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ABBREVIATION

AMC	Ahmedabad Municipal Corporation
AUDA	Ahmedabad Urban Development Authority
CDP	City Development Plan
CDI	Community Development Index
CEPT	Centre for Environmental Planning and Technology
EDI	Entrepreneur Development Institute
GTPUDA	Gujarat Town Planning and Urban Development Act
JNNURM	Jawaharlal Nehru Nation Urban Renewal Mission
MDG	Millennium Development Goals
MHT	Mahila Housing SEWA Trust
MoHUPA	Ministry of Housing & Urban Poverty Alleviation
NGO	Non Government Organisation
NIUA	National Institute of Urban Affairs
NSSO	National Sample Survey Organisation
NSUP	National Strategy on Urban Poor
SEWA	Self Employed Women Association
SJSRY	Swarna Jayanti Sahari Rojgar Yojana
SNC	Slum Network Cell
SNP	Slum Networking Programme
ULB	Urban Local Body
NHB	National Housing Bank
UNDP	United Nations Development Programme
UNFPA	United Nations Family Planning Association
UPRS	Urban Poverty Reduction Strategy
USEP	Urban Self Employment Programme
WPR	Workforce Participation Rate

1. Introduction

1.1 Background to the Project

The National Strategy for Urban Poor (NSUP) project is a joint initiative of the Ministry of Housing & Urban Poverty Alleviation (MoHUPA), Government of India and the United Nations Development Program (UNDP) aimed at addressing the key concerns in rooting urban poverty eradication and sustainable urban livelihoods. The main objective of the project is to empower the urban poor so that they can contribute effectively to decisions that impact their lives. The project strategy aims to provide the urban poor with a forum to discuss their needs and the obstacles to meeting them. The project seeks to build capacity for implementation of innovative urban poverty alleviation plans, with the thrust on basic services and improvement in the socio-economic condition of slum dwellers.

The UPRS is also an attempt at reaching out to the goals set out in the Millennium Development Goals for India. The MDGs are geared towards eradication of poverty and has a shorter time frame given the urgency of the situation. The MDG consists of eight goals, each one with specific targets.

Table 1.1 Millennium Development Goals

Goals	Targets	Time frame
Eradicate extreme poverty and hunger	Halve the proportion of people living on less than \$1 a day and those who suffer from hunger.	2015
Achieve universal primary education	Ensure that all boys and girls complete primary school.	2015
Promote gender equity and empower women	Eliminate gender disparities in primary & secondary education; at all levels	2005
Reduce child mortality	Reduce by two thirds the mortality rate among children under five	2015
Improve maternal health	Reduce by three quarters the ratio of women dying in childbirth	2015
Combat	Halt & begin to reverse the spread of	2015

HIV/AIDS, malaria and other diseases	HIV/AIDS and the incidence of malaria and other major diseases.	
Ensure environmental sustainability	Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources. Reduce by half the proportion of people without access to safe drinking water. Achieve significant improvement in the lives of at least 100 million slum dwellers.	2015 2020
Develop a global partnership for development	Develop further an open trading and financial system that includes a commitment to good governance, development and poverty reduction – nationally and internationally Address the least developed countries' special needs, and the special needs of landlocked and small island developing States Deal comprehensively with developing countries' debt problems Develop decent and productive work for youth In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries In cooperation with the private sector, make available the benefits of new technologies – especially information and communications technologies.	

The UPRS attempts to work towards goal 7 in particular and other goals on an overall.

The main objectives of UPRS

1. Sub-sectoral strategies aimed at leveraging resources for addressing the needs of the urban poor.
2. Promoting participation of the urban poor in the UPRS.
3. Promoting pro-poor institutional reforms.

In order to fulfil the above objectives, 12 cities were selected for formulation of UPRS. The Mahila Housing Sewa Trust was awarded work for formulation of UPRS for Ahmedabad city.

1.2 Approach

1.2.1 Strategy for Livelihoods

1. Analysis of Primary data (5 percent of the Slums and Chawls in Ahmedabad)
 - Nature and Extent of Livelihoods that exist in the slums, and whether there is heterogeneity in the slum with regard to incomes, castes, etc?
 - What would be the impact on their livelihoods if the slums were relocated?
 - What livelihood options do the workers in the slums have with regard to alternative jobs?
 - What is the nature of skills that they possess?
 - What is the nature of interventions that need to be made to improve the quality of life of the slum dwellers?
 - Develop some case studies of certain occupation groups, so as to facilitate intervention either in terms of skill up gradation, training, providing capital equipment or finances, providing insurance to the workers/ households in the slums.
2. Critical analysis of the existing livelihood programmes in Ahmedabad. The purpose is to see the extent of employability of such programmes and the scalability of the programmes and also to develop other alternative options. In this context we would begin with an analysis of Swarna Jayanti Swarozgar Yojana (SJSRY) and Ek Mouka Udaan, which is an initiative taken by the Gujarat Government and is implemented by SAATH, an NGO. We would also undertake some case studies of the beneficiaries for a better understanding of the programme.
3. Develop a livelihood strategy, which tries to address the concerns of the poor. This would largely include,
 - Skill training or up gradation across activities, which would make them employable.
 - Need for capital, especially for the self-employed through micro finance
 - Social security for the workers, which helps them to improve their quality of life
 - Insurance and health care

- Proper housing with hygienic conditions, as most work is done at home, there designated 'place of work'.
4. Formulation of Livelihood Strategy after consultation with the beneficiaries, NGOs working on these issues, like SAATH and Awaaz, and academic institutions, CEPT University and EDI and other organisations.
 5. Finalisation of Livelihood Strategy after consultation with the people living in slums and chawls.

1.2.2 Strategy for Housing

1. Out of the 5 percent of the Slums and Chawls we have chosen for the socio-economic survey and 2 slums were selected for detailed case study.
 - We would like to see under what conditions can a slum be relocated or there could be in-situ up gradation or vertical development of the slum in the same area with commercial development
 - As the slum population is not homogenous, we would like to explore the possibility of providing choices to the poor with regard to where they would like to resettle
2. Critical analyses of Slum Networking Project (SNP), which has been implemented in Ahmedabad and how we could improve this project both in terms of implementation and delivery. We would also review the SRA scheme, at Ram Dev no Tekra to understand the dynamics that exists and the implementation process.
3. Efforts were also made to see how resources could be leveraged for addressing the needs of the poor. Critical analysis of different schemes like, 90:10 toilet scheme, integrated low cost sanitation scheme, slum up gradation network project, and pay and use toilets with the objective of seeing, which of these schemes would be actually implemented with the most efficient resources for the welfare of the poor.

1.2.3 Institutional Reforms

1. To make both the livelihood strategy and housing strategy to be effective and beneficial for the poor, there is a need for institutional reforms,
 - The municipal corporations already have a 20 percent of their allocated budget to address the concerns of the poor.
 - i. The problem is that of utilization of that money for the poor.
 - ii. Ensure that the concerns of the poor are addressed in the projects taken up.
 - iii. Providing incentives to the staff of the AMC to take up pro-poor projects
 - iv. Need for more collaborative initiatives with the NGOs and private sector to ensure that the services reach the poor.

1.3 Methodology

The methodology adopted for undertaking the socio-economic survey is the following. Ahmedabad city has 710 slums and 958 chawls spread across 44 wards in five different zones. To understand the livelihood issues and needs of basic infrastructure of the poor we decided to take 5 percent of the slums and chawls as our sample. The sample is spread across the five zones in the city. A slum or a chawl has been chosen based on two criteria,

- (i) the extent of services (basic infrastructure) that exists in the chawl
 - a. no services
 - b. partial services
 - c. all services
- (ii) number of households in the chawl
 - a. number of households less than 150
 - b. number of households more than 150 <= 200
 - c. number of households more than 200

Based on these two criteria we have chosen slums / chawls in the city. The purpose of choosing the chawls or slum by the infrastructure criteria and size criteria is to assess the investment options and conditions under which slums can be relocated or resettled or whether there should be in-situ up gradation.

In socio-economic survey data on basic infrastructure and livelihood details of households were collected through detailed questionnaire survey. The questionnaire provided by NIUA has been modified a bit, wherein we some more questions have been added to have a better understanding of the situation. The socio-economic survey also helps us analyse the impacts on the weaker sections of the population SC and ST and specially the impact on women. There is no data that is available as of now, which help us to assess the impacts on these vulnerable groups.

1.4 Scope

1. Prepare a profile of the urban poor in the city – overall population and location wise classification into (i) urban poor residing in notified slums; (ii) urban poor residing in non-notified slums and (iii) homeless.
2. Conduct an analysis of the contribution of the urban poor towards the city’s economy and its day-to-day working. Study sector wise distribution of the urban poor such as numbers employed in industries, transport, crafts, domestic areas etc.
3. Map the city’s urban poor (residence and work place) and based on the map, analyze reasons as well as impact/ effect of the urban poor being located in a particular area.

1.5 Limitations

1. In 2002, the number of wards increased to 55. However, we have considered the earlier number of wards in our study due to availability of maps for 44 wards.
2. The UPRS is restricted to the AMC area.
3. The UPRS has touched open issues of health, social security and education for the poor. However detailed studies for these needs to be undertaken.

2. General Profile of the City

Ahmedabad is one of the largest cities in Western India, located in the highly industrialized and urbanized state of Gujarat on the West coast of India. The city economy has grown spatially from 108.24 sq. km. in 1971 to 190.85 sq. km. in 2001. There are five other large cities in Gujarat, apart from Ahmedabad, which play an important role in the state's economy. The population growth rate in Ahmedabad over the last decade was 2.03 percent, a slow down compared to other cities (Mahadevia, 2007)¹. There is a decline in the average household size over the last decade from 5.9 in 1991 to 5.1 in 2001, and the sex ratio has also slightly worsened over the past decade. What is interesting to observe is that the literacy rate in the city has improved tremendously over the decade from 68.5 percent in 1991 to 83.1 percent in 2001

2.1 Area and Population

The area within Ahmedabad Municipal Corporation (AMC) boundary was 190.84 Sq. km in 2001, while total urbanised area outside the AMC boundary was 67.79 Sq. km totalling to 258.63 Sq. km. The urban area surrounding AMC comes under Ahmedabad Urban Development Authority (AUDA), and we are not considering the AUDA area in this study and analysis, and restricting the Urban Poverty Strategy to the AMC area (Table 2.1).

Table 2.1 Demography: Ahmedabad City (AMC Area)

Parameter	1991	2001	2008
Population (in million)	2.87	3.52	5.5
Total area (in Sq. Km)		190.84	466
Density (persons/ sq. km.)	15039	18445	NA
No. of Households	552164	717638	NA
Average Household size	5.9	5.1	NA
Sex Ratio	889	884	NA
Literacy Rate (%)	68.58	83.1	NA

Source: Census Report, 1991 and 2001

¹ Mahadevia, D, 2007, 'A city with many borders: Beyond ghettoisation in Ahmedabad' in Annapurna Shaw (Edited) *Indian Cities in Transition*, Chennai: Orient Longman.

2.2 Socio-economic Profile

Ahmedabad is located in one of the highly industrialized and urbanised parts of Gujarat State. It is the seventh largest metropolis in India. In 1991 about 75 percent of the population of Ahmedabad district was identified as being urban. The Ahmedabad Urban Agglomeration (UA) (3.31 million in 1991) accounted for 92.2 per cent of the district's urban population in 1991 and housed a quarter of the state's urban population. The population of the Ahmedabad UA in 2001 increased to 4.5 million and it is the largest city in Gujarat. Ahmedabad city had a total population of 3.5 million in 2001, 1.86 million males and 1.65 million females.

In Ahmedabad a decline is occurring in the population share of the walled city (city core) because of emigration of population to other parts of the city as well as increasing commercialisation. This tendency has been particularly marked since the seventies (growth rates of -0.14 per cent and -1.73 per cent in 1971-81 and 1981-91 respectively). The periphery (especially the western region) has registered the fastest population growth due to low population size as compared to the core and availability of land. The average density of the city in 2001 was 18,420 persons per km². The sex ratio according to the 1991 census was 889 female per thousand males. It had declined to 886 in the year 2001. According to the 1991 census, the literacy rate of Ahmedabad city was 66.9 per cent. The male literacy rate was 73 per cent and female literacy rate was 60 per cent. The provisional figures for 2001 indicate that the total literacy levels have increased to 73.3 per cent. In 1991 13.9 per cent of the population in the city comprised of SC/ST 'Schedule Caste' and 'Schedule Tribe' population that is suffering from socio economic backwardness), which is the highest amongst all the other cities in Gujarat. For administrative purposes, the city is divided into 43 administrative wards and five zones

The city of Ahmedabad has had great importance in the economy of Gujarat owing to the large concentration of economic activities their high growth rates and productivity. Ahmedabad accounts for 7% of the state's total population and around 20% of its urban population. In 1995, with 7 percent of the total population, Ahmedabad

contributed to 17 percent of the state income (4). Ahmedabad city accounts for 21.5% of factories in the state employing 18% of workers (2000). In 1981, before the textile crisis, Ahmedabad city used to account for 19.3% of factories and 27.7% of workers in the state. Ahmedabad accounts for almost 19 percent of main urban workers in the state and 60 percent in Ahmedabad District. A sectoral shift has been observed in Gujarat, after liberalization. There has been a rapid growth of chemical and petrochemical industries in South Gujarat districts. The investment figures show a significant decline in the share of industries in and around Ahmedabad. On the other hand, tertiary sector which includes business and commerce, transportation and communication, construction activities and other services appears to be growing. The workers participation rate (WPR) or the share of working population in Ahmedabad is 32 percent (2001) as against 33 percent of the State Urban WPR.

2.3 Future Growth Direction

The Ahmedabad Urban Development Authority is responsible for land use planning within its jurisdictional limits. As stated above, the area under AUDA may be seen as various subunits depending on the administrative jurisdictional limits and extent of development. Of this, the area delineated as Ahmedabad Urban Complex consisting of AMC, outgrowth adjoining AMC and area likely to develop in the ten years has been designated as Ahmedabad Urban Complex. Land Use Planning Mechanism as envisage in Gujarat Town Planning and Urban Development Act (1976) include:

Development Plan: Prepared for the entire area of the Urban Development Area which consists of two parts

- a) A land use plan earmarking various areas as permissible use zones, and
- b) A Development Control Rules for implementation of development plans

Town Planning Scheme: Prepared for an area of about 100 hectares with an objective to convert original agricultural plots into urban plots with proper shape, size and access. In the process of preparation of these areas, aspects of public amenities, **housing for weaker section** and for marketing by the ULB to recover facilities infrastructure building costs are integrated. The total of this area ranges between 35 to 50%.

As per existing land use (1997), nearly 35 percent of total area is under residential use and 15.37 percent area is under industrial use. In proposed development plan of Ahmedabad 2011 has a mention of 43.20 percent area proposed for residential use. However, in the present development plan there is no specific allocation of land for housing of weaker section but in future when town planning scheme will be made the area specifically allocated for housing of weaker section will be mention.

Table 2.2 Existing and Proposed Land-use in AMC area

Sr. No	Existing Land Use of AMC area (1997)			Proposed Land Use of AMC 2011		
	Use/ Designation	Total Area (Ha)	% of total area	Use/ Designation	Total Area (Ha)	% of total area
1	Residential	6664.44	34.92	Residential	8340.22	43.70
2	Commercial	472.64	2.47	Walled City amd Gamtal	645.56	3.38
3	Industrial	2932.78	15.37	General Industrial	2006.51	10.51
4	Open/ Vacant Land	4473.36	23.44	Special Industrial	786.72	4.12
5	Gamtal	895.59	4.69	Commercial	263.06	1.38
6	Education	344.19	1.80	Agricultural / Recreational / Open Space / Gardens	1643.60	8.61
7	AMC Plots	467.18	2.45	Education		2.03
8	Hospitals	98.36	0.52	Area Under Reservations now designated as special development area	387.30	10.25
9	Burial Ground/ Grave Yard	86.54	0.45	Roads and railways	1955.37	11.10
10	Water Bodies	850.55	4.46	Water bodies (including rivers)	2117.67	4.92
11	Roads	1426.65	7.47	Total	937.97	100
12	Railway Land	372	1.96			
	Total	19084.00	100			

Source: Revised Draft Development Plan of AUDA – 2011AD Part I, Vol 2

2.4 Issues

- 1 Maximum Permissible Land should be reserved for weaker sections of the society in Development Plan and Town Planning Schemes.
- 2 Expediting preparation and implementation of Town Planning Schemes.
- 3 Vending zones need to be allocated into the Development Plan and Town Planning Schemes of Ahmedabad.
- 4 Re-examination of reservation if slums are more than 10 years old is required.

3. Poverty Profile of the City

3.3 Urban Poor in the City

Ahmedabad, with a population of nearly four million, is the seventh largest city in India and the largest city in the western state of Gujarat. Out of a total labour force of about 1.5 million workers in Ahmedabad city, over 75 per cent – about 1.15 million – work in the informal sector (Rani and Unni 2000). In 1997-98, the informal economy employed about 1.1 million persons, i.e., 76.7 per cent of the employment in the city. This sector generated an income of about Rs. 28146 million, 46.8 per cent of the city income. The informal economy of Ahmedabad is both large and heterogeneous. The vast majority of poor households depend on the informal economy; and over 80 per cent of women workers work in the informal economy. Major informal sector activities include shop keeping, street vending, small-scale manufacturing and repair workshops, auto-rickshaw driving, construction work, scrap and paper recycling, domestic services, and home-based manufacturing.

