

SQUATTERS AS DEVELOPERS?

Mumbai's Slum Dwellers as Equity Partners in Redevelopment

by

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

DOCTOR OF PHILOSOPHY
IN URBAN DEVELOPMENT AND PLANNING

at the Massachusetts Institute of Technology

June 2000

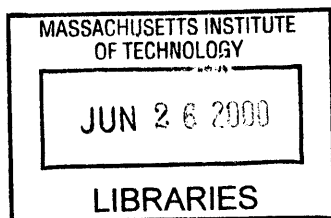
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ABSTRACT

This dissertation analyzes the slum redevelopment strategy introduced by the state government of Maharashtra (India) in its capital city, Mumbai (Bombay). The strategy involves demolishing the existing slums and building on the same sites at a higher density, new, medium-rise apartment-blocks including entirely cross-subsidized housing for the original slum dwellers. Slum redevelopment is distinctly different from the two prevalent conventional strategies with respect to slums in developing countries – slum clearance and slum upgrading. Interestingly, the strategy appears to enjoy considerable support of slum dwellers, NGOs, private developers and politicians.

The study focuses on a single slum redevelopment case – the Markandeya Cooperative Housing Society (MCHS) – to show how the state government amended the land development regulations to enhance the potential land values and allowed the slum dwellers to share in the high development values. This analysis of the role of the State in promoting a new housing strategy and providing crucial support in implementation contributes to our understanding of housing provision policy in three ways.

First, it provides insights into slum redevelopment as an alternative housing strategy. It analyzes the problems faced and the solutions innovated in the implementation of this strategy. It argues that despite slum redevelopment's shortcomings, the strategy may be superior to other alternatives, especially if the State can provide implementation support. Second, it identifies non-traditional issues, often overlooked in housing improvement that may help make slum upgrading programs more successful. Contrary to the conventional focus only on private property rights, the dissertation argues for policy to be based on a differentiated view of property rights (including common property rights) that also considers the property values, the physical structure of the property-holdings and the interplay among these issues. Third, the study reveals the complexities involved in housing production for low-income groups and demonstrates that enabling housing provision, even with the participation of private sector agents, requires an active government role. Paradoxically, enabling may require four levels of seeming contradictions – both decentralization and centralization; both demand-driven and supply driven development; both private as well as public investment; and both deregulation and new regulations.

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Acknowledgements

I would like to express my special gratitude to:

Bish Sanyal, my supervisor, for teaching me how to theorize, think creatively, explore new ideas and for being an unambiguous supportive advisor. John de Monchaux, my mentor, for his generous encouragement and for teaching me how to learn at, enjoy and survive MIT. Larry Vale, my thesis reader, for his thoughtful and precise feedback and for insisting that there is a “physical lens” for analyzing housing issues. Lisa Peattie, Bill Doebele, Shrimp (Reinhard Goethert) and Omar Razzaz for helpful advice, insightful discussions and valuable comments on earlier drafts.

The United Nations Development Program (UNDP) and the Lincoln Institute of Land Policy for essential financial support to undertake this research.

Sheela Patel, A. Jockin, Celine D’Cruz and Sunder Burra of SPARC for access to all of the NGO’s documents on the Markandeya case and for their help in establishing the necessary contacts in Mumbai. Gautam Chatterji, Sharad Mahajan, Ranjit Naik, Adolf Traglar, K.G. Pai, Johnny Challaiah, the other residents of Markandeya and the other Mumbai projects for sharing their experiences and opinions with me.

Natha uncle, Sushma aunty, Radhika, Debika and Manish for making my fieldwork in Mumbai enjoyable. Zeenat and Khush for being there, whenever I needed.

To “Team V” that selflessly helped me to put together this document – Tito Bianchi, Rajive Chaudhry, Marianne De Clerk, Brent Ryan, Zhang Yan, Perry Yang and T.Luke Young – and for being such great friends. Amy and Punit Mukhija for proof reading this thesis and finding more mistakes than I expected.

Sabrina de Carlo and Tito for friendship, advice and pasta. Monica and Claudio Pinhanez, & Pratap Talwar and Ranjan Nambiar for their support including their apartments. Jason Corburn for beer and basketball. Jose Oliveira and Arturo Ardila, my roommates for being cheerful despite the stress, also, Amy Brown and Yan, my office-roommates for smiling and laughing. Maria Elosua, Adair Smith and Lucian Burdi for the holidays in Mexico, Canada and Italy. And Ami and Aditya Mahajan, Ann Steffes, Janice O’Brien, Jennifer Hrabchak, Laura Wilcox, Nimfa De Leon, Sumila Gulyani, Theo Seltzer, Tom Campanella and the SPURS Fellows.

My parents and family for their tireless support.

Thank you!

This dissertation is dedicated to my parents.

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Acronyms

BJP	Bhartiya Janata Party
BMC	Bombay Municipal Corporation
BMRDA	Bombay Metropolitan Regional Development Authority
BUDP	Bombay Urban Development Project
CHS	Cooperative Housing Society
CIDCO	City and Industrial Development Corporation
DCR	Development Control Regulations
DP	Development Plan
DVS	Dharavi Vikas Samiti
FAR	Floor Area Ratio
FSI	Floor Space Index
GoI	Government of India
GoM	Government of Maharashtra
HUDCO	Housing and Urban Development Corporation
MCGB	Municipal Corporation of Greater Bombay
MCHS	Markandeya Cooperative Housing Society
MHADA	Maharashtra Housing and Area Development Authority
MRTP Act	Maharashtra Regional Town Planning Act
NGO	Non-governmental Organization
NSDF	National Slum Dwellers Federation
PMGP	Prime Minister's Grant Project
RICHS	Rajiv-Indira Cooperative Housing Society
SIP	Slum Improvement Program
SPARC	Society for the Promotion of Area Resource Centers
SPPL	Shiv-Sahi Punarvasan Prakash Limited
SRA	Slum Rehabilitation Authority
SRD	Slum Redevelopment
SRS	Slum Rehabilitation Scheme
SUP	Slum Upgrading Program
ULCA	Urban Land Ceiling (and Regulation) Act
UNCHS	United Nations Center for Human Settlements
WB	World Bank

Currency Exchange Rates

Year	Rupees per U.S. Dollar	
	Official Rate	Unified Rate
1985-86	12.24	
1986-87	12.79	
1987-88	12.97	
1988-89	14.48	
1989-90	16.66	
1990-91	17.95	
1991-92 (Post-liberalization)	24.52	
1992-93	26.41	(Market Rate = 30.65)
1993-94		31.36
1994-95		31.40
1995-96		33.46
1996-97		35.50
1997-98		38.03
1998-99		41.45

Notes: The Indian financial year runs from April 1 to March 31.

In 1992-93, India had a dual exchange rate system. In 1993, the rates were unified at the free-market rate.

Sources: i) IMF Statistics as cited in World Bank, 1997b
 ii) Reserve Bank of India, 1999

Chapter 1: Introduction - A New Strategy in Mumbai

1.1 The Puzzles of Slum Redevelopment

I became interested in Mumbai's slum redevelopment strategy, in the summer of 1996, when I read an article about it in a leading Indian business newsmagazine (Business India, 1996). The strategy, introduced by the state government of Maharashtra in its capital city, was based on demolishing existing slums and rebuilding on the same sites at a higher density, new, medium-rise apartment blocks including entirely cross-subsidized housing for the slum dwellers. Its uniqueness and divergence from conventional approaches intrigued me. Since the middle of the twentieth century, housing policy debate on slums in developing countries has been polarized between two extremes – slum clearance and slum upgrading. Slum redevelopment presented a third, very different approach.

In slum clearance programs, slums are demolished and the slum dwellers are resettled in alternative locations in medium-rise apartment blocks. Typically, this resettlement allowed governments to release the development potential of well-located land parcels. But this often led to confrontation and political conflict with the slum dwellers. Furthermore, conventional wisdom argued that the slum dwellers were unable to adjust to the alien lifestyle the modern apartment block imposed on them.

On the other hand, in slum upgrading the slum dwellers received legal title to their properties from the State. At times the State also helped in the provision of basic amenities, infrastructure and housing finance loans. The premise of this policy was that housing conditions in slums might appear substandard, but that they are likely to improve over time. The key to these improvements, however, was tenure legalization. Once slum dwellers had secured legal titles to their properties, they would be willing to invest in their houses and settlements and would consolidate their homes and improve their communities. In this way, conventional thinking also predicted that slum dwellers prefer slum upgrading.

International development agencies, often led by the World Bank, have been at the forefront of promoting slum upgrading programs. In a similar vein, in 1985, the state government of Maharashtra, with the support of the World Bank, introduced the Slum Upgrading Program (SUP) in Mumbai. However, the article I read suggested that the slum dwellers in Mumbai were not interested in the SUP, instead they supported an alternative policy introduced by the state government – slum redevelopment.

Most of Mumbai's slum dwellers do not have legal title to their land and are squatters, why were they behaving differently from the squatters in the housing literature? A possible explanation was that the city's slum dwellers were more interested in slum redevelopment because of the cross-subsidy available in the scheme. In 1996, the cross-subsidy was so large that the state government claimed that the slum dwellers were receiving "free-housing." Although, it is true that the participating slum dwellers did not have to contribute financially for their new houses, the government's claim is not completely true. In practice, the slum dwellers received their new houses in exchange for their old ones. Thus effectively, they would contribute their existing housing assets as equity to the redevelopment projects and would be development partners in slum redevelopment projects. But, why were they willing to assume such risks and live in the new medium-rise "boxes"? Why were they not interested in simply improving and consolidating their existing housing?

Moreover, governments are expected to prefer slum clearance and the displacement of slum dwellers. Although, Bangkok had a land-sharing scheme between landowners and slum dwellers, the proposition was a result of direct negotiations between the slum dwellers and the landowners, with limited government support for the slum dwellers. On the contrary the government actually forced the slum dwellers to negotiate by threatening eviction (Badshah, 1996). But why was the government of Maharashtra behaving differently in Mumbai? Why was it interested in allowing and supporting slum dwellers to continue controlling valuable land?

I was, and am, intrigued by this unique housing strategy in which the key actors appear to be departing from the usual expected behavior. Why was the slum redevelopment strategy being implemented in Mumbai? Why was this strategy acceptable to the different stakeholders? How old was the strategy? Did it have a history? How did it evolve? In other words – *Why and how did the slum redevelopment strategy in Mumbai originate and evolve?*

As I began my research, I found that the slum redevelopment strategy was much older than I had expected. The state government had introduced three consecutive programs of slum redevelopment in Mumbai since 1985. The first program was the Prime Minister's Grant Project (PMGP). The second program, introduced in 1991, was the Slum Redevelopment Scheme (SRD). And in 1995, the government initiated the Slum Rehabilitation Scheme (SRS).

But, I also encountered another puzzle: The poor implementation speed of slum redevelopment projects. My evidence indicated that Mumbai's slum dwellers were interested in slum redevelopment. Since 1991, after the introduction of the SRD, around 75,000 households

had presented proposals and received permission to redevelop their slums.¹ Yet, slightly over two thousand and two hundred housing units had been constructed for the slum dwellers by August 1998 (Table 1.1). More recent data from March 2000 indicated that since 1991, a total of 3,486 units had been built for housing the slum dwellers (Times of India, March 12, 2000).

Table 1.1: Slum Redevelopment Projects in Mumbai, 1998

		Proposals Received	Proposals Approved	Projects Under Construction	Projects with Occupation Certificates
Total	No. of Projects	446	367	145	26
Projects	No. of Units	NA	75,689	29,142	2,242

Source: Personal communication, Slum Rehabilitation Authority, August 1998

This poor performance was contrary to what the Government of Maharashtra expected. To increase the number of slums redeveloped the state government had, in accordance with the “enabling” paradigm as promoted in the prevalent housing literature, decentralized and privatized slum redevelopment. In other words, it had opened up participation in the management and implementation of projects to the slum dwellers, non-governmental organizations (NGOS) and most interestingly, the for-profit private sector.

Furthermore, the state government had amended the land development regulations to enhance the development potential of slum-encumbered land by increasing the maximum allowed floor area of development on such sites. In redevelopment projects, this allowed for additional floor space to be built and therefore more floor space to be sold in the free-market, making it further financially viable to cross-subsidize housing for slum dwellers and also greater profits for project developers. Moreover, by the mid-nineties, property prices in Mumbai were among the highest in the world. This implied that there was a large differential in land values before and after redevelopment and thus a big financial incentive for redevelopment.

However, despite the State’s enabling, its market-friendly policies, the slum dwellers’ willingness, and an attractive profit incentive for developers, the rate of project implementation was slow. Had this slow speed of implementing redevelopment projects been the result of

¹ After 1995, most proposals with SRD approval, applied for and received SRS status.

inefficient government performance, it could have been dismissed as another case of State failure. However, what makes the Mumbai case interesting is that this failure can also be attributed to the non-performance of the private sector. Why were so few slum redevelopment projects implemented in Mumbai? What kinds of problems were encountered in the implementation of projects? Was institutional support available to address the problems in implementation? Were the apparent incentives and profit assumptions underlying the strategy flawed? In other words – *What were the key issues in the implementation of slum redevelopment projects?*

This dissertation answers the above questions by focussing on a single case of slum redevelopment – the Markandeya Cooperative Housing Society (MCHS). A Mumbai NGO and a cooperative of slum dwellers initiated the MCHS project in 1987 through the state government's Prime Minister Grant Project (PMGP). Subsequently, in 1993, because of the scarcity of funds for construction, the slum dwellers' cooperative invited a private developer to invest in their project and develop it as a Slum Redevelopment Scheme (SRD) project. The developer agreed because he expected to utilize the government's amendments in the land development regulations to facilitate the SRD. The developer intended to build additional floor space and sell the extra units in the free-market. Later in 1996, the developer was interested in profiting more from the project and with the community applied for the Slum Rehabilitation Scheme (SRS) status. Finally, the slum dwellers occupied their new houses in 1998. However, a dispute arose between the developer, the community and the NGO on how to share the benefits of the project. They could not negotiate an agreement and the state government arbitrated to resolve their dispute. The government settled the conflict by deeming all the parties as equity partners in the project.

The dissertation analyzes the above case with the purpose of understanding Mumbai's slum redevelopment strategy. The study demonstrates the pivotal role of the State in creating and distributing urban land values. It also shows how the State managed new opportunities, revised development regulations and resolved social conflicts brought about by the increase in land values.

This analysis of the role of the State in promoting a new housing strategy and providing crucial support in implementation helps improve our understanding of housing provision policies, in developing countries, in three ways. First, this study provides insights into the slum redevelopment as an alternative housing strategy. It analyzes the problems faced and the solutions innovated in the implementation of this strategy. Second, it identifies non-traditional issues, often overlooked in housing improvement strategies that may help make slum upgrading programs more successful. Third, it reveals the complexities involved in housing production for the low-

income groups and demonstrates that enabling housing provision, even with the participation of private sector agents, requires an active government role.

1.2 Placing the Research in the Context of the Literature: Housing Strategies and Actors

Self-help, and Enabling the Communities

Towards the middle of the twentieth century, many developing countries gained independence and embarked on ambitious housing plans, including slum clearance. Slum clearance was expected to help eliminate the substandard urban housing stock and the former slum dwellers were to be provided with new public housing. However, most countries were unsuccessful in building enough public housing. Unfortunately, they had more success in destroying the existing housing stock.

The most influential critic of the intended housing policies was John Turner (1963; 1968a; 1972; 1977; Mangin and Turner, 1969; & Turner and Fichter, 1972). Turner, and a vast array of scholars, claimed that the State had failed by providing medium-rise apartment blocks that were unsuitable for low-income groups (Perlman, 1976; & Hamdi, 1991). They also argued that there was no need for such housing as housing conditions within squatter settlements improve over time. Partly as a consequence, many governments restricted their programs of slum clearance. However, governments also reduced their programs to develop more medium-rise public housing. Even though, no one had made a compelling case against such housing for the poor.

Moreover, it was quite clear that there was a continuing need for additional housing. But, Turner had persuasively argued that governments should cease doing what they do badly, i.e., building and managing housing. He proposed that instead of central institutions providing housing, users should be the principal actors. Power and responsibility should shift from the State to the popular sector because, he claimed, it was more efficient. Turner had a political agenda. As an anarchist, not only did he have faith in the ability of people to constructively take control of their own lives and build their own houses; he had reservations about the corrosive effects of State assistance and control (Harris, 1998). Control over housing decisions was a way of empowering communities. Moreover, he argued that improvements in housing signified a process of realization. This process, on its own, was considered to be of positive value for individuals and for society (Turner, 1972; & Mghweno 1984). Turner viewed housing as "... an existentially and politically relevant activity" (Turner, 1978, p.1141). Thus in the Turner school, housing was much more than mere shelter. It was a tool of development. And Turner argued that the right lens

through which policy makers ought to view housing was not material values but human use values (Turner and Fichter, 1972; Turner 1977; & Nientied and van der Linden, 1985).

Scholars in the Marxist tradition challenged Turner's anti-interventionist views. They argued that contrary to the view that the poor had the freedom to build, the poor's choices were constrained. Therefore, there was a need for structural reforms in the land market (Gilbert, 1982; & Ward, 1982b). However, the Marxist were suspicious of the State and its attempts to co-opt the poor. Turner was also criticized for his enthusiasm for self-help housing on the basis of his ideas of the use value of housing. Critics argued that in practice, housing was "petty commodity production" and primarily about market values (Burgess, 1978 & 1982). Indeed, later research clearly demonstrated that land markets are commodified and enterprising land developers played a key role in developing squatter settlements (Doebele, 1975; Payne, 1982; & Baross, 1983). However, in the literature there was little discussion on the role governments may play in developing land and housing markets. There was little positive discussion of why and how the State could play any constructive role in housing provision for low-income groups. There was, of course, little discussion of any need for slum clearance or how slum clearance could be accomplished in a non-confrontational manner.

Slum Upgrading Programs

The World Bank's urban policies of the seventies, though strongly influenced by Turner's ideas, were based on a more market-oriented approach. First, the Bank introduced projects of sites and services (World Bank, 1972). In these projects, beneficiaries were provided with land plots, on a full-cost basis, with varying degrees of infrastructure and were encouraged to build their houses. Subsequently, the World Bank promoted the idea of tenure legalization, through its slum upgrading programs. Slum upgrading was aimed at transforming squatters into legal owners (Dunkerley, 1983).² The centerpiece of the slum upgrading strategy was a policy intervention to legalize the land titles and provide security of tenure to residents of the largely illegal and informal squatter settlements. The straightforward logic of the strategy was that in the absence of security of tenure, residents would hesitate to invest in their housing, as they would be

² Scholars have argued that despite the seeming similarities between the World Bank's approach and Turner's, there were at least three key differences (Nientied and van der Linden, 1985). First, while Turner rejected and was suspicious of market values, the World Bank argued that harnessing of the market forces was the key to provide better housing. Second, in the Turner school incremental development of housing provided an opportunity to free human aspiration. For the World Bank, it was a means of economizing.

concerned about demolition, displacement and relocation (Jimenez, 1983; 1984; Friedman, Jimenez and Mayo 1988; & Malpezzi and Mayo, 1989). Moreover, it was argued that the documentation of legal title would allow beneficiaries to use their property as collateral to access credit for housing improvements (Struyk and Lynn, 1983; de Soto, 1989; Dowall and Clarke, 1996).

In its critique, the contrarian literature questioned the legal and economic wisdom of the positive causality between titling, security of tenure and investment in housing. There were two main criticisms that questioned the implied policy recommendation that all the State had to do was legalize tenure to promote housing improvement. The first criticism was that security for low-income residents was less dependent on legal status and more on the occupants' perceptions of the probability of eviction (Doebele, 1983; & Razzaz, 1993). This in turn, it was argued, depended on the provision of infrastructure and amenities (Strassman, 1984; Varley, 1987; Gilbert, 1990; & Payne 1997). Thus legal tenure was not necessary but the State could provide the right conditions for investment through public expenditure on services. The second criticism was that tenure in itself was not sufficient to lead to higher investment since housing finance was not available (Bruce, 1981; Mehta and Mehta, 1991; & Smets, 1997).

In summary, the policy advise of slum upgrading implied that once governments legalized the land titles of the poor, market (and community) forces would ensure housing improvement. But the critics argued that other non-legal interventions were needed to support housing improvement. However, there was very little discussion about different kinds of packages of property rights that could be provided through the legalization process. The literature did not discuss how different bundles of rights could have different impacts on the decisions and abilities of slum dwellers to invest in improving their housing? As if there was one particular way of legalizing tenure, and both policy promoters as well as their critics were in consensus on what that specific way was.

Enabling the Markets

By the late eighties, international development agencies had concluded that in order to achieve progress in the housing sector it was necessary to work even more closely with market-actors and further reduce the involvement of the State. This was to be the “enabling” strategy (UNCHS, 1990; & World Bank, 1993). This recommendation paralleled the counsel bilateral and

And third, while Turner argued for community involvement as an end in itself, the World Bank saw participation as a means for cost recovery.

multilateral donors, western governments and NGOs were dispensing in other fields of development. Much of this advice was based on the perceived failures of governments. As Judith Tendler pointed out, "... the advice is directed at limiting the 'damage' the public sector can do in developing countries," (Tendler, 1997, p. 1-2).

The key policy element in this package of advice was decentralization. Decentralization was defined as the dispersal of power and responsibility (Litvack, et. al., 1998). Supporters of decentralization argued that central governments were ineffective, inefficient, produced dissatisfying results and weakened local capacity in the long run (Rondinelli, et. al., 1989). Like the Turner school, they argued for the transferring of responsibility to the people (Korten, 1990) and to communities (Ostrom, 1990), with calls for local control and "people-centered development" (Gran, 1983; & Korten and Klauss, 1984). Others claimed that development could only occur through local control and local organizations had to be protected from centers of power (Wunsch and Olowu 1990).

An important premise on which support for decentralization was based was that it led to better information about local preferences (Litvack, et al., 1998). Higher and detached forms of government had been criticized for their lack of sensitivity to local needs and priorities and their use of standard procedures. A consequence was the ascendance of demand-driven development strategies (Howe and Dixon, 1993; & Glaessner, et al., 1995). A perceived economic advantage of demand-driven strategies was that they were more efficient and resulted in a better chance of cost recovery because they led to a stronger willingness to pay from beneficiaries (World Bank, 1993).

Another important element of enabling was the role of markets. The World Bank, in an extremely influential policy document, *Housing: Enabling Markets to Work* (1993), made two main recommendations: First, governments must restrain from intervening in housing and land markets and allow the markets to function more efficiently; Second, housing must be treated as an economic, and not a social sector.³ In essence, the document called for the privatization of housing delivery.

To support market-delivery of housing, the policy document made a number of suggestions. It advised governments to develop property rights (specifically private property rights), develop mortgage finance instruments, and mutual credit associations for housing

³ Like other developing countries, India has also acknowledged this advice. The National Housing Policy, 1994, recommended that activities of public agencies be reoriented to enable and facilitate the shelter

consumers, etc. The key policy advice to support privatization, however, was deregulation. The policy document specifically promoted the example of successful deregulation in Bangkok and Mexico in contrast to stifling regulation in India and Malaysia.⁴

Like most of the World Bank's work, the policy document was based on a macroeconomic approach. It divided countries across the world on an economic basis (low-income countries, highly indebted middle-income countries, formerly centrally planned countries and middle-income countries) and suggested strategies based on this division. Thus any city in India, be it Mumbai or a small town 250 kilometers north of Mumbai, was advised to follow similar strategies. There was no differentiation on the basis of land or property markets in different cities.

In summary, Turner's demand for autonomy of users, along with calls for people-centered development and the castigation of government ineptness in understanding the economics of housing helped make decentralization a key component of the enabling strategy. Decentralization was also presumed to allow for demand-driven development. Thereby, satisfying users needs as championed by Turner as well as a better chance of economic sustainability as advocated by the World Bank. With the recognition that communities needed support, markets were promoted as the new messiah. Moreover, since it was assumed that decentralization worked and since privatization and deregulation were argued to be an organizational form of decentralization (Rondinelli, et al., 1989) there was a further rationale for working with the markets.

It would seem that all these logical arguments and rationales coalesce together to allow an attractive, and simple model of enabling to emerge. According to this model, the enabling approach consists of decentralization, demand-driven development, privatization and deregulation. However, there are major shortcomings in this conceptualization. It is merely based on doing the opposite of what is believed to have failed. There is no empirical evidence to substantiate that this opposite will work, or that this is the best and only alternative.

Not surprising, critics have questioned the assertions made about the various components of the enabling strategy. Scholars criticized the claims made about decentralization and termed it "decentralization naivete," (Cohen and Paterson, 1996, p. 17). Others cautioned against the

activities of the community at large and legitimate private sector actors in particular (Government of India, 1994).

⁴ This can be attributed to the belief of World Bank associated researchers that "... there is a systematic tendency to overregulate," in most countries (Malpezzi, 1994, p. 455). Also see Malpezzi, 1990; World Bank, 1991; & Zearley, 1993.

potential drawbacks of decentralization, in particular the dangers of the local elite controlling power undemocratically and possible unevenness in growth and development (Prud'homme, 1995; & Hommes, 1996). Critics also pointed to earlier studies of decentralization that had observed that decentralization efforts had to be complemented by a strong public center(s) (Montgomery, 1972; & Cohen, et al., 1981). These criticisms suggest that there are likely drawbacks in the decentralization strategy and central initiatives may have an important role in mitigating the disadvantages. However, in the context of housing provision, there is very limited empirical analysis to demonstrate what kinds of problems can decentralization lead to. Of course, since we do not clearly know what the potential problems are, we are unable to discuss ways to avoid or mitigate them or what kind of role central institutions may play.

Similarly, in the context of demand-driven development, researchers argued that though theoretically the approach is expected to lead to beneficiaries being able to choose development strategies of choice, choices are constrained (Tendler, 2000). Housing provision, in some ways is more inherently complex than other development fields. Choices for low-income groups are likely to be very limited. It is quite conceivable that, paradoxically, the government may have a more active role to play in order to help potential beneficiaries pursue their preferences.

In terms of privatization, many critics of the World Bank's new approach argued that the new housing policy recommendations along with the World Bank's paper on urban policy (1991) represent an urban edition of the macro-economic, structural adjustments program. They warned about the adverse impacts on the poor (Baken and Linden, 1993; & Jones and Ward, 1995).⁵ Similarly, others pointed to the continuing need for more direct support for the majority of those who need housing (Jones, 1996; & Siembieda and Moreno, 1997). However, most of the critics of the market-based approach recognized the need to make housing policy work within the framework of markets. But how can governments devise market-based strategies that also provide housing for the poor? Are these two demands on governments, contradictory or are there viable policy alternatives?

Apart from concerns for the poor and the vulnerable, the current enabling approach implicitly assumes that for the private sector to perform effectively, the key need is deregulation

⁵ Structural adjustments seek to bring about important changes in the economic environment of a country. The main aim is to reduce budget deficits and promote economic growth by encouraging a shift towards the production of tradeables to meet external obligations and remove economic activity from inefficient government administration. "The adjustment policies sought to create an enabling policy environment that would increase the efficiency of firms and households and support the economy-wide adjustment process and the resumption of growth in the long run," (World Bank, 1991).

of policy controls. However, mere deregulation can hardly be a solution. Does not deregulation have to be followed by new regulation? Moreover, does not successful private delivery of housing require institutional support? Will well-functioning and efficient markets form automatically because of the absence of government intervention? It seems more reasonable to suggest that markets have to be created, at times with active government support. However, in the housing literature there is little discussion of how the State may help to enable the efficient production and exchange of housing.

But despite such concerns, questions and the cautionary statements of many researchers, enabling as comprised of decentralization, demand-driven development, privatization and deregulation has been conspicuously present in the narratives of most donor organizations. In contrast to this simplistic conception of policy advice and the role of the State, my research of slum redevelopment in Mumbai reveals a much more intricate story.

1.3 A Preview of The Dissertation's Arguments and Contribution

The Logic of Redevelopment

This dissertation shows how in Mumbai, the state government amended the land development regulations to enhance the potential land values and allowed the slum dwellers to share in the high development values. The slum redevelopment strategy was acceptable to the slum dwellers as they expected to receive a more secure and valuable housing asset. It was acceptable to the landowners and attractive to private developers because they expected to profit financially from the redevelopment. It was agreeable to the other city-residents because they expected Mumbai to gain physically through a more attractive building stock. And finally, the strategy was attractive to the state government because of its broad acceptance by the other stakeholders, the potential of a higher property tax collection (at the municipal level) and the virtue of being a highly visible policy intervention with a low cost and possible, large political payoffs.

However, the strategy has shortcomings. The strategy is risky because of its dependence on high property values in the market. Low property values can adversely impact the implementation of projects. Moreover, though the intention to redevelop has to be approved by a majority of the slum dwellers, they are not in control of the redevelopment process. Redevelopment is capital intensive and the investors of financial capital, the private sector, the non-profit sector, or the public sector are likely to control the projects. Lack of funds can delay projects and add to uncertainties in implementation. Interestingly, the state government has also

faced demands from the private actors for funds to redevelop their projects. Furthermore, redevelopment can also lead to conflicts among various participants on the distribution of gains from redevelopment. The participants are likely to ask the State to arbitrate their disputes.

Nonetheless as a policy, slum redevelopment may be superior to alternatives such as slum upgrading and slum clearance, especially if the State can provide institutional support for the implementation of projects.

Property Rights, Property Values and Property Structures

Although the research documents the slum dwellers' support of slum redevelopment, this outcome is surprising in the context of the conventional literature and practice that suggests that slum dwellers will be more interested in the slum upgrading strategy. The dissertation argues that the conventional expectations may be flawed because of slum upgrading's exclusive focus on private property rights and security of tenure. The slum upgrading strategy does not consider how the new legalized property rights are likely to be influenced by - the existing land development regulations in the city, the physical structure of slum settlements and the land values in the city.

A possible explanation for this oversight of undifferentiated property rights in the slum upgrading strategy is that the strategy is based on problematic assumptions. The literature appears to assume that formal property rights are unlimited, low-income settlements are regularly laid out, these settlements include reasonably large property-lots and the land values in the settlements are low.

In contrast, in Mumbai, the legally permitted intensity of development is extremely constrained. Furthermore, many slum dwellers have small, completely built-up property-lots in settlements with irregular layouts in which it is difficult to provide even basic infrastructure and amenities. However, these settlements can be well located in the city and have high development potential. In such settlements, even with secure development rights, the physical structure of their properties can make it difficult for the slum dwellers to capitalize on the potentially high land values, without some form of change in the structure of their properties through land assembly or land readjustment. Moreover, the city's slum dwellers are likely to have already built on their properties floor areas equal to what legal development rights allow. In Mumbai, the possibility of creating property assets that have a larger area, are more marketable and have higher property values, through the slum redevelopment strategy, provides the incentive for the slum dwellers to act collectively to redevelop their properties. This implies that housing investment decisions and improvement processes can be much more complex than assumed in the conventional wisdom.

Thus, the evidence in this dissertation suggests that a balanced view of housing improvement processes demands recognition of all three conditions - the property rights, the property values and the property structures (the physical structure of properties) and their impact on each other. The interplay between the three can significantly impact the behavior of various actors in the housing markets, even leading to the demand for demolition and redevelopment as opposed to in-situ upgrading. Moreover, this interpretation of complexity also suggests that governments may have a more involved role to play in housing improvement processes.

The Paradox of Enabling

What is noteworthy about the Mumbai slum redevelopment strategy is that it is a rare example of a government in a developing country trying to use the private sector and market methods to provide low-income housing. In the context of the present focus on using the markets to increase the supply of affordable housing, the evidence of this study presents insights into how markets operate in contexts like Mumbai, where the assumed institutional support for well operating markets does not exist.

The final argument in the dissertation elaborates on the role of the State and questions the conceptual validity of the current approaches of “enabling” the provision of housing in developing countries. In conventional thinking, enabling housing provision consists of decentralization, demand-driven development, privatization and deregulation. Maharashtra’s state government has tried to enable slum redevelopment through such policies. However, it has achieved limited success in implementing slum redevelopment projects.

The evidence from this research suggests that enabling slum redevelopment through market mechanisms require a different type of State involvement, not necessarily less State involvement. This complex and more sophisticated role of the State is necessary to provide the institutional support for well-functioning property markets, as well as to capture the opportunities high value property markets provide. Paradoxically, enabling housing provision may require four levels of seeming contradictions - both decentralization and centralization; both demand-driven and supply-driven development; both private as well as public investment; and both deregulation and new regulations.

The dissertation elaborates on these four sets of paradoxes and uses this as a framework to discuss policy recommendations.

1.4 Study Methodology

This is an empirical study and it takes an inductive approach. I have collected data, broadly speaking, in two areas. First, the urban development context of the city, including the three slum redevelopment programs. The source of this data is mostly secondary material. Second, a single case of slum redevelopment. For the case, I have used a “dense data case study approach,” based mostly on primary material.

The Dense Data Case Study Approach

The dense data case study approach can be defined as a “sharper manner of looking at particular situations,” (Peattie, 1995, p.392). It is strongly advocated for research in low-income housing and land development in developing countries (Doebele, 1994; Peattie, 1995; & Payne, 1997). The simple, and valid, premise on which this advice is based is that we do not know enough about how property markets operate in the developing countries. What we know is that there are numerous institutional constraints that prevent the market from functioning in an easily predictable manner. Of course, this does not mean that the behavior of actors in such property markets is irrational. On the contrary, the actors respond in a logical manner and their behavior adapts to the institutional context in which they have to perform. This study is an attempt to comprehend and analyze the institutional context for actors engaged in Mumbai’s slum redevelopment strategy.

Using a paper by Flybjerg (1990) as her reference, Peattie argued that the dense data case study approach is linked to Aristotle’s idea of *phronesis*, “knowledge of what to do in particular circumstances,” or prudence.⁶ This particular kind of knowledge is distinct from universal knowledge (*epistme*) and technique (*techné*). Unlike the deductive approaches to theorizing, *phronesis* is based on inductive approaches. The aim then, as of this study, is “...to reveal principles of functioning and to develop an understanding of how specifics of particular circumstances shape the unique outcome,” (Peattie, 1995, p.397).

A Single Case, Informed by Other Cases

However, when I began research for this study, I did not start with the idea of looking at a single case. Instead, I intended to look at four cases.⁷ I planned to research the four cases under

⁶ Peattie also pointed out that the concept does not translate that easily in English (1990).

⁷ Apart from the Markandeya case, I intended to research the Ishwari and Kailash CHS, the Sambhaji Nagar CHS and the Scion Shivaji Nagar CHS.

the premise that in each case, a particular institutional actor (the State, the community, the NGO, or the private sector) was the main lead actor. But I soon abandoned this strategy and decided to focus on one case, the Markandeya case.⁸

I decided to follow the single case strategy because I realized that the stories that I was trying to unearth were much more complex than I had ever imagined. Given the unfortunate but real constraints of time, it was impossible for me to collect the complete account of all four cases. Furthermore, as I feared, it was impossible to get complete financial statements in any of the cases. In this respect, I succeeded more at Markandeya because of the involvement of the NGO, the Society for the Promotion of Area Resource Centres (SPARC). As I progressed with my fieldwork, finding more about the case, I became more comfortable with my decision. An important reason for this was, as it turned out, that the Markandeya case was not simply about the role of a single institutional actor. Apart from the NGO; the community's cooperative, private market agents and State agencies, all have played significant roles.

However, I did not abandon the other three cases completely. Serendipitously, I had stumbled onto a rather compelling research strategy. By continuing to follow the other three cases, of course in relatively less depth, I kept finding about a wider set of issues and problems that I might have missed if I researched a single case. Thus my "abandoned cases," became a source of additional questions for the stakeholders at Markandeya. Moreover, they provided a term of reference, allowing me to confirm that the Markandeya case was not entirely unique.

Data Sources

The data for the case study come from multiple sources, but most importantly from open-ended personal interviews with the key stakeholders over almost a year (See Appendix 6.1 for a list of interviewees). Most of the interviews were multiple interviews with more than a few follow-up sessions. The questions I asked were usually quite simple – "what happened," "how did it happen," "did anything like 'this' happen," and most importantly "why." I supplemented these interviews with secondary material from project reports, project correspondence, newspaper articles, newsmagazine articles, and government documents and other published reports. Based on the, at times slightly different, accounts of different actors, I have constructed narratives that may not have captured all the details, but I hope convey the essential elements in this interesting event.

⁸ I had initially selected the Markandeya case on the premise that it was a case implemented by an NGO.

Fieldwork

The fieldwork for this research was conducted in two phases. The first phase was from August 31 to December 13, 1997. The second phase was from March 23 to August 28, 1998. I spent the time between the two phases in Cambridge, Massachusetts, analyzing my data.

Limitations of the Study

The drawback of choosing a single case for analysis is the problem of generalizing from the findings. Admittedly, the Markandeya context may be unique because of the rapidly increasing real estate prices in Mumbai during its implementation and the specific institutional actors involved. These unique conditions, however, do not negate some general lessons that can be drawn about the role of property rights, property values and property structures in housing choices and strategies; and the institutional constraints in the land and housing markets of developing countries.

1.5 The Structure of the Dissertation

The empirical core of this dissertation is a single rich case, the case of the MCHS. To present and interpret my material in an organized and accessible manner, I have developed three alternative narratives of the same story. These three accounts use different lenses to analyze the same case – Institutional, Spatial and Financial. They independently theorize by casting the stories against the relevant literature. These three narratives are each accurate, but individually incomplete. Taken together, however, they provide a much richer understanding of the whole case. This is an acknowledged research strategy – the alternative template strategy – of gaining insights from a single case.⁹

Apart from this introduction and the concluding chapter, the body of this dissertation includes four chapters. As mentioned earlier, the enabling framework of deregulation, decentralization, demand-driven development and privatization flows through the chapters. Chapter two traces the history of the slum redevelopment strategy and helps to place the case in the broader context of urban development, housing policies and urban politics in Mumbai. It also discusses the deregulation or regulation debate.

⁹ See for example, Allison, 1971; or March, 1991; or Langley, 1999.

Chapter three is the first of the three lenses on the case. It presents the MCHS' story from an institutional perspective. It focuses on how the project was implemented, which institutions played what role in implementation, how these roles changed and why. This chapter also elaborates on the decentralization or centralization debate.

Chapter four presents the MCHS' story from a spatial perspective. It focuses more on the physical conditions, how they changed and why. It includes a discussion on the physical conditions at Markandeya before the redevelopment and how these initial conditions played a role in the MCHS' decision to redevelop their slum. This chapter includes the floor plans and the area statements of the MCHS. And it discusses the demand-driven or supply-driven development debate.

Chapter five is the last of the three lenses on the case. It tells the MCHS' story from the financial perspective. It focuses on the financial incentives for actors in redevelopment as well as the financial constraints involved in this endeavor. One of the main tasks of this chapter is to elaborate the financial complexities in the property markets of Mumbai. In the end it presents some innovative financial arrangements planned by the main actors in this case. This chapter includes detailed financial statements of the case. The chapter elaborates on the private action or public action debate.

The final chapter brings these different accounts together and recapitulates the main arguments of this study. It also discusses the policy advice that follows from this study. In the spirit that this dissertation is a small piece in the larger scheme of things, the chapter ends by proposing a research agenda for the future.

Chapter 2: The Evolution of Slum Redevelopment in Mumbai

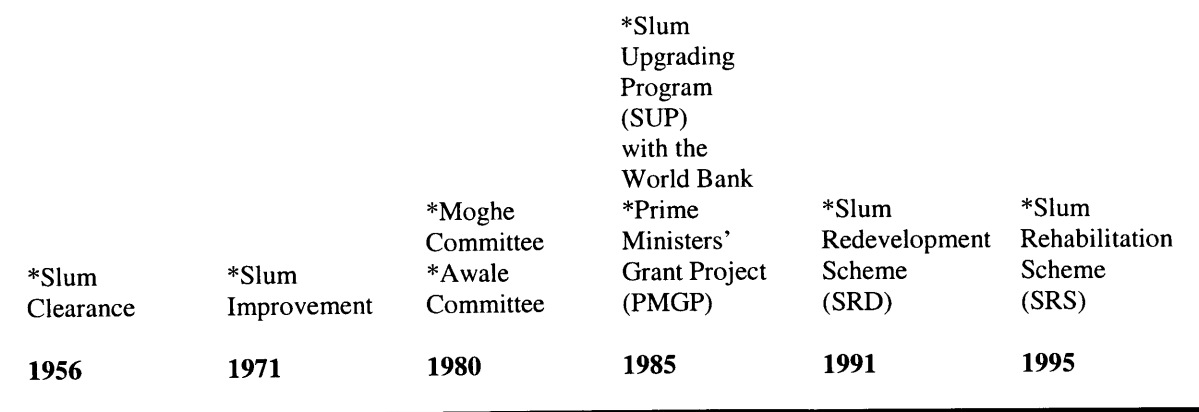


Figure 2.1: Timeline of Housing Programs for the Slums

2.1 Introduction

This chapter traces the historical evolution of the slum redevelopment strategy in Mumbai. It aims to locate this strategy within the broader context of urban development, housing policies and urban politics in the city. Apart from the historical focus, the chapter also employs a lens of “deregulation and regulation” to analyze the increase in the maximum permitted intensity of floor area developed to facilitate the slum redevelopment strategy.

The chapter makes two arguments. First, though the slum redevelopment strategy is most closely associated with the Slum Redevelopment Scheme (SRD) and the Slum Rehabilitation Scheme (SRS) introduced by successive state governments of Maharashtra in 1991 and 1995; the strategy’s history is older and has evolved much more gradually. The key policy intervention by the government to support slum redevelopment is a change in the land development regulations to allow for an increased intensity of development in the city. Previous attempts at increasing the allowed intensity of development were criticized and not implemented because such changes were believed to lead to an increase in the population of Mumbai and, therefore, more pressure on its infrastructure and environmental resources. Furthermore, the increase in population of the city was also expected to accentuate inter-regional disparities.

However, at least three local conditions in the city appear to have played a significant role in the change of policy attitude allowing for more spatial concentration, and in the adaptation and evolution of the slum redevelopment strategy-

- a) The poor living conditions in the city and the perceived failure of past urban development and housing policies to improve these living conditions for a burgeoning slum-resident population
- b) Electoral competition between Mumbai’s two major political parties, which makes it necessary for the two parties to appear to be intervening to improve the housing conditions in the slums
- c) The high property values in the city that imply a large potential differential in land values before and after redevelopment and consequently an attractive financial incentive for redevelopment

The chapter’s second argument is in the context of the State as an enabler of housing provision. It argues that contrary to the current conventional faith in deregulating housing policy, the Mumbai experience suggests that along with deregulation, new regulations can also play a positive role in housing provision. In Mumbai, urban development regulations are prescribed to a high standard. Not surprisingly, these regulations appear to have adversely impacted the supply of affordable, formal sector housing. Particularly damaging have been regulations limiting the density (total number of houses per unit area) and intensity (total floor area) of development. This

suggests the need to deregulate or relax such controls. Mumbai's experience with slum redevelopment, however, indicates that if the State intends to use permission for additional intensity (bonus floor area) as an incentive for developers to provide cross-subsidized low-income housing, the State will have to regulate the amount of floor area built in projects. If the State fails to regulate the amount of area built, there is no reason for private developers to care about incentives that allow them to build more.

These two arguments are elaborated in the main body of this chapter, particularly sections three, four and five. Since the slum redevelopment strategy depends on government intervention in land development regulations to increase the allowed intensity of development, in other words more spatial centralization, the next section, briefly reviews the debates in the literature on regulating and controlling urban growth and promoting spatial decentralization.

2.2 Literature Review: Regulating Urban Growth and Promoting Spatial Decentralization

The Urban-Rural Divide

Around the middle of the twentieth century, when many developing countries won their independence, the dominant paradigm for economic development was based on a model of industrialization, agricultural modernization and urbanization. This model was influenced by the work of Sir Arthur Lewis, who argued that the industrial sector should receive investment priority over the agricultural sector because of the better rate of return in industry (1955). Spatially, these investments were to be concentrated in urban areas because they provided economies of scale and agglomeration benefits. Rural to urban migration was to be the primary mechanism to facilitate the development process.

Lewis' model focused on overall economic growth but ignored issues of income distribution. Many Indian urban researchers argue that contrary to Lewis' model, the Indian government with its socialist disposition saw urbanization as a problem (Sundaram, 1989; & Krishan and Singh, 1996). The researchers claim that India's national policies through the Five-Year Plans, and state level policies, consistently favored a more evenly distributed pattern of growth. Indian policy has promoted spatial decentralization and urban decongestion by distributing and promoting investments outside existing urban centers (Harris, 1995). For example, the First Five-Year Plan was highly critical of urbanization and characterized it as the proliferation of "labor camps" caused by rural to urban migration (Krishan and Singh, 1996). Researchers also claimed that the financial allocations in the Five-Year Plans for the urban development sector had been consistently small. Although the urban population was over one-

sixth of the total population in 1951 and over a quarter in 1991, the outlay for urban development was less than three percent in virtually all the Plans (Krishan and Singh, 1996). This model of development has been attributed to the composition of successive Indian parliaments and state legislatures that lacked an urban lobby (Bose, 1978).¹⁰

The Indian model of regionally balanced development and spatial decentralization was also supported by a body of literature that argued against unfettered urbanization and cautioned that urban growth would accentuate urban-rural inequalities (Myrdal, 1957; Hirschman, 1958; & Williamson, 1965). Other scholars, however, argued that to mitigate against such inequalities, apart from the policy of decentralization there was another alternative - a thrust for more urbanization (Hall, 1987). This second policy alternative, however, leads to other problems including the question of how to deal with large urban size and metropolitan management.

Urban Size and Metropolitan Management

Since Aristotle's *Politics*, it has been consistently argued that large urban size creates problems of governance. While Plato in the *Republic* had implied that a *polis* needed at least 5,000 citizens, Aristotle added that a 100,000 was the upper limit.¹¹ Similarly Ebenezer Howard was extremely conscious of city-size and proposed to limit the Garden City's population to 32,000 (1898). Constantin Doxiadis' model of Ecumenopolis, however, was different and he argued for the progressive expansion of the present type of city as a universal single global settlement of fifteen to twenty-five billion people by the year 2200 (1969).¹² Nonetheless, Doxiadis also proposed that the World-city, though continuous, be made-up of settlement "cells," units of habitation with populations of 30,000-50,000 people.

The underlying theoretical reason behind these concerns about size and management is the possibility of negative externalities (Richardson, 1973), including the impact on the environment (Hall, 1988). In cities like Mumbai, apart from concerns of avoiding spatial centralization, urban policies have tried to control population growth for better urban

¹⁰ To facilitate urban decentralization a number of policies were adapted. These included the non-issue of industrial licenses for large metropolitan areas, preferences for small towns and cities in the location of public sector industries, and the establishment of district industrial centers, etc. (Sekhar, 1983). It is, however, argued that a considerable part of this urban dispersal was located in the proximity of metropolitan cities (Kundu, 1992).

¹¹ But as H.D.F. Kitto (1951) has pointed out, though Aristotle referred to 100,000 citizens, if we add a wife and four children, a liberal number of slaves and resident aliens, the actual population figure is closer to a million.

¹² Ecumenopolis was simply a worldwide expansion of what Jean Gottman had identified as the Boston-to-Washington "Megalopolis" along the eastern seaboard of the United States (1957).

management. Mumbai's urban policies have attempted to restrict the city's population by regulating low densities and intensities of urban development. A lower population was also expected to have a lesser negative impact on the natural environment of the city. While size may be an important variable in urban management, it is important to recognize that a city like Tokyo, though larger than Mumbai, is also better managed.

Deregulating Urban Growth

Since the eighties and the nineties, however, the literature has questioned some of the previous policies of regulating urban growth. Scholars have argued that it is extremely difficult to check city growth. Moreover, success in checking population growth is achieved at a heavy economic price. For example, it is claimed that Cuba has succeeded in controlling urban growth but only through chronic under-investment in its cities. The other notable example of success in checking urban growth is Kampuchea, but through a forced purging of the urban population (Richardson, 1987). The implicit argument is that if cities have to grow, then the growth might as well be in an organized and planned manner. Moreover, researchers have argued that urban growth dynamics ensure that problems such as urban primacy eventually fall and are replaced by a process of "polarization reversal," i.e., a relative increase in the growth rate of secondary cities and regions. This suggests that previous concerns about interregional disparities may be less serious (Richardson, 1977; & Hall, 1983).

The World Bank is playing an important role in the shift in urban policy. Its urban policy document has reiterated the old Lewis model and has hailed cities as the engines of growth (1991). Similarly, India's National Commission on Urbanization, in 1988, argued that the growth of cities was important for national economic development (Sundaram, 1989). Researchers have even argued that higher density in cities (more concentration) can be advantageous in terms of infrastructure provision, particularly public transit (Keare, 1996).

Critics of unchecked urban growth, though concerned about the impact of urbanization on income inequalities, also recognize that many of the growth controls in cities hurt the urban poor, a category that is expanding in numbers. Controls on the density and the intensity of development may prevent an affordable supply of formal housing and thus contribute to an increase in the slums. Furthermore, it is now argued that most of the large urban centers in developing countries are growing as a result of a natural increase in the population and not because of migration (Hardoy and Satterwaite, 1987). The implication is that, it is important to improve the living conditions for the existing, poor population groups within cities and not worry

only about the migration rate. Now, policy-makers are advised to “... aid deconcentration only when the advantages of concentration are clearly diminishing” (Rodwin and Sanyal, 1987, p. 16).

Thus there is a change in the urban growth literature and policy and more openness to proposals for higher centralization within cities. These changes can be traced in the history of urban development policies in Mumbai and are elaborated in the next section. However, it is important to remember that this policy shift does not completely eliminate or answer the previous concerns regarding interregional disparities and problems in metropolitan management.

