

Despite Policies
Housing the poor in Urban Maharashtra
Case studies of Mumbai and Nanded

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1.0 Introduction

In the situation where almost all lands are highly contested property, the difficulty of getting habitat for those without land or those who do not have access to it becomes intense. Like most urban areas in India, this is the context of Urban Maharashtra and it is most extreme in the city of Mumbai.

Some poor families have access to small bits of property that was historically obtained by them when the contest over property was not so intense. They made their houses in these properties. The reference here is to the chawls of Mumbai, where typically about a hundred families live in two to four storeyed chawls. Each family of about 5 to 10 persons occupies tenements of about 80 to 120 square feet that are strung along a corridor. Amongst other things, the families also share common toilets – about 10 families per toilet. The high intensity of use and absence of maintenance have made the living condition in these chawls extremely poor as most of these are dilapidated. Though the condition of housing is grossly inadequate, these families hold on to such properties in the absence of access to anything else. Most of the other poor families live on someone else's property. As they generally occupy space without entering into any formal contract with the 'true' property owner, they remain illegal. While most of these make their own houses, some rent them from other illegal occupants. Here again the condition of living remains inadequate. The reference here is to the slums and pavement dwellings of Mumbai, which housed some 50% of the city's population in 2001.

The response of the Government to these housing conditions varied over the past 50 years, ranging from forcible eviction of slum dwellers to providing them with free houses, as well as construction of new weaker section housing schemes. These responses were executed through several programmes and projects, each having new regulatory instruments, fresh institutional frameworks, and innovative financial mechanisms. However, even after 50 years of responding, the housing condition does not seem to have improved in Maharashtra.

2.0 Need, scope and objectives of the study

In India, the role of central government in respect of housing has been largely limited to providing policy and model laws, introducing financing mechanisms and technical innovation, and channelizing international interventions towards slum improvement to help low income housing across the country. The National Housing and Habitat Policy and the Draft National Slum Policy; establishment of institutions such as the Housing and Urban Development Corporation (HUDCO) and the National Housing Board (NHB) for housing finance; the Urban Land Ceiling and Regulation Act, 1976 (ULCRA) to ensure adequate land for housing the poor; establishment of Building Centres, the Central Building Research Institute (CBRI), Building Materials and Technology Promotion Council (BMTPC), etc. have been efforts in this direction.

It is only recently that the central government started initiating specific programmes for housing the poor in urban areas. The Jawaharlal Nehru National Urban Renewal Mission (JNNURM) being undertaken on mission mode with the involvement of state and urban governments, has brought focus on the way state and urban governments are viewing and providing for improving the housing and infrastructure conditions of the urban poor. The central government now wishes to look at more direct and targeted housing programme under the Rajiv Awas Yojana (RAY). Similarly a series of studies are being commissioned across the country to identify the planning and regulatory frameworks that impact housing the urban poor and to examine possible improvements in the same to enable governments and markets to deliver affordable housing for the urban poor. The present study is one such in the series of many focusing on the state of Maharashtra.

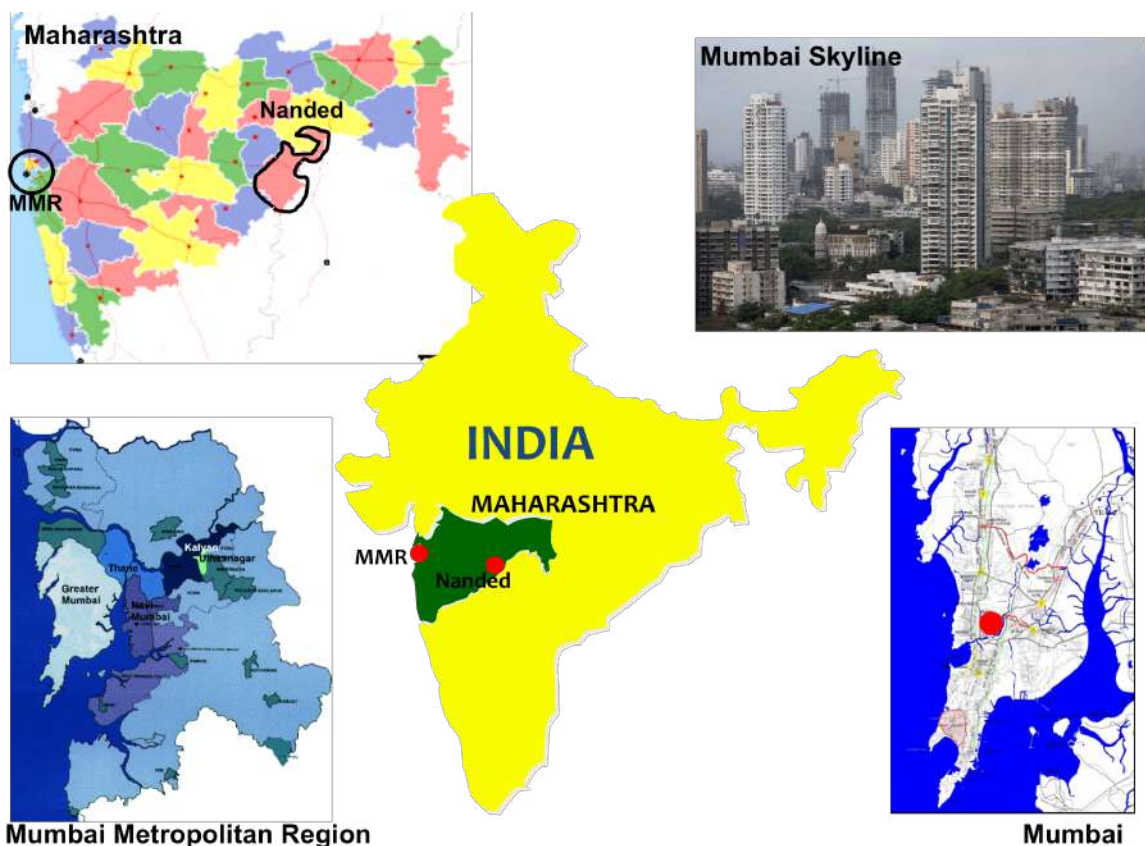
India has Housing and Habitat Policy approved in 2003. Maharashtra has a State Housing Policy approved in 2007. Maharashtra, particularly Mumbai and its surroundings, have a four decades long history of using land as a resource for financing infrastructure development. Markets are very active in this area and market oriented housing and urban development policies have been in place for at least two decades. Despite all this, Mumbai and its surrounding have the highest percentage of people living in slums, dilapidated buildings and unauthorized developments. The present effort is to identify whether planning and housing regulations have contributed to this problem or their inadequacy has led to this situation and whether they played any role in this at all. Based on the outcome, an attempt will be made to suggest regulatory changes and other associated recommendations that may help improve the current state of affairs.

The scope of the study includes a research on the regulatory aspects of the current/operative initiatives from the government to deal with the housing condition. Two cities have been identified – Mumbai, the largest metropolis in India with a population of 1.2 crore people (2001 census) and Nanded, with a population less than 5 lakh people (2001 census). The two case studies are expected to identify the variation in the city and housing conditions, geographical locations and urban governments.

The current report is in two parts and covering the different contexts of Mumbai and Nanded.

The objectives of the study are:

1. To critically review the regulatory aspects (processes, standards and regulations) of current / operative initiatives of the government to deal with the housing condition
2. To propose changes in the regulatory aspects and other associated initiatives so as to improve the effectiveness of the initiatives/formulate new initiatives.



3.0 Context of housing in Maharashtra

Maharashtra, with 42% urbanization, is the second most urbanized state in India as per Census 2001. The district-wise urbanization varies between 7 and 100%. 5 of the 35 districts in the state accommodate 60% of the urban population. There are over 240 urban local bodies in Maharashtra. 44% of the urban population of the state lives in Mumbai Metropolitan Region (MMR) and 29% lives in Mumbai city alone. Mumbai influences a large area beyond the municipal limits and vice versa.

After independence, the government has responded in several ways to supply housing for the first category of people requiring attention. It has made policies; created/amended laws and regulations; made special institutions with specific focus on housing; undertaken several and projects with innovative financial and legislative mechanisms.

3.1 Spatial Planning in Maharashtra

Spatial Planning in Maharashtra is governed by the Maharashtra Regional and Town Planning Act, 1966 (MR&TP Act, 1966), which subsequently formed the basis for all town planning legislation in India. As per the said Act, a Development Plan is required to be prepared for all urban areas in the state by Planning Authorities (PAs). Urban Local Bodies are the PAs for the municipal areas. For other areas notified for urbanization or conservation, the Govt. of Maharashtra (GoM) can designate a Planning Authority referred to as Special Planning Authority (SPA). The Act also provides for the Govt. to declare any organization, including a private entity as PA for a designated area (ex: the Navi Mumbai Special Economic Zone Company is designated PA for the Navi Mumbai SEZ area). However, the Development Plan sanctioning powers are with the GoM. The Development Control Regulations (DCRs) are generally part of the Development Plan and hence vary from city to city. However, standardised and common DCRs are prepared by the GoM for small municipal towns of A, B and C classes. The DCRs applicable to individual cities as well as those for the SB & C class cities differ in their approach towards land-use categories, FSI and regulations related to tall buildings. The standardized DCRs for A,B and C class towns have a) fewer categories of land-uses, b) volume of residential developments regulated by maximum plot coverage and building heights and not by FSI designation, c) no regulations pertaining to tall buildings as the maximum building height allowed is only 3 storeys. It is learnt that the Government of Maharashtra is now considering designation of land-use based FSI for such towns as well.

The DCRs specify both land development regulations (planning regulations) as well as building bye-laws. Maharashtra follows a one stage development planning process where each parcel of land is assigned a use, on which development can be undertaken in accordance with the DCRs. For most of the initiatives mentioned earlier, a special set of development control regulations covering the aspects of tenure, dwelling unit size, density of dwelling units, room sizes, Floor Space Index (FSI), marginal open spaces, level of community infrastructure, formation of co-operatives, delivery and maintenance mechanisms; role of NGOs being the important amongst them. These pertain to both delivery of new housing stock for low income groups as well as redevelopment of slums and dilapidated buildings.

3.2 The Housing Shortage

As per Census 2001, the population living in slums in Maharashtra towns varied between 3% (Kalyan) and 49% (Mumbai). About 50% of urban households in Maharashtra live in one room accommodation. In Mumbai it is as high as 80% and

in Nanded 35%. About 12% of the houses in Urban Maharashtra are vacant and of the occupied houses, 20% are put to not residential use. In Mumbai, while proportion of vacant houses is not higher than the state average, a higher proportion of 30% houses are converted to non-residential use. The rent controls also resulted in buildings not being maintained and therefore lead to obsolescence, which further reduced the available housing stock. In Island city of Gr. Mumbai alone, over 16,000 rented buildings are in need of repair and reconstruction. The land and real estate prices for conducting business as well as for housing have increased tremendously in the last four decades. The diminishing rental market and the unaffordable ownership housing for a vast majority have resulted in nearly 50% of the Mumbai households living in slums. Another factor that contributed to housing shortages in urban Maharashtra is the diminishing household size. Thus demographic features such as increasing urbanization, high population growth rate and increasing household formation rate; diminishing rental market and unaffordable property prices; loss of existing housing stock due to conversion to non-residential purpose and obsolescence have together contributed to the present housing conditions in Urban Maharashtra.

The current housing shortage is calculated separately for the two cities covered in this study and incorporated in the report under city case studies.

A number of approaches were adopted in Maharashtra in general and in Mumbai in particular, to address the issue of both slums and creation of new housing stock for the low income groups. Noteworthy in terms of scale are the Bombay Urban Development Project (BUDP) of 1980s which consisted of slum upgradation with tenure regularization in slums of Mumbai and creation of new housing stock in the form of sites and services in Mumbai and Navi Mumbai; and the Slum Redevelopment Scheme (SRD) which provides free houses of specified size to the slum dwellers occupying their tenements prior to 1st January 1995, mostly through on-site redevelopment driven by market forces.

3.3 Slums

The Maharashtra Slum Areas (Improvement, Clearance and Redevelopment) Act, 1971 defines “slum area” as any area declared as such by the Competent Authority under this Act. Section 4 of the said Act specified that the Competent Authority is satisfied that “any area is or may be a source of danger to the health, safety or convenience of the public of that area or of its neighbourhood by reason of the area having inadequate or no basic amenities, or being insanitary, squalid, overcrowded or otherwise; or the buildings in any area, used or intended to be used for human habitation are unfit for human habitation. The Competent Authority, by notification in the official gazette, declare such area to be a slum area.

In 1995, the Govt. of Maharashtra introduced the Slum Rehabilitation Scheme (SRS) for the slum dwellers in Mumbai which offered free houses to the eligible

slum dwellers of a specified size. 1996, this Act was amended to introduce provisions for Slum Rehabilitation Authority to implement the SRS. The main functions of SRA are to survey and review existing position regarding slum areas, to formulate schemes for rehabilitation of slum areas, to get the SRS implemented and to do all such other acts and things as may be necessary for achieving the object of rehabilitation of slums.

For the purpose of Slum Rehabilitation Schemes to be undertaken under the DCRs of Mumbai, slums are defined as those censused, or declared and notified in the past or hereafter under the Maharashtra Slum Areas (Improvement, Clearance and redevelopment) Act, 1971. Slum shall also mean area/pavement stretches hereafter notified or deemed to be and treated as Slum Rehabilitation Areas. **Under the same DCRs**, areas required or proposed for the purpose of construction of temporary or Permanent transit camps and so approved by the Slum Rehabilitation Authority shall also be deemed to be and treated as Slum Rehabilitation Areas, and projects approved in such areas by the Slum Rehabilitation Authority shall be deemed to be Slum Rehabilitation Projects.

4.0 Legal and Institutional framework

Since late sixties, the Govt. of Maharashtra created legal and institutional framework for addressing the issues of urban planning, integrated industrial support infrastructure and housing in the State. Accordingly the Maharashtra Regional and Town Planning Act of 1966 was enacted and three important state level institutions were created, which are the Maharashtra Housing and Area Development Authority (MHADA) as the housing board, the Maharashtra Industrial Development Corporation (MIDC) for development of industrial estates and the City and Industrial Development Corporation (CIDCO) for planning and development of new towns supporting the industrial decentralization policy. A fourth institution, the Mumbai Metropolitan Region Development Authority (MMRDA), was created for ensuring balanced development of the Mumbai Metropolitan Region. While each of these institutions had a specific mandate, some of their activities overlapped over a period of time. Housing is one of them.

The MR&TP Act, 1966 together with the Maharashtra Industrial Development Act of 1961, MHADA Act of 1976, and the MMRDA Act of 1975, the Rent Control Act of 1948 which was later replaced by the Maharashtra Rent Control Act of 1999, the Maharashtra Land Revenue Code of 1966, the Maharashtra Slum (Clearance, Redevelopment and Improvement) Act of 1971, the Urban Land Ceiling Act of 1976 (repealed in 2007) created a larger framework for development of the urban and regional areas and public housing interventions in the state.

However, in reality, what contributed most in the housing sector has been the Development Control Regulations framed as part of the Development Plans of the cities and Regional Plans of the regions under the provisions of the MR&TP Act, 1966.

4.1 Policies:

4.1.1 The Maharashtra State Housing Policy, 2007

The main features of the Housing Policy include the government's intention to facilitate affordable housing through deregulation; rationalization of development control regulations and approval procedures; and encouraging private sector participation in housing production. The policy also mentions promotion of rental housing; renewal and redevelopment of inner city areas; and having targets for slum-free cities. Sustainability and conservation of heritage and environment are also amongst the features of the policy. The policy also envisaged establishment of a Housing Regulatory Authority. Regulations ensuring reservations for Lower and Middle Income Groups in any area development scheme to be newly undertaken has already been drafted by the State Government and all Planning Authorities in the state are directed to incorporate the same in their respective Development Control Regulations.

4.1.2 The Mumbai Metropolitan Region Resettlement and Rehabilitation (R&R) Policy, 2001

The Mumbai Urban Transport Project (MUTP) undertaken to improve the rail and road networks in Mumbai with the World Bank assistance had a mandatory component of rehabilitation of the households affected by such project works. An R&R policy was prepared in co-ordination with the World Bank and was adopted to deal with the households affected by infrastructure projects under MUTP. The policy envisages not only physical resettlement but also cultural and economical rehabilitation. The policy formed the basis for other important city projects subsequently such as MUIP and Mithi River Development. Apart from defining the project affected and fixing the general compensation or rehabilitation entitlements, the important features of this policy also included new features such as compensation for economic losses, delegating organizational responsibilities, facilitating permanent rehabilitation through transit process, site-specific rehabilitation implementation plans and establishment of grievance redressal and environmental management mechanisms.

4.2 Creation / amendments of Laws and Regulations:

4.2.1 The Rent Control Act, 1948

To counter the spiraling rents after independence (on account of immense migration) and as an equity measure, the government enacted the Bombay Rent Control Act in 1948. The Act not only froze all rents at 1940 levels, but also prohibited eviction. These continue to apply to properties built before 1969. With Zeager returns from rented properties, landlords did not find it profitable to develop or maintain them. This saw the demise of the landlord in the housing delivery system. In most cases tenants were incapable of maintaining their

properties too. The Rent Control Act is blamed for much of the dilapidated buildings in the city. However, it is interesting to note that in the suburbs buildings with ownership flats built thirty years ago are also under severe dilapidation. Looking at the age and amount of overuse of the old rented buildings, it is probably unfair to blame their deterioration completely to the Rent Control Act. There have been several attempts to amend this act by successive governments, but the popularity of this act never allowed for any significant change. Criticised heavily as obsolete by the market forces, this act still remains one of the most popular acts in the history of the city to bring about a social justice.

4.2.2 The Maharashtra Slum (Clearance, Redevelopment and Improvement) Act, 1971

The major feature of this Act was that a definition of the slum was formed. Under the Act, a competent authority may declare an area to be 'slum' if this area is or may be a source of danger to health, safety or convenience of the public of that area or neighbourhood, by the reason of that area having inadequate or no basic amenities or being unsanitary, squalid, overcrowded or otherwise.