According to official poverty line estimates, average annual income of Rs. 24180 is accepted as the bottom-line reference for categorizing poor by Government of Gujarat and it was used to estimate urban poverty under Swarna Jyanti Sahari Rojgar Yojna (SJSRY) in 1998 for a household size close to 5. Out of all existing slums, the government notified slums are the ones which were recognized under Gujarat Development Regulation Act 16.2 G of 1991. Only these slum dwellers are officially entitled to any compensation by government in any form.

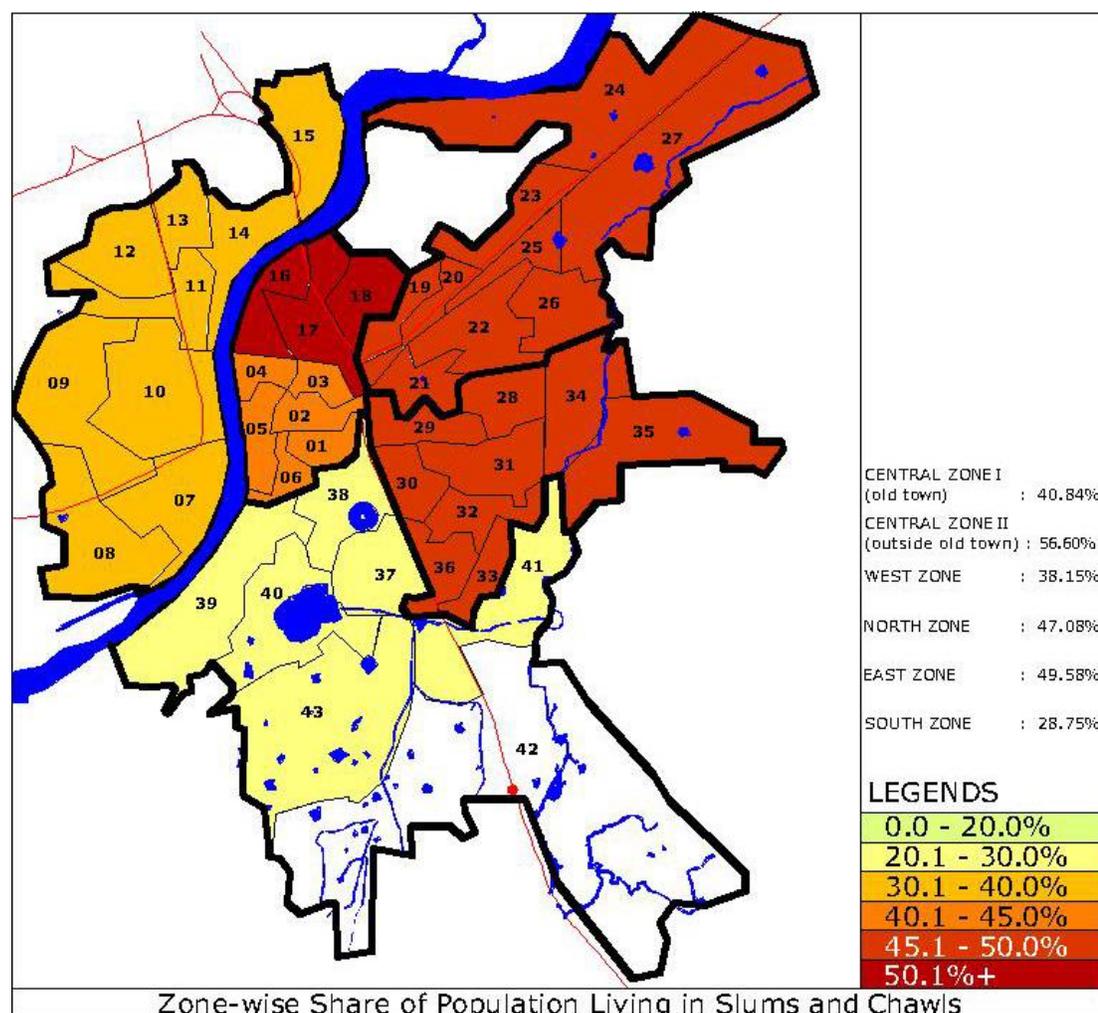
There are different estimates regarding the population of poor in Ahmedabad city. The 2001 census reported 12 percent of total population being poor in Ahmedabad. This is argued to be unrealistic. According to CDP of Ahmedabad, 2006-2012, SJSRY survey conducted in Ahmedabad in 1998 showed that 32.4 percent of city's population living in the slums. This means that the population living in slums had almost doubled within ten years from 1991 to 2001. According to the same survey, around 60 percent of the slum households fell below the poverty line. This makes the population of poor in the

city to be 19.5 percent assuming that there are no poor living outside slums and also, that living in slum in underprivileged conditions is in itself not sign of poverty. This is again contestable. This estimation is based on the income criteria. Mahadevia and Brar in their paper estimate the urban poor in Ahmedabd to be 40 percent (‘Basic Infrastructure, Public Finance and Slum Dwellers: Ahmedabad’, page 2)

Table 3.1: Slum Population in AMC area

	Population (in Lakhs)	
	1991	2001
Total Slum Population	4.56	9.06
Slum Population as % of total population	16	25.77

Source: AMC as quoted by CDP of Ahmedabad 2006-2012, prepared by AMC and AUDA with Technical support by CEPT University, Table 5-3, from page 73.



There are a number of estimates floating around with regard to the proportion of urban poor in Ahmedabad, based largely on income criteria. A more realistic definition of urban poor would be one, which takes into consideration both the income criteria and also whether households have basic infrastructure facility like water, sanitation, storm water drainage and solid waste management, which ensures them better quality of life. This is largely because we find that there are households within the slums, which have incomes much larger than the poverty line figures but their living conditions are pathetic and this often poses a question as to where one would classify them. Thus, we would like to have a much broader definition of urban poor, which includes both income and basic infrastructure criteria.

3.3 Location of Slums

The city of Ahmedabad has 710 slums and 958 chawls spread across different zones in the city. There are about 1.75 lakh households residing in the slums and 1.49 lakh households in the chawls in city (Table 3.2).

Table 3.2 Slums and Chawls in Ahmedabad

Zone	Slums			Chawls		
	No.	%	Houses	No.	%	Houses
East	52	7.3	22351	406	42.4	64053
West	156	22.0	41642	82	8.6	14120
North	129	18.2	25106	303	31.6	56472
South	209	29.5	39142	81	8.5	5771
Central	164	23.2	46883	86	8.9	8606
Total	710	100	175124	958	100	149022

Source: AMC-MHT Survey, 2000



A major issue concerning the poor relates to that of land tenure as most of the slums (66 percent) and chawls (91 percent) are on private land (Table 3.3). This causes a concern as the basic services which are to be provided to them cannot be provided on private lands or even in government or mixed lands. With regard to the basic infrastructure for the poor, we find that only 9 percent of the households in slums and 17 percent of the households in the chawls have pucca housing. A major reason for such poor housing could also be due to the tenurial rights not being clearly defined, households would be unwilling to invest in improving the conditions of their house.

Table 3.3 Status of Land Ownership of Slums and Chawls

Ownership	Slums	%	Chawls	%
AMC	119	17	51	5
Govt.	89	13	18	2
Private	466	66	868	91
Mix	34	5	21	2
Total	710	100	958	100

Source: AMC-MHT Survey, 2000

69% of the respondent households owned their homes. Home ownership was lowest in the Central zone, with just about half the respondents (49.5%) owning the home they live in. At least half of the residents invested more than Rs. 50,000 in residential property (including purchase of land and the costs of construction and up gradation of the homes). 30% of the households live in rented accommodation in these settlements. Among those who were renting their homes, the average rent paid was Rs. 500 per month. However, in Central zone the monthly rental was only Rs. 50 and in South zone Rs. 200 per month.

The duration of residence of the respondents in the settlements varied by zone. While the median number of years of residence in the current settlement was 20 years, it was 15 years for residents in the East zone.

9.3 % of the houses are kuccha and 66.3 are semi-kuccha. Thus, less than a quarter houses are pucca. There is some variation by zone. For instance, in the South zone, only 16% houses are pucca, but less than one percent is kuccha. The majority are semi-

pucca. In the Central zone, on the other hand, 37.2 % of the houses are pucca, and a little over half are semi-pucca. Chawls have a much higher percentage of pucca houses compared to slums- 31.3% versus 14.6%.

60% of the households paid property tax, indicating that they eligible for all services provided by the municipal corporation. The highest proportions of households that paid property tax were in the central and east zones (77% and 70% resp.) and the lowest proportion were in the West zone (38%). Many more chawl dwellers (76.3%) paid property tax compared to slum dwellers (42.1). There was a negligible payment of any other types of taxes by residents in these settlements.

The homes had an average of 2 rooms, with little variation across zones. Almost all the homes had only a ground floor. According to UN-HABITAT if there are more than 3 persons per room in a house, it is defined as overcrowded living conditions. According to this calculation, only three-fourths of the households had sufficient living area.

3.3 Demography

The majority in the slums/chawls are Hindus (95%). Muslims make up 4% of the population and Christians are a small minority (less than 1%). The Muslim community is concentrated in the Central zone, with 19.5% of the population in that zone being Muslim. Around 87 percent of total slum population belongs to Schedule Caste, Schedule Tribe and Other Backward Caste communities in that nearly 50 percent belongs to SC/ ST communities. Average household size in the slums is 4.5 percent. Literacy rate among male and female in slums and chawls is given in table 3.4.

Table 3.4 Literacy rate in Slums and Chawls

Sex	Literates (%)	Illiterates (%)
Male	50.02	49.98
Female	68.23	31.77

Source: - Primary Household Survey

3.4 Drinking water

Overall, 66% of the households had an individual water tap in their homes. In the West Zone however, only 44% reported having a private tap in their homes; in the other zones it ranged from 68% to 84%. Water was available on average for 2.5 hours each day. The next most common primary water source was a public tap (14.02%) followed by tube-well/hand pump (9.37%).

Given the smaller number of individual taps in the West zone, more than a quarter (26.32%) of the households use public taps as the primary source of data. Of the households that did not have individual taps, the distance to the water source and time taken to fetch water are important considerations. We assumed that households that had water available within 100 meters of their homes, and households that spent half an hour or less per day to get water could be said to be having good access to water. Less than half of the households without private taps had good water access. While the distance traveled was not the issue (72.21% had to travel 100 meters or less for water), more than half the households (57.3%) spent more than half an hour to get water.

The small percent of people that have to buy water spend Rs. 50 per month for water. However, none of the households in the central zone needed to buy water.

3.5 Drainage system

In most slums the storm water drainage is not well planned. It is seen that the storm water is led into the sewerage network either at household level or at street level. Storm water drainage, especially during the monsoons, is of critical importance in the slums. 30.6% households reported having no storm water drainage facilities in their settlements, and 69.1% reported having drainage problems despite having storm water drains in the settlement.

3.6 Toilet facility

Access to individual toilets was available to 69.59% of the households. Access to individual toilets is much higher in the chawls; 80% of the chawl households have individual toilets compared to 58% of the slum households. Another 16% used public toilets or someone else's toilet. This still left 14% households who did not have access to any toilets. While the majority of households that had individual toilets were connected to the sewer lines, almost 10% of these households were not connected to a covered sewer line. This leaves 38% of all households without improved sanitation, i.e. individual toilets connected to a covered sewer.

The West zone settlements were the least serviced with regard to toilets. Only 41.26 percent homes had individual toilets, and 38.4 percent of households had no access to any toilets. Households that do not have individual toilets expressed a willingness to pay about Rs. 200 as their contribution towards construction of an individual toilet.

3.7 Garbage

In many slums, the solid waste is not properly collected. AMC has provided collection bin to some of the slums. That collection bin was provided among 10 households or 5 households. Most of the slum dwellers throw their trash in open spaces outside the slum. As per the survey 69.6 percent household dispose garbage in containers kept in their home which was later collected by AMC. 19.4 percent disposed garbage directly in the common container. 10 percent of the total household dumped their garbage on the streets. Collection of solid waste is not proper in the west zone nearly 21 percent households disposed garbage on the street. Collection system in central zone is very efficient only 0.8 percent of the total household dispose garbage on the street.

3.8 Street Sweeping

Street sweeping is responsibility of health department in AMC. As per AMC records sweeping frequency is daily. In survey only 30 percent household responded that frequency is daily and 70 percent household responded that sweeping frequency is weekly.

3.9 Electricity

Electricity is widespread in Ahmedabad slums/chawls, with 94% houses having electricity. 88.7% have their own electricity meters, and another 5% have informal connections. On an average, households spend Rs. 200 per month on electricity costs. 88.7% have their own electricity meters.

3.10 Road

In 82.5 percent slums approach are made up of Asphalt/ Tar and in 12.5 percent slums roads are dirt and kutcha. Nearly all surveyed slums have pucca road network.

Table 3.5 Approach and inside road in Slums and Chawls

Road type	Approach road (% of Slums & Chawls)	Inside road (% of Slums & Chawls)
Asphalt and Tar Road	82.5	37.5
Dirt and Kutcha Road	12.5	33.75
Tar Road	5	
Paved		28.75

3.11 Education

The city is well endowed with educational facilities covering a range of primary, secondary, higher secondary schools, colleges being offered by Municipal Corporation, private institutions and Central Government. As per AMC statistical outline there are 1287 primary and 583 higher secondary schools in the Ahmedabad details are given in table 3.6.

Table 3.6 Schools within the AMC area

Type	Agencies				Total
	Central Govt.	AMC	Aided	Pvt.	
Primary Schools	11	563	-	715	1287
Secondary/Higher Secondary Schools	11	5	399	444	583

Category-wise average number of students registered in education institutions is given below in table 3.7.

Table 3.7 Dependency ratio in education institutions

Type of School	No. of School	No. of students	Dependency Ratio
Municipal Primary	563	206940	368
Private Primary	715	351065	491
Municipal Secondary	5	2005	401
Institutions Secondary	226	54218	240
Institutions Higher Secondary	210	168115	801
Others	8	1780	223

3.12 Health

The AMC manages 3 general hospitals, 3 ophthalmic hospital, 3 TB hospital, 5 referral hospitals and 22 allopathic dispensaries. AMC also manage 8 maternity homes, 3 dental clinics and 20 dispensaries. The Municipal General Hospitals together have the capacity of 1861 beds, whereas Civil Hospital has a capacity of 1189 beds. Together in all it sums up to 4782 beds. In the survey respondents were asked how far health facility from their slum and chawl is. Distance of health facility from slums and chawls is given in table 3.8.

Table 3.8 Average distance of health facilities from Slums and Chawls

Facility	Distance (% of slums)			
	0.5 Km	1 Km	2 Km	> 2 Km
Primary Care Centre	36	33	16	15
Chemist Shop	75	24	1	0
Clinic	73	14	9	5
Private Hospital	30	46	3	21
Public Hospital	5	24	18	54

3.13 Occupational structure

Data collected in survey on occupational structure revealed that 24.5 percent slum dwellers are construction worker and 20.5 are casual labours. Nearly 14.2 percent are working as domestic servant in that maximum are women. Persons who are street vendors are clubbed in hawker's category nearly 5.6 percent persons are in this category. Another big category is of seasonal employment 7.4 percent persons are seasonal labours. Occupational structure of workers in Slums and Chawls as per national classification of occupation as per NSSO is in given table 3.9.

Table 3.9 Occupational structure in Slums and Chawls

Sr. No	Occupation	Persons (%)
1	Hawker	5.6
2	Domestic Servant	14.2
3	Construction worker	24.5
4	Plumber	2
5	Electrician	1.5
6	Petty Trader	8
7	Casual Labourer	20.5
8	Tourism related activity	0
9	Handicraft sector	2.8
10	Seasonal employment	7.4
11	Other	2
12	Unemployed	11.5

3.14 Credit facility

Less than a quarter households (23.2%) saved regularly across the five zones. Among households that saved, the average was Rs.451.81 per month. The North zone had the smallest proportion of households that saved regularly (17.7%). Residents of South and Central zone had the highest proportion of savers (30.4% and 38.3% resp.); they also had higher monthly savings (above Rs. 500 per month), with West zone households having the lowest monthly savings (Rs. 300). However, the proportion of the population saving in formal banks² was relatively low, ranging from 23% in the Central zone to 9.2% in the North zone.

77.4% of the total respondent households reported having a loan currently, with little variation across zones. Only 19.1% of the total number of households had taken the loans from formal banks. South and Central zone residents had a higher proportion of borrowers from formal institutions compared to the other zones. Looking across the total population, 46% were currently indebtedness to private moneylenders, with this figure being highest for East zone residents at 57%.

² These include government banks and SEWA Bank.