2.3 The Emergence and Gradual Evolution of the Slum Redevelopment Strategy in Mumbai

Mumbai, formerly known as Bombay,¹³ on the west-coast of India, is the financial and industrial capital of the world's fourth largest economy (Figure 2.2 and Figure 2.3).¹⁴ With a population of 15.5 million people in 1995, the Mumbai metropolitan region was the world's fifth most populous city (UNDP, 1996).¹⁵ Encouraged by the country's economic liberalization reforms in the nineties, many multinational corporations have made the city, their south Asian regional head-office. Special interest groups such as Bombay First, an organization of the city's corporate elite, hope to position Mumbai as a global city in competition with other successful trade and financial centers in Asia (Bombay First, 1997).¹⁶ As a consequence of the business

¹³ Bombay was renamed as Mumbai in 1995. Originally, Mumbai was the name of a small island among a group of seven islands. Over a period of time, the names Mumbai and Bombay have been associated with a number of different geographical and political entities. The seven islands (including the original island of Mumbai) and the reclaimed breaches between them form the Mumbai Island City. Greater Mumbai includes the Island City, the suburbs and the extended suburbs on the Salsette Island. Mumbai metropolitan region is an area ten times as large as Greater Mumbai and includes the Municipalities of Thane, Kalyan and New Mumbai. New Mumbai is Mumbai's planned twin city across the harbor on the east. The earlier “Bombay State” included the present day states of Maharashtra and Gujrat and was dissolved in the 1960 reorganization of Indian states. The even older and larger “Bombay Presidency” during the British rule, extended into present day Pakistan. In this study, unless specified on the contrary, Mumbai refers to the Greater Mumbai area.

¹⁴ The Indian economy is the fourth largest on the basis of Purchasing Power Parity (PPP) calculations. It follows the USA, China, and Japan (Economist, May 13,2000). In terms of PPP, the Indian economy was just over \$2,000 Billion in 1998. For the year 2000, in US dollars the country had an estimated GDP of \$541 Billion. In nominal terms, this placed the Indian economy in the ninth place (Economist, 2000). Mumbai accounts for about 10 percent of factory employment and manufacturing value added in India, 61 percent of jobs in the oil sector, 41 percent of domestic air traffic, 25 percent of income tax revenues and 60 percent of customs revenues collected nationally. Per capita bank deposits in the city are about 16 times higher than the Indian average (Swaminathan, 1995).

¹⁵ Mumbai was the fifth most populous city along with Shanghai, behind Mexico City, New York City, Sao Paulo and Tokyo in ascending order (UNDP, 1996). According to the Indian Census in 1991, the metropolitan region had a population of 12.5 million people and Greater Mumbai had a population of 9.9 million (Panwalkar, 1996).

¹⁶ Bombay First is a non-profit association of the various corporate business interests in the city. This association is based on the model of “London First.” London First was formed by the business leaders in

interests in Mumbai and immense property speculation, real estate prices in the city were extremely high in the nineties (Economist, May 06, 1995; & Ghosh, 1996).

At the same time, along with this apparent prosperity, India is a “low-income country” and some of the world’s poorest live in Mumbai. According to the 1991 census estimates, over half of Mumbai’s population lives in slums (Panwalkar, 1996). Not surprisingly, the city has earned epithets such as “Slumbay,” (Dwivedi & Mehrotra, 1995). Like many cities of the developing world, numerous strategies to deal with the slums have been implemented in Mumbai.¹⁷

London to lobby the London council and the British government for State support to ensure that the city maintained its status as one of the world’s premier financial centers. Bombay First has a similar agenda in Mumbai. It has commissioned research on the city’s economic structure, competitive advantages, inadequate infrastructure, etc. The association has established a number of joint working groups with the municipal corporation and the state government to discuss the city’s strengths and weaknesses. Through these joint working groups, Bombay First suggests and lobbies for public intervention and investment in strategic areas that the association regards as important for the city to develop as an internationally competitive city (GSD, Harvard University, 1996).

¹⁷ This program was sponsored by the central government. In 1947, after independence, India adopted a Federal form of government. As a consequence, local governments are formally subordinate to the central government and the national constitution determines the functional jurisdictions of the various levels of government. The Seventh Schedule of the Constitution has a tripartite listing of functions. The first list (List I) corresponds to the functions of the central government. List II is the state government’s list and List III is the concurrent list (functions of the central and state government). Urban planning is on both List II (Entry 18) and List III (Entry 20), thus both state and central government have a constitutional basis to act in the housing field.

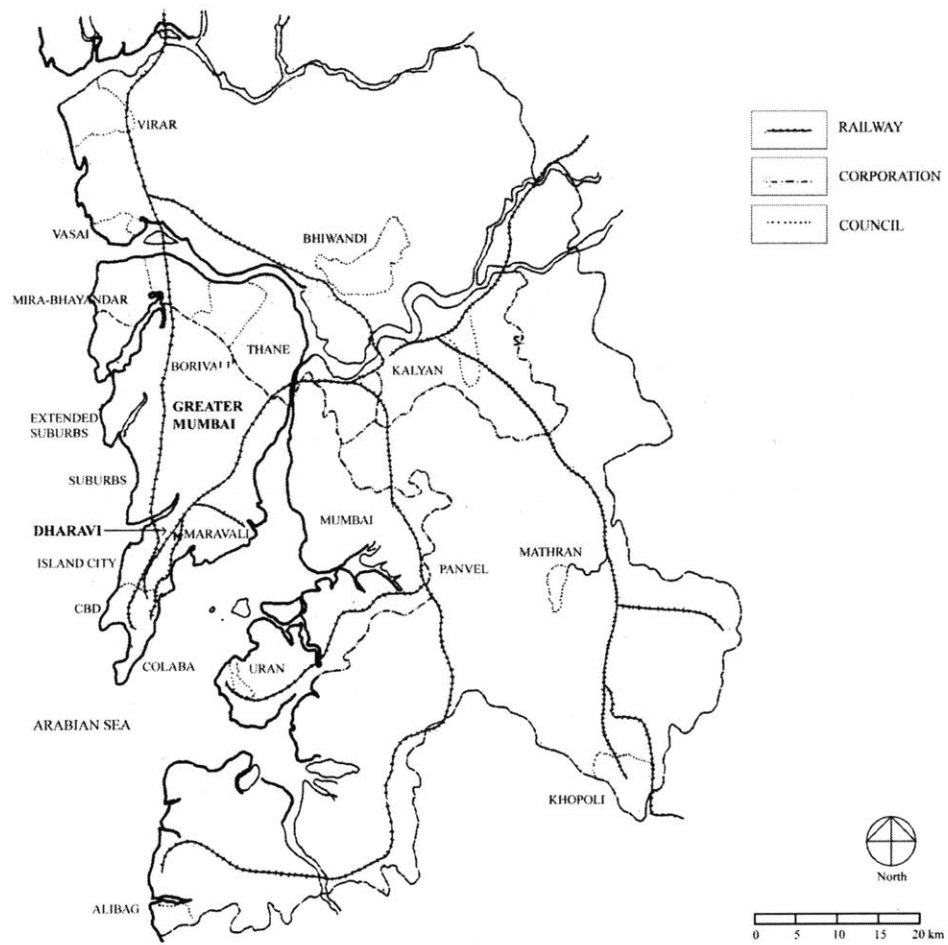
The distribution of legislative power has become even more ambiguous and contentious after the Constitution (Seventy-fourth Amendment) Act, 1992. This amendment is popularly known as the decentralization amendment and was expected to promote the role of “Urban Local Bodies” in governance. However, scholars have argued that the amendment act does not specifically speak about a third tier of government (Anand, 1995). Another report noted, “Unlike the functional jurisdiction of the States which follows a Constitutional delimitation, the functional domain of local bodies in India, including municipal governments, is derived from the responsibilities which are delegated by the States to the Municipalities, through legislation. Article 243W of the Constitution read with the Twelfth Schedule provides the basis for the State Legislatures in India to assign the functions to the Municipalities in the respective States. It is to be noted that the provisions of this Article are not mandatory. It is for the Legislatures of a State to decide as to which powers and authority it may devolve on a Municipality.” (Times Research Foundation, 1997, pp. 31-2).

Thus in Indian cities, the state government and its agencies are usually the most important public actor in the field of urban planning and housing. Local governments can and do take initiatives but they are required to follow the framework established by the state government. For example, in the case of Maharashtra, Mumbai’s municipal corporation follows the guidelines established by the state government in the Maharashtra Regional and Town Planning Act, 1966 (Government of Maharashtra, 1966). Furthermore, the municipal corporation requires state government approval for its Development Plan (land use master plan) and Development Control Regulations (building codes and regulations). However, the central government still plays a role at the city level. First, through various Acts of the central government such as the Urban Land Ceiling (and Regulation) Act, 1976 (Government of India, 1976). And second, through its financial allocations in the Five-Year Plans.

Figure 2.2: Map of India, Showing the Location of Mumbai



Figure 2.3: Mumbai Metropolitan Region



One of the earliest housing policy initiatives introduced in the city by the state government was the Slum Clearance Scheme of 1956.¹⁸ The clearance strategy was based on the logic that slums had to be removed and slum dwellers resettled in public housing. Not surprisingly, the strategy was difficult to implement. It was neither easy to demolish existing slums nor easy to construct new housing.¹⁹ In 1971, the state government introduced the Slum Improvement Program (SIP) to formally supplement its informal practice of tolerating slums. This improvement program aimed at providing basic infrastructure and amenities in the settlements. But it did not provide *de jure* tenure security to the slum dwellers (Panwalkar, 1996).

The same year, in Calcutta on the eastern coast of India, Ford Foundation consultants, Kingsley and Kristof, proposed a slum redevelopment scheme. They suggested that in slums of low gross density in attractive locations, slum dwellers be resettled on the original sites in high-rise housing and the excess land be sold to create a substantial cross-subsidy for the slum dwellers (Dwyer, 1979; p. 227). The proposal was restricted to low-density slums, as most of the city planning policies at that time were against any overall density increase in the city, as density increase was in contradiction to the accepted policy of urban decentralization and decongestion. In any case, though it is unclear why, the state government ignored the proposal.

A financially more attractive alternative of this scheme was proposed by Sanjay Gandhi, the Indian Prime Minister's son, during the National Emergency (1975-1977).²⁰ Sanjay Gandhi proposed that high-income groups be housed on the centrally located slum land and they pay for the resettlement of slum dwellers on the periphery (Times of India, August 11, 1990). Like the Ford Foundation proposal, Sanjay Gandhi's scheme was predicated on the assumption that the living conditions in Indian slums were not likely to improve without redevelopment. Both schemes, however, were unwilling to propose any increase in the density or the intensity of redevelopment.²¹

¹⁸ This program was sponsored by the central government.

¹⁹ In 1949, the state government established the Bombay Housing Board and in the early 1950s, the government initiated the "Subsidized Industrial Housing Scheme" to provide rental housing for low-income industrial workers. But these programs had a limited impact and were unable to meet the total demand for housing (Panwalkar, 1996).

²⁰ The national emergency was declared during the tenure of Prime Minister Indira Gandhi of the Congress Party. A number of civil rights were suspended and the period is regarded as a dictatorship in departure from the democratic norm.

²¹ Density defines the number of houses per unit area in a development. Intensity measures the total floor area in a development. Intensity is usually measured through the Floor Area Ratio (FAR), the ratio of the floor area in a site to the site area. (In Mumbai, the term Floor Space Index - FSI - is more popular. It is calculated in the same manner as FAR). An increase in intensity on its own does not necessarily imply an increase in the number of households in any particular development. But in practice, because of a relatively

In 1980, two consecutive government committees sponsored by the Congress Party led Government of Maharashtra, also proposed the redevelopment of Mumbai's slums. K. K. Moghe, the Chief Secretary of the Government of Maharashtra, led the first committee. And Premanand Awale, Maharashtra's Minister of State for Housing, led the second. The innovation of these committees was in proposing an additional Floor Area Ratio (FAR) ranging from 50-99 percent as an incentive for private developers to resettle the occupants of slums and old and dilapidated buildings (chawls) in new houses on the original sites along with new buyers (Kerker, 1981). Critics of the two reports objected and argued that the proposal was against the city's stated policy objective of decongestion (Kerker, 1981).

To review the criticism, the Government of Maharashtra established another committee under the leadership of Ajit Kerker, an industrialist, to analyze if extra FAR was necessary or not. The Kerker committee recommended against any increase in FAR and maintained that "...it was evident to the Group [the Kerker committee] that the problem which it had been asked to study, needed to be interlinked with the decongestion of the city," (Kerker, 1981; pp. 3-4). Instead, the committee proposed redevelopment of the slums at the existing FAR and the resettlement of the slum dwellers on alternative sites.²² It also expressed its distrust of private developers and recommended that the State be responsible for the implementation of projects.

Although the state government appeared to accept the Kerker committee's recommendation of abandoning the Moghe and Awale committees' advice, the idea of redevelopment at a higher intensity (FAR) and density was not completely forgotten. In October 1984, the Chief Minister of Maharashtra, the Congress Party's Vasant Rao Patil, declared that he was prepared to increase the FAR to "solve the housing problems" of the slum dwellers (Daily, October 30). He claimed that the FAR increase was necessary for the on-site rehabilitation of slum dwellers. The Chief Minister's claim was not based on any cross-subsidy calculations but on a simple observation of the existing high density of development in the city's slums, which caused a technical dilemma. The minimum total floor area required to resettle all the families, of

stable housing demand in the market, an increase in the intensity usually suggests or is accompanied by a corresponding increase in the density.

²² The committee expressed concern over the impending high densities that were likely to result because of any increase in maximum allowed FAR. To illustrate their concerns they quoted the criticism of Venezuela's "Superblock" schemes. The irony of this is that critiques of the Superblock were never convincingly able to establish that the failure of the projects was due to the high density of the Superblocks. It is possible that the projects were unsuccessful because the program involved the forced resettlement of slum dwellers from existing central locations to the remote periphery, precisely what the Kerker committee was recommending!

most of the slums in the same location with the smallest legally allowed housing unit size, exceeded the existing maximum allowed floor area that could be developed on-site.²³

In November 1984, the municipal corporation, then known as the Bombay Municipal Corporation (BMC), introduced a program of slum redevelopment – Redevelopment of Slums through Participation of Slum Dwellers (Daily, November 15, 1984). This program was restricted to the slums on land owned by the municipal corporation. Through this program, the BMC expected to lease its land to cooperatives of slum dwellers for a thirty-year renewable period. The corporation also promised assistance to the cooperatives in obtaining loans, but it limited the additional FAR to twenty five percent of the maximum allowed FAR. It is unclear what happened to this scheme. No slums, however, were redeveloped through this proposal.

In 1985, the state government introduced the Slum Upgrading Program (SUP) with the World Bank's assistance. The same year, the government also started a program of Slum Reconstruction through the Prime Minister's Grant Project (PMGP). The PMGP was formed on the basis of a grant from the central government and was aimed at improving housing conditions in Mumbai. Slum Reconstruction was one of the components of the project and it was based on the on-site resettlement of slum dwellers in medium-rise apartment blocks. During the implementation of slum redevelopment, as actual project costs came out higher than estimated, the PMGP introduced an element of cross-subsidy in the program. It decided that the beneficiaries of commercial properties (shop-owners) would pay one and half times the cost of housing and these additional payments would cross-subsidize the residential property-owners.²⁴

The policy-makers were aware that the normally allowed maximum FAR was likely to be insufficient for housing all the slum dwellers. However, since the state housing authority was implementing the scheme, housing projects qualified for an extra twenty percent FAR, over and above the normal allowed maximum.²⁵ Because of the State's involvement, the project was able to circumvent the urban congestion debate. The conventional wisdom in Mumbai has been that its

²³ A month later, in November, based on a proposal by a Congress Party's Member of Parliament from South Mumbai, the state government began preparing a similar redevelopment scheme for the tenants in old and dilapidated buildings (old *chawls*). The state government's scheme proposed that the tenants form cooperatives and purchase the property from the original owners for a hundred months rent. The tenants would be allowed to redevelop their properties at an enhanced FAR. The enhanced FAR would allow the tenants to have larger houses in accordance with the minimum standards in the Development Control Regulations, but without any additional floor area for sale in the market to generate a cross-subsidy for the cost of construction (Indian Express, November 8, 1984).

²⁴ The PMGP rationalized this proposal on the basis that the shops were almost twice as valuable as the houses.

population has an “oppressive size” and is responsible for diverse social evils,” (Sundaram, 1989, p.32). To mitigate the adverse impact of urbanization, Mumbai, like other major Indian cities, maintained a policy of decongestion by regulating a low maximum allowed floor area and density, and even “banning new telephone connections,” (D’Souza, 1987; p. 2).²⁶ In 1987, the Bombay Development Advisory Committee (The D’Souza Committee), in reviewing the city’s Draft Development Plan, strongly criticized the “...misguided pursuit of the chimera of decongestion,” (p. 22). The committee claimed that the policy was anti-poor and quoted William Alonso (1973) to observe that “It is clear that all of these instruments aimed at keeping people out tend to keep out those of lower income.” In its recommendations, the committee proposed higher maximum densities for the city and suggested that land values be the basis for fiscal strategies of urban development. It also proposed that landowners (in the case of slums) and landlords (in the case of old and dilapidated buildings) be allowed to redevelop and resettle on-site, the present occupants in exchange for a transferable Development Rights Certificate (DRC) equivalent in value to the development potential of their land.²⁷ It was envisioned that the transaction would operate in ways similar to the prevalent rule of landowners surrendering land for public projects, such as roads, and being compensated through DRCs.

Building on the changing policy context, and a promise by the leader of the opposition party to introduce a slum redevelopment program (Times of India, August 11, 1990), the Congress Party led state government instituted the Slum Redevelopment Scheme (SRD) in 1991. This program adapted and extended the Slum Reconstruction initiative of the PMGP to a citywide program. But there was a key departure from the past, an interesting innovation. SRD proposed an increase of up to 150 percent in the maximum allowed FAR.²⁸ This bonus FAR was designed to attract private developers to participate in the new program. The private developers were expected to provide cross-subsidized, on-site resettlement of slum dwellers and profit from redevelopment by selling additional floor space in the market.

²⁵ Regulation 33 (5), Development Control Regulations, 1991 (Government of Maharashtra, 1991). This provision existed in the regulations prior to the 1991 revisions.

²⁶ Mumbai and other Indian cities were not the only urban centers to attempt to control and reverse their population growth. Similar policy interventions were implemented in London, Paris, Moscow and Warsaw (Alonso, 1973).

²⁷ Transferable Development Rights Certificates or Transfer of Development Rights (TDR), un-bundle the full or partial development potential of a land parcel from a site-specific context and allow property owners to transfer the development potential from an “origin-site” to a “receiving-site.”

²⁸ The maximum allowed FAR in Mumbai ranged from 0.75 to 1.33. SRD raised the maximum allowed FAR in redevelopment projects to 2.5.

In 1995, the opposition party, the Shiv Sena, won the state elections. The new government replaced the SRD with an alternative program of slum redevelopment, the Slum Rehabilitation Scheme (SRS). The SRS was based on a series of prescribed ratios between the rehabilitation area (for the slum dwellers) and the market-sale area (for the developer to sell).²⁹ For the participating slum dwellers, the SRS provided a complete cross-subsidy (“free-housing”), an advance payment from the private developer to pay for future maintenance expenses and a relief in municipal property taxes.³⁰ For developers, the scheme allowed for more predictable FAR allowances.

Critics have disapproved of a number of aspects of the SRS. Environmental groups, such as the Bombay Environment Action Group (BEAG) and the Save Bombay Committee (SBC) criticized the scheme on environmental grounds and argued that the city could not sustain the increased density and intensity of development (Times of India, August 5, 1995). Other NGOs criticized the scheme for allowing private developers to profit from providing housing for the poor (Times of India, August 24, 1995). And a former municipal commissioner argued that the concept of free-houses, “... goes against the principles of equity in society,” (Sunday Observer, May 2, 1996).

Despite these criticisms, the state government continued with the SRS. In 1999, the Shiv Sena lost the state elections. The new, Congress Party led, state government announced that it intended to review the SRS policy. But even based on the past evidence, it is difficult to predict the future trajectory of this strategy (Table 2.1). Yet, it seems fair to suggest that Mumbai has accepted the idea of increasing the permitted FAR. It is also likely that private developers will be allowed to profit from redevelopment and slum dwellers will have a share in the profits, probably through subsidized on-site resettlement.

²⁹ In the SRD, the Slum Redevelopment Committee discerned the maximum allowed free-sale area with the aim of restricting profit from projects to 25 percent. The SRS prescribed three ratios between the rehabilitation area and the free-sale area. 1.33:1.0 for “difficult areas” where the property values were low; 1.0:1.0 in the suburbs; and 0.75:1.0 in the Island City where the property values were the highest.

³⁰ The scheme provided slum dwellers a complete rebate over the first ten years followed by a progressive increase to the normal tax-rate over the next ten years.

Table 2.1: Evolution of Slum Redevelopment Proposals & Programs

Year	Program/ Proposal	On-site Resettlement	FAR Increase	Subsidy for Slum Dwellers	Status
1971	Ford Foundation	Yes	No	Yes, Partial	Proposal
1975-7	Sanjay Gandhi	No	No	Yes, Full	Proposal
1980	Moghe Committee	Yes	Yes	No	Proposal
1980	Awale Committee	Yes	Yes	No	Proposal
1981	Kerkar Committee	No	No	No	Proposal
1984	BMC	Yes	Yes	No	Information not available
1984	Chief Minister Patil	Yes	Yes	No	Proposal
1985	PMGP	Yes	Yes	Yes, Partial	Implemented (Partially)
1987	D'Souza Committee	Yes	Yes	No	Proposal
1991	SRD	Yes	Yes	Yes, Partial	Implemented (Partially)
1995	SRS	Yes	Yes	Yes, Full	Under Implementation

This short historical account also illustrates that although in popular opinion, slum redevelopment is regarded as the brainchild of Balasaheb Thackeray, the leader of the Shiv Sena,³¹ and is most closely associated with the Slum Redevelopment Scheme (SRD) and the Slum Rehabilitation Scheme (SRS) of 1995; its history is much older. The strategy has evolved much more gradually and can be traced back, at least, to the recommendations of two separate committees (Moghe committee and Awale committee) appointed by the state government in 1980, to recommend policies to improve housing conditions in Mumbai's slums.

³¹ See for example, "Thackeray's housing plan unrealistic," Times of India, August 11, 1990, and "The house that Bal wants built," Telegraph, July 19, 1995.

2.4 The Imperatives for Implementing Slum Redevelopment in Mumbai

The slum redevelopment strategy is based on a key intervention by the local government, at the behest of the state government, in Mumbai's land use regulations. The intervention increases the maximum permitted intensity of development on slum-encumbered land, thus creating additional land values in the slums. This allows for cross-subsidized resettlement of slum dwellers on the original sites as well as an attractive profit for private developers. As the previous section indicates, over the years, the maximum allowed FAR and thus the subsidy for the slum dwellers, has progressively increased. At least three local conditions appear to have played a significant role in this evolution and are discussed below.

The Perceived Failure of Past Policies and Increasing Slums and Slum Dwellers

It is now generally accepted that supply-side controls, in particular urban and housing development regulations, play an important role in the inadequate, formal housing supply. As a consequence, housing demand is met through informal supply and squatter settlements. In Mumbai, the central government and the state government supported policies of decentralization and decongestion. It is claimed that these policies are responsible for the low maximum allowed FAR of development in the city (Sundaram, 1989). More specifically, it is claimed that Mumbai's FAR and housing density controls were based on the logic that if the number of houses constructed in the city were restricted, there would be less migration into the city (Babladi and Badheka, 1986).³²

Prior to the introduction of FAR as a regulatory control in 1964, Mumbai's municipal corporation enforced bulk and mass regulations. The effective consumed FAR in the city, at that time, ranged between 2.5 to 4.0. The 1964 Development Plan introduced a maximum FAR of 1.66 (Babladi and Badheka, 1986). The municipal government, with the approval of the state government, has since then further reduced the maximum permitted FAR. According to the Development Control Regulations (DCR) of 1991, the maximum FAR in the city ranged from 0.75 to 1.33 (Government of Maharashtra, 1991). However, it is unclear if these regulatory

³² In Mumbai, the municipal corporation's 1958 Draft Development Plan and subsequently the 1964 Development Plan introduced the concepts of FAR and housing density controls. FAR is a relatively new concept in planning. New York City introduced FAR (and incentive zoning) through its 1961 Zoning Resolution (Kayden, 1978; & Barnett, 1982). Prior to this New York City's development regulations focused on height, bulk and mass controls. In 1961, along with FAR the concept of "sky-exposure plane," replaced height districts that governed setbacks. However, one of the New York City commissioners had introduced a proposal for the introduction of FAR in 1944 (Koebel, 1973).

controls, though successful in reducing the formal supply of affordable housing, have helped to check the city's population growth in any substantial manner.

While Mumbai's proactive housing and urban policies may have played a role in the growth of slums in the city, reactive policies to improve living conditions in the slums have had limited success. Moreover, the total number of slums and slum dwellers in the city has kept on steadily increasing (Table 2.2 & Figure 2.4). By 1993, the municipal corporation estimated that over 55 percent of the residents of Greater Mumbai lived in slums. Although, there are almost an equal number of slum dwellers in the western and eastern suburbs, as a proportion of the total population, more slum dwellers live in the eastern suburbs and the least in the south, the Island City (Table 2.3 & Figure 2.5).

Table 2.2: Mumbai's Population and Slum Dwellers (in Millions)

Year	Slum Dwellers	Greater Mumbai	Metropolitan Region
1971	2.80 ³³	5.69	7.20
1981	4.30 ³⁴	7.57	9.58
1991	5.10	9.81	12.46

Sources: i) BMRDA, 1995 ii) Panwalkar, 1996

Table 2.3: Distribution of Slum Population in Mumbai

Area	Estimated Slum Population	Slum Population as % of Total
Island City	1,077,610	34.1
Eastern Suburbs	2,170,730	77.4
Western Suburbs	2,227,300	56.6
Total Greater Mumbai	5,475,640	55.3

Source: MCGB, 1993

³³ 1976, slum census data (Panwalkar, 1996).

³⁴ 1983, state government estimate (Panwalkar, 1996).

Figure 2.4: Increase in Population and Number of Slum Dwellers in Mumbai

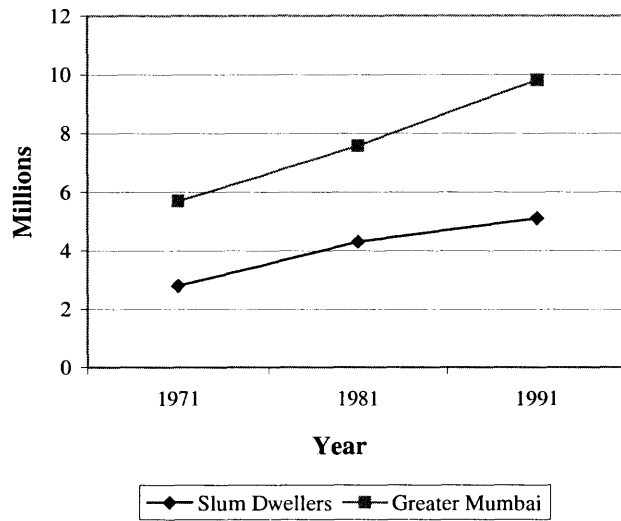
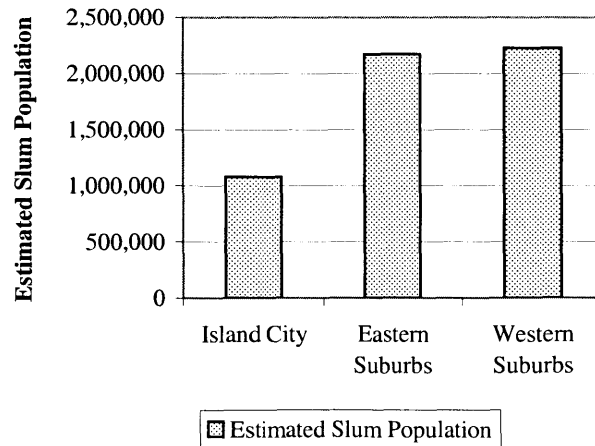


Figure 2.5: Distribution of Slum Dwellers in Mumbai



Perhaps, what is most disturbing is not that more than half of the city lives in slums, but the poor housing conditions within the slums. It is claimed that 80 percent of the slum dwellers live in houses smaller than a 100 square feet (9 sq.m).³⁵ For the city, approximately 73 percent of the total households are recorded as living in single room houses (Table 2.4). This is much higher than the 55 percent of the city’s population that lives in slums. Part of the discrepancy between the two percentages is explained through another significant component of the urban landscape, the *chawl*. The *chawls* were built to house the industrial workers of Mumbai. Not only do the *chawls* provide small, single room, tenement style housing, many of the building structures are now in a dilapidated condition. On the premise that living conditions in the *chawls* are slum-like, it is claimed that over 70 percent of Mumbai lives in slums (Sundaram, 1989). This makes housing a very important issue in local politics.

Table 2.4: Mumbai’s Housing Profile, 1981 & 1991

	1981	1991
Population (in '000s)	8,243	9,926
Average size of the household	5.1	4.8
Number of persons per room	3.7	3.4
Percentage of households with one room	68.9	72.9

Source: Afzulpurkar, 1995

Urban Politics: The Competition Between the Congress Party and the Shiv Sena

Though there are a number of political parties active in the state of Maharashtra and in Mumbai, politics is polarized between the Congress Party and the Shiv Sena (Table 2.5). The Congress Party, established in 1885, is national in scope and centrist in ideology. The Shiv Sena, formed in 1966, is a regional party and is considered a right wing, Hindu fundamentalist party (Thakkar, 1996). Historically, it has been anti-immigrant and anti-slum. This credo of the Shiv Sena is illustrated in its slogan, “*Sundar Mumbai, Maratha Mumbai*” (Beautiful Mumbai, Mumbai for the Maharashtrians). The party claimed that immigrants from outside the state

³⁵ Afzulpurkar, 1995, p. 8. In contrast to this statistic, Sundaram (1995) claims that 67 percent of the slum dwellers live in houses smaller than 15 square meters (161 square feet). It is possible that the Afzulpurkar Committee was referring to data regarding the lot-sizes and not the total usable floor area. In Mumbai it is common for slum dwellers to have lofts in their huts. These four to five feet (1.2-1.5m) high lofts are used for storage and sleeping and can effectively double the total usable area. Of course, the quality of the space in the loft area is much less because of the low ceiling height.

(primarily, south India) were moving into the city, depriving the Maharashtrians of jobs and were responsible for the disorder in the city by living in slums and perpetuating crime.

Table 2.5: Party Positions, Maharashtra State Assembly Elections

Name of the Party	1990	1995	1999
Congress I ³⁶	141	80	75
National Congress Party ³⁷	-	-	58
Shiv Sena	52	73	69
Bhartiya Janata Party ³⁸	42	65	56
Others and Independents	53	70	50
Total Seats	288	288	288

Source: India Votes, 2000

In 1985, for the first time, the Shiv Sena, came to power at the municipal corporation level by winning the municipal council elections. The new corporation declared that the city administration would launch a massive program of slum demolition, “Operation Slum-wreck.” Balasaheb Thackeray, the head and founder of the Shiv Sena, claimed that demolition was necessary because “We (the Shiv Sena-led corporation) are here to give justice to the tax-payers,” (Blitz, October 12, 1985).³⁹ But despite the rhetoric, it soon became evident that a significant part of the Shiv Sena’s support, particularly its *sainik’s* (soldiers) were the youth of Mumbai’s slums and pavements (Lele, 1996). The Shiv Sena soon recognized the potential political problems involved in acting against a constituency as large as the slum dwellers of Mumbai. The municipal corporation cancelled Operation Slum-wreck. The Shiv Sena’s recognition of the political reality was similar to the Congress Party’s experience with the abandoned “Operation Eviction” in July 1981 (Das, 1996).

³⁶ The original Indian National Congress (INC) has split a number of times but the Congress-I is regarded as the political heir.

³⁷ Before the 1999 elections, the Congress party split again. The Maharashtra based splinter group, the National Congress Party (NCP), however, joined the Congress-I to form the new state government after the 1999 elections.

³⁸ The Bhartiya Janata Party (BJP), is the Congress party’s rival at the national level. It is also active in the city and in Maharashtra. However, it is the Shiv Sena’s junior partner in the state.

³⁹ In response to the protests against its plan, the Shiv Sena shifted its attention to the city’s pavement dwellers. Thackeray announced that there was, “... no question of showing any humanity towards the pavement dwellers on this subject. Where have these people come from and why should we look after them? The city was not the country’s orphanage,” (Times of India, October 23, 1985).

However, neither the Congress Party nor the Shiv Sena can politically afford to be seen as inactive on the question of slums. In 1985, (after losing the local elections to the Shiv Sena) the Congress state government introduced the pilot program of Slum Reconstruction, through the Prime Minister's Grant Project (PMGP). The program received some support from the slum dwellers of Dharavi (Central Mumbai). This support opened up a new avenue of possibility in the city. The slum redevelopment alternative not only suggested that the slum dwellers would accept the redevelopment of slums but also that there was a problem of affordability by the slum dwellers. In order to structure an affordable and acceptable program of slum redevelopment and in competition with each other, both political parties began to increase the effective subsidy (explicit and implicit) for the slum dwellers. From 10 percent in 1985, subsidy had climbed to 113 percent by 1995 (Table 2.6).⁴⁰ At the time of writing this dissertation, the official cross-subsidy was still at 113 percent.

Table 2.6: Increasing Subsidy Levels in Different Slum Redevelopment Programs

Program	Subsidy ⁴¹ (Percentage)	Notes (All prices in Current Rupees)
PMGP (1985) Slum Reconstruction	10.0 %	Apart from the direct subsidy, a 20 % interest free loan from the PMGP
PMGP (Around 1990)	30.0 %	Effective write-off of PMGP's loan
SRD (1991) Slum Redevelopment	61.0 %	Beneficiary-contribution limited to Rs.25,000 out of a cost estimate of Rs.65,000
SRD (1992)	77.0 %	Beneficiary-contribution revised down to Rs.15,000
SRD (1994)	87.5 %	Cost estimate revised up to Rs.120,000 without any revision in beneficiary-contribution
SRS (1995) Slum Rehabilitation	113.0 %	Free-housing plus Rs.20,000 corpus for future maintenance expenditure

⁴⁰ In parallel to, though independent of, the slum redevelopment strategy in Mumbai, similar programs of redevelopment have been introduced for the old and dilapidated buildings (*chawls*). For these programs also, the two political parties have been competing to increase the benefits and making the programs more attractive for the *chawl* dwellers.

⁴¹ The value of the slum dwellers' existing housing asset is not included in these calculations.

Property Values and the Unrelenting Attraction of Redevelopment

Last, but probably the most important, crucial to the progressive increase in subsidy levels are the high real estate values in the city. A structural reason for high values in Mumbai is its unusual geography. The classic city depicted in urban economics is monocentric with the city center at the center of the circle (Alonso, 1964). Mumbai's geography is unusual. Even though the land between the original seven islands has been reclaimed, the city is still shaped like a "slice of a pie," a sub-part of a circle as opposed to a circle. To compound the problem the Central Business District (CBD) of Mumbai is located at the tip of this pie. A limited hinterland around the city center has ensured that land-supply is a perpetual dilemma in the city.

Consequently, property values in the city have been historically high. During the nineteenth century, land prices in Mumbai were nearly as high as in London (Dossal, 1995). This natural geographical handicap has ironically been increased by the successful implementation of the policy of relatively low maximum allowed FAR. The resultant short supply of usable floor space in the city has resulted in even higher property values.⁴² It is claimed that real land prices in Mumbai increased between 1966 and 1981 by 720 percent (Dowall, 1992, p. 18). An equally spectacular rise in property values has been in the early to mid-nineties (Table 2.7; Figure 2.6 & Appendix 2.1). In 1995, some of the most expensive real estate transactions in the world were recorded in Mumbai (Nayar, 1996). After 1996, property values in the city fell and by 1998 they were similar to the 1993 prices. Since 1998, however, property values in the city have stabilized and are still quite high. These high property values imply a large potential differential in land values after redevelopment and consequently there is an attractive financial incentive for redevelopment.

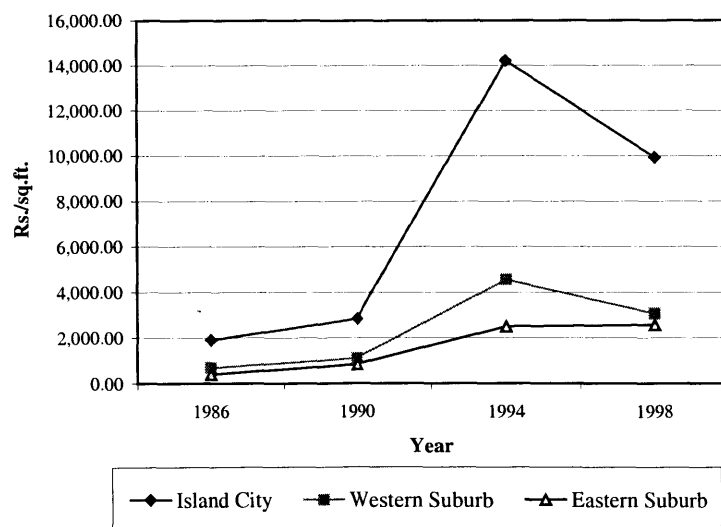
⁴² A high FAR is likely to result in a higher land value because the development potential of the land is increased. But the enhanced supply of usable floor space can be expected to cause a drop in the price of floor space.

Table 2.7: Residential Property Values in Mumbai (Current Rupees/Square Foot)

	1986	1990	1994	1998
<u>South Mumbai</u>				
Colaba	1,050	2,250	11,000	8,750
Marine Drive	2,250	3,500	11,000	11,250
Malabar Hill	2,800	3,500	17,500	10,500
<u>Western Suburbs</u>				
Bandra (West)	1,850	2,250	9,500	5,750
Andheri (West)	550	1,150	5,750	3,150
Borivli (West)	700	1,200	4,050	3,000
<u>Eastern Suburbs</u>				
Ghatkopar	600	1,000	2,700	4,250
Thane	288	525	875	1,650
Kalyan	225	375	925	1,000

Source: Accommodation Times, 1998. See Appendix 2.1

Figure 2.6: Average Residential Property Values in Mumbai



2.5 Regulating the Development Potential of Urban Land

There are two important issues raised in this chapter. The first is a shift in urban policy to allow for increased spatial centralization. The objective of this change in policy is to increase the quality of housing available to low-income residents in cities. However, it is unclear what will be the impact of such a change in policy on urban management, infrastructure provision and on the natural environment of a city. Furthermore, it is also possible that spatial centralization will lead to increases in inter-regional income disparities. Thus there is an important need to assess the impact of increased FAR in Mumbai at the city level as well as the regional level.

Secondly, although the State has the ability to define the eligibility and benefits of slum dwellers in redevelopment, and support such criteria through changes in land development regulations such as FAR and density controls, it is unclear to what extent the market can sustain such a public intervention. In other words, how should the State limit and structure its intervention?

Mumbai's experience in this regard is not particularly inspiring. The competition between the Shiv Sena and the Congress Party has resulted in a constant increase in subsidy levels. Furthermore, the redevelopment strategy is being extended to include the *chawl* dwellers as well. As a consequence more than 70 percent of the city may be eligible for "free-housing." This is an economically unsustainable intention. It is unlikely that any city's property market can sustain subsidizing housing for a majority of the city.

As more supply enters the market, prices are likely to fall, making cross-subsidy financially more difficult. An important question is how fast is this going to happen. If redevelopment projects are illegally built with a much higher FAR than the incentive enhanced ratios allow, the larger viability of the scheme is hurt faster. In Mumbai, the evidence indicates that over-utilization of FAR is the case and some developers are building redevelopment projects with an FAR as high as five even though the maximum allowed is two and a half (Times of India, December 25, 1998). This suggests a need for the State to strictly regulate the consumption of FAR in the city, if it intends to use a cross-subsidy strategy to provide housing for low-income groups.

Thus, there is a curious paradox. As opposed to the current conventional faith in deregulation, the Mumbai experience suggests that along with deregulation, new regulations can also play a role in housing provision. In Mumbai, the high standard of urban development regulations, not surprisingly, appears to have adversely impacted the supply of affordable, formal sector housing. In particular, land development regulations limiting the density (total number of

units per unit area) and intensity (total floor area) of development have further reduced the supply of housing in a city where land supply is geographically restricted. This suggests the need to deregulate or relax such controls. Mumbai's experience with slum redevelopment, however, indicates that if the State intends to use permissions for additional intensity (bonus floor area) as an incentive for developers to provide cross-subsidized low-income housing, the State will have to regulate the amount of floor area built in projects. This is imperative because only by restricting the supply, can the State make incentives for bonus floor areas attractive to developers. If the State fails to regulate the amount of area built, there is no reason for the developers to care about incentives that allow them to build more. Thus, housing policy in places like Mumbai may have to embrace deregulation of development standards as well as regulation of new standards to enable the provision of housing for low-income groups.

Appendix 2.1: Property Values in Mumbai

Source: Accommodation Times, 1998

RESIDENTIAL												
SOUTH BOMBAY	1986		1990		1994		1998					
	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE		
COLABA	900	1,200	1,050	2,000	2,500	2,250	10,000	12,000	11,000	8,000	9,500	8,750
CUFFE PARADE	2,000	2,500	2,250	2,500	3,000	2,750	10,000	22,000	16,000	8,000	9,500	8,750
NARIMAN POINT	NA	NA	NA	NA	NA	NA	11,000	26,000	18,500	10,000	11,500	10,750
MARINE DRIVE	2,000	2,500	2,250	3,000	4,000	3,500	6,000	16,000	11,000	9,000	13,500	11,250
MALABAR HILL	2,600	3,000	2,800	3,000	4,000	3,500	10,000	25,000	17,500	9,000	12,000	10,500
NEAPEAN SEA RD.	1,500	2,500	2,000	3,000	3,500	3,250	10,000	25,000	17,500	11,000	14,500	12,750
PRABHA DEVI	800	1,400	1,100	1,500	2,000	1,750	5,000	11,000	8,000	6,500	7,000	6,750
AVERAGE			1,908		2,833			14,214				9,929

COMMERCIAL												
SOUTH BOMBAY	1986		1990		1994		1998					
	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE		
COLABA	2,000	3,000	2,500	3,000	4,500	3,750	8,000	20,000	14,000	9,000	11,000	10,000
CUFFE PARADE	2,500	3,500	3,000	3,500	5,000	4,250	8,000	18,000	13,000	10,000	12,000	11,000
NARIMAN POINT	NA	NA	NA	NA	NA	NA	14,000	30,000	22,000	9,000	13,000	11,000
MARINE DRIVE	3,000	3,500	3,250	4,000	5,000	4,500	8,500	20,000	14,250	11,000	16,000	13,500
MALABAR HILL	2,500	3,500	3,000	4,000	5,000	4,500	9,000	20,000	14,500	12,000	16,000	14,000
NEAPEAN SEA RD.	3,000	3,500	3,250	3,000	4,000	3,500	8,000	19,000	13,500	12,000	14,000	13,000
PRABHA DEVI	1,500	2,000	1,750	2,000	3,000	2,500	4,000	15,000	9,500	7,000	11,000	9,000
AVERAGE			2,792		3,833			14,393				11,643

RESIDENTIAL												
WESTERN SUBURB	1986		1990		1994		1998					
	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE		
BANDRA (EAST)	400	600	500	1,000	1,500	1,250	2,000	8,000	5,000	2,500	3,500	3,000
BANDRA (WEST)	1,500	2,200	1,850	1,500	3,000	2,250	8,000	11,000	9,500	4,000	7,500	5,750
JUHU	NA	NA	NA	NA	NA	NA	4,500	8,000	6,250	4,000	6,000	5,000
ANDHERI (WEST)	400	700	550	900	1,400	1,150	3,500	8,000	5,750	2,500	3,800	3,150
BORIVALI (WEST)	600	800	700	800	1,600	1,200	2,600	5,500	4,050	2,500	3,500	3,000
MIRA ROAD	250	400	325	375	425	400	550	1,000	775	670	850	760
VIRAR	200	250	225	325	430	378	400	550	475	600	800	700
AVERAGE			692		1,105			4,543				3,051

COMMERCIAL												
WESTERN SUBURB	1986		1990		1994		1998					
	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE		
BANDRA (EAST)	1,500	2,500	2,000	1,500	2,000	1,750	4,000	18,000	11,000	4,000	7,000	5,500
BANDRA (WEST)	2,000	4,500	3,250	2,000	3,500	2,750	4,000	15,000	9,500	5,000	9,000	7,000
JUHU	NA	NA	NA	NA	NA	NA	3,000	12,000	7,500	6,000	9,000	7,500
ANDHERI (WEST)	800	1,600	1,200	2,000	3,000	2,500	3,500	9,000	6,250	4,000	6,000	5,000
BORIVALI (WEST)	2,000	3,500	2,750	1,500	4,000	2,750	2,500	10,000	6,250	3,500	7,000	5,250
MIRA ROAD	600	900	750	800	1,000	900	1,500	4,900	3,200	1,500	2,000	1,750
VIRAR	300	500	400	800	1,000	900	1,000	4,500	2,750	1,000	2,500	1,750
AVERAGE			1,725		1,925			6,636				4,821

RESIDENTIAL												
EASTERN SUBURB	1986		1990		1994		1998					
	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE		
WADALA	200	500	350	1,000	1,500	1,250	2,000	8,000	5,000	3,000	3,500	3,250
KINGS CIRCLE	300	600	450	1,100	1,500	1,300	2,000	8,000	5,000	2,800	3,500	3,150
CHEMBUR	500	700	600	800	1,200	1,000	1,200	3,200	2,200	2,200	5,500	3,850
GHATKOPAR	400	800	600	800	1,200	1,000	1,900	3,500	2,700	3,000	5,500	4,250
THANE	250	325	288	450	600	525	550	1,200	875	1,500	1,800	1,650
DOMBIVILI	250	300	275	325	475	400	450	900	675	700	900	800
KALYAN	200	250	225	350	400	375	450	1,400	925	900	1,100	1,000
AVERAGE			398		836			2,482				2,564

COMMERCIAL												
EASTERN SUBURB	1986		1990		1994		1998					
	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE	LOWER	UPPER AVERAGE		
WADALA	700	1,500	1,100	1,000	1,500	1,250	2,500	8,000	5,250	3,500	6,000	4,750
KINGS CIRCLE	700	1,200	950	1,000	1,500	1,250	2,500	8,000	5,250	4,000	7,000	5,500
CHEMBUR	1,000	2,000	1,500	1,500	2,000	1,750	2,000	8,000	5,000	2,500	7,000	4,750
GHATKOPAR	750	2,000	1,375	1,500	2,500	2,000	2,000	8,000	5,000	3,500	10,000	6,750
THANE	500	750	625	1,500	2,000	1,750	2,800	8,500	5,650	2,500	4,000	3,250
DOMBIVILI	500	600	550	700	1,000	850	800	3,200	2,000	1,000	2,000	1,500
KALYAN	500	700	600	800	1,000	900	1,000	8,500	4,750	1,500	3,400	2,450
AVERAGE			957		1,393			4,700				4,136

Chapter 3: Decentralized Conflict

						*Loan agreement with HUDCO *SPARC provides partial bank guarantee to HUDCO *SRD introduced
*PMGP announced	*SPARC & NSDF enter Dharavi	*PMGP elaborates plan for Dharavi *SPARC's census of Dharavi	*MCHS decides to reconstruct housing with SPARC's support	*MCHS' plan approved & construction starts	*Funding dispute with PMGP	
1985	1986	1987	1988	1989	1990	1991
1992	1993	1994	1995	1996	1997	1998
*Constr. of foundation completed *Super-structure contractor hired	*New super-structure contractor hired	*HUDCO completes loan release *MCHS transfers extra units to contractor/developer in lieu of payment	*SRD application submitted for MCHS *SRS introduced	*SRS guidelines elaborated * MCHS and contractor/developer keen to transfer to SRS	*HUDCO recalls MCHS' Loan *SRA forces contractor/developer to pay due arrears to HUDCO	*MCHS' members move into new houses *SRA arbitrates conflict between SPARC, MCHS & contractor/developer

Figure 3.1: Timeline of Key Institutional Events in the Markandeya Case

3.1 Introduction

This chapter elaborates the case of the Markandeya Cooperative Housing Society (MCHS) in Dharavi from an institutional perspective. It focuses on how the redevelopment of the Markandeya project was implemented, which institutions played what role in the implementation, how these roles changed and why. The institutional actors involved in the Markandeya project include the community cooperative, the NGO – The Society for the Promotion of Area Resource Centres (SPARC), private market-agents and State agencies. The key finding in this chapter is that in an environment of decentralized decision-making and control, the possibility of social conflict is likely. And, the occurrence of conflict can lead to the decentralized actors demanding for centralization from the State for conflict resolution. Thus, this institutional story of a slum redevelopment project in Mumbai also employs a lens of “decentralization and centralization” to analyze institutional arrangements structured to facilitate the slum redevelopment strategy in the city.

According to the conventional wisdom, decentralization is a well-meaning initiative to increase the scope of direct decision-making and the responsibilities of participants in the housing delivery process. However, Mumbai’s experience suggests that decentralization in the case of slum redevelopment may actually lead to conflicts related to claims on the new assets, where high value property assets are being created. In a booming real estate market the value of such assets appreciates rapidly and conflicting demands about who is to capture how much benefit and why, can generate conflicts of institutional interest. Entrepreneurial NGOs, who contribute to asset formation, may not act as neutral arbitrators to resolve such disputes. Rather, they may themselves get deeply embroiled in struggles with government agencies, the private for-profit actors, and even community groups.

Under such conditions, the decentralized actors (i.e., NGOs, communities and private developers) are likely to demand that the State institute a centralized authority to arbitrate any disputes. This is more probable in contexts where the property rights to the new, high value property assets are unclear. Under such conditions, participants may also demand that the State provide institutions to enforce contracts. Furthermore, speed is of the essence in property markets. So participants are likely to demand for faster approval-procedures and more predictability, even if this implies a centralized institutional arrangement.

Although government agencies often formally ask NGOs to participate in housing delivery, they may be reluctant to relinquish control over housing areas to NGOs if government investment sharply increases the real estate values. In the struggle for control over housing areas,

NGOs may have some competitive advantage over government agencies because they are more knowledgeable about these areas. However, this chapter argues that NGOs are not necessarily always accurate in articulating a community's preferences, which may change in a booming real estate economy. Furthermore, NGOs' efforts at community participation may be thwarted by decentralized corruption, because rising real estate prices may tempt community leaders. In dealing with such corruption, NGOs do not broaden community participation, but instead centralize the process of decision making to restrict the opportunities for corruption.

