The case of Mumbai, India

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A. URBAN CONTEXT

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1. NATIONAL OVERVIEW: INDIA, AN URBANISING COUNTRY

According to the provisional results of the 2001 Census of India the population of India has passed the one billion mark with a sharp decline from its decadal growth rate of 21.34 per cent over the last five decades. The urban population constitutes 27.8 per cent of the total, with a decadal growth rate of 31.2 per cent. The level of urbanisation is 2.1 per cent higher than in 1991. The density of population has increased steadily from 117 persons per km² in 1951 to 324 persons per km² in 2001. Urban agglomerations or cities with a population of more than one million have increased from 22 in 1991 to 35 in 2001 with Greater Mumbai being the largest at 16.4 million. The Mumbai Metropolitan Region is the largest urban agglomeration in the country. For the first time detailed data on slum areas in the country have been collected in the 2001 census. The total slum population in the country is 40.3 million comprising 22.6 percent of the total urban population of the towns which reported slums. The largest slum population was registered in the State of Maharashtra. Around 6 per cent of Maharashtra's population lives in the slums of the state capital, Greater Mumbai.

2. HISTORY OF MUMBAI

Mumbai, originally a group of seven marshy islands on the west coast of India and a fishing village until the 16th century, was ceded by the Moguls to the Portuguese in the 1630s. Later the King of England leased it to the East India Company. It developed as an important port, used by the British for more than two centuries. The city started growing after the cottongrowing areas of the hinterland were connected to Mumbai by rail, which facilitated the supply of cotton to factories in England. By 1864, the city's population had reached 817,000. With the growth of manufacturing units for cotton textiles, by 1888 Mumbai had emerged as the second largest commercial centre in India after Calcutta. The city gradually became more and more industrialised and attracted a massive supply of skilled and unskilled labour from all over the country. The growth of the city was steady as its manufacturing sector became more diversified with the expansion into the chemicals industry, basic metal and engineering products. The city of Mumbai was the first in the country to have a municipal corporation, created through special provincial legislation in 1888. After independence in 1947, the growth of the port, the discovery of offshore oil, the emergence of financial services, the development of national and international trade and the establishment of many public sector units and educational institutions gave further impetus to the growth of the city. Mumbai also became the capital of the State of Maharashtra, adding further to its administrative importance.

3. THE PHYSICAL CITY

Mumbai occupies a long, narrow peninsula in the Arabian Sea on the west coast of India. The region on the whole is low-lying but not flat. The climate is hot and humid and the monsoon brings heavy rain averaging about 2000 mm per annum.

Mumbai City is an island of 69 km². The original seven small islands were combined, partly through silting and partly through land reclamation. Most of the employment centres and a few high-density residential areas are located on the island strip of 24 km2. As the island became more commercialised, the residential developments of the British and wealthy Indians moved from the southern parts of the city along the sea coast as extended suburbs, while the housing of the working classes grew northwards. The second component of the city includes the suburban area of Salsette Island north of Mahim Creek, which began to grow at a faster rate after independence due to congestion on the main Island City. These two together form the Greater Mumbai area of 437.71 km², administered by the Municipal Corporation of Bombay. For purposes of revenue and general administration, Greater Mumbai is considered as one district. The Island City is connected to the region by north-south rail and road arteries. Suburban development requires north-south movements of millions of daily commuters to workplaces in the Island City on suburban trains that are highly overcrowded. The city has been divided into six zones and 24 wards to facilitate the administration of the Municipal Corporation.

After 1975, the influence of the city was extended into the Bombay Metropolitan Region (BMR). The BMR region, covering an area of 4,355 km² was formally delineated after the enactment of Bombay Metropolitan Regional Development Authority (BMRDA now MMRDA) Act in 1974.

The Bombay Metropolitan Region includes Greater Mumbai, Thane Municipal Corporation, Kalyan Municipal Corporation, Virar-Bhayandar, Bhiwandi (standard urban area VI), New Mumbai, (administered by the City Industrial Development Corporation, CIDCO) and the rest of the BMR (under smaller municipal councils, semi-urban areas and villages). In order to relieve the burden on the main city and to deflect city growth to the region, the government accepted the proposal to set up a self-contained twin city across the harbour which is more or less independent of Mumbai.

The CIDCO was set up for this purpose in 1970 as a development authority on the model of British New Town Development Corporation to develop a number of nodes. This is now known as Navi Mumbai (New Mumbai).

4. DEMOGRAPHICS

The population of Greater Mumbai has increased more than twelve times in the last century. Until 1950, most of the growth remained within the Island City but this significantly reduced after 1971 due to congestion (see **Table 1**). After independence, with the influx of refugees, both the eastern and western suburbs started growing rapidly. Since 1981, the suburban district of Mumbai has become the largest district in the State of Maharashtra in terms of population. The population has led to densities as high as 48,215 persons per km² in Mumbai and 16,082 per km² in suburban Mumbai (Census, 2001).

Table 1: Zones and Wards in Greater Mumbai

Zone	Name of Zone	Wards	
- 1	Inner island city	A,B,C,D,E	
II	Outer island city	FS,FN,GS,GN	
Ш	Inner WesternSuburns	HE,HW,KE,KW	
IV	Outer Western Suburbs	PN,PS,RS,RC,RN	
V	Inner Eastern Suburbs	L,ME,MW	

The population growth has further spilled over in the BMR region and the region has been continuously growing for the last fifty years. Migration from within the state and from the various parts of the country into the city has played a significant role in its population growth. Greater Mumbai is expected to accommodate 129 million people by 2011 (BMRDA, 1994).

According to the Census 2001 for Maharashtra, the average size of households declined from 5.1 members to 4.8 in 1991. During last 30 years the sex ratio (the number of females per thousand males) of Mumbai has increased from 670 in 1971 to 774 in 2001. Suburban districts have also shown improvements from 769 in 1971 to 826 in 2001. However, these are still the lowest of all the districts in the State of Maharashtra. However, in terms of literacy Mumbai suburban district has the highest literacy rate of 87.1 per cent (Census of India, 2001).

Table2: Population growth in Greater Mumbai

Year	Island City	Suburbs	Total	BMR Urban	Mumbai's share in urban Population on Maharashtra
1901	7,75,968	1,51,988	9,27,956	n/a	25.3
1911	9,79,445	1,69,312	11,48,757	n/a	31.3
1921	11,75,914	2,04,534	13,80,448	-	32.3
1931	11,61,383	2,36,429	13,97,812	-	28.4
1941	14,89,383	3,11,473	18,01,356	18,10,000	28.9
1951	23,29,020	6,65,424	29,94,444	33,10,000	32.2
1961	27,77,933	13,80,123	41,52,056	46,60,000	37.2
1971	30,70,378	28,99,617	59,70,575	68,30,000	0.38
1981	32,85,040	49,58,365	82,43,405	96,50,000	37.3
1991	31,74,889	67,51,002	99,25,891	134,50,000	32.5
2001	33,26,837	85,87,561	119,14,398	163,60,000	-

Source: BMRDA, 1994 and Census of India, 2001

Table 3: Household Income Distribution in Mumbai, 1993

Average Annual Income in US\$				
Quintile I	Quintile II	Quintile III	Quintile IV	Quintile V
373.84	619.97	938.53	1552.92	2496.55
Source: India National Report, Habitat II. (Government of India, 1996)				

The population of Mumbai is marked by its social heterogeneity cutting across racial, religious, regional and linguistic lines. Each community initially had its niche in the occupational structure. These include the Gujrati merchants, the influential Parsis, Jain traders, Muslim retailers, and the native Maharashtrians who worked in offices and industries. Migrants from the southern and northern states of India generally worked either in the construction or in the service sector, while the Sindhi refugees from West Pakistan entered the commerce sector. The Mumbai textile workers have always been considered the leaders of the industrial working class in India. The various religious and caste communities remained largely encapsulated and, in spite of being juxtaposed in Mumbai's cosmopolitan setting, continued to maintain lifestyles, which differed relatively little from those practised in their respective regions of origin (Desai, 1995, pp-96). According to a sample survey of households in the BMR region in 1989, 46 per cent of households were migrants. The mother tongue of nearly 50 per cent households was Marathi followed by Gujrati (15 per cent), Hindi (9 per

cent) and Urdu (6 per cent). Unemployment was not a serious problem and the average number of earners per household was 1.7 (BMRDA, 1994).

Household income distribution showed that in 1993 the average income in the first quintile was 15 per cent of the average income in the fifth quintile.

