An Overview of Slum Rehabilitation Schemes in Mumbai, India

APPROVED BY
SUPERVISING COMMITTEE:
Carlos Caldas, Supervisor
Curros Curdus, Supervisor
John Borcherding

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by

Rohit H. Jagdale, B.E.

REPORT

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An Overview of Slum Rehabilitation Schemes in

Mumbai, India

Rohit H. Jagdale, M.S.E.

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Supervisor: Carlos Caldas

In the recent decades, the Government of India has implemented a

unique approach to the problem of slum proliferation in Mumbai. By pro-

viding an innovative cross-subsidy to private developers, the administration

has created a working model for Public-Private-Partnership in Slum Rehabil-

itation. This Report traces the evolution of this model through an extensive

literature review of the preceding schemes. It also critiques the models on its

impact on public life and provides recommendations for future policy decisions.

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Chapter 1

Introduction

The socio-economic situation of India puts it in a strategically unique position in the post world-war libertarian society. Post independence, India has witnessed unprecedented growth, shadowed by a population explosion straining every national resource and crippling every effort taken by the succeeding government to alleviate its ailments. The burden of the democracy is felt by the nation through political upheavals and unstable governments rewriting the national policies every five years with diverging visions and ideologies. The chaotic administration of the nation is further complicated by the economic policies and consequent trend setting growth of new industries in a short period of time. All together resulting in the metaphorical elephant that is India. With the national GDP growing at the rate of 8% for the last 4 years, the elephant seems to be moving fast inevitably making the world step back and take noticeMeredith (2008) (Meredith, 2007).

The population in India already constitutes 17.5% of the world population and continues to grow at a rate of 1.4% annually. At the same time India has seen a gradual change of policing from decentralization to urbanization in the succeeding five year plans, as heavy-industrialization and commer-

cialization are given increasingly more impetus compared to agriculture and agro-based industries. These factors have resulted in a growing trend of rural to urban migration in the nation.

The metropolitan areas however do not have the infrastructure required to accommodate these huge migrating populations. These factors have caused the rise of a new section of population: the urban poor. Most of these urban poor translate into a squatter community. Slum pockets have emerged throughout the cities of the nation.

The development of the democratic thought in the recent years has brought the issue of right to housing for poor to the forefront. This thought has seen the government of India take efforts to accommodate the squatters and alleviate their quality of life by implementing various schemes.

1.1 Objective

The objective of this report is to trace the efforts taken by the government of India since the last few decades. We follow the change in the school of thought of the policy makers as the socio-economic structure of the country changes with new economic policies being implemented. This is done through an extensive literature review of the successive schemes implemented in the metropolitan city of Mumbai, capital of the state of Maharashtra and considered as the financial and commercial capital of the nation; where the problem of slums appears to be the most urgent.

1.2 Document structure

The report shall firstly give a brief documentation of India in the past half-century. This is done so the reader has an idea of the socio-political and economic situation in the country under scrutiny. After this we shall delve into the efforts taken by the administrative bodies through the years to upgrade the slum pockets in the city.

Chapter 2

India - A Brief Portrait

"India is not, as people keep calling it, an underdeveloped country, but rather, in the context of its history and cultural heritage, a highly developed one in an advanced state of decay." — Shashi Tharoor, *The Great Indian Novel*

With a population of more than 1.21 billion people, India is the most populous democracy in the world. Its population is set to surpass that of China by the year of 2025. It has a parliamentary republic with six national parties and more than 40 regional parties. As a national identity, India is shadowed by an unmatched diversity that is seen in the 1652 languages spoken six major religions and an economic gap between the poor and the rich classes that only seems to keep widening. The stability of a democratic institution in such a nation has continued to be a subject of great intrigue for political scientists across the world (Plattner and Diamond, 2007).

After achieving independent status, the Government of India declared itself a republic body, with conventional ideologies that restrained liberal capitalism. The economic crises of 1991 in India saw the then finance minister Manmohan Singh (currently the Prime Minister of India) bring out break-

through reforms ushering in new-liberal policies which included opening for international trade and investment, deregulation, initiation of privatization, tax reforms, and inflation-controlling measures. Indias economic structure underwent a major change in 1991. The phase of economic reforms that has followed since then till the present day is commonly referred to as the economic liberalization in India. Although the change was slow, Singh repeatedly insisted that these reforms were the only chance India had of raising the overall standard of living, which proved to be true in the year of 2007 when India recorded its highest GDP growth rate of 9% (French, 2011). With this India became the second fastest growing major economy in the world, next only to China. As an illustration of this, Fig. 2.1 charts the exponential growth in India's exports in the economic liberalization phase compared to the preliberalization phase.

According to the Bureau of Public Affairs, U.S., the stock of Indian FDI (Foreign Direct Investment) in the United States has increased from \$227 million in 2002 to almost \$4.9 billion in 2011, supporting thousands of U.S. jobs.

The aim of this brief portrait was to re-assert the importance of the role of the performance of the Indian economy in the global scenario.

2.1 Population Trends in India

Containing 17.5% of the world population and growing at a rate of 1.41%, India is set to be the most populous country of the world by 2025.



Figure 2.1: Export trends of India (http://www.tradingeconomics.com)

More than 72% of this 1.2 billion population lives in the rural areas of the nation, leaving a population of more than 286 million for the 23 urban centers, each containing more than one million poverty stricken people.

2.2 Poverty in India

In 2010, the World Bank reported that 32.7% (up from 22% in 1981) of the total Indian people fall below the international poverty line. The nation is estimated to have a third of the world's poorest (World Bank, 2013). The 2011 Global Hunger Index (GHI) Report places India amongst the three countries where the GHI between 1996 and 2011 went up from 22.9 to 23.7, while 78 out of the 81 developing countries studied, including Pakistan, Nepal, Bangladesh,

Vietnam, Kenya, Nigeria, Myanmar, Uganda, Zimbabwe and Malawi, succeeded in improving hunger conditions (Grebmer et al., 2011).

