government

Like the Municipal Corporation, the Government of Gujarat has a vested interest in drawing increased donor support for slum upgrading activities in Ahmedabad. At the same time, a principal obstacle to taking the SNP to scale is the state government’s unwillingness to cooperate with the AMC’s innovative approach to land tenure issues. In order to encourage community participation in the SNP, the AMC offers a virtual 10-year tenure guarantee, which can be extremely attractive to households located on holdings with disputed or uncertain titles. The guarantee does not confer an exchangeable deed to the slum resident; instead, the AMC commits itself to not initiating any action that would require the community’s relocation for a period of ten years.

This tenure provision is not necessarily legally binding; in fact, it is unclear whether the AMC can legally provide such a guarantee for land that is owned by either another branch of government or a private landholder. To date the policy has not been challenged, nor has the SNP’s guarantee to any community been breached. At the same time, SNP staff have been instructed to review the tenure status for each slum that applies to the project and reject those with a risk of tenure-related complications.¹⁷ In particular, if a slum is located on AMC land not reserved for a particular use (*e.g.*, highway or park construction), or is located on private land not involved in pending litigation, SNP staff are permitted to enroll the community in the program. If the community is on state government land, the SNP must seek approval from these branches of government. None of these approval requests has been granted in the past, and the Municipal Corporation has been “signaled” that none should be expected. Thus, SNP staff consistently reject applications from slums located on state-owned land.

In sum, whereas the SNP’s tenure provision makes the program more attractive to slum dwellers, it has also made the process of approving communities’ applications more difficult. As of November 2000, only 23 of the 112 slums that had submitted applications to the project were approved. The remaining slums have been either rejected or indefinitely delayed, at times because of their distance from main water and sewer lines in the city, but more often because of the land ownership status of the communities. In a random sample of 200 slum communities in Ahmedabad, we found that 112 (56%) were located on reserved AMC, state, or federal land, and would thus be considered (at least initially) ineligible for participation in the Slum Networking Project.

Section 6: Implementation difficulties

It is fairly common in pilot development initiatives to “pick the low-hanging fruit” by selecting first-round communities where the likelihood of success is relatively high. The communities that have participated in the Slum Networking Project, however, do not appear to be the “low-hanging fruit” among Ahmedabad’s poor neighborhoods. Surveys conducted before the commencement of upgrading activities in several slums show them to be socio-economically comparable to the city’s poor communities in general. Data from our own surveys conducted in *Parivartan* and non-*Parivartan* communities supports this view (Table 4). *Parivartan* communities range in size from 200 to 1900 residents; some had strong pre-existing community-based organizations while others had very little organizing experience. Homogeneity of religious beliefs and ethnicity also varies across communities. SNP and NGO staff have thus implemented *Parivartan* in a range of settings that, in most respects, mirror the diversity of Ahmedabad’s slums.

The important exception to this observation is that, prior to participating in the Slum Networking Program, a small percentage (<2%) of *Parivartan* households had access to any of the eight services offered by the program. Senior AMC officials we interviewed believe that conditions are similar in the majority of Ahmedabad slums. This assumption underlies the AMC’s requirement that communities accept the entire bundle of services in order to enroll in the SNP. Our research suggests, however, that the number of informal settlements in Ahmedabad that have no basic infrastructure services is far below the 2,431 cited by the AMC. For example, of these informal settlements approximately 1,400 are row tenements or *chaals*, none of which has submitted an application to the SNP. Field staff that we interviewed explained that the private-sector sponsors of these housing developments have, in most cases, already installed basic water supply and sanitation services for residents at no cost to them.

Many of the city’s 1,031 slums have also obtained water and sanitation services, using both formal and informal means. In the city’s West Zone, only about 10% of slum communities (7 of 67) are entirely without services. The remaining settlements have obtained basic infrastructure services through some combination of political sponsorship, the informal market, and the AMC’s ward offices. In visits to twenty randomly-selected slums throughout the city, we found that 40% already had individual water and sanitation services, and 30% had water, sanitation, and road paving. Among respondents in our survey, only 2% of households in *Parivartan* communities had individual (household) water and sanitation connections prior to participating in the Slum Networking Project; among respondents in non-*Parivartan* communities, 66% had individual services.