5. THE URBAN ECONOMY

Mumbai's contribution to the growth of the Indian economy has been significant as nearly 40 per cent of state domestic production originates in Mumbai. It is therefore called the 'commercial capital of India'. With its port, manufacturing industry, (traditional and modern), government and financial institutions, trade and services, Mumbai represents one of the most diversified and vibrant economies in the country. The Draft Regional Plan for BMR, 1994 (BMRDA, 1994), has presented some of the trends in the changing economy of the city. The basic metals and engineering industry and the chemicals and pharmaceutical industry are important contributors besides many supportive ancillary enterprises. The port supports the industries dependent on imports of raw materials like crude oil. Mumbai airport handles the major share of India's international passenger and cargo movements. The location of the headquarters of the Reserve Bank of India and the Mumbai stock exchange has attracted large numbers of financial institutions and banks. Alarmed by the environmental problems of the 'oppressive size' of the city, the Bombay Metropolitan Regional Plan of 1975 proposed deterring any growth in employment levels in Mumbai through dispersal of industries. The State Government progressively decided to curb the location of new and expansion of existing industries and commercial establishments in the city. The proportion of workers to total population has declined over the last few decades and was 34.6 per cent in 1991. The share of industrial employment other than that engaged in household industry has continued to remain dominant. But share of manufacturing sector employment has reduced from 43.8 per cent in 1971 to 28.5 per cent in 1990. Whereas in the service sector, the share of employment has gone up from 18.5 per cent in 1970 to 29.1 per cent in 1990. There is steady growth in the share of female employment in both the public and private sectors. Informal sector employment is steadily growing and the Economic Census estimates its share was 44 per cent in 1990. In the context of liberalisation of economic policies, the revised regional Plan (1991-2011) recognised the potential of Mumbai to function as a 'global city' and recommended the promotion of modern environmental friendly industries and the revival and replacement of sick industries. The city offers opportunities for economic mobility: the percentage of population below the poverty line was much lower - only 8.5 per cent - in 1998 than the national and state urban averages (Government of India, 2001).

6. GOVERNANCE

According to the Indian Constitution, land and housing, urban development and provision of civic infrastructure fall within the purview of state governments who are legally empowered to formulate and execute related policies. The central government however plays a significant role through the devolution of resources to state governments within the framework of National Five Year Plans. The state urban development department is in charge of the Town Planning Department, Urban Development Authority, urban water supply and sewerage. The Housing and Special Assistance Department is responsible for housing policy, land ceilings, rent control, slum upgrading and supervision of foreign aid projects.

Statutory bodies in Mumbai include the Greater Mumbai Municipal Corporation (BMC/GMMC), which enjoyed significant autonomy until the mid-eighties. It is the most affluent, and relatively most efficient local body in the country. Its range of services includes public transport, electricity, apart from other municipal services. It is responsible for the Master Plan of the city and enforcement of development control regulations. It is not directly involved in public housing or slum improvement.

However, in a significant move towards decentralisation, the 74th Amendment to the Constitution of India has empowered urban local self-government by devolution of functions like urban planning, slum improvement and poverty alleviation as well as other responsibilities.

The Mumbai (earlier Bombay) Metropolitan Development Authority (BMRDA/MMRDA) is responsible for regional planning and co-ordinating and supervising development efforts in the Mumbai Metropolitan Region. World Bank Assistance for its 'Shelter Project" in the mid-80s was channelled through the MMRDA and the Maharashtra Housing and Area Development Authority (MHADA) which is the main agency supplying public housing. The Collector of Mumbai is a revenue executive responsible for land management aspects related to titles and deeds of ownership of land. The Office of the Collector is responsible for issuing identity cards to slum dwellers, the collection of service charges from them, and the granting of entitlements to government lands and removal of unauthorised structures from public land. By a notification in 1995, the Government of Maharashtra (GOM) appointed a 'Slum Rehabilitation Authority' (SRA) under the provisions of Maharashtra Slum Areas Act, 1971. As per the Maharashtra Regional and town Planning (Amendment) Act, 1995, the Authority has been granted a status of the Planning Authority for Redevelopment Schemes. The Authority is responsible for reviewing the slum situation, formulating schemes for rehabilitation of slum areas and implementing the Slum Rehabilitation Scheme.

Private builders and developers play a very significant role not only in developing land and providing housing but also in slum rehabilitation. The period after the national emergency in 1976 saw the emergence of a supportive role of NGOs. The large-scale demolition of squatter settlements heightened the activism around the issue of tenure. There are more than 100 NGOs in Mumbai aimed at mobilising the urban poor to press their rights to housing (Desai, 1995, pp 294). Mumbai has an impressive number of high profile non-governmental organisations (NGOs) like SPARC and YUVA (Youth for Unity and Voluntary Action), which are involved in a broad spectrum of activities in poor neighbourhoods and have been strong in policy advocacy. NGOs have acted as strong pressure groups against evictions of squatters and pavement dwellers and for provision of better services in slums. Apart from builders' associations the Practicing Engineers, Architects and Planners Association (PEATA), forms another vocal and important pressure group specially for relaxation of development control norms and for repealing of Urban Land Ceiling Act as many architects, planners and engineers are involved in slum redevelopment schemes.

The State Government encourages formal community organisations. Many such CBOs have aligned to form the National Slum Dwellers Federation (NSDF). Established in 1974, it has been responsible for organising and mobilising the poor for fighting demolitions and securing amenities for slum dwellers. The NSDF has constituent federations such as the Railway Slum Dwellers' Federation, the Airport Authority Slum Dwellers' Federation the Pavement Dwellers' Federation etc. In recognition of his work, the President of the NSDF was awarded the Megasaysay Award.

The role of politicians and political parties is important as access to strategic resources, at least for disadvantaged lower-class groups, is through political rather than other channels. Slums in Mumbai need water, electricity, schools, testimonials to good character, and the like. These are obtained largely through political pressure and contacts. The system is such that politicians need support and bargain for it through promises of patronage and favours. The Republican Party and the Shiv Sena are in part generated by this system of mutually sustaining pay-offs (Desai, 1995, pp297).

B. SLUMS IN MUMBAI

1. TYPES AND ORIGINS OF SLUMS IN MUMBAI

Housing options for poor in Mumbai are: *Chawls*; *Patra chawls* (consisting mainly of semi-permanent structures, which can be both authorised and unauthorised); *Zopadpattis* (squatter housing); and pavement dwellings. Although pavement dwellings and chawls have poor slum-like conditions, these do not fall under the legal definition of 'slum'.

Chawls were rental tenements constructed in Mumbai by factory owners and landowners for low-income workers between 1920 and 1956. Later, the Port Authorities and a few other public sector units began renting out similar tenements to their workers. One-room tenements with cooking places and shared common lavatories were provided, with the aim of housing mostly single men for nominal rents. With the consolidation of male migrants in the city, their families joined them. Consequently densities in these single room tenements increased phenomenally and structures began to deteriorate very fast. Due to rent freezes imposed by the Rent Control Act during the Second World War, the building of chawls became unprofitable

Map: Location of slums in Mumbai, Census 1976

THANE

THANE

MUNICIPAL BIOLEGARY

MALVINE BRALVARY INSTRUMENT OF SLUMS

MACS BAY

MACS ROADS

SLUM

MIMBAI CITY MAP

LOCATION OF SLUMS

NOTIFIED IN 1976

CENSUS

SLUM

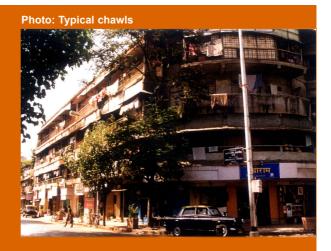
Source:Unknown

for landlords and their supply came to a halt by 1950. Rent freeze also led to a lack of investment by owners in repair and maintenance of existing chawls. In many cases residential tenements were put to commercial and industrial uses resulting in excessive loading and damaging the structure. The saline and humid weather caused dampness and corroded the steel in the structure. Faced with serious problems of decay and dilapidation chawls were in precarious conditions, some collapsing during the monsoon every year. A 1957 Mumbai Municipal Corporation Survey showed that of the 36,000 buildings within the city area, 49 per cent had been built before 1905. In 1969, about 20,000 chawls in dilapidated conditions housed two million people (Dua, 1990).

Pavement Dwellers are households, dominated by single male migrants living in hutments built on the footpaths of Mumbai's roads close to places of employment. There were 20,000 pavement dwellers as early as 1952; the number grew to 62,000 by 1961, whereas the 1981 Census identified about 22,600 households. The majority of them were migrants from poorer regions of the country. The living conditions of pavement dwellers was worse than those of squatters as these were not eligible for improvement schemes and often faced harassment and demolition (See Box 1).

Most of the inhabitants had to pay rent to local strongmen who informally controlled the pavements. The most alarming factor is the growing number of second and third generation of pavement dwellers in which the majority are 'street children' (Kuruvilla, 1991).