The buildings in this area used or intended to be used for human habitation area in any respect unfit for human habitation; or by reason of dilapidation, overcrowding, faulty arrangement and design of such buildings, narrowness or faulty arrangements of streets, lack of ventilation or sanitation facilities or any combination of these factors, detrimental to the health, safety or convenience.

Improvements under the Act were carried out in respect of slums on government lands. Owners of slums on private land took advantage of this act to evict slum dwellers. The government of Maharashtra subsequently issued an ordinance to prevent eviction of occupants in notified slums. The notification prevents eviction of occupiers from any building or land for recovery of arrears of rent without prior permission of the competent authority. It also makes a slum eligible for receiving improvement inputs under various improvement schemes. However private landowners continued to oppose this, challenging it in court. Moreover these were state laws and hence not applicable to lands under the central government, people squatting on which could not be serviced by basic infrastructure under this act. Finally the Slum Rehabilitation Scheme of 2005 brought modifications necessary for facilitating redevelopment of slums located on state government and private lands. However, the problem of slums on central government still remains unresolved. During the recent discussion between the central and state governments on the subject of the new centrally sponsored housing scheme of Rajiv Awas Yojana, this matter was discussed at length. As a result it is hoped that the issue would be resolved soon.

4.2.3 The Urban Land Ceiling Act, 1976 and the repeal of the same in 2007

In 1976, the Urban Land Ceiling Act (ULCA) was enacted as another equity measure. This Act restricted the amount of land owned by an individual in urban areas. The government acquired the excess land, which was to be used for

purposes of building housing and other amenities. There were several kinds of exemptions that were like industrial lands did not fall within the act. The ULCA is said to push the land prices very high, as land commodity available with the private parties (and hence in the open market) got restricted. This seemed to have showed its effect on the housing prices as well. ULCA has been severely criticised as a hurdle for large-scale developments as large pieces of lands cannot be assembled. Under such criticism and pressure from the central government (through JNNURM), the Maharashtra Government repealed the Land Ceiling Act in November 2007. However, even after two years now, there seems to be no change in the housing prices – in fact they continued ascending.

4.2.4 The Bombay Repairs and Reconstruction Board Act, 1969 and Amendments to the Development Control Regulations to facilitate Redevelopment of Dilapidated Buildings (Section 33(7) of DCR for Mumbai) – CESS RULE

The deteriorating housing stock and loss of life due to building collapses in the central part of the city forced the government to take up the responsibility of repairing rent controlled buildings. The Bombay Repairs and Reconstruction Board Act was passed in 1969 to carry out structural repairs to decayed buildings, demolish and reconstruct buildings that were beyond repair and provide transit facilities to tenants during the repair/construction phase. The government to support this activity collected a nominal Repair Cess. As the money accumulated for repair was extremely less, such an initiative of the government did not yield much. It was uneconomical for the Government to undertake such an activity all by itself without a clear financial policy. Moreover, there was a view that it wasn't worth repairing these buildings, but rather it would be better to reconstruct the entire building.

With such a background, the government came up with a complete new regulation popularly called as the CESS Rule for redevelopment. At the core of the regulation was the idea to encourage private participation in reconstructing dilapidated buildings and discourage the repair of them. According to the regulation, a building listed as a CESS building could undergo reconstruction if the landlord and seventy percent of the tenants agree. In such a case they could hire a developer for the new construction. The old tenants get flats that are as large as their old tenement or 20.9 square meter whichever is more. To offset this large cost, the regulation provided additional development rights on the property. Hence, the new building would have tenements for the old tenants plus will have additional real estate for selling in the open market. The additional development right is spelt as 50% (or FSI of 2.5, whichever is more) of the existing development. There was also an incentive 10 percent additional FSI given for older buildings making the total additional FSI as 60 percent for quicker responses.

4.2.5 Amendments to the Development Control Regulations to facilitate Redevelopment of Slums (Section 33(10) of DCR for Mumbai)

This regulation seeks to encourage private participation in the slum redevelopment activity. In its first form (1991), the regulation introduced an additional floor space index incentive and possibilities to transfer development rights (TDR) to other areas of the city to developers ready to take up this development. The increased floor space index was pegged at 2.5. The developers were to provide 180 sq ft. tenements to the slum dwellers with a thirty-year lease given to co-operatives of slum dwellers. The developers could sell the additional floor space generated in the open market. Consent of at least 70% of the slum families was required to implement this. The slum dwellers were required to pay 1/3 of the construction cost in the form of down payment and the remaining over a period of 15 years via loan. The tenements had to be maintained for 10 years after allotment. The developer was permitted to keep 25 percent profit. The regulation got market forces interested for the first time in slum housing. Beneficiaries were expected to pay 35% of the cost of tenement, thereby not making it free. The use of this regulation faced several problems: From the developer's side they did not see much scope for profits; they were afraid to engage with the slum communities and did not want to take up the task of transit accommodation. The slum communities on their part did not trust the builders and were skeptical of losing their slum sites and not getting new houses. Many of them could not cough up the initial cost of construction. As the cut off date was pegged at 1985, many people saw themselves in the 'ineligible' bracket, which brought much resentment. Moreover slum communities could not take up the development of the land on their own, in spite of the scheme being open to co-operatives. Since the lease of land was made available only after implementation of the project it could not be mortgaged to raise institutional finance. Lack of technical knowledge and managerial skills also led to delays.

In 1995, the earlier regulation was modified under the recommendation of the Afzalpurkar Committee. The main modifications were in respect of extension of cut-off date upto 1995, rehabilitation housing to be given free, increase in tenement size to 225 sq ft (20.9 sq m) and later to 269 sq ft (25 sq mt). For every 1 sq.m of space built for the slum dwellers, 0.75 sq.m was made available to the builder to sell in the open market in the island city, and in the suburbs this figure was 1 sq.m. The total FSI that could be consumed in-situ was kept at 2.5 while the rest could be taken as TDR Transfer of Development Right. The Slum Rehabilitation Authority (SRA) was instituted as a single window to overlook the schemes. In some cases of high density, concessions were given for building up to 3 FSI in-situ. Building regulations relaxed open space and set back norms. As per the regulation, the slum dwellers need to form a housing co-operative society and register it with the Slum Redevelopment Authority. The societies could then appoint a Developer who would develop the land on which the slum exists. The Developer is required to provide free tenements to all families registered in the society on the land of the slum. During the construction period, the Developer is required to accommodate the slum dwellers in a transit camp on his/her costs. The Developer also needed to deposit Rs 20,000 per rehabilitation tenement with the SRA, the interest on which would be used for future maintenance of the free

housing provided to the slum dwellers. The Developer is further required to pay to the Municipal Corporation an amount towards off-site the infrastructure upgradation requirements. Provisions were made to involve NGOs to take up schemes with additional financial incentives.

4.2.6 Amendments to the Development Control Regulations to facilitate Rental Housing

MMRDA initiated amendments to development control regulations of various municipal corporations and MMRDA to facilitate the creation of rental housing stock. Any person having land could develop rental housing (with 160 sq ft tenements) in 1/4th of his/her plot and give it free to MMRDA. In return, the regulation allows him/her to develop the remaining 3/4th of the plot with a higher FSI. The total FSI that can be used in such a plot is 4, where 1 should be developed as rental housing and remaining 3 can be commercially exploited. MMRDA itself can develop rental housing, in which case, MMRDA needs to develop 3 FSI for rental housing and the remaining 1 for cost recovery. In Mumbai, the land owner can develop entire 4 FSI as rental housing and give it to MMRDA and in return get equivalent FSI to be used as TDR.

MMRDA plans to create 5 lakh such rental tenements. While it is envisaged as general housing for poor, the maintenance model for this housing is yet to evolve. NGOs are expected to be involved in managing and maintaining the stock.

4.2.7 Reservations in public and private developments

The State Government issued directives to all Municipal Corporations and Councils to modify their Development Control Regulations to provide :

- 10% area in the form of 30 to 50 sq.m. plots for EWS/LIG and 10% area as 50 to 100 sq.m. plots (for MIG) in any sub-division of land admeasuring 2,000 sq.m. and more
- 10% tenements for each EWS/LIG Group (30 to 40 sq.m.) and MIG Group (41 to 60 sq.m.) for layout of land admeasuring 4,000 sq.m. and more

Past experience shows that unless monitored closely, such provisions are high jacked. It would be beneficial if government takes over such tenements/plots and distributes the same. The Gurgaon (Haryana) and the Madhya Pradesh experience show that the benefit either they do not reach the intended beneficiaries or gets subverted by the landowner paying compensation to the government in lieu of not allocating the same or he is allowed to shift it elsewhere with consent of the government.

4.2.8 BSUP Reforms under JNNURM for earmarking funds for urban poor and proving basic services

Under the JNNURM, the municipalities have to:

- Create a special budget head for provision of services to the urban poor. The amount allocated under this budget head needs to be 20-25% of the revenue income.
- Undertake a survey of slum localities / poor neighbourhoods to assess the infrastructure and services, prioritise the areas that require urgent attention, and develop an action plan to improve the service levels of such localities. The municipalities are also expected to set standards for service delivery in such locality and provide services up to such standards within the JNNURM period of seven years.
- Make a regulation to allocate 20-25% land and property for housing of the poor in all new developments.

Various cities of Maharashtra have responded to such reform agendas differently. While some cities have seriously acted and developed action plans to make themselves slum-free, others have responded stating that since the Slum Redevelopment Schemes will improve the condition of infrastructure and provide legal tenure, there is no requirement of complete implementation of the reform.

4.3 Institutions:

4.3.1 Repairs and Reconstruction Board

The deteriorating housing stock and loss of life due to building collapses, forced the government to take up the responsibility of repairing rent controlled buildings. The Bombay Repairs and Reconstruction Board Act was passed in 1969 to carry out structural repairs to decayed buildings, demolish and reconstruct buildings that were beyond repair and provide transit facilities to tenants during the repair/construction phase. Under the provisions of this Act, the Bombay Building Repairs and Reconstruction Board was formed in the year 1971. A repair cess was levied on old dilapidated tenanted buildings under the provisions of this Act. Thus, these buildings were called cessed buildings. Till 1977, this board was directly functioning under the government. Subsequently it was merged with the Maharashtra Housing and Area Development Authority in December 1977. Later in November 1992, the Mumbai Housing & Area Development Board was divided into three different Boards – Mumbai Housing and Area Development Board; Mumbai Slum Improvement Board; and Mumbai Building Repair and Reconstruction Board. Mumbai Building Repair and Reconstruction Board has been assigned to perform the duties of carrying out structural repairs of old cessed buildings and their reconstruction. (<http://mhada.maharashtra.gov.in>)

4.3.2 The Maharashtra Slum Improvement Board

Maharashtra Slum Improvement Board was constituted under MSIB Act (1973) in 1974, with intention to provide basic amenities, such as water taps, drainage, pathways, latrines and streetlights etc. in slums. To begin with, its activities were

confined to the Mumbai City and Mumbai Suburban Districts. These activities were later extended to the other parts of the State. (<http://mhada.maharashtra.gov.in>)

4.3.3 Maharashtra Housing and Area Development Authority

Bombay Housing Board was established in the year 1948 and had jurisdiction over the entire State of Maharashtra except Vidharbha Region. Vidharbha Housing Board was established in the year 1951 which had Jurisdiction over the vidharbha region, in the state of Madhya Pradesh Both these bodies undertook construction of residential buildings under various housing schemes for different sections of the society. The allotment and maintenance of these buildings was being looked after by it. On the re-organization of the State in the year 1960, the Vidharbha Housing Board was merged in the Bombay Housing Board and after the merger, this board was called as Maharashtra Housing Board. The Bombay Building Repairs and Reconstruction Board was constituted under the BBRB Act 1969. Maharashtra Slum Improvement Board was constituted under MSIB Act 1973. MHADA was established in the year 1977 by merging Maharashtra Housing Board, MBRRB and MSIB. MHADA was established to carry out the works of housing and Area Development across the state. There are nine regional boards under the jurisdiction of the Authority namely - Mumbai Housing and Area Development Board, Mumbai Buildings Repair and Reconstruction Board, Slum Improvement Board, Konkan Board, besides Pune, Nashik, Nagpur, Aurangabad and Amravati are the regional boards. The regional board shares the responsibility of works like Housing , development of the land, distribution /allotment of tenements or plots, maintenance, transfer of tenancy and lease agreement, and sale of deed i.e. conveyance of societies, etc. (<http://mhada.maharashtra.gov.in>)

4.3.4 Slum Redevelopment Authority

The Government of Maharashtra amended the Maharashtra Slum Areas (Improvement, Clearance and Redevelopment) Act, 1971 to provide for the creation of Slum Rehabilitation Authority (SRA) with a Chairperson, a Chief Executive Officer and fourteen other members. SRA was created by the Government Notification dated 16th December 1995 to function with effect from 25th December 1995. The Chief Minister of Maharashtra is the Chairperson of SRA and an IAS Officer is full-time Chief Executive Officer of the Authority. The fourteen other members include Ministers, elected members of the State Legislature, Secretaries of the concerned State Government Departments and some non-official members who are experts in the field of Building Construction, Planning, Architecture, Social Services, etc. The powers, duties, and functions of the Slum Rehabilitation Authority are:

- to survey and review existing position regarding Slum areas in Mumbai.
- to formulate schemes for rehabilitation of slum areas.
- to get the slum rehabilitation scheme implemented.
- to do all such other acts and things as may be necessary for achieving the objective of rehabilitation of slums. (<http://www.sra.gov.in/>)

5.0 The Mumbai Case Study

5.1 Housing in Mumbai

Mumbai, the commercial and financial capital of India, generates 5% of India's GDP and contributes over one third of India's tax revenues. However, it is here that the housing poverty is felt at its extreme in India. In 2001, Mumbai had 1.2 crore population, 80% of which lived in one room tenements, 49% in slums, 20% in dilapidated buildings. 12% of houses are found vacant and 30% houses are converted to non-residential use. The reasons for the state of affairs are already discussed in the earlier part of this report.

The people creating the housing demand in Mumbai could be divided into two categories – people requiring attention from the government and the people not requiring attention. The people requiring attention from the government are in three groups – first the slum dwellers, who are about 49% of the population (about 60 lakh people). The second include the tenants living in the rent controlled dilapidated buildings. There are about 19,000 dilapidated buildings housing about 20% of the population (about 24 lakh people). The third group includes the people of lower classes not staying in slums or in dilapidated buildings but having no access to housing. Along with these there are others who have an access to housing from the market and do not particularly require attention from the government – these include people with a genuine need of a house, people are looking for an alternative accommodation (either larger or in a different location) or people looking for houses for purposes of investment. Together all these groups create the massive housing demand of Mumbai reflected most acutely in the prices of houses.

Thus 70% of the city's population required new houses. The government has promised to provide them standard new houses free of cost and is using the instrument of higher FSI for achieving the same. The higher FSI incentive is subsequently offered as a solution to preserve heritage properties, redevelopment of lands of closed textile mills and to incentivize free reconstructed tenements for those living in unauthorized constructions. Today it is offered to all others on payment of premium to achieve intensification of land utilization in other areas on account of various infrastructure initiatives, thereby revenue generation for financing infrastructure development. Each of these is being done under a scheme for which provisions are made for levy of cess towards augmenting city scale infrastructure, particularly water supply and sanitation. Virtually, the whole city is under redevelopment.

5.2 Land and its management in Mumbai

Governments made attempts to create more lands by reclaiming it from the low lands along the sea and creeks, and utilize this to channelize development and to raise financial resources for the city management. The organized and large-scale

examples since independence are Nariman Point, Navi Mumbai and Bandra-Kurla Complex. In this coastal low lying and high rainfall area, storm water drainage determined how and what could be reclaimed.

Land was always in scarcity in Mumbai and therefore high density developments are not new to it. In fact, considering the infrastructure being created due to this in modern times and the limited expansion scope available due to its geographical location, attempts were made in early nineties at the time of preparation of the second Development Plan, to moderate the development potential. However, a no. of independent intensification measures have been initiated since then. Presently the Mumbai Metropolitan Regional Plan as well as the Mumbai Development Plan are under revision and there is an opportunity to review the situation and accordingly proceed further.

5.3 Housing demand and supply in Mumbai

Mumbai's housing situation is best understood in the context of Mumbai Metropolitan Region. The City Development Plan of Mumbai prepared for JNNURM in 2006 notes that only 49% of the households live in formal housing (population of 61,40,000) and that the estimated supply is only about 20,000-30,000, as against the demand of 40,000 houses per annum (for an additional population of 2,00,000). The Mumbai Metropolitan Region covers almost 10 times larger area than Mumbai, but Mumbai held 65% of its population in 2001. The MMR had a population of 1.9 crore in 2001, 94% of which was urban living in 20 municipal towns and 13 census towns. According to population forecast carried out by the Comprehensive Transportation Study (CTS) of MMR in 2007, it was estimated that about 45% of this lived in slums and other unauthorized constructions in 2005. The CTS estimated the population of MMR to be 2.9 crore in 2021. It was further estimated that the annual incremental demand would be 160,000 units. This is based on the assumption that, the percentage of households living in slums would reduce from 45 in 2005 to 22 by 2021.

The agencies that traditionally provided public housing in MMR are MHADA and CIDCO. Together they provided about 2,00,000 housing units (50% of this for the lower income groups) in the last 35 years. MMRDA produced 50,000 slum rehabilitation units in 2 years time. MMRDA is now aiming to produce 5,00,000 EWS rental units in 5 years time. The performance of market to produce low income housing units utilizing the higher FSI and TDR instruments appears to be around 10,000 units per year in Mumbai. It is necessary for these efforts of public agencies and private initiatives to continue until the housing demand is met, rather than working on fixed targets.

The various housing typologies in Mumbai are explained in [Annexure-1](#)

5.4 Housing Affordabilities in Mumbai

Accommodation Times, 28.2.2010 placed the residential property rates in Mumbai and its vicinity as below :

- South Mumbai : Rs. 6,000 to 18,500/sft
- Central Suburbs : Rs. 2,600 to 12,000/sft
- Western Suburbs : Rs. 2,500 to 14,000/sft
- Other cities in MMR : Rs. 900 to 8,000/sft

Most of the poor already living in the city of Mumbai for considerable time is eligible for free housing, leaving the question of housing the newly arriving low income groups. As per the World Bank's Transportation and Poverty study of 2005,

- 76% of the households earned less than Rs, 10,000/month in 2004,
- 66% were semi-skilled,
- with 4.5 as the average household size,
- over 80% living in slums and chawls,
- over 75% living for over 10 years at the same place,
- over 80% living in suburbs,
- 62% walk or cycle to work, 31% use public transport.