4. Vulnerability Assessment of Slums in the City

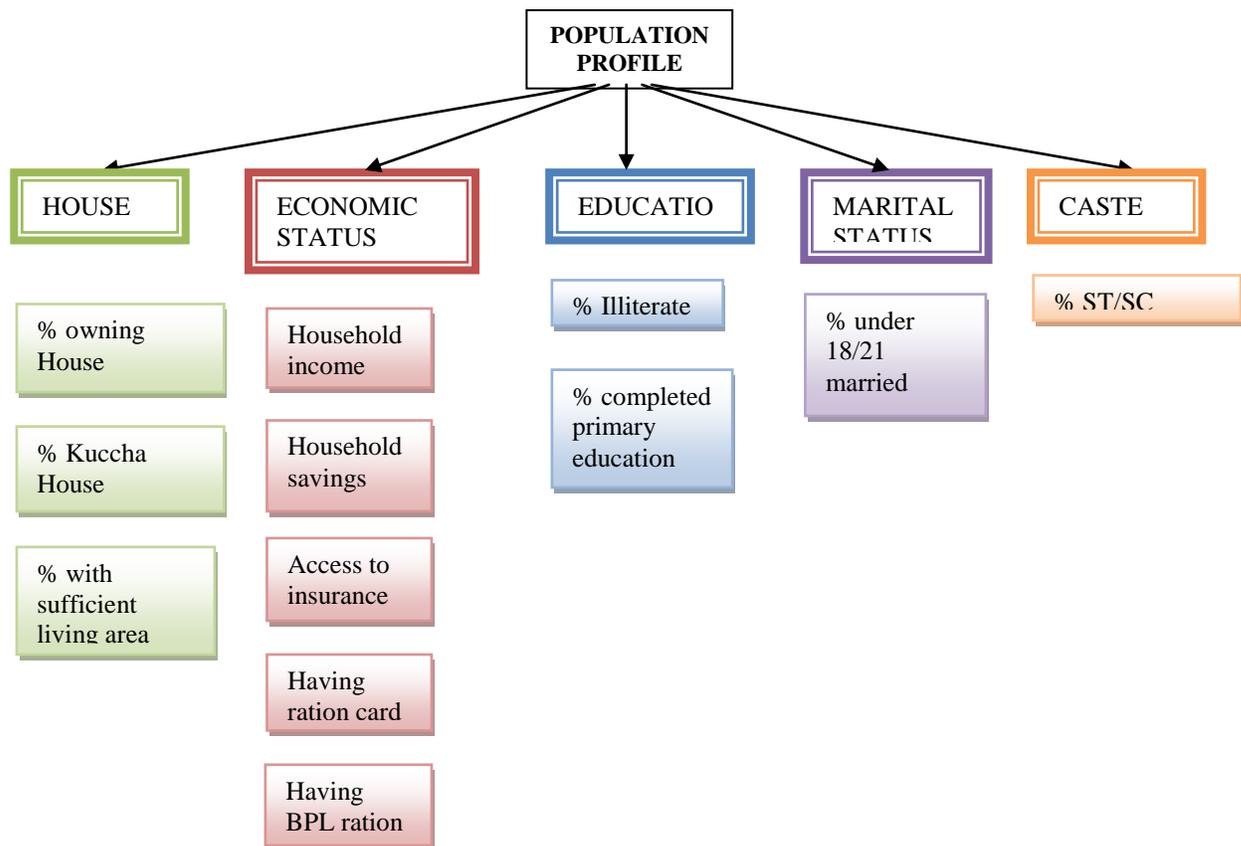
We have developed a Community Development Index (CDI) for each settlement based on the conditions of housing, infrastructure and basic services in that settlement. The CDI for each settlement is shown at the bottom of a one-page data sheet that has been prepared for each of the 84 slums/chawls. Each data sheet carries all the important details about that settlement pertaining to housing, infrastructure and basic services.

Specifically, there are four broad categories of information used to compute the CDI. These are:

- i. Population profile**, i.e. socio-demographic characteristics;
- ii. Access to public facilities** (usually outside the community), e.g. health facilities, schools, public transport etc.;
- iii. Access to basic facilities** (usually inside the community) at the household or community level, e.g. water supply, sanitation etc.;
- iv. Community participation.**

Each of these four groups has a set of indicators and sub-indicators. Figure 1 below illustrates how the first group “Population profile” has been divided into five groups and 12 sub-indicators.

Figure 1: Indicators and sub-indicators for Population Profile



Each group of indicators (except 3“Free Public Toilets” and “Pay & Use toilets”) has been assigned a group weight. The weights range from 1 to 20 to accommodate the highly variable importance of the various indicators for quality of life. The weights assigned to each group are therefore based on the importance as perceived by the residents and from the point of view of city planning and the well-being of the entire urban population. The sum for the indicator weights for each of the four groups is as follows:

- a. Population characteristics is 53
- b. Access to Public facilities (outside the community) is 16
- c. Access to basic services/infrastructure (inside the community) is 40
- d. Community participation is 10

³ The reason for excluding these two indicators is that the goal is to have individual toilets for everyone.

Thus, if there are all indicators available, then the total weight sums up to 119.

Each sub-indicator within a group of indicators is assigned a sub-indicator weight so that the sum of the sub-indicator weights is equal to the weight of the indicator group. The weight assigned to each sub-indicator is based on its importance relative to other-sub-indicators within its respective group. (It is therefore important to note that one cannot compare the weights of sub-indicator within different groups because each sub-indicator's weight is relative within its group, instead of being an absolute weight.)

In case the data for a sub-indicator is not available, the weights of available sub-indicators within the same group may be adjusted so that the group weight does never change (as long as there is at least one sub-indicator within the group available). The following example illustrates how weights and scores are assigned:

The indicator "Health Facilities" has been given a group score of 5. The two sub-indicators – "Primary Care Center" and "Public Hospital" have weights of 4 and 1 respectively, equaling the group weight of 5. If data for "Public Hospital" is not available for a particular settlement, then the weight for it will be 0 instead of 1. However, "Primary Care Center" will be reassigned a weight of 5 instead of 4 so that the group weight for this indicator does not change.

Only if the data for all the sub-indicators of a particular indicator is not available then the group weight in this case becomes zero. Continuing with the above example, if data for "Primary Care Center" and "Public Hospital" is not available, then the group weight will become 0 instead of 5, because there is no information available that could be factored into the CDI.

Each sub-indicator also has a score. The score is based on actual status/performance of that sub-indicator in that settlement. E.g. the score for the sub-indicator 'own house' in a settlement is equal to the actual % of households who own a house in that settlement as per the household survey carried out.

Some sub-indicators indicate a negative status, e.g. kuccha houses. In such cases, the score is equal to $(1 - (\text{share of kuccha houses in the settlement}))$; in this way each indicator's score defines a positive target, e.g. "the goal is to upgrade all kutchha houses no non-kutchha". In the appendix we have listed all the indicators, sub-indicators and the manner in which their scores were assigned.

The CDI for each settlement is thus equal to the sum of the score of each sub-indicator multiplied by its weight and then the sum is divided by the sum of all the weights assigned to the indicators in that settlement.

Note: It is important not to confuse the meaning of "weight" and "score". While the score tells us about the performance, e.g. how many houses are made of kutchha, the weight tells us how important we consider that there are X.X percent kutchha houses in the area. The different meaning is shown by the CDI formula:

$$\text{CDI} = (w_1 * SC_1 + w_2 * SC_2 + \dots + w_3 * SC_3 + \dots + w_n * SC_n) / (\sum w_i)$$

$$= \sum (w_i * SC_i) / (\sum w_i).$$

W being the weight (importance);

SC being the respective score (performance).

$\sum w_i$ being the total sum of weights available.

It is furthermore important, to mention that in statistics weights sum usually up to 1 (or 100 percent). We did not pay any attention to this (only formal) requirement for two reasons:

Data availability. In some cases not all indicators are available. For example, there are 6 settlements for which there is no map available. Data on street light coverage and share of kutchha houses are derived from maps. If there are no maps available, then the total weight in these settlements sum up to

$$119 - \text{weight of street lights} - \text{weight of kuchha}$$

$$= 119 - 2 - 5 = 112.$$

By deviding through the total of 112 weightage points instead of 119, the different sets of indicators become (relatively) comparable.

- i. **Easier understanding.** Instead of using weights like 0.0632 and 0.0137, we tried to keep it as simple as possible, using 1-digit numbers, such as 2, 3, 5, 10, and 20. This might be questionable from a scientists point of view put effective in the light of the policy makers that use the data.

To assess the vulnerability level for each of the 84 settlements surveyed, the CDIs have been categorized into four categories:

- a. 'Highly vulnerable' if the CDI is less than or equal to 0.527
- b. 'Vulnerable' if the CDI is greater than 0.527 but less than or equal to 0.623
- c. 'Mildly Vulnerable' if the CDI is is greater than 0.623but less than or equal to 0.719
- d. 'Nearly decent' if the CDI is above 0.719.

List of indicators and sub-indicators is attached in **annexure no I.**

5. Case Studies

The slum areas of “Rajiv Nagar” and “Sanjay Nagar” were chosen for detailed profiling based on the fact sheets developed as a part of Task–2 for the Urban Poverty Reduction Strategy, and MHT’s own experience of working directly with the community.

“Rajivnagar” is a slum located on Government land. The rationale for choosing this slum was to illustrate the fact, that by virtue of being on Government land, eviction is not perceived as a threat by the people. But the slum is not serviced by the Municipal Corporation, and the possibility of accessing good quality, doorstep services remains a distant dream. There are approximately 710 numbers of slums and 958 chawls in Ahmedabad city. However, most of these slums are not being considered for services by the ULB under the slum networking project because of denial of permission by the Government

Sanjaynagar’s physical infrastructure was upgraded as part of the city’s Slum Networking Project. The slum of “Sanjaynagar” has been recorded in the Mildly Vulnerable category in the fact sheet prepared under Task 2. However, this slum was selected as a case study to elicit the needs of an area that exist despite the slum upgradation that was done.

The SWOT analyses and the focus group discussions with the respective slum residents in these two areas, brings forth their distinct and different views on sensitive issues like relocation and housing.

For the third case, instead of taking up a third slum settlement, we have presented a possible model for housing for the poor. This decision was in consultation with the National Institute of Urban Affairs, and shared with the Ahmedabad Municipal Corporation. This model has also been discussed and presented to the National Housing Bank (NHB) for the “Aam Aadmi” Scheme which the NHB is proposing to launch.

5.3 Rajiv Nagar I.T.I

The Rajiv Nagar ITI slum is located in the Naroda ward of the North zone of Ahmedabad city. The land in this settlement has been designated as residential land. The occupied area in the slum is 0.44 hectares, and it has 174 households residing in it. The population in this settlement is 846, making a population density of 1915 per hectare.

5.1.1 Background

From discussions with the current residents, we know that the land in Rajiv Nagar was owned by a farmer named Baldevbhai. Around 1984, the farmer was told by the government to dispose of this land to poor households at a nominal rate. The farmer divided the land into 15 meter by 18 meter plots and sold them at Rs. 1500 a plot. The buyer was given a receipt to show purchase of the land. Some of the current residents are among the original buyers, others bought plots from the original buyers and built homes on the. The residents have these documents available with them. About half the current residents have been living there for over 15 years; others started living there in the last 15 years.

5.1.2 Population Profile

More than half the population belongs to the SC/ST category. While 62% of the population above 7 is literate, a third of the population (36%) has completed only primary education. The average monthly household income is Rs. 2,924 and half the people save Rs. 100 or less each month.

5.1.3 Approach Road and Access

The settlement is located adjacent to a railway track. Until two years ago, the easiest way to approach the settlement was from the kuchcha road next to the railway track. Two years ago, the railway department that owned this land has fenced it, thus blocking this convenient entrance to the settlement.

This lack of approach to the settlement has led to a host of problems ranging from deterioration of livelihood possibilities to hampered movement out of the settlement in case of medical emergencies.

5.1.4 Basic Services

The slum is laid out in a grid like fashion as see in the map. The biggest problem the residents face is lack of water for household use. The main municipal line for water comes to one end of the settlement. However, other settlements through which the line passes have taken illegal connections from this pipe to their homes, so that by the time the water reaches the mouth of Rajiv Nagar, there is very little water pressure. About a third of the homes have private water taps, provided by a private water supplier, who has dug a bore well at one end of the settlement. He lays pipe connections to individual homes at a charge of Rs. 1000, and charges Rs. 100 per month for the supply of water. The water is supplied for about half an hour each day.

Residents who do not have this source of water, either due to reasons of cost or distance from the private supplier's bore well, go to neighboring places for water. These include a factory across the railway track and a neighboring colony. However, going to other places is not free of harassment. Several families pay Rs. 5 per water pot to the person they get the water from. Also, sometimes they are not allowed to fill water.

Almost a third of the households (64%) have individual toilets. However, only 24% of the toilets are connected to the sewage line. The houses that have connected their toilets to the sewage lines have done so on their own – the municipal corporation has not laid any systematic legalized sewage connections from the individual homes to the municipal sewer line. Until some years/months ago, these households rushed these toilets, but now the residents say that the sewage line and the cesspits are all clogged and filled up. The majority now defecate in the open near the railway track. The residents do not have access to any pay and use toilet facilities.

The slum has no paved roads, and during the rainy season the roads in the slum are filled with water.

One of the two main lanes within the settlement has had street lights for a few years. Recently, about a month ago, street lighting was put up in a second lane. There is no system for storm water drainage in the slum. During the monsoons water gets collected in the slum and movement into and out of the slum becomes very difficult.

The residents say that there is weekly collection of waste from the households but the garbage is simply dumped at one end of the slum near the railway track where there is some unoccupied land. There is no community hall or any such facility in the settlement.

5.1.5 Housing

Most of the houses are single storey houses and 82% of these are semi-pucca structures. 75% of the houses are inhabited by persons who own the house. Using the definition used by UN-HABITAT, 63.2% of the population has sufficient living area.⁴ Only 5.13% of the households pay property tax.

5.1.6 Livelihood

Most of the residents are daily wage earners, primarily in construction work. Women also work as domestic help in neighbouring middle class colonies. Some women work at home rolling papads and then sell them to the traders marketing such goods. After the railway department blocked off the approach road to the settlement, people wanting to do home-based work are facing problems of getting work. Traders and middle-men find it difficult to reach the settlement, and even small vehicles carrying raw material have difficulty entering the settlement.

Mahila Housing Trust, an NGO working on improving housing and infrastructure services in the slums conducted training in construction skills for the residents. A few

⁴ According to UN-HABITAT if there are more than 3 persons per room in a house, it is defined as overcrowded living conditions.

residents reported that they had been able to get more and higher paid work as a result of this training.

5.1.7 Access to Public Facilities

There is a primary health care center two km away and a public hospital about three km from the slum. Residents mostly use private doctors for common illnesses, but use the public hospital for major health care needs. Lack of an access road at times of medical emergencies is a major concern. There is an aaganwadi half a km away, and the high school is located one km away. Local transportation is available about half a km from the settlement; the railway station is seven km away and the state transport bus terminal is 10 km away. The nearest police station is two km away.

5.1.7 Monthly Per Capita Expenditure

Primary data on Monthly Per Capita Expenditure (MPCE) were collected to know per capita expenditure of household on Health, Education and Travelling. More 80 percent households are spending Rs 0 to 300 per capita per month on Health and Education. Travelling expenditure also includes travel to work, nearly 13.86 percent households are spending Rs 425 to 500 per capita per month on travelling.

Table 5.1 Monthly Per Capita Expenditure on Health, Education and Travelling

Sr. No.	MPCE Category	Households (%)		
		Health	Education	Travelling
1	0 to 300	82.67	88.61	67.82
2	> 300 to 350	0	0	0
3	> 350 to 425	2.97	0.99	2.97
4	> 425 to 500	7.92	3.96	13.86
5	> 500 to 575	0	0	0
6	> 575 to 665	0.5	0.99	3.47
7	> 665 to 775	1.49	0.99	2.48
8	> 775 to 915	0.5	0.50	0.99
9	> 915 to 1120	1.49	2.97	4.95
10	> 1120 to 1500	0.5	0	3.47
11	> 1500 to 1925	0	0	0
12	> 1925	1.98	0.99	0

5.1.8 SWOT Analysis of Rajiv Nagar

RAJIV NAGAR ITI - AHMEDABAD			
SWOT ANALYSIS OF HOUSING			
Prepared By : MHT			
No. of households - 174	Average household size - 5	Residents per hectare - 1915	Median duration of residence - 15 years
HOUSING			
Strengths	Weaknesses	Opportunities	Threats
71% own their homes and have documents to prove that they have paid for the land			
	The land on which the settlement exists is owned by the State Government. The AMC therefore cannot carry out any slum upgradation or provision of basic services on this land.	The state government currently does not have a slum policy. It has however held a round of consultations to develop such a policy. If the state government adopted a policy for slum development, this slum could benefit from that policy.	
63% have sufficient living space		82% of the homes are semi-pucca kuccha homes	

SWOT ANALYSIS OF BASIC SERVICES			
Prepared By : MHT			
Strengths	Weaknesses	Opportunities	Threats
BASIC SERVICES			
88% have electricity meters			
	5% pay property tax		
		The settlement has weekly solid waste collection but the garbage is dumped in an empty plot on one side of the settlement. There are no containers for waste disposal. The settlement can be linked to the door-to-door garbage collection scheme of the AMC.	
	There is no public provision of water in the settlement. There is a municipal water pipe coming to the mouth of the slum. However, illegal connections taken from this pipe before it reaches the slum means that there is little water even reaching the mouth of the slum.	A private supplier has dug a bore-well and supplies water to households willing to pay. Each household pays connection charges of Rs. 1000 and annual water charges of Rs.1200 per annum	

		The main water line comes to the mouth of the slum. It can therefore be extended to individual homes with little extra cost.	
	There are no legal and properly engineered sewage connections in the slum. 24% of the residents reported toilet connections to the sewage line, but these are self-engineered connections. People who had constructed individual toilets are unable to use them due to blockage problems. There were a large number of individual toilets connected to soak pits, but these too are now too full to be of use.	64% of the homes have constructed individual toilets. Some of this construction is from private funds, and some toilets have been constructed under the central UBSP scheme.	Residents have to resort to open-defecation given the collapse of the informal sewage connections and the overflowing soak-pits. This is a big health hazard for the residents. This is particularly so because of the private borewell which is an important source of water supply in the settlement.
		The sewage pipes come into the settlement, and can be engineered to connect with individual toilets at little extra cost.	
	40% of the settlement is covered with street lighting . However, during the monsoons the lights do not work, and there is no community based organization or resident's association to address such problems. There are no paved roads in the settlement.	The infrastructure for adequate street lighting exists, and this can be strengthened to provide sufficient street lighting.	