SPARC (Society for Promotion of Area Resource Centre) an NGO and Nirmala Niketan College of Social Work, counted 125,000 pavement dwellers in 1985. SPARC also facilitated a formulation of grassroots level women's groups besides lobbying with the government for a better deal for pavement dwellers. The resettlement option has not been very acceptable to people due to economic dislocation involved. After a massive operation to evict them from pavements in July 1981, a civil rights group obtained an injunction from the



Box1. Eviction of the Prakash Nagar Pavement Community

The settlement originated 35 years ago and by 1998 had 300 families. The community is made up of different ethnic groups. Women head almost half of the families and single mothers headed fifty families. Most workers have daily wage-based activities on construction sites or in domestic work. The average daily income ranges between US\$0.4 to \$1 per day. The adult population does not have any formal education but children attend the municipal school. Small houses made of plastic sheeting are precariously arranged on wooden poles. Young men of the adjacent police colony often subject female residents to verbal, physical and sexual intimidation. Ironically the women are employed as domestic workers in the same locality

The community has been facing demolitions three to four times a year since 1985. Mostly demolitions occur without any notice. Besides living in a state of continuous anxious anticipation, the inhabitants also refrain from acquiring any possessions or assets even if they can afford to. In the event of evictions the men are sent away for fear of being beaten by the police or arrested. In 1999 the makeshift houses were finally demolished for construction of a flyover. The community struggled to retain its foothold. There were violent exchanges between police and the community. Arrest warrants were issued for community leaders. Women organised themselves to resist evictions and approached the local politician who could not help. The press gave publicity to two injured policemen rather than to the sufferings of the community. Single women were more vulnerable to violence and abuse.

Initially families were scattered for a few days facing the ordeal of having no access to basic necessities of water and sanitation. The community has rehoused itself on a nearby privately-owned plot. They are compelled to live in the vicinity to sustain their livelihood. Many families have filed applications for a 'photo pass' in order to validate their residence in the community since 1994. Currently the community is counter-claiming at the local courts and the National Human Rights Commission (NHRC) charges violence against them by police.

Extracts from Lisa, John (2002)

Supreme Court, with wide media coverage it brought into sharp focus the plight of pavement dwellers. Finally the court upheld the right of the BMC to clear pavements by giving prior notice but in its landmark judgement recognised that "Pavement dwelling was the result of dire poverty ...and eviction does lead to deprivation of livelihood and consequently to the deprivation of life ...which is a fundamental right" (SPARC, 1985).

Later this situation was thoroughly exploited by the slum leaders. Directives were issued to controllers of slums not to collect compensation from hutment dwellers forcibly. These decisions gave a major set back to the government's efforts to regulate the growth of slums. The bureaucracy felt angry and frustrated at being let down by the judiciary, which further led to an almost total stoppage of recovery of compensation (less than 25 per cent). Panwalkar (1989) observed that this led to strengthening of the slum dweller's position of total irresponsibility on the one hand and on the

other, lower levels of bureaucracy and the local politicians utilised this period of uncertainty and vulnerability to their maximum advantage.

Zopadpattis are squatters in the local terminology. These are the most predominant low-income informal settlements falling under the category of slum. Squatting began in Mumbai even before independence in 1947and continued growing. The first official census of slums was carried out by the State Government in January 1976 (Government of Maharashtra, 1995) and 902,015 huts in 2,335 pockets were identified. Households were given identification cards for the purpose of future settlements. All those who had been counted in 1976 were eligible for slum improvements, redevelopments and relocation. The government at that time decided that further encroachments would be effectively and ruthlessly stopped. More than 50 per cent of squatting was on private lands, followed by municipal lands. While 73.6 per cent of employment was concentrated in the island wards they contained only 21.1 per cent of slum population. Settlements in the suburbs housed almost 83 per cent of the slum population mostly located on lands not suitable for development - like low-lying marshy lands, hillsides and along railway tracks. The slum census didnot include pavement dwellers.

Slums had come be built on private lands earmarked for public facilities in the Development Plan. There was a wide variance in densities ranging from 750 huts/ha to 200 huts/ha in isolated pockets. Generally 10 to 15 per cent of residents worked in the settlements themselves. There were large slum concentrations like Dharavi which occupied about 175 hectares of mixed ownership and had a population of 0.35 million. Larger slums like Dharavi with its tanneries and liquor distilleries produce everything from suitcases, sweets and gold jewellery, and are places of ingenuity. This is enterprise personified, an island of free enterprise not assisted or restricted by the state or any law (Sharma, 2000,pp.78).

The average area of huts was as small as 12.5 m² and only 12.72 per cent of huts were built of permanent materials. The rental market was significant with 48 per cent households living as tenants. Sanitation was very poor and water supply was through highly inadequate community water taps. About 40 per cent of households belonged to the Economically Weaker Sections and 39 per cent belonged to the low income category. Seventynine per cent of families had come to Mumbai after 1960 and 50 per cent of migrants were from other states of India.

2. PROFILE OF SLUMS IN 2001

For the first time, detailed data on slum areas in the country have been collected in the 2001 Census (Census of India, 2001). A recent survey for the

Mumbai Sewerage Disposal Project (YUVA and Montegomerry Watson, 2000-2001) gives an insight into the existing situation of availability of services in slum settlements in Mumbai. The findings are summarised below.

In Greater Mumbai 1,959 slum settlements have been identified with a total population of 6.25 million, which forms 54 per cent of the total population of the city (Census of India, 2001). The Island City houses only 17 per cent of the slum population whereas the western suburbs have high concentrations of slums specially in the inner western suburbs, where there are large slums with hazy boundaries forming a continuous area containing 58 per cent of the slum population. Average household size is 4.5 and the sex ratio is much better (842 females per thousand males) than in the rest of the city. Thirteen per cent households are women headed. Out of the total 47 per cent are located on private lands. Pavement dwellers and chawls are also included in slums. These are located on state government, central government, railway and municipal land (YUVA & Montgomery Watson Consultants, India, 2001). Sixty-two per cent of slums predominantly have dwellings made of permanent materials like brick walls and reinforced cement roofs. Twenty-seven per cent slums have predominantly semi-permanent structures (brick walls and tin or asbestos cement sheet roof). Significant improvement in structures due to higher investment by slum dwellers is a result of higher perceived security. Only 115 slums have predominantly temporary structures. Higher housing consolidation is also visible from the fact that almost 45 per cent of houses have two or more stories. Houses are very small with 42 per cent dwellings having an area of less than 10 m² and 38 per cent having an area between 15 to 20 m², and only 9 per cent had area more than 20m².

Photo 2: Typical Slums



2.1 Access to Services

About 49 per cent of slums have access to water supply from shared standpipes, while 38.3 per cent

have a supply from more than one source. Remaining slums get their water from tube wells or community standpipes. Only 5 per cent of slums have individual taps whereas 17 slums with approximately 0.1 million inhabitants (0.87 per cent of the total) have no water supply and have to depend on adjoining settlements. Slum communities are clearly in favour of individual water connections. Women and children daily spend a lot of time and have to make several trips to collect water.

Sanitation in slums is very poor as 73 per cent of slums depend on community toilets provided by the government, 28 per cent defecate in the open, 0.7 per cent slums have pay to use toilets managed by NGOs and only 1 per cent of slums have individual toilets. Others have mixed provisions or use toilets in other slums or mobile toilets. Inadequate numbers of toilets lead to long waiting times. Overuse and poor maintenance makes them unhygienic especially in areas where the user group is undefined. Inadequate water supply and the absence of electricity connections further limits the use of public toilets. Women and small children face great difficulties due to inadequate and poorly maintained toilets. This is in spite of the fact that 59 per cent of toilet blocks were constructed after 1995.

The Municipal Corporation of Greater Mumbai is responsible for collection and removal of solid waste in Mumbai. The prevalent system in slums is limited to placing portable refuse receptacles or constructing garbage bins in or near the slums, accessible to the municipal vehicles for clearance. There is no organised system of solid waste collection and slum residents generally dump garbage in any open place, including lanes and railway tracks. Only in 36 slums is there an organised system of collection and clearance. Inadequate numbers of garbage bins/receptacles, lack of awareness amongst people about ill effects of indiscriminate dumping and inefficiency of local bodies are some of the reasons for poor solid waste management in slums.

Most of the settlements (98.6 per cent) have some form of drainage system. However many drains get blocked and become non-functional. Dumping of garbage in drains is the main cause for blocking. Slums located in low-lying areas or in the tidal range face serious problem of flooding during the monsoon. Poor sanitation is due to low levels of awareness among slum dwellers about its impact on their health.

2.2 Rental in Slums

The rental market in slums is very buoyant, as renting or buying a room in Mumbai slum is an expensive proposition. Rents vary according to location, level of infrastructure and the condition of the house. According to a recent report in a local daily (Ramaswamy, 2002), rents are as high as US\$40 for an average room in South Mumbai and as low as US\$10 in slums that are

more cramped, filthy, have poor access and face acute water shortages. In all cases an initial deposit has to be paid to the landlord, which can vary from US\$200 to \$1,200. Delay in payment of rents is common and is all right for the owner as long as he has a deposit. Rent agreements with 11 month contracts are signed on stamp-paper and even ratified by two witnesses and renewal depends entirely on the owner-tenant relationship. Selling a 25m2 room in well-located squatter settlement like Santosh Nagar could earn US\$16,000 to \$18,000. In some places prices of shops in a slum on a major road are equivalent to fancy new building shop prices in the same stretch. Slum shops are more profitable since they do not pay any taxes. 'karkhanas' (industrial accommodation) is sold for astronomical prices. "In Mumbai everyone is acutely aware of the value of land, even if they live in a slum. A few have sold their slum accommodation and moved to cheaper apartments in outlying suburbs" concludes the same report (ibid).