AMC officials nevertheless share the conviction that the bundling of services is advantageous to both the Municipal Corporation and to slum residents. As one staff member explained, “This package is much better than what [households] will get from the zone offices” of the AMC. “It’s also cheaper than what they would have to pay for someone to connect them illegally.” To SNP staff, the only feasible explanation for a slum household’s disinterest in a particular service is that the household already possesses that service. As such, the project rules include a set of credits that are applied to reduce the financial contribution required of any household that has already obtained one or more of the eight services.¹⁸ However, this reduction only applies to services that have been obtained legally by the resident. SNP staff subsequently see little need to adjust the suite of services offered, nor to create opportunities for residents to select subsets of the services according to their needs and preferences.

Findings from our surveys and focus group discussions suggest that offering only individual-level, bundled services is one important explanation for the SNP’s slow rate of expansion in the city. For example, in our survey of *Parivartan* households we asked respondents to list all the services provided in their community through the Slum Networking Project. Without being prompted 89%, 67%, 75% and 70% of residents surveyed were able to name water supply, sanitation, drainage and road paving services, respectively. Considerably fewer residents (<15%), however, could recall any of the six other services provided in the project. Respondents were also asked to identify which single service they felt was the most important to their household. More than 75% of respondents cited water supply, sanitation, drainage or road pavement, while fewer than 2% of respondents chose any of the remaining services. When reminded of these project elements, many respondents commented that they had no interest in these services at all; as one slum resident noted, “the AMC doesn’t require rich households to buy trees with *their* water supply.” NGO staff also reported that they were regularly asked by community members to advocate with the SNP for their exemption from having to “purchase” the less popular upgrading services.

Similar findings emerge from slum communities that have not been part of the SNP. In a series of focus group discussions, we asked which of the SNP-offered services they would be willing to invest in for their community. Water supply, sewerage, and road paving were virtually always chosen, whereas there was little demand for tree plantation, garbage removal, streetlights and the other upgrading services. When asked whether they would be interested in participating in the Slum Networking Project, two thirds of the groups concluded that their community could more easily obtain only those services they were interested in from other sources (*e.g.*, local politicians, charitable organizations), while the remaining one third felt that they would be willing to enroll for the full suite of services from the SNP.

Section 7: Summary and conclusions

The empirical literature on urban upgrading in developing countries suggests that resource constraints and political resistance are common reasons that successful initiatives do not scale up. These are also recurrent themes in literature dealing with scaling up in a variety of sectors and locations.¹⁹ Using a simple taxonomy of bottlenecks to scaling up, somewhat different conclusions emerge regarding the Slum Networking Program in Ahmedabad. Clearly a lack of “political will” has allowed the State of Gujarat’s unwillingness to confer legal title on slum dwellers to have a substantial impact on the Slum Networking Project’s expansion. In addition, the city’s elected councilors are—intentionally or otherwise—undermining the SNP’s attractiveness by supplying slum communities with the services they want at lower prices.

Neither the lack of a shared understanding about the SNP among implementing staff, nor a shortage of financial or human-capital resources, was identified as a principal explanation for the failure to take the program to scale. Much more important were the systematic differences between the infrastructure endowments of “pilot” SNP communities and the majority of the target population, combined with the inflexibility of the Municipal Corporation’s policy of providing only bundled, individual-level services.²⁰ Whereas the argument for bundling water, sewer, and storm water drainage services is clear, as well as the staging of these services prior to road paving, there is no technical rationale for requiring the provision of all upgrading services in all SNP communities.²¹ Revising this policy to allow greater flexibility in service selection would likely increase the attractiveness of the project to communities.²² This strategy would also accelerate the AMC’s physical construction achievements, thus improving its standing with development agencies interested in supporting urban upgrading initiatives.

The taxonomy developed here was used in a diagnostic fashion, to understand why a well-known, demonstrably successful upgrading program has been unable to scale up. Of particular importance from a planning perspective is the finding that, while some critical bottlenecks to expanding the Slum Networking Program are resolvable only with policy reform at the state level (*e.g.*, tenure policy for state-owned land), others are within the purview of the Municipal Corporation and its partner organizations. Even if broad economic and policy reforms are not forthcoming in the near term, substantial gains in improving the conditions of Ahmedabad’s slums can be made through the same effort and innovation that has characterized the SNP to date.