Also, if the decentralization of housing delivery leads to opportunities to profit, it may induce NGOs to change institutionally. NGOs, in such contexts, may transform their mission from one of advocacy to one of social investment in profitable enterprises. They are also likely to seek representation in conflict resolution bodies instituted by the State. In other words, decentralization may put NGOs in conflict with market institutions and NGOs may transform themselves institutionally so as to resemble the market institutions. Similarly, conflict with government agencies may induce NGOs to seek control over part of the government apparatus. Moreover, in dealing with market-agents, NGOs are often reluctant to relinquish control over housing areas, although the communities may prefer to work with private for-profit actors in a booming economy. Facing this situation, NGOs do not necessarily complement external, private investment by mobilizing local resources, but rather compete with the market-agents, as well as government agencies, by successfully mobilizing international financial assistance.

To illustrate these arguments, the story of Markandeya's redevelopment is arranged in four parts. First, I describe the project of slum redevelopment in Mumbai. The goal is to elaborate the intentions of this project. The next three sections describe three conflictual relationships – namely, between the government agencies and the NGO; between the private contractor and the NGO; and finally, between the community and the NGO. The subsequent two sections elaborate on the relevance of the findings from this case to the conception of NGOs as service providers and to the conventional wisdom of decentralization as a panacea for housing delivery.

3.2 Literature Review: Decentralized Development and NGOs as Intermediaries

By the late sixties and early seventies, the great expectations for the State's role in development and in the housing process had turned into a strong condemnation of its inability to meet the housing demand. Moreover, it was argued that centralized systems did not provide the various stakeholders opportunities to participate in the decision-making process and this lead to conflicts (Turner, 1977). A decentralized housing delivery system was to rectify this major

shortcoming, encourage participation and negotiation among the various stakeholders, and thereby reduce the possibility of conflicts.

An important feature of such decentralized housing delivery systems was the prominent role of NGOs (Drabek, 1987; & Clark, 1991). According to the neo-populist literature, NGOs were to be the glue holding the other institutional actors together in a decentralized delivery system. In housing provision they were promoted as benevolent intermediaries in the housing development process (Arrossi et. al., 1994; Liou and Stroh, 1998; & Payne 1999). Not surprisingly, in one paper on slum upgrading in Bangkok, the author used the terms “intermediary institutions” and NGOs interchangeably (Lee, 1995).

The NGOs were not to be concerned about projects, but instead were to focus on nurturing “the process,” so that communities could negotiate effectively with government agencies and market-agents to build a housing stock appropriate to their needs and purchasing power. There were many assumptions regarding NGOs underlying this new approach to housing delivery. These include the flexible approach of NGOs, their capacity to innovate, their ability to target the poorest, etc. However, scholars have challenged and criticized many of these assumptions (Tendler, 1982; Sanyal, 1994; & Vivian and Maseko, 1994).

Two sets of assumptions that have persisted, and focus on the role of the NGOs as intermediary institutions, are particularly relevant to this chapter. First, it was assumed that NGOs are mainly interested in empowerment and community building (Edwards and Hulme, 1992; Friedmann, 1992; & Stiefel and Wolfe, 1994). Thus unlike the State, they were uninterested in power; and unlike the market-agents, they were uninterested in profit.

These admirable qualities, however, did not make NGOs averse to working with market-agents. Most NGOs describe themselves as non-profit organizations, implying that their basic intention is not to make profit but to assist low-income communities. However, they are willing to cooperate and join hands with all kinds of institutions with varying motives, as long as such cooperation benefits “their communities” (Anzorena, 1993). There was some concern that working with incompatible institutions could taint the communitarian spirit of NGOs, but this possibility was not viewed with any particular alarm. It was argued that if such contamination occurred, the NGO was likely to lose moral legitimacy and hence, its hold on the communities it served (Korten, 1990; & Clark, 1991).

Secondly, NGOs are considered closer to and more knowledgeable about low-income communities than are state agencies. This implies that they are better at understanding the specific nature of local needs, and this gives them the capacity to mobilize resources at the local

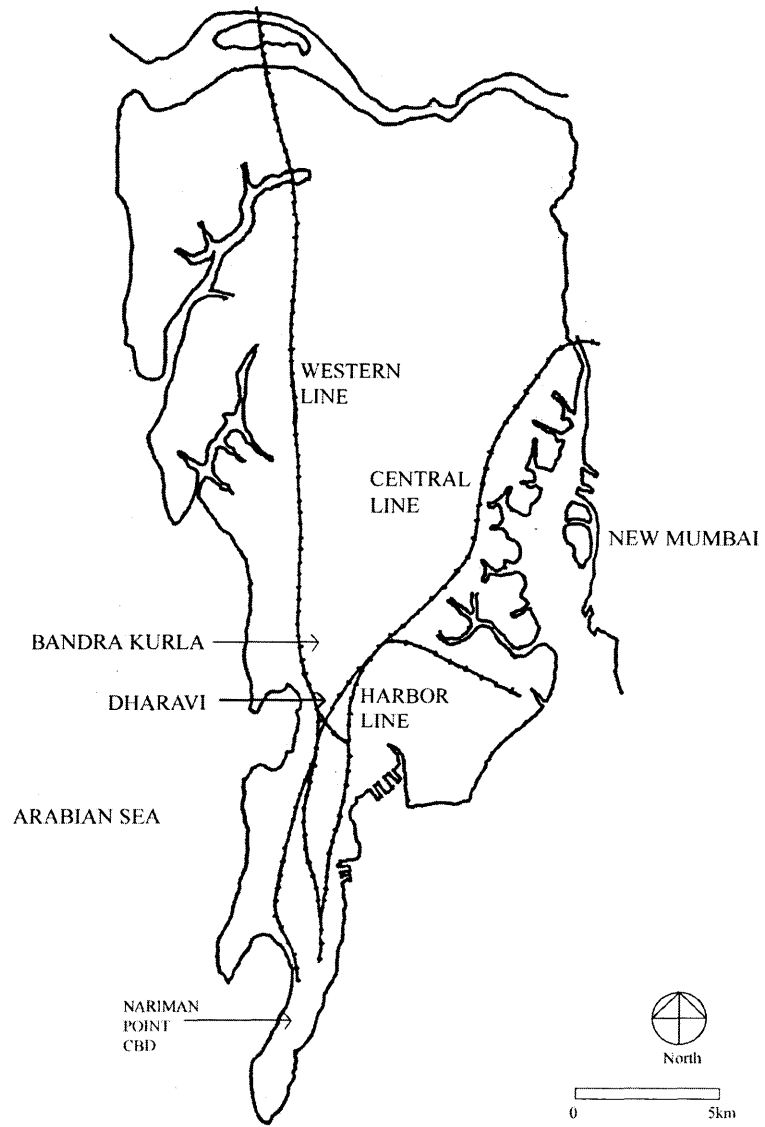
level (Hasan, 1990; and Fowler, 1993). Moreover, being close to the people, NGOs are thought to be capable of educating and training them to negotiate for resources and services from state agencies as well as to negotiate with market-agents in order to purchase goods and services without being exploited. As a result, the overall cost of housing can be reduced significantly.

It is noteworthy that possible conflicts among the various institutional actors in decentralized housing delivery systems were rarely discussed. The assumption was that most conflicts were generated by overtly centralized systems that did not provide the various stakeholders opportunities to participate in the decision-making process (Turner, 1977). This assumption justified the participation of NGOs as intermediaries between government agencies and low-income communities. Specifically, the NGOs were to represent the preferences and needs of the communities in a professional way to the state agencies, and they were to convey bureaucratic rules and regulations in a simple language and non-intimidating ways to the communities. In other words, NGOs were to act as a buffer between government and the communities, reducing the chances of misunderstanding, coercion, and conflict.

Since the policy push for decentralized housing delivery coincided with a concomitant push for privatization and other market-friendly reforms in the early 1980s, there was hardly any concern that a decentralized approach to housing delivery could create conflict between market-agents and low-income communities. No one feared that NGOs could, themselves, be engaged in struggles with private firms, because NGOs were not viewed as being interested in profit or market-share. As far as conflict between NGOs and low-income communities, this unpleasant possibility was very rarely discussed. NGOs were assumed to be the protectorate of the communities they served.

However, as the next few sections reveal, conflict among the various actors in the Markandeya project was very much the norm.

Figure 3.2: Map of Mumbai, Showing the Location of Dharavi



3.3 Dharavi Redevelopment Plan: Contested Intentions

Prime Minister's Grant Project (PMGP)

In 1985, the then Prime Minister of India, Mr. Rajiv Gandhi, announced a major housing improvement program for Mumbai, the capital of Maharashtra. The central government's grant of a billion rupees was awarded to recognize the city's contribution to the formation of the Indian National Congress, a political party, in Mumbai. The Congress Party played a pivotal role in the country's independence struggle and had many illustrious leaders including Mahatma Gandhi and Jawaharlal Nehru. Rajiv Gandhi, the Congress Party's leader at that time, announced the grant at the party's centenary celebrations in Mumbai.

Dharavi, known as Asia's largest slum (Desai, 1988), is located near the heart of Mumbai (Figure 3.2) and was to be a major beneficiary of the Prime Minister's grant. Dharavi's living conditions justified the plan for major improvements. The state government's records indicate that in 1985, a population of nearly 300,000 was served by 162 water taps and 842 toilet-seats (Warning, 1995). Every year, Dharavi was flooded during the rainy season with waist-high water containing raw sewage from open drains. Dharavi was an appropriate choice politically as well. The area's residents had consistently voted for the Congress Party, and the slum housed many ethnic groups, including Muslims and Tamils (from the southern state of Tamil Nadu), who were minorities in Mumbai.⁴³

Since the opposition party, the Shiv Sena controlled the Mumbai municipal corporation, the central government made its grant to the Congress Party led state government. The state government appointed a committee under the leadership of architect and urbanist Charles Correa to draft a policy approach for Dharavi.⁴⁴ Based on the Correa committee's recommendations the

⁴³ Mumbai is predominantly a Hindu city and a majority of the residents are from the state of Maharashtra. The city has a long history of political agitation and sporadic violence against minorities and migrants. The Shiv Sena, has often been blamed for organizing such violence (Lele, 1996).

⁴⁴ The Correa committee recommended-

- a) A complete survey to collect data and information
- b) A community centered, bottom-up approach to planning
- c) Shifting of all leather tanneries to Deonar (East Mumbai). These tanneries were a major source of pollution in Dharavi and it was estimated that there were 25 of them, covering 20 acres of land
- d) Reorganization or shifting of all *godowns* (storage) and workshops
- e) Reduction in the reservations in the existing Development Plan (such as schools and other public amenities), and shifting some of these reservations to the adjoining Bandra Kurla area (Figure 3.1). The committee argued that many of the reservations were elitist and dispensable
- f) Realignment of roads proposed in the Development Plan in recognition of the people already living on the proposed alignments
- g) Resettlement of some families in the Bandra Kurla area
- h) Stress on in-situ improvements and the provision of land-tenure

government of Maharashtra appointed the state housing authority, the Maharashtra Housing and Area Development Authority (MHADA), as the Special Planning Authority for the planning, implementation and development of Dharavi.⁴⁵ In 1987, the housing authority released a brochure outlining its project-approach to improve housing conditions in Dharavi (MHADA, 1987). The housing authority instituted a special division to oversee the project. This centralized division, called the Prime Minister's Grant Project (PMGP), was created to bypass the bureaucratic rules and procedures that had typically delayed the implementation of previous efforts at housing improvement (Dua, 1989).⁴⁶

Redevelopment Plan for Dharavi

The PMGP's intended to redevelop Dharavi by providing new infrastructure and reconstructing cooperatively owned, housing for the inhabitants. The goal was to encourage the slum dwellers to contribute financially towards the project cost. The project explicitly called for extensive participation by the inhabitants mobilized through the community development officers of the housing authority. The beneficiaries were to form cooperatives.

There were at least four other reasons for the PMGP to opt for the cooperative structure. First, cooperatives allow for easier administration, project implementation and maintenance of common infrastructure in the reconstructed areas. Second, the beneficiaries pay a lower property tax. Third, cooperatives can exercise control over beneficiaries, making it difficult for them to sell their new apartments. And fourth, the provisions of the Maharashtra Slum Area Act, 1971, only allow for the lease and transfer of public land to cooperatives of slum dwellers, not individuals (Government of Maharashtra, 1971).

The PMGP proposed that the cooperatives lease the slum-land for an initial but renewable period of 30 years. The cooperatives, in turn, could use such leases as a basis to raise

i) The setting-up of an autonomous planning and implementation organization for the Dharavi area (Correa, 1986).

⁴⁵ MHADA was appointed as the Special Planning Authority for Dharavi under the provision of the Maharashtra Regional and Town Planning Act (MRTP Act), 1966. The state government's decision was notified in July 1987. Usually, the municipal corporation is responsible for all planning decisions in Mumbai. However, these decisions follow the framework established by the state government and have to be approved by the state government (Government of Maharashtra, 1966). Moreover, as in the case of Dharavi, the state government can also institute other State agencies as planning authorities for parts of the city. Similarly, the state government has appointed the Mumbai Metropolitan Regional Development Authority (MMRDA) as the Special Planning Authority for the Bandra Kurla area.

⁴⁶ The PMGP incorporated representatives from the state government and the Municipal Corporation of Greater Mumbai (MCGB), the two big public landowners in Dharavi. According to the estimates from

funds for construction from housing finance agencies. This approach was in tune with the prevalent advice in housing policy at that time. It discouraged large-scale government subsidies. The PMGP proposed that at the most fifteen percent of the total cost of housing be provided by the grant from the Prime Minister's fund. The rest was to come from the beneficiaries' own contributions (about 15%), loans from housing finance agencies (about 50%), and an interest-free loan (about 20%) also, from the PMGP's funds.⁴⁷

As recommended by the Correa committee, the PMGP expected to hire architects and private contractors for the construction of housing, but was willing to let the cooperatives play an active role in monitoring the design and construction quality. The PMGP was also willing to transfer the responsibility for hiring and monitoring of architects and private contractors to the cooperatives. The officials, however, were skeptical that the cooperatives even if assisted by NGOs could perform well in this new role.⁴⁸

The PMGP started with a survey of Dharavi to identify the exact number of families to be housed under the redevelopment plan. On the basis of this survey, which identified 55,000 families, the PMGP prepared a tentative redevelopment plan. It proposed that the beneficiaries be housed in buildings of four to five floors, with apartment sizes ranging between 165 to 430 square feet (15-40 sq.m) carpet area. Apartment size depended on the size of the existing housing of the beneficiaries. The PMGP's plan was based on the premise, that to improve living conditions in Dharavi, at the most 35,000 families could be accommodated in the area. This meant that nearly 20,000 families had to be relocated elsewhere in the city. The plan also called for short-term housing of the beneficiaries in temporary facilities provided by the state government so that the land could be cleared for the construction of new housing (MHADA, 1987).

1985, the municipal corporation owned 59%, the state government (including the state housing authority) 16%, and 25% was in private ownership (Warning, 1995).

⁴⁷ This is based on the PMGP's financial plan in 1987, after its discussion with the Housing and Urban Development Corporation (HUDCO) for housing finance loans for beneficiaries. Interview with V. G. Gode, ex-Director PMGP, 1997.

⁴⁸ The initial official intention was to rely on the state housing authority's Community Development Officers (CDOs) to mobilize cooperatives of beneficiaries. But later, the PMGP explored the possibility of involving the city's NGOs to solicit community participation. The PMGP had initiated discussions with an NGO, the Slum Rehabilitation Society, which had implemented one of Mumbai's first recorded cases of slum redevelopment in 1977 (Kerkar, 1981). This project was achieved as a result of collaboration between the NGO, the community, a Catholic school and a church. (Interview with Father A. Traglar, Director of the Slum Rehabilitation Society, 1998).

SPARC, its Census and Alternative Proposal

In 1987, when the PMGP elaborated the plan for Dharavi's redevelopment, it was accompanied by a comment from the state's Chief Minister that Dharavi would soon look like Singapore, with modern, high-rise apartment blocks!⁴⁹ The politician may have intended to impress his constituency, but the result was the opposite. Many residents, including the poor, the residents who had not lived in Mumbai very long, and residents from the minority communities, feared that they would be among the 20,000 or so families relocated to make room for the Singapore-inspired buildings. This fear was compounded by the fact that a special institution had been set up to ensure the rapid implementation of the project.

In response a number of Mumbai's NGOs, including SPARC, decided to work in Dharavi. SPARC was a well-respected NGO that had successfully mobilized the pavement dwellers in Central Mumbai against eviction in 1984. SPARC had also created a new institutional alliance with another NGO the National Slum Dwellers Federation (NSDF). The NSDF had emerged in 1974 and claims to advocate slum dwellers' rights all across India. The alliance of SPARC and NSDF was a powerful force. It drew on SPARC's ability to conduct research, supported by the political clout and grassroots support base of the NSDF.

The SPARC and NSDF team became active in Dharavi in early 1987 with the initial intention to stop all evictions. They began by organizing a census survey of the area, as SPARC had done previously with the pavement dwellers in central Mumbai.⁵⁰ This survey allowed SPARC to establish a good rapport with the inhabitants. More importantly, it generated data, which allowed the NGO to challenge the government's estimates. SPARC described this process as "talking to the government with facts."⁵¹ The NGO argued that the government's proposed plan required a massive relocation, more than three times the government's claim (Table 3.1).

Based on these starkly different estimates, towards the end of 1987, SPARC prepared an alternative "People's Plan" for Dharavi. This plan recommended low-rise structures with a

⁴⁹ Interview with A. Jockin, SPARC and NSDF, 1997. This comment was made by the then state Chief Minister, Sharad Pawar. Also see, Indian Express, July 29, 1995.

⁵⁰ SPARC had used this strategy in 1985 while working with the pavement dwellers of Byculla (Central Mumbai). The enumeration of pavement dwellers was initiated soon after the 1984 Supreme Court judgment that upheld the right of the city's authorities to clear city pavements. SPARC's intention was to use the census to collect data on the pavement dwellers to elaborate on the extent of the evictions and use the census process to organize the pavement dwellers. Describing the logic of the enumeration, SPARC's Meera Bapat wrote, "The awareness that there are thousands like them (pavement dwellers) has given them the strength to stand up for fair treatment by the state," (Bapat, 1991). Also see, SPARC, 1985.

⁵¹ Interview with Sheela Patel, Director SPARC, 1997.

uniform unit-size of 280 square feet (26 sq.m). The plan also argued against the relocation of people or businesses.

Table 3.1: Contrasting Population Estimates of Dharavi

	PMGP	SPARC
Structures	55,000	85,000
Families	55,000	100,000
Families to be displaced	20,000	65,000

Source: SPARC, 1987, unpublished document, courtesy of A. Jockin, SPARC & NSDF

SPARC’s plan also demanded that the Housing and Urban Development Corporation (HUDCO), a national, public sector housing finance agency, provide concession-rate loans to reduce the project cost. Notably, the “People’s Plan” was very critical of direct private sector involvement in project implementation. It argued against the private sector’s involvement on the premise that private investment may result in the displacement of local residents to make projects more profitable.⁵² Instead, the plan proposed that the project beneficiaries control all decision-making and encouraged bottom-up, people-centered development (Table 3.2).

Table 3.2: Contrasting Plans for Dharavi, 1987

	PMGP	SPARC
Height of structure	Five floors	One-two floors
Size of units	165 sq.ft. (15 sq.m), 180 sq.ft. (17 sq.m), 181-430 sq.ft. (17- 40 sq.m)	280 sq.ft. (26 sq.m)
Terms of financing (1987)	15% beneficiary contribution; 50% loan at 9% interest; 20% interest-free loan from PMGP; & 15% grant from PMGP	Cost of project to be reduced with lower interest rate-loan (6%) without any collateral

Source: Multiple interviews with A. Jockin, SPARC & NSDF, 1997; and multiple interviews with V. G. Gode, ex-Director PMGP and G. S. Pantbalekundri, ex-Senior Planner PMGP, 1997

⁵² Interview with A. Jockin, SPARC & NSDF, 1997.

In calculating the costs for the proposed housing, SPARC argued that the construction cost could be reduced significantly by reducing the height of the buildings from five floors to one or two floors. It also argued that a self-help approach in which the residents managed the construction process by procuring building materials, like cement, from the public distribution system rather than the free market, could result in a substantial cost-saving. Also, in a self-managed project, the usual costs of government corruption and inefficiency could be avoided. Finally, SPARC argued that if such an approach was supplemented with low, or no-interest loans from HUDCO and the PMGP, the total project cost to the beneficiaries could be reduced significantly.

3.4 PMGP and SPARC: The Battle over Markandeya

Government Response to SPARC's Plan

The PMGP dismissed most of SPARC's proposal as unrealistic, guided, at best by an idealistic but naive desire to do good and at worst by an urge to control the Dharavi area because its redevelopment was creating a dramatic increase in the property values.

Furthermore, senior officers of PMGP argued that it was physically impossible to resettle all of Dharavi's residents in units of 280 square feet per family without resorting to even higher buildings than proposed. They also felt that since government-administered redevelopment projects elsewhere in the city were following a different norm, they could not justify allocating larger units to Dharavi's residents. They preferred that Dharavi be developed using a range of housing unit sizes depending on the beneficiaries' existing housing areas. They disagreed that the larger units would be cheaper and were skeptical of the financial capacity of the beneficiaries to afford the extra cost of the larger units. The PMGP also argued that HUDCO was not in any position to further reduce the already lower-than-market interest rate it was willing to provide the project beneficiaries. In response to SPARC's suggestion that the area's residents manage project construction, instead of private contractors hired by the government, the PMGP doubted the technical capacity of community groups to supervise the construction of apartment complexes, even if they were low-rise. The PMGP preferred to hire private contractors who would be accountable to the PMGP.

Compromise but Further Conflict

By the end of 1987, two years after the Prime Minister announced his grant, as the project moved into the implementation phase, the PMGP decided to modify its original plan to redevelop

Dharavi. There were three main reasons. First, the PMGP lacked sufficient funds to reconstruct the entire Dharavi area. Second, they did not have enough temporary housing for slum dwellers, whose houses were to be reconstructed. And third, they realized that forced resettlement of the area's residents, even if it was limited to 20,000 families according to the PMGP's estimates as opposed to the potential 65,000 families as claimed by SPARC, was politically unfeasible. Hence, the PMGP decided to upgrade the bulk of the housing (rather than reconstruct), and reconstruct only 3,800 housing units in twelve sub-areas within Dharavi (Dua, 1989). One of these sub-areas was Rajendra Prasad Nagar.

Rajendra Prasad Nagar was to be developed in three phases. Of the three projects in the first phase, one was the Markandeya area. Markandeya housed around 250 families and already had an organized community group headed by a popular local politician, S. Challaiah.⁵³ In early 1988, community development officers from the PMGP came to Markandeya to help transform the community group into a housing cooperative. Much to the surprise of the local politician, Markandeya's residents decided to create two cooperatives, instead of one. Nearly 160 families belonging to a particular caste group disregarded the local politician's advice and formed a separate cooperative.⁵⁴ The remaining 92 members, created a second cooperative, the Markandeya Cooperative Housing Society (MCHS).⁵⁵ The MCHS became the battleground for the next phase of struggle between the PMGP and SPARC.

SPARC's leaders knew the local politician, the chief-promoter of the MCHS. They approached him with a proposal to develop Markandeya according to the "People's Plan." The proposal offered the cooperative's members, 280 square feet (26 sq.m) houses. This was much larger than the PMGP's proposal of 180 square feet (17 sq.m) units for Markandeya's residents. Moreover, SPARC assured them that the larger units would actually cost less. The cooperative accepted SPARC's proposal.

⁵³ Challaiah was the founder of the Mumbai chapter of the Tamil Party, the Dravida Munnetra Kazhaghham (DMK). The DMK is one of the main political parties in the state of Tamil Nadu. Despite the strong Tamil presence in Dharavi, however, the DMK was not important politically in Mumbai.

⁵⁴ The break-away group from Markandeya are from the Padmashali caste. They formed the Padmashali cooperative. The cooperative was to be developed in the second phase of redevelopment in Rajendra Prasad Nagar.

⁵⁵ Technically, Markandeya's members created a "proposed" Cooperative Housing Society. The cooperative does not come into existence, till the organization has an asset owned cooperatively. The cooperative had 81 residential members and 11 commercial members.

SPARC and the architects commissioned by them, worked with the MCHS to prepare an architectural plan.⁵⁶ SPARC suggested using a physical plan for housing units that had emerged earlier, out of their consultation with the pavement dwellers in Central Mumbai (SPARC, 1988). Asked to design the kind of housing they preferred, the pavement dwellers had designed a room with fourteen feet (4.3 m) high ceilings that could accommodate a six feet (1.8 m) high loft. At Markandeya, the architect proposed to use a rectangular unit of 180 square feet (17 sq.m) with a 100 square feet (9.3 sq.m) loft to provide a total living space of 280 square feet (26 sq.m). The SPARC plan also provided common external toilets, in contrast to attached toilets for each individual unit as in the PMGP plan. This SPARC argued, lowered the cost and made the housing units unattractive to middle-class families, reducing the possibility of gentrification.⁵⁷

According to the proposed plan, the housing units were organized around a three floors high courtyard, instead of the five floors proposed in the PMGP plan.⁵⁸ In the SPARC plan, the third floor provided space for a common terrace occupying one third of the floor space. This terrace space could be rented out by the cooperative for social functions, and the rental income used for building maintenance.

By the middle of 1988, the MCHS informed the PMGP that they had decided to self-manage their housing reconstruction project with SPARC's support. Since the PMGP was bound by law to allow housing cooperatives to pursue their own approach, it accepted this decision but warned the MCHS that it would have to follow the building regulations of the city's municipal corporation, the Municipal Corporation of Greater Mumbai (MCGB). The PMGP was concerned that the project beneficiaries would sublet their lofts, significantly increasing the density and, consequently, pressure on the infrastructure.⁵⁹ The PMGP also argued that if the beneficiaries were allowed larger floor areas without any additional subsidies, then the project would become unaffordable for many residents. Finally, the PMGP objected to SPARC's plan to provide the public terrace space to be rented-out by the cooperative. The officials feared that such open space was going to be encroached upon, further adding to the density of the area (Times of India, March 16, 1989).

⁵⁶ Sharad Mahajan and his wife Neeta Bhatt of Purbi Architects were commissioned for the project. N. Bhatt had earlier worked with A. Jockin, the President of the NSDF, on an infrastructure project for a Mumbai slum. However, Mahajan, became the main project-architect.

⁵⁷ Interview with Celine D'Cruz, SPARC, 1997.

⁵⁸ Despite all attempts, the architects at Markandeya were unable to accommodate all required units in a two-floor structure.

When the MCHS proposed to the municipal corporation that it was planning to build fourteen feet (4.3 m) high units, the corporation refused to issue permits for construction and ordered the MCHS to restrict the height of units to ten feet (3 m). The MCHS and SPARC were helpless and decided to present a revised plan reducing the height of units, although they had no intention of following the revised plan after they obtained the building permit. Once the permit was issued, the MCHS and SPARC began a campaign in support of fourteen feet high units, writing to politicians at the state and the national level. Finally, in October 1989, the municipal corporation granted “special permission” to the MCHS to proceed with the fourteen feet high units.⁶⁰

Conflicts over Project Finance

As the project moved towards implementation, a new battle erupted over who was to pay for the redevelopment of Markandeya. Since the MCHS and SPARC had decided to develop Markandeya on their own, PMGP argued that it was not obliged to either give the interest-free loans (as originally planned, see Table 3.2) or to provide the guarantee for loans to other sources. The PMGP agreed, however, to provide the amount of direct cost subsidy from the Prime Minister’s original grant for Dharavi’s redevelopment.⁶¹

This created a major financial bottleneck for the MCHS. The MCHS and SPARC responded to this unexpected turn of events in three ways. They raised the direct contribution by beneficiaries, eliminated the amounts earmarked for contingencies, and directly approached a national, public sector housing finance organization, the Housing and Urban Development Corporation (HUDCO), for a concession-rate loan.

In 1989, the MCHS started the construction work with the members’ down payments and hired a private contractor, for the foundation-work, without the usual tendering process. Once construction began, SPARC on behalf of the MCHS approached HUDCO to negotiate a loan. HUDCO was willing to lend the amount necessary to the MCHS but asked for some form of

⁵⁹ In the 19th and 20th Century, it was a common practice in Mumbai to add lofts in existing buildings to rent out to the migrant labor. Researchers have held this practice responsible for the overcrowding in the city (Dwivedi and Mehrotra, 1995).

⁶⁰ Apart from the pressure by SPARC and the MCHS, by August 1989, the state government had agreed to approve the municipal corporation’s proposal for revisions to the Development Control Regulations, allowing fourteen feet high construction (Afternoon, August 29, 1989). The municipal corporation first made the proposal in the Draft Development Control Regulations in 1987.

⁶¹ The PMGP deducted overheads of Rs.400 per member and released the subsidy of Rs.5,000 per member. But they provided for only 76 members, claiming that they were able to verify the eligibility (based on proof of residence in Dharavi prior to 1985) of only those members.

collateral. HUDCO suggested three options. The first possibility was a guarantee from the state housing authority. Second, a land and building mortgage, which required the municipal corporation to lease the land to the cooperative and permit it to mortgage the lease of the land and the buildings to HUDCO. And the third option was a bank-guarantee, against a fixed-deposit, large enough to secure the loan.

The PMGP, however, refused to recommend to the state housing authority to provide the guarantee for the MCHS' loan. The PMGP argued that the MCHS and SPARC, and not the PMGP, were the project promoters and therefore, the PMGP had no control over the construction-process. SPARC then initiated a discussion with the municipal corporation of Mumbai to lease the land to the MCHS so that it could be mortgaged to HUDCO.

While discussions with the municipality proceeded, the construction work stopped due to the lack of funds. The private contractor was unwilling to finance the project and recover his expenses later. In 1991, SPARC decided to post a partial bank guarantee from its own funds and asked HUDCO to release the amount of the first loan installment. SPARC argued that it felt compelled to post the bank guarantee because of a sense of obligation towards the MCHS.⁶² SPARC also sensed that if it failed to complete the project, it would lose credibility not only among the Markandeya residents but also among other Dharavi residents who compared Markandeya with the other housing cooperatives working closely with the PMGP. Also, SPARC calculated that it did not need to post the guarantee for very long. It expected that the MCHS would soon receive the land-lease certificate from the municipal corporation, and would execute the mortgage agreement with HUDCO, enabling the release of SPARC's guarantee.

HUDCO released approximately three-fourths of the first loan installment to the MCHS with SPARC's partial bank-guarantee.⁶³ The loan was made directly to the MCHS, which was solely responsible for repayment. This allowed the building foundation-work to be completed by the middle of 1992. At that time, the MCHS and SPARC hired a new contractor (Sairam Construction) to complete the superstructure. The new contractor was the nephew of a member of the MCHS.

But the contractor was neither very experienced, nor well financed. Consequently, the project began to flounder again from the absence of funds.

⁶² SPARC agreed to post a guarantee of Rs.1,000,000, roughly one-fifth of the estimated total project cost.

⁶³ The total loan release for the 92 members at Markandeya was Rs.1,840,000. The first installment was Rs.1,071,000. HUDCO agreed to release Rs.750,000 to the MCHS, equal to 75% of SPARC's bank guarantee. HUDCO could not release more because the bank guarantee was also expected to secure future interest payments on the loan.

Local NGO, Global Connections

With the project almost five years old and very little progress on the building structure, SPARC became even more involved in its financing. In 1992, it provided a fairly significant bridge-loan from its own funds,⁶⁴ and later arranged for a complete bank-guarantee for the additional loan installments from HUDCO until the land-lease and mortgage was executed. To arrange this additional funding, SPARC approached a Belgian Trust, SELAVIP, which funds shelter-related projects.⁶⁵ SELAVIP agreed to provide a guarantee for US\$100,000 (approximately equal to 150 percent of the total loan) through the Bank of Liechtenstein.⁶⁶ SPARC presented this bank guarantee to the Bank of Baroda, which executed an agreement for the equivalent amount to HUDCO.

HUDCO accepted the guarantee and agreed to release the complete loan. HUDCO released the full amount of the first installment in December 1992. But, it also warned that no further amount would be loaned unless the pace of construction increased. SPARC was disappointed and argued that as a public agency created to assist low-income housing construction, HUDCO should be willing to accept more risks. But, HUDCO as a public sector organization being scrutinized closely for its performance in response to the pressure for privatization, was unwilling to bend any rules to help the MCHS and SPARC complete the project.

By the middle of 1993, only the first floor columns and part of the first floor ceiling-slab were completed. This slow progress concerned HUDCO and it asked for a new cost estimate before it would disburse any more loan installments. The new cost estimate, prepared by the MCHS, showed an increase of nearly 70 percent. As indicated in Table 3.3, this meant that either each beneficiary had to increase direct contributions three-fold or HUDCO had to increase its loan similarly. Faced with this situation, SPARC asked HUDCO to renegotiate a large loan, double the initially agreed amount, and proposed increasing the contribution of the beneficiaries to raise the balance. Needless to say, this created concern among the MCHS' members, who had to commit to double both their direct contribution and loan commitment.

⁶⁴ SPARC made an interest-free loan of Rs.200,000 to the cooperative.

⁶⁵ SELAVIP, *Servicio Latino Americano Asiatico Vivienda Popular*, had funded previous projects of SPARC.

⁶⁶ At the prevalent exchange rate, US\$100,000 was equivalent to Rs.2,760,000.

Table 3.3: Changing Estimates of Cost and Funding Sources for the Redevelopment of Markandeya (1988 and 1993, Rupees)

Source of Funds	1988	1993
Member's Contribution	20,000	40,000
HUDCO's Loan	20,000	40,000
Interest-free Loan from PMGP	10,000	-
PMGP's Subsidy	5,400	5,000
Total	55,400	85,000

Sources: (a) Technical Report, Purbi Architects, February 25, 1998

(b) Interview with the Managing Committee of the Markandeya Cooperative Housing Society, 1998

3.5 Conflicts Between SPARC and the Private Contractor

The Informal Cross-subsidy Scheme

In 1993, as the MCHS' managing committee felt the reluctance of the cooperative's members to double their financial commitments, the project-architect informed them that an experienced private contractor was willing to complete the project by investing his own funds.⁶⁷ The contractor offered to complete the project, within eighteen months, on a fixed-rate contract, at the same price as the previous contractor. But he asked the MCHS to revise down a number of the finish specifications to reduce the project's cost. The MCHS agreed to his suggestions. SPARC claims that it was not informed of the MCHS' decision to hire the new contractor. This is surprising, given that SPARC had been the principal negotiator for the MCHS in dealing with the PMGP, HUDCO, and other State agencies. Moreover, SPARC had invested significant resources in Markandeya, and was likely to be aware of such a critical issue as changing the project contractor.

But, why did the new contractor agree to risk his financial resources to complete the Markandeya project? The MCHS' managing committee's members and the contractor insist that he wanted an entry into the Dharavi property market and felt that such an entry would appear to be socially responsible if he completed the Markandeya project. Although this interpretation may be a partially correct, a more probable and complete explanation is that the contractor was aware

⁶⁷ In the design phase both Sharad Mahajan and Neeta Bhatt worked on the Markandeya project. But for the implementation phase Sharad Majahan was the project-architect. He introduced Shayam Raghoji Patel (Shayambhai), proprietor of Parth Constructions to the MCHS.

of the new government plan, the Slum Redevelopment Scheme (SRD), introduced in 1991.⁶⁸ This scheme was designed explicitly to encourage private sector participation in low-income housing delivery and was concurrent with larger, nationwide moves at the time “to liberalize” the economy by reducing various controls that discouraged private investment. According to the SRD, private developers as well as housing cooperatives could be promoters in redeveloping slums, as long as slum dwellers received housing units of 180-225 square feet (17-21 sq.m) and did not pay more than Rs.15,000 per household. Developers were allowed to profit up to 25 percent on their investment by building additional units to sell at market-price to buyers from outside the community. Maximum Floor Area Ratio for each site (FAR) was limited to 2.5 (MCGB, 1992).

The state government set up a special committee, the Slum Redevelopment Committee, to approve project proposals.⁶⁹ The committee had the authority to alter old PMGP slum reconstruction projects, such as Markandeya, to fit the new stipulations. Private developers could request such alterations as long as their requests were supported by the housing cooperatives. The new contractor at Markandeya did not raise the possibility of applying for SRD permission at the outset, although his contract with the MCHS indicates that he intended to build nearly 12 percent more units than previously planned.⁷⁰

SPARC claims that they came to learn about the plan to build additional units only later from other sources and from the contract. When SPARC asked the MCHS to explain why additional units were to be built, the managing committee explained that it was an opportunity to cross-subsidize the cost to the cooperative’s members who were reluctant to take on a large debt to HUDCO. The committee also claimed that it was not sure whether HUDCO would release the negotiated larger loan. Although the MCHS had signed a new agreement with HUDCO, based on a new cost estimate, it required new collateral, either another bank guarantee, which SPARC did not want to provide, or a mortgage on the land that the municipal corporation was yet to lease.

⁶⁸ Though the state government announced the SRD in February 1991 (Times of India, February 23, 1991), the municipal corporation elaborated implementation guidelines in April 1992 (MCGB, 1992).

⁶⁹ The SRD Committee was a decentralized three-member group. The Municipal Commissioner of Greater Bombay headed the committee. The chief-executive officer of the state housing authority and the Additional Collector of Slums (Government of Maharashtra) assisted him. The committee approved projects and determined the maximum allowed FAR (up to 2.5) on the basis of the profit-ceiling of 25 percent.

⁷⁰ It was agreed to build eleven additional units. Source: Agreement between Parth Constructions and the Markandeya Cooperative Housing Society, September 08, 1993.

Reluctance to Mortgage Land

Although in 1994, the municipal corporation did eventually provide a 30-year land-lease to the MCHS, the revised HUDCO loan did not come through, in part because the MCHS was reluctant to mortgage the land. Initially, after receiving the land-lease, the MCHS did approach HUDCO at SPARC's urging. HUDCO asked the MCHS to provide an income tax clearance certificate for the cooperative, as required by law. But the MCHS could not provide such a certificate because the cooperative's accounts were incomplete and had not been audited for a while. The managing committee claimed that the MCHS' treasurer was sick for about a year, so the records were incomplete. To SPARC's dismay, when HUDCO refused to proceed with the mortgage without the certificate, the MCHS refused to pursue the option. SPARC blamed the contractor and the architect who, SPARC assumed, conspired to make the MCHS rely on the contractor's own funds, so that the contractor could have more say in structuring the contract for cross-subsidy necessary to finance the remaining part of the project.

Irregularities in the Sale of Extra Units

Sometime in 1994, the MCHS transferred the rights to sell the additional units to the contractor. The contractor was to count the sale proceeds as past payments from the MCHS, which he did. The amount he indicated as the sale price, however, was apparently far below what he must have received from the buyers.⁷¹ SPARC noted this irregularity and assumed that the contractor shared the unaccounted amount with the members of the MCHS' managing committee. But, apparently SPARC was helpless. Moreover, the MCHS and the contractor agreed to jointly apply for permission to alter Markandeya's project status under the state government's Slum Redevelopment Scheme (SRD).

Taking Advantage of the Development Potential of Land: Markandeya as a Slum Redevelopment Scheme (SRD) Project

In 1995, when the MCHS and the new contractor applied for permission to develop Markandeya as a SRD project, the property prices in Dharavi, as in other parts of Mumbai, had increased to an unprecedented level. The potential for cross-subsidy was at an all time high. The contractor offered to become the developer of Markandeya and complete the project without any

⁷¹ In Mumbai, as in most Indian cities, property transactions are usually made partially in declared payments (white, i.e., check payments) and partially in undeclared payments (black, i.e., cash payments).

further loan from HUDCO. He proposed to repay the loan already received from HUDCO, reimburse SPARC for the bridge-loan it provided, and return to the PMGP, the subsidy granted so far. The cooperative's members would each pay Rs.40,000 for a finished unit with a market value that was about 12 to 15 times more. In return, the contractor/developer would be able to sell 68 units (nearly 70 percent more units than originally planned) in the free market, after transferring 18 additional units to the PMGP or the state housing authority. This scheme could not be carried out if the building was restricted to three floors, as initially proposed by SPARC. Now the buildings was to be five floors high, and the units in the top two floors were to be ten feet high, not fourteen feet, as originally envisioned in the plan.⁷²

Much to SPARC's disappointment, the MCHS strongly supported the developer's plan, and it was approved. According to the new plan, MCHS did not have to mortgage the land and the building or contribute more. But SPARC pointed out that the developer should return 60 percent of the beneficiaries contribution because the SRD capped member's contribution at Rs.15,000 per unit.

The developer argued back that there had been cost over-runs because of past delays and mismanagement prior to his involvement in the project. Also, the beneficiaries were to receive fourteen feet high units while the official scheme stipulated only ten feet high units. Nevertheless, the developer eventually submitted a revised application for SRD approval in which he proposed that he could deliver the units free to the beneficiaries if he could sell the 18 units he was supposed to deliver to the PMGP.⁷³ The Slum Redevelopment Scheme Committee, created to review proposals to the scheme, approved this application.

More Policy Changes, More Profit: Markandeya as a Slum Rehabilitation Scheme (SRS) Project

In 1995, the Shiv Sena, the opposition party, won the state elections and replaced the 1991 scheme, which was already market friendly, with its new Slum Rehabilitation Scheme (SRS). The new scheme removed the previous cap of twenty-five percent on profits and introduced the concept of Transfer of Development Rights (TDR). In return, the developers were to give "free-housing" to slum dwellers. The SRS created new opportunities for the developer at Markandeya. Since the foundation of the building was already constructed, it made it impossible for the developer to add more floors to utilize the maximum allowed FAR. But he could now

The proportion of white and black varies from city to city. In Mumbai the proportion at that time was 1:1. It appears that the contractor was only disclosing the amount received through declared payments.

⁷² The top two floors had to be restricted to a ten feet height to reduce the additional load on the structure.

transfer that right to build to other parts of the city with higher property values. For the developer this was an extremely lucrative opportunity. Not surprisingly, he filed a proposal to convert Markandeya, one more time, this time to the Slum Rehabilitation Scheme (SRS). To ensure support from the MCHS, he now promised to pay the interest payment on the HUDCO loan (previously he had offered to pay only the principal), and he offered to pay SPARC interest on the bridge-loan it had provided earlier. The contractor also agreed to contribute towards future maintenance expenditures, as required by the new scheme.

However, the developer refused to return the contributions made by the cooperative's members, despite SPARC's demands, and despite the new scheme stipulating "free-housing." The MCHS' members and managing committee did not pressure him with such a demand. They decided to postpone a final understanding with the developer till he completed the construction of their housing units. Some members accepted the contractor's argument that the new scheme stipulated ten feet high units, while they were to receive fourteen feet high units with lofts, and that they had to pay for the extra cost. Most were tired and anxious to move in to their new houses. In any event, they were unwilling to disrupt the developer's plan which had finally moved the project ahead, breaking the long impasse.

3.6 Uncivil Society: Distrust between SPARC and the Community

Suspicion on the Managing Committee

Not surprisingly, SPARC had begun to distrust the MCHS' motives. First, SPARC was ambivalent when the MCHS decided to hire Shayambhai Patel as the new contractor at the project architect's advice. But the NGO was eager to see the project progress. It recognized the new contractor's better skills, and thought that he could self-finance the project to completion. But, SPARC was also aware that the new contractor could inject a market mentality in the project and undermine SPARC's role in the project. After all, SPARC's initial proposal to redevelop Dharavi explicitly stated that private for-profit actors were not to be involved. This was based on the fear that an alliance of private contractors and government officials would encourage bribery, increasing the project-cost and reducing the quality of construction. SPARC had not thought at that time that an alliance of private developers and community leaders could be equally detrimental for the project.

⁷³ Source: Annexure II, revised Slum Redevelopment Scheme application, October 31, 1996.

When the MCHS signed a contract with the new contractor to build extra units, SPARC realized that its influence on the MCHS' managing committee was being challenged. For the first time, SPARC noted that there had been no elections held to form the managing committee. SPARC had initially worked well, with only two key members of the managing committee.⁷⁴ The rest of the members were "reluctant volunteers" who had to be cajoled to join in order to meet government requirements. Most residents of Markandeya trusted the local politician who headed the managing committee, and were reluctant to spend time and effort in self-managing the project. This had not bothered SPARC earlier, but its adverse effect became increasingly visible as the new contractor was able to convince the managing committee to approve all his requests.

When the managing committee refused to mortgage the land-lease, for which SPARC had worked very hard, SPARC, was hurt financially. By mortgaging the land-lease to HUDCO, SPARC had hoped that it could withdraw the bank guarantee it had provided with the help of SELAVIP, the Belgian Trust. SPARC realized that although the private developer had offered to repay HUDCO, it would be difficult to hold him liable if the loan was not repaid. The loan was from HUDCO to the MCHS, which alone was responsible for repaying it. But the loan was guaranteed by SELAVIP's funds. If the loan was not repaid and HUDCO revoked the guarantee, SPARC would be obliged to compensate SELAVIP. SPARC was frustrated that the private developer and the MCHS' managing committee and members were happy to complete the project without much concern about SPARC's financial liability.

⁷⁴ SPARC worked with the Chairman of the MCHS, S. Challaih and the Secretary, Geeta Naik.

Figure 3.3: The Markandeya Project, late 1997



To add to SPARC's disappointment, the MCHS' members voted unanimously to add more floors to the original low-rise design for which SPARC had fought so hard against the government (Figure 3.2). Although there is no evidence, SPARC claimed that the developer and the managing committee were colluding to share profits from the sale of the additional units, ignoring the adverse effect on the general quality of the houses being built.⁷⁵ But, there was no evident protest from Markandeya's members against the decision to add additional floors. On the contrary, the developer established a good rapport with the residents, who gratefully acknowledge his involvement in the project. It seems that Markandeya's residents were not aware, initially, of the real estate return their settlement could generate. While working with SPARC earlier to articulate their rights and needs, the residents did not fully recognize that they were sitting on a gold mine, which if properly developed, could generate enormous profits. The private developer opened the MCHS' eyes to this possibility. True, he himself benefited from this opportunity, even to some extent opportunistically, but he also demonstrated to the residents that they could benefit much more from the project than what SPARC had promised them.⁷⁶

SPARC on the other hand was legitimately concerned about its financial liability in the project. Someone had to repay HUDCO. SPARC tried to force the private developer to pay. When it learned that the managing committee had agreed to the contractor's proposal to convert Markandeya into an SRS project, SPARC pointed out to Markandeya's members that according to the project-guidelines for the SRS, the private developer was expected to provide them "free-housing." But the members were paying Rs.35,000 per household to the contractor.⁷⁷ SPARC was convinced that the only way the managing committee could accept this unfair proposal was because the developer had bribed them. SPARC demanded that the managing committee explain its rationale for signing off on the contractor's proposal. SPARC also approached the committee created to approve SRS proposals and asked them to ensure that 70 percent of the cooperative's members, as required by the SRS's rules, supported the decision not to have "free-housing." Consequently in 1997, the state government put Markandeya's application for SRS status on hold.

⁷⁵ Because of the extra units and floors built at Markandeya, the courtyard does not receive enough natural light and has become relatively dark.

⁷⁶ Of course, the MCHS' members were also aware of other redevelopment projects in Dharavi and Mumbai, where the slum dwellers were financially benefiting from the development potential of their land.

⁷⁷ Though all members were supposed to have contributed Rs.40,000 to the project, the actual payments varied from household to household. Together, the MCHS had paid Rs.3,168,700. This averages to about Rs.35,000 per member.

Figure 3.4: Self-contained Toilets in the MCHS



Ten Years for New Houses

Meanwhile, the developer continued with construction work on the project. He decided to add individual toilets to the units on the upper floors that he was authorized to sell in the free market. The existing plumbing for the common toilets was inadequate, so the developer decided to add new plumbing lines. This provided an opportunity for the MCHS' members to have attached toilets in their units as well. When the project was initially planned, SPARC had opposed the provision of separate toilets for each unit on the ground that it would increase the cost and make the units attractive for gentrification. Much to SPARC's dismay, nearly half of the MCHS' members decided to have individual toilets and paid for them in full to the developer (Figure 3.4).

The developer was keen to obtain the approval to convert Markandeya to an SRS project so that he could capitalize on the TDR from the project. But the rules stipulated that all the MCHS' members had to occupy their houses before the TDR could be exercised. So, the developer decided to temporarily halt the construction of the free-sale units and proceeded to complete the units for the members. At the beginning of 1998, nearly ten years after the Markandeya project was started, the cooperative's members finally started moving into their newly built units. In selecting their units the MCHS' members again surprised SPARC. The members preferred to choose units on the upper floors, and not the first floor. According to the MCHS' managing committee's members, low-income households, much like other income groups, may prefer the protection from pollution, mosquitoes, and noise offered by upper floor units.

The Bank Guarantee under Threat

However, Markandeya's story did not end with the MCHS' members moving into their new homes. A major dispute arose among the developer, SPARC, and the MCHS regarding who was to pay whom for what. After signing the agreement with the developer for the SRD, the MCHS had stopped all loan repayments to HUDCO. The developer did not pay HUDCO either. After sending repeated notices and demands to MCHS, the borrower, HUDCO decided to recall the loan. In September 1997, HUDCO threatened to invoke the international bank guarantee SPARC had provided with SELAVIP's funds.⁷⁸

⁷⁸ According to HUDCO, the MCHS owed the corporation Rs.2,422,577, the value of the unamortized loan and the due interest.

Arbitration by the State

Desperate, SPARC took three initiatives to resolve this crisis. First it requested HUDCO for a three-month grace period. Second it took the land-lease documents from the managing committee and decided to hold on to them. And third, it decided to approach the newly created authority that was instituted to sanction and monitor all slum redevelopment projects under the Slum Rehabilitation Scheme (SRS). The Slum Rehabilitation Authority (SRA) was created at the recommendation of a special committee appointed by the new government to help revise the earlier SRD scheme (Afzulpurkar, 1995).⁷⁹ The committee's objective was to develop guidelines to make redevelopment easier and attractive to implement. Both the special committee, and the authority created on the basis of its recommendation (SRA) included high-level government officials, representatives from the private sector, and civil society representatives. Interestingly, SPARC's Director, Sheela Patel, was asked to serve both on the special committee and, later, as a member of the SRA (Afzulpurkar, 1995; Government of Maharashtra, 1997). As a committee member, Sheela Patel had fully endorsed the recommendation that speedy implementation of the SRS required the creation of a centralized institution which could adjudicate disputes among the various parties involved in slum redevelopment (Afzulpurkar, 1995). When the SRA was created to serve this purpose, and Sheela Patel was asked to be a member, the conflicts in the Markandeya project had not as yet reached a peak. When the conflict did peak later, it was not surprising that SPARC asked the SRA to intervene.