SWOT ANALYSIS OF SOCIO ECONOMIC PROFILE			
Prepared By : MHT			
Strengths	Weaknesses	Opportunities	Threats
SOCIO-ECONOMIC PROFILE			
	38% of the population over the age of seven is illiterate		
	Almost 80% daily wage earners. A large number are construction workers and domestic workers. This means that they have low and irregular wages. The average household income here is below the city average income .		
15 persons have taken loans from SEWA Bank for home repairs. The fact that residents are linked with formal financial institutions indicates that the settlement is serviced by formal financial services and that the community residents are using formal financial		The connections with formal financial mechanisms through loans and insurance indicate that the residents already have good linkages to microfinance services. This linkage can be leveraged for soliciting the contribution of residents for slum upgradation and provision of basic services.	

services for maintaining housing stock.			
22% of the household has atleast one household member who has insurance. This is a high proportion for informal workers, and represents a willingness to participate in formal financial systems.			
	Mostly construction workers and domestic workers, lack of approach road has reduced livelihood opportunities		
APPROACH AND TOPOGRAPHY			
	Blocked approach Low-lying, gets flooded		

SWOT ANALYSIS OF OVER ALL			
Prepared By : MHT			
Strengths	Weaknesses	Opportunities	Threats
OVERALL FEATURES OF THE SETTLEMENT			
<p>The settlement has an almost ideal street layout. There is adequate space in the settlement for providing infrastructure and basic services.</p>			
	<p>The biggest weakness of the settlement is the lack of an approach road into the slum. Until two years ago this was not a problem because the land along one side of the settlement was vacant. This land however belonged to the railways, and two years ago they fenced that land. Since then movement in and out of the settlement has become a big handicap, with adverse effects on health and livelihoods. This has had an adverse impact on the livelihoods and health of the residents. Traders and other middlemen are reluctant to come into the slum due to approach problems. Vehicles to carry raw</p>		

	<p>material into the slum find it difficult.</p> <p>In medical emergencies, residents find it difficult to reach the hospital located 3 km away.</p>		
<p>More than half the residents have been living there for more than 15 years.</p> <p>Several residents have extended families in the same settlement, and own more than one unit of the 15 ft. by 18 ft. plots that were sold there.</p>			
	<p>The settlement gets flooded during the monsoons, making it difficult to move into and out of the settlement.</p>		
			<p>There is a illegal liquor brewing 'adda' on one side of the slum. This restricts the movement of the residents in and out of the slum from that side.</p>

			<p>The settlement borders railway land. If the railway wants to keep that land unoccupied, then making an approach road to the slum can be a challenge.</p>
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5.3 Sanjay Nagar

5.2.1 Background

The Sanjay Nagar ITI is located in the Amraiwadi ward of the East zone of Ahmedabad city. The land in this settlement has been designated as residential/industrial land. The occupied area in the slum is 0.42 hectares, and it has 80 households residing in it. The population in this settlement is 490, making a population density of 1158 per hectare. This slum benefited from the Slum Networking Project of the Ahmedabad Municipal Corporation.

5.2.2 Population profile

About 31% of the population belongs to the SC/ST category. While 61% of the population above 7 is literate, a little over one third of the population (40%) has completed only primary education. The average monthly household income is Rs. 2,863. Households have little or no savings. Among households that save, the average amount saved per month is Rs. 134.

5.3.2 Approach Road and Access

The approach road and the internal roads are all paved. The settlement is free of flooding and water-logging. However, the settlement is very congested and the internal roads are very narrow.

5.3.2 Basic Services

The approach road and the internal roads are all paved. The settlement is free of flooding and water-logging. However, the settlement is very congested and the internal roads are very narrow. 98.51% of the households have individual water connections provided under the slum networking project of the Ahmedabad Municipal Corporation. Almost all the households (96.83%) have individual toilets. All households are connected to the municipal covered sewer lines. 93.5% of the houses have metered electricity connections. There is daily solid waste disposal coordinated and managed

by the community based organization of the settlement. However, there are no street lights in the settlement.

5.3.2 Housing

Most of the houses are single storey houses and there are no kuchcha structures in this settlement. Most of the structures are semi-pucca. 96.6% of the households pay property tax and are in possession of legitimate housing documents. 74.6% own their homes. Using the definition used by UN-HABITAT, 63.5% of the population has sufficient living area, while the remaining live in overcrowded conditions.⁵ However, in terms of living area, the space is limited – more than 90% of the homes are less than 25 meters square. Even with the limited space, that was available, people were not willing to relocate, since access to basic services was available. Most of them wanted to construct Ground + 1 structure and willing to take loans for it.

5.3.2 Livelihood

The central location facilitates adequate daily wage and domestic work to residents in this settlement. However, there are a low proportion of salaried workers in the settlement – 6.3% men and 3.7% women earn regular monthly salaries. However it emerged from the focus group undertaken by MHT in the area, that due to strong caste prohibitions, women were not allowed to go out for work. Mainly all of them were home based workers and were only willing.

5.3.2 Access to Public Facilities

The primary health center is located one km away from the slum and the nearest hospital is 2 km away. There is an aaganwadi half a km away, and the high school is located one km away. Local transportation is available about one km from the settlement; the railway station is 5 km away and the state transport bus terminal is 10 km away. The nearest police station is one km away.

⁵ According to UN-HABITAT if there are more than 3 persons per room in a house, it is defined as overcrowded living conditions.

5.3.2 SWOT Analysis of Sanjay Nagar

SWOT ANALYSIS OF SANJAY NAGAR - AHMEDABAD				
Prepared By : MHT				
	No. of households - 100	Average household size - 5	Residents per hectare - 1915	Median duration of residence - 15 years
Housing				
SR. No.	Strengths	Weaknesses	Opportunities	Threats
1	96.36% pay property taxes and are in possession of legitimate housing documents.	Inadequate living space – more than 90% homes less than 25 sqm.	Location on AMC land improves possibility of negotiating formal land tenure.	Lack of formal land tenure.
2	74.6% own their own homes.	Overcrowding – 36.5% families have 3 or more persons per room.	Opportunity to provide microfinance for housing and for securing legal land tenure.	Due to central location and availability of services, land suitable for commercial development
3	No kuchcha houses. Most housing semi-pucca.	Relocation completely unacceptable to community.	Opportunity to explore possibility of acquiring land for community hall in a nearby location.	
4	Majority chose G+1 as most acceptable expansion solution.	More than one-third of homes not suitable for G+1 expansion due to lack of space.		
5	All residents willing to pay for formal land documents	Willingness to pay for legal land documents not matched by ability to pay due to low incomes.		
6	High perceived need and willingness to pay for community hall.	Lack of available space for community hall.		

SWOT ANALYSIS OF BASIC SERVICES				
Prepared By : MHT				
SR. No	Strengths	Weaknesses	Opportunities	Threats
BASIC SERVICES				
1	Individual water connections in 98.41% households.	No street lights	Opportunity for continued capacity building of CBO.	
2	No open defecation – 96.83% households have individual toilets.	Ability to pay for further up gradation is low due to low and erratic incomes	Opportunity to provide microfinance loans for additional infrastructure services.	
3	100% households connected to covered sewer.	Extremely narrow and congested inside roads.	High level of confidence in MHT and AMC	
4	No flooding or water logging.			
5	Paved approach road and inside roads.			
6	Metered legal electricity connections and regular billing for 93.5% houses.			
7	Daily solid waste disposal coordinated and managed by CBO.			
8	Adequate access to public and private health facilities, schools and day care.			
9	CBO highly competent in administrative matters.			
10	Willingness to pay for more services and up gradation			

SWOT ANALYSIS OF ECONOMIC STATUS/LIVELIHOODS				
Prepared By : MHT				
SR. No	Strengths	Weaknesses	Opportunities	Threats
BASIC SERVICES				
1	Central location allows for adequate daily wage and domestic worker livelihood opportunities.	At Rs.2863.17, mean income lower than city average	Opportunity to diversify home-based economic opportunities for women.	Erratic and low incomes (combined with lack of life, health and asset insurance) raises vulnerability to crises
2	73% of households have ration cards.	Low proportion of salaried stable incomes – 6.3% men and 3.7% women.	Opportunity to reach women with home-based micro-enterprise loans.	
3	12.7% have some form of insurance. 4. High willingness to pursue home-based economic activities among women.	Households have little or no savings – average amount saved per month is Rs.134.	Opportunity to provide insurance services.	
4	High willingness to pursue home-based economic activities among women.	Percentage of uninsured households very high.	High level of trust in MHT presents opportunity to link community to other SEWA services and organizations.	
5		Women unwilling to pursue outside employment.		

SWOT ANALYSIS OF LITERACY				
Prepared By : MHT				
SR. No	Strengths	Weaknesses	Opportunities	Threats
BASIC SERVICES				
1	More than 50% of women and approximately 28.2% of women have completed primary education.	High overall levels of illiteracy – 52.4% for men and 27.9% for women.	Opportunity to link residents to adult literacy programs.	

2	Primary school attendance high for boys and girls.	Most children attend municipal schools of very low quality	Opportunity to provide literacy and numeric support services to children.	
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5.3 Alternative Low-Cost Housing Development

This study emphasizes the necessity of preventing the surge of new slums (while continuing upgrading existing slums). The policy would create a sustainable and inclusive basis for economic growth and social development enabling the Indian society to constructively deal with the challenge of high urban growth rates.

Without the policy change, exponential population growth will increase the pressure on land, infrastructure, and housing, thus forcing a large population share to opt for the informal market. The potential surge of new slums might by far outweigh the achievements made in slum upgradation. New slums would cause severe negative externalities to the formal city by humiliating and disease breeding living conditions.

The study lays out the basic framework how the prevention of new slums might be addressed, including incremental low-cost housing models that would help to significantly reduce costs while providing affordable as well as socially and culturally acceptable living space to the poor. The housing models, due to their incremental nature, provide also diverse solutions that are flexible over time addressing the needs and priorities of the heterogenic target group. We compare the alternative models with current praxis to illustrate the advantages we see.

Most important, we believe that the alternative designs are also politically viable.

This report was written by Matthias Nohn (Harvard University and Consultant for Mahila Housing SEWA Trust, MHT) (matt_nohn@ksg.harvard.edu) in the scope of the National Institute of Urban Affairs (NIUA) study. I thank MHT, AMC and NHB for their comments. Special thanks to the MHT team, above all to Pragneshbhai, Mitalben and Payalben. For their patience and substantial input I thank Bijalben Bhatt, Taraji

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5.3.1 Economic Growth and Social Opportunity

As Jawaharal Nehru promised, India's authorities need to provide India's citizens with social and economic opportunities. In the field of housing and infrastructure large efforts have been made to provide the by Nehru declared opportunities to the poor; however, given the difficulties inherent in strong urban growth, the efforts did not match the demand. Therefore, instead of analyzing a third urban poverty pocket in Ahmedabad, Gujarat, the Ahmedabad Municipal Corporation (AMC), the National Institute for Urban Affairs (NIUA), and the Mahila Housing SEWA Trust (MHT) agreed to analyze one of the municipal corporation's low-cost housing schemes, and to make suggestions how the scheme may be improved upon.

This study's intention is to advance the frontier in the pro-poor housing field and to open a set of diverse opportunities to the heterogenic set of beneficiaries.

5.3.2 The challenge of India's Urban Expansion

India's urban population is projected to double, and the built-up urban area is expected to triple within the next 25 to 30 years. This development is expected due to the population increase itself (UNFPA) and an increase in living standards and mobility (Shlomo Angel, Stephen C. Sheppard and Daniel L. Civco (2006), *The Dynamics of Global Urban Expansion*). Therefore, providing new urban housing and/or access to affordable serviced residential land are two key challenges on the way to sustainable and truly inclusive economic growth.

In the case of Ahmedabad, the challenge is to provide new housing units for another 4 million urban residents, to upgrade the existing infrastructure networks, and to extend them over about triple the size of today's physical city boundaries. Ultimately, whether

or not AMC can constructively deal with these challenges decides upon Ahmedabad's success compared to other Indian mega-cities.

Public spending on slum upgradation alone is not sustainable; instead, AMC needs to also effectively address urban growth in order to prevent the surge of new slums. The urban built-up area is expected to increase dramatically. If serviced land in the formal market is not affordable to the poor during this phase of enormous expansion, then the majority of the poor is forced to informal solutions, i.e. many will move into new slums.

The surge of new slums however would not only be a humanitarian tragedy because of the deprived living conditions, it would also pose a heavy externality on the formal city, spreading disease to rich and middle income neighborhoods and discouraging investment and economic development everywhere.

This again would be a financial disaster not only because of the loss in tax revenue due to decreased economic growth but also because of the high costs incurring to the public sector. Empirical evidence (see table 1/UN) as well as detailed academic studies (see Goethert and Camino/MIT) have shown that effectively planned infrastructure (anticipating urban growth) is at least 40 percent (!) cheaper than reactive slum-upgrading. 1

Table 5.2 Investment required upgrading slums and providing alternatives to new slum formation by 2020 (UN, Task Force 8 Report on Improving the Lives of Slum Dwellers - A home in the city, 2005)

Intervention	Target population (millions)	Average cost per person (\$)	Total (\$ billions)	Source of investment (\$ billions)		
				Donors	Governments	Slum dwellers and future low-income urban residents
Upgrading slums	100	670	67	23	37	7
Providing alternatives to slums	570	400	227	78	126	22
Total	670	440	294	101	163	29

Table 1
Investment required to upgrade slums and provide alternatives to slums by 2020

Note: Numbers in table may not sum to totals due to rounding.

Source: Task force estimates calculated based on data from UN-HABITAT 2003a; Flood 2004; World Bank 2003a; FISE 2004.

1 We provided a copy of Camino and Goethert's book Urbanization Primer to AMC's Slum Networking Programme in order to assure the access to the out-of-print book.

5.3.3 The Target Group's Needs And Priorities

To effectively address the heterogenic target group and their changing needs and priorities we see the need to develop a housing product to be diverse and flexible over time. Given the heterogeneity— be it socially, culturally, ethnically, be it in terms of the geographic setting such as rural and urban, be it by religion, family size or composition – the “housing product” to be developed cannot be a “one-size-fits-all” product. Instead, the product needs to be diverse so that the beneficiaries can choose the one that is appropriate and affordable for them. Also, the product needs to be flexible over time because priorities and needs change over different phases in life. Only through such a diversified and flexible approach the by-Nehru-declared opportunities can be fully provided to India's poor residents.

“The important thing about housing is not what it is but what it does in people's live” (John Turner, Housing by People, 1976). Turner's famous statement frames a complex consideration into one single sentence: there exist many housing

standards but which one is the best choice? Is it the one that policy makers from the middle and upper class or donors consider important? Or is it the one the poor consider important?

Since we plan to build housing for the poor, reasonable people might consider the latter standards (if not more important then at least) sufficient! This is especially true in the light of the mismatch between the beneficiaries' ability to pay and the cost of higher-standard housing.

The poor's needs and priorities may change significantly over time.

E.g. the household income is expected to grow due to economic development. Or, the household size is going to increase or decrease: additional children are born; infants become children; children grow to adolescents who one day go to college or start to work; and, eventually, they have a family on their own. The new family might want to live with the grandparents to stay within existing social networks and maintain their complex functioning livelihood systems. Especially in the case of the informal sector, it is important for the beneficiaries to adapt to their changing needs and priorities at the current place of residence. Moving on to another location would destroy livelihood systems and social networks.