What is interesting to note here, is that most of these studies are centered on the 72% of rural population. On studying the trends for the remaining 286 million people, they show a growth rate that is significantly higher than those in the rural areas. The urban poor sect is forecasted to grow by a factor between two and three to approximately 660 million by 2025.

2.3 Migration Trends

A geographical inequality in the economic development is unavoidable, especially in the cases like India where the rate of development is almost unsustainable. This has been observed to lead to migration tendencies in developing countries, speeding up the urbanization process (Lall et al., 2006). Rapid City growth in developing countries is explained primarily by two major hypotheses: (1) unsustainable growth in rural population, and (2) the fall of agricultural sector due to economic policies favoring urbanization (Williamson, 1988). The difference in the per-capita incomes of the population in low-income areas compared to the high-income areas also is a factor promoting migration (Harris and Todaro, 1970). Rural-urban migration in addition to a high natural population growth aggravates the situation of surplus labor in the urban areas. This in effect, reduces the average urban income, which translates into a rise in the population of the urban poor, effectively transforming rural poverty into urban poverty (Banarjee 1986). The low rate of growth of industrial employment and

Table 2.1: Decomposition of Urban Growth (%), 1961-2001 (Mitra, 2013)

	Components of Urban Growth	1961-	1971-	1981-	1991-
		1971	1981	1991	2001
1	Natural Increase	64.6	51.3	61.3	59.4
2a	Population of new towns	13.8	14.8	9.4	6.2
2b	Increase due to expansion in ur-	2.9	14.2	7.6	13.0
	ban areas and merging of towns				
3	Net Migration	18.7	19.6	21.7	21.0

the high rate of rural-to-urban migration, lead to uncontrolled urbanization involving a transition from rural unemployment to excessive urban employment and underemployment. Population in the urban areas expands due to the following three factors: natural growth of population, rural-to-urban migration and reclassification of rural areas as urban in course of time. According to the Population Census of India 2006, around one-fifth of the urban growth is accounted by the rural-to-urban net migration, as shown in Table 2.1.

These trends have been consistently noted across India. Migration of the rural poor to an unemployment stricken urban area essentially has led to the settlement of slum pockets in the urban areas, the rates of which is most alarming in the city of Mumbai. Table 2 shows the percentage of populations of the major cities of India living in slums. We can see here how grave the situation of Mumbai is, in comparison to the other metropolitan areas.

2.4 Urban Poor in Mumbai

The metropolitan area of Mumbai spans an area of 437 square kilometers (approximately 170 square miles), with an estimated population of 10 to 12 million people. Six million of this urban populace is categorized as squatters or slum dwellers. This slum population has 2500 settlements in the city occupying about 2500 hectares of area, which constitutes a mere 6\% of the total land area. Unlike other cases, the slums in Mumbai have settled on private lands (50%), State Government Lands (25%) and Municipal Corporation lands (25%). The conditions of these slum occupations are dangerously unhygienic and are defined unfit for human habitation due to reasons such as overcrowding, lack of ventilation, electricity or sanitary facilities by the Census of India. Apart from this is the unaccounted-for population of an estimated 1 million that live on pavements, with absolutely no providence. In addition to this, an estimated population of 2 million people lives in old, dilapidated and often illegal structures called "chawls" of Mumbai. Which means that almost a staggering 80% of the population of Mumbai lives in sub-standard of unsafe conditions with a continuous threat of displacement. This brief description depicts the dismal condition of a basic human necessity: housing, in the financial capital of one of the fastest growing economies of the world. In the highly influential UN-Habitat Report: Challenge of the Slums (2003), Secretary General of the UN Kofi Annan was noted saying:

"Without concerted action on the part of municipal authorities, national governments, civil society actors and the interna-

tional community, the number of slum dwellers is likely to increase in most developing countries. And if no serious action is taken, the number of slum dwellers worldwide is projected to rise over the next 30 years to about 2 billion."

Chapter 3

Construction Industry in India

The construction industry has contributed an estimated Rs. 670,778 crore to the national GDP in 2011-12 (a share of around 8%). Construction constitutes 40% to 50% of India's capital expenditure on projects in various sectors such as highways, roads, railways, energy, airports, irrigation, etc. The Industry has been growing steadily in the recent years mainly on the strength of increased manufacturing activities, industrial growth, and heightened investments especially by the government in infrastructure and real estate as can be seen in Fig. 3.1. Moreover, the Indian governments decisions to give 100% foreign direct investments in the real estate business has jumped up construction activities throughout the country.

The construction sector of India is already said to show signs of recovery after the recent economic downturn (Bulk Transporter, 2010). The government has taken new initiatives to boost infrastructure development within the country by setting up a National Investment Board, which supervise financing for infrastructure projects (NIB). Infrastructure bonds, which were absent in the market, were introduced in 2012 by financial institutions like the Asian Development Bank (ADB) and India Infrastructure Finance Company

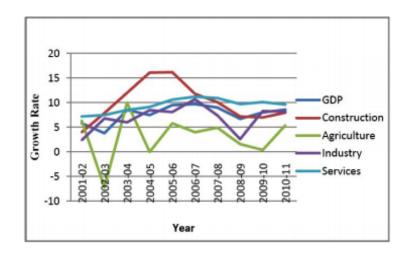


Figure 3.1: GDP and Sector-wise growth rate (Indiabudget)

Limited (IIFCL). This risk-sharing facility will partially guarantee INR7.2bn (US\$128mn) of rupee-dominated bonds issued by Indian companies to finance infrastructure projects. The NIB will focus on fast-tracking the execution of approved projects by getting all regulatory clearances. Other initiatives include a new land acquisition bill, which makes acquisition for public-private partnership (PPP) projects easier (Indian Mirror).