Ironically, at that time SRA's chief executive officer (CEO) was the same person who once headed the now defunct PMGP; the public sector entity created in 1985 to implement the original Dharavi redevelopment plan!⁸⁰ As early as 1986, SPARC had sparred with PMGP, first for the development approach in Dharavi and later for the development strategy and control at Markandeya. Hence, the CEO was quite familiar with the Markandeya case. He proposed to resolve all disputes, by designating Markandeya's redevelopment as "a joint venture" with the private developer, the MCHS and SPARC as partners. The value of each partner's share was arrived by calculating its direct financial contribution to the project. The developer was asked to pay HUDCO the due arrears, and transfer ten units to the MCHS and SPARC as their share of the free-sale component. The proceeds from the sale of these units were to be deposited in a bank

⁷⁹ The special committee was set-up under the leadership of the Chief Secretary of the state, Dinesh Afzulpurkar and had eighteen other members.

⁸⁰ Gautam Chatterji was the Director of the PMGP from 1988-1991 and was appointed the CEO of the SRA in 1997.

account, jointly held by the cooperative and the NGO.⁸¹ The sale-proceeds were to be first used to retire HUDCO's loan. As an added precaution, SPARC continued to hold the land-lease documents issued by the municipal corporation to the MCHS.

SPARC's New Role as a Developer

While the SRA was resolving the Markandeya dispute, SPARC began working with another cooperative in Dharavi in a new SRS project. This time SPARC was to be the developer.⁸² As the developer, SPARC has arranged financing from the American multinational bank, CitiBank; an NGO from the United Kingdom, Homeless International; and a Dutch NGO, Bilance.⁸³ To ensure the speedy implementation of the project, SPARC has centralized the decision-making in the planning and managing the project.⁸⁴ Unlike at Markandeya, the cooperative is to play a fairly limited role. SPARC has hired a new architect,⁸⁵ but is handling itself most aspects of the project, including negotiating loans, supervising the contractor and managing non-technical aspects. When the cooperative's consent is necessary, SPARC deals only with the chief promoter of the cooperative (P.S. Shanmuganand), who had invited SPARC to become the developer for the area.

SPARC claims that it is keen to ensure that this project is more successful and is implemented faster than the Markandeya project. It wants to "disprove its critics."⁸⁶ To expedite the project efficiently, SPARC has, like any private developer, reduced the beneficiaries' participation in the project to the minimum. But the beneficiaries are not complaining, as they seem to recognize that they may receive their new housing much faster in this manner.

⁸¹ This arbitration meeting was held at the SRA on August 28, 1998.

⁸² SPARC is the developing agency for the Rajiv-Indira CHS. The cooperative approached SPARC in 1996. Both parties signed a contract in 1997. Construction work started in July 1998 and was expected to be complete by the middle of 2000.

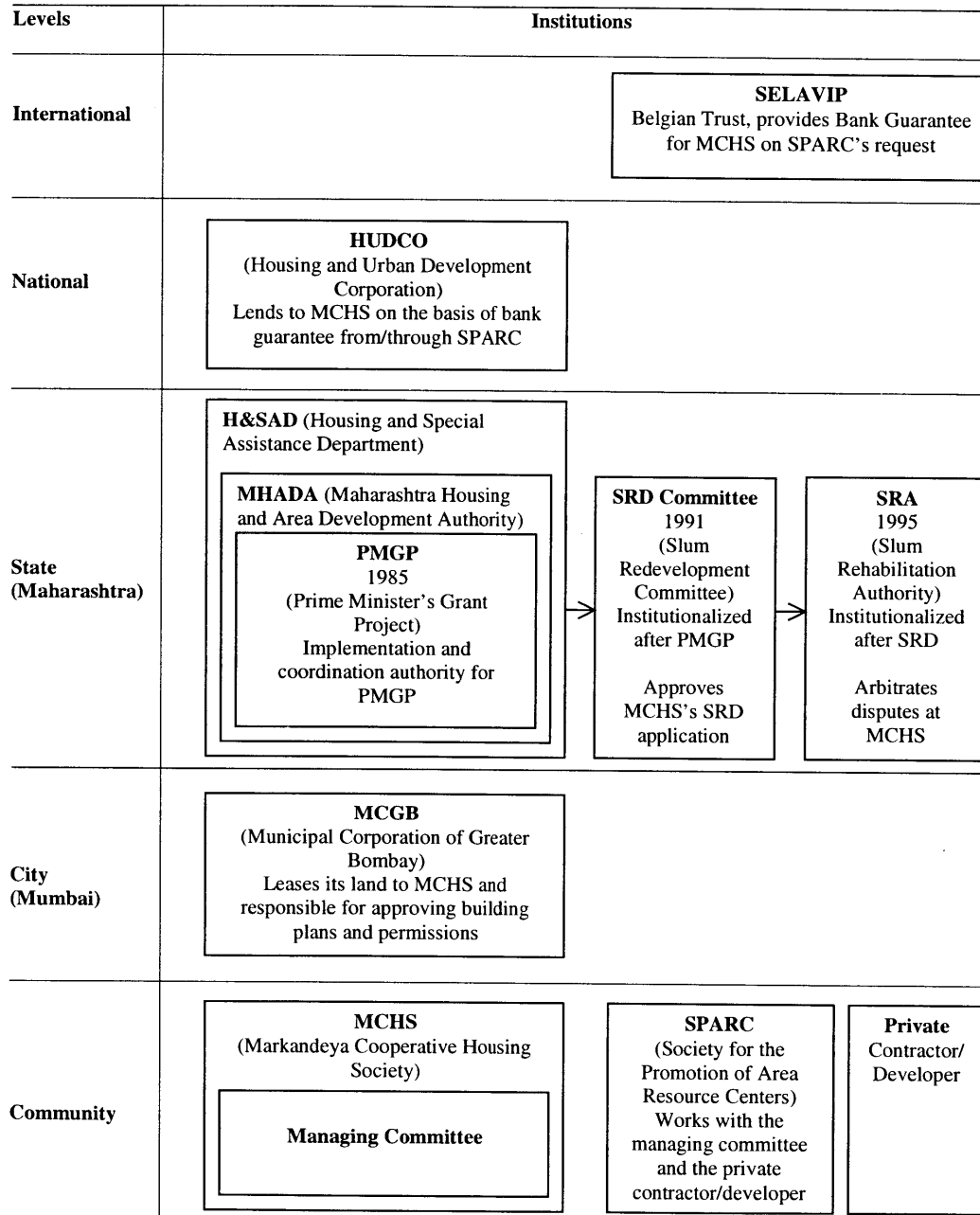
⁸³ CitiBank is releasing the construction loan for the project. The loan is secured by a bank guarantee provided by Homeless International and a pre-sale commitment funded by Bilance. SPARC is also receiving a grant from CitiBank. This grant, equivalent to 40 percent of the construction cost, also helps to secure the loan.

⁸⁴ SPARC claims that SPARC, the NSDF and Mahila Milan (Women's cooperatives organized by SPARC) will check each other to maintain accountability. This is highly dubious, given the close and overlapping relationship between the organizations.

⁸⁵ SPARC has commissioned Suchita Chogle of Pansare and Chogle Associates as the project-architect. The engineer and urbanist Shirish Patel, introduced Suchita to SPARC. Shirish Patel is also a member of the SRA.

⁸⁶ Interview with Sheela Patel, Director, SPARC, 1998.

Figure 3.5: Institutional Diagram of the Markandeya Case



3.7 Reexamining NGOs in Housing Delivery

Based on the case of the MCHS in the preceding pages, this section examines the role of NGOs in housing delivery in the context of the claims concerning NGOs as benevolent intermediaries. The intention here is not to be unnecessarily critical of the role played by SPARC at Markandeya but to critically assess that role.

It should be recognized that the Markandeya experience highlights that there are at least three positive accomplishments of SPARC in this story. First, SPARC's census of Dharavi in 1987 was a significant contribution that brought to the attention the extent of the hardship that a majority of Dharavi's population would face if the PMGP proceeded with its original plans to redevelop Dharavi. Second, SPARC was instrumental in Markandeya's members receiving larger housing units. And third, SPARC did support the MCHS financially. Initially through a partial bank-guarantee from its funds and later a complete bank guarantee through its international network.

However, the Markandeya case also brings to the forefront some less attractive aspects of NGOs. These aspects are contrary to some of the naively benign assumptions in the literature on NGOs. The findings of this case illustrate that it is necessary to be more circumspect about the role of NGOs.

NGOs and Community Preferences

The key assumption that the Markandeya case challenges is that NGOs are neutral intermediaries without any institutional interests of their own. Since they are not expected to have any interests or agendas, there is no concern regarding NGOs coming into conflict with the communities they work with to empower. However, it should be obvious that this assumption is problematic because "empowerment" can mean many different things to different actors at different points in time.

In Dharavi, in the mid-eighties, empowerment for the slum dwellers came from avoiding resettlement in a distant location. By 1987, this was replaced by empowerment that came from being selected for the Slum Reconstruction Scheme. The most significant empowerment, however, was a result of occupying the new housing. But importantly, for this new housing to be truly empowering, it had to come without concerns of loan-liability or future maintenance costs that could result in beneficiaries being evicted. This risk of displacement had the potential of turning an act of empowerment to a nightmare of vulnerability. Not surprisingly, to reduce their financial contribution to the project and eliminate the liabilities of future expenditure, the MCHS

agreed to the private developer's proposal to add more floors and develop the Markandeya project as an SRS project.

SPARC, however, felt that the MCHS was losing its empowerment by surrendering its control of the project to a for-profit actor. In other words, dis-empowering market values were subverting the community's achievement. SPARC was also keen that the MCHS establish a precedence of housing finance agencies lending to slum dwellers' cooperatives on the basis of slum-encumbered land as collateral. This precedence would empower other slum dwellers' cooperatives in Dharavi and probably in other parts of the country.

Again, not surprisingly, the MCHS' members were unconcerned about the mortgage precedence and the potential empowerment of other cooperatives of slum dwellers. Certainly, not at the cost of their own increased vulnerability. The MCHS' members were extremely rational in their behavior. They were rational in their decision to add more floors to the Markandeya project. And they were rational in their decision to add attached toilets to their housing units. Attached toilets meant a more valuable real estate asset.

However, their decision to add toilets implied that SPARC was not a hundred percent on the mark in promoting the idea of shared toilets. It is not that SPARC had failed to involve the community in decision-making and had wrongly identified the preferences of the MCHS but more likely that some members' preferences had changed. SPARC's efforts at community participation were further thwarted by decentralized corruption, because the community leaders were opportunistic and were tempted to benefit from the high real estate values. To deal with the potential of such corruption in its subsequent project, the Rajiv-Indira CHS (RICHS), SPARC did not broaden community participation. That would have been much more expensive, particularly in terms of time. Instead, SPARC centralized the process of decision-making to restrict the opportunities for corruption.

This centralization of power is likely to help SPARC implement the RICHS project more efficiently. In other words, better housing delivery. However, it may be without all the rhetorical good qualities - such as empowerment through participation - that NGO administered projects are supposed to embody.

NGOs, More Like the Market and the State

Part of the rhetoric about NGOs is how institutionally distinct they are from the market-agents or the State agencies. SPARC's experience suggests that this conception is misleading. In SPARC's new project, the RICHS, SPARC is the developer and like any private developer is

concerned about project costs and project profit. Not surprisingly, SPARC has minimized the participation of beneficiaries in the implementation of the project.

Equally interesting is SPARC's involvement, first in the Afzulpurkar Committee and later in the Slum Rehabilitation Authority (SRA). Thus SPARC, to protect and advance its institutional interests and agenda is quite deliberately working with State agencies as a partner-member. In other words, it is attempting to control the State institutions to influence the direction of future State policies.

In summary, what emerges from an analysis of SPARC is a much more complex, richer and overlapping institutional arrangement. Such an institution, though different from the assumed simplistic model of NGOs is not necessarily inferior or lacking in its capacity for social achievement. However, it is different and the consequences of its departure from the norm are unclear. Its performance ought to be clearly evaluated by future research.

NGOs and Cooperative Autonomy

Normatively, NGOs have been advised to cooperate with State agencies. The theoretical position from which such advice follows is that NGOs are institutionally distinct from the State and have different comparative advantages (Cernea, 1988). For example, the government is supposed to have the bureaucratic and financial resources to implement large-scale projects and policies. And, the strength of NGOs is supposedly in their ability to ensure beneficiaries' commitment and participation.

However, inter-institutional arrangements, as this chapter reveals, are likely to be more complex. More than mere cooperation, the relation is more likely to be dual and contradictory. Or what Bish Sanyal calls, cooperative autonomy – dialectic of cooperation and autonomy between the government and NGOs (1994). Thus, the strategies of one influence the strategies of the other.

Does SPARC follow a model of cooperative autonomy? On the surface the answer seems to be yes. However, this needs to be more closely examined. To answer this question fairly, the unit of analysis of research has to be the NGO (and the State), not a project in which the NGO was involved. There are a number of questions that follow. How does SPARC balance its institutional interests with its social agenda? How does SPARC's relationship with the government impact the government's development agenda? And conversely, what is the impact of State policies on SPARC?

Markandeya's case illustrates that the State has an important role to play in the success of NGOs and in NGO administered projects. The important role of the State in the context of decentralization is further highlighted in the next section.

3.8 Decentralization and Centralization in Housing Delivery

The current policy focus in housing provision in developing countries is on enabling (UNCHS, 1990; & World Bank, 1993). According to the conventional wisdom, decentralization is an important component of the enabling strategy. Markets and civil society are seen as key actors in housing production. The policy emphasis on decentralization is not limited to the housing field but is a more general advice promoted by the neo-liberal and the neo-populist literature in the field of development.

Interestingly, in the promotion of decentralization, the unpleasant possibility of social conflict is rarely discussed. But contrary to the assumption that decentralization is an unproblematic process, the evidence in this chapter indicates that decentralization in housing provision can lead to conflicts among various actors on how to share the benefits. Such conflicts are more likely in contexts where high value property assets are being created and where the property rights to the new assets are ambiguous or difficult to enforce. This is not to suggest that conflicts are always unproductive and should be avoided at all costs. But that there should be institutional mechanisms to ensure that conflicts can be resolved expeditiously.

Mumbai's context of slum redevelopment represents such a situation. At the city-level, the private sector and civil society participants in the Afzulpurkar committee, instituted to advise the state government on how to implement slum redevelopment, demanded for a centralized authority to resolve disputes that were likely in redevelopment. As a consequence of this advice, the state government established the Slum Rehabilitation Authority (SRA). At the case-level (MCHS), the different decentralized actors (the cooperative, the NGO, the private developer) demanded that the SRA, the State agency, arbitrate their dispute and resolve the conflict at Markandeya.

These demands for centralization and the involvement of central actors are surprising from the perspective of the one-sided literature on decentralization. However, they were absolutely rational demands from the decentralized actors in Mumbai. In high-value property markets, time is of the essence. It is natural for participants in such property markets to demand for fast conflict resolution. Furthermore, speed is of the essence in property markets. So

participants are likely to demand for faster approval-procedures and more certainty, even if this implies a centralized institutional arrangement.

Thus a more coherent housing policy is not likely to be achieved through simple centralization or simple decentralization. On the contrary, housing policy in places like Mumbai must promote centralization as well as decentralization to enable the provision of housing for low-income groups.

Chapter 4: Tenure Legalization or Demolition and Redevelopment

				*SPARC's architect prepares plan with 14 feet high units		
*PMGP announced	*Charles Correa heads committee on Dharavi	*PMGP elaborates plan; selects Rajendra Prasad Nagar for redev.	*MCHS decides to reconstruct low-rise housing with SPARC's support	*MCGB approves plan *MCHS' construction starts		*FAR dispute *MCHS' plan revised *SRD introduced
1985	1986	1987	1988	1989	1990	1991
1992	1993	1994	1995	1996	1997	1998
*Constr. of foundation completed *Super-structure contractor hired	*First floor columns of project completed *New super-structure contractor hired	*MCHS agrees to additional units to transfer to contractor/ developer in lieu of payment	*MCHS agrees to developer's proposal to add more floors *SRD application submitted for MCHS *SRS introduced	* MCHS and contractor/ developer keen to transfer to SRS	*Developer provides internal toilets to MCHS' members *Constr. on rehab. component completed	*MCHS members move into new houses *Free-sale constr. continues

Figure 4.1: Timeline of Key Physical Events in the Markandeya Case

4.1 Introduction

This chapter elaborates the case of the Markandeya Cooperative Housing Society (MCHS) in Dharavi from a physical perspective. It focuses on the logic of the slum redevelopment strategy in particular the reasons for slum dwellers to be interested in this strategy. The chapter contrasts the slum redevelopment strategy with the conventional strategy of slum upgrading through tenure legalization. Slum upgrading is predicated on a simple, positive causal relationship between secure private property rights for squatters leading to housing improvement. But the evidence in this chapter suggests that there is a more complex relationship among property rights, property values, and the physical structure of properties and housing improvement processes. This interpretation of complexity also underlines the potential of supply-side initiatives and suggests that the State may have a more involved role to play in housing improvement because of its ability to change property rights through amendments in land development regulations. Hence, this physical story of slum redevelopment in Mumbai also employs a lens of “demand-driven and supply-driven development” to analyze the institutional role of the State in innovating housing provision strategies for low-income groups.

Conventional literature promotes “slum upgrading” as the housing improvement strategy preferred by beneficiaries. Typically, the slum upgrading strategy focuses exclusively on private property rights and the legalization of such rights. It is premised on the logic of positive legal and economic causality, i.e, security of tenure encourages individual residents to invest in their houses, as they can be certain of the safety of their investments. It advises policy-makers to provide squatters with secure property rights, to allow individual property holders to consolidate and improve their living environments. However, in Mumbai, in the mid-eighties, when the Maharashtra state government initiated the Slum Upgrading Program (SUP) with the assistance of the World Bank, the demand from slum dwellers was far less than what policy-makers had expected. When the program was closed in 1994, approximately 22,000 houses had been legalized (World Bank, 1997).

In contrast, the state government’s slum redevelopment strategy attracted a more positive response from the slum dwellers. By August 1998, 367 proposals to redevelop the slums of 75,689 households of slum dwellers had been approved by the state government (SRA, 1998). These proposals were supported by the slum dwellers as they expected to receive more valuable housing through the slum redevelopment process.

The key finding in this chapter is that the conventional expectation of slum dwellers always supporting slum upgrading may be flawed because of the strategy’s exclusive focus on

private property rights and security of tenure without considering how the new legalized property rights are likely to be influenced by the existing land development regulations in the city, the physical structure of slum settlements and the property values in the city.

A possible explanation for this oversight of an undifferentiated focus on property rights in slum upgrading is that the strategy is based on problematic assumptions. The literature appears to assume that formal property rights are unlimited, low-income settlements are regularly laid out, these settlements include reasonably large property-lots and the land values in the settlements are not significant.

In contrast, in Mumbai, the legally permitted intensity of development is very low. Furthermore, many slum dwellers have small, completely built-up property-lots in settlements with irregular layouts in which it is difficult to provide even basic infrastructure and amenities. However, these settlements can be well located in the city and have high development potential. In such settlements, even with secure but regular development rights, the physical structure of their properties can make it difficult for the slum dwellers to capitalize on the potentially high land values, without some form of change in the structure of their properties through land assembly or land readjustment. Moreover, the city's slum dwellers are likely to have already built on their properties floor areas equal to, what legal development rights allow. In Mumbai, the possibility of creating property assets that have a larger area, are more marketable and have higher property values, through the slum redevelopment strategy, provides the incentive for the slum dwellers to act collectively to redevelop their properties. This implies that housing investment decisions and improvement processes can be much more complex than assumed in the conventional wisdom.

Thus, the evidence suggests that a balanced view of housing improvement processes demands recognition of all three conditions - the property rights, the property values and the property structures (the physical structure of properties) and their impact on each other. The interplay between the three can significantly impact the behavior of various actors in the housing markets, even leading to the demand for demolition and redevelopment as opposed to in-situ upgrading. Moreover, this interpretation of complexity also suggests that governments may have a more involved role to play in housing improvement processes.

The second argument elaborates on this need for a more involved and complex role of the State. In Mumbai, the slum redevelopment strategy, despite being an initiative of the state government, has significant support among the city's slum dwellers. What is interesting about the strategy is that it suggests that because of the State's ability to intervene in land development

regulations, supply-side initiatives can have a unique advantage of exceeding what potential beneficiaries may regard as feasible in land development. Yet, the success of supply-driven strategies may depend on how closely the strategies provide for demand-side preferences. In the case of slum redevelopment, the strategy acknowledges the slum dwellers' dislike of permanent relocation and their preference for more valuable housing.

To elaborate these arguments, the main body of this chapter starts with a literature review focused on the slum upgrading strategy. The main intention is to identify how the literature discusses issues of property rights, property values and the physical structure of properties. Next, I describe the story of Markandeya's redevelopment in three parts. First, I explain the physical structure of the properties in the Dharavi slum, in particular in the Markandeya area. Second, I describe the changes in property rights (land development regulations) and their impact on the physical structure of the Markandeya redevelopment. And third, I discuss how changes in the property structure allow the slum dwellers to capture a share of the increase in potential property values. The subsequent two sections elaborate on the relevance of the findings from this case for housing provision and improvement strategies and the current conventional wisdom of the need for less government involvement in these strategies.

4.2 Literature Review: Tenure Legalization – Property Rights, Property Structures and Property Values

From Slum Clearance to Slum Upgrading and Secure Property Rights

With the Modern Movement still strong around the middle of the twentieth century, many developed countries launched urban renewal programs.⁸⁷ Similarly the developing countries initiated slum clearance programs. One of Modernism's strongest tenets in architecture and urban planning was its disdain for housing conditions within the slums and the belief that the slums had to be demolished and replaced with new, modern housing (Colquhoun, 1989; Rowe, 1993). However, in both the rich countries and in the poor countries, by and large, these redevelopment programs led to a loss in the total number of housing units (Abrams, 1964).

⁸⁷ These were not the first urban rebuilding programs. Much earlier, Baron Haussmann had started the reconstruction of Paris under Napoleon III. However, the Modernist urban renewal and slum clearance programs were distinct because they were not limited to any single city.

By the sixties, these Modernist housing strategies were being strongly criticized for aggravating the housing shortage (Abrams, 1964),⁸⁸ for their flawed belief in physical determinism (Jacobs, 1961; & Perlman, 1976) and in their assumptions about the physical preferences of beneficiaries (Jacobs, 1961; Gans, 1962; & Turner, 1968b). Partly because of the criticism and in part because of the lack of financial resources, the redevelopment ideas became less prominent in housing strategy. Instead policy focus shifted to programs of housing improvement within existing settlements.

In developing countries, the World Bank promoted a strategy of tenure legalization, through its Slum Upgrading Programs. These programs were aimed at transforming squatters into legal owners (Dunkerley, 1983). Subsequently, many researchers associated with the Bank argued that there is a positive causality between titling, security of tenure and investment in housing (Jimenez, 1983; 1984; Friedman, Jimenez and Mayo, 1988; & Malpezzi and Mayo, 1989). Critics, however, have questioned the logic of the World Bank's tenure legalization strategy and have argued that perceived security of tenure through the passage of time (Doebele, 1983), infrastructure provision (Strassman, 1984) and the availability of housing finance (Mehta and Mehta, 1991) may be more important in housing improvement.

The debates in the literature have focused on whether or not secure property rights are necessary. Surprisingly, there is very little discussion about what kind of formal property rights are provided through the legalization process and what is the impact of different bundles of rights on housing improvement. The literature appears to treat the legalization of property rights as a guarantee against eviction and a right to develop legalized properties in an unrestricted, *laissez faire* manner. Thus property rights are treated in this extremely polarized manner, either slum dwellers have no property rights and therefore have complete insecurity, or they have legal property rights and therefore an unrestrained right to develop their properties in any possible manner.

However, property rights, in particular development rights in land, are much more complex and sophisticatedly defined instruments. Property rights can vary in at least three fundamental ways. First, the amount of area that can be built on a site. Second, the kind of land use that is permitted on a site. And third the ownership of the rights, i.e. private or common

⁸⁸ Charles Abrams' often quoted observation, sums up this critique – "In a housing famine there is nothing that slum clearance can accomplish that cannot be done more efficiently by an earthquake" (Abrams, 1964, p.126).

ownership. It is surprising that there is little analysis of such variation in property rights in the context of slum upgrading.

Slum Upgrading and Property Structures

Most of the literature on slum upgrading also overlooks any possible impact of the physical structure of squatter settlements on successful housing improvement. An indicator of this drawback in the literature is the complete absence of line-drawings of either the individual properties or the settlements being discussed.⁸⁹ To some extent this is logical because one of John Turner's main arguments was that housing conditions at a specific point in time do not matter as housing is dynamic and improves over time. Furthermore, slum upgrading programs of tenure legalization are based on the logic of legal and economic causality; mostly legal and economic experts promote the programs. It is less surprising that architectural plans are not a part of this discourse.

But it seems likely that the literature assumes certain physical characteristics of slums and thus avoids any discussion of the impact of these conditions on the success or failure of housing improvement strategies. My interpretation is that the literature assumes physical characteristics for low-income settlements very similar to what William Mangin and John Turner observed in the *Barriadas* of Lima, Peru (Mangin, 1967, Mangin and Turner, 1968). Thus if I am right, the two key assumptions in literature and policy are that -

- 1) Low-income settlements are clearly and regularly laid out, and
- 2) The individual lot-sizes within these settlements are "reasonably" large

Contrary to these characteristics the Modernist vision of urban renewal and slum clearance had assumed that squatter settlements were chaotic, unorganized and irregularly laid out. Mangin in his seminal work challenged the Modernist interpretation and argued that the internal structure of squatter settlements was clearly laid out (1967).⁹⁰ Since then a substantial amount of research work has built on Mangin's observation and has claimed that low-income settlements follow a gridiron pattern (Ward, 1982b; de Soto, 1989) and mimic urban rather than

⁸⁹ For example, see Peattie, 1968; Turner and Fichter, 1972; Ward, 1982a; Rodwin, 1987, Clerc, et. al., 1995; or Fernandes and Varley, 1998.

⁹⁰ In his paper "Latin American Squatter Settlements: A Problem and a Solution," Mangin reviewed the existing literature and described eight common myths about squatter settlements and squatter populations: squatter settlements are chaotic and unorganized; formed by rural migrants; composed of substandard straw houses; are an economic drain on the nation; are marked by social pathologies; are isolated and alienated from the cities; are high in illiteracy and low in education levels; and finally, are hotbeds of and breeding

organic layouts (Payne, 1989; Baross and Linden, 1990). Thus there appears to be some consensus that low-income settlements are clearly and regularly laid out.

The second key assumption is about the available lot-sizes within these settlements. As mentioned earlier, most of the literature does not include any drawings, particularly drawings with reference scales. Even the text rarely mentions the lot-sizes. However, at times there are hints embedded in the text. For example, Lisa Peattie has written that the houses in Venezuela's *Barrios* have backyards with the occasional fruit tree (1968). Similarly, Janice Perlman has described the lots in the Brazilian *Favelas* as being large enough to allow for new rooms to be added to the existing houses (Perlman, 1976).

In the few cases where lot-sizes are actually indicated, they also appear to be "reasonably" large. John Turner (1967) described the typical *Barriadas* in Lima, as consisting of lot-sizes of 1200 square feet (110 sq.m). Peter Ward mentioned plots of 200 square meters (2150 sq.ft.) in Mexico City (1982b). Even cases outside Latin America can have large lot-sizes. For example, K. Tokman pointed out that the densities in Ankara's *Gecekondus* are lower than the densities in the middle or high-income settlements of the city (1984). Johan Silas (1984) wrote that in the *Kampungs* of Jakarta and Surabaya, more than fifty percent of the building plots had an area of over 50 square meters (540 sq.ft.) and over 30 percent exceeded 100 square meters (1080 sq.ft.). Similarly, Lynn Pikholtz described a successful case of upgrading of a shack settlement in South Africa (1997). In the case she researched, there was some land readjustment and after the readjustment the reconfigured plots were around 250 square meters (2,700 sq.ft.) large. All these papers lead to the impression that lot-sizes within low-income settlements are reasonably large, i.e., larger than 50 square meters, though lot-sizes of over a 100 square meters are not uncommon. While these papers conform to the above assumptions about the structure of low-income settlements, there appears to be an inherent contradiction between the two assumptions. The regularity of the settlements indicates that low-income settlements are developed by entrepreneurs that recognize a commercial demand for such settlements (Payne, 1989). But the commercial demand suggests that over a period of time, with a limited land-supply in a city, the logic of commercial pressure is likely to reduce lot-sizes. Thus these two assumptions may be contradictory in the long-run, particularly in land-markets such as Mumbai, where the supply of land is a major constraint.

grounds for communism. Based on his evidence from Peru, Mangin challenged these eight myths (Mangin, 1967; & Mangin and Turner, 1968).

Slum Upgrading and Property Values

Moreover, and perhaps most interestingly, the literature does not differentiate policy advice on the basis of differences in the property values. The conventional wisdom appears to assume that land values are low in squatter settlements and that any increase in property values due to legalization of tenure is minor. The contrarian literature, however, does recognize that property values may increase significantly as a result of tenure legalization. Moreover, the increased property values can lead to higher rents and therefore the displacement of poor tenants (Gilbert and Varley, 1991; & Sanyal, 1996). The insight of this argument is that, across settlements, the composition of residents can vary and there can be settlements with a large number of tenants who may suffer as a consequence of tenure legalization. This argument does not focus on the variation in property values across settlements and how such variation may itself impact decisions about housing improvement strategies, even leading to a decision to redevelop as opposed to in-situ upgrading.

In general, the literature's position that the poor live on land of low value is captured in the title of a paper by Alan Gilbert and Peter Ward (1988) – *Land for the Rich, Land for the Poor*. The authors argued that the poor occupy land that has low value because of its inherent characteristics (height, soil, etc.) as well as acquired characteristics (servicing, social character, etc.). Thus, the poor are supposed to start with poor land and this land is supposed to get poorer over time.

However, cities of the developing world have been growing at a quite significant rate. As a consequence of such expansion, many low-income settlements in once peripheral and marginal locations now occupy a more strategic location (acquired characteristic) in the geography of the city. The “better” location can lead to potentially higher land values and, therefore, an incentive for redevelopment. The Markandeya slum in Mumbai has a similar story. Its case of redevelopment, with respect to the above observations, is elaborated in the following sections.

4.3 The Physical Structure of Properties in Dharavi

Dharavi's Changing Geography

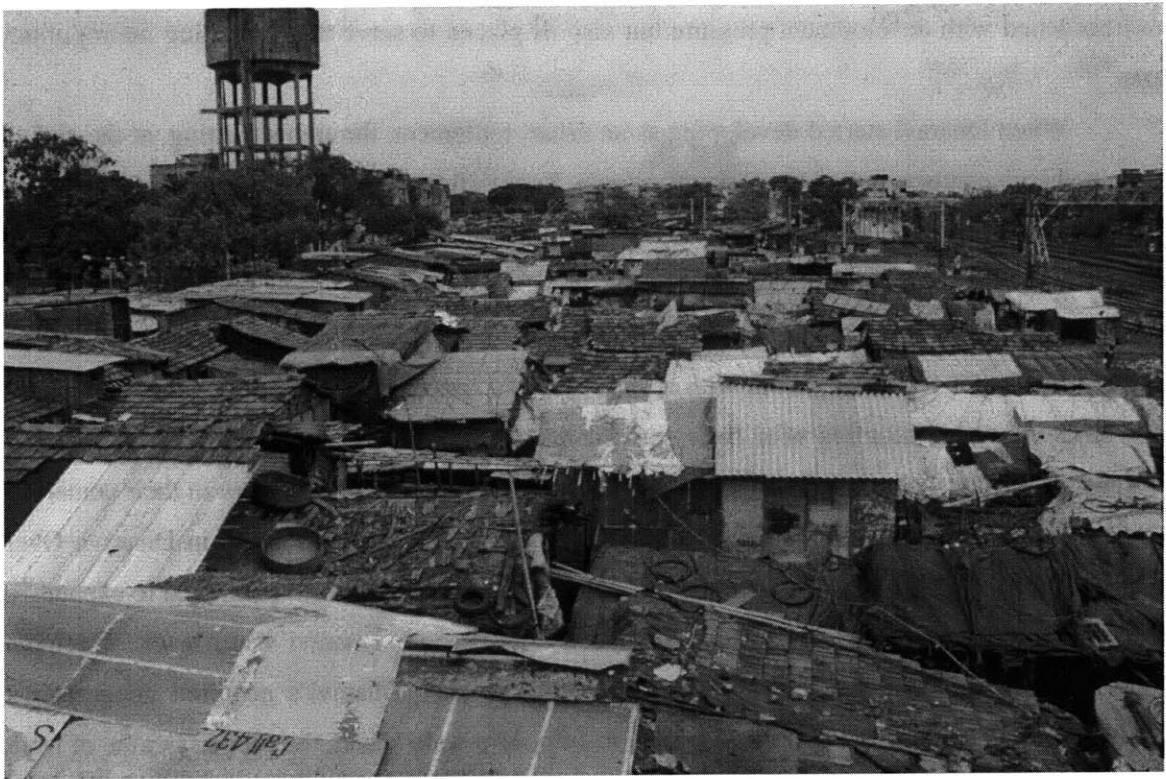
By 1975, Mumbai had grown to such an extent that its once peripheral slum, Dharavi, was centrally located in the city's geography (Figure 2.3). An indicator of this centrality is the Mumbai Metropolitan Regional Development Authority's (MMRDA) proposal to develop the Bandra Kurla area adjoining Dharavi as an alternative center for Greater Mumbai (Sundaram, 1989). The proposition to develop Bandra Kurla was premised on the logic that Mumbai's Central Business District, the Nariman point area at the southern tip of the city, was not only overburdened with development pressure but also ill-placed to serve the expanding metropolitan area.

When Dharavi started developing as an urban settlement, through squatting, at the end of the nineteenth century, it was a peripheral swamp. Its isolation from Mumbai, its proximity to the Bandra slaughterhouse and easy access to water, made it an attractive location for leather tanneries.⁹¹ The entrepreneurs that established these tanneries recognized that their enterprises were highly polluting, literally stinking and would not be allowed within the city limits. Moreover, Hindus regard any work with animal hides as "impure" in a religious sense and would not have tolerated tanneries near their settlements. The entrepreneurs recruited Muslims and lower-caste Hindus, particularly from the southern state of Tamil Nadu, to work in their tanneries, (Dwivedi and Mehrotra, 1995). These workers also squatted and settled down in Dharavi. Over the next hundred years, Dharavi's businesses prospered and the settlement continued to expand.⁹² Concurrent with Dharavi's growth was Mumbai's expansion. Dharavi's attributes of remote location were supplanted by an attribute of centrality. Thus Dharavi's acquired geographical centrality demonstrates that at least one attribute of poor people's land, the property value of land, can increase over time.

⁹¹ The first leather tannery in Dharavi started operating in 1887 (Dwivedi and Mehrotra, 1995). About a hundred years later, it was estimated that there were 25 tanneries in the settlement (Correa, 1986).

⁹² A diversifying economic base accompanied Dharavi's expansion. The leather tanneries attracted the leather processing industries. The illicit liquor distilling industry found the illegality of Dharavi an attraction, and the inexpensive real estate and labor was the key attraction for the garbage recycling industry (Dwivedi and Mehrotra, 1995).

Figure 4.2: The Physical Structure of Housing in Dharavi



Note: These images of Dharavi are from 1998. However, most of Dharavi was similar to this in 1985.

Slum Upgrading and Slum Redevelopment: Two Housing Improvement Policies

To improve living conditions for the slum dwellers of Dharavi, and other low-income settlements of the city, Mumbai's municipal corporation and the state government implemented a number of programs, including a Slum Improvement Program in 1971. In 1976, the state government launched a census of the city's slum dwellers. This census provided the slum dwellers with some secure rights including a right to compensation from the government in the case of eviction (Panwalkar, 1996). However, the slum dwellers did not have formal land tenure rights.

In 1985, the state government introduced the Bombay Urban Development Project (BUDP) with the assistance of the World Bank. An integral component of the project was a program of tenure legalization, the Slum Upgrading Program (SUP). The central focus of this program was the provision of a 30-year renewable, leasehold tenure for slum dwellers' cooperatives. It was considered too difficult to demarcate individual properties within the slums and provide private titles. Individual owners, however, would have the legal rights to improve and consolidate their properties on a private basis. The program included individual home improvement loans and the provision of better settlement infrastructure and community facilities. In accordance with the prevalent belief in the economic soundness of projects, the state government planned to implement the projects on a cost-recovery basis. The state government and the World Bank's target was to upgrade 100,000 households, about 12 percent of the slum population of Greater Mumbai according to the 1981 estimates. The policy-makers were conscious of the problems involved in private land acquisition and set a relatively modest target of upgrading only 10,000 homes on privately owned land.⁹³ The intention was to complete the program in five years (Panwalkar, 1996).

⁹³ According to the estimates from 1984 (Panwalkar, 1996), half the city's slums were on privately owned land (including the Mumbai Port Trust). The public owners of the land housing the other half include the central government (6%), the state government, including the state housing authority (26%), and the municipal corporation (18%).

Figure 4.3: Map of Dharavi Showing the location of Rajendra Prasad Nagar

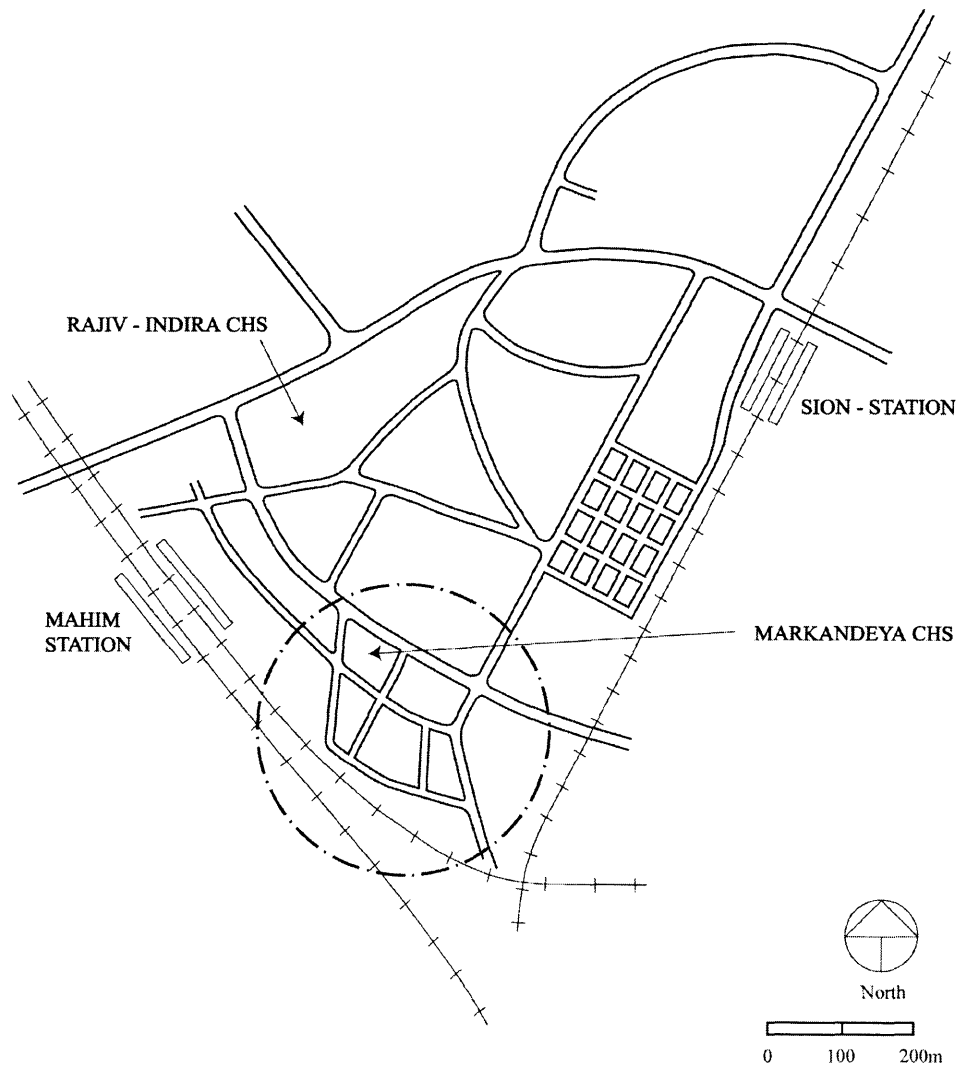
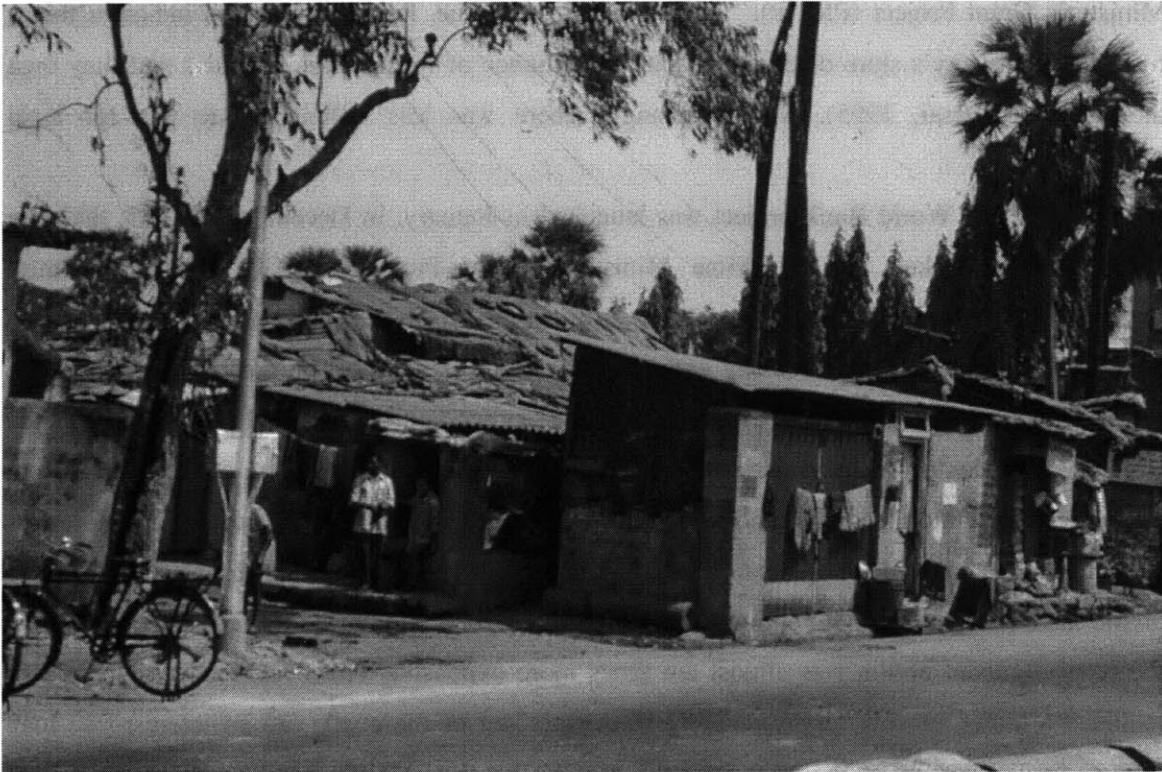


Figure 4.4: Typical Slum Housing in Mumbai



Note: Although this photograph is not from Markandeya, the old houses of Markandeya were quite similar to these.

Contrary to expectations, there was a weak demand for slum upgrading. The program completion date was advanced by four years and the target was scaled down to 60,000 homes. By 1994, when the program was closed after a four-year extension period, only 22,204 households had opted for tenure legalization. The World Bank had to accept that there was “the lack of a strong constituency for in-situ slum upgrading on a cost-recovery basis” (World Bank, 1997, p. ii). The World Bank, however, claimed that the scheme was undermined by alternatives, particularly a slum redevelopment option that was formally introduced through the Prime Minister’s Grant Project (PMGP).⁹⁴ This is only partly true. Previous research indicates that a majority of the city’s slum dwellers, despite the absence of formal title, consider that they own their houses (Desai, 1995). Not surprisingly, there was less willingness to pay for legal ownership.

While the World Bank project was launched in January, in December of 1985, the state government embarked on the Prime Minister’s Grant Project (PMGP) with the central government’s financial support. The state government established a special institution, also called the PMGP, within the state housing authority. By 1987, the PMGP presented Dharavi’s slum dwellers with two program choices and termed it a “cafeteria approach,” (Dua, 1989). First, the slum dwellers could opt for traditional tenure legalization or second, a non-conventional, slum redevelopment option - Slum Reconstruction. Slum Reconstruction involved the demolition of existing slums and the development of new, medium-rise apartment housing for the slum dwellers on the same site. Though both options were planned to operate primarily on a cost-recovery basis, the redevelopment option was almost ten times more expensive. However, redevelopment also included a direct subsidy (approximately fifteen percent of the cost), and an interest-free loan (almost twenty percent of the cost) from the PMGP. But the PMGP’s funds were only sufficient to finance the redevelopment of 3,800 units in the initial phase (MHADA, 1993).⁹⁵ Interestingly, PMGP’s officials claim that demand from Dharavi’s slum dwellers far exceeded the project limit

⁹⁴ Prior to the slum reconstruction program of the PMGP, Mumbai had at least one notable experience with the concept. In the seventies, an NGO, the Slum Rehabilitation Society, started a project to redevelop a squatter settlement in Bandra in the Town Planning Scheme – III area. This settlement had developed on land owned by a school and the land was needed by the school for their expansion program. The Slum Rehabilitation Society helped to resettle part of the residents on a nearby site made available by a church and the rest were accommodated on site in medium-rise apartment blocks. Phase-I of resettlement on land leased from the Mount Mary Church was completed in 1981. The on-site Phase-II was completed in 1993 (Interview with Father Tragar, Slum Rehabilitation Society, 1998).

⁹⁵ The PMGP planned to redevelop 2,000 units on the original slum-sites and 1,800 units on alternative sites in Dharavi. These off-site relocations were planned to resettle slum dwellers from land expropriated by the PMGP to facilitate road-widening and other infrastructure improvements in Dharavi.

of 3,800 units.⁹⁶ The PMGP advised the additional slum dwellers to take the upgrading alternative, which would give them an unofficial priority in any future phase of redevelopment.

Rajendra Prasad Nagar and the Markandeya Slum

The PMGP's strategy was to select twelve peripheral parts of Dharavi with easy road access for the initial pilot projects (MHADA, 1993). In 1988, one of the areas selected for Slum Reconstruction was Rajendra Prasad Nagar.⁹⁷ Rajendra Prasad Nagar is at the edge of Dharavi just south of the 60 Feet Road (Figure 4.3). It is shaped like a compressed "C." The PMGP's plan was to redevelop the two arms as the first two phases, build road access to the central spine and redevelop the central area in the third phase (Figure 4.5). On the north-east end of Rajendra Prasad Nagar, along the 60 Feet Road was the Markandeya slum. Markandeya was to be a part of the first phase of Slum Reconstruction.

Like other parts of Rajendra Prasad Nagar, Markandeya had small lots, densely and irregularly laid out (Figure 4.6). Most of the lot-sizes were between 120 to 160 square feet (9-14 sq.m). The houses were twelve to fourteen feet (3.7-4.3m) high and included a small loft, four to five feet (1.2-1.5m) high. The lofts were used for storage or sleeping. Most of the huts at Markandeya were used for housing. Of the 92 huts in the area, only 11, facing the 60 Feet Road, had a commercial land use.

Unlike the other slum settlements of Dharavi, where the PMGP was responsible for implementing the redevelopment projects, at Markandeya, a cooperative of the slum dwellers had decided to work with a non-governmental organization (NGO), the Society for the Promotion of Area Resource Centres (SPARC). SPARC had persuaded the Markandeya Cooperative Housing

⁹⁶ Multiple interviews with ex-PMGP officials in Mumbai through 1997 and 1998. The officials interviewed included two former Directors of the PMGP, Mr. Gautam Chatterji and Mr. V. G. Gorde.

⁹⁷ The twelve sites selected for the new medium-rise housing in the Dharavi area were-

- 1) Nehru Nagar
- 2) Khamdeo Nagar
- 3) Kalyanwadi
- 4) Gandhi Nagar
- 5) Rajendra Prasad Nagar
- 6) Damber Compound
- 7) Vijay Nagar
- 8) Sankalpna
- 9) Akashganga
- 10) Milind Nagar
- 11) C.S. No. 343 (Relocation)
- 12) C.S. No. 501

Technically, Rajendra Prasad Nagar is not in Dharavi but in adjoining Matunga.