2.3 Tenure Options

Tenure arrangements and tenure security in slums vary considerably. The most insecure group are the pavement dwellers, un-notified slums, and squatter settlements built after 1995. Slums on central government land are not entitled to tenure security as these are excluded from the 'Slum Redevelopment Scheme'. Attempts to evict areas 'unfit for human habitation and dangerous to health' were made by the Municipal Corporation under the provisions of municipal acts as early as 1954. During the first decade after independence in 1949 the government adopted the policy of slum clearance and re-housing in permanent buildings on a rental basis. The scheme was not successful because the pace of construction could not keep pace with the increasing demand, rents were unaffordable and houses were sold off by beneficiaries in several cases (Jha, 1986 p 23). With government investments in infrastructure provision under the Central Scheme of 'Environmental improvement of Urban Slums' since 1972, slum dwellers have perceived some tenure security. Similarly slum families in possession of photo passes also perceive some security. Communities in the majority of slums (93 per cent) in the city perceive that their slums are notified and hence perceive some security. However 137 slum pockets are not notified and hence are more vulnerable (YUVA & Montgomery Watson Consultants, India 2001).

2.4 Access to Credit

One of the biggest problems slum dwellers face is accessing housing loans. Even if joint earnings of family members are enough to allow some to buy consumer durables like television sets, they cannot muster enough finances to purchase a legal house. A

few slum dwellers had a bank account but most lacked the collateral to ask for loans from commercial banks. A small number of residents who work in established companies could borrow from their employees, others rely on friends and relatives. Pawning jewellery was a common way of raising credit. Many household items are bought through hire-purchase (Desai, 1995 p 237). NGOs like Mahila-Milan have organised women groups and supported collective savings and credit activities in selected slums. Collective saving in small groups allows borrowings to be repaid at their own pace according to fluctuating incomes. A saving pool allows women to borrow even for the smallest need.

2.5 Education

Educational levels of slum dwellers are marked by diversity. The majority of the older generation over the age of 50 had no formal education, whilst the middle-aged slum dwellers had completed primary school education and the majority of slum dwellers' children attended the nearest Municipal Corporation school that offered free schooling. Post-schooling education however, was afforded only by richer households in the slums (Desai, 1995). The overall literacy rate as found in base line surveys in slums is 60 per cent (MMRDA, 2002) which is lower than the city average.

2.6 Health

The most frequent diseases reported were malaria, dysentery, cholera, jaundice and typhoid, which are closely related to poor environmental conditions. However use of private medical facilities is more common than government or municipal medical facilities (Desai, 1995 p186).

2.7 Occupation and Incomes

The level of education affects the occupational status of slum families. However, with increases in duration of stay in the city a considerable proportion of unskilled migrants move upwards to occupations requiring skills. A significant number of formal workers are employed in the surrounding area as guards, mechanics, labourers, drivers, teachers, clerks and government employees. Workers in modern industries are better paid than those in traditional industries. The base-line surveys of 16,000 households for (MMRDA, 2002) Mumbai Urban Transport Project showed that 33 per cent of the population is working, with an average of 1.46 workers per household. Home-based economic activity is also common as a secondary source of income, which can range from vegetable shops to illicit liquor shops. 9 per cent of structures had commercial establishments. 30 per cent of workers were self-employed, 44 per cent were working in private establishments, 9 per cent were in government service and only 17 per cent were casual workers. Average monthly household incomes were Rs. 2,978 (US\$61) and 40 per cent of households

were considered to be below the poverty line. Recycling of waste including plastics is very common in many slums.

Many women work as maids in surrounding residential areas. The building industry is another important employer of women workers. Most women workers are carriers of head loads and helpers to male workers at building sites. They are also paid lower wages than male workers doing the same work and are denied access to training to qualify them for higher paid semiskilled or skilled jobs such as masons, carpenters, plumbers etc. One of the reasons for working on construction sites was the makeshift shelter offered in addition to wages by the contractor. These poorly ventilated structures are without any toilets or water supplies. Women continued to work for a contractor sometimes even without work every day to retain their shelters as they moved from site to site (Shah, Vinita, 1996 pp.5-13)

2.8 Community Participation and Social Life

In large slums people identified themselves as part of smaller enclaves each with distinct identities based on ethnic homogeneity. Rioting in Mumbai after the demolition of the Babri mosque in 1992 led to conflicts and polarisation between the Hindu and Muslim communities. As a detailed study of a slum shows, the most significant impact of the riots was the eviction of families and the spatial segregation and ghettoisation of a community (YUVA, 1996 p 75).

As policing in these highly dense large slums is not possible people took it upon themselves to guard their settlements through neighbourhood committees. Almost all slums have registered Resident Associations. CBOs were initially formed to fight demolitions. However, the extent of participation by the community and continuity of participation is issuebased and varies in different slums at different times. Most settlements have a slum leader or a local politician who is the final arbitrator of disputes. In several

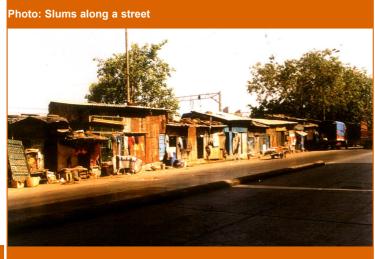
areas, it is powerful women who play the role of mediators (Sharma, 2000 p 131). Community leaders are generally better educated, better employed, more prosperous and highly motivated. Their liaison with political parties and the government institutions affects the benefits received by the community (Desai, 1995).

Day to day frustrations about increasing deficiencies in basic needs find their expression in daily guarrels at community standpipes or community latrines and sometimes erupt as major conflicts between different groups. The slums are far from the depressing places they may appear; they seethe with vitality and hope. Worsening conditions lead to more and more communities organising themselves in order to resist exploitation by slum landlords, corrupt officials and police. However unless the problem of growing slums is tackled, the positive energies in slum could easily turn to violence, strife and communalism (Seabrook, J 1987 p 152). Crimes like brewing illicit liquor, smuggling and petty crimes grew and flourished in some slums but the criminal history of Dharavi illustrates how an area's criminal profile is linked to larger issues of crime and politics in cities rather than particularly with the slum (Sharma, 2000). Demolitions and evictions lead to lot of physical and psychological trauma especially for the women of affected families. Women-headed households face the greatest hardship (See Box 1).

Regular religious ceremonies and festivals are the main focus of slum life and a source of much interest and excitement combined with fun and partying. The other main social centre in slums has been the welfare centre or the office of the CBO. During occasions like marriages and funerals social support is provided mutually. Radio and television are the main sources of recreation and information (Desai, 1995).

3. PERCEPTION AND ASPIRATIONS OF SLUM COMMUNITIES

The majority of slum dwellers identified themselves with the city rather than with their native place and plan to settle permanently in the city. In spite of poor conditions in slums, most residents felt that life in slum is tolerable and city life was certainly better than rural life. Almost 60 per cent felt that their houses were tolerable (Gill, 1994 p 60-85). Slum dwellers were also aware that traditional social safety nets do not exist in today's slums. They greatly value improving their working situation through getting a better job, yet have, again by middle class standards, low aspirations and have a very optimistic view of their chances of upward social mobility. All of them, irrespective of age, gender, wealth and educational attainment express their high



regard for education and foresaw upward social mobility for their children by educating their offspring as much as possible. They confessed, however, that there was not an atmosphere conducive to study (Desai, 1995 pp 259-261). People living in incredibly crowded lanes represent a dynamic collection of individuals who have figured out how to survive in the most adverse circumstances. Significant changes in attitudes have come as a generation has grown in slums (See Box 2).

Box 2 The People in the Slums of Dharavi*

Khatija

Sixty-seven year old Khatija a handsome, tall Muslim woman lives in Dargah chawl in Dharavi's Social Nagar with her daughters and son and daughter-in-law. Khatija came to Mumbai from Kerala (the southernmost state of India) after her marriage when she was merely fifteen. Her husband used to work in a hotel in Dadar. When he lost his job in 1961, they were forced to move out of their rooms above the hotel. That is when they came to Dharavi and were given temporary accommodation by their caste community. Describing the early years in Dharavi, Khatija recalls, 'First there were a few scattered jhopdas (huts) here and there, there was tall grass all round, there were snakes. I brought sacks of mud and filled this place. Then the dadas (local goons) entered the picture and started building several huts and selling them. They took over the land.' Describing how she had to literally fight for survival in the past, Khatija represents one of the myriad communities that reside in mixed settlements.... Today, her house is typical of the incrementally improved structures you see around. But just thirty years ago, it was thatch and bamboo and had to be replaced every monsoon. Now her house is made of brick and concrete. It has a phone, a T.V. a fridge and a washing machine. All the crockery is arranged neatly on a shelf on the wall of her spacious front room. There are two beds in the room, a couple of chairs and a sewing machine. The kitchen is located in a room at the back and like most others; Khatija has a loft of the same size as her front room. The daughter-in-law is laden with gold, and wears bright clothes befitting a new bride. When people like Khatija first came to live in Dharavi, they had no electricity; now they have separate electricity meters. She does not have piped water inside the front room but a tap is conveniently located outside the house. For years open fields were the only toilets; today, there are municipal toilets albeit unusable on many days.