Indian Construction Industry is expected to witness effective investment over INR 10,000 bn (USD 200bn) in the next 5 years. Housing industry alone has seen trend setting growth in urban areas. Much of this growth is concentrated in the popular middle-income group (MIG) of the nation. As a result of rising household income and swelling middle class, India's per capita income has doubled over the past 20 years. With population growth of about 1.6% per annum and Gross Domestic Product (GDP), growth of 9% per an-

num, the per capita income is expected to quadruple by the year 2020. The average real income of urban India and rural India is likely to grow by 5.7% and 3.6% respectively by 2025. Moreover, India's middle class is expected to expand by more than 10 times from its current size of 50 million to 583 million people in next 18 years.

All of these factors put together with a competitive market that is still discovering the possibilities of a liberal economy, sets the stage for a housing industry that will constitute a major part of the construction industry. The land prices in Mumbai, the economic capital of the nation, have always been high by global standards (Dossal, 1995). Mumbai, like New York is an island city and has limited land. Only between 1966 and 1981, land prices in Mumbai increased by 720% (Dowall, 1992) witnessing some of the most expensive real estate transaction in the world in 1995 (Nayar, 1996). With limited land to develop upon, it is only a matter of time before the developers look at slum rehabilitation as the only source of new projects in prime urban locations.

This discussion was intended to bring out the scope for slum rehabilitation projects in the future by highlighting the amount of capital available for housing projects.

Chapter 4

Slum Rehabilitation in India

The Government of India has made efforts to eradicate the problems of urban slums since the 1880s: the colonial era. However, these efforts have grown in effectiveness since the 1970s, and especially after 1985. A series of events have motivated this development of a sympathetic attitude towards the problem of slum upgrading. This chapter traces these events and gives a picture of all the efforts taken by the Government of India in the recent decades.

In Mumbai, since the mid-1980s the state government of Maharashtra has been implementing an unorthodox strategy of housing improvements in the citys slums. Contrary to the conventional approach of promoting incremental housing improvement, slum redevelopment involves the demolition of existing slums and their subsequent redevelopment at a higher density. The redevelopments include market-rate housing for new buyers as well as cross-subsidized apartment blocks for the original slum-dwellers. The governments key policy intervention to facilitate slum redevelopment is a change in the land development regulations to allow for an increased density of redevelopment in the citys slums. The increase in the permitted intensity of development helps

to generate the cross-subsidy for slum-dwellers.

4.1 Conventional Strategies

Through the 19th century the slum upgrading policy was limited to demolishing and redeveloping the squatter settlements using a model of planning derived from the industrially superior Britain (Dossal, 1989). Around the middle of the twentieth century, many developing countries initiated slum clearance programs. Governments played an active role in these projects. The main motivation, for these projects however was a disdainful attitude towards slum dwellers, second only to the profits that can be reaped by redeveloping prime real estate (Mukhija, 2003). Typically, they did not necessarily benefit the poor residents. By the 1960s, such housing strategies underwent severe criticism for aggravating the housing shortage (Abrams, 1966). Some argued that the physical preference of the slum dwellers were ignored in these strategies (Turner, 1968). In light of these arguments, governments gradually started adopting strategies that enabled the communities to help alleviate themselves.

Mumbai initiated such a programme in 1956. The Slum Areas (Improvement and Clearance) Act, 1956, Section 10, Sub-section 4 states:

"When a slum clearance order has become operative, the owners of buildings to which the order applies shall demolish the buildings before the expiration of six weeks from the date on which the buildings are required by the order to be vacated or before the expiration of such longer period as in the circumstances of the case the competent authority may deem reasonable."

Beyond this the Act goes on to say that the Central Government holds the power to acquire the land if the said land is not used within a period of 12 months after clearance, for the planned purpose according to the city plan. It also gives the state the power of declaring an area as a slum based on its surveys, giving it the right to enact slum clearance on it.

The strategy proved to be relatively ineffective in achieving its desired goal of eradicating slums completely. The fundamental problem was that such an endeavor required more capital than any developing nation could bring up for these programs. Most of the slum-dwellers were relocated to new accommodation that was substandard (Abrams, 1966). More often than not, the slum dwellers were rehabilitated in remote locations, estranging communities and social networks built over decades, which made it difficult for them to continue their lives smoothly. Not surprisingly, these programs received severe criticisms from the slum habitants. Subsequently, governments replaced slum clearance strategies with the more modest aim of improving slum conditions by providing basic services and better amenities. In Mumbai, the Slum Improvement Programme (SIP) was introduced in 1971.

4.1.1 Slum Improvement Programme, 1971

The earlier strategy employed by the administration of slum clearance was not popular with the people for obvious reasons. Efforts taken by the state government to resettle the evicted slum dwellers were unsatisfactory at best.

The landowners generally did not have the resources required to police their lands against encroachment. This meant that even after slum clearance, the cleared land was soon re-occupied by slums after a brief hiatus of inoccupation, rendering the whole scheme an unfruitful expense.

In the 1970s, the state first recognized the need for a working strategy of resettlement for slum dwellers, after slums were demolished. The perception of slums was gradually changing from that of an uncontrollable nuisance to a self-organizing organic solution to the pressing housing problem of Mumbai. The passing of the Slum Areas (Improvement, Clearance and Redevelopment) Act, 1971 was a major change in the States Slum policies. The Act took a never-before-seen sympathetic attitude towards slums. The state recognized that it was inadequately funded to clear the slums overnight and that the next best step for it was to see to it that these slums do not become a source of danger to the health, safety and convenience of the people (Government of Maharashtra, 1973).