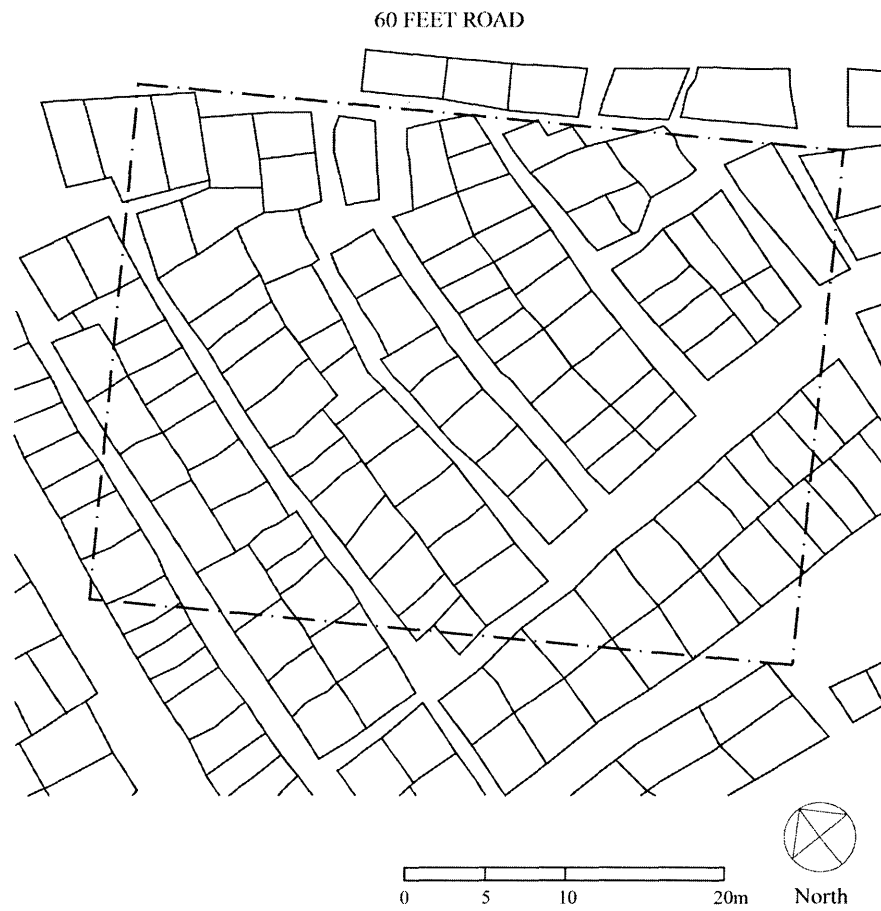
Society (MCHS) that working independent of the PMGP, the cooperative would be able to build larger housing at a lower cost. The cost saving was to be achieved by eliminating the possibility of the PMGP's bureaucratic inefficiency and corruption, and by keeping the new project low-rise. SPARC also argued that the low-rise project would be culturally and socially more suitable to the lifestyle of the low-income slum dwellers of Markandeya. SPARC claimed that "...multi-storied buildings are not suitable for the average Dharavi dwellers who are fisherman, vegetable vendors and tannery workers who can't carry his or her working equipment to upper floors... Such multi-storied flats are middle-class concepts," (Independent, September 30, 1989).

It is important to note that not only did the PMGP agree to the MCHS' proposal to work with SPARC as opposed to the government agency, but the PMGP also agreed to provide the cooperative with temporary housing in the Dharavi area. The MCHS' members were allotted transit accommodation on a monthly rent basis in the state housing authority's apartment blocks in Dharavi. These units had an area of 165 square feet (15 sq.m) and were less than a kilometer away from the original site.

Figure 4.5: Map of Rajendra Prasad Nagar Showing the Markandeya slum



Figure 4.6: Survey Layout of Markandeya, 1987



4.4 Change in Property Rights and Change in Property Structures

Markandeya's Redevelopment into a Low-rise Courtyard Structure

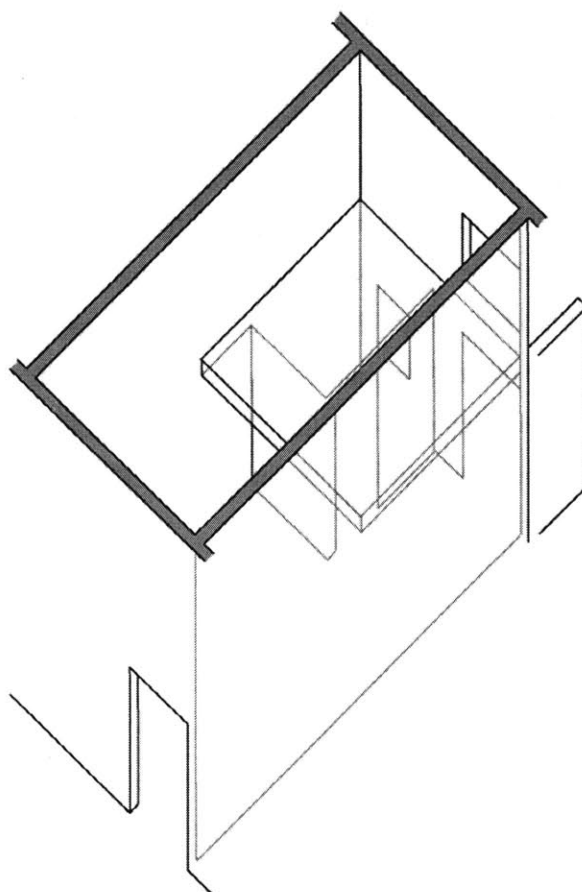
SPARC had promised the MCHS new housing with a carpet area of 280 square feet (26 sq.m).⁹⁸ However, according to the PMGP's guidelines, the MCHS' members were only eligible for new units of 180 square feet (17 sq.m).⁹⁹ It was unclear how the NGO would help the cooperative receive permission for the larger units. On the contrary, the PMGP's officials left no doubt that they were against floor areas larger than 180 square feet for the MCHS.

SPARC responded with a new typology of housing that was larger but complied with the existing development guidelines. It decided to limit the floor area of the Markandeya's units to 180 square feet but proposed a loft of 100 square feet (9 sq.m) to sum to a total area of 280 square feet. The loft idea was based on the existing housing at Markandeya as well as a similar proposition made by a group of pavement dwellers working with SPARC (SPARC, 1988). The pavement dwellers, working in a housing workshop organized by SPARC, designed and proposed units with fourteen feet (4.3 m) high floors. In these units, the pavement dwellers proposed to add six feet (1.8 m) high lofts over the kitchen and toilet areas. The pavement-dwellers' designs were freestanding units. SPARC was unsure how easy or difficult it was to accommodate this design in an apartment block. To work out the details of the design, SPARC commissioned an architectural firm that they were familiar with.

⁹⁸ Carpet area refers to the usable area. It does not include the walls and external circulation areas. As a rule of thumb, the carpet area of a housing unit in an apartment in Mumbai is roughly around 70 percent of the total built up area.

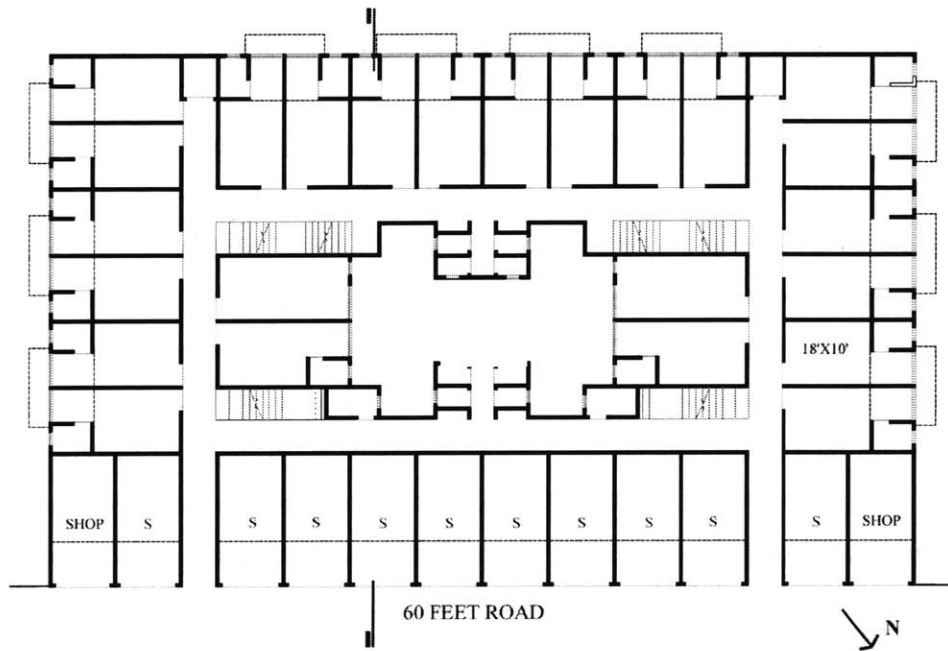
⁹⁹ According to the PMGP's initial proposal, the MCHS' members, on the basis of their existing small houses would have been eligible only for 165 square feet (15 sq.m) carpet area units. In 1987, this was the smallest unit size being built by the state housing authority. But in 1988, the Draft National Housing Policy (Government of India, 1988) was released and it advocated a minimum built-up area of 240 square feet (22 sq.m). On the reasonable premise that 240 square feet of built-up area corresponds to 180 square feet (17 sq.m) of carpet area, the PMGP and the state housing authority increased the minimum area in their housing schemes to 180 square feet.

Figure 4.7: Unit Design, Markandeya CHS, 1988

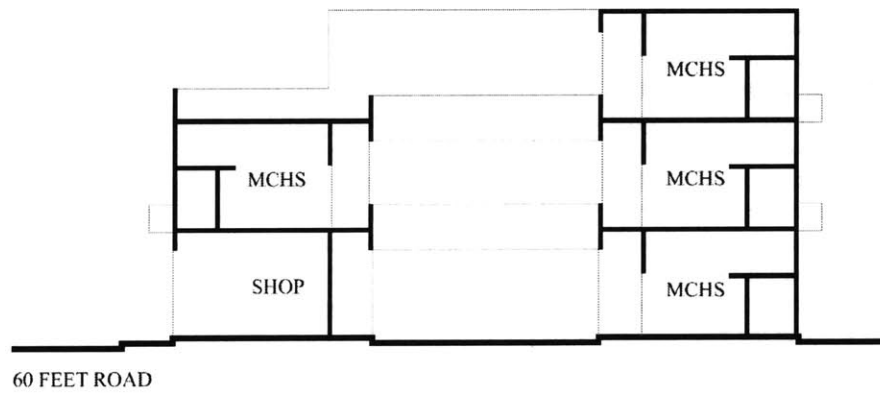


AXONOMETRIC VIEW

Figure 4.8: Floor Plan and Section, Markandeya CHS, 1988



FIRST FLOOR PLAN



SECTION

The architects prepared a design with rectangular units of ten feet by eighteen feet (3.0 X 5.5 m), with the entrance at the shorter end (Figure 4.7). These units were organized around a central courtyard (Figure 4.8).¹⁰⁰ SPARC argued that the courtyard form allowed more possibilities for social interaction and matched the needs of the low-income slum dwellers. However, despite SPARC's strong desire, the Markandeya project was to be three floors high. But, only two-thirds of the top floor was needed for the housing units, the rest was to be a community terrace.¹⁰¹

In another innovation to further increase the usable living area, SPARC proposed common external toilets, two for every nine families.¹⁰² These toilets were in addition to the attached bathrooms being provided inside the housing units.¹⁰³ SPARC argued that the water supply in Dharvai was undependable and the toilets were likely to stink. External toilets would be more pleasant and hygienic. SPARC also argued that, apart from allowing for more living space, the common toilets would be cheaper.¹⁰⁴ SPARC also suggested that external, shared toilets would allow for more social interaction. The NGO's premise was that low-income groups enjoy and prefer such opportunities for social contact as opposed to the middle-classes that desire privacy. Finally, SPARC hoped that the shared toilets made the housing units unattractive to middle-class buyers, reducing the possibility of gentrification.

After preparing the design, the architect estimated the cost of the project. Contrary to SPARC's assurances, the units in Markandeya were more expensive than the units in the projects implemented by the PMGP. Not surprisingly, the innovations of creating a larger floor area of housing had an impact on the cost of the project. However, SPARC assured the MCHS that the

¹⁰⁰ The courtyard form, as demonstrated by the research of Leslie Martin and Lionel March (1972), allows larger ground coverage than the tower approach used by other projects in Dharavi. Markandeya's ground coverage is approximately 67 percent. This is considerably higher than the 40 percent ground coverage of neighboring Ishwari CHS. The Ishwari project is based on the tower approach rather than the peripheral courtyard approach. If the site areas of the Markandeya and Ishwari projects were equal, given the different physical planning approaches, a three floor high structure at Markandeya would have the same floor area as a five floor high structure at Ishwari.

¹⁰¹ SPARC proposed that the MCHS use a light-weight material, such as a tensile structure, to cover the terrace after the construction was completed. The covered terrace could be rented out to other residents of Dharavi for social functions such as marriages. SPARC hoped that the revenue generated through the leasing could be used for the maintenance of Markandeya.

¹⁰² Before redevelopment, approximately 400 families, including the MCHS' members, shared a twenty-seat toilet block. Thus the new design, despite the sharing, was more than a five-fold improvement.

¹⁰³ According to the building regulations at that time, the housing units could not combine bathrooms and toilets. These regulations were revised in 1991.

¹⁰⁴ While there is certainly a saving in the cost of toilets because of sharing, it is not clear that Markandeya's members were actually getting cheaper housing because of this innovation. In the case of

cost at Markandeya was only marginally higher than the PMGP's cost estimate, even though the PMGP's designs provided for only 180 square feet of area in contrast to Markandeya's design of 280 square feet area.¹⁰⁵

State Suspicion of Future Encroachment

In early 1989, Markandeya's project-architect submitted the design proposal to the PMGP for approval. The PMGP officials had a number of reservations about the proposal. They told the architect that they could not approve the fourteen feet (4.3 m) high floors because the municipal corporation's rules allowed a maximum height of ten feet (3.0 m).¹⁰⁶ The PMGP's officials were unimpressed with SPARC's subversion of the development rules and they were also convinced that Markandeya's members would be unable to afford the larger floor areas. They suspected that the MCHS' members would be forced to sublet their lofts to pay for their larger housing loans. This would increase Dharavi's density and put more pressure on its infrastructure. Furthermore, the PMGP also objected to the community terrace on the top floor. They suspected that the terrace was likely to be encroached in the future, further adding to the population and density of the area. The PMGP was aware that the land development regulations allowed a Floor Area Ratio (FAR) of 1.33 in Dharavi but the consumed FAR in the Markandeya design was only 1.17.¹⁰⁷ Amazingly, if the terrace were covered, the consumed FAR would be exactly 1.33!

SPARC, however, argued that the PMGP could not force the MCHS to consume the maximum allowed FAR of the site. Instead, SPARC and the MCHS applied to the municipal corporation for permission to proceed with the design. In October 1989, they were successful in receiving special permission to proceed with the original proposal. Soon construction work started at the foundation level, but progress was slow because of the lack of funds. Moreover, the

individual toilets, the residents would have lost some floor area from their units to accommodate the toilets. Now, they were getting larger units with shared toilets.

¹⁰⁵ By 1988, the PMGP had revised their cost estimate for the 180 square feet unit to Rs.48,500. The architect's cost estimate for Markandeya's larger unit was Rs.49,000. However, the architect recommended that the MCHS collect Rs.55,400 to provide for potential cost overruns.

¹⁰⁶ The municipal corporation had proposed a change in the Development Control Regulations to allow for 14 feet high floors, but the proposed changes were still to be approved by the state government. These changes were approved in 1991.

¹⁰⁷ FAR is the ratio of the floor area in a project to the area of the site. In Mumbai, the term Floor Space Index (FSI) is used. It is calculated in the same manner as FAR.

contractor pointed out that a more elaborate and expensive precast pile foundation was needed to support the building structure in Dharavi's marshy terrain.¹⁰⁸

In March 1991, the PMGP ordered the MCHS to stop construction of the project. The PMGP had provided the MCHS members with a financial subsidy (equivalent to ten percent of the cost)¹⁰⁹ and claimed that as a consequence the state government had a right in the development potential of the Markandeya site. The PMGP claimed that the Markandeya project was a low-cost housing scheme developed by the state housing authority and was eligible to be developed at the FAR of 1.60.¹¹⁰ Furthermore, the PMGP argued that according to the new format, for calculating FAR, introduced by Mumbai's revised Development Control Regulations in 1991, the actual consumed FAR in the Markandeya project was only 0.95.¹¹¹ The PMGP calculated that if the Markandeya project consumed the allowed 1.60 FAR, 62 additional units could be built on the same site, with the same basic design, by adding more floors to the proposal. The PMGP needed additional units for other slum dwellers in Dharavi and asked the MCHS to build extra units on its site and hand them over to the PMGP or the state housing authority. The PMGP's Director argued that all redevelopment projects in Dharavi had to consume the maximum permissible FAR to ensure the minimum displacement of Dharavi's residents (Independent, September 30, 1989).

SPARC objected. They claimed that the MCHS was uninterested in utilizing the maximum development potential of the site. Moreover, they argued that the PMGP was threatened by the project's demonstration that it was feasible to resettle Dharavi's residents in low-rise structures as preferred by the slum dwellers. They believed that the PMGP wanted to disrupt their plan for low-rise housing. The PMGP, on the other hand, was suspicious of the MCHS' and SPARC's decision to build fewer units than allowed when the market demand for such units was very high. The PMGP probably feared that once the project was approved, the

¹⁰⁸ This was followed by a farce of excessive bureaucracy by the State agencies and administrative ineptitude by SPARC and the MCHS. In December 1989, the municipal corporation issued a "stop-order" because the MCHS had failed to apply for and obtain a "commencement certificate." This certificate is required before construction work can start. Subsequently, the MCHS applied for the certificate from the PMGP and received it in March 1990. However, the certificate was valid for only a year, since the MCHS did not apply for renewal, the certificate expired in March 1991.

¹⁰⁹ The PMGP had initially promised a subsidy equal to 15 percent of the total cost. Though the cost estimate of projects increased, the PMGP was unable to increase the subsidy amount.

¹¹⁰ The usual FAR for housing projects in Dharavi is 1.33 but since Rajendra Prasad Nagar was being developed by the public sector it was eligible for a 20 percent FAR bonus, taking the allowed FAR up to 1.60 (Regulation 33(5), Government of Maharashtra, 1991).

¹¹¹ According to the revisions in the Development Control Regulations, circulation area and toilet blocks were not to be included in the FAR calculation (Government of Maharashtra, 1991).

MCHS and SPARC would build the extra permissible units and share the benefit without any gain to the PMGP.

However, SPARC argued that the Markandeya project was not a public sector project but a community project and, therefore, not eligible for the enhanced FAR. After seven months of argument and a halt in construction activity, both sides compromised to accept the FAR of 1.33 (non-State projects), and build up to the maximum allowed FAR, but use the revised method of calculating FAR (Table 4.1).

This meant that the MCHS was to hand over 37 units to the PMGP at the cost of construction when the project was completed. Based on this agreement, Markandeya's plan was approved and permission for construction was granted in December 1991, three years after the initial request. It is interesting to note that in accepting the compromise of higher FAR, the MCHS and SPARC assumed that the PMGP could not force them to build the extra 37 units once the construction was completed according to their plan. In any case, SPARC argued that the PMGP had made no new provision to finance the additional units and the cooperative was already facing financial problems to construct the originally planned 94 units.

Table 4.1: Additional Units at the Markandeya CHS

Method of FAR and Built Up Area Calculation	FAR	Built Up Area (sq. m)	Extra Units Possible	Total No. Of Units	Note
Pre-1991	1.17	2256.80	-	94	Claimed by SPARC
Post-1991	1.60	3086.22	62	156	Proposed by PMGP
Post-1991	1.33	2565.42	37	131	Compromise

Source: Purbi Architects¹¹²

Note: The above Built Up Area refers to the Net Built Up Area. Markandeya's effective plot size is equal to 1928.89 sq.m. This includes 593.89 sq.m of area lost through road widening.

¹¹² Architectural Drawings of Markandeya CHS and interviews with Mr. Sharad Mahajan, 1998.

Table 4.2: Approved Unit Statement at the Markandeya CHS, December 1991

	Units for Members	Units for the PMGP
Residential	81	37
Commercial	11	-
Amenities	2	-
Total	94	37

Source: Markandeya CHS, Design Documents, Purbi Architects

Adding More Floors: Change in Property Rights and Property Structures

Due to the lack of finance, construction progress at Markandeya continued to be slow. SPARC and the MCHS blamed the contractor for his inability to invest in the project while the cooperative awaited its housing loan from the housing finance corporation, the Housing and Urban Development Corporation (HUDCO). In the second half of 1993, on the project-architect's advice, the cooperative decided to replace the old contractor with a new one, Shayambhai Patel of Parth Construction.

The new contractor was willing to invest his resources to complete the project by early 1995. It is reasonable to assume that at that time he was aware of a new state government program, the Slum Redevelopment Scheme (SRD). The SRD was introduced in 1991 to build upon and extend the Slum Reconstruction project of the PMGP in Dharavi to the rest of Mumbai. Similar to Slum Reconstruction, the SRD was based on a strategy of demolishing existing slums and housing the slum dwellers on-site in new apartments of 180 to 225 square feet (17-21 sq.m) carpet area. Unlike the PMGP's program, the SRD allowed private developers to be promoters in redeveloping the slums and the slum dwellers were expected to pay only Rs.15,000 for their new houses. To make this viable, the program changed the land development regulations for slum-encumbered land. The new property rights permitted a higher density and intensity (FAR) of development. This allowed for extra units to be constructed and sold, at the market-price to outsiders, generating a cross-subsidy for the slum dwellers and profits for the project promoters. The program also allowed for old PMGP projects under construction to be developed as SRD projects.

Though the new contractor did not initially suggest that Markandeya be developed as an SRD project, he recognized that it was technically and legally feasible to build more units in the Markandeya project. The architect had informed him that it was possible to add two more floors

at Markandeya. But there were two caveats. First, the top floors had to be limited to a ten feet height to limit the load on the project's structure. And second, internal toilets had to be provided for the market-sale apartments. This meant that new plumbing lines had to be incorporated into the design.

Aware of the development potential of the Markandeya project, the contractor proposed to the MCHS that, if they had no objection to the Markandeya building being two floors higher, the contractor and the cooperative develop Markandeya as an SRD project. This would allow the MCHS to complete the project without any more housing loans and the contractor would repay the loan already borrowed. Moreover the MCHS' members would have the option to include internal toilets, although at an extra cost, but it would increase the value of their housing.¹¹³ In return, the contractor expected to sell all additional units allowed by the state government in the free-market.¹¹⁴

To SPARC's disappointment, the MCHS agreed to the proposal of adding additional floors. Moreover, almost half of the members opted for having their bathrooms refitted with internal toilets. In October 1996, the SRD committee approved the Markandeya project's application (Tables 4.3 & 4.4). The new permission was for a five floors high structure with 180 units (Figure 4.9).

Table 4.3: Unit Statement at the Markandeya CHS, May 1996

	Units
Markandeya Cooperative's Members	92
Markandeya Cooperative's Office	1
PMGP (Commercial) ¹¹⁵	1
Developer	86
Total	180

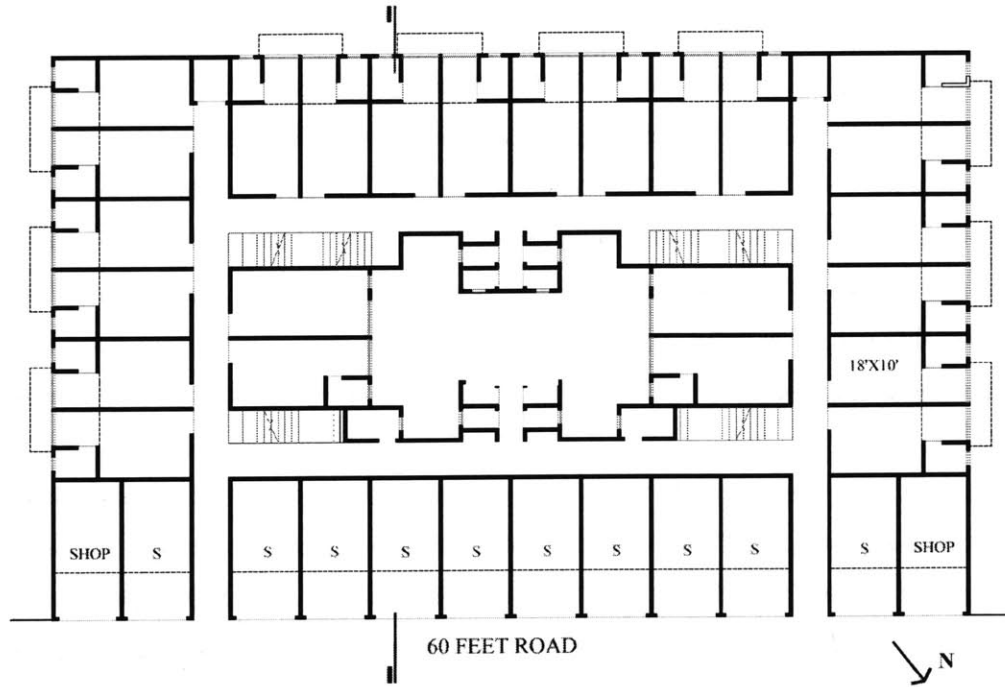
Source: Annexure II, SRD application, Markandeya CHS, October 31, 1996.

¹¹³ The architect confirmed that it was possible to modify the internal baths to include toilets.

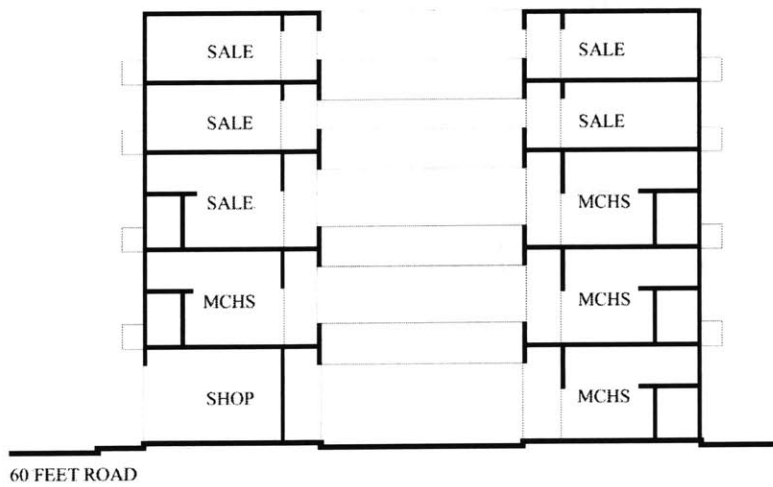
¹¹⁴ To approve SRD projects, the state government instituted the SRD committee. One of the main functions of the committee was to discern the maximum allowed FAR in projects to restrict profit for developers to 25 percent.

¹¹⁵ This unit was to be transferred to the state housing authority, the Maharashtra Housing and Area Development Authority (MHADA), the PMGP's parent institute. By 1996, the PMGP had been dissolved.

Figure 4.9: Section, Markandeya CHS, 1996



FIRST FLOOR PLAN



SECTION

Table 4.4: Net Area Statement of the Markandeya CHS, Slum Redevelopment Scheme

	Area (sq.m)	FAR
Built Up Area Rehabilitation ¹¹⁶	1,831.90	0.95
Built Up Area Market-sale	1,952.46	1.01
TOTAL	3,784.36	1.96

Source: Markandeya CHS, Design Documents, Purbi Architects

In 1995, the newly elected state government of the Shiv Sena party replaced the SRD with the Slum Rehabilitation Scheme (SRS) of “free-housing.” Like the SRD, the SRS restricted maximum site FAR to 2.5 but introduced the provision of Transfer of Development Rights (TDR).¹¹⁷ At Markandeya, because of structural constraints, it was impossible to add more floors to the project beyond those already added. However, according to the guidelines of the SRS, the developer had the right to build over a thousand square meters of additional market-sale area. If the Markandeya project was approved as an SRS project, the developer could expect the additional development potential as a Development Rights Certificate (DRC) which he could sell through TDR (Table 4.5). In 1997, the developer offered to pay all the due interest on past loans and a corpus payment of Rs.20,000 per member for future maintenance expenditure (as stipulated in the SRS rules). He also pointed out that a conversion to the SRS would make the beneficiaries eligible for a reduction in their property taxes (H&SAD, Government of Maharashtra, 1997). But he refused to return the MCHS’ prior payments.

¹¹⁶ Note that the method to calculate the Net Built Up Area changed after the Development Control Regulations were revised in 1991 (Government of Maharashtra, 1991). Thus there is a difference in the Built Up Area and the consumed FAR in Tables 4.1 and 4.4.

¹¹⁷ SRS sites could act as “origin-sites” transferring development potential to a “receiving-site.” There are no receiving-sites in the Island City (South Mumbai). TDR can only be consumed in the suburbs. In the suburbs the maximum allowed FAR is 1.33, but with TDR, sites can develop up to 2.0 (H&SAD, Government of Maharashtra, 1997).

Table 4.5: Gross Area Statement, Markandeya CHS, Slum Rehabilitation Scheme

	Area (sq. m)
Gross Built Up Area Rehabilitation	2,371.72
Gross Built Up Area Market-sale	2,124.00
DRC/TDR (Market-sale)	1,030.39
Total	5,526.11

Note: Ratio of Rehabilitation and Market-sale is 1:1.33¹¹⁸

Source: Architectural Drawings, Markandeya CHS, Purbi Architects, 1998

The MCHS, however, agreed to the developer's proposal but asked him to finish their housing units before they negotiated how much money the developer should return to them. In January 1998, ten years after the MCHS' first redevelopment plan was prepared, members' apartments were completed and they started occupying their new houses.

¹¹⁸ The Gross Built Up Area includes staircases and other circulation areas and is thus different from the Net Built Up Area (Compare with Table 4.4). In Mumbai, the FAR is calculated on the basis of the Net Built Up Area, but the amount of allowed free-sale area in SRS projects is calculated in ratio to the Gross Built Up Area for rehabilitation.

Figure 4.10: Markandeya CHS, Front View, 1998



Figure 4.11: Hallway Around the Courtyard, Markandeya CHS, 1998



4.5 High Property Values and Medium-rise Living

Medium-rise Living as an Outcome of Redevelopment

Interestingly, contrary to SPARC's expectations, Markandeya's members demonstrated a preference for upper floors as opposed to the first floor. While I do not have data for all of the MCHS' members, all the managing committee members live on the second and third floors. The managing committee had the first chance to select their housing units in the building. After the managing committee, the MCHS' members who had made their due payments in full were allowed to select their houses. According to the committee's members, most of the cooperative's members also preferred the upper floors. They argued that the upper floors were more protected from pollution, mosquitoes and noise. The only members that continued to have a preference for the first floor were the old and the infirm.¹¹⁹

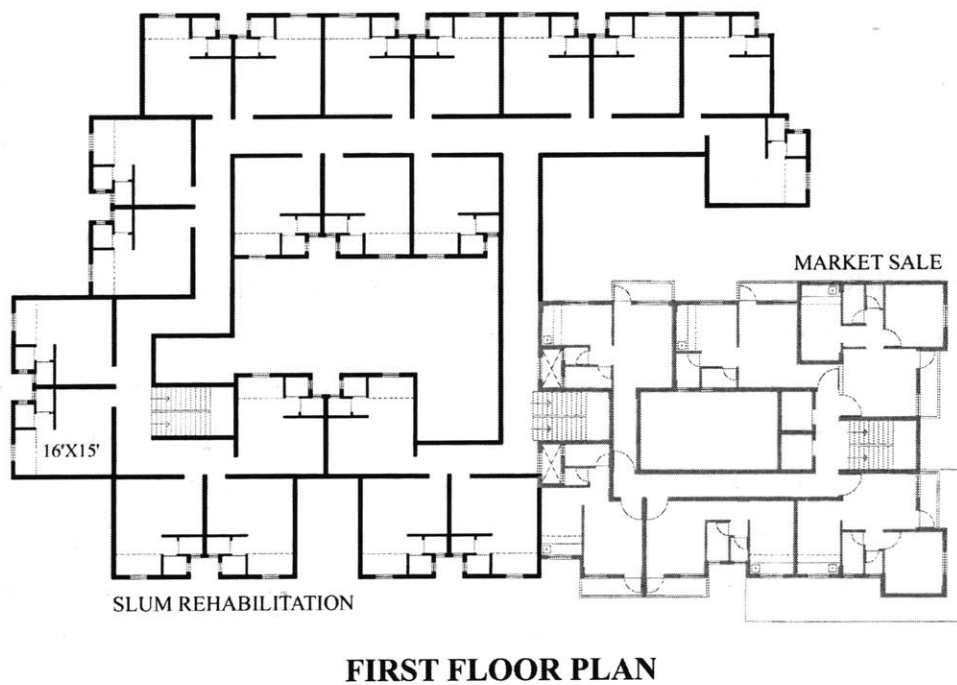
In 1995, another cooperative of slum dwellers in Dharavi had started negotiating with SPARC for assistance in redevelopment. In 1996, SPARC agreed to be the developer for the Rajiv-Indira CHS (RICHS) project. SPARC's architect designed the project by 1997.¹²⁰ Like the Markandeya project, the beneficiaries' units are fourteen feet high to accommodate a loft. Unlike Markandeya, all units have attached toilets. They are organized in four floors around a courtyard (Figure 4.12). SPARC still claims that the Rajiv-Indira rehabilitation is a low-rise project, more suitable for the lifestyle of low-income groups. Certainly, in contrast to the four floors of the rehabilitation area, the market-sale area has eight floors. However, the NGO does not point out that since each floor of the rehabilitation area is fourteen feet high, the building structure is fifty-six feet high or almost equivalent to a six floors high building (Figure 4.13). Despite SPARC's claims, it is misleading to call the project, low-rise.¹²¹

¹¹⁹ The disregard for the first floor was not limited to the Markandeya project. The same thing happened at Sion Shivaji Nagar, another SRS project in Mumbai. At Sion Shivaji Nagar, ten managing committee members and twelve additional members (selected on the basis of the time they had lived in the slum and on the basis of the time they had contributed to the project), were allowed to select their units before the general members of the cooperative. These twenty-two members demonstrated little preference for the first floor (only two members). Instead they were more interested in the orientation of their units, privacy, protection from "noise and smell" of the street, being together with their friends, and some opportunities of limited expansion that existed on upper floors. (Because of a revision in the design during the construction, units on the third floor and above had an additional small niche, approximately one cubic meter, for storage). Four members selected units on the second floor; eight preferred the third floor, five the fourth floor and two the fifth floor. This project has 175 members and the building has eight floors and includes an elevator. (Source: Interview with managing committee's members, Sion Shivaji Nagar CHS, 1998). Please see Appendix 4.1 for a plan of the Sion Shivaji Nagar CHS.

¹²⁰ SPARC commissioned Suchita Chogle of Pansare, Chogle and Associates as the project architect.

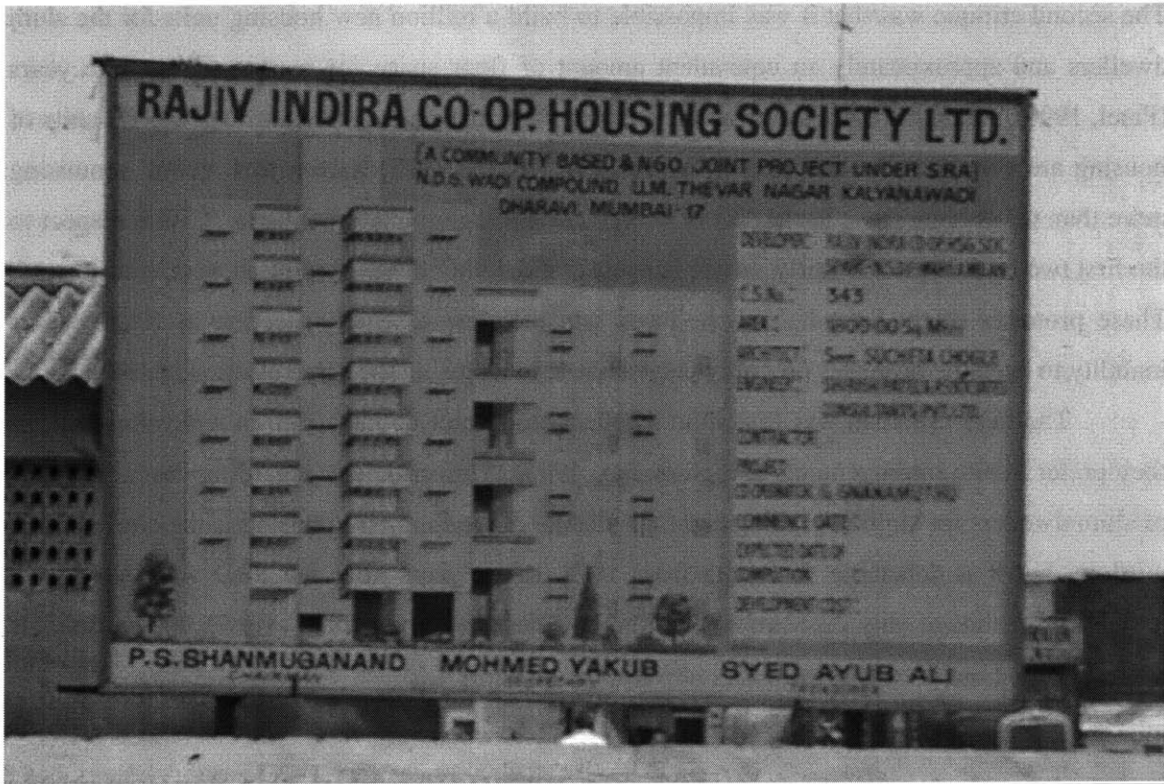
¹²¹ Another notable aspect of the project is that SPARC controls the development rights of the roof. SPARC has assumed these rights on the pretext of using the roof for advertising banners. SPARC is of course aware

Figure 4.12: Floor Plan, Rajiv-Indira CHS, 1998



that the state government can change the Development Control Regulations and increases the FAR of the site in the future. The easiest way to realize the enhanced development potential would be by constructing on the roof. SPARC either wants to prevent a repeat of the MCHS experience, where the low-rise structure became higher with additional floors, or it wants to be in a position to benefit from any such change.

Figure 4.13: Hoarding at the Rajiv-Indira Site, 1998



Slum Redevelopment Projects in Mumbai

The SRS is the third and most ambitious program of slum redevelopment introduced in Mumbai since the mid-eighties. The state government launched this program in 1995 with the promise to resettle all of Mumbai's slum dwellers in new and free housing within five years.

Not surprisingly, the SRS has been strongly criticized. There were three main criticisms. First, that the cross-subsidy intention was financially unsustainable in the long run because housing prices were likely to fall with an increase in the supply (Patel, 1995; Business India, 1996). This is a valid criticism. Even when the program was introduced in 1995, in many parts of the city, particularly the north-east, property values were too low to generate a full cross-subsidy. The second critique was that it was impossible to build a million new housing units for the slum dwellers and approximately an equivalent amount of floor space for market-sale in five years (Patel, 1996). Again the evidence from the past supports this claim as only around 20,000 units of housing are constructed every year in Mumbai (BMRDA, 1992). Given this record, promising more than ten-fold increase in the rate of construction is absolutely unrealistic.¹²² With respect to the first two criticisms, it is fairly safe to suggest that the Shiv Sena's promises were quite absurd. These promises might have helped the party win the state assembly election in 1995, but its inability to keep the promises probably played a role in its losing the same election in 1999.

The third criticism was that slum dwellers would not be interested in redevelopment, as they prefer in-situ improvements (Singh & Das, 1995). This criticism, regarding the preferences of slum dwellers for slum upgrading and their dislike of medium-rise housing is the conventional wisdom, but it is debatable. The data from 1998, seven years after the SRD was introduced, indicated that though only 2,242 rehabilitation units had been completed, over 75,000 households had asked, and received approval, for redevelopment (Table 4.6).

¹²² Redevelopment experience from Bangkok's land sharing program (Sheng, 1992) and Seoul's urban redevelopment programs (Cho & Park, 1995) indicate that the pace of construction in redevelopment programs is likely to be slow. I have not found many details of the Seoul program in English, however, Cho and Park describe the program as a "coalition of residents and developers," where "the private developer participates in the resident's renewal action with business management principles and seeks the maximization of profit," (1995, p. 123). They also point out that from 1983 to 1988, on an average, 6,320 units were demolished and 7,452 units were constructed annually.

Table 4.6: Slum Redevelopment Projects in Mumbai, 1998

		Proposals Received	Proposals Approved	Projects Under Construction	Projects with Occupation Certificates
Mumbai City	No. of Projects	127	111	53	6
	No. of Units	NA	24,310	10,001	806
Western Suburbs	No. of Projects	217	173	55	15
	No. of Units	NA	34,073	12,274	928
Eastern Suburbs	No. of Projects	102	83	37	5
	No. of Units	NA	17,306	6,867	508
Total Projects	No. of Projects	446	367	145	26
	No. of Units	NA	75,689	29,142	2,242

Source: Personal communication, Slum Rehabilitation Authority, August 1998

In addition to this statistical evidence of interest, many slum dwellers that I talked to in Mumbai, including the members of the MCHS, described the new houses as their dream. But they also said that at times, they were afraid of whether they would secure their new housing or not. They were concerned about the possibility of losing their assets to unscrupulous private developers. At the same time, they found the strategy attractive because of the property values of the new flats and because they believed that the new housing was better for their children.

Certainly, the slum redevelopment strategy raises a number of concerns but it is also important to recognize that the actual number of slum dwellers interested in redevelopment may be larger than the 75,000 indicated in the data. Seven reasons that suggest that the demand could be larger are listed below-

- a) Slum Rehabilitation proposals are only being received from slums in locations where the existing property values allow a full cross-subsidy for slum dwellers to be financially viable. It is possible that there are slums where the slum dwellers are willing to partially contribute to the cost of housing and may be interested in redevelopment.
- b) Proposals are not accepted from slums in dangerous and therefore “un-buildable locations,” such as hill slopes, or under power-lines. It is estimated that about 20 percent of Mumbai’s slums are in locations where redevelopment is not allowed (Afzulpurkar, 1995). It is likely

that there are slum dwellers interested in redevelopment but redevelopment will not be allowed.

- c) Although proposals have been submitted from squatter settlements along the coast, where high property values suggest that redevelopment is highly profitable, the proposals have not been approved. Approval is being withheld because of the provisions of the Coastal Regulation Zone notification of 1991.¹²³ The notification prohibits urban development along the coast.
- d) Lack of trust in the private sector developers can limit the interest of slum dwellers. In 1998, some private developers were willing to offer slum dwellers approximately Rs.20,000 per household to pay for renting temporary housing during the construction period. Many slum dwellers that I talked to, find this proposition financially feasible but immensely risky. They prefer arrangements in which they can continue to live on the original sites, or close to the sites, while redevelopment starts on a part of their site. In large and less dense slum pockets, this may be feasible but it is more difficult in dense and small sites.
- e) Some slum dwellers have housing units much larger than the maximum 225 square feet area (21 sq.m) allowed for beneficiaries. These residents are unlikely to favor redevelopment and are likely to contest any interest in redevelopment of the slum.
- f) Similarly, in some settlements economic activities are dominant. Rehabilitation can be counter-productive to such activities in the short as well as long run. Such settlements are not likely to receive broad-base community support for redevelopment.
- g) Proposals are still being prepared. For example, in the middle of August 1998, SPARC was involved in preparing SRS proposals for another eight settlements.¹²⁴

Because of these constraints it may be difficult to estimate the complete extent of the slum dwellers' interest in the strategy in Mumbai. However, it is fair to suggest that for many slum dwellers in Mumbai, there is a substantial appeal in the strategy.

¹²³ This notification was issued under the Government of India's Environment Protection Act, of 1986.

¹²⁴ Interview with Mr. A. Jockin, SPARC, August, 1998.

Figure 4.14: Redeveloped Parts of Dharavi, 1998



4.7 Slum Redevelopment and Tenure Legalization

Property Rights, Property Structures and Property Values

One of the main lessons of the Mumbai slum redevelopment experience is that the package of property rights that accompanies tenure legalization can take many forms. It is important to recognize that the legal property rights granted through any legalization process are unlikely to be unlimited. On the contrary, they will be restricted and defined. This of course means that the property rights in land development can be delineated in a number of ways. In particular, the Mumbai experience suggests at least three different ways of differentiating development rights-

- a) The permitted intensity (Floor Area Ratio - FAR) and density of development
- b) The allowed land use of development
- c) The property rights regime (private, common, etc.)

For example, in Mumbai, as per the existing Development Control Regulations (DCR), the normally allowed FAR ranges from 0.75 to 1.33. This means that if tenure is legalized for illegal squatters, depending on the location of the settlements, they will be allowed to build within this range of permitted FAR. Since the lot-sizes in Mumbai are small and already completely built-up, most slum dwellers have already consumed the allowed FAR. Legal title within the existing development rights framework does not allow most slum dwellers to consolidate their housing by building more floor area. Not even, a second floor. Thus simple legalization may not provide a more useful property rights framework for improvements in existing housing.

Similarly, land development rights include restrictions on the land use that can be developed.¹²⁵ In any tenure legalization strategy an important question is how to treat variations in existing and potential land uses. Will legalization allow a more flexible land use development or will it curtail the possibility of flexibility by outlawing certain land use types?

And what about the property rights regime, i.e., ownership? Most of the focus of policy and literature has been on private property rights. However, Mumbai's experiments involve a common property regime. The logic of the policy is that private action at an individual level is insufficient to improve housing conditions within the city's slums.

The Mumbai case suggests that if there is to be a more differentiated approach to property rights, policy must also consider the physical structure of low-income settlements and

¹²⁵ For example, the SRS allows ten percent commercial land use in all cases of redevelopment. Developers have been approaching the Slum Rehabilitation Authority for a relaxation in the land use regulations and

the houses in it. In other words, the property structures. Specifically, a differentiated property rights approach can start by acknowledging-

- a) The lot-sizes of the individual properties
- b) The build-up on the lots
- c) The layout and organization of the settlements in which the properties are sited
- d) The location of the settlements

The lot-size is important because it is an indicator of how much built up area a slum dweller is likely to be able to achieve on his or her property. It is extremely difficult to add an extra floor on a small lot. Moreover the existing FAR calculation method in Mumbai is biased against the owners of small properties. In Mumbai, the FAR is the main regulatory control limiting the built-up area on a site. The FAR calculations in the city do not include staircases, circulation areas etc. On large land parcels, which are developed as apartment blocks and have significant circulation areas, this allows developers to build more usable area. However, in the case of small lots, where there are no circulation or staircase areas, this method of FAR calculation is disadvantageous. For small property owners, a larger allowed FAR without the provision of deducting special categories of areas, such as circulation, is likely to be more useful and profitable.

Similarly, the existing build-up on the lots is important in legalization strategies because it is an indicator of how much more a property owner can build. In Mumbai, most slum dwellers are likely to have already developed more floor area on their properties than allowed by the legal land development rights. For such slum dwellers, legal tenure does not provide any opportunity to develop additional area. Not surprisingly, legalization within the existing framework of development rights is less attractive.

The settlement layout can also be important. It is more difficult to provide infrastructure in irregularly laid out settlements. Furthermore, in places like Mumbai, the settlements are so dense that it is claimed that it is impossible to provide any amenities, not even toilets because there is literally no space (Panwalkar, 1996). Thus the settlement layout can be an indicator of the ease or the difficulty in physical regularization, i.e., the provision of services and physical integration with the rest of the city. The probability of physical improvement in living conditions can be a variable in decisions by property owners to redevelop or improve housing without demolition.

permission to develop more commercial area. Commercial areas have higher property values, and the developers claim that it is easier to sell.

And finally, the location of the settlements can also be important. Location is likely to impact the present and future property values. In Mumbai, slums can be located in very central and attractive locations. At times, they are right next to high property value uses. In such slums there is a big differential in land value before and after redevelopment. Not surprisingly, there is an enormous financial incentive to redevelop such places.

As a consequence in cities like Mumbai, where the slum dwellers' properties tend to be small, are usually completely built-up, and are a part of irregularly laid-out settlements, but well located, conventional slum upgrading through tenure legalization is difficult and less attractive to slum dwellers. At the same time, these very conditions can provide an incentive to redevelop. Mumbai's slum redevelopment strategy uses common and enhanced property rights (additional FAR) as a tool to facilitate such redevelopment. The redevelopment option presents an opportunity to create property assets that are more marketable and have high property values. Thus, the evidence in this chapter suggests that there is a complex relationship among the property rights, the property structures, the property values, and the success of housing improvement strategies. Upgrading strategies are likely to be more successful if they recognize such nuances.

The Classification of Low-income Settlements

The Mumbai experience suggests that the discourse on upgrading can draw a lesson from researchers like Caminos and Goethert (1978), and Bertaud (1990), who have looked at the significance of varying physical conditions in the case of development of new housing opportunities for low-income groups in developing countries. These researchers have been able to understand physical complexities in relation to the institutional realities of organizations, markets and governance. Literature and policy on upgrading existing settlements could develop a similar kind of sophistication that acknowledges the physical conditions and develops appropriate property rights accordingly.

Another implication of a more complete and balanced understanding is the need to reexamine the prevailing system of classifying low-income settlements as legal or illegal. Competing classification systems of low-income housing settlements in the literature have focused on two kinds of criteria. First, a classification based on physical conditions, and second, based on the origin of settlements. The earlier Modernist classification system based on good or bad housing conditions (slums) was instrumental in the policy choice of slum clearance. This system was discredited because it failed to capture the temporal dimension and the likely

improvements in housing conditions (Burgess, 1985). The physical classification system was replaced by the now prevalent system based on origin, and hence the classification system of legal and illegal settlements, in which illegal settlements are regarded as inferior because illegality is expected to lead to insecurity and therefore a lack of investment in housing. The direct policy response of this classification system is to make illegal settlements legal through legalization of tenure.¹²⁶ While the first classification system, based on housing conditions, ignores the potential of future improvements in housing, the second, based on housing or settlement origin, uncritically assumes that legal title leads to improvement. However, this chapter suggests that slum upgrading efforts are much more complicated and are impacted by property rights, property values, and property structures; a more complex settlement classification system is needed. Any alternative and balanced classification system should acknowledge all these variables.

The Paradox of Physical Determinism

The medium-rise Modernist model of housing has been strongly criticized as an inappropriate housing typology for the urban poor. The literature suggests that this criticism in itself is an important reason to avoid slum redevelopment. However, Mumbai's slum dwellers do not seem to share the concerns of the conventional wisdom and appear willing to be resettled in such housing. Even NGOs that were critical of the Modernist model are accepting the medium-rise model in practice. This suggests that the critique of Modernist housing as physically inappropriate may be paying too much attention to the physical characteristics of housing. Paradoxically, literature that promotes tenure legalization and self-help strategies appears to disregard actual physical characteristics of low-income settlements. Interestingly, what may be common in these two contradictory viewpoints in the literature (criticism of public housing and the praise of self-help) is a belief that the less the State's involvement, the better. However, the Mumbai case suggests that the State's involvement is needed. The next section elaborates on this argument.