Haji Shamsuddin

In 1948, an eighteen-year-old boy Shamsuddin from the southern state of Tamilnadu travelled to the city of Mumbai as it was difficult to survive in his drought-hit village. He began his life in Mumbai living with his uncle in one of the huts that then constituted the informal housing in Dharavi. He started his career as a rice smuggler (bringing rice from outside the city limits of present day Mumbai to the Island City was taxed). In 1954-55 his uncle went back to the village, and as a result, the rice trade stopped. He managed to find a job in a local coal company. After two years his prospects improved when he got a better job at Atlas printing press with higher wages. This gave him the confidence to get married in 1959. While his wife has never been to school, Shamsuddin has studied up to class VI. The couple lived in an illegal hut in Dharavi with no electricity and no water. In 1961, Shamsuddin moved to a room in a more 'settled chawl' with improved water supply.

'One man, Hamid, knew how to make chikis (peanut brittle) ...we got him a hut and he began to make chikis. I would take it to the shop and sell it. I left my job at the press as this way I earned much more profit' recounts Shamsuddin. In time Shamsuddin and his wife also learned how to make chikis and took over the business when Hamid left for Calcutta and named his brand A-1 chiki. His business flourished until the riots of 1992-93 when all his workers ran away. 'That is when I lost interest and handed over the business to one of the boys who used to work for me. He now runs it and gives me a share of profits each month,' says Shamsuddin. Today he lives in Nagri apartments, one of Dharavi's high-rise buildings. His tiled, plush drawing room has two phones, a wooden cabinet with a TV set. His sons are educated and have their own businesses. One of them runs a medical store on Dharavi main road.

Lilavati Subhash

The slum settlement of Nagar is like any village in the southern states of India. Lilavati lives with her husband and two sons in a tiny 6 by 8 foot (1.8x2.4m) room with a half-loft. In this space they have a bed, a T.V. set, a radio, shining stainless steel vessels hung on the wall and a gas stove near the door. Leelavati rolls out papad from the pre-mixed dough given to her by "Lijjat Papad" and supplies back the dried papad. This enterprise is managed by a women's organisation working since 1959 to enable women to work at home and earn some extra money. The younger son goes to school and the older one is studying commerce in college. They have no hang-ups about where they live. She likes Dharavi because everything is so convenient. What is striking about Lilavati is the absence of self-pity, which has made a difference in her son's attitude. He wants to learn computer science and contemplated buying a computer but realised that there would be no space in the house to keep it. So he says, he will wait until their area is redeveloped.

*Extracts from: Sharma Kalpana (2000)

4 URBAN POVERTY

4.1. DEFINITIONS AND INTERPRETA-TIONS OF POVERTY

The Planning Commission of the Government of India decides the poverty line for urban areas in the country every year. These are economic indicators worked out on the basis of the minimum income needed to ensure an intake of 2,100 calories per person. Poverty at the national level is estimated as the weighted average of state poverty levels.

The National Commission on Urbanisation stressed that poverty can not be characterised adequately in terms of income, expenditure or consumption patterns alone but should include environment, access to services and social and psychological supports. It recognised that the most visible forms of urban poverty are — i) Proliferation of slums; ii) Growth of the informal sector; iii) Crushing pressure on civic amenities; iv) High rates of educational and health contingencies and under utilisation of social services; v) Growing sense of

hopelessness(Government of India, 1988). The Planning Commission has defined the poverty line in urban areas as Rs. 309 per capita per month (US\$9.85) in 1993 and Rs. 404 per capita per month (US\$9.60) in 1997-98. The incidence of poverty expressed as a percentage of people living below the poverty line has witnessed a steady decline from 55 per cent in 1973-74 to 36 per cent in 1993-94 and 26 per cent in 1999-2000 (Government of India, 2002). The assessment is based on data collected by the national sample survey on a thirty-day recall period. Though poverty as a percentage of population has declined, the number of urban poor remained high due to the growth in the population and has reduced only in the last decade. The Planning Commission has recognised various types of vulnerability of the poor so that suitable programmes can be designed for them in the tenth Five Year Plan (2002-2007). These include-

- Housing Vulnerability: Lack of accessto tenure, poor quality shelter, lack of access to individual services and unsanitary living conditions
- Economic Vulnerability: Irregular or casual employment, low pay, lack of access to credit, lack of access to formal safety net programmes, low ownership of productive assets, legal constraints to self-employment
- Social vulnerability: low levels of education, lack of skills, low social status, inadequate access to food security programmes, lack of access to health services, exclusion from local institutions
- Personal vulnerability: Proneness to violence or intimidation, women, children and elderly, disabled and destitute, lack of information and lack of access to justice.

The eradication of poverty has been one of the priorities of the Government of India and several schemes have been launched towards this end. The Ministry of Urban Development and Poverty Alleviation has the mandate for broad policy formulation and monitoring programmes on urban poverty. Earlier urban poverty alleviation programmes have adopted an area approach under Environmental Improvement of Urban Slums (EIUS) schemes, beneficiary approaches under Nehru Rojgar Yojna (NRY) and community approaches under Urban Basic Services for the Poor (UBSP). The Prime Minister's Integrated Urban Poverty Eradication Programme (PMIUP) was launched in 1995-96, covering all of the 345 urban centres that have populations between 50,000 and 100,000 in the 1991 census. The National Slum Development Programme (NSDP) was launched in August 1996 for slum development. An integrated approach is being adopted under Swarna Jayanti Shahari Rojgar Yojna (SJSRY). The scheme plans to provide-gainful employment to the urban poor through encouraging the setting-up of self-employment ventures or provision of wage employment and consists of two components, namely:

- (i) The Urban Self-Employment Programmes (USEP) and
- (ii) The Urban Wage Employment Programme (UWEP).

The SJSRY is planned to be implemented through community organisations like Neighbourhood Groups (NHGs), and Community Development Societies (CDSs) set up in the target areas. The CDSs would be the focal point for purposes of identification of beneficiaries; preparation of applications, monitoring of recovery and generally providing whatever other support is necessary to the programme. The CDSs also identify viable projects suitable for that particular area.

A comprehensive National Slum Policy is being prepared, which would focus on the special needs of the slum areas and would suggest various options for

Figure 1 Spread of Slum Population

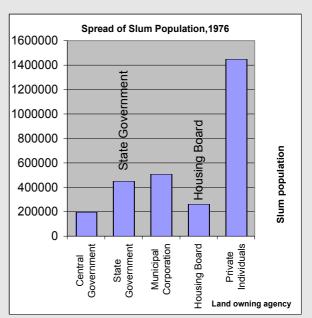


Table 4 Spread of Slums according to LandOwning Agency

Sr.no.	Land Owning Agency	Pockets	Hutments	Population
1	Central Government	120	39,404	1,97,000
2	State Government	415	89751	4,48,000
3	Municipal Corporation	309	1,18,000	5,07,000
4	Housing Board	47	58061	2,62,000
5	Private Individuals	780	3,22,200	14,50,000
Total		1,671	6,27,216	28,64,000

their improvement. In addition, a major programme called Valmiki Ambedkar Malin Basti Awas Yojna for the provision of affordable housing and infrastructure was announced by the Prime Minister in August 2001. This programme will receive 50 per cent subsidies and 50 per cent loan components and a grant of US\$200 million from the Central Government.

C. SHELTER POLICIES IN MUMBAI

1. OVERVIEW OF SHELTER POLICIES

Public policy has seen a shift from the role of controller and provider of housing to facilitator of housing. Various policy decisions have influenced housing supply in the city, which has had a bearing on the growth of slums in the city. Some of these are discussed below.

The Mumbai Rent Control Act (1947) was introduced to freeze rents at 1940 levels and the rights of tenants against evictions. These provisions had a negative impact on private investments in rental housing and adversely affected property tax collection. The Rent Control Act was subsequently revised in 1986 and later in 1993, but the revisions are applicable only to new properties. Similarly, the Urban Land (Ceiling & Regulation) Act of 1976 sought to control land speculation and to achieve a more equitable distribution of land by putting a ceiling of 500 m² on vacant urban land in Mumbai that could be held in private ownership. All the land in excess of this ceiling was supposed to be returned to the government which could use it for housing the poor. Some of the major owners of vast stretches of vacant land in Mumbai are charitable trusts of big industrialists and businessmen. The Act was

often by-passed by using the 'exemption clause' by manipulation and getting permission from the Corporation to build, leading to a total defeat of the stated objectives of the Act (Jha, 1986, pp.36-37). These restrictions actually reduced the supply of formal land.