The Act of 1971 enabled the state to declare an area to be a slum if:

"a) Any area is or may be a source of danger to health, safety or convenience of the public of that area or of its neighborhood, by reason of that area having inadequate or no basic amenities, or being unsanitary, squalid overcrowded or otherwise; or b) The buildings in any area, used or intended to be used for human habitation are: i) in any respect, unfit for human habitation; or ii) by reason of dilapidation, overcrowding faulty arrangement and de-

sign of such buildings, narrowness or faulty arrangement of streets, lack of ventilation light or sanitation facilities or any combination of these factors, detrimental to the health, safety or convenience."

The Government of Maharashtra began projects so the slums would have access to basic utilities alleviating the sanitary and hygienic conditions of the slums. However, these projects were under the jurisdiction of the Maharashtra Regional and Town Planning Act, 1966 (MRTP), which meant that only pockets of lands meant to be improved upon under the development plan would be provided with these utilities. Under the Amendment of 1973, a Slum Improvement Board (SIB) was set up in the interest of expediting the providing of utilities.

The impact of these schemes however was broader than envisaged. There were other unintended effects too. The Act of 1971 put together with the MRTP Act of 1966, gave slum dwellers the effective power to legally encroach a private land. An interesting judgment by the High Court of Mumbai quashed the order by the State of Maharashtra that had declared one such private land as a slum. The judgment was interesting as it re-asserted the intention of the act: to declare a land as a slum meant empowering the state to clear it as soon as possible and reallocating it to its intended purpose and not promote further accommodation. (The State of Maharashtra Vs. Mahadeo Pandharinath Dhole and Ors., 1980 AIR (Bom) 348)

On the other hand, the state carried out increasingly aggressive slum clearances after passing this act, violating several international human rights in the process. A notable case is that of the demolition of Janata Colony which began in 1976. The Bhabha Atomic Energy Commission gave a notice to the 70,000 colony dwellers seeking to evict all of them without any compensation whatsoever. Despite the national importance of the Bhabha Atomic Research Center (BARC) that sits just beside the Janata Colony, the slum dwellers argued that they had been residing on the location long before the BARC facility was even setup. The protests and demonstrations by 50,000 of the dwellers were to no avail. On May 14, 1976 India was declared to be in a state of Emergency by the Prime Minister of India, Mrs. Indira Gandhi, following which the eviction of the 70,000 Janata colony dwellers was completed within 45 days. It was left for the local community to make efforts, with the help of Non-Profit NGOs, to make the eviction as humane as was possible with their meagre resources (Arputham, 2008). This included setting up of temporary camps to accommodate the evicted until they found other options. The living conditions of these camps were noted to be inhuman. This was an eye-opener to the community of public policy makers worldwide about the possible ill effects of wrongly drawn policies that gave too much power in the hands of few, possible even in a democracy.

The Scheme in itself was not a spectacular success. It did not fulfill its promises. By 1989 it had spent Rs. 500 million. Improvements provided however have been less than expected, for example one new sanitary facility had been provided to serve each 100 people instead of the aimed 20-50 people (MHADA, 1990).

4.1.2 Slum Upgrading Programme (SUP), 1985

The year of 1985 saw the Supreme Court of India make a landmark decision in the Olga Tellis vs. Bombay Municipal Corporation case (Supreme Court of India, 1985). Tellis had tried to evict the slum dwellers occupying his private land without proper legal procedure. While the court was against this, it did not think that the slum dwellers had a right over the private land and passed the order to vacate the premises. However, for the subject of resettlement it stated that: (i) sites should be provided to residents presented with census cards in 1976; (ii) slums in existence for 20 years or more were not to be removed unless land was required for public purposes and, in that case, alternative sites must be provided; (iii) high priority should be given to resettlement.

Administrations of many developing countries were striving to give the slum dwellers tenure and rights to the land occupied by them. This decision was the first step in regulating the question of tenure for slum dwellers and is popular as one of the formative judgments in Indias housing right policies. John Turner who suggested that the communities should take the initiatives of improving housing conditions and that the governments should reduce direct involvement, was a major influence during this time (Turner, 1972, 1979). The World Bank had funded many infrastructure projects in the developing countries in the recent years. Many of these Infrastructure Projects involved forced eviction and land grabbing. After much criticism, the World Bank redrew its Involuntary Resettlement policy. The new policy made it impossible for the

project sites to be cleared without appropriate resettlement and rehabilitation (World Bank, 2004). The World Bank had promoted Turners ideas. It helped the administrations formulate schemes that provided tenure to eligible slum dwellers. During the 1980s the World Bank took a project-by-project approach in numerous developing nations to promote the governments to take a facilitative rather than fundamental role in the housing of the poor. Its efforts were based on the philosophy of affordability—cost-recovery—replicability (Pugh, 1991).

Affordability. The housing under these schemes were to be developed by the slum dwellers themselves, promoting to develop a self-help attitude in the slum dwellers. The slum dwellers would be paying for the houses themselves and so the housing had to be planned such that it was affordable to the poor. Cost-Recovery. The model aspired to achieve this housing with no subsidy from the side of the government. This would put no burden on the governments budget and made it clear that the user-pays.

Replicability. The successful accomplishment of making the model affordable for the slum dwellers and the cost being recovered by the government would ensure perfect replicability of programmes eventually addressing the slum-upgrading problem entirely.

The Slum Upgrading Programme (SUP) initiated in Mumbai funded by the World Bank in 1985 was based on similar lines. Under SUP, consisted of leasing of existing slum land to cooperative groups of slum dwellers at affordable rates (where the lands were not needed for public purposes) and giving loans for environmental and housing improvements (Naik, 1996). The conflict over land value however remained, since some of the families got assets worth much more than others. The population that could not be reached by the programme held grudges against it. Several have noted that the main problem with these programmes was the acquisition of private land, which was proving to be full of complications and hurdles, when almost half of the citys slums occupy private land (Panwalkar, 1996). Low-income Group Shelter Programme was a self-financing programme, under which the state government gave land free to agencies that would then use them to build shelter for the lowincome groups. The expenses were subsidized by selling plots to the middle or high-income groups. About 85,000 low-income households have benefited from this programme. For a small initial cost, they were given a home-improvement loan repayable over 20 years. Like every other scheme, this too had its pitfalls. A major problem faced by this programme was that middle-income groups used this scheme to get accommodation in prime locations at low or negligible rates. This could have been avoided by taking help from NGOs during the selection of beneficiaries.