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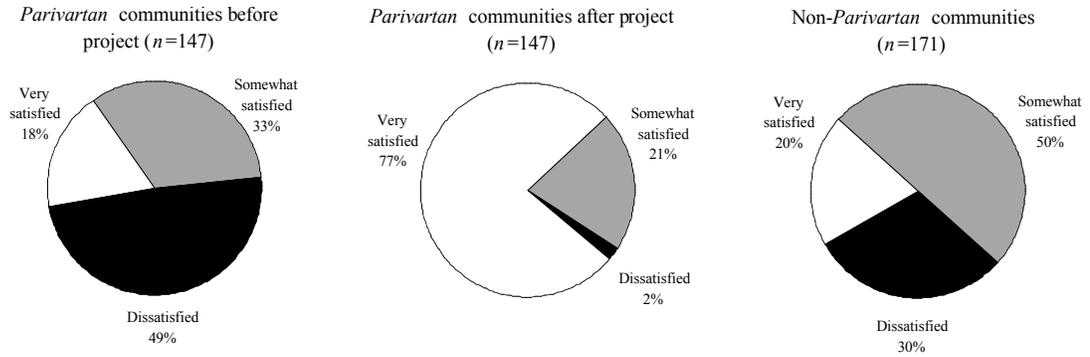
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Figures

Figure A: Satisfaction with water and sanitation services among *Parivartan*, non-*Parivartan* households in Ahmedabad



Tables

Table 1: Cost sharing in Slum Networking Project, Ahmedabad Municipal Corporation

<i>Per-household costs</i>	<i>AMC share</i>	<i>NGO share</i>	<i>Household share</i>
On-site infrastructure costs: US\$200	US\$111	US\$44	US\$44
Community development activities: US\$22*	US\$15	US\$7	---
Networking to main infrastructure: US\$100	US\$100	---	---
Total cost: US\$322	US\$226 (70%)	US\$51 (16%)	US\$44 (14%)

**Many NGO staff feel that their costs for community development activities are actually higher than those stipulated in the project agreement.*

Table 2: Annual budget allocation and utilization, Slum Networking Project

Year	Allocated budget	% increase	Expenditure	% utilized
1996-97	\$44,400	-	\$1,600	4
1997-98	\$240,200	441	\$36,600	15
1998-99	\$1,024,900	327	\$283,800	28
1999-00	\$1,155,400	13	\$254,600	22
2000-01	\$1,679,000	45	N/A	N/A

Source: SNP, 2000. Figures are approximate.

Table 3: Attitudes toward Ahmedabad Municipal Corporation (AMC) staff among *Parivartan*, non-*Parivartan* communities

<i>Percentage of respondents who found AMC staff to be...</i>	<i>Parivartan</i>		<i>Non-Parivartan</i>
	Before project	Currently	Currently
Helpful	36%	95%	25%
Polite	39%	95%	32%
Honest	49%	91%	30%

Table 4: Socioeconomic and demographic profile of *Parivartan*, non-*Parivartan* communities

	<i>Parivartan</i> (n=147)	Non- <i>Parivartan</i> (n=177)
% female	64%	64%
Median age	36	40
% with no formal education	41%	45%
% with primary education only	33%	35%
Median household size	4.9	5.1
% homeowners*	96%	66%
Median market value of home**	58,400 Rs. (₹US\$1,300)	50,000 Rs. (₹US\$1,100)
Median monthly rental value of home*	390 Rs. (₹US\$8.60)	315 Rs. (₹US\$7.00)
Median household monthly income	1710 Rs. (₹US\$43)	1960 Rs. (₹US\$38)

*An equivalent percentage (63%) of *Parivartan* respondents said they were not homeowners before the Slum Networking Project, suggesting that the AMC's 10-year tenure guarantee is viewed as *de-facto* land tenure.

**Estimated by respondent

Endnotes

¹ Whereas the term *slum* has derogatory connotations in some countries, I employ it in this paper as an administrative classification (as in many developing countries), referring to a wide variety of informal housing settlements that have unclear land tenure, limited infrastructure, and housing structures that are generally constructed with temporary or non-permanent materials.