In order to provide 70% of Mumbai's households with free housing, the market charges the others permitted in the schemes, a premium. The price at which these other units are sold is what determines the feasibility of free housing. This calculation can have two consequences :

- Market taking up free housing schemes only where the market potential for high price of other units exists
- Push up the market price of the other units so high that more households than before find housing unaffordable

This phenomenon is clearly visible in the trend that even at sites 100 km. away from Mumbai, Tata housing is selling Nano housing units of 283 sft. at nearly Rs. 4,00,000. The rehabilitation units built by MMRDA have reportedly cost Rs. 3,00,000 per unit excluding land cost.

5.5 The housing initiatives by Govt. of Maharashtra

In 2007, the Government of Maharashtra came out with the State Housing Policy (SHP). The policy was to be implemented through executive orders and programmes of the government following the policy. In this respect, four significant moves were initiated by the Govt. recently. They are, 1) encouraging redevelopment of dilapidated buildings in sizeable clusters by offering higher FSI incentive rather than plot by plot redevelopment; 2) announcement of construction of 100,000 tenements in the state for weaker sections; 3) announcement of programme of construction of 5,00,000 EWS tenements under rental housing scheme to be implemented in the MMR by MMRDA; and 4) the introduction of provisions for LIG and MIG in the layouts. Except the 100,000 houses programme by the Govt., all others have been already translated into amendments to the

DCRs for facilitating their implementation. The above four as well as other ongoing initiatives are explained below.

5.5.1 The operative initiatives related to housing provision

1. Redevelopment of Slums in Mumbai and other cities in Maharashtra (1995)
2. Establishment of the institution SRA (1997)
3. Rehabilitation and Resettlement policy for the squatters affected by infrastructure projects (PAPs)
4. JNNURM reforms : setting up standards and budget provision for improving infrastructure in areas where urban poor lives (2005)
5. Undertaking environmental improvement and housing redevelopment in slums by ULBs under the BSUP of JNNURM (2005)
6. Special Township Schemes with provision for small housing units (2006)
7. State Housing Policy (2007)
8. Repeal of ULCRA (2007)
9. Conceiving the Dharavi Redevelopment scheme on PPP basis (2007)
10. Incentivisation of regularization and reconstruction of unauthorized constructions in Ulhasnagar (2007) and Thane District falling in MMR (policy under consideration).
11. Incentivisation of cluster form of redevelopment of dilapidated buildings (2008)
12. Rental Housing scheme in MMR for EWS using FSI incentive (2008)
13. Regulation for provision of small housing units/plots in all land developments (2008)
14. Free houses for several categories of existing dwelling units using FSI and TDR incentive

5.6 Development Control Regulations of Mumbai

Development Plans were prepared for Mumbai City in 1964 and in 1991. The Development Plan of 1991 is presently undergoing revision. The provisions related to public and low income housing are listed below :

- a. Land-use provisions : The development plan had land-use provisions for six varieties of Public Housing independent of land zoned for residential. These lands could be developed by the Government, the Municipal Corporation, a Public Authority or the landowner. The details as amended from time to time are given in Annexure-1.

Development Permission in respect of Public Housing/High Density Housing: When the land reserved for Public Housing or for Housing the Dishoused is not under acquisition, the owner may be allowed to develop it for Public Housing/High Density Housing. However, prior clearance in the case of cessed properties from the concerned Public Authority will be necessary in conformity with the stipulations specified by such Authority.

b. Layout of land and land sub-division regulations :

Minimum plot size for residential development in Mumbai is 25 sq.m under the general category and 21 sq.m. for Plots in Public Housing/High Density Housing/ Sites and Services/Slum up gradation/Reconstruction scheme.

c. Tenement densities

In sites allocated for Public Housing/High Density Housing (PH/HDH) no maximum tenement densities prescribed, but the minimum density will be 325 per net hectare for FSI of 1.00. However, in zones in which the FSI is less or more than 1.00 the minimum density of PH/HDH sites will be reduced or increased in proportion to the FSI permissible. The present minimum densities prescribed for Slum Rehabilitation and Rental Housing Schemes are 550 and 1500 tenements per net hectare of land.

d. Additional FSI for special developments/re-developments

Sl. No.	DCR Clause	Type of buildings	Provision for Additional FSI
1	33(3)(A)	Govt. & Mun. Corp. staff Qrts.	Up to 2.5 FSI.
2	33(5)	Low cost housing schemes of MHADA	20% extra FSI if schemes have at least 60 % of tenements under EWS and LIG housing
	33(7)	Redevp. of cessed bldgs. in Island City or old bldgs. of Corp.	2.5 FSI or FSI required for Rehab of existing tenants plus incentive FSI whichever is more
	33(7)	Repairs and recon.vof cessed bldgs.&Urban Renewal Scheme	4.0 FSI or FSI required for rehab. of existing tenants/occupiers, whichever is more
	33(7)	Redevp. of cessed bldgs. in Island City or old bldgs. of Corp. or Police Dept.	2.5 FSI or FSI required for rehab. of existing tenants plus incentive FSI whichever is more
	33(8)	Construction for housing the dishoused	4.0 FSI for those displaced by projects by Corp. for Devp. Plan implementation
	33(9)	Repairs and reconstruction of cessed buildings and Urban Renewal Scheme	4.0 FSI by MHADA or Corp. in Island City, or FSI required for rehab. of existing tenants/occupiers, whichever is more.
	33(10)	Rehab. of slum dwellers through owners/developers/co-operative housing societies	3.0 FSI or FSI required for rehab. of slum dwellers and incentive for the co-op Soc of slum dwellers, owners or developers, whichever is more.
	33(11)	Sites and Services and Small Size tenements under ULCRA	Provisions of Appendix V hereto shall apply.
	33(12)	Development by MHADA with world Bank Assistance	Permissible subject to the Regulations in Appendix VI.
	33(13)	Devp. of sites reserved for R&R of Project Affected Persons	2.50 FSI
	33(14)	Provisions relating to Transit Camp tenements for Slum Rehabilitation Scheme	2.50 FSI in Suburbs and extended Suburbs. 2.99 FSI in Difficult areas such as Dharavi 2.33 FSI in Island City on govt. lands
	33 (23A)	Rental Housing Scheme	3.0 FSI on private land for rental housing and TDR equivalent to plot area permitted. 4.0 FSI on MMRDA lands with 3.0 FSI for rental housing

The above Development Control Regulations shaped various housing schemes meant for delivering housing units to the slum dwellers and other low income groups living in Mumbai currently. The important schemes are detailed and analysed below.

5.7 The various Schemes

A list of the schemes with their primary features and operative periods is provided in [Annexure-2](#).

5.7.1 Resettlement Colonies for the Evicted

In the 70s, the Government evicted slum dwellers and resettled families in new resettlement colonies where tenure (rented) is given for a small – (serviced) piece of land. Families build their own houses. The positive aspects of this initiative includes: use of occupants' resources, planned layout, and possibilities of expansion as land is given where a floor can be added. Similarly the negative aspects include: indiscriminate eviction, requirement of lands and individual claims remain unresolved as sub-tenancy etc. are not recognized.

5.7.2 Slum Improvement Programme

These improvements were undertaken in slums notified under the Maharashtra Slum Areas (Improvement, Clearance and Redevelopment) Act, 1971. Photopasses were issued to slum households in 1976. The interventions included provision of community toilets, storm water drains, solid waste management, roads and balwadis. The Slum Board and MCGM provided and managed these amenities. For the first time, protection of some sort was offered. However, with limited space availability and management problems, improvements were inadequate. Moreover funds were insufficient

5.7.3 Bombay Urban Development Project (Slum Up-gradation Programme and Site and Services Schemes)

The World Bank's Rs. 53 crore Bombay Urban Development Project (BUDP), 1985 came into being with two programmes – the Slum Up gradation Programme (SUP) and the Low Income Group Shelter Programme (LISP).

In the SUP, the slum lands were to be given on a long lease of 30 years (where the lands were not needed for public purposes), to the co-operative society of slum dwellers at a nominal lease rent. It was expected that housing redevelopment or improvements would happen following such tenureship. Government also provided upgraded civic amenities on a cost-recovery basis and soft loans to the slum dwellers for renovation of their individual structures on an as-is-where-is basis against the mortgage of individual leasehold rights. However, tenure regularization did not automatically result in housing improvement. Households waited for the next schemes of subsidized/free housing for undertaking actual redevelopment.

Under the LISP, the state provided subsidized land to Economically Weaker Sections (EWS) and Low Income Groups (LIG) to build their own houses within the frameworks of a type based design.

The major mantras brought in with the BUDP were regularization of slums, supply of serviced lands to manage slums, granting of secure long term legal tenure and cost recovery. Accordingly the standards for plot sizes and infrastructure were based on 'affordable costs' with prices varying as per the zone corresponding to the Development Plan, payable over a period of 20 years. However there were several problems with this scheme, the first being that many were excluded from the scheme as it did not recognize the various complex tenancies that slum areas involve. Further establishing the eligibility of appropriate households created serious problems. Secondly, technical problems of extending services and augmenting site infrastructure were faced. The recovery of infrastructure costs failed because of lack of mechanisms to assess incomes and strengthen systems of disbursements and collection of loans. Further pressures from Real Estate Developers to not transfer land to slum dwellers as stipulated in the scheme, the refusal of the Central government to allow the implementation of the scheme on land held by them and perhaps a lack of push from the government side, caused the demise of this scheme. Only about 22,000 households were covered in this scheme until it was officially terminated in 1994.

5.7.4 Prime Minister's Grant Programme

In 1985 a special grant called Prime Minister's Grant Project PMGP, 1985 announced by the Prime Minister to improve living conditions of slum dwellers in Mumbai, brought in yet another major shift in the manifestation of housing for the poor. The 100 crore grant was mostly used in Dharavi purported as Asia's largest slum. A master plan was prepared for Dharavi. The model sought reconstruction as against upgrading on grounds of high density and seeming irrelevance of the in-situ upgradation model to these areas. Co-operatives of slum households were to be provided with 18 sq. m. (carpet area) walk-up tenements with a provision for transit accommodation during the construction period on a rental basis. Households were required to pay for the cost of tenements and the co-operative societies were helped to connect to lending agencies. Post occupation surveys show that though the scheme managed in some ways to tackle public health hazards, it failed due to many reasons. High maintenance costs forced many people to sell off their houses. Delays in construction, escalations in the cost of tenements and shortage of transit camps created hardships for people. In many instances slumlords entered the management of co-operative societies, managing to usurp funds and fill in bogus names of claimants. Moreover cost recovery was poor due to lack of mechanisms for the same. The system of allotment through drawing of lots further disintegrated the social structure, the networks and the community fabric leading to severe dissatisfaction. This scheme however paved the way for reconstructions in the 90s. This was in a way, the first such venture where households were moved into high rise buildings in resettlement colonies using housing subsidies.

5.7.5 Shivshahi Purnarvasan Prakalp

In 1998 the Shiv Sena – BJP government set up the Shivshahi Purnarvasan Prakalp Ltd (SPPL). This scheme sought to hand over slum land to builders for construction in the open market, where the builders would be obliged to use part of their profits to build new houses for the slum dwellers. SPPL now became a development agency and a 600 crore loan was taken from the Mumbai Metropolitan Development Agency (MMRDA) and the MHADA (Maharashtra Housing and Area Development Agency). In this scheme, SPPL became the developing agency, the SRA became the facilitating agency, and the builders became contractors with padded profit margins. The scheme as reported by ex-municipal commissioner S.S. Tinaikar turned out to be a scam with only a fraction of the targeted houses actually being built. The scheme it seems was bogged down by corruption, mismanagement of funds and nepotism.

5.7.6 Resettlement and Rehabilitation projects for Infrastructure Project Affected People

This project is targeted towards people affected by large infrastructure projects. MMRDA is aiming to shift some 50000 such families. Under this project, a private builder is involved in building these tenements of 20.9 square meters each. The builder is to give these tenements free of cost to the state. In return the builder gets transferable development rights which could be used in other parts of the city. In most cases, the builder is able to dispose off land with cheap real estate value in the city and get a higher price for it. On the other hand the state gets these houses free of cost. The problem however is that the rehabilitation sites are on the outskirts of the city where the slum dwellers are made to move to. These new places do not provide enough opportunities for people to work.

The government appointed NGOs to negotiate with the slum dwellers to make the shifting easy. However, the scales of these operations are large with about 50,000 families marked for relocations. Working at such large scales seems to have taken the NGOs away from grass roots fine-grained operations of working with communities.

The project has several negative aspects - Habitability regulations relaxed and resultant quality of living is extremely poor, depends highly on the market, resettlement colonies in low priced areas, poor quality of construction as supervision is absent, social and economical networks of families disrupted, Urgency of infrastructure projects cause compromises – subjective decisions, Issue of claims resolved by NGOs – complaints of fraud/non-transparency, etc. Schemes were seen as a necessary condition for infrastructure development and not seen as city wide housing solutions. Depending on the urgency and depending on the funding agency, standards, eligibility criteria and benefits changed creating discrimination amongst the poor.

5.7.7 New housing under JNNURM

Under this mission, the central government and state government contribute part funds for development of housing. The municipality (or the housing authority) prepares the project, mobilizes land and implements it. The urgency of the mission, however has forced the municipalities to utilize the SRA regulations that are not necessarily good or necessary. An opportunity for good, well designed housing schemes seemed to have been lost.

5.7.8 Dharavi Redevelopment Project

The SRA is the special planning authority and Dharavi is special planning area. This status allows the SRA to have separate special regulations for the area. Such regulations were developed with high (4) FSI. The entire planning area was divided into 5 sectors and bids are invited from international developers to redevelop each sector. The developer is expected to provide free housing, amenities, transit accommodation, etc and in return get additional development rights to commercially exploit in the same area. Currently, the government is in the process of identifying eligible people that require to be housed in the scheme. The government has proposed to recognize only ground floors of the tenements. There has been large oppositions to the project particularly questioning high densities, non-recognition of work cultures, eligibility criteria, etc. The SRA also formed an expert committee of people who were opposing the project to advice the government on the same. The SRA has stopped giving permission for any other kind of project expecting that a master-plan approach would be better. However in the wake of stiff opposition, non-constructive and economical melt-down, the whole project (or any other projects in Dharavi) has come to a standstill.

5.7.9 New Housing Schemes by MHADA

Since its establishment and earlier as an housing board, MHADA has constructed several schemes various classes. In the past six decades, MHB and MHADA together have managed to build 5.5 lakh houses in Maharashtra, of which 2.5 lakh are in Mumbai. Of these over 70 per cent have been for economically weaker sections (EWS) and lower-income groups (LIG) and the balance for middle-income groups (MIG) and high-income groups (HIG). On its own, MHADA has built 412,437 between 1976 and 2007. Of these, 198,342 are located in Mumbai.

(<http://www.constructionupdate.com/products/constructionworld/2008/september2008/009.html>)

5.8 The operative initiatives and their regulatory aspects

In the previous part of this paper, the various initiatives by the government to deal with the issue of housing for the poor were discussed. This part of the report will focus on the current/operative initiatives of the Government to deal with the housing condition and discuss in detail the regulatory aspects (processes, standards and regulations) for each of these. The current/operative initiatives include:

1. Redevelopment of Dilapidated Buildings
2. Redevelopment of Slums
3. Rental Housing
4. Resettlement and Rehabilitation Projects
5. New Housing under JNNURM
6. Dharavi Redevelopment Project

This part of the paper will further evaluate each of the current/operative initiatives against the criterion of Applicability, Sustainability, Livability, Efficiency and Equity (with specific focus on the evaluation of regulatory aspects)

5.8.1 The Regulatory Aspects of the Current/Operative Initiatives

	Current / Operative Initiatives	Redevelopment of Dilapidated Buildings	Redevelopment of Slums	Rental Housing	R&R projects	JNNURM Housing	Dharavi Redevelopment Project
1	CONTEXT	Applicable for tenanted buildings built before 1960. The problems of dilapidation of the old housing stock, small tenements and low sanitation facilities are the main factors of this initiative	Applicable for 'declared' slums. The problems of low standard of living and sanitation are the main factors of this initiative	Initiated as one of the low income housing supply initiatives in Mumbai Metropolitan Region using market mechanism	Applicable for people affected by large infrastructure projects. Started with the intervention of financing agencies like the World Bank.	Initiated as one of the low income housing supply initiatives using Government Grant	Applicable to Dharavi Slum. Initiated as a special project to address the low standard of living in Dharavi Slum. Addressing large slums as single entities and are planning at pre- development stage are its main features
2	CON-CEPT	Additional Development Rights are provided to redevelop old and dilapidated buildings whereby all existing tenements are reconstructed (minimum size of each tenement is 25 sq mt and each tenement is self contained with kitchen & toilet). The tenement is provided free of cost to the tenant on ownership. The reconstruction cost is expected to be offset by the sale of real-estate that is produced from the additional development right.	A slum can be redeveloped in situ whereby each eligible slum household is rehabilitated in a house of 25 sq mt with a kitchen and toilet inside the house. The tenement is provided on ownership and free of cost. To offset the cost of such redevelopment, additional development rights are provided (75% 100% and 133% of the total area required for rehabilitating all the slum dwellers in city, suburb and difficult sites respectively), which need to be developed on the same site and sold in the open market.	Any land owner in Mumbai Metro-politan Region can develop rental housing on that land. 4 FSI is given on such land, out of which 1 FSI is to be developed as rental housing units (of 160 sq feet area) and 3 can be commercially exploited. The rental units are to be handed over to the MMRDA free of cost, which will allocate and maintain the houses with the help of NGOs. In Mumbai the entire land could be developed as rental housing in return of equivalent TDR. MMRDA can also build rental housing on its own land, with 3 FSI devoted to rental	Anybody having land in Mumbai can develop housing with each house of 20.9 sq mt. and hand over the same to the MMRDA, In return such a person would be given TDR that could be used anywhere to the north of the site where the housing was built. Such houses are then allocated to the eligible people affected by infrastructure projects. An NGO is used to shift people to the new location.	Govt of India gives substantial part as grants to cities identified in the mission to build housing for the urban poor. Govt. of Maharashtra also provides part grants to these cities. The city governments (or the project implementation agency) have to mobilise the remaining finances and land for the project. The city government (or the project implementation agencies) allocate the houses to slum dwellers.	Dharavi is declared as a special planning area under the Maharashtra Regional & Town Planning Act and SRA (Slum Redevelopment Authority) is declared as the Special Planning Authority (SPA) for Dharavi. Special rules are made by the SRA and developers are invited to redevelop Dharavi. The entire area is divided into five parts, each to be developed by a different developer. 4 FSI is permitted and each eligible slum family is to get 25 sq mt. free house and the remaining FSI is to be commercially exploited.