4.1.3 The Prime Ministers Grant Project (PMGP), 1985

In the same year that the World Bank sponsored a Slum Upgrading Programme, the Prime Minister of India passed a grant of Rs. 1 Billion for housing projects only in India, forming the PMGP. The grant was focused mainly on upgrading the Dharavi slums (then renowned as the largest slum area in Asia). With the grant, the state government established a PMGP unit in the state housing authority. The PMGP was unique in its approach as it gave a two-pronged solution to the slum dwellers of Dharavi. They could either opt for acquiring tenure of their land and acquiring subsidized loans for its development. Or they could opt for an unconventional reconstruction option. Under this option the existing slums were demolished and the property was redeveloped with residential complexes of higher intensity. This was possible because of the involvement of the state housing authority in the form of the PMGP Unit, which gave an additional 20% of development rights. It was a cost-recovery model and the dwellers were expected to pay for their new accommodation, though at a subsidized rate. The cost of redeveloping was ten times more than upgrading it in 1987. The state government highly subsidized the price of the new apartments through grants and interest free loans thus decreasing its capacity to address a larger volume of the Dharavi population. The high cost of the tenements prompted many households to sell (Dua, 1989). The redevelopment of the Markendeya Slum, initiated under the PMGP makes an interesting case study in bringing out the flaws and possible pitfalls in such schemes. The pioneer NGO SPARC had initiated this redevelopment and had personally invested in the project by providing collateral for the loan required for the project. The case shows a private player trying to play the loop holes of the succeeding scheme The private player later however, refused to pay off the loan, which led to a conflict, and a huge lesson learned for SPARC. Although the Project could finance the resettlement of only 3,800 units in its first phase, PMGP officials claimed that the demand for the project far exceeded the 3,800 figure. It maybe argued, therefore, that the project was formative in the sense that it gave the policy makers the idea that subsidized in-situ redevelopment in already dense areas like Dharavi was probably the most successful option till date. Many of the intended beneficiaries however, could not afford the new accommodations. Mumbai therefore needed to find new and innovative ways to subsidize the reconstruction of slums. In addition this programme attracted the attention of political parties in 1989. This was a time of political upheaval in Mumbai, as the national Congress party after having ruled for 40 years in the state of Maharashtra had finally succumbed to a local party: Shiv Sena, in 1985. The Congress Party was therefore desperate to gain brownie points through its superior administration skills. All of these factors came together in evolving the next generation of slum rehabilitation schemes of Mumbai.

4.2 Privatization of Slum Rehabilitation

1991 brought an end to socialist policies in India. With the liberalization of the markets, India experienced a wave of privatization taking over substantial market share of almost all industries save a few (like railways). Construction industry and slum rehabilitation in specific were not spared either. The policy changes saw the government take a back seat and enable the for-profit private players to enter the market of Slum Rehabilitation. Slum

clearances with inadequate rehousing schemes still continued in the last decade of the century after almost 30 years of policy improvements. In the Sanjay Gandhi National Park, out of the 80,000 settlements, a survey conducted under the supervision of the Deputy Conservator Forests found that 33,000 slum huts were eligible for relocation. Starting October 1997 these hutments were razed, uprooting about a hundred thousand people in the most inhuman way (CPDR, 1999, 2000). However, it was only in the 1990s that the State of Maharashtra developed its unique cross-subsidizing model of in-situ redevelopment schemes.

4.2.1 Slum Redevelopment Scheme (SRD), 1991

The Congress Government (the most popular government in Maharashtra) came to power in 1991 after a lost term in 1985, and launched the Slum Redevelopment Scheme (SRD) in 1991. This was seen by many as Congress' reply to Shiv Senas promise of providing "free houses" to the slum dwellers. The political rivalry therefore, for once had acted in the benefit of the people, perfectly following the competitive model that the Indian private industry was taking as well. The SRD, 1991 built upon the already existing PMGP to extend its benefits to the rest of Mumbai beyond Dharavi, however the program financed itself in a way fundamentally different from that of the PMGP. The SRD added an innovative approach that was formative in the unique Slum Rehabilitation Schemes in Mumbai. The state recognized that subsidies did not have to come in the form of grants or donations. It could come in the form

of relaxing of some regulations that would raise capital from the free market. It incentivized private developers to demolish existing slums and provide new on-site housing. Development Control regulations (DCR) were changed giving added Floor-Area Ratio (FAR)/Floor Space Index (FSI) as incentives to the developers. The extra units constructed would be sold at market price, the profits of which will be entirely given to the private developers according to the modified Development Control Regulations (DCR) (Government of Maharashtra, 1991). This in effect generated a cross-subsidy provided by the Government and the developer for the slum-dwellers who will be awarded new apartments for a mere cost of Rs. 15,000 (US \$300) in the same location, which in many cases was prime property, being in close proximity to the commercial district of the city. The modified DCR limited the total built-up area measured as Floor Space Index to 2.5, which was a significant increase from the previous 1.33 FSI throughout the city. This cap on the FSI of 2.5 has remained constant throughout the schemes till date, in the interest of limiting the increase of intensity of construction. SRD, 1991 in addition limited the profits of the private developers to 25%. The projects could be initiated only after collecting the consent of 75% of the slum-dwellers. The slum dwellers were then awarded a renewable lease of 30 years to their new homes. The new houses were not permitted to be transferred for a period of 10 years. Despite the relaxed regulations the cap on the profits that developers can make was impractical in a competitive market and it deterred major players from taking up these projects with the fear of having to let go of assets for much less money than they were worth. In addition, it led to an increase in underhanded dealings, the effects of which still linger in the real-estate markets. Gaining the consent of 75% of the slum dwellers was proving to be a major hurdle for private developers especially since most of the slum dwellers had political differences and refused to agree on any one developer. Transit accommodation was another problem. Providing temporary housing that was acceptable to all the slum dwellers was a challenge nigh impregnable. A mistrust of builders was built in the slum dwellers after decades of ruthless slum clearance and repossession done by landowners. Another problem was the eligibility criteria of the duration since which the slums were occupied. Slums inherently are transitional and very few slum dwellers stay in the same location for too long. The scheme however was only available to those who had occupied the location for almost a decade.