The Housing Board, as the successor MHADA (until 1986) had supplied about 100,000 fully built ownership dwellings to various income groups of which 75 per cent were for Economically Weaker Sections (EWS) and Low Income Groups (LIG) (Sunderam, 1989, pp.68). However, after 1985 there was a shift as the EWS category was not covered and the proportion of High Income Groups was increasing. Against 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 together was only 17,600 and 20,600 respec-

tively. In 1984-91, the supply of formal sector housing increased by about 47,400 units per annum mainly on account of private sector activity. Property rates in Mumbai being the highest in India, speculation and hoarding in real estate was the most lucrative investment until the 1990s. As reported in one of the local weeklies, 'The real irony is that in a city where thousands are homeless, about 0.1 million flats are lying vacant for the right price' (Bombay, 1988, pp.17). Housing supply by public agencies has been far below the requirement and that by the private sector was beyond the reach of poor. Housing conditions thus deteriorated as 73 per cent of households in 1991 compared to 69 per cent in 1981 lived in one-room tenements (Government of Maharashtra, 1995)). Rental markets were locked, and as such the only option for many low-income families was to encroach on public and private open lands and build structures, which they could afford (BMRDA, 1994, pp.259).

Supportive Slum Policies

The Municipal Corporation of Mumbai was empowered to clear slums by amendment in the Mumbai Municipal Corporation (BMC) Act as early as in 1954. But there was no significant clearance until 1967. The development plan for Mumbai was launched in 1967 and there was optimism that it might have been possible to clear slums. In 1969 a special slum improvement cell was created in BMC to clear and resettle slums on municipal lands. In 1971, with the enactment of the Maharashtra Slum Areas (Improvement, Clearance and Redevelopment) Act the government was equipped with wider powers to notify slums, and implement clearance schemes. The city's slum population was estimated at that time to be 1.3 million (Gopakumar,2001).



2. EXAMPLES OF SPECIFIC POLICY APPROACHES

2.1 The Maharashtra Vacant Lands (Prohibition of Unauthorised Structures and Summary Eviction) Act 1975

In an effort to prevent a further proliferation of squatter settlements, the state government enacted the Vacant Lands Act. According to the Act, all lands encroached by squatters can be considered vacant, all slums covered by the Act are temporary and can be removed, police can be mobilised for eviction and alternative accommodation has to be provided. Squatters have to pay 'compensation' for unauthorised occupation of land. Due to these provisions, courts could not move against evictions. With the help of this act many demolitions were carried out in different parts of the city. The offence of unauthorised occupation was non-bailable. After the slum census, the government made a policy of protection, removal, rehabilitation and improvement. For the vigilance of open lands and for the recovery of compensation and service charges the government appointed a Controller of Slums at the rank of District Collector.

The rates of compensation were revised only in 1987 (based on the recommendations of Jankhanwala Committee). The rates of compensation included service charges, compensation for occupying land and nominal taxes, with different rates for residential, commercial and industrial uses in different cities of the state. This effort towards recovery on the basis of use is quite unique in the country.

Some landlords subsequently challenged the validity of the Act in court questioning the government's right to collect rent from private properties. The Mumbai High court passed a verdict in favour of the landlords in 1980. But the matter continued with fresh petitions.

2.2 The Slum Areas (Improvement, Clearance and Redevelopment) Act

Under the Maharashtra Slum Areas (Improvement, Clearance and Redevelopment) Act, 1971 the competent authority may by notification in the official Gazette, declare area to be 'slum' where it is satisfied that:

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

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

Maybe notification in the official Gazette declare such area to be a slum area.

Source: Government of Maharashtra, (1971)

Improvements under the Act were carried out only in slums on government lands, earmarked for 'improvement ' in the Development Plan. Taking advantage of this act, the owners of slums on private land started evicting slum dwellers on an unprecedented scale. The government of Maharashtra issued an ordinance subsequently 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 (especially infrastructure) under various improvement schemes. However, there have been several appeals by private landowners challenging notification of their lands as 'slums'. This did not cover central government lands, as state laws do not apply to central government lands.

2.3 Centrally Funded Environmental Improvement of Urban Slums (EIUS)

Slum Improvements began in 1972 under the Central Scheme of Environmental Improvement of Urban Slums. A separate mechanism, the Maharashtra Slum Improvement Board was set up by the state government in 1974 to co-ordinate this work. This was later merged with MHADA when Maharashtra Housing and Area Development Authority (MHADA) was set up in 1977. MHADA improved slums on government and private land whereas slums on corporation land were improved by BMC. The scheme included provision of community taps, community latrines, construction of pathways and drains and provision of streetlights. The scheme was financed by grants from the central government with a per capita ceiling cost. Lack of space for execution and staying orders from courts created difficulties in implementation. The majority of slums situated on lands owned by state government, municipal corporation and Housing Board lands were improved but those on private lands or central government land could not be easily improved. Implementation of the improvement scheme did not significantly improve the environment, as more migrants were attracted to the improved slums. The corporation for maintenance of these facilities collected

service charges from the residents. Municipal taxes are also levied for semi-permanent and permanent structures, however, the recovery has been poor which has affected maintenance.

2.4 Mumbai Repairs and Reconstruction Programme

In order to conserve and improve old dilapidated housing in chawls, the Government of Maharashtra enacted a legislation in 1969, and set up the Mumbai Building Repairs Board for carrying out repairs and where necessary reconstruction. Resources were raised by levying a repair tax on those buildings and contributions by government. Financial norms were prescribed for undertaking repairs. If the cost of repairs exceeded the limit, repairs were undertaken only if owners/tenants agreed to bear the excess expenditure. If this option was not acceptable to occupants, the building was declared beyond economic repair and considered for demolition and reconstruction. In case of reconstruction, occupants had to be shifted to transit camps and the property was acquired by the MAHADA (The Board was later merged with MAHADA). Buildings were reconstructed with higher floor area with better standards and ensuring minimum floor area of 18 m² and given to the old occupants on a rental basis. Tenants were considered for granting of ownership if they formed a co-operative society and made initial payment of 40 per cent. Repairs have extended the life of buildings by 10 to 15 years. From 1970 to 1990, about 222,180 tenements were repaired and 15,256 tenements were reconstructed. Recovery of rents, although subsidised, is low and except for safety there is no marked improvement in the living environment within buildings (BMRDA, pp. 258,1994).

2.5 Slum Upgrading Programme (SUP) funded by the World Bank

A major shift in policy came with the launching of the Mumbai Urban Development Project (BUDP) financed by the World Bank with a two-pronged approach of regularisation of squatter settlements and supply of serviced land to manage the problem of slums. In line with the World Bank's philosophy, secure long-term legal tenure was to be granted along with provision of basic service with recovery for 100,000 slum households. The standards for plot sizes and infrastructure were based on 'affordable costs' The price to be charged was based on the zone in which the slum is located as per the Development Plan, plot size and plot use to be repaid over 20 years. Leasehold rights were to be granted to co-operative societies of slum dwellers covering BMC and government land and 10 per cent private land. Individual members of the society were entitled for Home Improvement Loans (HIL), which could be advanced against the mortgage of individual leasehold rights. The scheme however did not benefit slums on private and central government lands.

Various difficulties faced in the implementation of the BUDP programme (Panwalkar, 1989) included hostility of the excluded part of slum community, which had to be resettled and poor availability of relocation sites. Establishing the eligibility of appropriate households and problems of unwilling households and unwilling communities created serious problems. It also raised issues about the role that such co-operatives can play in taking up maintenance responsibilities and preventing further encroachments. Major difficulties were faced in the extension of services due to the limited capacity of site infrastructure and the inability of the BMC to further augment existing networks. The HIL component remained under-utilised as assessment of incomes, systems of disbursement and collection of loans remained unclear. Only 22,000 households were covered under the programme after which BUDP was closed in 1994. "There may be universal acceptance of need to change but it may not be backed by political, bureaucratic and institutional commitment" (Desai, 2001).

At this juncture, in an attempt to gain popularity, the then Chief Minister announced the intention of the government to grant leases to co-operative societies of slum dwellers free of cost or at nominal rates under the Slum Upgrading Programme (SUP). This was applicable to all the slums not covered by BUDP with a possibility of redevelopment by relaxation of development control rules. The pronouncements of these two seemingly similar but contradictory orders created a vague and hazy situation and reflected the inability of the bureaucracy to override political expediency (Panwalkar, 1989). The state government through a resolution in June 1985 decided to extend the SUP through municipal corporations, to other towns of Maharashtra thus making it a state level programme. The government made financial allocations to extend loans to local bodies for infrastructure and shelter improvement in selected slums and issued guidelines for implementation of the same. Members of the society were required to pay necessary service charges to the society for maintenance, repair and management of infrastructure. The government also decided that lands which belonged to the State Revenue Department, would be transferred on an 'as is where is' basis for this programme without charging any occupancy price. Grants were also released to municipal corporations for securing 'people's participation in shelter'. SUP scheme was given up midway after a change of political party at the state level.

In 1989, with the change of political party, the State Government issued instructions to all municipal corporations for considering granting of leasehold tenure to individual eligible households squatting on government lands before 1985. Heads of households whose names were included in the voter list of 1985 and who were staying at the same place as indicated in the voter list, were issued photo passes for granting of tenure. Slums on private land, squatters on central government land and pavement dwellers were not eligible. The reluctance of the Revenue Department to part with state government land was one of the major difficulties faced.