	Current / Operative Initiatives	Redevelopment of Dilapidated Buildings	Redevelopment of Slums	Rental Housing	R&R projects	JNNURM Housing	Dharavi Redevelopment Project
				housing 1 FSI for commercial exploitation.			
3	PROCESS						
	Initiation	The owner of the dilapidated building initiates the project generally through a developer who is given development rights. Consent of 70% tenants is required. The tenants can also initiate the project	The owner of the land where the slum is located initiates the project through a developer. The slum dwellers can also initiate with help from NGO or through a developer. Consent is required from 70% slum dwellers	The owner of the land where Rental Housing is proposed to be built. (This could be also MMRDA) initiates the project.	The owner of the land where R&R housing is proposed to be built initiates the project	The urban Local Body or MHADA initiates the project by making a Detailed Project Report and applying for a grant from the Central Government	SRA initiated the project (A consultant was appointed to work out the details of the new DCR and tender documents for the developers)
	Land mobilization	In situ rehabilitation of people, Land is transferred to the Government and leased to the New Society of habitants for 30 years.	In situ rehabilitation of people, Land is transferred to the Government and leased to the New Society of habitants for 30 years.	Land is subdivided – 1/4 th for rental housing and 3/4 th for commercial exploitation. Land of rental housing along with dwelling units is transferred to MMRDA	Land is transferred to MMRDA	Land is owned by the Government and leased to the New Society of habitants for 30 years.	Land is owned by the Government and leased to the New Society of habitants for 30 years.
	Eligibility	All legal tenants of the dilapidated building	All slum households occupying the slum before 1/1/1995	Any family whose min. income is not less than Rs. 5000, not having an ownership house in MMR and domiciled in Maharashtra	All families occupying the slum before 1/1/2000 and affected by infrastructure project	Any slum household / PAP. New housing can also be built for EWS not living in slums	All houses that are on the ground floor of the slum.
	Actors and their Roles	Municipality verifies the details of the site and provides necessary approvals. Approvals from other agencies also required. 70% of the Tenants are required to give consent Owner of the property either initiates the development (either	Slum Redevelopment Authority (SRA) acts a single window agency. Collector verifies /declares slum, Approvals from other agencies are also required. 70% of slum dwellers are required to give consent Owner of the property either initiates the development (either him/herself or through a	Local Authority in Mumbai Metropolitan Region verifies details and provide the necessary approvals. MMRDA coordinates the approval process, allot s and maintains the rental houses (may be through an NGO) Land owner (self or through a deve-loper) mobilizes	SRA verifies and provides necessary approvals or this function is delegated to the Infra agency. The infrastructure Development Agency coordinates the approval process. Land owner (self or through a developer) mobilizes architects,	State and Central Governments provide part finances. Either a local body or housing authority mobilizes land and other requirements to build housing itself. The local body / housing authority allots housing. The new Society of	SRA acts as an SPA, verifies eligibility and provides necessary approvals. Developer to mobilize architects, finances, contractors for the development and hands over the housing to SRA. Developer to also provide transit accommodation. SRA to allot housing New Societies to maintain the

Current / Operative Initiatives	Redevelopment of Dilapidated Buildings	Redevelopment of Slums	Rental Housing	R&R projects	JNNURM Housing	Dharavi Redevelopment Project
	him/herself or through a developer) / or give no objection to the development Developer mobilizes architects, financiers / finances, contractors, estate agent etc. for the development. He/She also provides transit accommodation NGO (if involved) acts as developer or helps the local community to act as developers New society of rehabilitated people and new people buying houses (either together or separately – if the buildings are separate) maintain the new development	developer) / or give no objection to the development Developer mobilizes architects, financiers / finances, contractors, estate agent etc. He/She also provides transit accommodation NGO (if involved) acts as developer or helps the local community to act as developers New society of rehabilitated people and new people buying houses (either together or separately – if the buildings are separate) maintain the new development	architects, finances, contractors, estate agents for the development and Hands over the housing to the MMRDA	finances and contractors for the development and hands over houses to infrastructure development agency . Infrastructure development agency allots houses to the project affected families. NGO convinces the people to shift, coordinates the shifting, helps to identify the eligible persons, helps allot the houses, also undertakes post occupancy measures like forming the society, training the people to maintain the housing etc.	people in the housing project maintain the housing	housing after occupancy
Finances	Market: Funds mobilized by the developer and returns earned after selling of the sale component developed from the additional FSI. Maintenance costs to be raised by the new Society (with partial contribution from the developer)	Market: Funds mobilized by the developer and returns earned after selling the sale component OR selling / developing TDR generated in the project. Maintenance costs to be raised by the new Society (with partial contribution from the developer – 20,000 per tenement)	Market: Funds mobilized by the owner of land / developer and returns earned from developing FSI provided for commercial exploitation. Maintenance costs to be borne by MMRDA (raised though the collection of rents)	Market: Funds mobilized by the owner of land / developer and returns earned after selling / developing TDR generated by the project. Maintenance costs to be raised by new Society (with partial contribution from the developer)	State: Central, State and Local bodies mobilize funds for the project. Maintenance costs to be raised by the new Society	Market: Funds mobilized by the developer and returns earned after selling the sale component. Maintenance costs to be raised by the new Society (with partial contribution from the developer)

4 STANDARDS

	Current / Operative Initiatives	Redevelopment of Dilapidated Buildings	Redevelopment of Slums	Rental Housing	R&R projects	JNNURM Housing	Dharavi Redevelopment Project
	Min. Plot Size	None	None	10000 sq mt. Smaller can be considered by MMRDA			
	FSI	Unlimited as it depends upon the existing number of tenements. All to be consumed on site	Unlimited as it depends upon the existing number of tenements. 4 to be consumed on site and if more, balance is given as TDR. If less is required, other PAPs are to be accommodated to consume 4 FSI	4 Entirely to be used on site	4 Entirely to be used on site	4 Entirely to be used on site	4 Entirely to be used on site
	Min. Density	500 tenements per hectare	500 tenements per hectare	500 tenements per hectare but 1500 on MMRDA owned lands	500 tenements per hectare	500 tenements per hectare	500 tenements per hectare
	Carpet area of tenement	225 sq ft earlier; 269 sq ft now	225 sq ft earlier; 269 sq ft now	160 sq ft. 160 to 400 sq ft. under consideration	225 sq ft	225 sq ft	256 sq ft
	Set Back	1.5 m all sides, 3 m between two buildings of 7 stories	1.5 m all sides, 3 m between two buildings of 7 stories	3.6 m all sides, 6 m between two buildings of 7 stories	1.5 m all sides, 3 m between two buildings of 7 stories	1.5 m all sides, 3 m between two buildings of 7 stories	1.5 m all sides, 3 m between two buildings of 7 stories
	Building Height	Unrestricted. Only regulated through civil aviation rules	Unrestricted. Only regulated through civil aviation rules	Unrestricted. Only regulated through civil aviation rules	Unrestricted. Only regulated through civil aviation rules	Unrestricted. Only regulated through civil aviation rules	Unrestricted. Only regulated through civil aviation rules
	Open Space			8% of plot area			
	Amenities	None	Balwadi and Society's Office to be provided Space for livelihoods can be provided	Welfare hall and Balwadi of 160 sq.ft for 200 tenements and a managers off of same size for 500 tenements	1 Balwadi and Society's Office for 100 tenements	None	Balwadi and Society's Office to be provided

5.8.2 Criteria for Evaluation of current / operative initiatives

The following criteria have been identified to discuss and evaluate the current initiatives:

	Criterion	Range / Possibilities
	APPLICABILITY	
1	Situational Applicability	Contextual, Global
2	Replicability	Specific/Limited Possibilities, Replicable
	SUSTAINABILITY	
3	Social/Cultural Networks	Community Splits, Community Intact
4	Economic Networks	Disrupted, Sustained, New opportunities possible / accessible
5	Long-term Maintenance	Economical / Expensive
6	Sustainability of Occupancy	Families stay on site, Families rent/sell their houses and move
7	Infrastructure	Impacts neighborhood infrastructure (physical/social), Impact on other neighborhoods, non-predictability for planning
8	Environment	Energy Consumption – high/low; Environment Impacts – Negative/none
	LIVABILITY	
9	Infrastructure	Poor, Fair, Good
10	Light & Ventilation	Poor, Fair, Good
11	Open Spaces	Poor, Fair, Good
12	Other Amenities	Poor, Fair, Good
13	Construction	Poor, Fair, Good
	EFFICIENCY	
14	Land Utilisation	External Land Required, In Situ
15	Financial	Depends on State, Market oriented, partial / full beneficiary financing
16	Risk during Implementation	Long Process, Dependent on Consent
17	Cost of the House to the occupant	Free, Small One Time Commitment, Small Periodic Commitments, Part Cost, Cost of only building house, Full cost
18	Overall Housing Market	Impacts Housing prices
	EQUITY	
19	Resolution of Claims	Exclusionary, Targeted, Appropriated by claimants / Developers
20	Equity in receivables	Equitable/Not Equitable with respect to - each other within the scheme / other interventions / other housing
21	Security of Tenure	All rights exercisable; Some rights not possible – use; develop; sub-letting; mortgage; inheritance; transfer (selling);

5.8.3 Evaluation of current approaches

5.8.3.1 Redevelopment of Dilapidated Buildings

No.	Criterion	Remark
APPLICABILITY		
1	Situational Applicability	As the scheme depends on the market (particularly property price), it generally works for dilapidated buildings in areas with high property prices. The scheme is applicable for only tenanted buildings within the island city of Mumbai.
2	Replicability	The scheme is replicable, but depends on the readiness of the community (as consent of the community is essential) & market (availability of the developer / property price)
SUSTAINABILITY		
3	Social/ Cultural Networks	As the inhabitants are rehabilitated on the same site, the community remains intact. However, new families are added to the site (as part of the sale component). Also, old families tend to sell their new houses as they cannot afford the maintenance. .
4	Economic Networks	As the inhabitants are rehabilitated on the same site, economic networks do not get affected.
5	Long-term Maintenance	As the redevelopment buildings are generally high rise, multi-storied buildings, they are expensive for maintenance and there is no long term model to deal with the issue of maintenance.
6	Sustainability of Occupancy	As maintenance of the new redevelopments is expensive, the rehabilitated families tend to sell their tenements. There have also been instances where the old tenants have been either paid to evacuate their tenements by the developer.
7	Infrastructure	As densities are high (due to redevelopment of existing dense chawls and addition of new families) and also as the new redevelopments have higher infrastructure requirements (for example the old toilets do not have flush, the new have); there is a burdening on infrastructure of the area. Moreover, the new families (due to sale component) have higher infrastructure requirement (particularly parking).
8	Environment	There is higher requirement of energy as infrastructure requirements are higher; however, as the sanitation issues are addressed, the living environment is improved. The redevelopments have unlimited FSI (generally very high) as the existing buildings themselves have higher FSI than the prescribed FSI (as they were built before the concept of FSI was introduced) and the FSI of the new building depends upon existing number of tenements – higher the existing number of tenements, higher the sale component and hence higher the redevelopment FSI.
LIVABILITY		
9	Infrastructure	Better sanitation infrastructure is provided than existing dilapidated buildings.
10	Light & Ventilation	As the set-back and open space rules are relaxed, the light and ventilation issues are compromised. However, as these sites tend to be small in size, they generally are stand-alone buildings, hence the problem does not seem so acute as the buildings adjoining the site follow regular regulations for set-back and open spaces.
11	Open Spaces	Open Space rules are relaxed and hence this issue is compromised
12	Other Amenities	The overall health and educational requirements of the site are left to be addressed in the dev. plan.
13	Construction	As the redevelopment project is driven by the developer and he/she does not have to sell the redevelopment tenements and moreover as there is feeble supervision by the concerned authority the quality of construction tends to be poor – as there is no effective mechanism to supervise it.
EFFICIENCY		
14	Land Utilisation	As no external land is required, the land utilization is efficient. Density increases, therefore land is more intensively utilised than before.
15	Financial burden on the govt.	The scheme depends entirely on the market – particularly on property prices. Though an NGO or the residents community itself can undertake such a scheme, generally a developer is involved who is able to mobilise the financial requirements and get through the approval procedures. As areas with less property prices cannot yield a

		good profit, buildings in such areas tend to remain undeveloped.
16	Risk during Implementation	The scheme requires consent of 70% tenants. There have been instances of tenants asking for money or additional houses from the developers in return for consent. There are also cases where developers have bribed tenants to either give consent or vacate their houses. In other cases, the tenants / developers have got into agreements with other developers / other tenants to cancel original schemes and develop another one with a better 'deal'. All these factors are instances of risk for the implementation.
17	Cost of the House to the occupant	The redeveloped house is free of cost to the old tenement. While this is politically useful, the absence of financial participation does not allow a local commitments creating an environment where breaking agreements and selling houses (to capitalize it) becomes usual.
18	Overall Housing Market	As the entire cost of housing the tenants is pushed on to the buyers of the sale component (who themselves may not be very rich), the price of house available in the market becomes higher – thereby making housing unaffordable to more households.
	EQUITY	
19	Resolution of Claims	The sub-tenants etc. are not eligible for the rehabilitation. There have been events where sub-tenants are forcibly evicted.
20	Equity in receivables	As set back and open spaces regulations are relaxed, the redevelopment gets treated differently (unequally) as compared to the rest of the city. Habitability & Safety issues are compromised.
21	Security of Tenure	The free houses received by the tenants are free hold with clear title.

5.8.3.2. Redevelopment of Slums (under SRA)

No.	Criterion	Remark
	APPLICABILITY	
1	Situational Applicability	As the scheme depends on the market (particularly property price), it generally works for slums in areas with high property prices. Also, in case of a large slum, these schemes happen in a piecemeal manner depending upon the readiness of the community. The schemes are also not possible in certain kinds of areas like reserved areas, costal zones, no development zones, extremely thin plots, or lands along transport corridors that require expansion.
2	Replicability	The scheme is replicable, but depends on the readiness of the community (as consent of the community is essential) & market (availability of the developer / property price)
	SUSTAINABILITY	
3	Social/Cultural Networks	As the slum dwellers are rehabilitated on the same site, the community remains intact. However, new families are added to the site (as part of the sale component and sometimes as Project Affected people from other sites) – but generally, the development is made such that these two (the rehabilitation component and the sale component) are treated as separate buildings.
4	Economic Networks	As the slum dwellers are rehabilitated on the same site, location based economic networks remain – eg. women working as maids continue their work. However space based economic activities gets disrupted as the new redeveloped buildings (mostly multistoried apartments) cannot house the economic activities existing in the slum – eg people working with bamboo, plastic, etc. (use a lot of outdoor areas) have to shift occupation as there is no place to store raw material or finished goods. Moreover, the labour groups (that work on small enterprises and also live inside the enterprise space), who do not have any claims on property lose everything – place of stay and work. The scheme works better in slums without economic activities.
5	Long-term Maintenance	As the redevelopment buildings are generally high rise, multi-storied buildings, they are expensive for maintenance. Though the developer pays Rs. 20,000 per

		rehabilitated house (to be kept in the bank) for maintenance, there is no long term model to deal with the issue of maintenance.
6	Sustainability of Occupancy	As work gets disrupted and the redeveloped buildings are expensive to maintain; and moreover, there is possibility to access quick capital the rehabilitated families tend to sell / rent (informally) their houses
7	Infrastructure	As densities are high (due to redevelopment of existing dense slums and addition of new families) and also as the new redevelopments have higher infrastructure requirements (for example the old toilets do not have flush, the new have); there is a burdening on infrastructure of the area. Moreover, the new families (due to sale component) have higher infrastructure requirement (particularly parking).
8	Environment	There is higher requirement of energy as infrastructure requirements are higher; however, as the sewerage and sanitation issues are addressed, the living environment is improved. Moreover, if the project is proposed for higher densities, then it generates transferable development rights that affect other areas
	LIVABILITY	
9	Infrastructure	Better sanitation infrastructure is provided than existing slums
10	Light & Ventilation	As the set-back and open space rules are relaxed, the light and ventilation issues are compromised. However, as these sites tend to be small in size, they generally are stand-alone buildings, hence the problem does not seem so acute as the buildings adjoining the site follow regular regulations for set-back and open spaces.
11	Open Spaces	Open Space rules are relaxed and hence this issue is compromised
12	Other Amenities	There is a provision for a balwadi and Society's Office in a redevelopment scheme. The overall health and educational requirements of the site are left to be addressed in the dev. plan.
13	Construction	As the redevelopment project is driven by the developer and he/she does not have to sell the redevelopment tenements and moreover as there is feeble supervision by the SRA (generally responding to complains by the slum-dwellers) the quality of construction tends to be poor – as there is no effective mechanism to supervise it.
	EFFICIENCY	
14	Land Utilisation	As no external land is required, the land utilization is efficient. However, if the project is proposed for higher densities, then it generates transferable development rights that affect other areas.
15	Financial	The scheme depends entirely on the market – particularly on property prices. Though an NGO or the slum community itself can undertake such a scheme, generally a developer is involved as he/she is able to mobilise the financial requirements and the get through the approval procedures. As areas with less property prices cannot yield a good profit, slums in such areas remain undeveloped as no developer is interested. Also as the houses are given free to slum dwellers, there is no commitment from their side and invariably they sell their houses.
16	Risk during Implementation	The scheme requires consent of 70% slum dwellers. There have been instances of slum communities (or some members) asking for money or additional houses from the developers in return for consent. There are also cases where developers have bribed community members to either give consent or vacate their houses. In other cases, the slum communities / developers have got into agreements with other developers / other slum members to cancel original schemes and develop another one with a better 'deal'. All these factors are instances of risk for the implementation.
17	Cost of the House to the occupant	The redeveloped house is free of cost to the slum dweller. While this is political useful, the absence of financial participation does not allow a local commitments creating an environment where breaking agreements and selling houses (to capitalize it) becomes usual.
18	Overall Housing Market	As the entire cost of housing slum dwellers is pushed on to the buyers of the sale components (who themselves may not be very rich), the price of house available in the market becomes higher – thereby pushing the price of housing in the overall market.
	EQUITY	
19	Resolution of Claims	The cut-off date to be eligible for this scheme is 1-1-95. People unable to prove their residence before this date are ineligible. There are instances of slum dwellers

		removing people who have 'rented' the house in the slum and occupying it themselves (a member of the family shifts into such a house). There are also instances of fake eligibility established by slum dwellers & developers.
20	Equity in receivables	As set back and open spaces regulations are relaxed, the slum communities get treated differently (unequally) as compared to the rest of the city. Habitability & Safety issues are compromised.
21	Security of Tenure	The free houses received by the slum dwellers are free hold with clear title. However, the slum dwellers are not allowed to trade their rights (either sell or rent) the house for 10 years after occupation. But in many cases it is seen that such houses are informally sold or rented.