4.2.2 Slum Rehabilitation Scheme (SRS), 1995

In 1995, the Shiv Sena came to power again by forming a coalition government in Maharashtra. It was an interesting time for the real-estate market of Mumbai; property values were among the highest in the world (The Economist 1995). The Shiv Sena asserted, that this made complete cross subsidizing possible in Mumbai. After the change of government, the Afzalpurkar Committee (in-charge of formulating the development plans of Mumbai in the 1990s) further modified the SRD, and Shiv Sena launched the new Slum Rehabilitation Scheme (SRS). The scheme had been modified majorly by taking

feedback from preceding schemes. The controversial eligibility criteria were abolished. Every slum dweller accounted for in the 1995 electoral vote was eligible for the benefits. This was a major step, as it provided the benefits under SRS to pavement dwellers for the first time. The previous cap of 25% on the profits was removed, bringing the full potential of construction industry to slum rehabilitation. To further attract private developers, this scheme introduced the concept of Transferable Development Rights (TDR). TDR allowed the developers to transfer part of the surplus development rights generated under SRS to any other sites in the city, many time more profitable than the SRS sites. The carpet area of tenements was increased to 225 sq. ft. (approx. 20 sq. m.) from 15 sq.m. The cost of Rs 15000 for the new houses was canceled, making new accommodation available to slum dwellers virtually free of cost (as promised by the Shiv Sena in its campaigns). A central monitoring and clearing agency was set up, and incentives were given to construct transit accommodation on vacant public lands. A statewide Slum Rehabilitation Authority was formed for overseeing, coordinating and approving these schemes.

SRS superseded all the previous schemes. The Scheme however still required the consent of 75% of the slum dwellers, which made execution difficult. The performance of the schemes was not up to the expectations. In the period of 1991-2000, only 3486 units had been redeveloped (The Times of India, 2000). Despite path-breaking innovations the SRS did not succeed in attracting the full potential of the competitive housing market that was boom-

ing in the nation elsewhere, to slum rehabilitation. Arguments are also made that the scheme needed a better regulatory guidance (Mukhija, 2003). The Slum Rehabilitation Scheme (SRS) was criticized just as much as the previous schemes, some even went to call it the mother of all bluffs (Das, 2003). On the other hand, some argue that it was an improvement on the previous policies as it was based on cost recovery by input of market forces, whereas the government plays an enabling role (Ruiter, 1999). A particular point brought into discussion by several researchers is the number of people rehabilitated under the scheme successfully. Deshpande (2004, p. 24) notes that the SRS failed miserably by moving only 26,000 households by 2002. Table 4.1 however shows that despite the below expectation performance, the demand for the SRS has been as high as 75,000 (Mukhija, 2003).

4.3 The Alliance (Role of NGOs)

Since the 1980s NGOs (Non-Government Organizations, conventionally conceived as non-profit in India) were assumed to play an important role in initiating Redevelopment activities in the urban areas. NGOs were seen to be placed in a strategic location, in close contact with the developers and the slum habitants (Hasan 1988). One of the major players in Indias Slum Rehabilitation efforts was The Society for the Promotion of Area Resource Centers (SPARC). Since 1986, SPARC has been working in partnership with two community-based organizations the National Slum Dwellers Federation (NSDF) and Mahila Milan. Together, they are known as the Alliance.

Table 4.1: Slum rehabilitation projects in Mumbai, 1998 (Mukhija, 2003)

		Proposals	Proposals	Projects	Projects
		Received	Approved	under con-	with oc -
				struction	cupation
					certificates
Mumbai City	Number of projects	127	111	53	6
·	No. of units	NA	24310	10001	806
Western Suburbs	Number of projects	217	173	55	15
	- 0	NA	34073	12274	928
Eastern Suburbs	Number of projects	102	83	37	5
	No. of units	NA	17306	6867	508
Total Schemes	Number of projects	446	367	145	26
	No. of units	NA	75689	29142	2242

The Alliance was intricately involved with the development of these schemes since its formation. Their experiences with multiple institutions defined and influenced the future modifications in the schemes to a large extent. Today they are active through 70 cities across the nation. As mentioned earlier, one of the major problems in implementing Slum Rehabilitation Schemes is aligning the interests of the slum dwellers. A third-party with no vested interest in the profits, such as SPARC has played a vital role in doing this for the past two decades. The Alliance also takes up projects itself, redeveloping projects at its own cost. It has rehabilitated large number of slum dwellers displaced due to

infrastructure projects. Since the 1980s, one of its major sources of financing has been the Community Led Infrastructure Financing Facility (CLIFF). The Mumbai Urban Transport Project (MUTP) appointed the Alliance as the chief interlocutor for its rehabilitation project, which involved relocating 16,000 families that lived along the railway tracks. Impressed by its success with the MUTP projects, the Mumbai Urban Infrastructure Project (MUIP) also appointed the Alliance as the nodal agency for the redevelopment of 9,000 structures along the roads that were being developed by MUIP in the 2000s (SPARC, 2013).