Table 5.3 Household size by number of rooms, for new households staying 1 year or less in the community

	Number of Rooms				Total
	1 room	1 room kitchen	2 room kitchen	3 room kitchen	
1 Count	30	11	1	0	42
Share within Group	71.4%	26.2%	2.4%	.0%	100.0%
% of Total	3.3%	1.2%	.1%	.0%	4.6%
2 Count	117	53	3	1	174
Share within Group	67.2%	30.5%	1.7%	.6%	100.0%
% of Total	12.7%	5.7%	.3%	.1%	18.9%
3 Count	94	65	8	1	168
Share within Group	56.0%	38.7%	4.8%	.6%	100.0%
% of Total	10.2%	7.0%	.9%	.1%	18.2%
4 Count	124	97	18	1	240

Share within Group	51.7%	40.4%	7.5%	.4%	100.0%
% of Total	13.4%	10.5%	2.0%	.1%	26.0%
5 Count	68	94	16	1	179
Share within Group	38.0%	52.5%	8.9%	.6%	100.0%
% of Total	7.4%	10.2%	1.7%	.1%	19.4%
6 Count	30	39	4	1	74
Share within Group	40.5%	52.7%	5.4%	1.4%	100.0%
% of Total	3.3%	4.2%	.4%	.1%	8.0%
7+ Count	18	22	5	0	45
Share within Group	40%	48.9%	11.1%	.0%	100.0%
% of Total	2.0%	2.4%	.5%	.0%	4.9%
Total Count	481	381	55	5	922
Share within Group	52.2%	41.3%	6.0%	.5%	100.0%
% of Total	52.2%	41.3%	6.0%	.5%	100.0%

As table 2 shows, 93.5% of all households that recently moved to a new location reside in dwelling units with only 1 room or 1 room plus kitchen. This is a very strong indication that, given the market pressure on land and housing, initially a 1-room housing unit is culturally and socially acceptable to them; however, it would be wrong to assume that the poor want to continuously dwell in such limited conditions.

Therefore, the task is to develop housing alternatives that are flexible over time and can adapt to multiple situations. The owner may want to add a room to their dwelling to accommodate a larger family's needs, or to rent a room out to generate additional family income that allows sending one of the children to college. However, all this is not possible in flats located in a walk-up; such flats are locked in their structure because it is not possible to make any significant changes/amendments to the apartment.

Walk-up flats provide basic infrastructure and living space; however, in terms of future opportunities (such as amending the dwelling, or renting a room out to top up family income) it provides little or no options at all. Additionally, the beneficiaries' financial contribution to the total cost of land, infrastructure, and housing is either insignificant or unaffordable as long as standards remain high (such as building a complete larger dwelling all at once).

The intention of this research is to develop a diversified approach providing various options to the beneficiaries; therefore, we encourage the idea of incremental housing.

Incremental housing approaches allow the municipal corporation to reduce the initial construction's scope and cost while providing the citizen with future opportunities such as later upgrading and amending the dwelling. In this way, while the public sector makes only the investment required for the initial minimum standard, the beneficiaries purchase a dwelling providing large opportunities for future investments. There are different degrees (levels) of incremental housing; see Davidson & Payne, The Urban Project Manual, DFID, 1983:

- (i) The highest incremental degree is to provide just (vacant) plots, indirectly served by basic community infrastructure.
- (ii) The medium degree is to provide (also vacant) plots, served with individual households connections such as individual sewage connection.
- (iii) The lowest degree of incrementalism is to provide a core house to be amended over time on a plot with individual household connections.

Incremental housing, though being relatively easy to implement in rural settings can be very challenging in urban settings. Usually, providing the option of future extension requires larger plots, which are unaffordable, if the cost of land is high. Therefore, especially in urban areas vertical plots help reduce the land necessary for incremental housing.

As “vertical plots” may be understood any architectural solution sharing one plot but providing multiple independent dwelling units with single housing characteristics, i.e. units that may be changed and/or amended over time. For example, described below, we developed a stacked row house, in which the ground floor extends horizontally and the upper floor vertically.

To scale low-cost housing projects to fully address demand cost recovery must significantly improve. There is no alternative! This may be achieved by either minimizing costs or by maximizing the beneficiaries' contribution.

1. Minimizing costs. Any standard required determines the associated price floor, i.e. higher standards result in higher costs. As long as standards are set at a high level, minimizing costs is hardly impossible. However, lowering standards to a level that is still acceptable to the poor results in significant cost savings.
2. Maximizing the beneficiaries' contribution. Requiring the poor to pay a higher amount may result in the poor overspending on housing. Then, since the poor live close to the subsistence level, they might not be able to pay for other important expenditure such as health or education. Therefore, the costs for expensive higher standard projects cannot be fully recovered from the poor beneficiaries so that it is impossible to scale such projects without excessive burden to the taxpayer.

In conclusion, as long as standards remain high, many poor (excluded from the Unaffordable higher-standard projects) are forced to opt for the informal market creating new slums and disease-breeding living conditions within the city. Thus, over the long-term, any standard we impose upon a low-cost project, though being well intentioned, may cause a significant threat to sustainable development.

5.3.4 Enabling a Pro-Poor market

It is necessary to comprehensively rethink the three products land, infrastructure and housing to make the final product affordable to the poor. Otherwise, a large share of the expected 4 million new urban residents in the next 25 years will opt for the informal sector, then lacking infrastructure and adequate planning. In this case, there is not only no solution to open defecation, disease, humiliation, and misery, upgrading future slum settlements will also be more expensive than providing land and infrastructure in a planned and cost-effective manner!

C.K. Prahalat well described in his book “The Fortune at the Bottom of the Pyramid”, how commercial institutions have discovered the large numbers of poor consumers as a potential source for profit. The product in question needs to be comprehensively redesigned – not only in terms of the product itself but also in the way it is produced,

distributed and maintained. The Aravind Eye Hospital, founded by Dr. Venkataswamy (Dr. V.) in 1976 in Madurai, India is a good example for such a redesign because Dr. V. reinvented the process of cataract surgery.

In our eyes, we also need to comprehensively rethink the approach to low-cost housing. Though housing design and construction techniques and materials may contribute to cost savings, there are other aspects that might be even more important. Only if we optimize the full set of (both public and private) land costs, (both infrastructure and dwelling) construction costs, and finance costs we will be able to effectively reduce the market distortion that exists:

- Efficient street and infrastructure layout, minimizing construction and maintenance costs.
- Efficient allocation of public spaces, minimizing the cost of public land and improving the likelihood of community maintenance.
- Efficient planning of individual plots, reducing the amount of public land and infrastructure required serving the private plots (see text box below).
- Cost-reducing location of low-cost housing plots in the core of larger urban blocks, thus reducing the cost of land by selling the most valuable land located on the main streets to commercial developers while using the cheaper land inside the block for low-cost shelter.
- Incremental housing, maximizing future opportunities while reducing costs in the present.

Text Box 1

Saving on infrastructure and public land through effectively designed individual plots

Proportion of Plots. For example, a 36sqm plot may be a square of 6x6 or a rectangle of 3x12 meter. While in the first case 3m of street and infrastructure serves one plot (6 meter for 2 plots on each side of the street), in the latter case this is only 1.5 meter of street and infrastructure. The latter case not only reduces the cost of all infrastructure construction and maintenance (road paving, water and sanitation networks, street lighting, etc) by 40 - 50 percent but also the public land needed to serve the private plots. Assuming 8 meter narrow local streets, in the first

case 8x3=24sqm public land serve 36sqm private land. 24sqm represent 40 percent of the total land! In the latter case it is 12sqm or 25 percent only. Assuming Rs. 2,000 cost for the non-developed land, the cost of the 6m-frontage plot is Rs. 1.2 lakh while the cost of the 3m-street frontage plot is only Rs. 0.96 lakh. Thus, by choosing a two-room frontage over a one-room frontage, the cost increase in land is Rs. 24,000 per plot: 25 percent!

Street Width. When choosing a broader street the cost explosion is even more significant, e.g. in the case of a 12m broad street it is Rs. 132,000 instead of Rs. 96,000: a nearly 40 percent increase.

The cost increase becomes even more dramatic when comparing the two discussed effects, e.g. comparing a two-room frontage in a 12m-Broad Street with a one-room frontage in an 8m-broad street. The public land needed for serving the 36sqm private plot is 36sqm (100 percent) or 12 sqm (33 percent) respectively. The cost of private land (assuming Rs. 2,000 for the undeveloped land) would be Rs. 144,000 or Rs. 96,000 respectively: a 50% increase.

Given the dreadful experience with large semi-public community spaces made by other countries (see text box 2), we strongly recommend not repeating the same well intentioned but wishful schemes. The important fact is that the beneficiaries care for their private good, and take over the ownership but they do not do so in the case of semi-public spaces. Additionally, the opportunities created by shifting semi-public to private land in favor of the beneficiaries are likely to promote economic and social development and, thus, will make expensive public programs such as housing upgradation or livelihood schemes unnecessary.

Text Box 2

The difficulties of semi-public community spaces in low-cost housing projects

The question how much open-space should be provided in public projects is always a delicate issue. After World War II, many housing projects similar to the analyzed AMC project were constructed in Europe. These projects also relied on compact and (assumably) cost-efficient walk-up blocks with generous semi-public areas between them. These semi-public spaces should be taken care off and be preserved by the beneficiary communities.

However, the experience with this type of low-cost housing scheme has predominantly been devastating: the communities could not be effectively mobilized for maintaining the semi-private space properly. Struggling to manage their personal lives they showed little effort to invest or maintain the nonprivate good. Also, the semi-public space provided little incentives for personal appropriation at all.

Urban planners' dreams – that these places would be used as recreational community space– were defeated because of a lack of ownership and privacy. Eventually, often the public sector had to intervene to manage and maintain these spaces, which became a costly and little pleasant exercise.

Therefore, we recommend maximizing the private space, which then can be used for incremental housing or urban agriculture, thus increasing the residents' individual opportunities. At the same time public responsibility and expenditure for construction and maintenance may be reduced to the necessary and reasonable.

5.3.5 Incremental Low-Cost Housing Models

We developed two low-cost housing models that are (i) incremental, (ii) located on a narrow and deep plot, (iii) use one-room street frontages, thus reducing the share of public land.

1. The simple row house

The first type is an incremental housing development on a 3m*12m=36sqm plot, usually occupied by a single household only, at least initially. Given the pressure on land and the (though small but) significant plot size this option is not affordable to the Economically Weaker Section (EWS); however, it may still well suit Lower Income Segment (LIG) households in urban areas outside the city centre.

2. *The stacked row house*

The second type is much more complex in terms of design, being a "stacked row house" with 3 or more families sharing several vertical plots situated over one ground plot of

3.5m*18m=63sqm.

1. The ground floor household has the option to incrementally extend the dwelling unit by occupying the backyard and then extending vertically.
2. The upper floor may incrementally amend the dwelling by building on the rooftop.
3. If necessary, the vertical plots may be amended by "sandwich floors" located between the upper and ground floor. There exists two types of sandwich floors:
 - 3.1. The normal sandwich floor with flats comparable to non-incremental apartments in a multi-family apartment block.
 - 3.2. The very-high-ceiling sandwich floor, allowing the installation of an intermediate floor at half the room height.

Text Box 3

Bombay Chawls and The Stacked Row House.

There exist Bombay chawls, e.g. in at the area around the Gamdevi Temple (between Charni Road Station and Grant Road Station) that are nearly identical with the second type design, though being no incremental flats (similar to the sandwich floor). Even the road width is 8 meter, as in the two alternative projects in the appendix. The residents living there all stated that this type of housing is perfect for them and that they love to live there, even though in our eyes the 180 square feet units are quite small (but Bombay certainly is a special case)...

Given the degree of land pressure that existed in colonial Bombay, and assuming that these pressures are to some extent similar to second-tier cities' today situation, it is no wonder that our team found a similar solution with the 3.5m*18m=63sqm plot. Bombay's chawls are perfectly planned according to the key efficiency requirements "small frontage", "deep plot"

and “many small local roads and few small main roads”. What Bombay’s chawls however do not have is the incremental aspect. With respect to the latter, the stacked row-houses on the 3.5*18m plot increase the efficiency even further because one local street will serve four blocks of houses: on each side of the street one stacked row house and in the backyard the future ground floor extension.

Sandwich floors may not only help to further reduce the cost of land but also promote some degree of social mix and serve the very poor that are not able to afford any other solution. In a G+3 structure there would be one "sandwich floor" between the ground and the upper floor, in a G+4 structure there would be two sandwich floors, etc. Depending on the land cost the number of sandwich floors may increase; however, the target group’s cultural and social preferences should be considered.

5.3.6 Three Alternative Approaches towards Low-Cost Housing

We analyzed one of AMC’s current projects, of which the material was kindly provided by AMC/SNC. The project master plan, as well as architectural plans and cost estimates are provided in the appendix. We further developed two incremental housing alternatives on the same construction site. All projects are detailed in the appendix. We believe that our cost estimate is accurate within a 5% margin.

1. Costs:

The project is located in an area where land costs (according to SNC) are estimated at Rs. 4,000 per square meter. AMC provides the land at zero cost to the project; the land cost has not been included in AMC’s evaluation of project costs. In order to make the project comparable with any alternative and in order to show the true cost accruing to the city, we calculated the opportunity cost of land at Rs. 4,000/sqm * 15,400sqm = Rs. 6.16 crore, i.e. Rs. 1.13 lakh per dwelling.

The state and national governments pay for any other costs than land. These payments are disbursed in the scope of diverse pro-poor housing and infrastructure schemes not further mentioned in this report. These costs include infrastructure provision and

construction of the dwelling itself, which is according to SNC about Rs. 2.1 lakh per dwelling unit * 544 units = Rs. 11.42 crore.

Thus, the cost in AMC's low-cost housing scheme is Rs. 17.6 crore for 544 dwelling units or Rs. 3.2 lakh per dwelling unit; beneficiary contribution is Rs. 25,000.

2. Benefits:

The benefits provided through the project are 544 dwelling units that are completely constructed of pre-fabricated reinforced concrete. Thanks to the precise building technology plastering and painting the walls becomes obsolete. According to AMC this eliminates any maintenance costs, at least in the near future. Each unit consists of living room, bedroom, kitchen bath, and toilet. Generous semi-public open spaces between the blocks provide leisure space and future parking space, necessary as soon as the living standard of the beneficiaries increases in the future. The large semi-public space shall be maintained by the community itself in order to minimize public expenditure.

3. Future perspective:

Due to the structure of the G+3 walk-up apartment blocks, it is not possible to make any future amendments to the dwellings. Imagining the community one generation (25 years) from now, the dwellings will look exactly the same as today (if they were well maintained). Any future development, if at all, will therefore occur in the semi-public space.

4. Evaluation:

The main factor responsible for the high costs is the construction technology with prefabricated reinforced concrete. Constructing the same dwelling units in brick could save Rs. 50,000 or more. Another important factor for the high costs is the size of the dwelling: each unit has two rooms and (!) kitchen plus bath and (!) WC. Though this might be appropriate for a relocation project in order to improve acceptance thus making the project politically viable, this project would not suit the needs of new urban

households that need to pay for the dwelling and would therefore accept much smaller units as long as they may make future amendments.

Anyway, all 544 dwelling units are identical, thus not addressing the beneficiaries' heterogenic characteristics.

In our eyes, the cost of Rs. 3.2 lakh per dwelling unit including the cost of land and infrastructure is extremely high. The beneficiaries' contribution is 7.7 percent only! We believe that this approach is not scaleable. We therefore developed two project alternatives on the following pages.

Alternative Housing Project I.

1. Costs:

Since the project is virtually located on the same plot, land costs are also estimated at Rs. 4,000 per square meter; thus, the opportunity cost of land is also Rs. 6.16 crore, i.e. Rs. 1.13 lakh per dwelling.

Incremental housing based on brick technology, and innovative modular design (see section VI and appendix) decrease dwelling and infrastructure construction costs significantly. Costs fall from Rs. 2.1 lakh to Rs 1.3 lakh.

Thus, the cost in the first alternative low-cost housing scheme is Rs. 13.2 crore for 544 dwelling units or Rs. 2.4 lakh per dwelling unit. This is a cost reduction of 35 percent!

2. Benefits:

It needs to be clearly stated the incremental housing approach sacrifices some share of the exhaustive parking possibilities available in the original project. On the other hand however, it reduces costs significantly, while providing the beneficiaries with a ready plastered and pointed apartment that also consists of 2 rooms plus kitchen, bath and WC. We chose the same room constellation in order to keep the projects comparable.

We subdivided the land, maximizing the share of private land to increase individual opportunities and future investments. This allowed the incremental approach and the

significant cost savings. Virtually all plots on the site have proportions to build one of the two incremental housing models already presented in this study (see Incremental Low-Cost Housing Models).

Building predominantly vertical plots such as the high-density option alongside with the individual row house (architectural plans are available in the appendix) allows to construct also 544 dwelling units.

3. Future perspective:

The second phase of (incremental) development likely starts 10 to 15 years. This is after the original project costs are paid off. Then many dwellings will be amended, thus providing either additional living space or additional income to the owners. In the case of renting or selling the amendment to a second party, the number of housing units will increase at zero land and infrastructure costs. Therefore, the new units will be amazingly cost-efficient.

If this kind of incremental housing projects would be built in a large scale, then the provision of low-cost housing units during the second development phase might have a significant impact on the low-cost market, thus reducing the market price in the future.

Other than in the case of parking, we do not believe that the decrease in recreational community area is problematic: Instead, we believe that the community is better off with the reduced semi-public area because empirical evidence suggests that it is hard to mobilize the community to maintain such facilities. The proposed intimate community spaces with the community hall in the central area may be used for weddings and other social events, as well as for meetings of the community mandal and as a kindergarten during the day, etc, thereby providing the community the services they really need on a cost-effective basis.

4.Evaluation:

This model promotes future construction opportunities while sacrificing on current future parking opportunities. Incremental housing is possible through individual plots.