5.8.3.3 Rental Housing using FSI Incentive

No.	Criterion	Remark
APPLICABILITY		
1	Situational Applicability	The scheme is applicable all over the Mumbai Metropolitan Region, both in urban and rural areas. As the scheme depends on the market (particularly property price), it may succeed in areas with high demand for affordable housing at far away locations and reasonable property prices. The scheme is not permitted in areas designated as conservation zones in the statutory regional or development plans.
2	Replicability	The scheme is replicable, but depends on the readiness of home seekers to accept living in high rise buildings. Those in far away areas may not be able to either consume high FSI due to acceptability reasons or take off due to market reasons of prevalent not so high property prices. It may succeed in urban areas. Replicability also depends on availability of off site infrastructure and the ability of the local authority to cope with the physical and social infrastructure and other environmental demands of such high density areas. Replicability further depends on the ability of the lead public agency to deal with identifying the target groups for allotment, the asset management requirements of such high density rental tenements.
SUSTAINABILITY		
3	Social/Cultural Networks	Since this is new housing, no specific problem can be attributed to this housing type. There is a provision for creation of housing co-operative societies at post-occupancy stage and hence the problem can be dealt with. However, the very high density and non-incremental houses can cause social stress. Similarly, some amount of conflict may develop if the free sale component of the developer attracts very high income groups, which appears unlikely.
4	Economic Networks	As all households are new and come to the location of the scheme site by choice, it has the potential to establish good economic networks. Since the schemes may come up in far away rural areas in transition, if the land-use planning at regional level can be sensitive, new economic centres can be created using the opportunity presented by these schemes. Establishment of new growth centres can integrate such efforts.
5	Long-term Maintenance	This can prove to be the greatest problem of this scheme. Institutional capacity of a new kind will have to be developed. Long term maintenance is required of the assets created as well as to ensure moving of the households when they no longer need such subsidized housing to allow in-flow of new poor.
6	Sustainability of Occupancy	The prime concerns will remain as mentioned above.
7	Infrastructure	The schemes at their proposed locations were not part of plans pertaining to that area but have come up as a result of a new regulation. Therefore, there is an urgent need to integrate their infrastructure requirement with the regional and local plans. However, the institutional mechanism to provide and maintain the infrastructure needs to be addressed. The new regional plan under preparation can well aim to do this.
8	Environment	There will be an opportunity to address the environmental issues arising out of these high density schemes as they are new settlements and there is lesser dependence

		TDR.
	LIVABILITY	
9	Infrastructure	The planning and building norms are reduced in the scheme regulations. Coupled with the extremely high densities, this may result in not so good living conditions. However, if parameters of the scheme impacting livability aspects such as densities, minimum plot size, non-compromise on layout and building regulations, population based amenities and of-site infrastructure are carefully worked out and the scheme locations are integrated with existing or proposed employment centres, a good living environment can be ensured.
10	Light & Ventilation	
11	Open Spaces	
12	Other Amenities	
13	Construction	Since the projects are expected to be large in size and at new locations, newer technologies and materials can be used and appropriateness can be ensured.
	EFFICIENCY	
14	Land Utilisation	In terms of intensity of land utilization, the scheme with proposed high FSI are efficient. However, their locations and applicable planning norms should take into consideration appropriate utilization of land given the suitability.
15	Financial	The scheme depends entirely on the market – particularly on property prices. On the other hand, it also depends on the ability of the promoter public agency to invest in off-site infrastructure and ensure a balance between the market return on the asset value and the rents. The subsidy, if any, in this process can be ensured only if the asset value is maintained and enhanced in future. Tendencies to transfer use rights of such subsidized tenements by the tenants on the short term and conversion of the same into free ownership tenements at a future date, as is generally observed with rental housing of MHADA and MCGM in the past must be avoided.
16	Risk during Implementation	None except the market for such houses and the ability of promoter and local authorities to provide off-site infrastructure.
17	Cost of the House to the occupant	The tenements are provided at subsidized rent. The current norms of the scheme only specify a minimum monthly income of households to participate in the scheme and not a maximum. Therefore, mechanism is needed to avoid subsidizing higher income groups. The rents can be linked to incomes or a maximum monthly income as eligibility is prescribed. Otherwise, there will be tendencies to illegally transfer the tenancy rights to others.
18	Overall Housing Market	If integrated with regional population and employment distribution, the scheme has immense potential to improve the overall housing markets to increase land supply and direct growth. This may help bring regional balance and reduce property prices.
	EQUITY	
19	Resolution of Claims	Income proof and proof of not having another house in Mumbai Metropolitan Region may lead to some conflicts.
20	Equity in receivables	As set back and open spaces regulations are relaxed, the tenants get treated differently (unequally) by the other occupants of the project area. In addition, habitability and safety issues will remain until the parity in planning and building standards are reduced.
21	Security of Tenure	The rental tenements would be taken over by MMRDA and allotted with the help of NGOs and/or MHADA. The documentation is expected to be proper and not leading to any conflict. However, the tenants are not allowed to transfer their rental rights.

5.8.3.4 Rehabilitation and Resettlement of squatters affected by Infrastructure Projects (PAPs)

No.	Criterion	Remark
APPLICABILITY		
1	Situational Applicability	As the rehabilitation units are built at a different location, most of the deviations observed in the case of in-situ redevelopment such as land use related, are avoided. However, the densities increase on site when R&R units are built and if limit exceeded, TDR is granted.
2	Replicability	The scheme is replicable, but depends on the readiness of the community (as consent of the community is essential) to shift elsewhere, market (availability of the developer / property price) and the urgency felt for development of the intended infrastructure project. It is observed that R&R schemes are more flexible in eligibility and entitlement parameters, hence replication is easier. However, replicability depends on availability of vacant areas near to the slum location
SUSTAINABILITY		
3	Social/Cultural Networks	Even though it is a relocation scheme, slum dwellers are rehabilitated in groups and hence the community remains together. However, new families are added to the site (as part of the sale component and sometimes as Project Affected people from other sites) – but generally, the development is made such that these two (the rehabilitation component and the sale component) are treated as separate buildings.
4	Economic Networks	As the slum dwellers are rehabilitated on a different site, location based economic networks may not remain. Space based economic activities also gets disrupted as in the case of in-situ redevelopments. The labour groups (that work on small enterprises and also live inside the enterprise space), who do not have any claims on property loose everything – place of stay and work. The scheme works better in slums without on-site economic activities. The closer the rehab site to the slum, the better retained are the economic linkages.
5	Other parameters	All other parameters of the scheme remain the same as those in the case of in-situ slum redevelopment schemes. Hence are not repeated.

5.8.3.5 New Housing under JNNURM

No.	Criterion	Remark
APPLICABILITY		
1	Situational Applicability	Most of the aspects of this scheme are the same as those in respect of rental housing, except that the tenements here are on ownership and there is a beneficiary contribution towards the cost of the tenements as already mentioned in this report earlier. The sustainability, therefore, is higher. The schemes accommodate only low income housing units and hence may not have the mixed communities.
2	Replicability	For the reasons cited above, the scheme is more easily replicable than the free housing schemes, subject to availability of land.
3	Other aspects	All other aspects of the scheme are same as in the case of rental housing schemes.

5.8.3.6 Dharavi Redevelopment Project

No.	Criterion	Remark
APPLICABILITY		
1	Situational Applicability	<p>Most parameters of in-situ redevelopments apply to Dharavi redevelopment Project. However, there are some variations. These pertain to the overall approach to the scheme as a parcel of city's development plan, calculation of amenity spaces on the basis of planning standards, lesser deviations from building regulations, location of economic activities within the scheme area, improvement in transportation networks etc. All the deviations emanate from the size of the scheme that permits such considerations. At the same time, impact of the high densities and the deviations can be felt far more significantly in such large schemes.</p> <p>The scheme is government driven but market oriented like any other in-situ redevelopment scheme on a vast parcel of land located near the new CBD of Mumbai, that is, Bandra-Kurla Complex (BKC). Therefore, failures, if any, may have tremendous long term impact on its own sustainability as well as on the city at large. Due to its proximity to BKC where land values are highest at present, the ability of the scheme to retain residential character, particularly retention of the original slum dwellers will have to be constantly monitored and improvements to the scheme made as and when necessary.</p> <p>The Development Plan of Mumbai is under revision and appropriate measures regarding redevelopment of large slums such as Dharavi must be taken into consideration in the new plan.</p>
2	Replicability	Replicability of the scheme can be examined only after it is implemented and sustained in its intended form. The Maharashtra State Housing Policy recognized the need for such large redevelopments and suggested measures for their replication.
3	Other parameters	Other parameters of the scheme remain the same as those in the case of in-situ slum redevelopment schemes. Hence are not repeated. Variations may be observed and can be studied after the scheme is implemented.

6.0 Nanded Case Study

This part of the paper will discuss the case of Nanded City¹.

6.1 The City of Nanded

Nanded is located in the eastern edge of Maharashtra State in the Marathwada region and is very close to Andhra Pradesh in the East and Karnataka in the South. Nanded is also an important religious place for the Sikh community. Three hundred years ago Guru Gobind Singh, the 10th Guru of the Sikhs, declared the Granth Sahib as the Guru before ending his life. These different influences on Nanded have created a diverse cultural mix.

The economy of the city is fueled by its administrative position of being a district headquarters – it is the 2nd largest city in the Marathwada region after Aurangabad. Moreover, the centrality of its location and various highways passing through it has generated a context for transport based enterprises that seem dominant in the city. But today, the biggest generator of the economy seems to be religious tourism. Low accesses to raw material and markets have reduced the potential of Nanded to grow as an industrial centre. Nanded has been politically extremely active and given two chief ministers to the state of Maharashtra.

Geographically, Nanded is 489 m above sea level on the Deccan Plateau. The climate is generally dry except during the three months of monsoon, where it receives a rainfall of about 901mm. Godavari River passes thorough the centre of the city. The area of the city is 51.77 sq km, out of which 20.62 sq km is the old part to the north of Godavari River and 31.14 sq km is the new part to the south. While the old part consists of organically developed dense parts, the south part consists largely of agrarian landscapes along with large housing colonies developed by MHADA, CIDCO and HUDCO in the mid 70s and the 80s.

The Nanded Waghala City Municipal Corporation is relatively young and was formed in 1997. under the Bombay Provisional Municipal Corporation Act. It was formed by merging the Nanded Municipal Council, Waghala Municipal Council, CIDCO and HUDCO areas, and 6 villages of the south Recently more new areas have been added to the city.

As per the 2001 Census, Nanded's population has been 4.3 lakhs. The City Development Plan (CDP) prepared under JNNURM estimates the current population around 6 lakhs. The annual growth rate of 4.22% has reduced from 1971-1981 period to 3.37% in 1991-2001 period. The CDP estimates a growth rate between 3 and 4 for the next 15 years.

¹ The authors would like to thank Dr. Deepak Mhaisekar, Municipal Commissioner, Shri. Ratnakar Waghmare, Deputy Municipal Commissioner, Shri. Sashimohan Nanda, Deputy Municipal Commissioner, and other staff of the Nanded Waghala Municipal Corporation along with Shri. Sanjeev Patil, IL&FS and Smt. Hema Dudhwala, AAPIL Consultants for their generous help for this paper

6.2 The Housing Context

The housing demand is created by several groups – firstly, the old-city residents who live in old and dilapidated houses - in the recent road widening scheme (for an important religious event – Guru ta Gaddhi), several houses were demolished. The Municipal Corporation has relocated these residents in the newly constructed relocation site.

The second group of people is those living in sub-standard housing. Though people in this group have some form of tenure over the lands they occupy, their housing condition is described by the city municipality as slums. The third group is the people encroaching on government as well as private lands. As per the recent housing policy published by the Municipal Corporation, 1.56 lakh people live in these slums – either with or without tenural security. There is also a group of people who require housing on account of them moving newly into the city or on account of existing houses becoming small for growing families.

In the past few years Nanded has seen immense developmental activities – government itself has spent about 1000 Crores towards developing roads, water and sewerage infrastructure, housing etc. Another 1000 crores is expected to be spent in the next few years. This has propelled additional private investment into the city. This investment from public and private sources has brought in large number of people into the city – primarily construction laborers who have already spent about five years in the city so far and would continue to stay. These groups have created additional housing demand.

Housing delivery has largely been organized by the private sector. In the past, land owners with lands sub-divided their properties and sold to individual families, who then built their houses. As the land sub-division has been irregular and house building activities have been piece-meal and haphazard, such areas have become slum-like in their condition. Recently, there is also a trend towards developing apartment blocks and selling ready-made houses.

The Government Interventions are led by the Development Plan (DP), which is the primary growth management tool available to the Local Authorities to guide development of the city in a planned manner. It is mandatory for the local authorities, (under Section 23, read with Section 38 of the Maharashtra Regional and Town planning Act, 1966,) to prepare a DP.

After the formation of the Municipal Corporation in 1997, the NWCMC has prepared a plan for its development with assistance from the Town Planning Department of Government of Maharashtra in 2004 for the period 2004-15. This DP was prepared only for the part of the city north of Godavari River as only that part was included as the city then. NWCMC is currently in the process of preparation of its revised DP to include for the Southern side as this part has been newly added to the city. The development plan making process includes projecting population for the horizon year and reserving land for residential and

other uses for the projected population. Hence there is a residential zone marked in the plan. The development plan further has a set of development control regulations to control development in the particular zone. These zones (residential and others) do not necessarily take into account the existing tenureship and ownerships

The Existing and Proposed landuses for an area of 2062.48 Hectares (North Nanded) in the DP are as follows:

No.	Landuse	Existing in 1996 (percentage of landuse for 2062.48 Ha)	Proposed for 2015 in the DP (percentage of landuse for 2062.48 Ha)
1	Residential	20.14	46.71
2	Commercial	1.63	2.63
3	Industrial	2.85	2.02
4	Public – Semi Public	8.54	13.20
5	Recreational / Public Utilities	0.45	0.99
6	Transport and Communication	12.30	17.46
7	Open Spaces	1.90	8.87
8	Water Bodies	0.44	0.35
9	Agricultural	22.79	7.77
10	Vacant and Barren	28.96	0.00
	TOTAL	100.00	100.00

From the above table it is clear that about 47% of the land within the municipal boundaries was reserved for residential purposes. However, the DP does not indicate strategies for developing the zones for the required purpose. Such development is expected to be led by other policies, programmes and private initiatives. The DP seems more as a regulatory instrument rather than a proactive instrument.

The Municipal Corporation has been carrying out slum up-gradation by providing basic infrastructure like open drains, pathways, underground drainage lines, water supply lines and street lights depending upon the funds available every year. The CDP states that 90% of the declared slums are covered with Water Supply and Sewerage Infrastructure. In case of un-declared slums, 25% to 60% coverage is achieved in Water Supply. In 17 slums, sanitation is 0%, while in others it is between 25% to 60%. Under the State Government's Valmiki Ambedkar Awaas Yojna of the state government, some 600 houses have been built.

In the 70's MHADA built about 1,000 housing units for different categories of people. In the 80s, CIDCO and HUDCO built a large township of about 1.91 sq km about 5km away from the city with 11,000 houses and plots. Today, these houses have undergone tremendous transformations.

Since the 80s there has been no large public intervention in developing housing scenario until 2006, when JNNURM started. Under this mission, the Municipal Corporation is building more than twenty three thousand houses in the city of

Nanded. Along with JNNURM, the event of Guru-ta-Guddhi has brought in large funds for housing – for resettlement of people affected by road widening.

6.3 Operative Projects and Programmes

As mentioned earlier, in the past few years, NWCMC has undertaken the activity of providing housing to the urban poor in a very large scale. This has been done through two central government programmes – Special Package for the Guru tha Gaddhi and JNNURM. Until now, about **twenty-three thousand** houses have been planned under these two programmes so far. This section of the paper will discuss provision of housing under the above two programmes.

6.3.1 Resettlement of people (holding legal properties) displaced under the road widening schemes (related to Guru ta Gaddhi event)

In October 2008, Nanded hosted a large religious event Guru tha Gaddhi, marking the completion of 300 years the declaration of the Granth Saheb as the Guru. The Central Government took particular interest and initiated several projects that would not only support the event, but also create a long term infrastructure base for the city. The projects were funded under two schemes – Special Package for Guru tha Gaddhi and Jawaharlal Nehru National Urban Renewal Mission. The infrastructure projects included developing Water Supply and Sewerage Schemes, Sewerage and Drainage Schemes, Public Space Creation and Heritage Conservation Schemes and Road and Transport Infrastructure improvement schemes. Improvement of Roads in the dense Core area of the city included widening of the roads, which involved removing buildings from the edge of roads. This widening produced the context for Resettlement of People. NWCMC shifted about 122 families to facilitate the improvement of roads.