4.4 Recent Developments

The Slum Rehabilitation Scheme launched by the Shiv-Sena government in 1995, is still active in Mumbai. It is enacted by the Slum Rehabilitation Authority which surveys and reviews existing position regarding Slum areas in greater Mumbai and formulates schemes for rehabilitation of slum areas. It acts as the single point of contact and decision regarding slum rehabilitation efforts in Mumbai. In addition to its original role of supervising the slum redevelopment projects, it is now assigned as a development authority with the power to function as a local authority within its jurisdiction and is empowered to prepare and submit proposals for modification to the development plans of greater Mumbai. Certain minor modifications have been made to the scheme, however the fundamental model remains the same. The jurisdiction of the SRA however is only extended to the borders of Greater Mumbai. The



Figure 4.1: MUTP Project: Slum Redevelopment along railway lines citep (http://www.sparcindia.org)

rest of the state of Maharashtra is still under the Slum Redevelopment Scheme (SRD) of 1992. The major difference between the two remains the 25% cap on the profits made by the developers. An interesting new development was a ruling by the High Court of Mumbai made in November 2013. The Bombay High Court asked the Government of Maharashtra to do away with the norm of obtaining consent from 75% of the slum dwellers. This ruling however, was pertinent to projects, which included an integrated development of slums into townships, commonly known as cluster development projects. The Court rec-

ognized that obtaining such consent was a herculean task and was obstructing many projects from proceeding by enabling the slumlords to arm-twist the developers. Since its conception, the Slum Rehabilitation Authority (SRA) has allocated 1,524 slum redevelopment projects, of which only 197 have yet been successfully completed. Other cities in Maharashtra like Nagpur and Pune have also seen major development in Slum Rehabilitation schemes.

Chapter 5

Conclusion

Despite best efforts, the situation of slums is not seeing the improvement that was expected out of the programs. In 2006/7 State of the world cities report released by UN-Habitat scored India as at risk on its performance towards the goal of achieving a significant improvement in at least 100,000 slum-dwellers by 2020. Mukhija, compiles and compares the subsidy percentages of the schemes we have discussed in this report in Table 5.1. It is interesting to see that although the government has played an increasingly less involved role in the programmes, the effective subsidy rate has been increasing, with the SRS even crossing a 100%.

There are several lessons that can be learned from Mumbai's Slum Rehabilitation efforts. One of the major conclusions is the role that the government can play in development of slums. The government of Maharashtra might have achieved the perfect balance between over-involvement and under-involvement. The lesson learned is that governments can play a passive-aggressive role by deregulating the development controls. It can a play major role in redistributing real estate to reduce the gap between the urban rich and poor. Agricultural land reform is often thought of as a major asset dis-

Table 5.1: Increasing and changing subsidies in different redevelopment programs (Mukhija, 2002b)

Stellie (Hallinge, 2002)		
Programme	Subsidy	Notes
	(Percentage)	(All prices in current rupees)
PMGP (1985)	10%	A direct subsidy of 10%, and an indirect subsidy in the form of an interest-free loan for 20% of the cost amount
PMGP (1990)	30%	PMGP concedes a write-off of the 20% loan
SRD (1991)	61%	Beneficiaries expected to contribute Rs. 25,000 out of an estimated cost of Rs. 65,000
SRD (1992)	77%	The contribution of beneficiaries reduced to Rs. $15,000$
SRD (1994)	87.5%	Cost estimate revised up to Rs. 120,000 without any revision in the contribution of beneficiaries
SRS (1995)	113%	Free housing, plus a Rs. 20,000 corpus fund for future maintenance expenditure

tribution strategy that does not have an urban equivalent (Linn, 1983). We have seen that it was made possible in Mumbai. The uniqueness of Mumbais approach also lies in its promotion of entrepreneurial activity in the slum dwellers. The enabling schemes were aimed at giving them a sense of security and making them self-dependent. However, it also suggests that governments should not specify rigid parameters within which the surplus value can be exploited. Governments must be willing to relinquish some control over development outcomes. This might make it possible to combine the Mumbai strategy with other innovative housing-improvement practices, such as those undertaken in Ahmedabad and Indore (Diacon, 1997). An interesting case was

presented of the Markendya Slum Redevelopment project, which highlighted the complications faced by SPARC while working with a multi-institutional environment. To avoid such situations, governments will have to play more active roles in conflict resolution (Sanyal and Mukhija, 2001a). NGOs can play a major role by acting as an intermediary between the government and the slum dwelling community. A major obstacle for successful implementation was dissemination of information. Slum dwellers do not have access to information about the benefits that they are eligible for. NGOs should play a vital role in bridging this gap. Governments will be responsible for protection of slum dwellers rights. This can be achieved through strict supervision of contracts and their execution. Governments could also initiate pilot projects that can serve as model projects for the future. Slum Rehabilitation activities have increased the density of construction in Mumbai. The state government should be careful of not overloading the already strained infrastructure and environment of the city. Some still argue that the kind of scheme implemented in Mumbai, steers away from its intention of rehousing and focuses more on the profits for the developers. This makes the success of the schemes entirely dependent on the price differential between the sale price of the additional apartments built and the construction cost of the rehabilitated apartments. This is a deterrent as developers only pick up-scale locations where profits through sale are a surety (Burra, 2005). This creates the risk of slum-dwellers being used as a tool for rapid redevelopment. The impact of these schemes on the beneficiaries should be closely studied. It is however, hard to argue

the fact that it is virtually impossible under any other perceivable scheme to provide renovated homes to slum-dwellers in prime urban locations at no costs whatsoever. If development regulations can be modified, and if it leads to entrepreneurial initiatives by the slum-dwellers, the city might become a powerhouse of innovations in housing improvements.