¹²⁶ Critics of tenure legalization have suggested that the legal centralism perspective at the root of this classification ought to be replaced by a legal pluralism perspective and hence, formal and informal settlements (Razzaz, 1993). The policy recommendation is that tenure legalization is not essential and that the perception of security of tenure based on the respect and recognition of informal rules and norms is an alternative policy.

4.8 Demand-driven or Supply-driven Development: A False Dichotomy

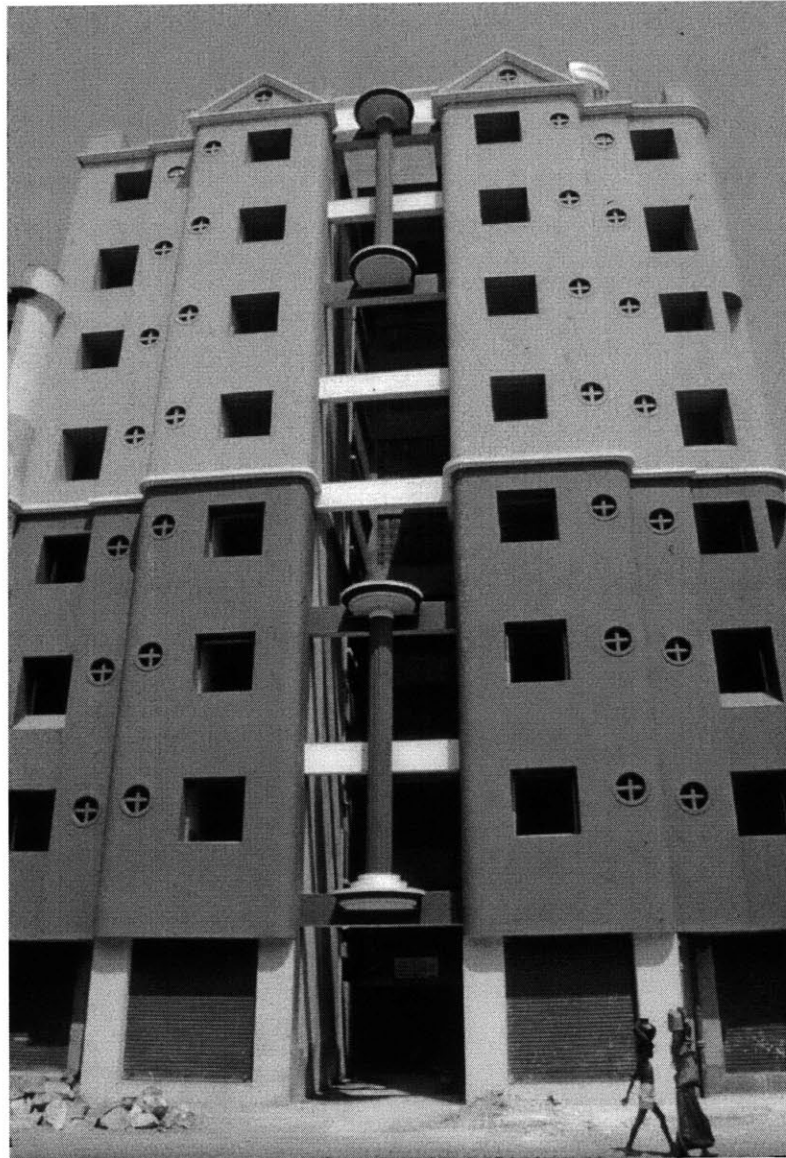
According to the officials of the Prime Minister's Grant Project (PMGP), the demand for Slum Reconstruction in Dharavi far exceeded their target of 3,800 houses. As a consequence, the officials had to ask all additional slum dwellers to opt for the more traditional slum upgrading option. Subsequently, the state government initiated two other programs of slum redevelopment – the Slum Redevelopment Scheme (SRD) and the Slum Rehabilitation Scheme (SRS). The evidence from the Slum Rehabilitation Authority's records indicates that by August 1998, around 75,000 households of slum dwellers had expressed their interest in having their slums redeveloped. While this number is still a fraction of the almost one million households of slum dwellers in the city, it is significant in the context of the claims made that there would be no demand from slum dwellers for redevelopment (Singh and Das, 1995). On the contrary, newspapers report that groups of slum dwellers in the city were contesting each other and private developers for the right to redevelop their slums and capture the increase in land values (Indian Express, April 16, 1997).

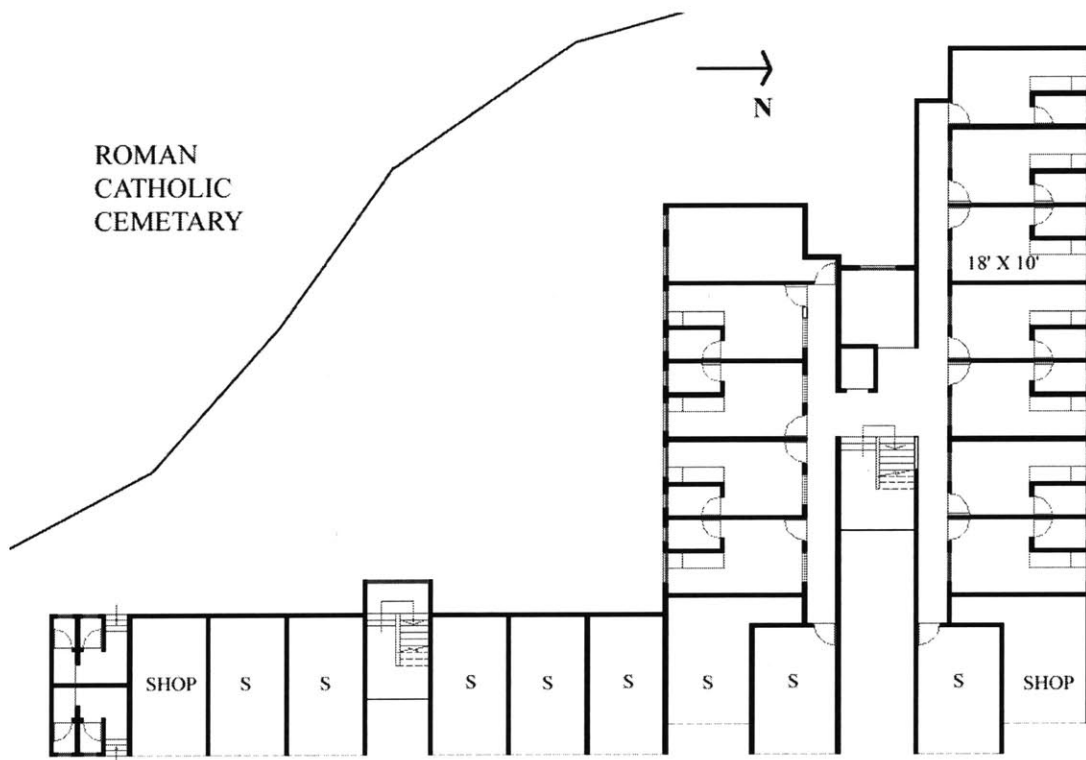
Thus, the evidence demonstrates that the slum redevelopment strategy, despite being an initiative of the state government, has significant support among Mumbai's slum dwellers. What is interesting about the strategy is that it suggests that because of the State's ability to intervene in land development rights, supply-side initiatives can have a unique advantage in housing provision. Such interventions by the State can open-up opportunities that are beyond the horizon of imagination of ordinary beneficiaries. However, the success of such strategies also depends on the State's ability to recognize and provide for the preferences of slum dwellers. In the case of slum redevelopment, the strategy acknowledges two key, demand-side preferences. First, the slum dwellers' dislike of permanent displacement and second, their preference for more valuable housing.

Furthermore, in a city like Mumbai, where the housing market is tight and the supply of housing is constrained, housing policy must strive to increase the range of supply options. In this context, Mumbai's experience with increasing the Floor Area Ratio (FAR) to increase the overall supply of housing and creating a cross-subsidized supply demonstrates one way of how the State can be creative in influencing an enhanced supply of housing. However, the slum redevelopment strategy is resource-intensive and time-consuming and should not be regarded as a panacea. But it is likely that the strategy can be part of a larger set of housing provision policies. In conclusion, housing strategies in places like Mumbai are more likely to be successful if policy embraces both

demand-driven development and supply-driven development in enabling the provision of affordable housing.

Appendix 4.1: Scion Shivaji Nagar CHS





BHAU DAJI ROAD EXTENSION

Chapter 5: Financing Slum Redevelopment

*Center grants 1 Billion Rupees for PMGP	*SPARC enters Dharavi	*PMGP estimates houses for Rs.37,500 *SPARC promises houses for Rs.30,000	*PMGP revises cost to Rs.48,500 *MCHS decides to reconstruct housing with SPARC's support *SPARC revises cost-estimate to Rs.55,400	*MCHS' construction starts *PMGP refuses interest-free loan or guarantee	*MCHS' construction stops because of lack of funds *SPARC provides bridge-loan	*Loan agreement with HUDCO, Subject to collateral *SPARC provides partial bank guarantee to HUDCO *SRD introduced
1985	1986	1987	1988	1989	1990	1991
1992	1993	1994	1995	1996	1997	1998
*Super-structure contractor hired *SPARC arranges for a complete bank guarantee through SELAVIP	*Cost of constr. at MCHS revised up by 70% (Rs.85,000) *New super-structure contractor hired	*MCGB leases land to MCHS *HUDCO completes loan release *MCHS transfers extra units to contractor/ developer in lieu of payment	*Mumbai property prices peak *SRD application submitted for MCHS *MCHS stops loan repayment to HUDCO *SRS introduced	* MCHS and contractor/ developer keen to transfer to SRS *Developer keen on TDR from project *MCHS' units worth Rs.500,000	*HUDCO recalls MCHS' loan *SRA forces contractor/ developer to pay due arrears to HUDCO *Constr. on rehab. component completed	*MCHS members move into new houses *Free-sale constr. continues *SRA decides; developer, MCHS, & SPARC to be equity partners

Figure 5.1: Timeline of Key Financial Events in the Markandeya Case

5.1 Introduction

This chapter elaborates the case of the Markandeya Cooperative Housing Society (MCHS) in Dharavi from a financial perspective. It focuses on how the redevelopment of the Markandeya project was financed and, in particular the problems faced in securing funds. Financing problems and potential conflicts among the participants in redevelopment contribute to the uncertainties involved in projects. This chapter highlights these vagaries to throw into relief the nominal gains that are expected in slum redevelopment.

To mitigate the uncertainties, various innovative institutional structures have been implemented in Mumbai to finance slum redevelopment. An underlying imperative in these institutional innovations is the provision of finance. Contrary to the conventional wisdom's focus on mortgage finance for housing consumers, the new institutional arrangements in slum redevelopment are focused on development finance. Moreover, the private actors have demanded that the state government play a more active role in the provision of development finance. This was contrary to the government's expectations and its intention to invite private developers to finance the slum redevelopment strategy. Thus this chapter also employs a lens of "private investment and public investment" to analyze the institutional roles of public and private actors in housing provision for low-income groups.

In 1991, when the state government extended the Slum Reconstruction program of the Prime Minister's Grant Project (PMGP) to a citywide Slum Redevelopment Scheme (SRD), it expected that the private sector's involvement would lead to an increase in the number of slum redevelopment projects implemented in the city. The government strategy was in accordance with the conventional wisdom that the private sector, given an opportunity to profit, could sharply enhance the production of low-income housing. However, from 1991 to August 1998, only 2,242 houses for slum dwellers had been constructed and occupied (SRA, 1998). This, despite the state government introducing the Slum Rehabilitation Scheme (SRS) in 1995, which further increased the profitability of slum redevelopment projects. Had the slow pace of projects been because of the failure of State agencies to successfully implement redevelopment projects, it probably would be dismissed as yet another case of public sector ineptitude. But since this failure can also be attributed to the private sector, it is intriguing.

The evidence presented in this chapter suggests that, in part, the failure of the private sector to make progress in the slum redevelopment strategy can be attributed to uncertainties in implementation that can make slum redevelopment a financially risky strategy. Since 1995, the property values in Mumbai have been declining. The fall in property values is a major factor

contributing to the uncertainties in this strategy. High property prices are essential to generate a cross-subsidy for slum dwellers. A drop in property prices adversely impacts project profitability and damages the viability of the strategy. Paradoxically, projects that are financially profitable have other problems. Participants in profitable projects are likely to be involved in disputes regarding the distribution of gains from slum redevelopment. Such conflicts can delay progress of projects and contribute to the uncertainty.

Perhaps the major cause of uncertainty in slum redevelopment projects is the unpredictability or unavailability of development finance. Development finance, or construction finance, is needed to construct the slum redevelopment projects. Traditionally developers in Mumbai have financed the construction of real estate projects through “pre-sale financing.” In this established method, potential buyers or investors make advance payments for purchasing property. Developers use these payments to construct projects. However, because of the potential uncertainties involved in slum redevelopment projects that can lead to delays in implementation, property buyers are wary of investing in slum redevelopment. This lack of finance aggravates the problem and leads to further uncertainty.

To cope with the lack of development finance various forms of partnerships and other institutional innovations are being implemented in Mumbai. The advantage of such innovations is that pluralistic housing finance and delivery systems are being created. However, it is still unclear which of these arrangements are more likely to benefit the city’s slum dwellers.

A surprising outcome of these new arrangements is the increased role of the State in the implementation of slum redevelopment projects. Because of the lack of funds, developers and cooperatives of slum dwellers have been postponing projects that have all the required development permissions. Such private actors have demanded that the state government provide finance for construction.

Therefore, contrary to the conventional wisdom, in particular the enabling strategy in housing and its explicit faith in the ability of markets and private investors, the state government is faced with demands to invest in slum redevelopment projects. Thus, the second argument in this chapter is that the State has a more involved role to play in housing provision. In other words, enabling housing provision is likely to require both private as well as public investments.

Moreover, the housing finance literature has predominantly focused on long-term mortgage finance for consumers of housing, i.e., the buyers. There is very little discussion on short-term finance for the producers of housing, i.e., the developers. The Mumbai experience suggests that development finance can also be a significant bottleneck in the construction and

provision of housing, and therefore there is a need for understanding and providing institutional arrangements for development finance.

To elaborate these arguments, the main body of this chapter starts with a literature review focused on the role of the private sector in housing delivery. The intention of the review is to illustrate some of the contradictions and questions that appear across policy and practice. Next, the story of Markandeya's redevelopment is described in three parts. Part one explains how the slum redevelopment strategy started with the State as the main source of funds. Part two elaborates on policy changes made by the government to involve the private sector in financing slum redevelopment. Part three describes how the policy intentions faced limited success and the state government faced demands to play a more direct role in funding slum redevelopment projects. An important objective of these sections is to illustrate how real estate financing mechanisms and strategies work in places like Mumbai. Given the emphasis of housing policy on using formal markets for housing provision, this account provides an important corrective.

The last section of the chapter elaborates on the relevance of the contrarian findings from this case for housing provision strategies and the involvement of the State.

5.2 Literature Review: Markets and Partnerships

Markets and Low-income Housing

In 1972, the World Bank initiated its sites-and-services and slum upgrading projects in Senegal. However, during the 1980's the World Bank's policy shifted from these projects to "housing finance development," (World Bank, 1993). In this "second phase," the World Bank's housing policy focused on creating mortgage finance instruments in developing countries. These instruments were intended to help provide housing consumers with more choices in the market. In the nineties, with the enabling strategy, the World Bank's focus shifted to the third phase, "housing policy development," (World Bank, 1993). The World Bank, supported by the United Nations Centre for Human Settlements (UNCHS), urged governments to reengineer housing policy to emphasize the importance of market forces in creating an adequate supply of affordable housing. The World Bank argued that-

Governments are advised to abandon their earlier role as producers of housing and to adopt an enabling role of managing the housing sector as a whole. This fundamental shift is necessary if housing problems are to be addressed at a scale commensurate with their magnitude – to improve substantially the housing conditions of the poor and if the housing sector is to be managed as a major economic sector, (1993, p. 1).

Like governments of other developing countries, the Indian government also found the advice compelling. The Government of India's National Housing Policy, 1994, proposed that the activities of the public agencies would be reoriented to enable and facilitate the shelter activities of the community at large and the legitimate private sector actors in particular. However, faith in the formal private sector to provide housing for low-income groups remains questionable. Skepticism about the private sector's ability and willingness to reach the poor is grounded in the unsuccessful past experiences to promote the formal private sector in Chile from 1973 to 1983 (Baken and van der Linden, 1993); in the failure of Bogota, Colombia's *normas minimas* developments to reach down-market (Mohan, 1994); and in the failure of the private sector to provide affordable housing in the Egyptian New Towns (Soliman, 1999).

Another criticism of the housing literature and policy is that although the practice is now focused on enabling the provision of housing through private sector actors, there is very little discussion or provision of development finance for housing producers. Housing policy and literature is still focused on housing finance in terms of mortgages for housing consumers (World Bank, 1993; Mitlin, 1996; & Datta and Jones, 1999). Clearly, in the absence of adequate instruments of development finance, the cost of credit and the debt-servicing rate will be high, raising the cost of housing proportionately. How are private developers expected to reach low-income groups under such conditions?

Public-Private Partnerships and Housing

In the nineties, another institutional model that gained popularity was public-private partnerships (PADCO, 1991; UNCHS, 1993; Batley, 1996; & Payne, 1999). Public-private partnerships have been defined as "programs and/or projects in which both public and private sector entities have financial commitments and exposure to risk" (PADCO, 1991, p. 3). It is fairly common in such partnerships for the public sector to participate through a land-for-equity swap, i.e., the public contribution is in the form of land (Sagalyn, 1993; 1997; & Archer, 1999). At times, the private partner is expected to contribute equity in the projects in exchange for the public land or at times for regulatory permission (Durrand-Lasserve, 1999).

The critiques of such partnerships as institutional models for the provision of housing for low-income groups are similar to the concerns raised in the earlier sub-section. How does the private sector, in the absence of institutional avenues to access development finance, complete such projects? Do such partnerships benefit low-income groups? While there are claims regarding

the success of public-private partnerships in providing affordable housing in India (PADCO, 1991), other researchers have questioned such claims (Mukhija, 1997).

Another concern is that the focus of such partnerships is on the public sector working with formal private sector actors. Can partnerships be more inclusive to include actors such as communities and NGOs, i.e., public-community partnerships? Some of these questions and concerns become evident in the story of the redevelopment of the Markandeya slum. Markandeya's case is elaborated in the next three sections.

5.3 Prime Minister's Grant and State Finance for the Redevelopment of Dharavi

Prime Minister's Grant: A Rotating Fund for Redevelopment

In early 1987, the Maharashtra state housing authority released a document describing the state government's intention to redevelop the Dharavi slum (MHADA, 1987). Subsequently, the state government instituted the PMGP as a special institution within the state housing authority to reconstruct Dharavi's slum housing into medium-rise apartment blocks. The PMGP allocated 370 million Rupees for this project.¹²⁷

However, when the PMGP began to elaborate an implementation plan for Dharavi, it faced three major obstacles. First, it did not have enough funds to redevelop all of Dharavi. Second, there was political opposition to the plan because redevelopment also involved the resettlement of some of the original residents outside Dharavi. And third, a significant part of the funds were needed to clean and widen the Mithi River to prevent the annual flooding of the slum. Consequently, the PMGP decided to reconstruct only 3,800 houses in the initial phase. It hoped to use its finances as a rotating fund to leverage additional capital from various public and private sources and, on being repaid by the beneficiaries, initiate additional cycles of redevelopment.

The PMGP planned to redevelop Dharavi with housing units of carpet areas ranging from 165 to 430 square feet (15-40 sq.m), depending on the area of the existing houses of the slum dwellers. In 1987, it estimated that it would cost Rs.37,500 to construct the 180 square feet (17 sq.m) apartment. The PMGP calculated that the beneficiaries had to pay less than fifteen percent of the cost as down payment. The PMGP planned to subsidize the beneficiaries by an almost equal amount and intended to arrange the balance as a housing-loan (Table 5.1). The PMGP's

¹²⁷ The PMGP was established on the basis of a Billion Rupee grant from the Central Government. Apart from the redevelopment of Dharavi, the grant was to be used to redevelop the old *chawls* in the city (410 Million Rupees) and provide infrastructure in other slums in the city (220 Million Rupees).

informal marketing slogan for the redevelopment strategy was similar to – “Give us Rs.5,000 and get a key to a new apartment.”¹²⁸

Table 5.1: PMGP’s Cost Estimate for a 180 square feet Unit, 1987a

Source of Funds	Amount (Rs.)
Member’s down payment	5,000
Housing loan	27,100
PMGP’s subsidy	5,400
Total	37,500

Source: Interviews with V.G. Gode, ex-Director, PMGP and G.S. Pantbalekundri, ex-Senior Planner, PMGP, 1997

The officials of the PMGP claim that there was an overwhelming demand from Dharavi’s residents to participate in the Slum Reconstruction program. This is not surprising. Apart from the social respectability of living in an apartment as opposed to a slum, there was tenure legalization for the slum dwellers and a considerable government subsidy. More importantly, beneficiaries expected a significant appreciation in the value of their housing assets. In areas that were selected by the PMGP for the Slum Reconstruction projects, the property value of a typical hut (approximately 120 sq.ft.) increased from Rs.10,000-20,000 to approximately Rs.50,000-60,000 immediately after the notification.¹²⁹ However, there were also some concerns raised about the slum dwellers’ ability to afford the loan-liabilities, future maintenance expenditure and higher property taxes. A local politician from the ruling Congress Party warned his constituents against the proposal. He argued that the poor slum dwellers could not afford the new apartments and were committing suicide with a “gold-dagger.”¹³⁰

Beneficiaries’ Contributions and Housing Loans from State Agencies

To negotiate housing loans for Dharavi’s residents, the PMGP approached the Government of India’s housing finance agency, the Housing and Urban Development Corporation (HUDCO), and other national banks. HUDCO was willing to lend from its low-

¹²⁸ Interview with Mathew John, 1998. Mathew John used to be a Dharavi resident, later he became a real estate agent in Dharavi. He went on to become the Managing Director of SM. Associates, a real estate development company.

¹²⁹ Interviews with Mr. Kulkarni, Chief-promoter, Ishwari CHS, Rajendra Prasad Nagar, Dharavi, 1998.

¹³⁰ Ibid.

interest rate funds earmarked for low-income groups. Although HUDCO offered lower interest rates than the banks it had two conditions. First, it wanted the state housing authority to guarantee the loan. Second, it could not lend more than Rs.20,000 at the subsidized low-interest rate of nine percent per annum.¹³¹

The PMGP recognized that Dharavi's beneficiaries would find it difficult to afford the higher interest rate. It accepted HUDCO's loan conditions and decided to provide Dharavi's beneficiaries the balance of the required loan from its funds (Table 5.2). Moreover, since HUDCO had insisted that the borrowers' monthly loan-liability should not be increased, the PMGP also agreed to lend to the beneficiaries on an interest-free basis. Since the PMGP's interest-free loan was not to be paid back until the beneficiaries had retired HUDCO's fifteen-year loan, effectively the PMGP's loan was a big subsidy.

Table 5.2: PMGP's Revised Cost Estimate for a 180 square feet Unit, 1987b

Source of Funds	Amount (Rs.)	Amount (Rs.)
	1987b	1987a
Member's down payment	5,000	5,000
HUDCO's loan	20,000	27,100
PMGP's loan	7,100	5,400
PMGP's subsidy	5,400	0
Total	37,500	37,500

Source: Interviews with V.G. Gode, ex-Director, PMGP and G.S. Pantbalekundri, ex-Senior Planner, PMGP, 1997

In contrast to the other cooperatives in Dharavi, the Markandeya Cooperative Housing Society (MCHS) had decided that it did not want the PMGP to be involved in the implementation of its project. On the contrary, the MCHS wanted to self-manage the project with the help of an NGO, the Society for the Promotion of Area Resource Centres (SPARC). SPARC had assured the MCHS that, if the cooperative eliminated the government's involvement from its project, it could remove the possibilities of corruption and inefficiency. Moreover, the MCHS could depart from the PMGP's expensive, medium-rise housing model and design a cheaper, low-rise structure with

¹³¹ If the slum dwellers borrowed more than Rs.20,000, the loan-ceiling for the concessional rate, the interest rate had to be three percent higher, i.e., twelve percent. The banks were willing to lend at a rate of twelve to fourteen percent. Interview with V.G. Gode, ex-Director, PMGP, 1998.

larger housing units. SPARC assured the MCHS that with the NGO's help the cooperative's members could get houses of 280 square feet (26 sq.m) area for less than Rs.30,000.

Increase in Cost Estimates

In 1988, when the construction work started in Dharavi, the PMGP realized that it had underestimated the cost of construction by approximately twenty-five percent. It proposed that this increase in cost be met by additional contributions from beneficiaries and a larger interest-free loan from the PMGP (Table 5.3). Unfortunately, such cost increases are common in projects and the beneficiaries had little option but to accept the revised estimate.

Table 5.3: PMGP's Cost Estimate for a 180 square feet Unit, 1988

Source of Funds	Amount (Rs.)	
	1988	1987b
Member's down payment	5,000	5,000
Member's additional contribution	8,100	0
HUDCO's loan	20,000	20,000
PMGP's loan	10,000	7,100
PMGP's subsidy	5,400	5,400
Total	48,500	37,500

Source: Interviews with V.G. Gode, ex-Director, PMGP and G.S. Pantbalekundri, ex-Senior Planner, PMGP, 1997

A cost-increase was also experienced in the Markandeya project. Architects commissioned by SPARC had designed the Markandeya building as a three-floor high structure with fourteen feet (4.3 m) high floors. Each unit covered a 180 square feet (17 sq.m) area but could accommodate an additional loft of 100 square feet (9 sq.m). When the design was finalized in 1988, contrary to the initial assurance, SPARC and the architects proposed that the MCHS budget Rs.55,400 for the cost of housing! (See Table 5.4).

However, the project-architect claims that the estimated unit construction-cost was only Rs.49,000, marginally higher than the PMGP's estimate of Rs.48,500 for the ten feet (3 m) high units. But he and SPARC recommended that the cooperative should account for potential cost-overruns, office-expenditure, etc., and collect additional funds. The MCHS accepted this advice

and with SPARC's assistance prepared a payment plan for the project. Their plan used the PMGP's payment plan as its reference but increased the amount contributed by beneficiaries.

Table 5.4: Markandeya's Payment Plan for the 280 square feet Unit, Compared with the PMGP's 180 square feet Unit, 1988

Source of Funds	SPARC 280 sq. ft. (Rs.)	PMGP 180 sq. ft. (Rs.)
Member's down payment	5,000	5,000
Member's additional contribution	15,000	8,100
HUDCO's loan	20,000	20,000
PMGP's loan	10,000	10,000
PMGP's subsidy	5,400	5,400
Total	55,400	48,500

Source: Interviews with Sharad Mahajan, Purbi Architects, 1998 and the Managing Committee of the MCHS, 1998

Financial Prudence of State Agencies

But when the MCHS approached the PMGP, the State agency declined both the interest-free loan and the bank guarantee for HUDCO. The PMGP argued that since it had no control over the construction-process, it could not take the financial risk.¹³²

SPARC claims that the PMGP was upset by the cooperative's idea to work independently of the government. The NGO assured the cooperative that it would help negotiate the loan from HUDCO and approached the housing finance corporation. HUDCO, which has a mandate to help low-income groups, agreed to lend Rs.20,000 per member, directly to the cooperative. The corporation, however, demanded collateral. HUDCO offered three options – a guarantee from the state housing authority, a bank guarantee, or a mortgage of the land and the proposed building. SPARC preferred the idea of a mortgage as this could set a precedent for other cooperatives such as the MCHS to borrow directly from the corporation.

However, with the PMGP's refusal to extend the interest-free loan, there was still a deficit of almost twenty percent. To mitigate this shortfall, rather than revise the design and reduce the floor area of the units, SPARC proposed an increase in the contribution of the beneficiaries and eliminated all provisions for contingencies and administrative expenditure

¹³² The PMGP, however, did agree to provide the subsidy and temporary housing for the MCHS.

(Table 5.5). This meant that any cost-overruns in the project or mismanagement of the project could create serious problems in implementation.

Table 5.5: Revised Payment Plan for the Markandeya CHS, 1989

Source of Funds	1989 (Rs.)	1988 (Rs.)
Member's down payment	5,000	5,000
Member's additional contribution	18,600	15,000
HUDCO's loan	20,000	20,000
PMGP's loan	0	10,000
PMGP's subsidy	5,400	5,400
Total	49,000	55,400

Source: Interviews with Sharad Mahajan, Purbi Architects, 1998 and the Managing Committee of the MCHS, 1998

5.4 Private Capital from the Non-profit and the For-profit Sectors

Bank Guarantee from an International NGO

Although the collateral for the loan from HUDCO was still being arranged by SPARC, construction work at Markandeya started with the members' contributions. Progress, however, was slow because the cooperative did not have enough funds. SPARC agreed to help the cooperative by lending Rs.250,000 from the funds of another cooperative it was working with, the Jankalyan CHS.¹³³

SPARC had been negotiating with the municipal corporation for Markandeya's land lease. In principle, the corporation had agreed to lease to the MCHS but the details were still being discussed and the lease was yet to be drafted. However, on the basis of this progress, in June 1991, HUDCO and the MCHS signed a formal contract for the housing loan, subject to the provision of collateral.¹³⁴ The loan was to be released in three installments (Table 5.6), and the

¹³³ SPARC claims that it was compelled to help because the NGO felt a sense of obligation towards the MCHS and because its credibility among other residents of Dharavi was being hurt by the slow progress at Markandeya.

¹³⁴ HUDCO agreed to lend for fifteen years with quarterly repayments. The loan carried a rate of interest of 9.0%, plus a risk charge of 0.5%. (The risk charge would not be levied if the state government guaranteed the loan.) It included a 0.5% rebate on early payments and a 2.5% penalty on late payments. There was also an additional interest of 3.0% on all outstanding interest payments. The loan repayments were alternatively Rs.58,000 and Rs.57,000 every quarter. HUDCO's accounting software computes repayments in *Lakhs* (hundred thousands), and it rounds-up payments to two decimal places. Consequently, the repayments at

effective monthly loan-liability for Markandeya's members was Rs.209.59. The contract included the possibility of a partial loan-release on the basis of a corresponding cash (bank) guarantee. SPARC decided to use this condition to provide HUDCO with a partial bank guarantee.¹³⁵

Table 5.6: HUDCO's Loan Release Plan, 1991

Loan Installment	Amount (Rs.)
First installment	1,071,000
Second installment	408,000
Final installment	361,000
Total loan	1,840,000

Source: HUDCO's loan agreement with the MCHS, July 26, 1991

The NGO guaranteed a million Rupees through the Bank of Baroda by maintaining a fixed-deposit with the bank. SPARC hoped that, on the basis of this bank-guarantee, HUDCO would release the first loan-installment. But HUDCO argued that it could not release more than 75 percent of the guarantee amount, as the collateral had to secure future interest payments as well.¹³⁶

In December 1991, HUDCO released the truncated first loan-installment to the MCHS, but the loan-amount was spent almost immediately. The cooperative consumed more than a third of the loan to repay SPARC. The rest was paid to the foundation-contractor. By early 1992, the only progress on the project was a complete foundation. To help construction work progress, SPARC extended another interest-free bridge-loan of Rs.200,000 to the MCHS.

Meanwhile, the NGO, continued to negotiate with the municipal corporation for the land to be leased to the MCHS. The corporation was willing to lease the land, but was unwilling to allow the cooperative to mortgage the land to HUDCO. SPARC also unsuccessfully kept trying to convince the state housing authority to guarantee the loan.

SPARC was, however, successful in convincing a Northern NGO, the Belgian Foundation, SELAVIP - *Servicio Latino Americano y Asiatico de Vivienda Popular* (Latin

Markandeya were to alter between 0.57 and 0.58 Lakhs. Any adjustments that had to be made in the loan payments would be made in the last payment (Source: HUDCO's loan agreement, July 26, 1991).

¹³⁵ The NGO expected that the MCHS would soon obtain the land-lease and replace SPARC's bank guarantee with its mortgage.

American and Asia Low-income People's Housing)¹³⁷ - to provide HUDCO with a bank guarantee for the entire loan.¹³⁸ SELAVIP had earlier collaborated with SPARC. In July 1992, it extended a guarantee of \$100,000 through the Bank of Liechtenstein. At the prevalent exchange rate, this was equal to one and a half times the planned loan.

On the basis of the bank guarantee, HUDCO agreed to release the complete loan amount and surrendered SPARC's bank guarantee.¹³⁹ In December 1992, the housing finance corporation released the balance amount from the first loan-installment.¹⁴⁰ But before it released the second installment, HUDCO expressed concern at the slow progress of the project and demanded a revised cost-estimate from the MCHS.¹⁴¹ The project's last official cost-estimate was from 1988. The project-architect's revised estimate for Markandeya showed a cost escalation of seventy percent!

The cooperative's members had already spent almost four years in their temporary housing. But even the first floor of their project was not ready. Now the project was almost three times more expensive than the first estimate of Rs.30,000 in 1987. The members were further distressed by SPARC's proposal that the members double their loan commitments as well as their direct contribution to the project (Table 5.7).

¹³⁶ HUDCO agreed to release only Rs.750,000. It also deducted front-end fees (transaction cost) for the complete loan from this amount. This is a standard lending practice, but it did reduce the amount of money available to the MCHS.

¹³⁷ The SELAVIP foundation supports shelter improvement programs for low-income groups (See, Anzorena, 1993).

¹³⁸ Again, SPARC expected to replace SELAVIP's guarantee with the land and building mortgage as soon as the municipal corporation leased the land to the MCHS.

¹³⁹ SPARC presented SELAVIP's international bank guarantee to the Bank of Baroda and in return the bank agreed to execute a guarantee of Rs.2,760,000 for HUDCO. HUDCO agreed to surrender SPARC's initial guarantee of Rs.1,000,000. But the Bank of Baroda insisted that, since it was dealing with an international guarantee, which it claimed was subject to foreign exchange rate risks, SPARC had to retain its Rs.1,000,000 deposit with the bank. SPARC's deposit would also cover any potential delays involved in invoking the international guarantee. Moreover, SPARC had to pay a service charge of 0.1 percent/month to the Bank of Baroda for extending the guarantee to HUDCO. This worked out to Rs.33,120 a year, hardly an insignificant amount when compared with the Rs.20,000 loan/member.

¹⁴⁰ The balance amount from the first installment was, $Rs.1,071,000 - 750,000 = Rs.321,000$.

¹⁴¹ HUDCO's request was fairly normal. It is a standard practice for lenders to link loan disbursement to construction progress. This allows them to ensure that the loans are spent on the construction of projects. It also provides an opportunity for lenders to cut their losses and discontinue lending to distressed projects that are likely to default.

Table 5.7: Revised Financial Plan for Markandeya CHS, 1993

Source of Funds	1993 (Rs.)	1989 (Rs.)
Member's contribution	40,000	23,600
HUDCO's loan	40,000	20,000
PMGP's subsidy ¹⁴²	5,000	5,400
Total	85,000	49,000

Source: Interviews with Sharad Mahajan, Purbi Architects, 1998 and the Managing Committee of the MCHS, 1998

SPARC requested HUDCO to revise the MCHS' loan because a larger credit was needed to complete the project. HUDCO agreed; but only to revise the loan up to Rs.35,000/member.¹⁴³ Unlike the earlier loan, the new loan exceeded the loan-ceiling for concessional interest rates and would attract a three percent higher charge.¹⁴⁴ The loan was subject to the provision of additional collateral, either a bank guarantee or the mortgage.

In 1993 the Municipal Corporation of Greater Bombay (MCGB) agreed to lease the MCHS its land.¹⁴⁵ In 1994, it signed an agreement to lease with the cooperative and subsequently transferred the lease-deed to the MCHS.¹⁴⁶ Though the cooperative's members were reluctant and concerned about the increased loan-liability, because of pressure from SPARC, they presented the lease documents to HUDCO to execute a mortgage. But HUDCO also needed a valuation certificate of the property and Income Tax clearance certificates of the cooperative. On SPARC's

¹⁴² The PMGP's subsidy was reduced to Rs.5,000 because the agency deducted a transaction charge before releasing the subsidy.

¹⁴³ HUDCO intended to release the balance from the initial loan, i.e., Rs.769,000 and the additional amount of Rs.1,380,000, in four installments, (Source: Agreement between HUDCO and the MCHS, August 09, 1994).

¹⁴⁴ The new amount would attract an interest rate of 12.5%. In addition, there would be a front-end fee of 1.25%. The risk charge was fixed at 0.5%. There was also a penal interest of 2.5% on any overdue amount and an additional interest (interest tax) of 3.0% on the interest payable, (Source: Agreement between HUDCO and the MCHS, August 09, 1994).

¹⁴⁵ As a condition to lease the land, the MCGB demanded a deposit of Rs.173,550. The deposit was intended to ensure that the constructed building met all specified building standards. The corporation demanded a deposit equal to two years ground rent, calculated on the basis of the existing market rates. The deposit was to be returned after the construction was completed and an Occupancy Certificate was granted for the building. On SPARC's request, the municipal corporation agreed to accept a bank guarantee instead of a cash deposit. SPARC provided this guarantee (Source: i) Agreement to lease between the Municipal Corporation of Greater Bombay and the MCHS, December 09, 1993, and ii) Interview with A. Jockin, SPARC, 1998).

¹⁴⁶ In March 1994, the municipal corporation made a 30-year land-lease to the MCHS for an annual rent of 1Rupee (Source: Lease agreement, March 07, 1994). The cooperative had to pay stamp-duty on the lease-

request HUDCO agreed to prepare the valuation certificates on behalf of the MCHS. However, the housing finance corporation argued that it was unable to relax the legal requirement of tax-clearance certificates.¹⁴⁷ The MCHS needed complete financial accounts to complete these certificates. It claimed that it had not maintained its accounts, since the treasurer of the cooperative had been sick for a year!

Consequently, HUDCO only released the balance of the initially agreed loan (Table 5.8).

Table 5.8: HUDCO's Loan Release

	Amount (Rs.)	Release Date
1	750,000	December 04, 1991
2	321,000	December 04, 1992
3	265,000	March 18, 1994
4	398,000	September 15, 1994
5	106,000	December 13, 1994
Total	1,840,000	

Source: Interview with BSA Murthy, Appraisal Officer, HUDCO, Mumbai, 1998

It is not surprising that, despite SPARC's pressure, the MCHS' members were against the proposal to take an enhanced loan. Instead, they saw the possibility of developing more units in Markandeya and creating a cross-subsidy for the members. In neighboring Slum Reconstruction projects such as the Ishwari CHS and the Kailash CHS, beneficiaries were involved in such approaches.

deed transfer. Stamp duty is paid on all property transactions. It is paid to the state government and was calculated at four percent of the value (market value of the land rent) of the transaction.

¹⁴⁷ Two certificates were needed. First, under chapter XX-C of the Income Tax Act the MCHS had to complete form 37-I. The 37-I form has to be cleared for all property transactions exceeding a certain threshold. The conditions for 37-I vary from city to city and are also amended from time to time. In Mumbai the threshold amount at that time was Rs.1,000,000 (subsequently, in the late-nineties, it was increased to Rs.7,500,000). The regulation is intended to curtail the use of black money, i.e., unaccounted cash, in property transactions. If the Income Tax authorities suspect that a real estate property is being undervalued in a transaction, they have the right to acquire the property at the declared amount. The second certificate was required under Section 230-A of the Income Tax Act. To fulfill this requirement the cooperative was required to submit a complete audited account statement of its expenditure. This certificate is required for all instruments of transfer of property rights (except an inheritance will) exceeding Rs.500,000. Without this certificate, property transactions are considered invalid by the state government.

Policy Changes to Attract Private Capital

In the middle of 1993, the MCHS' project-architect introduced the cooperative to a new contractor, Shayambhai Patel. The new contractor was willing to invest in the Markandeya project for the right to develop and sell additional units in the market. The contractor was aware of the Slum Redevelopment Scheme (SRD) introduced by the state government in 1991. SRD allowed the city's slums to be redeveloped at a higher intensity and density. The additional units could be sold in the market and the profits used to subsidize the slum dwellers and compensate the private developers. When the state government introduced the scheme in 1991, it proposed that slum dwellers pay only Rs.25,000 for their new houses and developers be allowed a maximum profit of 15 percent (Independent, April 08, 1992).

Such provisions, however, made little sense in the market-place. An almost equal rate of return could be earned through fixed bank deposits. Why would any developer venture to risk private capital in a slum redevelopment project? A possible explanation is that in India, at that time, market liberalization was still a relatively new concept and profit was still an unacceptable word. However, by 1992, when the state government announced the implementation guidelines for the SRD, the profit-ceiling was increased to a slightly more realistic 25 percent.¹⁴⁸ Correspondingly, the state government reduced the slum dwellers' contribution to Rs.15,000 (Independent, April 08, 1992).

The architect supported the idea of adding additional units to the project. Sixteen additional units could be added to the third floor. By the middle of 1995, property prices in Mumbai were at an historic high. According to Markandeya's residents, each of these potential additional units had a market value of around half a million Rupees and a construction cost less than a quarter of that. This suggests a profit of Rs.6,000,000.¹⁴⁹

But the contractor disagreed with my calculations and claimed that the figures were misleading. He argued that the market value of the additional units was lower than my estimate. Furthermore, the construction cost would be higher as the units would have to be finished with better materials and would also include toilets. Most significantly, he claimed that the calculations did not include an interest rate of 48 percent as the cost of capital. Thus, in two years the cost of construction effectively doubles if debt-servicing is included.

¹⁴⁸ It could probably be argued that this regulatory constraint was only instituted to create an opportunity for public officials to indulge in rent-seeking.

¹⁴⁹ If the construction cost of each unit in 1995 was around Rs.115,000 (an assumed increase of 35 percent on the 1993 cost-estimate), then the cost of units for the 92 MCHS' members was Rs.10,580,000. Thus, the profit appears to be enough to pay for the housing of over 50 members.

Nonetheless, in 1995 the contractor proposed to the MCHS that they apply for permission to develop Markandeya as an SRD project. The contractor agreed to invest in the project and complete the construction for the development rights to the additional units that the SRD would allow. He offered to repay HUDCO's loan, SPARC's bridge-loan and to fulfill any demands of the PMGP or the state housing authority that were likely to be made in lieu of their initial subsidy amount. The cooperative's members would each pay only Rs.40,000 for their units.¹⁵⁰

The MCHS agreed; and in May 1996, the contractor, now the "developer," received permission from the Slum Redevelopment Committee to develop two additional floors on the Markandeya building. He was permitted to build 87 additional units of which 19 were to be handed over to the state housing authority. But in October, the developer resubmitted his application with the request that he be asked to transfer only one unit (a shop) to the government. In his revised application, the developer claimed that he was providing the slum dwellers with "free-housing" and his total profit was only 1.15 percent (Appendix 5.1). The developer's request was approved (Table 5.9).

Table 5.9: Unit Statements at the Markandeya CHS

	1996 October	1996 May	1989	1988
MCHS' Members	92	92	92	92
MCHS' Office	1	1	1	2
State Housing Authority's Commercial	1	1	-	-
State Housing Authority's Residential	-	18	-	-
Developer's Units	86	68	-	-
Total	180	180	93	94

Source: Interviews with Sharad Mahajan, Purbi Architects, 1998 and the Managing Committee of the MCHS, 1998

However, by this time, the new state government had introduced the Slum Rehabilitation Scheme (SRS). The key differences between the SRS and the earlier SRD were a more predictable Floor Area Ratio (FAR) by right and the introduction of Transfer of Development Rights (TDR). For the developer, the TDR provision was an opportunity to profit further.

¹⁵⁰ Though the beneficiaries were expected to have contributed Rs.40,000 each, the total contribution by the beneficiaries was Rs.3,168,700. This averages to about Rs.35,000 per member. Some of the members had paid the full Rs.40,000, while the others were expected to pay the balance prior to allotment.

Markandeya's building structure could not support additional units, but, according to the new rules the developer was eligible for an additional 1030 square meter of market-sale area (Table 4.5). If the developer received this development potential as a transferable Development Right Certificate (DRC) he could sell the certificate for around fifteen million Rupees.¹⁵¹

This is more than the construction-cost of housing for the MCHS' members. To receive permission under the SRS scheme, however, the developer would have two additional expenses. First, he would have to deposit Rs.20,000 for each MCHS member with the Slum Rehabilitation Authority (SRA) as a corpus payment for future maintenance expenditure. Second, he would have to pay a development charge for the built up area in excess of the normally allowed FAR. Even with these expenses the developer could expect to profit by over 10 million Rupees (Table 5.10).

Table 5.10: Financial Cost-benefit of the SRS through TDR

Benefit	Sale price of TDR	1030.39sq.m X Rs.14,000	Rs.14,425,460.00
Cost 1	Corpus payment for MCHS	92 X Rs.20,000.00	Rs.1,840,000.00
Cost 2	Development charge to the municipal corporation	2256sq.m X Rs.840.00	Rs.1,895,000.00
Profit			Rs.10,690,420.00

Sources: i) MHADA, 1997

ii) Technical Report, Purbi Architects, MCHS, June 18, 1998

Shayambhai proposed to the MCHS that they apply for SRS permission. He agreed to pay all of the cooperative's liabilities (outstanding loans and interest payments), but he refused to return their contributions. This meant, on average, the houses would cost the members Rs.35,000 each as opposed to the government requirement of "free-housing."¹⁵²

Markandeya's residents decided against negotiating with the developer until he completed their apartments, even though some of the members told me that the cooperative wanted the developer to return half of their contributions. However, they were aware that, before the developer received the TDR, he would have to present to the SRA signed "possession-letters" from the cooperative. Thus, the MCHS would have an opportunity to negotiate with the developer

¹⁵¹ The prevailing market value of DRC in Mumbai was between Rs.12,000-16,000/sq.m (1,100-1,500/sq.ft.). See Appendix 5.2 for a sample of a DRC. This certificate was issued to an adjoining property.

after the construction was completed. Finally, in early 1998, members of the cooperative started occupying their new units. Although, the MCHS' members had been in temporary housing for almost ten years, in 1998, they estimated that their new houses were worth close to half a million Rupees!¹⁵³

5.5 Institutional Responses to the Scarcity of Finance

The Joint Venture at Markandeya

SPARC had been sidelined in the Markandeya project by the private developer. However, the NGO recognized that the developer had the financial capacity to finish the project that it had initiated. But, SPARC was concerned about the loan repayments to HUDCO. After making some of the initial repayments to the housing finance corporation, the MCHS had stopped all repayments after it signed the agreement with the developer in 1995.¹⁵⁴

In September 1997, after repeated notices and demands for repayment, HUDCO informed SPARC that it intended to recall the loan and the interest due. It threatened to invoke the international bank guarantee to meet the cooperative's loan-obligation.¹⁵⁵ SPARC tried to force the developer to pay. It claimed that the developer had to provide the MCHS with free-housing. If the developer returned the members' initial contributions, SPARC could use those funds to repay HUDCO. But the developer refused.

In December 1997, SPARC approached the Slum Rehabilitation Authority (SRA) for help. The SRA's Chief Executive Officer (CEO) accepted SPARC's argument that the NGO should not be financially hurt and ordered the developer to pay HUDCO's pending arrears at that

¹⁵² See footnote 150.

¹⁵³ In 1987, before the PMGP picked out Markandeya for redevelopment, the average price of the huts in Markandeya was around Rs.20,000.

¹⁵⁴ SPARC was concerned because the bank guarantee it had arranged was likely to be invoked. But the MCHS was not the only cooperative defaulting on loan obligations. Other cooperatives in Dharavi had also stopped their repayments, leaving the state housing authority liable, (interview with Mr. V.G.Gorde, Secretary Slum Rehabilitation Authority and an ex-Director of the PMGP, 1998). The loan recovery in Dharavi was less than thirty percent (The Independent, August 17, 1994). This poor loan recovery left the PMGP and in return the Maharashtra Housing and Area Development Authority (MHADA) liable. To recover its losses, in 1998, MHADA tried to sell some of the apartments it had constructed for slum relocation along the 100 Feet Road in Dharavi. These units had been built on tannery land and the original intention was that they would be used to re-house adjacent slum dwellers and then the empty slum-land would be redeveloped.

¹⁵⁵ At that time, the MCHS owed HUDCO Rs.2,422,577. Principal was Rs.1,758,000; Interest was Rs.646,859; and Additional Interest was Rs.17,718 (Source: Letter from HUDCO to the MCHS, September 05, 1997).

time.¹⁵⁶ The CEO also decided that the developer and the cooperative, negotiate an agreement on the premise that Markandeya's members were not eligible for free-housing because their units were fourteen feet high as opposed to ten feet and therefore the members had to pay the developer the cost of the extra height.¹⁵⁷

The CEO asked Markandeya's architect to calculate the cost of providing the extra height. The architect used 1998 cost-prices to estimate the additional cost and calculated that the developer owed the cooperative a balance amount of almost 2.1 million Rupees.¹⁵⁸ SPARC disagreed with the calculations and argued that the construction price difference be calculated on 1996 prices since most of the actual construction of the rehabilitation units was completed in 1996 (Table 5.11). It calculated that the developer owed the cooperative a balance amount of almost 2.6 million Rupees.¹⁵⁹

Table 5.11: The Cost of the Extra Height

Height	Area (sq.ft.)	1998 Constr. Cost (Rs./sq.ft.)	1998 Total (Rs.)	1996 Constr. Cost (Rs./sq.ft.)	1996 Total (Rs.)
14'-0"	268.72	535	141,078	460	123,611
10'-0"	268.72	450	120,924	400	107,488
Extra 4'-0"			20,154		16,123

Source: Technical Report, Purbi Architects, Markandeya CHS, February 25, 1998

But the parties could not agree on how to resolve their disputes. Eventually, the CEO of SRA suggested that the Markandeya project be considered a joint-venture between the developer, the cooperative and the NGO. With the help of the architect's calculations, the CEO asked the developer to transfer ten of the ten feet high units to the MCHS and SPARC as their share in the

¹⁵⁶ The pending arrears were Rs.1,260,000 (Source: Letter from SPARC to HUDCO, December 17, 1997).

¹⁵⁷ This meeting was held at the CEO's office on February 17, 1998.

¹⁵⁸ The actual amount calculated by the architect was Rs.2,100,086 (Source: Technical Report, Purbi Architects, February 25, 1998).