Local Politicians, NWCMC Officials and Gurudwara Board (which controls the affairs of the Gurudwara) negotiated with the Project Affected Families (PAFs) and convinced them to shift. As the whole project was to benefit the Gurudwara (by improving access to it) the Gurudwara Board provided land for the resettlement of the PAFs close to the place from where the PAFs have been evicted. The master-plan and the detailed plans were prepared by the NWCMC in consultation with the PAFs. Resettlement house sizes varied from 256 sq ft to 600 sqft depending upon the sizes of houses occupied by the PAFs before eviction. The Central Government provided funds for the resettlement project and the project was executed by the NWCMC. Consultants and Project Management Agencies were used by the NWCMC to design and execute the project. The existing Development Control Rules used for normal development were used. In the case of commercial units being displaced, the Project Affected Party was given monetary compensation or land or shops were made available on rent or combination of all three in different proportions were made available. “As the number of commercial units were less, the NMCMC could enter into a case-by-

case negotiation with each of the commercial unit owner. The issue regarding displacement of renters remained unresolved”²

NWCMC considers it to be a successful project – the project was implemented with no major protests, on time, within the estimated costs, and yielded desired results in terms of improved roads and well planned resettlement neighborhoods. The following seems to be the important reasons for the success of the scheme:

- a. Local Politicians and Religious Institutions negotiated and convinced the people for the project. Moreover, the PAFs largely were from a single religious community and the main purpose for their eviction was a religious event of that community.
- b. Resettlement site was close to the Eviction Site – so cultural and economic networks remained intact. Land was made available by the Gurudwara Board.
- c. Plans were made in consultation with the PAFs. There was no relaxation of standards to maximize the efficiency of occupancy.
- d. The existing houses of PAFs were old and dilapidated. The neighborhood was also dense and lacked infrastructure. The new resettlement colony promised new better planned houses and neighborhood.
- e. No payment was expected from the PAFs.

However, the following issues remain unresolved:

- a. Renters in the existing site get displaced as have no voice in the scheme
- b. Maintenance of common property in the resettlement remains an issue and would require a community formation and joint effort
- c. Encroachment by the rehabilitated PAFs needs to be checked.

6.3.2 Provision of Housing under BSUP of JNNURM

The largest programme of housing in Nanded is currently undertaken by the Municipal Corporation under the JNNURM. So far 10 projects worth Rs. 1001.71 Crores to build 26,307 housing units have been sanctioned. The Municipal Corporation expects to make the city slum-free and has developed a policy and strategy to do so.

In the past housing delivery has largely been organized by the private sector. Lands were irregularly sub-divided by owners of large lands and sold to families who constructed their houses. The land tenure for such occupancy has been regularized under the recent Gunthewari Act. However, as families built houses in an haphazard manner, the entire area became a slum like condition. Furthermore, there are also real slums that are primarily encroachment sites. The households with tenure constitute about 80% of the total slum households³.

² Interview with Shri. Ratnakar Waghmare, DMC, NWCMC on 22nd March, 2009

³ Interview with Shri. Ratnakar Waghmare on 22nd February, 2010, with Shri Shashimohan Nande on 20th February, 2010 and Smt. Hema Dudhwala on 20th February, 2010

Some of these areas were notified as slums, while the other are recognized and listed as slums. The CDP of Nanded states that there are about 58 slum areas (25 notified and 33 un-declared) with a population of about 1.56 lakhs (31%) covering an area of 3.43 sq km (6.6% of the city area). On the other hand, the recently published Slum Policy for Nanded states that there are 245 pockets of slums. A detailed survey was undertaken by AAPIL Consultants to identify slums and Smt. Hema Dudhwala from AAPIL Consultants stated that within large pockets of slum area, “different smaller slums were identified as they were diverse in their characteristics”⁴. Shri Ratnakar Waghmare, DMC, NWCMC also explained that “neighbourhoods of urban poor (*garib vasti*) have been identified and not slums (*galicha vasti*)”⁵

Under the BSUP programme projects for 132 slum pockets have been approved so far. Along with developing housing, physical and social infrastructure also needs to be developed.

The funding arrangement under this programme :

Components	Funds from Central Govt. (as Grant)	Funds from the State Govt. (as Grant)	Funds raised by NWCMC	Funds contributed by the Beneficiary
House Construction	80%	7%	2%	11% (10% for the reserved categories & 12% for others)
Physical & Social Infrastructure Building	80%	18%	2%	0%

AAPIL Consultants were appointed to survey the slums, design the proposals and manage the redevelopment implementation. AAPIL carried out elaborate surveys and developed an online information system called the ‘Slum Permanent Record System (SPRS)’. This system compiled various kinds of data on each slum dweller recording demographic and economic conditions. Further the physical characteristics of each slum along with each house also mapped. The information collected was vetted by NWCMC officials and a beneficiary list was finalized including people who would be rehabilitated under the programme. The year 2005 was considered as the cut-off year for recognition of the beneficiary in case of families without tenure. A slum beneficiary biometric card was also prepared for each of the beneficiary.

Depending upon the ownership and tenurship patterns redevelopment strategies were developed as follows:

⁴ Interview with Smt. Hema Dudhwala on 20th February, 2010.

⁵ Interview with Shri. Ratnakar Waghmare on 22nd February, 2010

MODEL 1: In-Situ Re-Development

This was applicable for all slums where people had tenure over the land they occupied. This was also applicable for slums in municipal owned or government owned lands. The new houses were built almost exactly over the piece of land occupied and owned by the slum dwellers. On case by case basis, the streets between the houses were widened and straightened. The streets were widened to a minimum width of 1.5 meters. Small amount of land required for such widening was given by the slum dwellers. Community facilities were built in places where earlier community facilities or community toilets existed. 269 sq feet houses with two rooms and a kitchen with toilets inside were proposed / built. In most cases, ground storied structures were proposed or built. In some cases where land the land parcel is very small, ground plus one structure has been proposed / built. Thirteen types of houses have been designed to be used depending upon the site conditions. These types have been approved by the Town Planning Department based on the guidelines developed by MHADA for Low-Cost Housing. The layouts however are yet to be approved. As the current Development Control Regulations do not have provision for such development requiring relaxed standards, they were not followed. The NWCMC is currently in the process of developing revised development control regulations incorporating all such relaxations⁶.

MODEL 2: Relocation

This was applicable for slums where people had encroached on private lands or government lands where in-situ development is not possible (like edges of railway tracks etc). In this case, land reserved under the zone 'Housing for the Dishoused' category was acquired and housing complex was developed. In this case all regular town planning rules were followed for set-backs, open spaces. Ground plus three walk-up units with two rooms, a kitchen, a bathroom and a toilet has been developed in such a complex. The complex also has spaces for children's nurseries and day care facilities.

MODEL 3: In-Situ Redevelopment with land Sharing

This has been developed for one large site with 5136 households. Here one third land is owned by the Nanded Textile Mill and two third by the Gurudwara Trust. An agreement has been entered with these two owners to facilitate the redevelopment project using the land sharing mechanism. The total area of the land is 113 acres out of which 40 acres is proposed to be used for rehabilitating the slum dwellers. The remaining land is to be shared between Nanded Textile Mill and the Gurudwara Trust in the proportion of their original ownership. However, complete FSI as available to each of the parties (the Mill and the Gurudwara) in their original land will be utilized by each of them on their new parcel.

The municipality has developed several strategies to deal with other issues in the above programme⁷:

⁶ Interview with Shri Ratnakar Waghmare, DMC, NWCMC on 22nd February, 2010

⁷ Interview with Shri Shashimohan Nanda, DMC, NWCMC on 20th February, 2010

- a. Local Politicians and Government Officials negotiated together with the communities without involvement of NGOs.
- b. The Municipal Corporation is in the process of developing micro-finance possibilities for the beneficiaries so that they are able to make the contribution of 10 to 12 percent.
- c. The communities manage the transit accommodation themselves in nearby areas and the programme is not burdened with providing it
- d. In case of the relocation site, beggars and criminals have been accommodated. They have been given work in the construction of their houses.
- e. The Municipal Corporation intends to allot the house in the name of women so as to ensure that the property is safeguarded.
- f. The Municipal Corporation intends to take an undertaking from the beneficiaries that there will be no property transfers for 20 years nor there will be any additional construction for 20 years.

However, several shortcomings are observed in the implementation of the scheme;

- a. While AAPIL has developed a robust information system, the Municipal Corporation does not seem to have the capacity use it or update it. Moreover, there also seems to be an overdependence on the consultants and project implementation agencies. The Municipal Corporation perhaps requires more and better skilled staff to manage such a large project while construction as well as after it.
- b. Standards have not been followed for the layout of in-situ development. While this is a problem, it is also useful as the site conditions are difficult. It is important to note that the designing is done on a case by case manner and care is taken to ensure required light and ventilation.
- c. Similarly Development Plan reservations are not respected in case of the in-situ developments. This is not only a legality problem, but also may result in the amount of amenities required for the locality.
- d. Maintenance of the common areas in the housing complexes remains to be an issue. The Municipality currently does not seem to have a strategy to deal with this.

The Deputy Municipal Commissioner, Shri Ratnakar Waghmare's comments are most important to conclude the discussion on Nanded. He made two important points –

1. "By making houses, we do not make slum-free cities as poverty is not addressed and more slums will come up"
2. "The Municipal Corporation is young and does not have the British legacy of documentation, planning and intervention. We are continuously learning and negotiating difficult situations".



CIDCO and HUDCO built housing in the 80's in Nanded



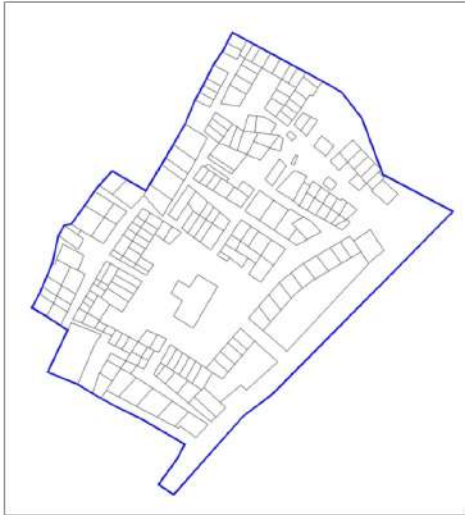
Resettlement of people (holding legal properties) displaced under the road widening schemes (related to Guru ta Gaddhi event) – Abaji Nagar, Nanded



In Situ Rehabilitation – Jai Bhim Nagar, Nanded.
Representative before and after images.



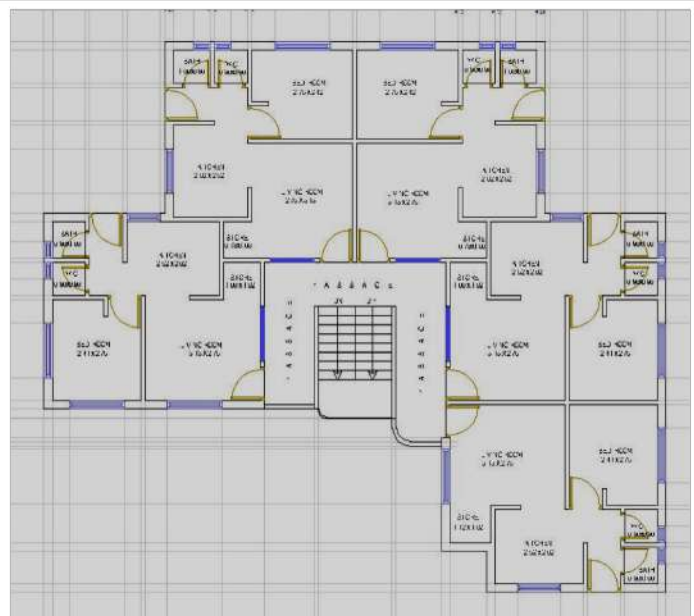
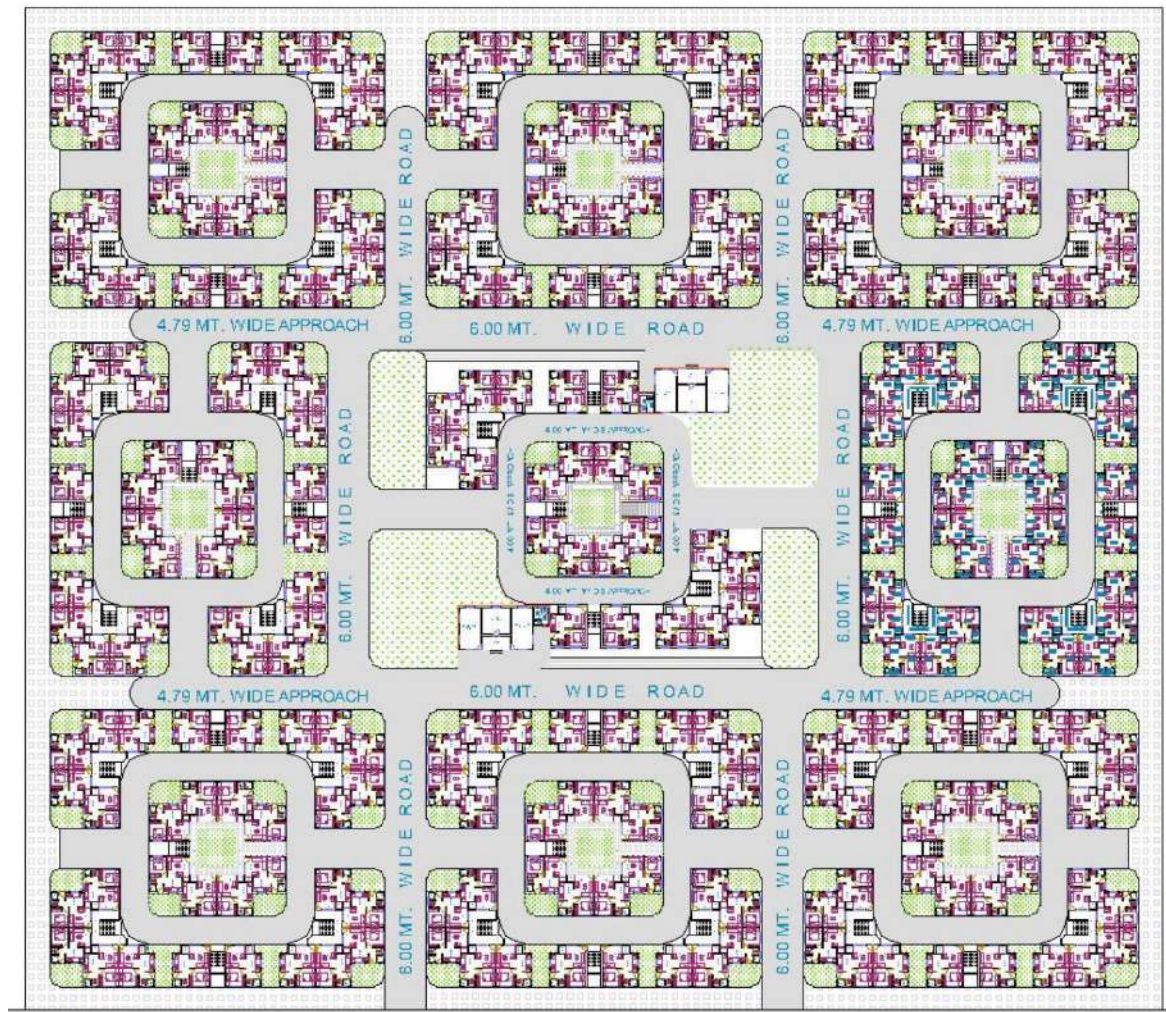
In Situ Rehabilitation – Shanti Nagar, Nanded. Representative before and after images.



In Situ Rehabilitation – Shanti Nagar, Nanded. Representative before and after images.



Resettlement Project – Site No. 34, Nanded.



Plans of Resettlement
Project – Site No. 34,
Nanded.



Resettlement Project – Site No. 34, Nanded.

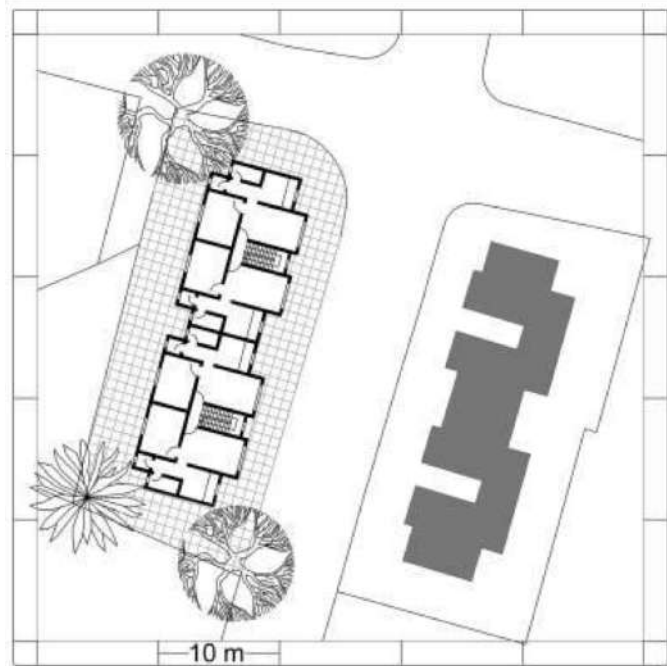
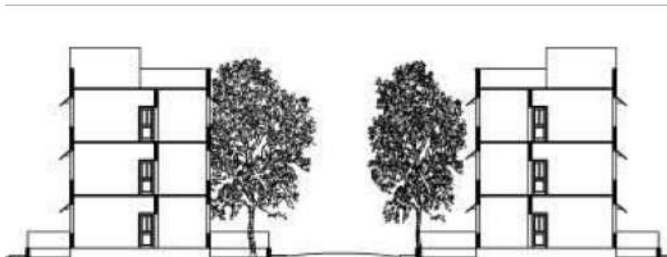
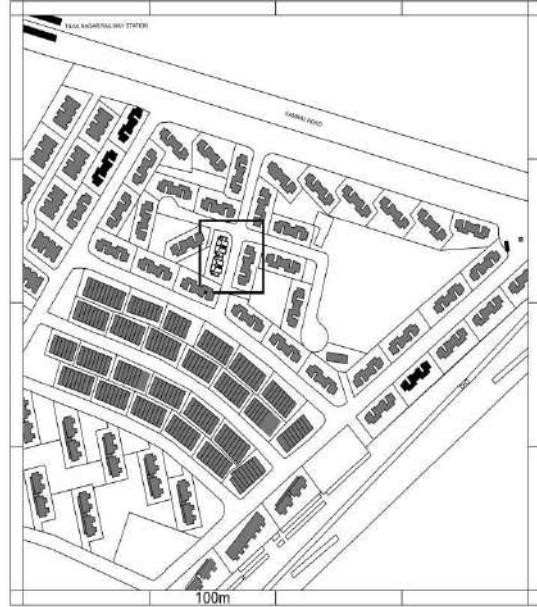
ANNEXURES

Type-1 Mass Housing by the State after Independence

With independence came further migration, both by victims of partition and people seeking opportunities in the city. This raised the housing demands in the city. Rents started spiralling. The Government started providing for the poor and at the same time encouraging private investment in housing. To check the spiralling rents, the Rent Control Act was enacted in 1947, which froze rents at 1940 levels. With meagre returns from rented properties, landlords could no longer maintain them. Moreover, providing rented accommodation was not a viable business anymore. This saw the demise of the landlord and rented housing stock in the city. In 1967, the Development Plan of Mumbai was sanctioned which brought in the concept of FSI (Floor Space Index) that restricted how much one could build according to the infrastructure available. FSI in large parts of the island city was fixed at 1.33, which was lower than that already consumed by much of the rental housing stock. Hence repairs of dilapidated properties faced a roadblock. New housing stock had to be built in areas that were undeveloped. Land had to be acquired. The state took up the responsibility of providing new housing stock through the Housing Board and later MHADA (Maharashtra Housing and Area Development Board). Land was acquired through enacting the Urban Land Ceiling Act of 1976 whereby a ceiling was on private ownership of un-built land and the state taking over the remaining land. With concepts of FSI and Urban Land Ceiling restricted what individual land owners could possess and build on.