Bibliography

- Abrams, C. (1966). Housing in the modern. World. London: Faber and Faber.
- Arputham, J. (2008). Developing new approaches for people-centred development. *Environment and Urbanization*, 20(2):319–337.
- Bulk Transporter (2010). India's construction growth may bring us opportunities.
- Burra, S. (2005). Towards a pro-poor framework for slum upgrading in mumbai, india. *Environment and Urbanization*, 17(1):67–88.
- Committee for the protection of democratic rights (1999, 2000). Fact finding report of the slum demolitions at Sanjay Gandhi National Park and at Govandi. Documents on human rights violations, Center for Social Sciences, University of Pune.
- Das, P. K. (2003). *Bombay to Mumbai*, chapter Slums Improvement and Development Schemes and Policies. Oxford University Press.
- Deshpande, S. (2004). *Mumbai City Development Strategies (eds.)*, chapter Slums of Mumbai: crying for bottoms-up approach, pages 13–44. Indian Merchants' Chamber Economic Research and Training Foundation, Mumbai.

- Diacon, D. (1997). Slum Networking: An innovative approach to urban development. Building and Social Housing Foundation Coalville, Leicestershire,, UK.
- Dossal, M. (1989). Limits of Colonial Urban Planning: A study of midnineteenth century Bombay. *International Journal of Urban and Regional* Research, 13(1):19–31.
- Dossal, M. (1995). Signatures in space: Land use in colonial bombay. *Bombay:*Metaphor for Modern India (Bombay: Oxford University Press, 1995).
- Dowall, D. E. (1992). The benefits of minimal land development regulation.

 Habitat International, 16(4):15–26.
- Dua, A. (1989). Towards shelter for all: The Bombay experiments. *Urban management in Asia: Issues and opportunities*, pages 161–173.
- French, P. (2011). *India: a portrait*. Random House Digital, Inc.
- Government of Maharashtra. (1973). The Maharashtra Slum Areas (Improvement, Clearance and Redevelopment) act. Law and Judiciary Department.
- Grebmer, K. v., Torero, M., Olofinbiyi, T., Fritschel, H., Wiesmann, D., Yohannes, Y., Schofield, L., and von Oppeln, C. (2011). Global hunger index. The Challenge of Hunger: Taming Price Spikes and Excessive Food Price Volatility. IFPRI, Concern and Welthungerhilfe. Bonn, Washington DC and Dublin.

- Harris, J. R. and Todaro, M. P. (1970). Migration, unemployment and development: a two-sector analysis. *The American Economic Review*, 60(1):126–142.
- Hasan, A. (1988). Orangi pilot project, karachi: A low cost sewer system by low-income pakistanis. *Building community: A Third World case book*, pages 81–88.
- Indiabudget. Economic survey 2012-13.
- Lall, S., Selod, H., and Shalizi, Z. (2006). Rural-urban migration in developing countries: A survey of theoretical predictions and empirical findings. World Bank Policy Research Working Paper, (3915).
- Meredith, R. (2008). The elephant and the dragon: the rise of India and China and what it means for all of us. WW Norton & Company.
- Mitra, A. (2013). Insights into inclusive growth, employment and wellbeing in india. Springer.
- Mukhija, V. (2001a). Enabling slum redevelopment in mumbai: policy paradox in practice. *Housing Studies*, 16(6):791–806.
- Mukhija, V. (2001b). Upgrading housing settlements in developing countries: the impact of existing physical conditions. *Cities*, 18(4):213–222.
- Mukhija, V. (2002a). An analytical framework for urban upgrading: Property rights, property values and physical attributes. *Habitat International*, 26(4):553–570.

- Mukhija, V. (2002b). New houses for old in mumbai: an attractive but problematic strategy. *International Development Planning Review*, 24(2):161–176.
- Mukhija, V. (2003). Squatters as developers?: Slum redevelopment in Mumbai.

 Ashgate Publishing.
- Nayar, S. (1996). The Indian real estate market: a comprehensive analysis for the foreign investor. PhD thesis, Massachusetts Institute of Technology.
- Nijman, J. (2008). Against the odds: Slum rehabilitation in neoliberal mumbai. *Cities*, 25(2):73–85.
- O'Hare, G., Abbott, D., and Barke, M. (1998). A review of slum housing policies in mumbai. *Cities*, 15(4):269–283.
- Panwalkar, P. (1996). Upgradation of slums: a world bank programme. *Bombay: metaphor for modern India*, pages 121–142.
- Patel, S. (1996). *Bombay: Metaphor for Modern India*. Oxford University Press, USA.
- Plattner, M. F. and Diamond, L. J. (2007). India's unlikely democracy. *Journal of Democracy*, 18(2):29–29.
- Pugh, C. (1991). Housing policies and the role of the world bank. *Habitat International*, 15(1):275–298.
- Pugh, C. (1995). The role of the World Bank in housing. Zed Books, London.

- Ruiter, W. (1999). Equity and slum redevelopment in mumbai. *Urban growth* and development in Asia, 2.
- Sanyal, B. and Mukhija, V. (2001a). Institutional pluralism and housing delivery: A case of unforeseen conflicts in mumbai, india. *World Development*, 29(12):2043–2057.
- Sanyal, B. and Mukhija, V. (2001b). Institutional pluralism and housing delivery: A case of unforseen conflicts in mumbai, india. *World Development*, 29(12):2043–2057.
- Turner, J. C. (1968). Housing priorities, settlement patterns, and urban development in modernizing countries. *Journal of the American Institute of Planners*, 34(6):354–363.
- Turner, J. F. and Fichter, R. (1972). Housing as a verb. Freedom to build, pages 148–175.
- Werlin, H. (1999). The slum upgrading myth. Urban Studies, 36(9):1523–1534.
- Williamson, J. G. (1988). Migration and urbanization. *Handbook of development economics*, 1:425–465.