2.6 The Prime Minister's Grant Project (PMGP)

The special grant of US\$20 million announced by the Prime Minister in 1985 to improve living conditions of slum dwellers in Mumbai, brought a major shift in the approach towards improvement of squatter settlements with the initiation of redevelopment projects. An important component of this grant was to be used for redevelopment of the biggest slum of Mumbai-Dharavi. A master plan was prepared for Dharavi. Reconstruction was justified in high-density slums like Dharavi where insitu upgrading had limited relevance and could not be expected to bring perceptible improvements. Co-operatives of slum households were to be provided with 18 m² (carpet area) walk-up tenements. Families were to be shifted to 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 establish liaisons with lending institutions. The reconstruction project succeeded in a limited way by tackling public health hazards, but the high cost of the tenements prompted many households to sell (Jhavar. 1993).

Delays in construction, escalations in the cost of tenements and shortage of transit camps created hardships for people. In some cases slumlords got into the management of the society and created obstacles for development. A few outsiders managed to get their names included in the list of beneficiaries. In an evaluation of this scheme, Bharwada and Mahajan (1999) reported that by 1993, 60 per cent of targeted upgrading and 74 per cent of reconstruction had been achieved. However, cost recovery has been poor due to poor recovery mechanisms. Lack of awareness about the benefits, liabilities and procedure of the project led to dissatisfaction amongst beneficiaries, which subsequently led to poor participation. The system of allotment through drawing of lots disintegrated the community fabric. In stray NGO supported cases like Markandeya Co-operative, the community directly demanded leasehold rights of land from the Municipal Corporation to mortgage and raise resources. But the delays left people disheartened and wondering whether the seven-year struggle was worth the results (Bharwada & Mahajan 1999). However, slum redevelopment in Dharavi was a major shift in the improvement approach. Subsequent schemes continued the redevelopment approach.

2.7 Public-Private Partnerships in the Slum Redevelopment Scheme (SRD)

The Moghe and Awale Committee had suggested the possibility in early 1980s of permitting additional built up space and its sale to encourage participation of private builders in slum redevelopment. During the 1990 assembly elections, one of the political parties (Shiv Sena) announced a scheme to provide selfcontained houses for four million slum dwellers free of cost. This approach capitalised on the idea of the elected Congress Party, the Slum Redevelopment Scheme (SRD), introduced in 1991. Notified slums were to be redeveloped at the same site by private builders by offering the incentive of increased maximum floor area ratio (FAR) of 2.5. After rehousing slum dwellers in 180 ft² (about 15 m²) tenements, builders were free to sell the remaining floor space on the open market and to make profits of up to 25 per cent of the project cost. Thirty years lease was to be given to the co-operatives of rehoused slum dwellers. The consent of at least 70 per cent of slum families was necessary to implement the scheme. The slum dwellers were required to pay US\$500, approximately, one third in the form of a down payment and the balance in the form of a loan repayable over 15 years, against an estimated cost of US\$1,500. Allottees were not permitted to transfer their tenement for a period of 10 years. Proposals were initiated from slums located in affluent areas. Out of the 178 schemes submitted, 86 were approved on private, municipal and MAHADA lands.

The scheme was criticised, as it was feared that the developers would exploit slum families. Concerns were also expressed over increases in density, and increases in consumption of water and electricity. Nonavailability of transit accommodation and maintenance costs were some of the problems faced. Rates quoted by builders for the sale of flats in the open market were lower than the actual market prices due to the 25 per cent ceiling on profit margins and extra payments were received in black. As the cut-off date for eligibility was 1985, many slum dwellers were not eligible and this created resentments among slum communities. Although the scheme was open to co-operatives of slum dwellers, such societies faced difficulties in implementing the redevelopment projects on their own. Since the lease of the land was made available only after implementation of project it could not be mortgaged to raise institutional finance. Lack of technical knowledge and managerial skills also led to delays.

2.8 Public-Private Partnerships in the Slum Rehabilitation Scheme (SRS)

The provision of free tenements to 4 million slum dwellers was one of the slogans in the election manifesto of Shiv Sena, which came to power in 1995. After the change of government, the Afzalpurkar Committee further modified the SRD and the new scheme was called Slum Rehabilitation Scheme. Departures from previous policies were made on various levels. The scheme was opened to all slum dwellers included in the 1995 electoral rolls, including pavement dwellers. The carpet area of tenements was increased to 225 ft2 (approx 20m2). The tenements were to be given free of cost to slum dwellers. For every 10 ft2 (1 m2) of rehabilitated floor space constructed in the Island City, the builders were offered a free sale component of 7.5 ft² (0.5 m²). A central monitoring and clearing agency was set up, and incentives were given to construct transit accommodation on vacant public lands. The builders were given incentives in the form of additional floor area, which varied between Island City, the suburbs, and difficult areas. However, on each pocket of slum land, a maximum of 2.5 FSI (Floor Space Index) was permitted. Surplus floor area, if any, could be transferred to another area under Transfer of Development Rights (TDR). Additional supports were proposed in case of proposals by the Co-operative Society which included time bound scrutiny, expert advice in technical, financial and administrative matters and an additional commercial component of 5 per cent. The scheme was to be completed in five years covering 2,335 slum pockets and 90,2015 huts.

To strengthen the financial capacity of BMC for provision of infrastructure, a levy of US\$20 per m² of rehabilitated floor space was proposed to be collected from the developing agency. The Slum Rehabilitation Authority was constituted for overseeing, co-ordinating and approving these schemes. The executing agencies could be co-operative societies of slum dwellers, public housing organisations, developers, contractors, charitable institutions, or private companies. All other slum improvement programmes were to be phased out limiting the options for slums. The amendments to the Slum Act, Maharashtra Regional & Town Planning Act, Mumbai Municipal Corporation Act, Maharashtra Housing and Area Development Act, Land Revenue Code and the Development Control Regulations (1991) were made, to restrict the scope of slum dwellers appealing to courts of law seeking injunctions against the scheme. The implementation was strengthened as all projects were to be considered as government works and police power was to be used to remove obstructions to the progress of the works. Municipal taxes were to be levied in a telescopic manner ie 50 per cent in the first 10 years and 70 per cent afterwards. Maintenance was taken care of by a deposit of US\$400 per slum tenement by the developing agency kept with the slum society in the form of securities. The interest was to be used for paying taxes and maintenance. The study group identified 211 ha of vacant land in Mumbai, which can be used for construction of transit tenements. 60,000 tenements were under construction by the end of 2000.

Box 3. Selected (SRS) Projects

I) Someshwar Co-operative Housing Society.

The area falls within the Dharavi slum (a difficult area) and hence is surrounded by low-income areas. The settlement had 146 households on an area of 2,258 m² owned by the Municipal Corporation. In 1972 the settlement received minimum improvements under the Environmental Improvement Scheme. Later, in 1989 the households formed a registered co-operative society for improvements under the PMGP scheme. Dwellings were mostly single-storey with an average area of 15 m^2 . The redevelopment was delayed due to protests from surrounding areas against the demolition of a common toilet. The issue could not be resolved until 1997 when the society got approval for the SRS scheme. The redevelopment was completed in 1999 with 187 dwellings in eight storied buildings with lifts. Dwellings of 23 m² were provided free of cost to all the households achieving a density of 841 dwellings/ha and FSI of 2.5. Individual toilets and water taps were provided to each dwelling. All the sale tenements have been purchased and occupied by middle-income families from surrounding areas. Although 30 to 40 per cent of the slum tenements have been informally sold, a significant improvement has been achieved in terms of living conditions and the social status of slum families.

Ii) Shivaji Nagar Co-operative Society

The slum pocket was established in 1955 on 2,567 m² of municipal land. The squatters resisted several attempts by municipal authorities to evict them. Finally nominal occupancy charges were levied which gave perceived security of tenure. The settlement was later notified as a 'slum' and photo passes were issued to 151 families. The slum was provided with minimum improvements in the 1970s. In 1985, the households formed a registered society and leasehold tenure was granted under the Slum Upgrading Project of the World Bank. Community latrines, common taps, two garbage bins, pathways and open drains were provided. Households were paying US\$0.4 per month in maintenance charges. Most of the structures were semi-permanent and only 5 per cent families had availed of the 'home improvement loan' under the scheme. The society applied for redevelopment under SRD scheme in 1991 and by the time people were shifted to transit camps in 1994, the SRS scheme came into operation. It was approved in 1997 and redevelopment was completed by 1999. After redevelopment five buildings (five and eight storied) were constructed accommodating 181 tenements (30 for open sale) achieving a floor area ratio of 1.99. Besides permanent shelters with good finishes and individual toilet and tap facilities, the community has better open space, better maintenance and a welfare centre and pre-school centre within the premises. Maintenance charges of US\$3 are paid every month by each household in addition to US\$4 met from the maintenance deposit given by the builder. The informal resale of 9 per cent of dwellings was noticed. Local leaders helped in solving the problems of transit camps but in turn have also personally benefited by informally acquiring one additional tenement.