The State further made policies for targeting the housing supply to various classes. The concepts of HIG (Higher Income Group), MIG (Middle Income Group), LIG (Lower Income Group) and EWS (Economically Weaker Section) were formulated. The State started building rented apartments for these classes. The size of the houses and specification of construction depended upon the income group. However, adequate open spaces, light, ventilation and sanitation arrangements were ensured in these colonies. The typologies also reflected the income group. The Lower income groups had houses that resembled the chawls, but had larger tenement sizes and individual toilet facilities. Lower income groups were at times given small serviced pitches of land where the families built row houses. As these families grew they added rooms and floors to these houses incrementally. In some cases, the state also built houses for cooperatives of working-class, wage-labour and other groups. On the other hand, apartments with bedrooms were made for middle and higher income groups.

The colonies were typically low rise and the densities depended on the class of the inhabitants. Today these colonies, though dilapidated, are places with maximum amount of open spaces around them. These colonies consumed lesser FSI, which in present times, offered immense opportunity for redevelopment with higher densities. These redevelopments are undertaken by private developers whereby the existing households are re-accommodated in slightly larger apartments and the additional construction allowed for such redevelopment, is sold in the open market.



Previous Page (pg 2): A building at DN Nagar Middle Income Group Housing Colony

Opposite Page (pg 3): Plan of Sahakar Nagar Housing Colonies for various income groups built by the state in the Eastern Suburbs

Above: Higher Income Group building at Sahakar Nagar

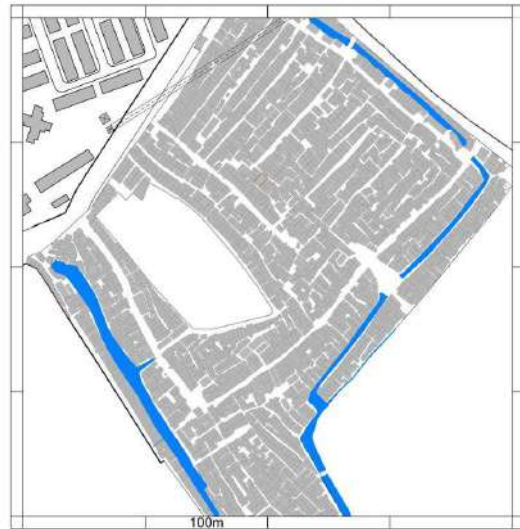
BUILDING NO. 30	
SAHAKAR NAGAR MHADA COLONY CHEMBUR	
No. of tenements	12
Size of each tenement (sq m)	50
Ground Cover of building (sq m)	223
Plot Area (sq m)	533
No. of inhabitants	60

Type-2 Slums

The economic vibrancy of Mumbai attracted people into the city much before independence. The access to housing remained inadequate and people started living in slums since the late 19th Century, providing services to the formal industries and city building activities. These settlements however grew on the outskirts of the city on marshlands and other difficult places. The city grew rapidly since the beginning of the 20th century. Marshlands and outskirts were developed. The slums that were earlier on the outskirts of the city came within. However in spite of the annual housing need for 46,000 dwellings in the 1960s and 60,000 dwellings in the 1970s, the supply of formal housing by the public and private sectors was only 17,600 and 20,600 respectively. The rest fulfilled their shelter need in the slums. But slums only came into real urban concern in the 70's when the real estate prices started climbing. Today about 60 % of Mumbai's Population live in the slums, which exist everywhere - on marshlands, along railway tracks, on open areas, public lands, private lands, between buildings and also on the pavements. The construction type varies from wood to plastic to asbestos construction and to double storey brick and concrete structures. There are slums that have a concentration of ethnic communities, of work based communities, and other such associations. There are slums that come up on construction sites and move on to other construction sites after the work gets completed.

Houses in a slum are generally very small (about 100 sq ft.). But there are instances where large houses of about 1000 – 2000 sq ft could be found. These mostly belong to the slum-lords who control land in the slum. These slum-lords use muscle-power and bribing tactics to squat on free land (generally belonging to the government). They make houses of tin sheets and bamboo (or some times even of brick and concrete). These small houses are then rented to poor people who are in search of housing. There are also houses in the slum that have original squatters. These families also in most cases build an additional room or a floor to accommodate growing families. Sometimes these additional rooms are further rented out bringing about a complex tenure pattern in a slum. A slum settlement is mostly located along a natural drain which takes care of the sewerage. Electricity and water was generally stolen, but the government makes efforts to provide basic facilities. Water supply in slums is mostly in terms of shared community taps. A slum mostly has a toilet block built by the government, but that remains inadequate. Some houses in a slum have toilets within them.

In the 70s the slums were seen as a disease, and stood for poor living conditions. But perceptions of the slums have changed. A slum dwelling has been a unit of production and a slum dweller, a unit of enterprise. The slum is not only a place for living, but is also a place of work. It has spaces, which accommodate a community washing space, a leather tannery, a ceramic kiln or a food-manufacturing unit. Today, the slum dwellers are considered integral parts of the city contributing to the economy. Their right to live in the city is protected and they cannot be evicted without rehabilitation.



Previous Page (pg 12):
Slum in Santacruz East

Opposite Page (pg 13)
Plan of Korba Mithaghar
Slums in Wadala near the
Part Area

This page
**INFRASTRUCTURE IN
THE SLUM:** Clockwise
from top left: Slums
edging the natural
watercourse, Water Pipes
laid by the Government,
Internal Streets with
Drainage lines, Public
Toilet, Open air bathroom



Type-3 Slum Improvement and Resettlement in 70s & 80s

It was not until 1970s that the state began to think about slums as possible solutions to housing shortages. In 1970s the Slum Improvement Program was launched with the mandate to provide water supply, toilets, roads, drainage and streetlights for slum dwellers. The scheme included provision of community taps, community latrines, construction drains and pathways and streetlights and was financed by grants from the central. The Maharashtra Slum Improvement Board was set up by the state government in 1974 to co-ordinate this work. This was later merged with Housing Authority in 1977 and it improved slums on government and private lands. The Municipality also improved slums on municipal land. Shortage of funds also hampered the success of this programme. Another development in the 70s was the passing of the Slum (Improvement, Clearance and Redevelopment) Act in 1971 under which, a competent authority may, declare an area to be 'slum' if it is a source of danger to health, safety or convenience of the public by the reason of that area having inadequate amenities or being unsanitary, squalid or over crowded. Improvements under the Act were only carried out in slums on government lands. Paradoxically owners of slums on private land took advantage of this act to evict slum dwellers. The government of Maharashtra subsequently issued an ordinance to prevent eviction of occupants in notified slums.

Later in 1975, in an effort to prevent further proliferation of squatter settlements, the state government enacted the *Maharashtra Vacant Lands (Prohibition of Unauthorised Structures and Summary Eviction) Act, 1975*. According to the Act, all lands encroached by squatters could be considered vacant, all slums covered by the Act, temporary and could be removed, police could be mobilized for eviction and alternative accommodation would have to be provided. Squatters had to pay 'compensation' for unauthorized occupation of land. Due to these provisions, courts could not move against evictions and hence a spate of demolitions was carried out in the wake of this act.

The slum dwellers that were evicted during the mid 70s were relocated by the state in various parts of the city. They were given serviced pitches of about 160 square feet where they had to build their houses. These families had to pay rent to the state and they thus became tenants of the state. Such pitches were adjoining each other and we find a variation of row houses in these resettled colonies. Later as families grew, they added a room or a floor. Some times rooms were also added and rented. Houses along the road were converted into shops and residences moved to upper stories. Such settlements were also provided with community toilet facilities and community water connections.

Today, lands under these settlements are highly sought by builders for redevelopment. In many places, builders pay a very high price and evict the slum dwellers from these colonies. They then take possession of the land and build towers.



Previous Page (pg 18): Bharat Nagar MHADA Resettlement Scheme

Opposite Page (pg 19): Bharat Nagar (Note: The additions and subdivisions are recorded in the central surveyed part. The remaining parts are drawn as per original allotments to families)

Above: Streets in Bharat Nagar carrying services

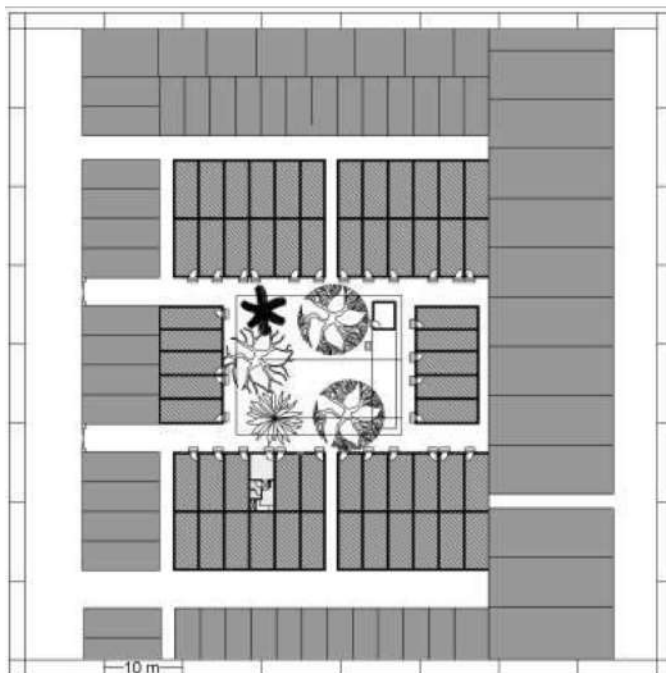
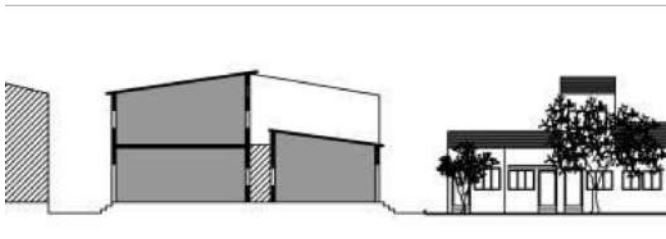
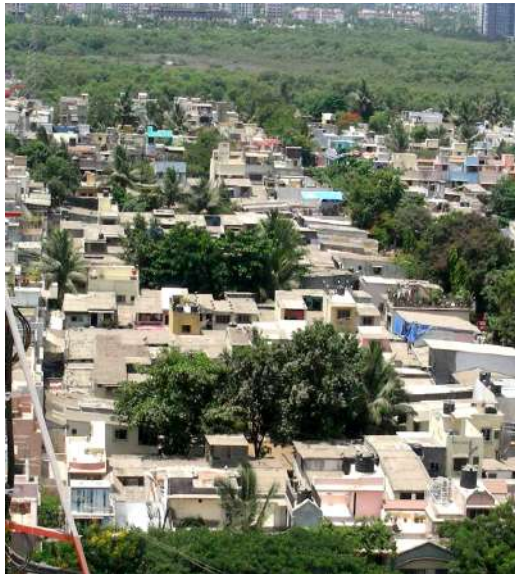
Type-4 Sites and Services Schemes (SSS)

By 1986 the state had provided about 100,000 houses to various income groups out of which 75% were for the lower income groups. However post 1986, the share of high income housing increased as private sector involvement grew in the housing sector. Supply of low income and affordable housing continued to drop abysmally. Subsequently the 80s saw major demolitions with the vision of turning Mumbai into Singapore. However a Supreme court judgement decreed that the evictions would not only result in deprivation of shelter but would also inevitably lead to deprivation of their means of livelihood which means deprivation of life. The Right to Life under article 21 was invoked here. This judgement brought about a major shift in the Government's stance.

The World Bank's *Bombay Urban Development Project (BUDP)*, came into being in 1985, with two programmes – *the Slum Up gradation Programme (SUP)* and *the Low Income Group Shelter Programme (LISP)*. These were the Mumbai versions of the Site and Services Schemes. In the SUP, the slum lands not reserved for public use were given on a long lease of 30 years to the co-operative societies of slum dwellers at a nominal rent. Government could provide upgraded civic amenities on a cost-recovery basis and soft loans to the slum dwellers for renovation of their structures on an as-is-where-is basis against the mortgage of individual leasehold rights. Under the LISP, the state provided subsidized land to Economically Weaker Sections (EWS) and Low Income Groups (LIG) to build their own houses. The major mantras brought in with the BUDP were regularization of slums, supply of serviced lands to manage slums, granting of secure long term legal tenure and cost recovery.

However there were several problems with this scheme, the first being that many were excluded from the scheme as it did not recognize the various complex tenancies that slum areas involve. Further establishing the eligibility of households created serious problems. Secondly, technical problems of extending services and augmenting site infrastructure were faced. The recovery of infrastructure costs failed because of lack of mechanisms to assess incomes and strengthen systems of disbursements and collection of loans. Further pressures from Real Estate Developers to not transfer land to slum dwellers, the refusal of the Central government to allow the implementation of the scheme on land held by them and perhaps a lack of push from the state government side, caused the demise of this scheme. Only about 22,000 households were covered in this scheme until it was terminated in 1994.

Typologically these schemes had a row of houses strung around a courtyard. These courtyards would be accessed from roads that were then connected to the main roads. The edge of the main roads had higher income group housing. People built their houses as per their capabilities in these schemes. Today, these settlements are showing a degree of transformation as there is a new class moving into these lands. Some houses in these are getting transformed into clinics, design studios, etc.



Previous Page (pg 22): Site and Service Scheme at Gorai

Opposite Page (pg 23): Plan of Gorai S&S Scheme

Top: Internal Courtyard in the S&S Scheme

Above: Entrance to the S&S Scheme

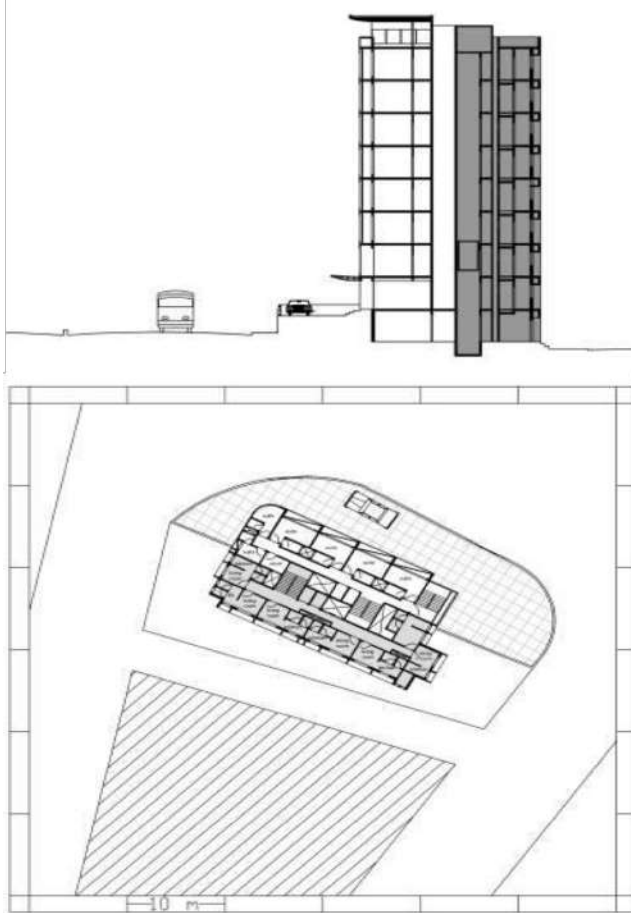
PLOT NO. 28 TAPTSYA	
GORAI (DISTANT WESTERN SUBURBO	
No. of tenements	70
Size of each tenement (sq m)	24
Ground Cover of building (sq m)	1422
Plot Area (sq m)	2688
No. of inhabitants	350

Type-5 Slum Rehabilitation with Private Initiative

Projects involving private initiatives in Slum redevelopments came about since the early 90s. The Scheme sought to involve the Private Developers to address the problem of Slums. As per the scheme, the slum dwellers need to form a society and register it with the Slum Redevelopment Authority (SRA, instituted as a single window to overlook the schemes). The society formation required 70 % of the slum dwellers to agree to the scheme. These societies could then appoint a Developer who would develop the land on which the slum existed. The Developer is required to provide free tenements of 20.9 sq m to all families registered in the society. During the construction period, the Developer is required to accommodate the slum dwellers in a transit camp and also needs to deposit Rs 20000/- per tenement with the SRA for future maintenance. In return, the Developer gets free additional development rights (75% to 133% of free housing for the slum dwellers). The Developer could use these rights to develop real estate to be sold in the open market. The Developer has to use this right on the same site where the slum is rehabilitated. To accommodate this intensive development with very high densities, the schemes got additional FSI and rules on open spaces were relaxed. Two buildings of 8 stories could come next to each other at a distance of 3 meters. If with all these relaxations, the Developer was still not able to still use the additional development in the site, then these rights were given as Transferable Development Rights that could be used in an other site.