The community area is reduced to a scale that is easy to maintain while providing essential core services.

Significant cost savings of about 35 percent per unit (as compared with the AMC approach) may be attributed to brick construction and incremental approach. Assuming the initial beneficiaries' contribution remains Rs. 25,000, this now represent 10.4 percent; however, after the incremental extensions are constructed, the beneficiaries' investment would be Rs. 2 lakh, i.e. 50 percent of the total costs!

Alternative Housing Project II:

1. Costs:

The project concept is the same as for alternative I; however, the new low-cost housing settlement is limited to the inside core of the street block, thus leaving the file plots located at the main roads for private development. The cost difference between commercial and low-cost housing plots may be used to cross-subsidize the project.

The cross subsidy reduces the price per dwelling by Rs. 30,000 (-12%) to Rs. 2.1 lakh for land, dwelling and infrastructure. This is a cost reduction of over 50 percent compared with the original AMC approach!

2. Benefits:

As above.

3. Future perspective:

As above.

4. Evaluation:

The disadvantage of this approach is however that less housing units can be constructed on the plot. Since the money made through selling the valuable land to the private developer can be used to buy new land this is usually not a problem. (Only the difference in price was allocated for the cross subsidy!) BUT this calculation does not hold if the valuable land is needed for a relocation project to be close to the current location.

Constructing the low-cost housing units on the less costly land inside any street block may contribute to significant cost reductions. Compared with the original

AMC approach, Alternative II reduces unit costs by over 50 percent. This may be attributed to brick construction technique, incremental approach, and internal cross-subsidy. The beneficiaries' initial contribution (still Rs. 25,000) represents now 12 percent of the project costs; however, after saturation, the beneficiaries' contribution is about Rs. 2.2 lakh equivalent to 55 percent of the total costs.

5.3.7 Affordability

Financing low-cost housing projects is a difficult issue; whether or not it is possible to realize them without any subsidy to the beneficiaries is an open question, which we are not able to answer within this study. However, it remains clear that – to scale low-cost housing provision for new urban households (different from a relocation project) cost recovery should be as high as possible, i.e. the subsidy should be as low as possible.

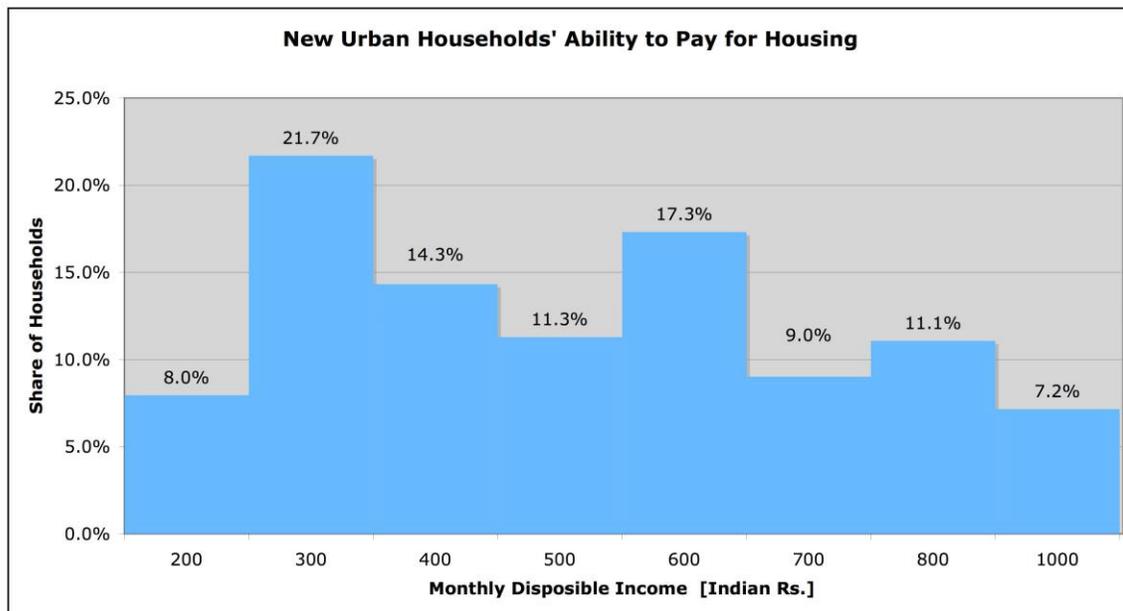
Table 3 shows the income of new urban households (with a duration of residence in the area of no longer than a year) in the 13,000-household sample in Ahmedabad's slums and chawls that was conducted in the scope of task II. According to Davidson and Payne (2000) we calculated the income disposable for shelter, assuming that in the lower income groups the share of households able to spend 15 (25) percent of their income on housing would be larger (smaller) than in the higher income groups.

Summarizing the findings of table 1 yields the distribution of the households' monthly income disposable for shelter as illustrated in chart 12: again, this illustrates how diverse new urban households are and, therefore, calls for not implementing any "one-size-fits-all approach".

2 We may assume that the calculated disposable income is a lower bound for the true amount for several reasons: (i) the NIUA question technique used. Instead of asking the income of each income source separately and adding these up, the households were asked the total income. Empirical evidence shows that this method contributes to the respondents understating their income. (ii) The income brackets in the table used the lower threshold of each bracket. (iii) The x-values under the bar chart again show the lower bound of each disposable income bracket.

Table 5.4 Monthly Income and Amount Disposable for Shelter, households staying 1 year or less in the area.

Share of		Income for	Income	Assumed Share of	
Monthly Income	Households in	Shelter	Disposable for	Households in this category	
Group	this category	[Share]	Shelter	[of group]	[of total]
		15.0%	Rs. 225	50.0%	8.0%
		20.0%	Rs. 300	40.0%	6.4%
Rs. 1500	15.9%	25.0%	Rs. 375	10.0%	1.6%
		15.0%	Rs. 300	40.0%	9.7%
		20.0%	Rs. 400	40.0%	9.7%
Rs. 2000	24.3%	25.0%	Rs. 500	20.0%	4.9%
		15.0%	Rs. 375	30.0%	4.0%
		20.0%	Rs. 500	40.0%	5.4%
Rs. 2500	13.4%	25.0%	Rs. 625	30.0%	4.0%
		15.0%	Rs. 450	20.0%	4.6%
		20.0%	Rs. 600	50.0%	11.5%
Rs. 3000	23.0%	25.0%	Rs. 750	30.0%	6.9%
		15.0%	Rs. 525	20.0%	1.1%
		20.0%	Rs. 700	40.0%	2.1%
Rs. 3500	5.3%	25.0%	Rs. 875	30.0%	1.6%
		15.0%	Rs. 600	20.0%	3.6%
		20.0%	Rs. 800	30.0%	5.4%
Rs. 4000 or more	17.9%	25.0%	Rs. 1000	40.0%	7.2%
				Total	100.0%

Chart 1: Distribution of Households' Monthly Income Disposable for Housing.

Note: It is important not to confuse the households' "ability to pay" with "willingness to pay".

5.3.8 Trade Offs in Affordable Low-Cost Housing Design

We now know how much the target population is able to spend on housing. The next question is what type of a housing product would be affordable to each group. This will depend on the one hand side on the land and construction costs and on the other on the finance costs.

In the appendix, I provide a cost estimate for the cheapest design we developed (though even there still exist some potential cost savings such as not plastering and painting the dwelling, etc but we believe they might significantly decrease benefits or make the project unviable). The dwelling units and associated costs (always including construction, private and public land, infrastructure and community facilities!) can be roughly described as:

- Ground Floor: 1 room, WC & shower, back-yard, extendable to 4 rooms.

Rs. 195,000, incl. construction, land, infrastructure, community facilities.

Note: the price includes already the backyard extension's foundation (ca Rs. 25,000).

- Second floor: 1 room, WC & shower, balcony, extendable to 2 rooms.

Rs. 143,000, incl. construction, land, infrastructure, community facilities.

Note: the price includes already the walls for the second floor; only the floor itself needs to be constructed (ca Rs. 27,000).

- Third floor: 1 room, WC & shower, balcony, non-extendable.

Rs. 115,000, incl. construction, land, infrastructure, community facilities.

- Top floor: 1 room, WC & shower, balcony, extendable to 2 rooms.

Rs. 127,000, incl. construction, land, infrastructure, community facilities.

Depending on demand one may build more second floor type or more third floor type units.

We may compare these options with providing vacant individual (non-vertical) plots without core dwellings: In this case, which is the cheapest selling price, the costs would be predominantly land costs: Assuming a 3.5m*8m=28sqm plot, which is large enough to build one room, a toilet and a staircase on the ground floor, the cost would be

Land	28*2,500	= Rs. 70,000
Community Facilities & Infrastructure ***		= Rs. 20,000
TOTAL:		Rs. 90,000

*** I allocated the same amount to community facilities and infrastructure as in the ultra-high density design described above, assuming the higher infrastructure costs per plot (due to lower density) are set off by infrastructure provision limited to community facilities.

Providing only the plot implies one of the following:

-The beneficiaries start up with a budget shack or plastic sheets, which is hardly politically or socially viable. It is hard to imagine that any politician would like to cut the ribbon of an empty plot that costs nearly Rs. 1 lakh to be paid by the potential voters.

-Real costs would be significantly higher when constructing a standard dwelling. With a decent dwelling constructed the project costs would be significantly higher at about Rs. 1.5 to 2 lakh, then exceeding the costs of the vertical plots described above.

-The target group saves on construction costs compromising on hazard-robustness.

This evaluation shows that this type of project is politically and economically not viable in urban settings where land costs are high. The situation however would be very different if the project beneficiaries would receive a fully constructed house that is painted and plastered, including the toilet and the option to later add additional rooms for little more than Rs. 1 lakh.

Such a project, as described in the case of the vertical plots above, would be politically viable and economically and socially sensible.

5.3.9 Affordable Housing Finance

Anyhow, any of these incredibly efficient designs are not affordable to the poor, given the currently available financing products. Therefore, there will be no solution to the problems of slums without developing new finance products. Let's first make the assumption that there existed a 15-year maturity, Rs. 1-lakh housing mortgage at an interest rate of just 11%. Even this mortgage would not be affordable to the poor. Therefore, NHB is currently evaluating the option to make such long-term low-interest finance products affordable for LIG and EWS through an interest subsidy scheme. The subsidy would reduce the contractual annual interest rate by 5% during the first 5 years, e.g. from 11% to 6% (all numbers are taken from NHB).

How would this work?

Initially the subsidized household would not be able to pay the full interest accruing on the loan so that the principle would increase instead of being reduced by each payment. Under this scenario the poor household would be trapped in a debt crisis. This will however change, if the Bank subsidizes the interest during the first five years. NHB's assumption is that thereafter, due to the expected nominal (not necessarily real!) income growth, the household will be able to pay back the full interest accruing plus some share of the principal. (The NHB assumes an annual nominal income growth of 10 percent.) Since we should be careful about making such forecasts reaching far into the future we however assume 6 percent only. We will further assume that the share of income disposable for shelter will not change, i.e. initially the disposable income is e.g. Rs. 3000 * 20% = Rs. 600; in 5 years the disposable income will be Rs. 3000 * (1+6%)⁵ * 20% = Rs. 803, etc.

The assumption underlying the following assumptions is a flat interest on the outstanding principal that is compounded on a monthly basis.

Example 1: Rs. 127,000 for the top floor unit (incl. infrastructure, public land, etc.)

Household savings or other sources: Rs. 27,000 point

Loan size: Rs. 100,000

Household income: Rs. 3,000 (nominal annual growth rate = 6%)

Income disposable for shelter: Rs. 600 (20%)

Interest Subsidy: 5% over 5 years, through NHB; total subsidy: Rs. 23,837.

Time needed to pay off the loan: 17 years, 1 month.

Example 2: As example 1 but the Municipal Corporation pays for the infrastructure and community facility costs: Rs. 20,000; accordingly the loan size decreases:

Loan size: Rs. 100,000 – Rs. 20,000 = Rs. 80,000.

Interest Subsidy: 5% over 5 years, through NHB; total subsidy: Rs. 18,022.

Time needed to pay off the loan: 12 years, 1 month.

Example 3:

A housing relocation project necessary for BRTS. Since the beneficiaries were recognized slum dwellers AMC will compensate them with Rs. 115,000 equivalent to the cheapest unit on the third floor. The household however opts for the ground floor unit in order to be able to make future amendments.

Unit cost: Rs. 195,000 for the ground floor unit

Household savings or other sources: 20,000

Municipal contribution: Rs. 115,000

Loan size: Rs. 195,000 – Rs. 115,000 – Rs. 20,000 = Rs. 60,000

Household income: Rs. 3,000 (nominal annual growth rate = 6%)

Income disposable for shelter: Rs. 600 (20%)

Time needed to pay off the loan: 9 years, 1 months.

Example 4: Rs. 115,000 for the ground floor unit

Household savings or other sources: 15,000

Loan size: Rs. 115,000 – Rs. 15,000 = Rs. 100,000

Household income: Rs. 2,000 (nominal annual growth rate = 6%)

Income disposable for shelter: Rs. 400 (20%)

Interest Subsidy: 5% over 5 years, through NHB; total subsidy: Rs. 25,581.

Time needed to pay off the loan: NEVER! Even with the interest subsidy the beneficiaries are not able to pay back the full interest during the first 5 years. The growing principal locks the poor in the debt trap.

The examples show how the repayment period significantly varies with disposable income and loan amount. Lowest-income families with income lower than Rs. 2,000 will not be able to pursue any of the four housing products described above (as long as the subsidy is not increased). As the disposable income distribution in chart 1 shows, about 40 percent of all households fall under this category, not affording more than Rs. 400 per month for housing.

Either these 40 percent – the very poor – will never be able to purchase real estate property or the subsidy needs to be higher. On the one hand, reasonable people may argue that the very poor should just rent; however, at this income level there is not sufficient acceptable living space available in the formal market.

Therefore, to prevent the surge of new slums and to end open defecation some form a subsidy appears to be appropriate. Careful analysis needs to be undertaken to design the subsidy mechanisms so that market inefficiencies are discouraged. The higher (direct) subsidies to the low-cost housing sector are, the less efficient the sector tends to be. For examples, if the interest subsidy would be the only form of assistance, then this would decrease market inefficiencies because the beneficiaries stay fully responsible for construction and land costs. However, there would exist a significant moral hazard problem on the financial market in terms of beneficiary selection. Tying the subsidy to certain housing design characteristics (such as a small plot or apartment size) or loan characteristics (the smaller the loan, the higher the necessity, the higher the subsidy) would address this problem. Though this would

increase the administrative burden (again driving costs up) this approach would enhance self-selection and reinforce redistribution...

5.3.10 The Need to Improve Risk Allocation

Now let us come back to the initial assumption that there would exist a 15-year maturity, Rs. 1-lakh, 11% interest housing mortgage. It is important to emphasize that this assumption usually does not hold for the target group. If the risk of loan default could be reduced ((or the likelihood of cost recovery be increased), then the interest rate would go down, too. This is a delicate issue because often it is politically difficult to evict the defaulting household from their dwelling. This is particularly tragic because this difficulty is partially responsible for the severe distortion in the low-cost housing market.

Option 1 to reduce risk: Expropriating the Right to Future Construction. In the case of incremental housing it is possible to only “partially” expropriate the household. Instead of evicting the household one may only take the right to the future constructions away from the household while being allowed to stay in the dwelling. By this solution the difficult eviction process could be avoided while some value of the dwelling would be shifted to the lender. Also shifting the right to future constructing to another poor family, constructing or renting the incremental extension, would create additional poor living space. In sum, the mortgage/lease could be split between the two parties, i.e. the household in default may pay a lower, now affordable rate after losing the right to future constructions.

Option 2 to reduce risk: Long-term Lease. On the occasion of the panel discussion “Innovations in Market-Based Solutions to Low-Income Housing” at the Institute for Financial Management and Research (IFMR Chennai), the Bombay-based consulting Monitor Group presented the fact that the poor accept Banks but not the government as an intermediary in financing low-cost housing projects. It might therefore well be possible to finance the project under a long-term lease contract.

The Urban Projects Manual (Davidson and Payne/DFID, 2000) illustrates various other advantages of long-term leases, such as the beneficiaries' obligation to comply with certain standards and regulations. Without compliance the beneficiaries will not be able to purchase the dwelling after a specified time period.

Any options considered – whether these two examples or any other – need careful further analysis.

5.3.11 Developing the Institutional Framework

“International experience has shown that the innovative nature of upgrading slums and providing serviced site calls for the creation of an administrative unit with specific responsibility for such programs.” (Davidson and Payne, 2000) AMC has already established the Slum Networking Cell (SNC), today successfully upgrading existing slums. Given the success to the Slum Networking Program and the experience SNC has acquired working with the target population and other stakeholders such as involved NGOs, we recommend assigning SNC with the task of slum prevention, too.

The competencies of AMC's Slum Networking Cell should be amended as soon as possible to effectively prevention the surge of future slums. (See also Task II, Executive Summary and the Slum Networking Program's evaluation.) The SNC's most important task is the provision of affordable serviced land and the development of new sites. In order to make it acceptable to the poor it needs either to be centrally located or connected though high-quality and affordable transportation. These competencies would include but not be necessarily limited to the following:

- Land development for the provision of sites, including acquiring and selling land, and – if possible –the conversion from agricultural to non-agricultural land.
- □Provision of infrastructure and public facilities, especially in terms of budget and coordination among involved agencies.
- A simple system for the encouragement and control of house building taking into account the special aspects of incremental housing.