¹⁵⁹ The actual amount claimed by SPARC was Rs.2,638,000. Source: Mimeo, Purbi Architects, March 3, 1998. The architect revised the calculations but the developer insisted that the cooperative pay him interest at the rate of 16 percent for the two years past 1996. According to his calculations he owed the cooperative Rs.2,248,000. (Source: Technical Report, Purbi Architects, June 18, 1998. The managing committee at a meeting with the CEO of SRA accepted this agreement. (This meeting was held on June 15, 1998. SPARC's was absent from the meeting) But SPARC objected. It felt that the developer's logic of charging the beneficiaries interest was unfair. On the contrary, it argued that the developer should pay the interest, as he should have repaid the cooperative in 1996. According to their new calculations the developer owed the MCHS, approximately, Rs3,500,000. (Interview with A.Jockin, SPARC, 1998).

project. The cooperative and the NGO agreed to use the sale-proceeds to, first, repay HUDCO's outstanding loan; then, SPARC's bridge-loan; and subsequently pay back the members a part of their contributions (Table 5.12).

Table 5.12: Amounts Likely to be Returned to MCHS' Members (Rupees)

Sale Price of ten Units	3,000,000.00	3,500,000.00
HUDCO's Outstanding Loan	1,607,000.00	1,607,000.00
SPARC's Loan and Interest	400,000.00	400,000.00
Balance	993,000.00	1,493,000.00
Per Member	10,793.48	16,228.26

Sources: Interview with A. Jockin, SPARC, 1998

SPARC's Deal-making

Before the Markandeya project was completed, SPARC started working on a new SRS project with another Dharavi cooperative, the Rajiv-Indira Cooperative Housing Society (RICHS). SPARC is the developer of this project and estimated that the project would cost over 50 million Rupees.¹⁶⁰ To finance the project SPARC approached HUDCO and the leading private housing finance corporation, the Housing Development Finance Corporation (HDFC), but both lenders were unwilling to lend without appropriate collateral.

Since the state government is the landowner in the Rajiv-Indira slum, SPARC briefly explored the possibility of the government leasing the land to the cooperative and SPARC using the lease as a mortgage for the loan. But SPARC abandoned the intention for at least three reasons. First, it was unclear how long the state government would take to lease the land. Second, the lease would be to the cooperative, SPARC would not be able to use the cooperative's lease to secure a loan for itself. Third, SPARC was successful in negotiating a construction loan from the American multinational bank, Citibank.

Citibank agreed to lend to SPARC almost half the construction cost.¹⁶¹ The bank agreed to lend for a number of reasons, namely-

¹⁶⁰ In August 1998, SPARC estimated that the project would cost Rs.53,666,424. See Appendix 5.3.

¹⁶¹ Citibank agreed to lend to SPARC Rs.25,000,000 for eighteen months at an interest rate of fourteen percent. Interviews with T. S. Anil, Product Manager Mortgage & Personal Loans, Citibank, Mumbai, 1998. SPARC claims that if HUDCO had agreed to lend, the loan would have had an interest rate of twelve percent.

- a) There was an international initiative launched by the Citibank to be involved in local community efforts through the Citigroup Foundation. Through this initiative SPARC was scheduled to receive a grant equal to 40 percent of the loan.¹⁶²
- b) SPARC provided a bank guarantee from Homeless International (HI), UK, for more than 25 percent of the loan.¹⁶³ HI's guarantee was secured by booking six apartments in its name at Rajiv-Indira.¹⁶⁴
- c) SPARC demonstrated an advance sale equal to 18 percent of the loan.¹⁶⁵ Bilance, a Dutch NGO, that had made grants to SPARC in the past, had bought this property for SPARC.
- d) The projected cash-flows of the scheme demonstrated its financial viability. Citibank supervised and helped SPARC prepare the financial analysis of the project.¹⁶⁶

SPARC intended to use the commercial space bought by Bilance, as a bank, "*Jansampatti*" (People's Wealth). The NGO had planned to institute Jansampatti as the umbrella-bank for the many saving and credit accounts managed by the various Mahila Milans, women's cooperatives, it promoted and supported (Patel, 1993). SPARC expected Jansampatti to grow into a viable housing finance institution capable of providing "...home finance to the poor from their own pooled savings...." (Patel, 1993).¹⁶⁷

In July 1998, the Rajiv-Indira site was cleared and foundation-work started.¹⁶⁸ It was expected that the project would be completed in two years.

¹⁶² Citibank's grant to SPARC was for Rs.10,000,000 and was to be released over three years. Even though this grant is not formally linked to SPARC's construction loan, it is conceivable that Citibank intended to use this grant to adjust SPARC's repayment obligations.

¹⁶³ Homeless International's guarantee was for 100,000 Pounds Sterling, or approximately, Rs.7,000,000. Since, Homeless International arranged this guarantee through a bank deposit in a London branch of the Citibank, SPARC was not required to pay any service charge.

¹⁶⁴ The six apartment units booked by SPARC for Homeless International have an average Built-up area of 600 square feet (55 sq.m). SPARC estimated a sale price of Rs.2000/square foot and an average apartment value of Rs.1,200,000. Thus, the six units were worth approximately Rs.7,200,000.

¹⁶⁵ The pre-sale was estimated at Rs.4,000,000.

¹⁶⁶ SPARC expected to raise the balance of the construction-cost through pre-sale agreements.

¹⁶⁷ Also see, Patel & Burra, 1994. Patel and Burra, p. 396, described the Mahila Milan bank as, "would be organized as a federation capable of making interorganization adjustments to pool the effects of different cycles of peaks and troughs in the finances of small credit organizations."

¹⁶⁸ SPARC hired Falak Constructions as the general contractor. The firm was hired on a fixed-rate contract. Falak Construction quoted a rate of Rs.575/sq.ft. for the market-sale component and Rs.650/sq.ft. for the rehabilitation component. Normally, construction-cost of the market-sale is higher than the cost of the rehabilitation area because of the better amenities and finishes in the market-sale units. However, at Rajiv-Indira it was expected to be the opposite because the rehabilitation units have been planned with fourteen feet high floors while the market-sale units will have ten feet high floors. (In other redevelopment projects in Mumbai the cost of construction in market-sale units in August 1998 was approximately Rs.600/sq.ft. The cost of construction for the rehabilitation units was between Rs.500-550/sq.ft.) At Rajiv-Indira, an

State Initiative to Provide Development Finance

Most other developers in Mumbai are less successful in securing development finance for slum redevelopment projects. It is well accepted that in the Indian property market there is very little institutional support for debt-financing of construction projects. Even HDFC, the leading private sector housing finance provider, rarely makes construction finance loans to private developers.¹⁶⁹ There are two main reasons for hesitation on the part of lenders. First, they regard Indian foreclosure laws to be extremely weak. And second, there is no institutional provision of insurance for development finance loans.

In the case of slum redevelopment, the problem of collateral is further aggravated. The state government does not want to lease the slum land to developers, but to the slum dwellers' cooperatives. Developers can not use this lease for collateral.

Developers have requested the SRA, for land-leases to the part of the site that they intend to develop for market-sale. (After construction the market-sale portion of the sites are to be leased to cooperatives of market-sale buyers.) However, the state government has refused. The government claims that it can not lease the land to the developers, as it has no institutional means to ensure that the developers will complete the projects and not vanish with the construction loans.¹⁷⁰ Instead, the state government has agreed to provide the developers with "agreements-to-lease," as opposed to lease agreements. But lending agencies are likely to refuse to lend on the basis of such agreements as collateral.

The SRA's CEO blames the construction finance problem as the major bottleneck in the progress of the slum redevelopment strategy. According to the SRA's records, 367 projects had been approved by August 1998. In less than 40 percent of these, construction had started (Table 5.13). Furthermore, it was unclear how much actual progress in construction was being made in these projects. Unfortunately, it is possible that only the existing slums have been demolished.

additional construction cost of Rs.50/sq.ft. was also expected because of the pile foundation. Interviews with Bhati Naeem, Falak Constructions, 1998.

¹⁶⁹ Interview with Mr. Krishnamurthy, Property Services Group, HDFC, Mumbai, 1998. Reputed corporations, however, could access construction loans at a 17-19 percent interest rate. Also, interview with S.B. Bhaise, Larsen and Tubro, Consultants Group, Mumbai, 1998.

¹⁷⁰ Interview with V.G. Gorde, Secretary Slum Rehabilitation Authority, 1998

Table 5.13: Land-ownership, Distribution and Status of Slum Rehabilitation Proposals, 1998

	Proposals Received	Proposals Approved	Construction Started
Municipal land	143	120	45
MHADA land	62	52	10
State Government land	38	37	20
Central Government land	01	01	-
Private land	202	157	70
Total	446	367	145

Source: Personal Communication, Slum Rehabilitation Authority, August, 1998

To improve the pace of implementation, the state government launched a new initiative. In June 1998, it decided to set up the Shiv-Sahi Punarvasan Prakalap Limited (SPPL), to raise 100 billion Rupees (over 2.2 billion US Dollars) for the slum redevelopment projects.¹⁷¹ The state government asked the Mumbai Regional Development Authority (BMRDA) and the Maharashtra Housing and Area Development Authority (MHADA) to contribute Rs.3 billion each to build-up SPPL's capital base. The government planned to raise the balance through Overseas Development Assistance and the capital markets (Times of India, June 26, 1998). The SPPL was expected to work in close cooperation with the SRA (Times of India, July 08, 1998).¹⁷²

In 1999, however, the Shiv Sena lost the state assembly elections and was replaced by a coalition led by the Congress Party. By that time, the SPPL had started financing 29 redevelopment projects. However, the new Maharashtra state government declared that the SPPL would not finance any new projects (Times of India, December 05, 1999).

5.6 Private and Public Investment

Risks in Slum Redevelopment

Markandeya's case definitely illustrates that the slum redevelopment strategy is risky. The MCHS' members left their huts and moved into temporary housing in 1988. They spent

¹⁷¹ *Shiv-Sahi Punarvasan Prakalap* roughly translates to the rehabilitation project for Shivaji's (legendary Maratha king) state.

¹⁷² The state government's intention to institute the SPPL was very controversial. While the Shiv Sena party was keen on the intention, its coalition partner the Bhartiya Janata Party (BJP) was less enthusiastic (Times of India, August 19, 1998). The BJP members questioned the financial viability of the SPPL and

almost ten years in an unenviable state of displacement.¹⁷³ During this period, they were not only frustrated by the slow pace of construction-progress at Markandeya but were also helpless and vulnerable. Unfortunately, Markandeya's case is quite typical. Beneficiaries in other slum redevelopment projects also experience immense delays in project completion. These experiences raise an important question. What should the government's role be when slum redevelopment projects are initiated? For example, a scrutiny of the financial capacity of project developers (communities, NGOs, or private developers) can, at least, reduce the potential hardships faced by beneficiaries. But perhaps more importantly, it will be useful for potential beneficiaries to know that in slum redevelopment, delays are likely and that it is a risky housing provision strategy.¹⁷⁴

But why is slum redevelopment such a risky strategy? One explanation is that risk is inherent in this approach because it is so closely related to market conditions. For example, in the Markandeya case, the developer claimed that because of the fall in property values in Dharavi after 1995, he found it extremely difficult to sell the additional market-sale units and this delayed project completion. The validity of his claim is supported by his decision to transfer ten of the market-sale units to the MCHS and SPARC. If it were easy to sell the units he probably would have preferred to sell the apartments and pay the cooperative and the NGO.

The manner in which the SRS has been structured, property values of the market-sale units have to be high enough to pay for the cost of construction of the rehabilitation area and the free-sale area, the corpus fund for future maintenance expenditure, development charges to the municipal corporation for floor area in excess of the normally allowed FAR, other official permissions, transit cost for beneficiaries, debt-service and profit.¹⁷⁵ Some of the private developers that I have interviewed in Mumbai claim that for slum redevelopment projects to be viable, property values of the free-sale area must be at least Rs.3,000/square foot.

However, high property values and larger potential gains can lead to other problems. First, there can be conflict among the participants on how to share the gains. And second, developers making profit may also face demands from corrupt public employees as well as

criticized the state Housing Minister's promise that the SPPL would ensure the construction of 100,000 units by the end of the year 2000.

¹⁷³ Although, for some of the MCHS' members, the temporary housing may have actually provided better living conditions than the earlier slum.

¹⁷⁴ Fortunately, despite the grandiose promises of the Slum Rehabilitation Scheme, a sense of realism existed in the city and the municipal corporation is continued with its program of building 100,000 toilets in the city's slums, (Times of India, June 12, 1998).

¹⁷⁵ See Appendix 5.3 for a more detailed illustration of the costs involved in Slum Rehabilitation Scheme projects.

extortion from the city's notorious political and criminal mafia.¹⁷⁶ Such hurdles can cost directly and indirectly through the loss of time. All delays increase the holding-cost of project for developers. Yet another factor that contributes to the uncertainty in slum redevelopment is the lack of development finance for construction.

The Problem of Development Finance

Like most developing countries, India does not have well-developed institutions of development finance for the construction industry (Economist, June 13, 1998). The lack of funds was the single biggest reason for the slow progress in the Markandeya case. The developer claimed that his cost of finance from informal sources was 48 percent. According to his claims, the cost of construction effectively doubles in two years if debt-servicing is factored into the cost. Surprisingly, in the SRD's "Annexure II," that was completed by developers for building permission and used by the SRD Committee to compute the profit and determine the allowed FAR, there was no provision to calculate the impact of debt-servicing on profit!

Nonetheless, the developer's claim of a 48 percent interest rate and doubling of the cost of construction in two years appears to be excessive. Traditionally, developers have used advance payments to finance the construction of real estate projects. These payments from homebuyers and investors (speculators) are interest-free. Developers have typically contributed about 25 percent of the equity in projects, 30-40 percent has come from investors (who have a share in the project) and the balance from advance sales to end-users.¹⁷⁷ Of course, these alternative means of financing can be unreliable and expensive. Formal development finance can be cheaper and may reduce the uncertainties in the property market. But formal finance requires an advanced legal system with workable foreclosure laws. Moreover, institutional finance for slum-encumbered land can be trickier because the collateral is less attractive. Thus contrary to the conventional

¹⁷⁶ Interviews with Ranjit Naik, an architect involved in almost fifty redevelopment projects, including the Sion Shivaji Nagar CHS, 1998.

¹⁷⁷ There are also other informal methods of financing. According to S. Menon, the contractor of the Sambhaji Nagar redevelopment scheme, builders and contractors usually have an overdraft facility at their local banks. The local bank managers can approve up to a million Rupees in advance through such facilities. The overdraft facility is secured by collateral equal to the value of the loan. Collateral is usually in the form of fixed bank deposits or National Savings Certificates kept in the bank's locker. The interest rate is around 22-24 percent, compounded daily. At times, credit is also available from dealers of building construction material. The dealers usually have arrangements with their suppliers. The possibility of credit varies from product to product. For example, in Mumbai in 1998, it was impossible to buy floor-tiles without advance payments. But contractors could buy cement and sand aggregate and pay a month later. Steel on the other hand was available at a credit-rate of 1.5-2.0 percent/month, up to a period of three

belief that land is the main problem in providing housing for low-income groups, in the slum redevelopment strategy, the land problem is resolved but replaced with access to finance as the key problem.

There is an interesting story, which is a bit of a legend in Mumbai, of a slum dweller financing the redevelopment of a Mumbai slum. This slum dweller used to work as a diamond-cutter. Apparently one day, while working, he managed to hide and smuggle out of his workshop, an uncut diamond that he was working on. The diamond-cutter planned to use the money from the pilfered diamond to become a developer and invest his funds to redevelop his slum.¹⁷⁸

Of course, there can not be many cases of stolen or misplaced diamonds financing slum redevelopment. The redevelopment strategy must not be dependent on such a happenstance. Maharashtra's state government has recognized the development finance impasse. Its initiative to institute the SPPL was intended to overcome the financing bottleneck in the slum redevelopment strategy. Compared to the twenty-one projects financed by the private sector, in which units were developed and occupied by slum dwellers, the SPPL had started financing 29 other projects. However, the SPPL's future is less certain because the new state government declared its intention to dissolve the body. In any case, the 29 projects that it started funding do indicate the role and value of public investment in housing provision.¹⁷⁹

Mumbai's slum redevelopment experience suggests that a simplistic reliance on the private sector's initiatives is dangerous. The State's involvement can increase the possibility of housing production. At the same time, other initiatives from Mumbai also indicate the possibility of more pluralistic housing finance and delivery systems.

months. (Interviews with S. Menon, Viraj Enterprises, building contractor of the Sambhaji Nagar CHS, 1998).

¹⁷⁸ Interview with A.Jockin, SPARC, 1998.

¹⁷⁹ Another example of the government's role in the housing market is the Government of India's efforts at developing a secondary mortgage market. It has been argued that the State is in the best position to absorb the start-up cost for such an institution (Lea, 1994). The international evidence suggests that from the point of view of consumers, secondary mortgage markets have been an unqualified success (Follain and Zorn, 1990). A Secondary Mortgage Facility, the National Housing Bank exists in India, since 1989 (Pugh 1990). The National Housing Bank was formed under the Seventh five-year plan and obtains capital and then on-lends to various housing finance institutions. According to the initial Secondary Mortgage Markets plan four housing finance institutions will be allowed to bundle their mortgages and raise 1.15 Billion Rupees (Economic Times, July 12, 1998). In the Indian Budget of 1999, the Finance Minister announced that the Finance Ministry was moving to propose an amendment to the Security (Regulation) Act to pronounce the "pass-through certificates" as approved security (Economic Times, February, 27, 1999). In other words the amendment would allow debt to be transferred.

Partnerships and other Institutional Innovations

Markandeya's redevelopment was ultimately regarded as a joint venture between the private developer and the community. It suggests that Mumbai's slum dwellers may be in a position to financially contribute to slum redevelopment. But if the slum dwellers are expected to financially contribute then the stipulation of free-housing of 225 square feet is problematic. On the contrary, slum dwellers may be able to participate in projects, contribute through equity and negotiate for their benefits. The State could support them with technical assistance in their negotiations with private developers.

SPARC's second project, the RICHS, also suggests another institutional model. An advantage of having NGOs involved in slum redevelopment is that, like SPARC, they may be in a position to leverage international development assistance. Moreover if this assistance is in the form of loans and grants, redevelopment projects that are less financially viable may also be implemented.

Conclusion

This chapter argues that the slum redevelopment strategy in Mumbai is risky but institutional innovations are taking place that may lead to more success in the strategy. These innovations are focused on the provision of development finance for the construction of projects. This focus is contrary to the literature's focus on mortgage finance for low-income housing. Secondly, the State has an important role to play in the provision of development finance. Therefore, enabling housing production can not depend only on private initiatives and private finance. It is likely to require public investment as well.

Appendix 5.1: Markandeya CHS: Annexure II SRD Application, October 1996

Source: S.Mahajan, Purbi Architects, Markandeya CHS

Annexure II M/S Purbi Architects

Slum Redevelopment Project for Markandeya Cooperative Housing Society, Dharavi

Cost of the Project

1. Cost of 81 tenements constructed for rehousing slum dwellers at (Rs.500/sq.ft.) 1,9995.56 sq.m X Rs.5,382.00	= Rs. 10,740,103.92	(1)
2. Cost of Nil tenements for project affected Persons to be given to PMGP	= Nil	(2)
3. Cost of 204.12 sq.m built-up commercial Rs.500/sq.ft. 204.12sq.m X Rs.5,382.00	= Rs. 1,098,573.84	(3)
4. Cost of commercial shop for sale 17.31 X 5,382.00	= Rs. 93,162.42	(4)
5. Cost of construction of 92 tenements of sale Including 18 tenements to be given to PMGP At construction rate (Rs.500/sq.ft.) 2,107.49sq.m X Rs.5,382.00	= Rs. 11,342,511.18	(5)
6. Cost of PMGP shop/commercial 18.22sq.m X Rs.5,382.00	= Rs.98,060.04	(6)
7. Cost of Society room 18.56sq.m X Rs.5,382.00	= Rs.99,889.92	(7)
8. Cost of staircase area 315.55sq.m X Rs.5,382.00	= Rs.1,698,290.10	(8)
9. Cost of electric meter room 18.56sq.m X Rs.5,382.00	= Rs.99,889.92	(9)
TOTAL COST (1+2+3+4+5+6+7+8+9)	= Rs.25,270,481.34	(A)
10. Supervision charges (5% of A)	= Rs.1,263,524.07	(10)
11. Price variation (10% of A, and transit accommodation)	= Rs.2,527,048.13	(11)
12. Development charges for market-sale area		
a. Rs.40 per sq.m of proportionate plot area [1,928.89 X 45.31] / 100 = 873.98sq.m 873.98sq.m X Rs.40	= Rs.34,959.20	
b. Rs.100 per built-up area Rs.100 X 2,167.50sq.m	= Rs.216,750.00	
c. Commercial area for sale 17.31sq.m X 2 X 100	= Rs.3,462.00	
Total (a+b+c)	= Rs.255,171.20	(12)
13. Staircase area premium		
a. Commercial area =		
Member	= 232.34 sq.m	
Sale	= 17.31 sq.m	
PMGP	= 18.22 sq.m	
Total	= 239.65 sq.m	

b. Other Residential = 4,342.70 – 239.65
= 4,103.05 sq.m

Proportionate staircase area

c. Total staircase area = 315.55sq.m
d. Proportionate staircase for commercial area
[239.65/4342.70] X 315.55 = 17.41 sq.m
e. Proportionate staircase for residential area
315.55 – 17.41 = 298.15sq.m

Staircase premium calculations

Residential	= 298.15 X 830 X 1.05	= Rs.259,837.73	
Commercial	= 17.41 X 830 X 2 X 1.05	= Rs.30,345.63	
Total		= Rs.290,183.36	(13)

14. TOTAL Project Cost (A+10+11+12+13) = Rs.29,606,408.10 (14)

Recovery of Project Cost

1. Recovery from sale in market of 84 tenements

a. Residential at Rs.14,000/sq.m
Rs.14,000 X (2,107.49 + 142.96) = Rs.29,462,860.00

b. Commercial at Rs. 28,000/sq.m
Rs.28,000 X 17.31 = Rs.484,680.00

Total Income = Rs.29,947,540.00 (X)

Total Expenditure = Rs.29,606,408.10 (Y)

Profit (X-Y) = Rs.341,131.90 (Z)

Percentage of income over expenditure


[Z/Y] X 100 = 1.15%

Note – the Project is nearly viable by cutting on overheads etc., and after cancellation of requirement to transfer 18 tenements to the PMGP

MCHS's Chairman's signature
(Challaiah)

Architect
Sharad Mahjan
31/10/96

Appendix 5.2: A Development Rights Certificate

<p>महानगरपालिका MUNICIPAL CORPORATION Mahapalika Marg, DEVELOPMENT RIGHT CERTIFICATE I, S/ri... <u>Garish Vasudeo Gokhale</u></p>		<p>महानगरपालिका OF GREATER MUMBAI Fort, Mumbai-400 001.</p>
<p>MUNICIPAL COMMISSIONER FOR GREATER MUMBAI</p>		
<p><i>Certify that the person(s) within named in this certificate is/are the registered holder(s) of the DEVELOPMENT RIGHT CERTIFICATE issued subject to the provisions of the regulation No. 33(10) & 34 read with appendix VII (B) of the Development Control Regulations for Greater Mumbai, 1991 as amended upto date.</i></p>		
<p>1 (a) Location & details of the land on which S. R. P* is sanctioned. (b) Area of the land on which S. R. P* is sanctioned. (c) Zone of the land in 1(a) above. (d) Number & date of approval of S. R. P. sanctioned by S. R. A.</p> <p>2 (a) B. U. A. sanctioned in the form of T. D. R. in the S. R. P*. (b) Number & date of the order issued by C. E. S. R. A.*** for 2(a) above.</p> <p>3 (a) Built up area of the developed reservation handed over to M.C.G.M. (b) Possession Receipt No. & date. (c) Reservation of built up amounty.</p> <p>4 The area where D.R.C. can be utilised:</p>	<p>C. S. Nos. 43 (pt), 86 (pt) to 96 (pt) of Dharavi Division. 3656.78 sq.mts. Residential zone. SRA/DyCE/1480 dtd.21.3.97</p> <p>2450.00 sq.mts. (Phase-I) SRA/DyCE/1949 dtd.4.4.97.</p> <p>Not applicable. Not applicable. Not applicable.</p> <p>The D.R.C. will be allowed to be used as provided under Regulation Nos. 8 to 13 of Appendix VII B of the D.C. Regulation for Gr. Mumbai, 1991 as amended upto date.</p>	
<p>Folio No. /SRP/ Certificate No. SRA./.../Rehab TDR CITY/.../DN-1 WARD/Phase I (One) Name(s) of the D.R.C. Holder(s) M/s. Akrut1 Nirman Pvt. Ltd.</p>		
<p>F.S.I. Credit of built-up area in Sq. Mts. (in figures) 2450.00 sq.mts. (in words) Two thousand four hundred fifty square metres.</p>		
<p>Given under common seal on this... 17th... Day of... July... Year 1997</p>		
<p><i>[Signature]</i> Chief Engineer Development Plan</p> <p><small>*SRP = Slum Rehabilitation Project **CE = Chief Executive Officer ***SRA = Slum Rehabilitation Authority</small></p>	<p><i>[Signature]</i> Authorised Signatory Municipal Commissioner For Greater Mumbai.</p>	

Appendix 5.3: Cost Estimate of the Rajiv Indira CHS

Source: A.Jockin, SPARC

Cost of the Project

1	Rehabilitation Area 2842.71sq.m X 7,618Rs./sq.m	Rs.21,655,765.00
2	Sale Area 1900.31sq.m X 7,910Rs./sq.m	Rs.15,031,452.00
3	Cost of Transit	Rs.1,060,000.00
4	TOTAL	Rs.37,747,217.00
5	Supervision Charge @ 5%	Rs.1,887,360.00
6	Price Variation @ 10%	Rs. 3,774.722.00
7	Infrastructure Premium (3644.92sq.m-2394.63sq.m) X Rs.840	Rs.1,050,244.00
8	Corpus Payment Rs.20,000 X 84	Rs.1,740,000.00
9	Development Charges 1583.41sq.m X 140Rs./sq.m	Rs.221,677.00
10	Premium (Stair+Lift+Lobby+Balcony) 10% X 291.56sq.m X Rs.20,000/m	Rs.583,120.00
11	Interest burden @ 15% for half period	Rs.5,662,083.00
12	Other Costs Electrification deposit, taxes, etc.	Rs.1,000,000.00
	TOTAL	Rs.53,666,424.00

Chapter 6: Enabling Slum Redevelopment in Mumbai

6.1 The Main Arguments

The Government of Maharashtra's slum redevelopment strategy in Mumbai, involves demolishing the existing slums and building new, entirely cross-subsidized, medium-rise, apartment-block housing for the slum dwellers on the original sites. This strategy is distinctly different from the two prevalent conventional strategies with respect to slums in developing countries – slum clearance and slum upgrading. Interestingly, slum redevelopment in Mumbai appears to enjoy considerable support of slum dwellers, NGOs and private developers. However, very few redevelopment projects have been completed in the city.

The main objective of this study was to comprehend and explain the slum redevelopment strategy. Specifically, why and how did this strategy evolve and what are the key issues in implementation? This research indicates that Mumbai's redevelopment strategy has evolved gradually. Though the strategy is most closely associated with the Slum Redevelopment Scheme (SRD) and the Slum Rehabilitation Scheme (SRS) introduced by successive state governments of Maharashtra in 1991 and 1995, the strategy's history is much older. The history can be traced back, at least, to the recommendations of two separate committees (Moghe committee and Awale committee) appointed by the state government in 1980 to recommend policies to improve housing conditions in Mumbai's slums.

Slum redevelopment is based on a key intervention by the local government, at the behest of the state government, in the land development regulations to allow an increased intensity of development, thus creating additional land values in the slums. Previous attempts at increasing the allowed intensity of development in the city were criticized and not implemented because such changes were believed to lead to an increase in the population of Mumbai and, therefore, more pressure on its infrastructure and environmental resources. However, in the nineties, the policy attitude changed. Three local conditions appear to have played a significant role in this change – the growing number of slum dwellers in the city, electoral competition between Mumbai's political parties and the high property values in the city.

Furthermore, the enhanced land values allowed the state government to devise a strategy of sharing the property values between the slum dwellers, landowners, and private developers. The slum redevelopment strategy was acceptable to the slum dwellers, traditionally opposed to the demolition and redevelopment of slums, as they expected to receive a more valuable housing asset. It was acceptable to the landowners and attractive to private developers because they

expected to profit financially from the redevelopment. It was agreeable to the other city-residents because they expected Mumbai to gain physically through a more attractive building stock. And finally, the strategy was attractive to the state government because of its broad acceptance by the other stakeholders, the potential of a higher property tax collection (at the municipal level) and the virtue of being a highly visible policy intervention with a low cost and likely large political payoffs.

However, slum redevelopment is a risky strategy. The property values must be high enough to cross-subsidize the slum dwellers, compensate the landowners, and provide an attractive profit to the private developers. A fall in property values during and prior to construction can hurt all participants, particularly the slum dwellers. Moreover, although the intention to redevelop has to be approved by a majority of the slum dwellers, they are not in control of the redevelopment process. Redevelopment is capital intensive and the investors of the funds, the private sector, the non-profit sector, or the public sector are likely to control the projects. The lack of capital can delay projects and add to uncertainties in implementation. In Mumbai, to make redevelopment more viable, the State (local and state government) relinquished its right to profit, despite being the landowner. Yet the state government faced demands from the private developers for help in financing redevelopment projects because of the high cost of capital in the market and the lack of formal institutional support for development (construction) finance. Furthermore, implementing the slum redevelopment strategy requires State oversight because the increase in property values that it creates can generate conflicts between the various participants. Such property related conflicts increase the uncertainty in projects and, hence, hurt project viability.

Nonetheless, because of the increase in property values that it can generate and because the slum dwellers can share the enhanced land values, the strategy may be superior to alternatives such as slum upgrading and slum clearance, especially if the State can provide institutional support for the implementation of projects.

A key finding to understand the slum redevelopment strategy, is the recognition of the limitations of slum upgrading strategies. Conventional literature promotes “slum upgrading,” as the housing improvement strategy preferred by beneficiaries. Typically, the slum upgrading strategy focuses exclusively on private property rights and the legalization of such rights. It is premised on the logic of positive legal and economic causality, i.e., security of tenure encourages individual residents to invest in their houses, as they can be certain of the safety of their

investments. It advises policy-makers to provide squatters with secure property rights, to allow individual property holders to consolidate and improve their living environments.

On the contrary, the evidence from Mumbai indicates that the conventional expectation of slum dwellers always preferring slum upgrading may be flawed because of the strategy's exclusive focus on private property rights and security of tenure. The slum upgrading strategy does not consider how the new legalized property rights are likely to be influenced by - the existing land development regulations in the city, the physical structure of slum settlements and the property values in the city. A possible explanation for this oversight of an undifferentiated focus on property rights in slum upgrading is that the strategy is based on problematic assumptions. The literature appears to assume that formal property rights are unlimited, low-income settlements are regularly laid out, these settlements include reasonably large property-lots and the land values in the settlements are not significant.

In contrast, in Mumbai, the legally permitted intensity of development is very low. Furthermore, many slum dwellers have small, completely built-up property-lots in settlements with irregular layouts in which it is difficult to provide even basic infrastructure and amenities. However, these settlements can be well located in the city and have high development potential. In such settlements, even with secure development rights, the physical structure of their properties can make it difficult for the slum dwellers to capitalize on the potentially high land values, without some form of change in the structure of their properties through land assembly or land readjustment. Moreover, the city's slum dwellers are likely to have already built on their properties, floor areas equal to what legal development rights allow. In Mumbai, the possibility of creating property assets that have a larger area, are more marketable and have higher property values, through the slum redevelopment strategy, provides the incentive for the slum dwellers to act collectively to redevelop their properties. This implies that housing investment decisions and improvement processes can be much more complex than assumed in the conventional wisdom.

Thus, this study argues that a balanced view of housing improvement processes demands recognition of all three conditions - the property rights, the property values and the property structures (the physical structure of properties) and their impact on each other. The interplay between the three can significantly impact the behavior of various actors in the housing markets, even leading to the demand for demolition and redevelopment as opposed to in-situ upgrading. Moreover, this interpretation of complexity also suggests that governments may have a more involved role to play in housing improvement processes.

The next significant finding in the dissertation elaborates on the more involved and complex role of the State in housing provision. Hence, the third main argument in this study questions the conceptual validity of the current approaches of “enabling” the provision of housing in developing countries. In conventional thinking, enabling housing provision consists of decentralization, demand-driven development, privatization and deregulation. The focus of this policy package is to reduce the “damaging” involvement of the State in the housing sector. Maharashtra’s state government has tried to enable slum redevelopment through such strategies. However, through its enabling strategies the government has achieved limited success in implementing slum redevelopment projects, despite the clear demand from many slum dwellers and despite the apparent profitability of various projects on paper.

The evidence from the slum redevelopment experience in Mumbai suggests that enabling slum redevelopment, a strategy of housing production and delivery through market mechanisms, requires a different type of State involvement, not necessarily less State involvement. In other words, paradoxically, enabling housing provision may require, both decentralization and centralization; both demand-driven and supply-driven development; both private as well as public investment; and both deregulation and new regulations. This complex and more sophisticated role for the State is necessary to provide the institutional support for well-functioning property markets, as well as to capture the opportunities high value property markets provide. The four sets of seeming contradictions are discussed below.

Decentralization and centralization: Mumbai’s experience suggests that decentralization of decision-making in the case of slum redevelopment can lead to conflicts, based on claims to the new high value property assets, among participants. Under such conditions, the decentralized actors, such as NGOs, communities and private developers, are likely to demand that the State institute a centralized authority to arbitrate their disputes. This is more likely in contexts where contract enforcement is weak and where the property rights to the new assets are ambiguous. Furthermore, speed is of the essence in property markets. So participants are likely to demand for faster approval-procedures and more certainty, even if this implies a centralized institutional arrangement.

Moreover, even NGOs involved in decentralized housing delivery are likely to centralize their own internal operations. They may even transform their mission from one of advocacy to one of social investment in profitable enterprises. They are also likely to seek representation in conflict resolution bodies and other advisory organizations instituted by the State. In other words, decentralization may put NGOs in conflict with market institutions and NGOs may transform

themselves institutionally to resemble market institutions. Similarly, conflict with government agencies may induce NGOs to seek control over part of the government apparatus.

Demand-driven and supply-driven development: The slum redevelopment strategy's support among Mumbai's slum dwellers suggests that the State's ability to intervene in land development rights provides supply-side initiatives with a unique advantage of exceeding what potential beneficiaries may initially regard as feasible in property development. Yet, the success of supply-driven strategies may depend on how closely the strategies respond to demand-side preferences. In the case of slum redevelopment, the strategy recognizes the slum dwellers' dislike of permanent relocation from their neighborhoods and their preference for more valuable housing.

Private and public investment: To increase the scale of slum redevelopment in Mumbai, the state government invited private developers to invest and participate in slum redevelopment projects. Private developers were attracted to the scheme because of the potential to profit. However, the developers found it hard to participate in slum redevelopment projects because it was difficult and expensive to raise development finance for projects. The traditional method of "pre-sale financing," in which potential buyers or investors make advance payments for purchasing property was difficult because buyers were wary of conflicts and delays in implementation. Moreover, formal institutions to provide development finance are not well developed. Consequently, contrary to the government's expectations, the private developers asked the state government to provide the funds for construction.

Deregulation and new regulations: High development standards in Mumbai have adversely impacted the supply of affordable, formal sector housing and need to be reexamined. However, Mumbai's slum redevelopment experience indicates that if governments intend to use permission to develop additional floor area as an incentive for developers to provide cross-subsidized housing, then they will have to regulate the amount of floor area built in projects. If they fail to regulate the amount of area built, there is no reason for the private developers to care about incentives that allow them to build more.

6.2 Enabling Housing Provision: A Closer Look at Policy Recommendations

The policy recommendations that follow are based on the slum redevelopment experience in Mumbai. Therefore, they are more specifically directed toward slum redevelopment. However, the research has also focused on government's role in housing provision and many of the policy suggestions are relevant to other housing initiatives in developing countries. The main theoretical

position from which the policy proposals follow, is that the housing sector behaves like a market, but to operate effectively, the housing market requires institutional support and this support needs to be provided by the State. Moreover, though markets provide opportunities, markets are also treacherous, in the sense that they can create “winners” and “losers.” In the case of those who do not benefit from the market-based approach, the State may have to play a more direct role in housing provision.

Continuing with the enabling framework of decentralization (and centralization), demand-driven development (and supply-driven development), etc., proposed in this dissertation, the policy recommendations follow a similar format. However, given the close conceptual affinity between decentralization and demand-driven development, they are discussed together. Similarly, deregulation (and new regulation) and privatization (and public investment) are elaborated together.

Decentralization and Centralization & Demand-driven and Supply-driven Development

This dissertation argues that in the decentralization and centralization debate, or in the demand-driven development and supply-driven development debate, it is less useful to think of these policy approaches as opposing choices. Instead, these approaches represent two sides of the same coin. Specifically, it is important to decentralize housing supply, but it is also important to support such initiatives through central institutions. Similarly, it is right to allow for demand-driven choices, but it is important to ensure that choices are available, even if supply-side initiatives are required.

Mumbai’s experience illustrates a progressive increase in decentralization of decision-making and control through an increase in the private sector’s and the civil society’s participation in redevelopment projects. Despite, the critique of naive and one-sided decentralization policies in this dissertation, paradoxically, Mumbai’s slum redevelopment strategy can support further decentralization and devolution of decision-making, particularly with respect to the benefits and the rights of the slum dwellers. For example, similar to the deregulation of the profit-limit for the private developers, the benefit-cap limiting the benefits of the slum dwellers could also be withdrawn. Slum dwellers could be allowed to negotiate with private developers for their share of benefits from redevelopment. The government could even transfer the land to the slum dwellers prior to redevelopment, allowing them to more effectively bargain with private developers.

Slum redevelopment is an asset transfer strategy. The slum dwellers should be regarded as real estate owners. Therefore, in slum redevelopment, and in slum upgrading, restrictions

imposed on beneficiaries against the sale of their properties should be reexamined. In practice, sale-restrictions are difficult to enforce and add transaction costs on beneficiaries trying to sell. These restrictions are counterproductive instruments of social control that add to the vulnerability of slum dwellers by making it difficult for them to liquidate their assets in the case of an emergency. The restrictions also deny the poor an opportunity to participate in the capital appreciation of real property.

However, along with the decentralization, the State needs to establish centralized institutions and undertake other initiatives to support decentralized efforts. Conflicts are likely in slum redevelopment. However, if the government can provide conflict resolution mechanisms, conflicts are not necessarily bad. Furthermore, the State can support slum dwellers by establishing centralized institutions that are capable of providing technical assistance to slum dwellers in their negotiations with land owners and private developers. Similarly, central institutions with the responsibility to survey and define squatter settlement parcels that can be redeveloped, as a part of some larger framework of redevelopment, according to Master Plan objectives as opposed to fragmented attempts to redevelop, are also required. Lastly, one of the most important arenas for centralized initiative is to develop laws and institutions to ensure effective contract enforcement between various actors in the housing market.

A key theoretical reason to support decentralization is that it can lead to demand-driven development. However, it is important for housing policy to create choices for the poor through supply-side initiatives. In cities like Mumbai, the housing market is tight and the supply of housing is constrained. Housing policy must aim to increase the range of supply options. Mumbai's experience with slum redevelopment demonstrates one way that the government can be creative in enhancing the supply of housing. However, slum redevelopment is not a panacea and should be part of a larger set of housing provision strategies.

Deregulation and Regulation & Private and Public Investment

The key policy advice that follows in this section is that governments should seek to attract private investment in housing by leveraging public investment and they should reexamine regulations that restrict housing supply. However, they should also institute new regulations that ensure housing supply for the low-income groups through cross-subsidy programs.

Central to Mumbai's experience, is the increase in the Floor Area Ratio (FAR) for slum redevelopment. Increase in the FAR can have a positive impact on the overall supply of housing. An argument in this dissertation is that the slum upgrading strategy in Mumbai received little

support because the legal development rights provided through the strategy were constrained by the low allowed FAR in the city. Most slum dwellers in the city had already consumed the legal limit of development on their properties. Increasing the FAR may also allow slum upgrading to be more attractive to slum dwellers.

At the same time, increases in FAR must be balanced with the real concerns about environmental carrying capacities of cities and the feasibility of augmenting existing infrastructure to support the increase in intensity. Furthermore, for property markets to operate effectively, it necessary that changes in FAR are not random and that development rights are predictable.

The implementation of strategies such as slum redevelopment is dependent on viable cross-subsidies. It is unlikely that any city's property market can sustain subsidizing housing for a majority of its residents. As more supply enters the market, prices are likely to fall, making cross-subsidy financially more difficult. But the question is - How fast is this going to happen? If redevelopment projects are unscrupulously built with higher FAR than the incentive enhanced ratios allow, the larger viability of the cross-subsidy intention is hurt faster. In Mumbai, the evidence indicates that over-utilization of FAR is the case and some developers have built redevelopment projects with FARs as high as five even though the maximum allowed is two and a half (Times of India, December 25, 1998). This suggests a need for the State to regulate strictly, the consumption of FAR in the city, if it intends to use cross-subsidy strategies to provide housing. Furthermore, the construction quality of the houses that the private developers provide as cross-subsidized units to slum dwellers, for the right to the bonus FAR, also needs to be strictly regulated. Evidence from Mumbai suggests that the quality of rehabilitation housing in projects can be sub-standard (Indian Express, July 25, 1995).

Regulating the private sector does not imply ignoring its huge potential in housing provision. In Mumbai's three programs of slum redevelopment, the State has been transferring its ownership of land to private actors - slum dwellers' cooperatives and private developers. Moreover, after the PMGP, the programs of the nineties are heavily reliant on private initiative, skills and resources. Thus, there has been an attempt to mobilize private expertise and funds to implement slum redevelopment in Mumbai, and quite a few projects are attracting private interest. The government has innovated with instruments such as Transfer of Development Rights (TDR) to attract private interest in the SRS. TDR provisions can also be used to compensate landowners willing to transfer their land to squatters, thus increasing the possibility of successful slum upgrading.

However, there is an inherent problem in housing provision, though it is amplified in the slum redevelopment strategy. Housing production is resource (finance) intensive but there is a lack of institutions to provide development finance. In Mumbai, as in most of India, construction activity has traditionally been financed by advance capital from buyers, either speculators or end-users. The industry refers to this as “pre-sale.” But in the context of slum redevelopment, developers have found it difficult to arrange for pre-sale, as the projects are perceived to be too risky. Moreover, after 1995-96, property values in the city dropped, although they stabilized in 1998 at levels similar to the 1993 values. The fall in property values has hurt the implementation chances of redevelopment projects further. But even projects that are financially viable on paper are stalled because of the lack of funds for construction (Times of India, December 22, 1997).

The state government believed that the lack of development finance was the key bottleneck. As a consequence it formed a new housing finance corporation, the Shiv-Sahi Punarvasan Prakalap Limited (SPPL) to help in implementation of projects (Times of India, June 06, 1998). The corporation was expected to raise money from the capital markets and international agencies, and provide short-term development finance to private developers at the market-rate.¹⁸⁰ Such institutional initiatives to provide development finance are needed in most developing countries. In the past, policy focus has been on developing mortgage finance (demand-side) institutions (World Bank, 1993). Policy support for mortgage finance must continue, but it needs to be supplemented with institutional support for the supply-side, i.e., access to finance for the private developers.

Governments can support the ability of developers to access finance through a number of initiatives. First, by developing workable foreclosure laws. Second, by introducing development finance insurance (similar to mortgage insurance) for lenders. Third, by developing a database and a rating system of developers to guide institutional lenders. And finally, by reducing the uncertainty in projects (through contract enforcement and conflict resolution) and allowing for more predictable profits.

¹⁸⁰ However, a new state government led by the opposition, Congress Party, was elected toward the end of 1999, and it declared that it intended to dissolve the SPPL (Times of India, March 12, 2000).

6.3 A Research Agenda

A research project like this has an inevitable result – it leads to more questions. At least two questions are obvious. First, is slum redevelopment a good housing improvement strategy? Should public policy attempt to actively promote a strategy which requires the poor to live in medium-rise apartment blocks? Second, is the slum redevelopment strategy replicable? Can more cities implement slum redevelopment projects? Can the strategy be “scaled-up”? Can slum redevelopment become a larger share of the new housing starts in a given city? This section starts with the first issue and ends with the last. In between the two, I discuss other institutional issues, including the interests of various institutional stakeholders, conflict resolution and institutional learning.

Evaluation of Slum Redevelopment Projects

When I started this research, one of my objectives was to evaluate slum redevelopment projects. But, I abandoned the idea because the case that I was the most interested in was too new and recent to be evaluated on an ex-post basis. Nonetheless, it is important to understand what aspects of the slum redevelopment strategy work well as a housing improvement strategy, and what aspects do not. By now, Mumbai has a large repertoire of projects to allow such research. Moreover, some of the earlier PMGP projects are close to ten years old and in research terms are “mature enough” to be systematically evaluated.

Evaluation of success in housing projects is a complex exercise and researchers are advised to evaluate on multiple indicators (Vale, 1996). Similarly, an evaluation of slum redevelopment projects must be from the perspective of both the direct beneficiaries (slum dwellers) and the city. From the perspective of the slum dwellers, for redevelopment to be considered successful, it should not only improve their living conditions but also contribute to reducing their vulnerability. For example, if the chances of eviction of beneficiaries increase because of loan liability or maintenance costs of the new housing, it suggests that their vulnerability is increasing. This, however, may be balanced by an increase in the property value of their assets. Similarly, from the perspective of the city, redevelopment is likely to be successful if the city benefits from such projects, physically and administratively as well as fiscally. For example, an indicator of physical and administrative benefit is greater physical access and movement, for slum dwellers and non-slum dwellers.

A suggestive list of indicators for the evaluation of slum redevelopment projects is included in Table 6.1. Not surprisingly, some of the proposed indicators are contradictory and

tradeoffs among different measures of success can be expected in projects. Research must empirically elaborate on such tradeoffs and suggest means to maximize the positive impacts while mitigating the negative outcomes.

Table 6.1: Successful Outcomes in Slum Redevelopment Projects

SLUM DWELLERS		CITY	
VULNERABILITY	LIVING CONDITIONS	FISCAL	PHYSICAL & ADMINISTRATIVE
1. All slum dwellers qualify for the housing improvement	1. Housing unit size increases	1 Loan-recovery is viable	1. Redevelopment helps to meet the objectives in the Master Plan
2. There is no increase in the pressure of eviction or increased bureaucratic or political control of residents because of the loan liability, maintenance charges, taxes, service charges, etc.	2. Infrastructure and service provision improves in the new settlement	2. There are increases in the land values in the redeveloped settlement and in adjacent pockets thus allowing for greater property tax collection	2. Redevelopment does not result in a more visible vertical slum, but allows for an improved image of the city
3. All economic activities prevalent in the slum can continue in the new redevelopment	3. Unit expansion possibilities are not reduced in the new arrangement	3 Cost-recovery of services improves and responsibility for payments is fixed.	3. Redevelopment allows for greater control, safety, physical access and movement, and lower crime-rates
4. The new property rights are not less credit-worthy than the earlier ones	4. The public spaces are cleaner and better maintained	4. Financially, the city is in a position to augment the existing infrastructure ¹⁸¹	4. Redevelopment of slum pockets does not result in left-over pockets that cannot be redeveloped because of odd configurations or the lack of access

¹⁸¹ Consumption of infrastructure, particularly water and sewerage, is expected to increase in redeveloped slums. This is partly due to the increased density and partly because service consumption can be expected to rise when beneficiaries move from the slum housing to the redeveloped housing.

Evaluation of slum redevelopment projects is important, not only in the context of this strategy but even more from the perspective of reconsidering medium-rise living as an alternative typology of housing for low-income groups. Rising land values across the developing world suggest that this may be a possible scenario. Mumbai of course, represents one end of the price spectrum. But it is likely that there are more cities with land markets tending to be like Mumbai's. The cost of land is no longer a minor component in the cost of housing. In the mid-nineties, in the most attractive parts of Mumbai, the cost of land was as high as 80 to 90 percent of the total cost of housing. Certainly, the proportionate cost of land, in most low-income settlements is much lower. Nonetheless, if land prices continue to rise and grow as a component of the cost of housing, housing strategies may have to embrace asset substitution strategies – replace building material for land – and adapt to medium-rise housing models. Such a trade-off is more likely if low-income groups are to be provided better locations in the city. Moreover, the evidence in this study suggests that medium-rise living may not necessarily be inimical to low-income “lifestyles” and may be acceptable to the low-income groups. However, future research needs to test this possibility in a rigorous manner.

Institutional Stakeholders and their Interests

This research raises some important questions about how the interests of various stakeholders, other than the slum dwellers, impact housing projects. Three key stakeholders, politicians, civil society and private market agents, and their potential effect on project definition and success are discussed next.

Politicians and political support for projects: It is claimed that political support is necessary for housing, or other development, projects. This is likely true. However, it is important to progress beyond attributing policy failure to the lack of political will. We must ask the question – Under what conditions are politicians, given that they have certain political interests, likely to support specific policies?

Many of us live in democratic systems, where governments are likely to change every few years. An important question is – What kinds of housing policies are likely to enjoy continuous support from a disparate sequence of politicians? To answer these questions and frame policies accordingly, policy makers and planners must have a better understanding of the constraints within which politicians operate. This dissertation has focused on the institutional constraints facing private actors (for-profits, non-profits and communities) operating in the context of land and housing markets. Similarly, we must understand the political and legal

constraints confronting political actors. For example, are there constitutional constraints that may make it more difficult for politicians to support certain policies? In successful cases of housing policies being introduced, how are such constraints negotiated? How do entrepreneurial politicians modify housing policy objectives to develop a political constituency of support?

Civil society and its interests: This dissertation has demonstrated the importance of NGOs as influential advocates of various kinds of policy initiatives. However, a key finding is that civil society actors are not uninterested, agenda-less actors in development projects. On the contrary, they are also conscious of their institutional interests. We need to better understand the underlying institutional interests of actors, such as NGOs, in advocating a particular development model. An important question that follows is - What kind of strategies and programs are different civil society actors likely to pursue and advocate?