² Following the World Bank (2001), I define “slum upgrading” in a limited way as the systematic improvement of the physical environment in slums. Slum upgrading generally includes improving and/or installing infrastructure such as water supply, sanitation, and storm drainage networks, as well as waste collection systems, access roads and footpaths, lighting, public telephones, *etc.*

³ Letter dated 31 May 2002, from World Bank president James Wolfensohn to his staff during a trip to China.

⁴ In part because of frustration with the lack of “replicability” of upgrading projects, a different approach to upgrading emerged that focuses on broad market and policy reforms related to land availability, access to financing, construction standards, *etc.* (e.g., Angel 1986). In this paper I focus on a project approach to upgrading and the process by which a successful, yet limited, initiative is taken to scale citywide.

⁵ Of course, there are multiple sources of funding for upgrading initiatives, including donors, government, and households themselves. Kamete (2000) notes that the World Bank “unbendingly” advocates a user-pay principle in its urban projects, with the notion that cost recovery through user fees is the only feasible means of creating scalable and sustainable upgrading programs.

⁶ Gulyani and Connors (2002), for example, note that World Bank-supported urban upgrading projects in Africa “have grappled with very different priorities such as land legalization, upgrading infrastructure, and, to a lesser degree, social and economic development.”

⁷ The project emerged from similar experiences in the neighboring city of Indore, but with significant changes to several project elements. See Verma (2000), for details on the project’s history.

⁸ In Ahmedabad—as in most Indian cities—the term *chaal* is used to denote a particular form of multi-story or row housing tenement constructed by firms for their workers, usually with permanent or semi-permanent materials.

⁹ Whereas the SNP was initially envisioned as a partnership between the public, private, and NGO sectors, in reality only one private company has been involved in the initiative, and only in one slum community.

¹⁰ SAATH is not an acronym; it is a word that from Hindi or Gujarati can be translated as “together,” “cooperation,” “a collective,” or “support.”

¹¹ Verma (2000), however, challenges the notion that the slum networking approach has been successful in the neighboring city of Indore, where it won a “best practice” citation by the UN Centre for Human Settlements.

¹² A complete discussion of our household survey and focus-group discussion results is available in Davis *et al.*, 2001.

¹³ *Octroi* tax is levied on goods moving in and out of a local government’s jurisdiction. Local governments in India rely heavily on *octroi* tax for revenues, although recent efforts to phase out the tax have emerged at the national level. In Ahmedabad approximately 40% of the Municipal Corporation’s revenues are derived from *octroi*.

¹⁴ In our survey of 171 slum households that had not participated in the SNP, 55% of households said they had not made a complaint to the AMC about their water supply or sanitation services within the previous six months. Of these, 54% did, in fact, have legitimate O&M problems, but did not contact the

AMC because they felt that no action would be taken by the ward offices. Among the households who did make service complaints to the AMC, more than one third reported that their problems were never resolved.

¹⁵ Verma (2000) notes that demand for a similar upgrading project in nearby Indore fell off in part as a result of households' exposure to the poor maintenance of infrastructure installed by the project in neighboring slums.

¹⁶ Of course, this approach would itself increase the cost of NGO participation, as some mechanism of debating and coming to consensus on the type of activities and the level of funding provided to each enrolling community would have to be devised.

¹⁷ Slums in areas for which a land use plan has yet to be finalized or developed will also be barred from participating in project. A slum can also be refused permission to participate on technical grounds, *e.g.*, if the settlement is located on land that cannot be accessed with minor improvements to existing mainstream infrastructure.

¹⁸ For example, if a household already has a legal water supply connection, it can deduct US\$11 from its US\$44 required contributions to the project. Similarly, an existing (legal) sanitation system will reduce a household's obligation by US\$11.

¹⁹ See, for example, Elmore, 1996; Kar and Phillips, 1998; Mukerjee, 1998; and Pyle, 1981.

²⁰ This finding stands in contrast to a body of literature that rejects "narrowly conceived and sectorally planned" upgrading projects (Moser, 1995). Staged upgrading may proceed one sector at a time, but need not occur without comprehensive planning.

²¹ It is notable that, when asked where this set of services originated, the majority of AMC staff said that they had simply been adopted from the project as implemented in the neighboring city of Indore (a few said that they emerged from a discussion between senior AMC staff and NGO representatives).

²² One could also infer that a policy marketing campaign among ward councilors to promote consistent cost-sharing policies for infrastructure projects in slums would benefit the SNP.