Source: Gopakumar, 2001

The scheme initially generated lukewarm interest from the building lobby, which feared delays due to problems of land ownership, continuity of policy, political alignments in the community and the possible opposition by the beneficiaries after initial consent. Slum dwellers occupying more than 22.5 m² were reluctant to join the scheme. NGOs are helping squatter communities in resettlement, formation of co-operatives, negotiating with authorities and improving legal literacy of squatters to fight for their rights in courts of law, prevention of arbitrary exclusion of eligible households etc. The policy has generated a lot of debate and criticism. Singh and Das (1996) felt that this is likely to open the doors to a burgeoning real estate Mafia in the city with greater scope for harassment and intimidation by builders using the police. Most of the proposals were initiated in affluent areas and significant numbers of tenements have changed hands (Adusumilli, 1999).

2.9 The Government–NGO-CBO Partnership in the Mumbai Slum Sanitation Project

Recently under the 'clean Mumbai' campaign the Corporation has taken new initiatives and seeks to create partnerships with the community in the World Bank funded project of community based toilet construction. The Municipal Corporation is paying the construction costs and communities are expected to maintain the toilets. The Corporation has allotted a few slums to NGOs for house-to-house collection and construction. In selected slums (Kaachpada, Korbamithagarh), garbage bins are placed in every lane; the garbage is collected by a CBO, transported to a main bin and regularly cleared by the civic body. The CBO also sweeps the lanes and educates the community and collects nominal amount for this.

2.10 Govt-NGO Partnership in Slum Resettlement

A major resettlement of about 60,000 people was carried out with popular participation and partnerships with NGOs in the recent past for the Mumbai Urban Transport Project (MUTP). The project was designed to improve the capacity of suburban trains by laying new railway lines and the extension of platforms. The project is partly funded by the World Bank. Some 15,000 squatter households living within 25 m of the track and 4,000 households around the stations had to be moved. The resettlement and rehabilitation policy recommended the provision of 20.8 m² apartments for 'project affected families'. The Railway Slum Dwellers Federation had already collected data about settlements along the tracks, mapped them, set up women's saving groups and supported the formation of housing

co-operatives. Representatives of the NGOs SPARC and the National Slum Dwellers Federation (NSDF) and were involved in the policy formulation. Indian Railways carried out an unexpected demolition of over 2,000 huts in February 2001, after some pressure from media and a public interest litigation filed in the High Court by an NGO called 'Citizens for a Just Cause' to evict slums along railway tracks without any resettlement. However, the state government assured the courts of a time-bound resettlement. Within a year a population of 60,000 was shifted into apartments in four and seven storied buildings and a few families were shifted into single storied transit accommodation (MMRDA, 2002). The most important factors in this resettlement were the extent to which households were organised to move (Sheela Patel et al, 2002). The NGO alliance contributed significantly at various stages including hut counting, rough mapping, numbering, plot surveys, household surveys, settlement profiles, forming of groups and encouraging women groups to share information. Resettled families had a mixed response. On the one hand they are happy to have secure tenure and access to basic services but on the other hand the resettlement location offered fewer employment opportunities and led to increased travel costs for a few. However, settling in a new place would take some time, but NGOs are building supports by extending credit support, setting up fair price shops, organising school transport setting up committees to deal with water sanitation and other such problems. "Many factors led to the success of project, these included flexibility on part of the government agencies on procedures, greater autonomy given to NGOs to draw resettlement plans and implement them to accord the work of construction of transit camps to house 2,500 families to NGO alliance. The power to determine eligibility of households and allotment of dwellings was left to the CBOs" (Sheela Patel et al, 2002,pp 170,171). The project adequately demonstrates the importance of partnerships between international donors, state and local bodies, NGOs and CBOs.

3. LESSONS LEARNED

■ The colossal size of the squatting problem, land scarcity and increasing pressure on land in Mumbai will continue to affect policies towards slums. The city of Mumbai offers opportunities for upward economic mobility to the urban poor. Pavement dwelling has been recognised as slum housing but squatting still remains the most common housing option for the urban poor. Continuous growth of squatter settlements by densification has resulted in inadequate living spaces and a deterioration of the environment. Lack of access to secure legal tenure prevents access to services and

formal housing finance. The high density, low-rise settlement pattern limits any significant improvement of living conditions.

- Policies for slums have been mostly populist political initiatives or prescriptions imposed by international aid agencies. However there is a clear policy shift from clearance to more supportive policies of improvement and tenure regularisation of slums. Sustainable improvements and larger coverage have not been possible due to lack of continuity of policies and frequent policy changes due to 'competitive politics'.
- Slum improvement approaches inMumbai had always focused on physical improvements. However, intervention by civil society in last two decades has helped in improving awareness amongst slum dwellers, organising them and has successfully influenced policy implementation. The role of NGOs is being formally recognised by the government in its recent projects of MUTP and the Slum Sanitation Project. NGOs have also sensitised policy makers on the role of women in organising and managing improvements for the community.
- The redevelopment approach is unique inmany ways. It has significantly deviated from the enabling approach of international aid agencies, propagating provision of land and services, provision of affordable options, minimising subsidies and total cost recovery, low rise high density development, incremental improvements and the participation of households in shelter provision. Interestingly, the slum upgrading programme based on these principles, achieved relatively poor coverage, and had poor recovery, though it was affordable, and poor living environments and maintenance. Given the density of slums, there is no space available to provide minimum access ways, taps and toilets. Moreover, the scheme was limited to public lands only.
- The SRS scheme on the contrary, has achieved relatively faster and better coverage, with significant improvements in shelter, in terms of area and structural conditions, finishes, and individual services, thus integrating these slums with surrounding middle-income areas. Slums on private lands are also being developed. What is most interesting is that in a few cases beneficiaries of Slum Upgrading Schemes with secure legal tenure have approached builders and offered some payment to take up their area for redevelopment. The slum dwellers seem to be more than satisfied with the scheme as significant improvements in housing are seen within very short period, free of cost.
- Schemes carried out by co-operatives have taken many years as compared to those taken up by builders, which have taken two to three years. This is because of

the better technical, financial and managerial capacity of builders. Slum dwellers seem quite contented with the builder providing everything.

- On the other hand the SRS scheme has certain limitations. Critics fear that the scheme when implemented would double the population densities to 500 dwelling units per hectare in the already crowded slums. Although the builders have to contribute towards augmentation of off-site infrastructure, the scheme might create acute environmental deficiencies if the local body does not augment services. The decision to give 'free' houses hampers it's economic viability and is not at all justified as in earlier schemes squatters have paid up to US\$900 In future it will be politically difficult for any party to retract from this populist measure. The approach is heavily dependent on the real estate market, which has seen a sharp decline in prices in recent years. Moreover, redevelopment projects are not economically viable for large, high-density squatter settlements.
- While there is scope for further modifications in the scheme, it is essential to understand its limitations. The scheme is likely to be more viable if the slum density does not exceed 500 dwelling units/ha, if the slum pocket is not too big, if the community is homogeneous and if the pocket has locational advantages of good accessibility and good land value. The slum dwellers should be asked to contribute according to their ability to pay. More zones could be created according to land values in the city and differential floor area ratios can be prescribed in each zone. The present market-led approach views slums as real estate opportunities and holds some promise but closing other options of regularisation may neither be desirable nor feasible. With SRS the entire initiative rests with private builders and the government has taken a back seat. It is necessary to have other options for improving and regularising slums with the government playing a more proactive role.
- While earlier efforts at slum redevelopment elsewhere in the country were rejected on account of being capital intensive, requiring high subsidies, this one seems to have created sustainable improvements in many slums in Mumbai. A few factors, which have facilitated this are the higher land prices in Mumbai, acceptance of slum dwellers of apartment living and adoption of very high-density high-rise development by authorities. The Mumbai experiment offers possible options for regularising tenure for squatters located on high value public and private land in large metro cities of India. Continuity of policies and political commitment is essential to achieve wider impacts.

ACRONYMS

BMC/GMMC Greater Mumbai Municipal

Corporation

BMR Bombay Metropolitan Region

BMRDA Bombay Metropolitan Regional

Development Authority

BUDP Mumbai Urban Development Project

CBO Community Based Organisation

CDSs Community Development

Societies

CIDCO City Industrial Development

Corporation

EIUS Environmental Improvement of

Urban Slums

EWS Economically Weaker Sections
GOM Government of Maharashtra
HIL Home Improvement Loans

LIG Low Income Groups

MHADA Maharashtra Housing and Area

Development Authority

MMRDA Mumbai Metropolitan

Development Authority

MUTP Mumbai Urban Transport Project

NRY Nehru Rojgar Yojna

NGO Non-Governmental Organisation

NHGs Neighbourhood Groups
NSDF National Slum Dwellers

Federation

NSDP National Slum Development

Programme

PEATA Practicing Engineers, Architects

and Planners Association

PMIUP Prime Minister's Integrated

Urban Poverty Eradication

Programme

SJSRY Swarna Jayanti Shahari Rojgar

Yojna

SPARC Society for Promotion of Area

Resource Centre

SRA Slum Rehabilitation Authority
UBSP Urban Basic Services for the
USEP The Urban Self-Employment

Programmes

UWEP The Urban Wage Employment

Programme

YUVA Youth for Unity and Voluntary

Action

GLOSSARY

Chawl Housing originally built as

accommodation for mill workers

Hutment Collection of huts

Katcha Flimsy, poor quality

Pucca Solid

Zopadpattis Squatter settlements

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