- Registration and regularization of land tenure including the reorganization of plots to grant cooperative land tenure.
- Granting exemptions from national and state regulations such as building codes.

“It needs to be emphasized that any successful organizational solution must recognize the role that can be adopted by the target group itself. Highly organized settler groups can help achieve a reduced involvement by the public authorities, and thus to reduce costs. They can also help to obtain political support. Beyond a basic minimum design and construction programme, settlers can be successfully encouraged to organize themselves in the provision of a level of housing and services best suited to their particular needs and resources.” (Urban Projects Manual, Davidson and Payne/DFID, 2000)

5.3.12 Reviewing The Regulatory Framework

To make pro-poor housing work, the legal framework needs to be reviewed. We would like to give three basic examples of regulations that – in our eyes – unnecessarily increase the cost of land in low-cost housing projects.

1. Creating additional floor area at zero cost in the air space over the pavement. The stacked row house provides access to the upper-floor apartments through a cantilever corridor located over the street pavement. Using this air space available at zero cost is a sensible design in tropical countries because providing shadow during the heat and protection during the monsoon.

Also the broad corridor – possible through the cantilever – creates semi-private zones through niches between the division walls. The dwellers can take ownership of this buffer zone in front of their apartment, e.g. by putting a bench or flowers there, or by using this space for domestic work, etc.

However, according to the National Housing Bank (NHB) constructing a cantilever over the public space does not comply with the regulations. On the other hand, the construction over the pavement exists in Bombay historically: many colonial buildings legally occupy the air space located over the pavement, thus providing shadow and protection against rain. In our eyes this is a good example for how deregulating the

building code may add value and open additional opportunities at marginal cost. (It is important to note that the model type “stacked row house” also works without the additional space constructed over the pavement.)

2. Optimizing the street width is a delicate question. On the one hand, a narrower local street can significantly bring land cost down; on the other hand, narrow streets limit the space allocated for parking, if not for the circulation itself. Anyhow, in many Western metropolitan areas, a large share of the lower income segments lives without individual cars, too, due to the limited affordability not only of the car but also of the land including parking opportunities. This does not necessarily limit the quality of life, especially close to the city centre or where public transportation is good and affordable. Why should this be different in India?

As discussed in the alternative low cost housing projects this is often a trade off between different future opportunities that needs to be made. Good public transport could however help to alleviate the downsides of fewer parking spaces. Therefore, narrow local streets and public transportation should be a priority.

3. The share of public land could be significantly reduced. As already explained, excessive semi-public open spaces support the risk of a degrading environment that is not cared for and thus badly maintained.

In sum, the question of balancing today’s problems with the problems of tomorrow is a typical public policy dilemma and there is no final/single answer. However, it is obvious that given the magnitude of today’s problem (the cost of land, infrastructure, and finance) there will be no sustainable and inclusive development without making significant compromises.

6. Programmes and Polices Related to Poverty Alleviations

6.1 Individual Toilet Block Construction (under 90:10 scheme)

6.1.1 Objective

The Ahmedabad Municipal Corporation (AMC) launched the so-called “90-10-Scheme” in the mid 1990s with the aim to improve the municipal households’ access to safe sanitation. The World Bank co-funds this scheme, under which the beneficiary household is provided an individual toilet block.

6.1.2 Cost-Sharing

The scheme’s name originates in the fact that the AMC originally paid 90 percent of the cost (Rs. 2,894), while the household contributed 10 percent to the cost (Rs. 306), totaling the originally estimated construction cost of Rs. 3,200.

The amount of Rs. 3,200 was never increased to keep pace with inflation. The technically required standard toilet is estimated to cost about Rs. 7,000 today, of which the city still pays the original Rs. 2,894. The dwellers are however able to construct adequate facilities for about Rs. 4,700, mainly due to savings through used construction material. Thus, of the total real costs the dwellers today contribute about 40 percent. By empirical evidence, this demystifies the common believe that the poor were not willing or had no capacity to pay for delivered services and infrastructure.

6.1.3 Eligibility

All households have to fulfill both following criteria:

1. Households need to have a taxpayer number and to provide the tax receipt to the authorities with their application for the toilet.
2. Households need an individual sewage connection receipt proving payment of the municipal fee (Rs. 300 annually).

Given the criteria the Scheme may only be implemented if the resident can prove legal ownership of the house, thus excluding slum dwellers as well as renters.

6.1.4 Implementation

	<i>Duration</i>	<i>Costs</i>
<i>Selection, Information & Application Phase</i>	<i>1 ½ months</i>	<i>Individual Households: Rs. 100 12 NGO visits: Rs. 3,600 per community AMC: Rs. ???</i>

1. Any self-selecting individual can apply for the scheme.

Alternatively, an NGO identifies potential target communities, raises awareness among the residents, and organizes the households willing to participate in the Scheme.

2. The individual household submits (i) a tax receipt, (ii) a sewage receipt, and (iii) a photo of the household member who is the official beneficiary to the Zonal Office along with (iv) an application fee of Rs. 50.

Alternatively, the intermediary NGO collects documents and fee, and submits these.

3. The Zonal office checks the application.
(AMC with about 4 million residents is divided into 5 zones.)
4. The application is sent to the ward office.
(AMC is divided into 47 wards, subordinate to the city's zones.)
5. The ward's technical supervisor comes for a site visit into the community and determines the appropriate location of the toilet for each house. The beneficiaries may express their preferences; however, the supervisor decides based on his expertise.
6. The work order is issued to the individual who can then begin the construction.

Alternatively, the NGO receives the work orders and then provides the beneficiaries with a photocopy of the document.

	<i>Duration</i>	<i>Costs</i>
<i>Construction Phase</i>	<i>1 - 3 months</i>	<i>Individual Households: Rs. 4,700 2 NGO visits: Rs. 600 per community</i>

		AMC: Rs.???
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7. The construction has to be according to the specifications provided by the AMC and has to be completed within 6 months of the issue of the work order.

Alternatively, the intermediary NGO often constructs one sample toilet illustrating the technical and design standards that the beneficiaries have to comply with to ensure that the toilets meet the specifications. Also the NGO might set a deadline for finishing of construction; e.g. SEWA sets a 3-month deadline to improve coordination. Usually, the households however terminate within a single months to harvest the improvements as soon as possible.

	<i>Duration</i>	<i>Costs</i>
<i>Reimbursement Phase</i>	<i>2 - 3 months</i>	<i>Individual Household: Rs. 1,200</i>
		<i>Subsidy Disbursement: - Rs. 2,900</i> <i>- Rs. 1,700</i>
		<i>3 NGO visits: Rs. 900 per community</i>
		<i>AMC: Rs. 2,900 subsidy plus???</i>

8. After completion of construction, the ward's technical supervisor again visits the site to check the completion of the work and the compliance with the required standard.
9. All documents (original work permit, tax and sewage receipts) are again taken to the ward office, where the technical advisor signs the permission to release the subsidy.
10. The subsidy permit is taken to the zonal office, which issues a pay-order of Rs. 2,894 in the name of the house-owner, which is given directly to the individual. Assuming that the beneficiaries finance Rs. 4,000 with a local moneylender with flat monthly interest of 7 percent and monthly down payment of Rs. 400, the down payment accumulates to 1,200 within 3 months; see Appendix I.

Alternatively, the NGO takes the pay-order to the bank so that the amount is transferred to the beneficiaries' bank accounts.

	<i>Duration</i>	<i>Costs</i>
<i>Down Payment Phase</i>	<i>6 - 15 months</i>	<i>Individual Household: Rs. 1,600</i> <i>NGO: ---</i> <i>AMC: ---</i>

11. The individual household pays its loan down. Additional steps and costs are necessary to connect to the public sewer network; however, these steps – not part of the Scheme – are not discussed here.

	<i>Total Duration</i>	<i>Total Costs</i>
<i>Project Summary</i>	<i>12 - 24 months</i>	<i>Individual Household: Rs. 4,700</i> <i>NGO: Rs. 5,100 per community</i> <i>AMC: Rs. 2,900 per household</i>

Note: NGO costs are estimated at Rs. 300 for each one-day visit, i.e. Rs. 200 for daily salary plus Rs. 100 for transportation and other costs.

6.1.5 Adaptations in the Past

B1. Today, the scheme is used more by groups of geographically clustered households, instead of scattered individual households only. Originally, due to lack of awareness about the Scheme, only few individuals participated. A few NGOs engaged in the scheme initially, but found it difficult and time consuming to manage the procedure because the beneficiaries were scattered over the city and the work required a lot of coordination. Over time some NGOs like SEWA have re-started working with community groups to benefit from the scheme. SEWA follows an area approach and takes up the project only if there are at least 15 house owners willing to participate in toilet construction under the Scheme.

B2. Today, again the beneficiaries finance the construction themselves until they are paid the subsidy, instead of organized pre-finance by an NGO. Originally, the individuals were always supposed to pay first and get reimbursed later; however, given the target group's difficulties in financing the construction costs, pre-financing was tried by an NGO. This approach failed because of the delay described in adaptation B1 significantly increased financing costs. The time period between toilet construction and payment could be as long as half a year; thus, the interest on the loan taken to finance the construction had significantly increased the toilets' costs. Due to the circumstances the beneficiaries let default their loans; consequently, the NGO decided not to engage in financing the scheme any longer.

B3. Today, the dwellers construct the toilets themselves, instead of construction workers hired by the NGO. Originally, though this was never part of the Scheme's official design, an NGO tried to organize construction workers for this task. However, letting the dwellers themselves construct the facilities has proven to be more cost effective because the poor usually find equally adequate but much cheaper, often used material. The average construction cost is currently estimated at Rs. 4,700 (versus Rs. 7,200 in the official cost estimate).

B4. Today, the pay-order is only issued in the name of the beneficiary, instead of using current account checks. Originally, the current account check used could be cashed onto any account in anyone's name, opening the door for potential misuse by a third party (other than the City or the beneficiary). Thanks to AMC's policy change, this is not possible any more today.

B5. Today, the technical ward officer allows also the connection to the sewage system, instead of requiring a soak pit. Originally, the technical standard (see appendix) required the construction of a soak pit latrine because the authorities assumed that there existed no sewer in the target communities. However, this assumption was false; therefore – though the technical standard was never officially changed – it is today possible to connect the toilets to the sewer, if existent.

6.1.6 Today 's Challenges and Recommendations

C1. There is a need of recognizing the role of intermediary NGOs. Originally, the scheme was designed for individuals. However, like a number of schemes aimed at the poor, the intermediation of an NGO improves implementation efficiency. Currently there is no recognition of NGO's role, and thus no budget for covering the incurred costs.



Recommendation 1: Recognize the role and requirements of NGOs enabling the satisfactory implementation of the Scheme!

C2. Excluding the most vulnerable, the beneficiaries have to arrange for the construction finances themselves. This is because the Scheme reimburses the individual only after construction. Therefore, the poorest and most vulnerable segments of society are unable to arrange for the finances and, thus, are unable to avail of the scheme; alternatively, they may compromise on construction quality.



Recommendation 2: Evaluate the viability of alternative financing models that would increase the access to the Scheme, such as providing a loan through a microfinance institution and disbursing the subsidy on time.

C3. Currently available information on the Scheme is incomplete. The scheme was started more than a decade ago. The officers who were present during the initial period are no longer in the AMC, and there is no written documentation of the scheme available, except for the technical specifications attached. Cooperative officers in the AMC facilitate implementation of the scheme, but the lack of institutional memory creates some uncertainty about the Scheme's future availability for the urban poor. For example, an intermediary NGO is unable to know how many toilets it can plan for over time. Making the required information - especially the budgeted - available zone-wise would significantly improve planning security.



Recommendation 3: Make comprehensive information on the Scheme available in a written form to guarantee reliable project planning for all stakeholders!

C4. The process' lengthiness, as outlined in challenge B1 and B2, still drives costs up today. The time lag between construction and subsidy deposit on the beneficiaries' bank accounts still may take as long as three months, increasing the construction costs by up to one third; see cost estimates of the reimbursement phase.

Therefore, there exist large potential efficiency gains, e.g. by making the process a "one-stop-one-day-booth": for example, if the ward officer approves the inspected toilets, he could immediately issue the certification documents; then the NGO could take the documents to the zonal office where the pay-orders are issued; then the pay-orders are taken to the bank to transfer the money. In such way, it would be possible to shorten the process from three months to a single day, eliminating the administrative cost increase totally.



Recommendation 4: Evaluate options for improving the efficiency of the process that leads to the issue of the output-based subsidy pay-order!

C5. The current eligibility criteria exclude many potential beneficiaries. Due to the requirement to provide a tax receipt the program does not reach renters and slum dwellers representing the most vulnerable population segments. Additionally, the latter fact increases the difficulty to identify 15 households eligible to participate within the same community. (Note: Since the 15-household threshold is a precondition for the intermediary NGOs' efficiency it should not be eliminated.)

For example if there are 12 eligible owners with appropriate documentation as well as several renters and unrecognized occupants that are all willing to participate in the 90-10-Scheme they would not be eligible. This is because though they might be as many as 30 organized potential beneficiaries both willing to participate and to make the significant cost contribution, the group would not pass the threshold of 15 households.

De-linking the status of tenure from the provision of basic infrastructure and services is possible as illustrated by successful strategies such as “proof of occupancy” (Bangalore) or “no objection certificate” (AMC).

C6. The current eligibility criteria vary significantly across programs, making it difficult to achieve synergies through the combination of different schemes. For example, while the Parivartan Scheme does not require proof of tenure of the beneficiaries, the 90-10-Scheme does. However, combining both schemes is not possible if the official requirement is to comply with the stricter of both schemes’ eligibility criteria. In order to maximize the access of Ahmedabad’s vulnerable population to slum upgradation, all eligibility criteria need to be withdrawn. Only then, as is already the case in the Parivartan Scheme, the AMC is able to provide all of its citizens with the opportunity for a better life. Otherwise, this is if the eligibility criteria become stricter, there is no way to provide save sanitation to the poor; then open defecation can not be eliminated but will even increase. In the latter case unhygienic and humiliating sanitation conditions of the poor will continue to cause severe damage to the formal city, too. Therefore, all eligibility criteria should be ceased to create a win-win-situation for Ahmedabad’s rich and poor citizens.



Recommendation 5: Remove all eligibility criteria but especially de-link the status of tenure from the provision of services, as AMC already does in the Parivartan Scheme with great success!

C7. There exists a need for more flexible (technical) standards. One example was already outlined in adaptation B5: the official requirement is to build a soak pit, even if there exists a sewer in the locality. Another example is the design of the toilet door that is required to open to the inside. This either increases the size of the toilet (because more space is required in a tiny room to close any door on the inside) or significantly compromises comfort and hygiene (because the person closing the door will touch walls and step on the latrine itself). The original reason was presumably the fact that the community streets are usually very narrow and a door opening to the outside would compromise movements in the public space; however, one may expect the beneficiaries

to take care of their asset, for which they made a significant contribution. Therefore, more choices should be left to the beneficiary.



Recommendation 6: Consult with the stakeholders with the aim to adjust design standards to real community needs!

C8. Subsidies are based on cost estimates from the mid 1990s that have never been adjusted to inflation. Due to this distortion, potential beneficiaries that would originally have participated with the obligation to contribute Rs. 306 are now excluded from the scheme because the today necessary co-payment of at least two thousand rupees exceeds their capacity by far. Eventually, balancing the competing objectives of reaching out to more vulnerable beneficiaries and of raising significant cost contributions may result in a compromise.



Recommendation 7: With the aim to balance both efficiency and redistribution, review the cost-benefit analysis and determine target group(s) as well as appropriate subsidy and co-payment!

6.2 The 1500 – NOC Scheme

6.2.1 Objective

The 1500-Scheme (read “Fifteen-Hundred-Scheme”) aims at providing slum residents with a No Objection Certificate (NOC) that allows them to apply for legal individual sewage and water connections to their house. “1500” refers to the amount paid by the individual to the municipal corporation for getting the NOC. This scheme was started in approximately 2002 and, given its goal, targets informal areas only.

6.2.2 Cost Sharing

The informal dweller pays the full costs of Rs. 1,510 for NOC and application fee while the AMC recovers the administrative costs through the beneficiaries’ contribution. The NGO pays the costs occurring through the community work.

6.2.3 Eligibility

1. The applicant should be residing in a slum dwelling of no more than 40 square meters.
2. The applicant should have some type of residence proof, though no formal “proof of tenure” such as in the 90-10-Scheme is required. Instead, informal proofs such as ration card, voter I.D., or electricity bill are accepted, too.

6.2.4 Implementation

1. Any self-selecting individual can apply for the scheme. Alternatively, an NGO identifies potential target communities, raises awareness among the residents, and organizes the households willing to participate in the Scheme (4-5 community visits).
2. The individual applies to the zonal office on a form available there for Rs. 10. She submits a proof of residence along with the form. The zonal office issues an ‘inward number’ to the applicant.