The Slum Rehabilitation Scheme continues to be the present housing delivery for the poor. All other slum improvement schemes have slowly phased out. Builders continue to look at the land as valuable resource to be usurped. The city has recorded many instances where builders have forcibly taken over slum lands by producing bogus names of slum dwellers or getting their consent by fraudulent means. Moreover this scheme being a market oriented one works in areas of high real estate prices and not in many others. A close look at the designs of the rehabilitation components show a complete disregard to the community structures and work and living patterns of slum communities. In the attempt to maximize profits no attempts are made to rethink these designs and typologies. Developers and architects seem to spend all their time designing for the open market. Many other issues like the complex and multiple tenancies that the slums house, remain unanswered in this scheme and those 'ineligible' find themselves thrown out of the system. Many of the slum communities cannot manage the high maintenance costs associated with the built forms.

More recently, the Government has proposed a new model for redeveloping large slum areas. In this model, a planning agency is declared as a Special Planning Authority over such a slum. Such an authority could then make plans and develop the area. Incentive FSI in this model is much higher than the existing scheme. Moreover, the Authority does not even require 70% consent from the slum dwellers. Such a model is being experimented in Dharavi

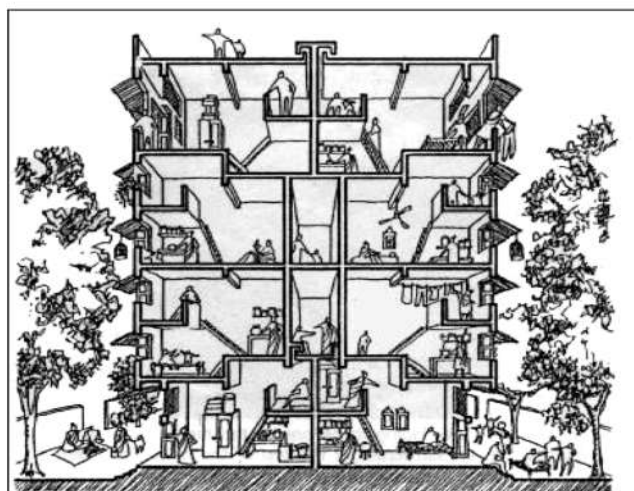


Previous Page (pg 28): Privately built Slum Rehabilitation Scheme in Jogeshwari (Western Suburbs)

Opposite Page (pg 29): Location Plan Slum Rehabilitation Scheme in Andheri East (Western Suburbs)

Above: Slum Rehabilitation Scheme with a Hotel built in the front using the incentive FSI

SUBHA GALAXY	
ANDHERI (E) WESTERN SUBURB	
No. of tenements	40
Size of each tenement (sq m)	14
Ground Cover of building (sq m)	274
Plot Area (sq m)	316
No. of inhabitants (only rehab)	200



Top Left: Transit Camp for Slum Dwellers built with prefab construction at Sewri near the port lands

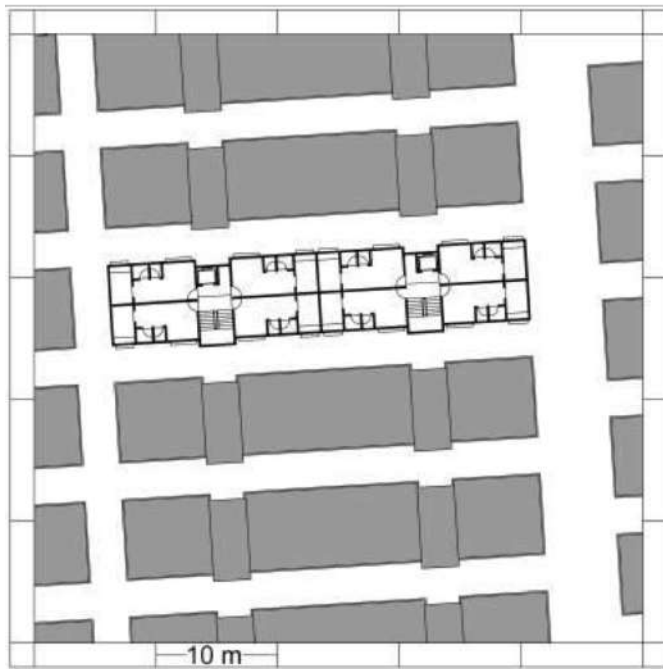
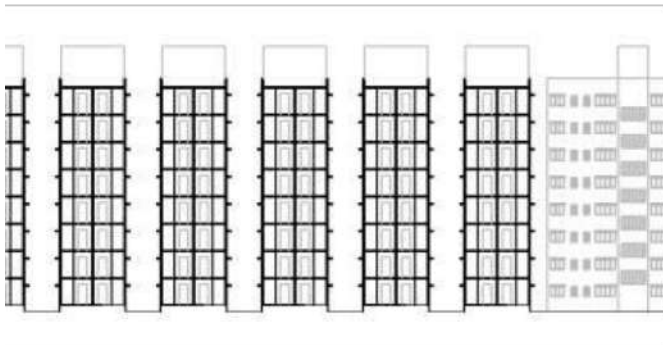
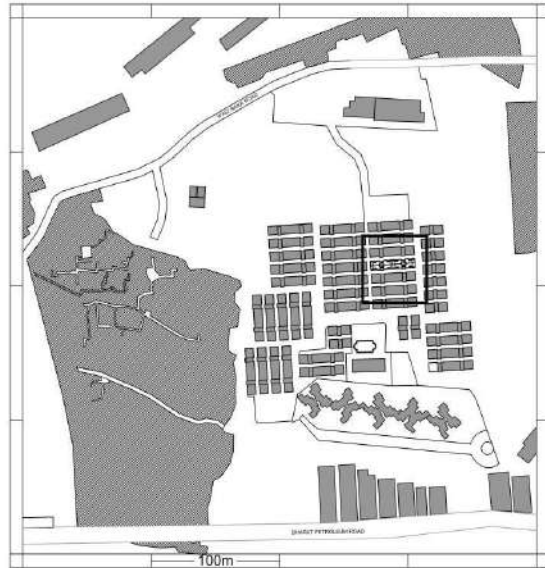
Above: Construction of Transit Camps with prefab units

Left: Experiment by an NGO, SPARC that provided 14 feet high tenements for slum dwellers allowing mezzanines to be inserted, thereby increasing space for economic activities or for accommodating larger families

Type-6 Rehabilitation of the Project Affected (PAP) for Infrastructure Projects

Since the past 5 years, the Government is aiming to construct some 50,000 tenements to relocate and rehabilitate slum dwellers that are being displaced due to the mega road building projects of the state. About 25,000 families have been relocated so far in these tenements. The state has adopted an interesting model to undertake this resettlement. A private builder is involved in building these tenements of 20.9 sq m each. The builder is to give these tenements free of cost to the state. In return the builder gets transferable development rights which could be used in other parts of the city. For the builder it is an extremely profitable endeavour. The builder builds each sq ft for about Rs 600 to rehabilitate slum dwellers. The builder also builds another sq ft at Rs 900 (with better specifications) to sell at a place with very high land price. The builder gets about Rs. 4500 to Rs 6000 for this per sq ft. Hence for each investment of about Rs. 1500, the builder makes Rs 4500 to Rs 6000. Also the builder is able to dispose off land with cheap real estate value in the city and get a higher price for it. On the other hand the state gets these houses free of cost. The problem however is that the rehabilitation sites are on the outskirts of the city where the slum dwellers are made to move to. These places do not provide opportunities for people to work. A women in a slum who works as a household maid prefers to be close to her house to organise her time for household work. On the other hand industrial workers in the slum also have to move and find new work that may require new skills as these industries are forced to close down as they become unviable in the new locations that do not offer the same networks. These schemes have so far proved to be not very popular with slum communities.

The government appointed NGOs to negotiate with the slum dwellers to make the shifting easy. However, the scales of operations being large, the NGOs are taken away from grass roots fine-grained operations of working with communities and their specific needs to mega management and gross generalisations. Such broad brushed approaches are unable to understand the complexities of multiple tenancies through which communities claims rights over space and the various socio-economic networks. When such understanding does not become a part of the interventions, housing is equated with compensating 20.9 sq m floor space minus all the other complexities. Moreover, these houses cross all limits in compromising with the habitability. Bars of 8 stories building are developed at 3 m distances from each other. Light and ventilation conditions in these tenements remain pathetic. Further, high densities in these buildings are bound to overuse the resources such as lifts. Maintaining such buildings might get more difficult. Further, the relocations have stripped people of their economic networks and the designs show no recognition of the slum dwelling being a place of work. Further, it would be extremely difficult to deal with these sites in cases of disaster or after they get dilapidated, which they are showing signs of, within a year or two of their construction. This model of Resettlement and Rehabilitation is sought by more and more government agencies to execute mega projects like enlarging the airport, conserving a fort or even for protecting the national park.



Previous Page (pg 34): Resettlement and Rehabilitation (R&R) Scheme built by the State for slum dwellers displaced by Road Projects

Opposite page (pg 35): Plan of R&R Scheme at Anik Panjrapol

Above: 3m distance between two buildings of G+7 buildings in an R&R Scheme

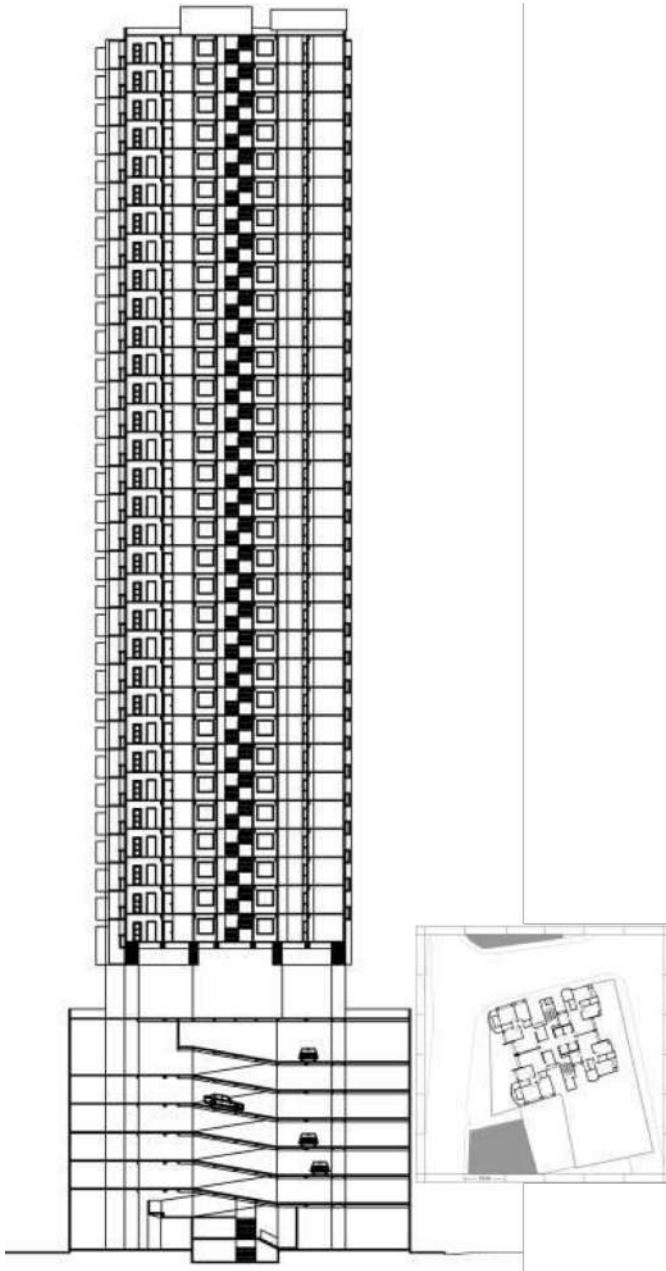
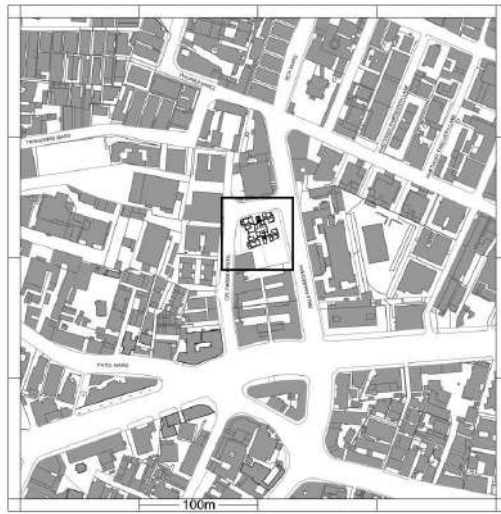
ANIK 1 R&R	
ANIK PANJRAPOL CHEMBUR	
No. of tenements	64
Size of each tenement (sq m)	24
Ground Cover of building (sq m)	230
No. of inhabitants	320
45 such buildings are constructed over an area of about 19000 sq m.	

Type-7 Redevelopment of Dilapidated Buildings

The central and inner city areas of Mumbai have a large number of old housing stock built during the late 19th and early 20th century. It is estimated that there are around 19000 such buildings in the central and inner city areas. There have been several instances of building collapse in these areas in the 50s and the 60s. The Rent Control Act is popularly blamed for the dilapidation of this housing stock as it is argued that landlords did not get enough resources to upkeep of the buildings. Along with the effects of the Rent Control Act, the overuse of resources, the poor economic situation of the tenants as well as aging building stock could be listed as reasons for the dilapidation of this housing stock. The deteriorating housing stock and loss of life due to building collapses forced the government to take up the responsibility of repairing rent controlled buildings. The government collected a nominal Repair Cess to support this activity. As the money accumulated for repair was extremely less, such an programme did not yield much. It was uneconomical for the Government to undertake such an activity all by itself without a clear financial policy. Moreover, there was a view that it wasn't worth repairing these buildings, but rather it would be better to reconstruct the entire building.

With such a background, the government came up with a complete new regulation in 1997 popularly called as the CESS Rule. At the core of the policy was the idea to encourage private participation in reconstructing dilapidated buildings and to discourage their repair. The policy suggested that a building listed as a CESS building could undergo reconstruction if the landlord and seventy percent of the tenants agreed. In such a case they could hire a developer for the new construction. The old tenants get flats that are as large as their old tenement or 20.9 square meter, whichever is more. To offset this large cost, the regulation provided additional development rights on the property. Hence, the new building would have tenements for the old tenants plus an additional real estate for selling in the open market. The additional development right is marked at 50% (or FSI of 2.5, whichever is more) of the existing development. There was also an incentive 10% additional FSI given for older buildings making the total additional FSI at 60% for quicker responses.

The policy brought about a rush by developers to invest and redevelop the dilapidated buildings. However, one sees that the new redevelopments have come up only in areas with very high real estate values and not in the other areas where the problem of dilapidation is very acute. But the greater problem was the larger implication of the rule on the city. The new redevelopments are typically tall towers in the middle of dense old city fabrics. These towers have large houses, large multi storied parking spaces, terrace swimming pools etc. Their location close to business areas of the city make them highly sought amongst the elite groups. The profits made from these are never invested back into the city rather this newer development has gentrified these areas and further heavily burdened the infrastructure.



Previous Page (pg 38) : New Redevelopment of a dilapidated building in the Inner-city Area following the new redevelopment policy

Opposite Page (pg 39): Plan of the Inner-city Area of Girgaon

Above: Rushabh Apartments at Girgaon
(Photo Ciourtesy: Ubaid Ansari)

RUSHABH APARTMENTS	
GIRGAON INNER CITY	
No. of tenements	124
Each tenement (s m)	108(3bhk,84(2bhk)
Ground Cover (sq m)	1216
Plot Area (sq m)	1729
No. of inhabitants	620

ANNEXURE - 2

Categorization of Approaches, Strategies and Interventions

	Approaches	Strategies	Interventions (Projects / Programmes)	Year(s)
1	Eviction	Eviction	Eviction	1960s
2	Protection + Environmental Improvement	Slum Improvement Programmes	Environment Improvement in Urban Slums	1970s
			BSUP Reforms under JNNURM for earmarking funds for Infrastructure in slums (including setting standards)	Late 2000s
3	Protection + Improvement + Tenure	Slum Upgradation Programmes	Slum Upgradation Programme (under BUDP)	Mid 1980s
4	Redevelopment	Redevelopment with subsidy & sometimes with local commitment	Prime Minister's Grant programme	Mid 1980s
		Redevelopment with subsidy or Free Housing using market	Slum Redevelopment Scheme	1991-1995
			Slum Rehabilitation Scheme	1995 onwards
			Shivshahi Punarvasan Prakalp Ltd.	Late 1990's
			Cessed Building Redevelopment	Early 2000 onwards
5	Resettlement	Eviction + New Tenure	Resettlement Colonies	1970s
		Eviction + Free House using market	MUTP, MUIP, CR, River widening, Forest R&R	2000s
6	Low income Housing	Site and Services Schemes	Low Income Group Shelter programme (under BUDP)	Mid 1980s
		Subsidized Provision with + local commitment	BSUP under JNNURM	Mid 2000s
			Mill Lands Redevelopment	Mid 2000s
			LIG + EWS Housing by MHADA	1970s onwards
			LIG + EWS Housing by CIDCO in Navi Mumbai	1970s onwards
		Provision using market instruments	Rental Housing	Late 2000s
			Reservations in private Developments (like Special Townships)	Late 2000s
			Dharavi Redevelopment Project	Late 2000s