If the specific interests of different civil society actors are likely to lead to specific policy advocacy and eventually the implementation of particular programs, two kinds of questions follow. First, how do the institutional interests of NGOs impact project beneficiaries? What may be the shortcomings of the involvement of NGOs? What kinds of policy intervention from the State can help mitigate or check any negative impacts? Second, how do the opportunities associated with different policies redefine the interests of actors such as NGOs? What impact does such redefinition of priorities have on the mission statements of NGOs? If the objective of the State is to foster a civil society that follows a broad progressive agenda - What policy opportunities can the State create to foster this goal?

Private market agents, their incentives and the success of projects: It is now acknowledged that private market agents, motivated by an incentive to profit, play a key role in the supply of housing. Specifically, the role of such agents in developing squatter settlements for low-income communities in developing countries is well documented (Payne, 1989). Similarly in this study, the important role of private developers interested in profit is evident in the slum redevelopment projects. Most slum redevelopment projects that have been completed in Mumbai do not involve NGOs or community cooperatives acting independently.

However, the role of private developers in successful slum upgrading is rarely discussed. What kind of role do private market agents play in slum upgrading strategies? I hypothesize that a closer analysis of slum upgrading projects may demonstrate that private market agents play a key role in the successful cases. (Where “success” is measured in terms of number of houses upgraded). If this is true, it suggests that a key consideration in the design of slum upgrading projects, like other housing projects, should be the potential role for private entrepreneurs.

Research focused on elaborating how private developers can be involved in slum upgrading projects, will be informative.

Conflict Resolution in Property Markets

The involvement of private market agents as this research demonstrates, may also lead to property related conflicts. If property markets continue to appreciate, it is fair to assume that the chances for such conflicts are likely to increase. However, urban property conflicts are relatively ignored and unexamined. Empirical research on property conflicts in developing countries is needed.

There are, at least, two aspects on which research can focus. First, if conflicts are likely, then communities and individuals that deal with and rely on private market agents, probably anticipate such conflicts. Do such communities successfully predict the nature of potential conflicts? Do they successfully structure their agreements with private agents in a manner that provides them with some leverage over the private agents? Is there a way of translating such informal leverage into a more formal structure through institutional design, without increasing the cost on the beneficiaries? Second, we need to understand the nature and diversity of property related disputes in low-income housing markets. Such knowledge may help us to design better policies, preempting conflict, as well as to design more adept conflict resolution mechanisms.

Implementation and Coordination Institutions

This dissertation argues that there is a role for State institutions in housing provision. This suggests that, rather than forgetting and ignoring the past experience of State institutions, we must analyze and evaluate the past episodes carefully. An argument is sometimes made that the past experiences are less relevant because of a change in the role of governments from direct providers to more strategic coordinators. This argument, however, is flawed.

First, the State still needs to be directly involved in housing the poorest. An analysis of the past experience will be invaluable in this respect. Second, in the context of the unrelenting belief in administrative decentralization, such an analysis may be even more important as it may reveal some unexpected results. I propose that the evaluation of the past experience assess separately government performance in implementation and in coordination activities. Although, the conventional wisdom is that the government's functions in housing delivery are best located at the municipal government level, an evaluation of the past performance may reveal that state

government or regional governments (as opposed to the local governments) are better structured to handle coordination functions.

Squatters as Developers?

Is the slum redevelopment strategy replicable? This study clearly indicates that slum redevelopment projects are not easy to implement, although they can be quite advantageous to beneficiaries. A similar policy has been implemented in Seoul, South Korea (Cho and Park, 1995). A variation on the same theme is the land sharing strategy implemented in Bangkok, Thailand (Sheng, 1992). The common premise is that the slum dwellers receive a share of the squatter settlement's land value. This is possible due to the growth and physical expansion of these cities. Once peripheral parts of the city, such as Dharavi in Mumbai, now occupy more central positions in the geography of the city. This creates a new housing opportunity. These cross-city experiences suggest that slum redevelopment or similar strategies may be possible across more cities.

This study indicates that apart from institutional constraints, such as the lack of construction finance, property-related conflicts among the participants in redevelopment projects, the institutional interests of indirect stakeholders (politicians and NGOs); the two crucial stakeholders in slum redevelopment are the slum dwellers and the private developers.¹⁸² For more projects to be implemented, projects will have to be in the interest of these two stakeholders. For the private developers, the market-viability of slum redevelopment projects is the major concern. The financial viability of projects, depend upon the potential property values after redevelopment, the feasibility of selling the market-sale areas, the amount of cross-subsidy for the slum dwellers and payments to the landowners. The sale of the market-sale areas is the most crucial and is contingent on a number of factors, including the property values in the city, the location of the projects, the design of the projects, etc. Research in this area can be extremely useful. For example, a survey of past buyers, who agree to purchase, despite knowing that their new neighbors are ex-slum dwellers, will be informative. Under what conditions are buyers more likely to invest in redevelopment projects? What design arrangements are more attractive to buyers? Can market-sale and rehabilitation units be mixed together? What income groups are the

¹⁸² Another key stakeholder in redevelopment can be the landowner. In Mumbai, the state and the local government, despite being the landowners in many redevelopment projects, have abandoned their right to profit from redevelopment. In the case of private landowners, the landowners either invest in redevelopment in the capacity of private developers or they negotiate with the developers for their share of profit from the redevelopment projects.

buyers likely to represent? Is it easier to sell commercial areas as opposed to residential areas in redevelopment projects? What is the impact of city-level property values on the feasibility of selling properties in redevelopment projects?

Finally, and most importantly - What are the interests of the slum dwellers? Under what conditions are slum dwellers likely to support redevelopment projects? In slum redevelopment, slum dwellers are effectively equity partners in redevelopment. They contribute their existing housing asset, including the potential to invest in and consolidate that asset, as equity to redevelopment projects. As a return on their investment, they receive apartment units of a fixed size. If the value of the new housing asset is higher than the value of their existing asset, they are likely to be in favor of redevelopment.¹⁸³

It is relatively easy to predict the property values of the new housing. However, volatility in the property market can make such calculations difficult. Even more difficult to understand is the property value of the existing housing. The value of the existing housing is likely to depend upon the property values, the physical structure of the properties and the associated property rights. Data on property values and property structures, though difficult to collect, can be amassed. The data on property structures will need intelligent analysis to interpret the ease and difficulties involved in consolidating and improving the properties. Apart from the physical constraints, the key limitations are likely to be the property rights. What are the slum dwellers existing, *de facto*, property rights? How do those property rights change through slum upgrading and tenure legalization? How do the *de facto* and *de jure* property rights compare to the property rights achieved through slum redevelopment? These questions are the key to a better understanding of why slum dwellers may be willing to invest their existing housing assets in redevelopment projects.

¹⁸³ The slum dwellers have to discount their gains against the hardship and risk that this strategy involves. Needless to add, both the cost of hardship and the cost of risk are difficult to assess. As a consequence, to be interested in redevelopment, slum dwellers probably require a huge premium on their gains.

Appendix 6.1: List of Interviewees

<u>SPARC</u>	Ms. Sheela Patel, Director Mr. A. Jockin, President NSDF Ms. Celine D’Cruz, Founding member Mr. Sunder Burra, Officer of the Indian Administrative Service on voluntary deputation to SPARC, ex-Director PMGP
<u>NSDF</u>	Mr. Gnanamuthu
<u>Markandeya CHS</u>	Mr. Ramachandra Jadhav, Chairman Mr. Viraswami Dhota, General Secretary Mr. Mohan Sawant, Treasurer Mr. Johnny Challaiah and other members of the cooperative Mr. Sharad Mahajan, Architect, Purbi Architects Mr. Shyambhai Patel, Developer, Parth Constructions
<u>SRA</u>	Mr. Gautam Chatterji, CEO SRA, ex-Director PMGP Mr. V. G. Gode, Secretary SRA, ex-Director PMGP Mr. D. T. Joseph, ex-CEO SRA, member Afzulpurkar Committee Mr. D. B. Holikar, Executive Engineer
<u>PMGP</u>	Mr. G. S. Pantbalekundri, ex-Senior Planner Ms. Usha Singh, ex-Chief Architect Ms. Neena Dabir, Planner
<u>Municipal Corporation</u>	Mr. K. G. Pai, ex-City Engineer, member Afzulpurkar Committee
<u>BMRDA</u>	Mr. V.K. Pathak, Chief, Town and Country Planning Division Mr. P. S. Sharma, Community Development Officer
<u>HUDCO</u>	Mr. Mr. B. S. A. Murthy, Appraisal Officer, HUDCO Mr. Sanjay Bhargava, Appraisal Officer, HUDCO
<u>Rajiv-Indira CHS</u>	Mr. P. S. Shanmuganand, Chief Promoter Mr. Mohammed Yakub, General Secretary and other members of the cooperative Ms. Suchita Chogle, Architect Pansare Chogle Associates Mr. Prabhu, Site Engineer Mr. Bhati Naeem, Contractor, Falak Constructions
<u>Citibank</u>	Mr. T. S. Anil, Product Manager Mortgage & Personal Loans,
<u>Homeless International</u>	Ms. Ruth McLeod, Director

<u>Private Developers & Architects</u>	Mr. Niranjan Hiranandani, member Afzulpurkar Committee Mr. Mathew John, Developer, SM. Associates Mr. Suresh Krshnan, Architect and Consultant Ms. Chandramukhi Setpaul, Architect Mr. Milind Sambhare, G.D. Sambhare & Co. Mr. Z. J. Dadina, Developer, Viraj Exim Mr. S. B. Bhaise, L&T, Consultants Group Mr. Mukesh Shah, Developer Mr. Deepak Rao, Accanoor Associates Mr. T. N. Hasan, Architect and Developer, Hasan Associates
<u>Scion Shivaji CHS</u>	Mr. Ranjit Naik, Architect and Director, People's Participation Program (PPP) Mr. Michael D'Silva, PPP Mr. A. Abraham, Architect Mr. Vinay, Developer, Royal Developers Mr. Swamy, Chief Promoter and other members of the cooperative
<u>Sambhaji Nagar CHS</u>	Mr. Chandrashekhar, Architect Mr. Menon, Contractor Mr. Vivek Khadye, Chief Promoter, former member of Municipal Council Mr. Bapur Sarvankar and other members of the cooperative
<u>Ishwari & Kailash CHS</u>	Mr. L. D. Babladi, Developer and Architect, member Afzulpurkar Committee Ms. Pournima Raje, Architect, Conarch Architects Mr. Kulkurni, Chief Promoter, Ishwari CHS Mr. Philip Verghese, Chief Promoter, Kailash CHS Mr. Arjun and other members of the cooperatives
<u>Others</u>	Ms. Madhura Swaminathan, Associate Professor, Indira Gandhi Institute of Development Research Mr. Niraj Kumar Pandey, Journalist, Citizen Communication Mr. Earl Kessler, Director, Regional Urban Development Office, USAID Father Adolf Traglar, Slum Rehabilitation Society Mr. Krishnamurthy, Housing Development and Finance Corporation (HDFC) Mr. Fahad, HDFC Mr. Danait, CEO Bombay First Ms. Nalini Vaz, Bombay First Mr. Colin Gonzalves, Lawyer Ms. Monisha Coelho, Lawyer Ms. Pratima Panwalkra, Ex-Chief Community Development Officer, MHADA Mr. R. D. Singh, Chief Promoter, Indiraji Nagar CHS

Bibliography

- Abrams, Charles. 1966. *Housing in the Modern World*. London: Faber and Faber. (Originally published as *Man's Struggle for Shelter in an Urbanizing World*. 1964. Cambridge, MA: Massachusetts Institute of Technology).
- Afzulpurkar, Dinesh K. 1995. *Programme for the Rehabilitation of Slum and Hutment Dwellers in Brihan Mumbai*. Report of the Study Group appointed by the Government of Maharashtra for the Rehabilitation of Slum and Hutment Dwellers through Reconstruction. Mumbai: Government of Maharashtra.
- Allison, Graham T. 1971. *Essence of Decision: Explaining the Cuban Missile Crisis*. Boston: Little Brown.
- Alonso, William. 1964. *Location and Land Use*. Cambridge, MA: Harvard University Press.
- Alonso, William. 1973. "Urban Zero Population Growth." *Daedalus* 102 (4). (Also published in *The No-Growth Society*. 1975. Edited by Mancur Olson and Hans H. Landsberg. London: The Woburn Press.
- Anand, P. B. 1995. "Decentralization and Municipalities in India: A Mistaken Case of Murphy's Law." *Urban India* 15 (1): 1-12.
- Angel, Shlomo. 1983. "Land Tenure for the Urban Poor." In *Land for Housing the Poor*. Edited by Shlomo Angel et. al. Bangkok: Select Books.
- Anzorena, 1993. "Supporting Shelter Improvements for Low-income Groups." *Environment and Urbanization* 5 (1): 122-131.
- Archer, Ray W. 1999. "The Potential of Land Pooling/Readjustment to Provide Land for Low-cost Housing in Developing Countries." In *Making Common Ground: Public-private Partnerships in Land for Housing*. Edited by Geoffrey Payne, pp. 113-133. London: Intermediate Technology Publications.
- Arrossi, Silvina, Felix Bombarolo, Jorge Hardoy, Diana Mitlin, Luis P. Coscio and David Satterthwaite. 1994. *Funding Community Initiatives*. London: Earthscan Publications.
- Babladi, Laxmikant and Natubhai Badheka. 1986. *Home – Dream of Bombay's Millions: Study of Problems Solutions Strategies*. Bombay: Fairy Manor.
- Badshah, Akhtar. 1996. *Our Urban Future: New Paradigms for Equity and Sustainability*. London and New Jersey: Zed Books.
- Baken, Robert and Jan van der Linden. 1993. "Getting the Incentives Right." *Third World Planning Review* 15 (1): 1-22.
- Bapat, Meera. 1991. "Enumeration with People's Participation." *Economic and Political Weekly* 26 (41): 2355-56.
- Barnett, 1982. *An Introduction to Urban Design*. New York: Harper and Row.
- Batley, R. 1996. "Public-Private Relationships and Performance in Service Provision." *Urban Studies* 33 (4-5): 723-751.
- Baross, Paul and Jan van der Linden. 1990. *The Transformation of Land Supply Systems in Third World Cities*. Aldershot, England: Avebury.
- Bertaud, Alain. 1990. *Efficiency in Land Use and Infrastructure Design*. Washington DC: The World Bank.
- Bombay Metropolitan Region and Development Authority (BMRDA). 1992. *Shelter Needs and Strategies for Bombay Metropolitan Region*. Bombay: BMRDA, Planning Division.
- Bombay Metropolitan Region and Development Authority (BMRDA). 1995. *Draft Regional Plan for Bombay Metropolitan Region 1996-2011*. Bombay: BMRDA.

- Bruce, John. 1981. *Observations on Land Tenure and Housing Development in the Major Villages of Botswana*. Mimeo, prepared for the Ministry of Local Government and Lands, Botswana, by the Land Tenure Center, University of Wisconsin-Madison.
- Burgess, Rod. 1978. "Petty Commodity Housing or Dweller Control? A Critique of John Turner's View on Housing Policy." *World Development* 6, 1105-33.
- Burgess, Rod. 1982. "Self-Help Housing Advocacy: A Curious Form of Radicalism. A Critique of the Work of John F. C. Turner." In *Self-Help Housing - A Critique*. Edited by Peter Ward, pp.56-97. London: Mansell Publishing.
- Burgess, Rod. 1985. "Problems in the Classification of Low-income Neighborhoods in Latin America." *Third World Planning Review* 7 (4): 287-306.
- Caminos, Horacio and Reinhard Goethert. 1978. *Urbanization Primer: Project Assessment, Site Analysis, Design Criteria for Site and Services or Similar Dwelling Environments in Developing Areas: with a Documentary Collection of Photographs on Urbanization*. Cambridge, MA: MIT Press.
- Cho, Jaesoon and Jeonghee Park. 1995. "Slums and Squatter Settlements in South Korea." In *Housing the Urban Poor: Policy and Practice in Developing Countries*. Edited by Brian C. Aldrich and Ranvinder S. Sandhu. London and New Jersey: Zed Books
- Clark, John. 1991. *Democratizing Development: the Role of Voluntary Organizations*. West Hartford, Connecticut: Kumarian Press.
- Clerc, V., et. al. 1995. *Integration of Irregular Settlements: Current Questions in Asia and Latin America*. Paris: AITEC.
- Cohen, John M., and Stephen Peterson. 1996. *Methodological Issues in the Analysis of Decentralization*. Development Discussion Paper No. 555, Harvard Institute for International Development. Cambridge, MA: Harvard University
- Cohen, Stephen, et. al. 1981. *A Framework for Policy Analysis*. Paper prepared for Decentralization Project, Institute of International Studies. Berkeley: University of California.
- Colliers Jardine. 1998. *Bulletin: India, Property Highlights*. Mumbai: Colliers Jardine, July 1998.
- Colquhoun, Alan. 1989. "Twentieth Century Concepts of Urban Space." In *Modernity and the Classical Tradition: Architectural Essays, 1980-1987*, pp. 223-233. Cambridge, MA: MIT Press.
- Correa, Charles. 1986. *Report on Dharavi*. Bombay: Maharashtra Housing and Area Development Authority (MHADA).
- D'Souza, J. Bain. 1987. *Report on Bombay's Second Development Plan, 1981-2001*. Bombay: Government of Maharashtra, Bombay Development Advisory Committee.
- Das, P. K. 1996. "Manifesto of a Housing Activist." In *Bombay: Metaphor for Modern India*. Edited by Sujata Patel and Alice Thorner, pp. 170-182. New Delhi: Oxford University Press.
- Datta, Kavita and Gareth A. Jones. 1999. *Housing and Finance in Developing Countries*. London and New York: Routledge.
- de Soto, Hernando. 1989. *The Other Path: The Invisible Revolution in the Third World*. New York: Harper and Row.
- Desai, Vandana. 1988. "Dharavi, the Largest Slum in Asia: Development of Low-income Urban Housing in India." *Habitat International* 12 (2): 67-74.
- Desai, Vandana. 1995. *Community Participation and Slum Housing, A Study of Bombay*. New Delhi: Sage Publications.
- Doebele, William A. 1975. *The Private Market and Low-income Urbanization in Developing Countries: The 'Pirate' Subdivisions of Bogota*. Discussion paper D75-11, Department of City and Regional Planning. Cambridge, MA: Harvard University.

- Doebele, William A. 1983. "Concepts of Urban Land Tenure." In *Urban Land Policy: Issues and Opportunities*. Edited by Harold B. Dunkerley, pp. 63-107. New York: Oxford University Press.
- Doebele, Williams A. 1994. "Urban Land and Macroeconomic Development: Moving from 'Access for the Poor' to Urban Productivity." In *Methodology for Land and Housing Market Analysis*. Edited by Gareth Jones and Peter M. Ward, pp. 44-54. London: University College of London Press.
- Dossal, Mariam. 1996. "Signatures in Space: Land Use in Colonial Bombay." In *Bombay: Metaphor for Modern India*. Edited by Sujata Patel and Alice Thorner, pp. 89-99. New Delhi: Oxford University Press.
- Dowall, David E. and G. Clarke. 1996. *A Framework for Reforming Urban Land Policies in Developing Countries*. UMP Paper No. 7. Washington DC: World Bank.
- Dowall, David. 1992. "The Benefits of Minimal Development Regulation." *Habitat International* 16 (4): 15-26.
- Doxiadis, Constantin. 1969. "Ecumenopolis: World City of Tomorrow." *Impact of Science on Society* 29 (2).
- Drabek, Anne Gordon. 1987. "Development Alternatives: The Challenge for NGOs." *World Development* Special Issue.
- Dua, Ajay. 1989. "Towards Shelter for All: The Bombay Experiments." In *Urban Management in Asia: Issues and Opportunities*, pp. 161-173. New Delhi: National Institute of Urban Affairs.
- Dunkerley, H. B. 1983. *Urban Land Policy: Issues and Opportunities*. Oxford, England: Oxford University Press.
- Durrand-Lasserve, Alain. 1999. "Partnerships between Public Sector and Informal Actors." In *Making Common Ground: Public-private Partnerships in Land for Housing*. Edited by Geoffrey Payne, pp. 134-152. London: Intermediate Technology Publications.
- Dwivedi, Sharad and Rahul Mehrotra. 1995. *Bombay the Cities Within*. Bombay: India Book House.
- Dwyer, D. J. 1979. *People and Housing in Third World Cities: Perspectives on the Problem of Spontaneous Settlements*. New York: Longman Group.
- Fernandes, Edesio and Ann Varley. 1996. *Illegal Cities: Law and Urban Change in Developing Countries*. London and New York: Zed Books.
- Flybjerg, Bent. 1990. "Aristotle, Foucault and Progressive Phronesis: Outline of an Applied Ethics for Sustainable Development." In *Applied Ethics: A Reader*. Edited by Earl Winkler and Jerrold Coombs. Cambridge, MA: Blackwell.
- Follain, James R. and Peter M. Zorn. 1990. "The Unbundling of Residential Mortgage Finance." *Journal of Housing Research* 1 (1): 63-89.
- Friedman, J., E. Jimenez and S. K. Mayo. 1988. "The Demand for Tenure Security in Developing Countries." *Journal of Development Economics* 29 (2): 185-98.
- Gans, Herbert J. 1962. *The Urban Villagers: Group and Class in the Life of Italian-Americans*. New York: Free Press of Glencoe.
- Ghosh, 1996. *Factors Influencing the Urban Real Estate Market in India*. Master of Science in Real Estate Development, Thesis, Massachusetts Institute of Technology (MIT). Cambridge, MA: MIT.
- Gilbert, Alan. 1982. "The Housing of the Urban Poor." In *Cities, Poverty and Development: Urbanization in the Third World*. By Alan Gilbert and Josef Gugler, pp. 81-115. Oxford: Oxford University Press.

- Gilbert, Alan. 1990. "The Costs and Benefits of Illegality and Irregularity in the Supply of Land." In *The Transformation of Land Supply Systems in Third World Cities*. Edited by Paul Baross and Jan van der Linden. Brookfield: Avebury.
- Gilbert, Alan and Josef Gugler. 1982. "Housing the Urban Poor." In *Cities, Poverty and Development*, pp. 81-115. Oxford: Oxford University Press.
- Gilbert, Alan and Peter Ward. 1982. "Low-income Housing and the State." In *Urbanization in Contemporary Latin America*. Edited by A. Gilbert, J. Hardoy and R. Ramirez, pp. 79-128. Chichester, Wiley.
- Gilbert, Alan and Ann Varley. 1991. *Landlord and Tenant: Housing the Poor in Urban Mexico*. New York: Routledge.
- Glaessner, Philip J., et. al. 1995. *Poverty Alleviation and Social Investment Funds: The Latin American Experience*. World Bank Discussion Papers, No. 261. Washington DC: The World Bank.
- Government of India (GoI). 1976. *The Urban Land Ceiling (and Regulation) Act*. New Delhi: Ministry of Law, Justice and Company Affairs, GoI.
- Government of India (GoI). 1988. *Draft National Housing Policy*. New Delhi: Ministry of Urban Development, GoI.
- Government of India. 1994. *National Housing Policy*. New Delhi: Ministry of Urban Development, GoI.
- Government of Maharashtra (GoM). 1966. *Maharashtra Regional and Town Planning Act*. Bombay: Law and Judiciary Department, GoM.
- Government of Maharashtra (GoM). 1971. *The Maharashtra Slum Areas (Improvement, Clearance and Redevelopment) Act*. Bombay: Law and Judiciary Department, GoM.
- Government of Maharashtra. 1991. *Development Control Regulations for Greater Bombay, 1991*. Bombay: Urban Development Department, GoM.
- Government of Maharashtra (GoM). 1997. *Guidelines for Implementation of Slum Rehabilitation Schemes in Greater Mumbai*. Mumbai: Slum Rehabilitation Authority, Housing and Special Assistance Department, GoM.
- Graduate School of Design, Harvard University. 1996. *Bombay First: The Economic and Urban Services*. A Draft Case. Cambridge, MA: Harvard University.
- Hall, Peter. 1983. "Metropolitan Settlement Strategies." In *Shelter, Settlement, and Development*. Edited by Lloyd Rodwin, pp. 236-259. Boston: Allen & Unwin.
- Hall, Peter. 1988. *Cities of Tomorrow*. Oxford, UK and Cambridge, MA: Blackwell.
- Gran, Guy. 1983. *Development by People: Citizen Construction of a Just World*. New York: Praeger.
- Hamdi, Nabeel. 1991. *Housing Without Houses: Participation, Flexibility, Enablement*. New York: Van Nostrand Reinhold.
- Hardoy, Jorge and David Satterthwaite. 1989. *Squatter Citizen: Life in the Urban Third World*. London: Earthscan Publications.
- Harris, Richard. 1998. "The Silence of the Experts: 'Aided Self-help Housing', 1939-1954." *Habitat International* 22(2): 165-189.
- Hasan, Arif. 1988. "Orangi Pilot Project, Karachi: A Low Cost Sewer System by Low-income Pakistanis." In *Building Community: A Third World Case Book*. Edited by Bertha Turner, pp. 81-88. London: Building Community Books.
- Hasan, Arif. 1990. "Community Groups and Non-government Organizations in the Urban Field in Pakistan". *Environment and Urbanization* 2 (1): 74-86.
- Hasan, Arif. 1997. *Working with Government: the Story of OPP's Collaboration with State Agencies for Replicating its Low-cost Sanitation Programme*. Karachi: City Press.

- Hiebert, Karis L. 1995. *The Private Formal Sector in Bangkok: Providing a Low-income Housing Alternative?* Master's Thesis, Department of Urban Studies and Planning, Massachusetts Institute of Technology (MIT). Cambridge, MA: MIT.
- Hirschman, Albert O. 1958. *The Strategy of Economic Development*. New Haven: Yale University Press.
- Hommel, Rudolf. 1996. "Conflicts and Dilemmas of Decentralization." In *Annual World Bank Conference on Development Economics, 1995*. Edited by Michael Bruno and Boris Pleskovic, pp. 331-350. Washington DC: The World Bank.
- Jacobs, Jane. 1961. *The Death and Life of Great American Cities*. New York: Random House.
- Jimenez, Emmanuel. 1982. "The Value of Squatter Dwellings in Developing Countries." *Economic Development and Change* 30 (4): 739-752.
- Jimenez, Emmanuel. 1983. "The Magnitude and Determinants of Home Improvement in Self-help Housing: Manila's Tondo Project." *Land Economics* 59 (1): 70-83.
- Jimenez, Emmanuel. 1984. "Tenure Security and Urban Squatting." *The Review of Economics and Statistics* 66 (4): 556-567.
- Jones, Gareth A. 1996. "The Difference Between Truth and Adequacy: (Re)joining Baken, van der Linden and Malpezzi." *Third World Planning Review* 18 (2): 243-256.
- Jones, Gareth A. and Peter M. Ward. 1995. "The Blind Men and the Elephant: A Critic's Reply." *Habitat International* 19 (1): 61-72.
- Kayden, Jerold. 1978. *Incentive Zoning in New York: A Cost Benefit Analysis*. Cambridge, MA: Lincoln Institute of Land Policy.
- Keare, Douglas H. 1996. *Rethinking Urban Land Policies: Throwing Off Some Shackles*. Cambridge, MA: Harvard Institute for International Development (HIID).
- Keare, Douglas H., and Scott Parris. 1982. *Evaluation of Shelter Programs for the Urban Poor: Principal Findings*. Washington DC: The World Bank.
- Kerkar, Ajit. 1981. *Report of the High Power Steering Group for Slums and Dilapidated Houses*. Report of the Study Group Appointed by the Government of Maharashtra. Bombay: Government of Maharashtra
- Kitto, H. D. F. 1951. "The Polis." In *The Greeks*. London: Penguin Books.
- Koebel, Romin. 1973. *Incentive Zoning in New York City*. Ph.D. Dissertation, Massachusetts Institute of Technology (MIT). Cambridge, MA: MIT.
- Korten, David C. 1990. *Getting to the 21st Century: Voluntary Action and the Global Agenda*. West Hartford: Kumarian Press.
- Korten, David C. and Rudi Klauss. 1984. *People Centered Development: Contributions Towards Theory and Planning Frameworks*. West Hartford: Kumarian Press.
- Krishan, Gopi and Singh, Nina. 1996. "Urbanization – Emerging Scenario and New Challenges." In *Urban India in Crisis*. Edited by Kulwant Singh and Florian Steinberg. New Delhi: New Age International.
- Kundu, 1992. *Urban Development and Urban Research in India*. New Delhi: Khama Publishers.
- Langley, A. 1999. "Strategies for Theorizing from Process Data." *Academy of Management Review* 24 (4): 691-710.
- Lee, Yok-Shiu F. 1995. *Intermediary Institutions, Community Organizations and Urban Environmental Management*. East West Center Working Paper.
- Lele, Jayant. 1996. "Saffronization of the Shiv Sena: The Political Economy of City, State and Nation." In *Bombay: Metaphor for Modern India*. Edited by Sujata Patel and Alice Thorner, pp.185-212. New Delhi: Oxford University Press.
- Lewis, Arthur W. 1955. *The Theory of Economic Growth*. London: Allen & Unwin.

- Liou, Y. Thomas and Robert C. Stroh. 1998. "Community Development Intermediary Systems in the United States: Origins, Evolution, and Functions." *Housing Policy Debate* 9 (3): 577-594.
- Litvack, Jennie, Junaid Ahmad and Richard Bird. 1998. *Rethinking Decentralization in Developing Countries*. Washington DC: Sector Studies Series, The World Bank.
- Malpezzi, Stephen. 1990. "Urban Housing and Financial Markets: Some International Comparisons." *Urban Studies* 27: 971-1022.
- Malpezzi, Stephen. 1994. "Getting the Incentives Right - A Reply to Robert-Jan Baken and Jan van der Linden." *Third World Planning Review* 16 (4): 451-466.
- Malpezzi, Stephen and Stephen K. Mayo. 1987. "Use Cost and Housing Tenure in Developing Countries." *Journal of Development Economics* 25 (1): 197-220.
- Mangin, William P. 1967. "Latin American Squatter Settlements: A Problem and a Solution." *Latin American Research* 2 (3): 65-98.
- Mangin, William P. and John F. C. Turner. 1968. "The Barriada Movement." In *Progressive Architecture*, May 154-162.
- Mangin, William P. and John F. C. Turner. 1969. "Benavides and the Barriada Movement." In *Shelter and Society*. Edited by Paul Oliver. New York: F. A. Praeger.
- March, J., et. al. 1991. "Learning from Samples of One or Fewer." *Organization Science* 2 (1).
- MCGB, 1992. *Redevelopment of Slums through Participation of Slum Dwellers*. Additional Guidelines for the Implementation of the Slum Redevelopment Scheme. Bombay: Municipal Corporation of Greater Bombay (MCGB).
- MCGB, 1993. *Brihanmumbai Mahanagarपालिका Patrika* (Greater Bombay Municipal Corporation Journal). Bombay: Municipal Corporation of Greater Bombay (MCGB).
- Mehta, Meera and Dinesh Mehta. 1989. *Metropolitan Housing Market: A Study of Ahmedabad*. New Delhi: Sage Publications.
- Mehta, Meera and Dinesh Mehta. 1991. "Housing Finance System and Urban Poor." *Economic and Political Weekly* 27 April, pp. 1107-1114.
- Mghweno, Joram. 1984. "Tanzania's Surveyed Plots Programme." In *Low-Income Housing in the Developing World: The Role of Sites and Services and Settlement Upgrading*. Edited by Geoffrey Payne, pp. 109-123. Chichester; New York: John Wiley & Sons.
- MHADA, 1987. *Prime Minister's Grant Project - A Profile*. Bombay: Maharashtra Housing and Area Development Authority (MHADA).
- MHADA, 1993. *Prime Minister's Grant Project: An Appraisal*. Bombay: Maharashtra Housing and Area Development Authority (MHADA).
- Mitlin, Diana. 1997. "Building with Credit: Housing Finance for Low-income Households." *Third World Planning Review* 19 (1): 21-50.
- Montgomery, John D. 1972. "Allocation Authority in Land Reform Programs." *Administrative Science Quarterly* 27 (1) 62-75.
- Mohan, Rakesh. 1994. *Understanding the Developing Metropolis: Lessons from the City Study of Bogota and Cali, Columbia*. New York: Oxford University Press for The World Bank.
- Mukhija, Vinit. 1997. *Low-income Housing and the Formal Private Sector in Urban India: the Case of Ahmedabad City*. Doctoral Research Paper, Massachusetts Institute of Technology (MIT). Cambridge, MA: MIT.
- Myrdal, 1957. *Economic Theory and Underdeveloped Regions*. London: Duckworth.
- Nayar, Sameer. 1996. *The Indian Real Estate Market: A Comprehensive Analysis for the Foreign Investor*. Master of Science in Real Estate Development, Thesis, Massachusetts Institute of Technology (MIT). Cambridge, MA: MIT.

- Nientied, Peter and Jan van der Linden. 1988. "Approaches to Low-income Housing in the Third World." In *The Urbanization of the Third World*. Edited by Josef Gugler, pp. 294-307. New York: Oxford University Press.
- Ostrom, Elinor. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge (UK); New York: Cambridge University Press.
- PADCO. 1991. *India: Public/Private Partnerships in Land Development*. Washington DC: U.S. Agency for International Development.
- Panwalkar, Pratima. 1996. "Upgradation of Slums: A World Bank Programme." In *Bombay: Metaphor for Modern India*. Edited by Sujata Patel and Alice Thorner, pp.121-142. New Delhi: Oxford University Press.
- Patel, Sheela and Celine D'Cruz. 1993. "The Mahila Milan Crisis Credit Scheme: From a Seed to a Tree." *Environment and Urbanization* 5 (1): 9-17.
- Patel, Sheela and Sundar Burra. 1994. "Access to Housing Finance for the Urban Poor." *CITIES* 11 (6): 393-397.
- Patel, Shirish B. 1995. "Slum Rehabilitation: 40 Lakh Free Lunches?" *Economic and Political Weekly* 30 (40):2473-2476.
- Patel, Shirish B. 1996. "Slum Rehabilitation in Mumbai, Possible if Done Differently" *Economic and Political Weekly* 31 (18):1047-1050.
- Payne, Geoffrey. 1982. "Self-help housing: A Critique of the Gecekondu of Ankara." In *Self-help Housing: A Critique*. Edited by Peter M. Ward. London: Mansell Publishing Ltd.
- Payne, Geoffrey. 1984. *Low-Income Housing in the Developing World: the Role of Sites and Services and Settlement Upgrading*. Chichester; New York: John Wiley & Sons.
- Payne, Geoffrey. 1989. *Informal Housing and Land Subdivisions in Third World Cities: A Review of the Literature*. Oxford: Center for Development and Environmental Planning (CENDEP).
- Payne, Geoffrey. 1997. *Urban Land Tenure and Property Rights in Developing Countries: A Review*. London: Intermediate Technology Publications.
- Payne, Geoffrey. 1999. *Making Common Ground: Public-private Partnerships in Land for Housing*. London: Intermediate Technology Publications.
- Peattie, Lisa. 1968. *The View from the Barrio*. Ann Arbor: University of Michigan Press.
- Peattie, Lisa. 1979. "Housing Policies in Developing Countries: Two Puzzles." *World Development* 7: 1017-1022.
- Peattie, Lisa. 1987. "An idea in good currency and how it grew: the informal sector." *World Development* 15 (7): 851-860.
- Peattie, Lisa. 1995. "An Approach to Urban Research in the Research in the 1990s." In *Perspectives on the City*. Edited by Richard Stren, pp. 389-415. Toronto: Center for Urban & Community Studies, University of Toronto.
- Perlman, Janice E. 1976. *The Myth of Marginality: Urban Poverty and Politics in Rio de Janeiro*. Berkeley: University of California Press.
- Pikholz, Lynn. 1997. "Managing Politics and Storytelling: Meeting the Challenge of Upgrading Informal Housing in South Africa." *Habitat International* 21(4): 377-396.
- Prud'homme, Remy. 1995. "The Dangers of Decentralization." *World Bank Research Observer* 10 (2): 201-220.
- Pugh, C. 1990. *Housing and Urbanization: The Case of India*. Delhi: Sage India.
- Razzaz, Omar M. 1993. "Examining Property Rights and Investment in Informal Settlements: The Case of Jordan." *Land Economics* 69 (4): 341-355.
- Reserve Bank of India (RBI). 1999. *Annual Report*. Mumbai: RBI.
- Richardson, H. W. 1977. *City Size and National Spatial Strategies in Developing Countries*. World Bank Staff Working Paper No. 252. Washington DC: The World Bank

- Richardson, H. W. 1987. "Spatial Strategies, the Settlement Pattern, and Shelter and Services Policies." In *Shelter, Settlement, and Development*. Edited by Lloyd Rodwin, pp. 207-235. Boston: Allen & Unwin.
- Rodwin, Lloyd. 1987. *Shelter, Settlement, and Development*. Boston: Allen & Unwin.
- Rodwin, Lloyd and Bishwapriya Sanyal. 1987. "Shelter, Settlement, and Development: An Overview." In *Shelter, Settlement, and Development*. Edited by Lloyd Rodwin, pp. 3-31. Boston: Allen & Unwin.
- Rondinelli, Dennis, James S. McCullough and Ronald W. Johnson. 1989. "Analyzing Decentralization Policies in Developing Countries: A Political-Economy Framework." *Development and Change* Vol.20: 57-87.
- Rondinelli, Dennis. 1990. *Decentralizing Urban Development Programs: A Framework for Analyzing Policy*. Washington DC: USAID, Office of Housing and Urban Programs.
- Rowe, Peter. 1993. *Modernity and Housing*. Cambridge, MA: MIT Press.
- Sagalyn, Lynne B. 1993. *Public Development: Using Land as a Capital Resource*. Cambridge, MA: Lincoln Institute of Land Policy.
- Sagalyn, Lynne B. 1997. "Negotiating for Public Benefits: The Bargaining Calculus of Public-Private Development." *Urban Studies* 34 (12): 1955-1970.
- Sanyal, Bishwapriya. 1994. *Cooperative Autonomy: The Dialectic of State-NGOs Relationship in Developing Countries*. Geneva: International Institute for Labour Studies.
- Sanyal, Bishwapriya. 1996. "Intention and Outcome: Formalization and its Consequences." *Regional Development Dialogue* 17 (1): 161-178.
- Seik, Foo Tuan. 1992. "The Provision of Low-cost Housing by Private Developers in Bangkok 1987-89: The Result of an Efficient Market?" *Urban Studies* 29 (7): 1137-1146.
- Sekhar, U. 1983. *Industrial Location Policy: The Indian Experience*. World Bank Staff Working Paper No. 62. Washington DC: The World Bank
- Sheng, Yap Kioe. 1992. *Low-Income Housing in Bangkok: A Review of Some Housing Sub-markets*. Bangkok: Asian Institute of Technology.
- Siembieda, William J. and Eduardo Lopez Moreno. 1997. "Expanding Housing Choices for the Sector Popular: Strategies for Mexico." *Housing Policy Debate* 8 (3): 651-677.
- Silas, Johan. 1984. "The Kampung Improvement Programme of Indonesia: A Comparative Case Study of Jakarta and Surabaya." In *Low-Income Housing in the Developing World: the Role of Sites and Services and Settlement Upgrading*. Edited by Geoffrey K. Payne. Chichester; New York: John Wiley & Sons.
- Singh, Gurbir and P. K. Das. 1995. "Building Castles in Air: Housing Scheme for Bombay's Slum-Dwellers." *Economic and Political Weekly* 30 (40): 2477-2481.
- Smets, Peer. 1997. "Private Housing Finance in India: Reaching Down-Market?" *Habitat International* 21 (1): 1-15.
- SPARC. 1985. *We the Invisible: A Census of Pavement Dwellers*. Bombay: SPARC.
- SPARC. 1988. "In Search of Shelter." *Architecture + Design* 4 (2): 70-73.
- Soliman, 1999. "Partnerships in three Egyptian Cities." In *Making Common Ground: Public-private Partnerships in Land for Housing*. Edited by Geoffrey Payne, pp. 89-112. London: Intermediate Technology Publications.
- Stiefel, Matthias and Marshall Wolfe. 1994. *A Voice for the Excluded. Popular Participation in Development: Utopia or Necessity?* London: Zed Books.
- Strassman, W. P. 1984. "The Timing of Urban Infrastructure and Housing Improvements by Owner Occupants". *World Development* 12 (7): 743-753.
- Struyk, R. and R. Lynn. 1983. "Determinants of Housing Investment in Slum Areas: Tondo and other Locations in Metro Manila." *Land Economics* 59(4): 444-454.
- Sundaram, P. S. A. 1989. *Bombay, Can it House its Millions?* New Delhi: Clarion Books.

- Sundaram, P. S. A. 1995. "Dimensions on the Housing Crisis in Bombay." *Open House International* 20(2): 3-15.
- Swaminathan, Madhura. 1995. Aspects of Urban Poverty in Bombay." *Environment and Urbanization* 7(1): 133-143.
- Tendler, Judith. 1982. *Turning Private Voluntary Organizations into Development Agencies: Questions for Evaluation*. AID Program Evaluation Discussion paper No. 12. Washington DC: U.S. Agency for International Development.
- Tendler, Judith. 1997. *Good Government in the Tropics*. Baltimore: The John Hopkins University Press.
- Thakkar, Usha. 1996. "The Commissioner and the Corporators: Power Politics at Municipal Level." In *Bombay: Metaphor for Modern India*. Edited by Sujata Patel and Alice Thorner, pp. 248-267. New Delhi: Oxford University Press.
- Times Research Foundation. 1997. *Municipalities in India: The Devolution Paradox*. Study sponsored by the U.S. Agency for International Development
- Tokman, K. Bulent. 1984. "Ankara: Procedures for Upgrading and Urban Management." In *Low-Income Housing in the Developing World: the Role of Sites and Services and Settlement Upgrading*. Edited by Geoffrey K. Payne. Chichester; New York: John Wiley & Sons.
- Turner, John F. C. 1963. "Dwelling Resources in South America." *Architectural Design*, 37, pp. 360-393.
- Turner, John F. C. 1967. "Barriers and Channels for Housing Development in Modernizing Countries." *Journal of the American Institute of Planners* 33 (3): 167-181.
- Turner, John F. C. 1968a. "The Squatter Settlement: Architecture that Works." *Architectural Design*, 38, pp. 355-360.
- Turner, John F. C. 1968b. "Housing Priorities, Settlement Patterns, and Urban Development in Modernizing Countries." *Journal of the American Institute of Planners* 34 (6): 354-363.
- Turner, John F. C. 1972. "Housing as a Verb." In *Freedom to Build: Dweller Control of the Housing Process*. Edited by John F. C. Turner and R. Fichter. New York: The Macmillan Company.
- Turner, John F. C. 1977. *Housing by People: Towards Autonomy in Building Environments*. New York: Pantheon Books.
- Turner, John F. C. 1978. "Housing in Three Dimensions: Terms of Reference for the Housing Question Redefined." *World Development* 6 (9/10): 1135-1143.
- Turner, John F. C. 1982. "Who Shall Do What About Housing?" In *Urbanization in Contemporary Latin America*. Edited by Alan Gilbert, J. E. Hardoy, and R. Ramirez, pp. 191-204. New York: John Wiley and Sons.
- Turner, John F. C. 1983. "From Central Provision to Local Enablement." *Open House International* 8 (4): 6-10.
- Turner, John F. C. and R. Fichter. 1972. *Freedom to Build: Dweller Control of the Housing Process*. New York: The Macmillan Company.
- UNCHS. 1990. *Global Strategy for Shelter to the Year 2000*. Nairobi: UNCHS.
- UNCHS. 1993. *Public/Private Partnerships in Enabling Shelter Strategies*. United Nations Centre for Human Settlements (UNCHS).
- Vale, Lawrence J. 1996 "Public Housing Redevelopment: Seven Kinds of Success." *Housing Policy Debate* 7 (3): 491-534.
- Varley, A. 1987. "The Relationship Between Tenure Legalization and Housing Improvements: Evidence from Mexico." *Development and Change* 18 (3): 463-481.
- Vivian, Jessica and Gladys Maseko. 1994. *NGOs Participation and Rural Development*. Geneva: United Nations Research Institute for Social Development (UNRISD).

- Wadhwa, Kiran. 1989. *Role of Private Sector in Urban Housing - Case Study of Ahmedabad*. New Delhi: Human Settlements Management Institute.
- Ward, Peter. 1982a. *Self-Help Housing - A Critique*. London: Mansell Publishing.
- Ward, Peter. 1982b. "The Practice and Potential of Self-Help Housing in Mexico City." In *Self-Help Housing - A Critique*. Edited by Peter Ward. London: Mansell Publishing.
- Warning, Claudia. 1995. *Participation and Intervention in Slum and Squatter Settlements Improvement Programmes: Experiences from Slums in Bombay*. Ph.D. Dissertation. Pune, India: University of Pune, Centre for Development Studies and Activities (CDSA).
- Williamson, J. 1965. "Regional Inequality and the Process of National Development: A Description of the Patterns." *Economic Development and Cultural Change* 13 (4): 3-45.
- World Bank. 1972. *Urbanization: Sector Working Paper*. Washington DC: The World Bank.
- World Bank. 1991. *Urban Policy and Economic Development: An Agenda for the 1990s*. Washington DC: The World Bank.
- World Bank 1993. *Housing Enabling Markets to Work, A World Bank Policy Paper, with Technical Supplements*. Washington DC: The World Bank, (This paper was written by Shlomo Angel and Stephen K. Mayo).
- World Bank. 1997a. *Implementation Completion Report (Bombay Urban Development Project)*. Washington DC: The World Bank.
- World Bank. 1997b. *Economic Update: Sustaining Rapid Growth, Grey Cover Report No. 16506-IN*. Washington DC: The World Bank, May 30, 1997.
- Wunsch, James S. and Dele Olowu. 1990. *The Failure of the Centralized State: Institutions and Self-Governance in Africa*. Boulder: Westview Press.
- Zearley, Thomas Lee. 1993. "Creating an Enabling Environment for Housing: Recent Reforms in Mexico." *Housing Policy Debate* 4 (2): 239-249.

Newspaper and Newsmagazine Articles:

- The Accommodation Times. August 01, 1998. "Property Rates in Mumbai."
- The Afternoon. August 29, 1989. "City Development Control Rules to be Relaxed."
- The Blitz. October 12, 1985. "Bombay sits on a Bomb."
- Business India. July 1-14, 1996. "Trick or Treat."
- The City. Vol 1. No. 1, September 1997. "Bombay First: What it is and Where it hopes to go."
- The Daily. October 30, 1984. "To Solve Slum-dwellers' Woes: Dada Ready to Raise FSI."
- The Economic Times. July 12, 1998. "Secure Foundations to Build on."
- The Economist. May 06, 1995. "The Most Expensive Slum in the World."
- The Economist. June 29, 1996. "New Homes for Old."
- The Economist. June 13, 1998. "Hitting Home: Housing Finance in India."
- The Economist, May 13, 2000. "Global Giants."
- The Independent. September 30, 1989. "Dharavi Distrusts Redevelopment Scheme."
- The Independent. April 08, 1992. "A Bonanza for Private Builders."
- The Independent. August 17, 1994. "Rajiv's Dream Scheme Achieves Precious Little."
- The Indian Express. November 8, 1984. "Tenants may be Allowed to Form Societies."
- The Indian Express. December 20, 1987. "Now You See it, Now You Don't."
- The Indian Express. August 27, 1988. "Shaky Start to Dharavi Project"
- The Indian Express. July 25, 1995. "Dharavi Slum-dwellers Sceptical of Re-housing Scheme."
- The Indian Express. July 29, 1995. "Ambitious Dream."
- The Indian Express. April 16, 1997. "Fishermen Fight to Save Village."
- The Indian Express. April 21, 1997. "Worli Society, House in Disorder."
- The Indian Post. July 05, 1987. "Self Help: Novel Scheme for Dharavi."

The Sunday Observer. May 12, 1996. "A Dream Scheme."

The Telegraph. July 19, 1995. "the House that Bal wants Built."

The Times of India. October 23, 1985. "Sena Firm on Demolitions."

The Times of India. March 16, 1989. "Row over Loft Building in Dharavi."

The Times of India. August 11, 1990. "Thackeray's Housing Plan Unrealistic."

The Times of India. February 21, 1991. "Extra FSI for Social Service Bodies."

The Times of India. February 23, 1991. "Thackeray's Housing Plan Half-baked."

The Times of India. August 05, 1995. "Builders See a Killing in State Housing Plan."

The Times of India. August 24, 1995. "Free Housing Scheme Will not Eradicate Slums."

The Times of India. December 22, 1997. "SRD Beneficiaries have Problems Galore."

The Times of India. June 06, 1998. "State Forms New Body to Raise Rs.10,000 Crore for SRD Scheme."

The Times of India. June 12, 1998. "BMC will Build One Lakh Toilets."

The Times of India. June 26, 1998. "State forms New Body to Raise Rs.10,000 Crore for SRD Scheme."

The Times of India. July 08, 1998. "All MHADA Lands in City will not be Transferred to Shivshahi Prkalp."

The Times of India. August 19, 1998. "BJP Ministers Boycott State Cabinet Meeting."

The Times of India. December 25, 1998. "State Stays Development Work on Land from Jogeshwari to Borivli"

The Times of India. December 05, 1999. "SPPL will not Finance Fresh Projects."

The Times of India. March 12, 2000. "Maharashtra Government Scraps Slum Scheme."

Documents:

MCHS' Loan Agreement with the Housing and Urban Development Corporation (HUDCO). July 26, 1991.

MCHS' Agreement with Parth Construction. September 08, 1993.

MCHS' Lease Agreement with the Municipal Corporation of Greater Bombay (MCGB). March 07, 1994.

MCHS' Agreement with the Housing and Urban Development Corporation (HUDCO). August 09, 1994.

Letter from the Housing and Urban Development Corporation (HUDCO) to the MCHS, September 05, 1997.

Letter from SPARC to the Housing and Urban Development Corporation (HUDCO). December 17, 1997.

Annexure II, Revised Slum Redevelopment Scheme (SRD) Application, Purbi Architects. October 31, 1996.

Technical Report, Purbi Architects. February 25, 1998.

Technical Report Purbi Architects. June 18, 1998.

Personal Communication, Slum Rehabilitation Authority (SRA). August, 1998.