Alternatively, the NGO delivers the application forms to the community, collects the Rs. 10 fee with the completed forms, and Rs. 1,500 for the NOC. The NGO then takes the documents to the Zonal Office to pay the fees there; in turn the

administration issues inward numbers, which the NGO takes back to the community (2 community visits).

3. An engineer from the zonal office comes to the applicant's residence to measure and draw the dwelling. The Deputy Zonal Municipal Commissioner approves the drawing.

Alternatively, the NGO accompanies the technical officer in order to speed up measurement and drawing (1-2 community visits).

4. If the dwelling is eligible for the NOC in terms of the two criteria listed above, the estate department of the zonal office issues a "resolution" certificate to the City Civic Center (CCC). With the resolution the resident may pay Rs. 1500 to the CCC that issues in turn a payment certificate.

Alternatively, the NGO pays the collected Rs. 1500 to the CCC (½ NGO work day).

5. After the individual household has taken the payment certificate back to the zonal office, a photographer is sent to the resident's house to take a photo of the residence with the applicant holding her 'inward number' on a small chalkboard.

Alternatively, the NGO takes the certificates back to the zonal office (½ NGO work day).

6. This photograph is then glued onto the bottom of the pink NOC certificate, and both together are laminated into plastic to ensure the longevity of the document. The NOC is sent to the applicant who is then able to apply for legal individual water and sewage connections, or to legalize existing illegal connections.

Alternatively, the NGO delivers the NOC certificates to the dwellers (1 NGO work day).

	<i>Duration</i>	<i>Costs</i>
<i>Project Summary</i>	<i>Scattered households: more than 1 month, with</i>	<i>Individual Households: Rs. 1,510</i>
	<i>NGO intermediation: about 1 week.</i>	<i>10 NGO visits: Rs. 3,000 per community</i>

		AMC: Rs. ???
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Note: NGO costs are estimated at Rs. 300 for each one-day visit, i.e. Rs. 200 for daily salary plus Rs. 100 for transportation and other costs.

6.2.5 Adaptations in the Past.

B1. Today, NGO intermediation significantly improves the process, compared with AMC directly working with individual households scattered throughout the populace.

For example MHT carried out the administrative process collectively on behalf of slum dwellers, liaising with the municipal corporation. There are some key advantages in NGO intermediation:

1. NGOs inform the individual households that are rarely aware of the scheme.
2. NGOs are experienced in administrative procedures while the informal dwellers usually have difficulties in dealing with the administration.
3. NGOs adopt an area approach by organizing geographically clustered households to participate collectively in the Scheme, thus making the process more efficient.
4. NGOs proactively work with the community, thus speeding up the process. E.g. the payment of Rs. 1500 for the NOC is accepted only after the estate department verifies the dwelling's size of not more than 40 square meters with the drawing. To reduce the workload the city administration sought support of MHT engineers for drawing the dwellings. So the technical officer only needed to verify the plans' correctness, and the payment was completed within one week compared to up to one month usually.

6.2.6 Today 's Challenges and Recommendations

C1. Only few stakeholders know about the Scheme. Unless someone acts as the intermediary, many citizens do therefore not participate. Information is also limited in Urban Local Bodies. The institutional knowledge needs improvement to guarantee

smooth transactions, especially after the change of individual officers or of the city corporation's leadership (e.g. after elections).



Recommendation 1: Develop and publish information material about the scheme, such as duration, budget, etc in written form for internal office use and intermediaries.



Recommendation 2: Develop and publish target-group-specific information material for the beneficiaries.

C2. Getting the NOC does not necessarily imply that the households are able to access a legal connection. It may be that the budget for extending the infrastructure branch line to the community remains to be allocated.



Recommendation 3: Intensify the area approach targeted at geographically clustered households, and, if inexistent, include the network provision to the respective community into the area intervention!

C3. The poor's access to the Scheme is limited. Many informal households do not participate because cost contributions are too high without actually providing any facilities (but only the permit to apply for these). Though living in unsanitary conditions, such as open-defecation or deprived water access, the poor do not participate in the Scheme. This is however obstructing AMC's goal to improve the city's sanitation not only in the informal settlements but also in the entire city. Therefore, costs need to be reduced significantly. If this is politically not viable, then at least the costs for the more efficient group approach should be reduced, and lower fees might also be applied to households with ration cards.



Recommendation 4: Improve the access to the Scheme by reducing respective fees!

C4. The 40 square meter eligibility criterion excludes larger dwellings from the scheme. The assumption that the poor do not have such large dwelling units does not hold in practice. Excluding the larger dwellings does contradict AMC's goal to stop

open defecation within the city. Additionally, drawing the dwelling suits the main purpose to verify its size. If the eligibility criterion would be dropped the drawing would become obsolete, too. Then AMC would be able to reduce not only its administrative costs but also the fees charged for the NOC. Eventually, the beneficiaries' access to the Scheme would improve, as would Ahmedabad's sanitary conditions.



Recommendation 5: Drop the 40 square meters eligibility criterion!

C5. NOC fees are based on cost estimates for scattered households applying individually. However, in the area approach with NGO intermediation the process is much more efficient for all sides. Therefore, a reduction in NOC fees should be considered. As already stated in C7, lower fees would improve access to the scheme, and therefore overall sanitary conditions within the AMC boundary, both within the formal and informal city.



Recommendation 6: Consider a reduction in fees to provide larger benefits to AMC citizens!

C6. There is a need of recognizing the role of intermediary NGOs. Originally, the scheme was designed for individuals. However, like a number of schemes aimed at the poor, the intermediation of an NGO improves implementation efficiency. Currently there is no recognition of the NGOs' role, and thus no budget for covering the costs incurred to them; this however would be necessary to scale the programme up.



Recommendation 7: Recognize the role and requirements of NGOs enabling the satisfactory implementation of the Scheme!

6.3 The Door-to-Door waste collection scheme

6.3.1 Objective

The Ahmedabad Municipal Corporation (AMC) launched the Door-to-Door Garbage Collection Scheme in Ahmedabad City in 2004. Under the scheme AMC awards contracts to registered associations who wish to take up the task of waste collection from households, and pays these association for the services rendered.

A unit of 200 households is considered as one unit under the scheme, and an association has to take up the waste collection responsibility for a minimum of 200 households (and a maximum of 5000 households). A sweeper collects the waste from each household and deposits it into the municipal garbage containers located outside the collection areas. The containers are usually available at an interval of 1.5km; thus, the distance to the next container should not significantly exceed 750m.

6.3.2 Cost-Sharing

AMC pays the association Rs. 10 per household per month as payment for the waste collection. An association may also collect waste from commercial establishments. In this case, the payment for the collection is made by the commercial establishment. The minimum payment per establishment is Rs. 10 per month (Rs. 7 in some Parivartan communities); if the establishment produces lots of garbage, a larger sum may be negotiated.

6.3.3 Eligibility

1. The association bidding for the contract should not have a government employee as a member.
2. The local association of an area is given priority in the assignment of contracts. Second preference is given to associations made up of dalits/valmikis.

6.3.4 Implementation

Contracting

1. An association wishing to get the contract has to identify the area it wants to service.
2. It has to conduct a survey of the households in the selected area. It collects information from each household about the number of residents with break up by age and sex. It also gets an estimate of the volume of daily waste from each household. AMC uses the data to update their databank and to control whether the rubbish was properly collected.
3. It has to seek written permission from the residents in the selected area to service their area.
4. It submits the application to the ward office. The association that wins the contract gets a work order to begin work.
5. For each unit of 200 households AMC provides a pedal-rickshaw to the sweepers. The association has to purchase the rickshaw, thereafter getting reimbursed by AMC on submission of the respective bill.

Daily Cleaning Routine

1. Each unit of 200 households is serviced by one sweeper who goes every morning around 7 am to the ward office to sign in.
2. She/he then goes to the work area and collects waste from the households and deposits it into the municipal bins using the pedal-rickshaw.
3. She/he usually carries out this work between 7 am and 12 pm.

Monthly Payment

1. The association submits a monthly bill to the ward office between the 1st and 3rd of each month for services rendered.

2. The ward office crosschecks the bill with a list of all households in the area, which is based on the initial survey. In the list each household have to sign that the service was properly and regularly delivered.
3. The payment is electronically deposited in the Association's bank account between the 10th and 15th of each month.
4. The association then pays each sweeper by the 20th of each month.

Material and Maintenance Costs

Each sweeper receives either a pedal-rickshaw or a handcart. While the rickshaw costs Rs. 6,200 and can carry 6 waste containers, the cart is much cheaper at Rs. 3,500 but can only carry one third of the waste a rickshaw carries. Since the program is new there is no empirical data on the maintenance costs available yet; however, the AMC plans to give the sweepers Rs. 900 any third year.

Generating Stable Local Employment for the Most Vulnerable

AMC pays Rs. 10 for each registered household per month, of which the CBO keeps between Rs. 3 and 4 in order to finance community work. The CBO collects the fee from commercial establishments directly. The sweeper receives Rs. 7 per household.

In reality collection areas vary in size from the 200-household model district. In order to guarantee all sweepers a monthly income out of the Door-to-Door-Scheme of at least Rs. 1,400 the associations make the following adjustments: if the cleaning district is (significantly) larger than 200 households the sweeper will get less than Rs. 7 but at least Rs. 6 per household. Contrarily, in smaller districts the fee increases.

Eventually, the sweepers' monthly income out of the Door-to-Door-Scheme is at least Rs. 1,400, on average it is Rs. 1,500 and in large districts with up to 300 households it is as high as Rs. 1,800. Since the local community association has a first-mover right in the process of contracting, the Door-to-Door-Scheme thus contributes to the generation of stable local employment. In the case of slums and through the preferential treatment of dalits and valmikis the Scheme furthermore benefits the most vulnerable groups.

6.3.5 Adaptations in the Past

B1. Today the sweeper has the choice whether to receive a pedal-rickshaw or a handcart, instead of being offered only pedal-rickshaws. Originally, assuming that pedal-rickshaws are more efficient than handcarts, AMC provided only pedal-rickshaws to the sweepers. However, women members of the Parivartan-Scheme CBOs were more comfortable with handcarts; SEWA, the intermediary NGO, therefore asked the City Corporation to provide handcarts instead of pedal-rickshaws. Even though a sweeper using a handcart has to make three trips for each trip made by the pedal-rickshaw sweeper for depositing waste in the municipal containers, they still prefer the handcarts. Through the provision of the latter, the women's working conditions have therefore improved. Also the handcarts are more cost effective: while pedal-rickshaws cost about Rs. 6,200 the handcarts are available at Rs. 3,500 only.

6.3.6 Today's Challenges and Recommendations

C1. NGOs can facilitate access to the Scheme in informal areas that are not appropriately organized for participation. Typically, associations selecting an area for waste collection do not select slums. In case the selected area includes a slum, the sweepers tend to neglect waste collection in the slum. Slums that do not have associations are therefore unable to participate in the Scheme. Here NGOs can take over as an intermediary facilitating waste collection directly or helping the community to organize effectively, enabling them to engage in the Scheme.

For example, Mahila SEWA Housing Trust (MHT) facilitated the implementation of this scheme in slums of the Parivartan-Scheme. In these slums community-based organizations (CBOs) had been formed for construction and maintenance of slum infrastructure under the Scheme. The Door-to-Door-Scheme was adopted by these CBOs. The CBOs did such a good job of waste collection in their own slums, that slowly they were able to win contracts for non-Parivartan areas where this service had hitherto been unavailable. This activity not only improved the cleanliness there but it

also provided the Parivartan CBOs with income for improving their community development activities.



Recommendation 1: Recognize the role and requirements of NGOs enabling the satisfactory implementation of the Scheme!

C2. Stakeholder participation can lower costs as well as improve efficiency and sustainability. As illustrated in Adaptation B1, for the technical or administrative professional it is often hard to know what the best solution is for local communities. Therefore any stakeholder, but especially community participation can not only help to improve living and working conditions but also to reduce the cost of services rendered.



Recommendation 2: Let all stakeholders actively participate in the process to achieve efficient and sustainable local solutions!

C3. The daily sign-in by the sweepers in the ward office appears to be unnecessary. As far as we understand, the sign-in shall assure that service is delivered on a regular basis; however, the sign-in does not guarantee that the sweeper goes to work in the assigned neighborhood afterwards. Since the procedure is very time consuming and, thus, limits complimentary income opportunities of the sweeper, the administration might evaluate whether the sign-in is necessary. This is especially true since the household sign-up list appears to be a more effective monitoring instrument.



Recommendation 3: The AMC should evaluate whether the sweepers' daily sign-in adds significant value, or whether the requirement should be dropped!

6.4 Ek Mauka Udan – A Scheme for Livelihood Promotion

6.4.1 Objective

The Ahmedabad Municipal Corporation (AMC) launched a livelihood programme “Ek Mauka Udan” in September 2005 in partnership with Saath and Heritage Livelihood. Saath is an Ahmedabad based NGO working in the city’s slums. The Heritage Livelihood is a Hyderabad based organization working to promote livelihoods. This programme was first piloted in Andhra Pradesh (AP) by Dr.Reddy’s group. AMC was approached by Dr.Reddy’s group for this venture. Heritage Livelihood of AP conducted the training and Saath was the implementing agency. This programme has also been implemented in countries like Sri Lanka and Vietnam.

The aim of the programme is to provide or upgrade (train) skills among the youth to make them competent for the present day market and gain them employment opportunities.

6.4.2 Cost sharing

AMC and the beneficiary share the cost of the training. AMC has a budget of Rs. 4100 per participant. The beneficiary pays Rs. 500 as fees while the other costs, including infrastructure required for conducting the trainings are borne by AMC. The beneficiary has to pay Rs. 250 before the training and the remaining half on completion of the training.

6.4.3 Eligibility criteria

1. The beneficiary has to be between the age group of 18 – 30 years.

6.4.4 Implementation

The role of the NGO is built into the scheme’s design. This includes market assessment, awareness creation, identification of beneficiaries and organizing the training.

- Market assessment

Prior to the implementation of this project, market assessment was done in order to assess the market situation. Road shows were conducted in slums to orient the youth about the programme.

- Create scheme awareness

They have to promote the programme at the community level.

- Identifying beneficiaries between the age group of 18 – 30

Identified youths are enrolled for the programmed based on their area of interest.

Trades identified

Different trades have been identified under this programme in order to train the youths.

The trades are broadly classified as under:

- Multi skill (E.g. AC repairing, Refrigerator repairing)
- Hospitality (E.g. Hotel management)
- Logistics (E.g. Office management, couriers)
- EPS (E.g. Customer relation, call centers)
- Information Technology (E.g. MS Office, DTP)

The course duration of each batch is three months. Up till April 2007, four batches have been trained with a total of 900 beneficiaries (485 boys, 192 girls)

Observations (as observed by Saath)

1. The ratio of male to female trainees per batch is 70:30. The overall dropout rate is 10%.
2. 5 – 10% males get placed with some company, 5% join father's business, Of the female trainees 3% are not interested in taking up any kind of job after training and One of the main reasons for dropping out is joining the course at the same time when they are involved in their family business.

3. The trainees absorbed in the market draw a monthly salary in the range of Rs. 1500 – 6000.

Programme Successes

1. Motivation levels are high due to enhanced capacities.
2. The training leads to an increase in self-esteem.
3. Trainees learn not only the specific skills they are trained for, but also several ‘life skills’ through their peers and through the training experience.
4. The trainees have been placed in mainstream businesses such as the Subhiksha chain of retail stores.
5. The Gujarat State Government is now trying to replicate this programme at the state level.

6.4.5 Adaptations

After the success of this programme, the state government has now decided to replicate it elsewhere in the state. Some of the changes that would be introduced in the present programme are as follows:

1. This programme has been renamed “Ummeed”.
2. 35 crore budget has been allocated for training 1 lakh trainees over a period of 3 years.
3. Cost sharing would be done by the state and the participant where the state will contribute Rs. 3500 and participant will contribute Rs. 500.
4. Some SJSRY funds and the infrastructure of SJSRY will be used for this programme on a larger scale. The existing infrastructure will be improved to enhance the quality of the programme.
5. Saath will be the resource agency in this case. They will be responsible for overseeing the implementation of this programme in Ahmedabad, Baroda, Palanpur and other selected districts.

6. 3 more NGOs have been designated with this task. They are Dr.Reddy's, Capt Foundation and AID-dE-ACTION.

6.4.6 Recommendations in light of present challenges

C1. The programme does not target people above 30 years. This programme is designed only to train people between the age group of 18 – 30. Thus it does not target people who are in the higher age group; when in fact they are the ones who need such trainings the most owing to their social position.



Recommendation 1: The programme can be designed to include people in the higher age bracket who already have some level of skills but need brushing up in order to be competent as per the demands of the present day market. Every batch could accommodate 20 – 30% candidates who are above 30.

C 2. All trainees don't get job placements. The effort is to place all the trainees, but sometimes all of them don't get placements.



Recommendation 2: The programme can help the trainees to get loans so that some of them can set up their own business.



Recommendation 3: One of the reasons for the trainees not getting placement could be lack of trust, on part of the employers, in their abilities to perform. This could be addressed by placing the trainees for internship and eventually they may get absorbed. In this way the trainees can get some amount of experience and in some cases the end result may be in the form of job placement.

Shabana Maiyuddin Qazi – A Success Story

My name is Shabana Maiyuddin Qazi. I live in Sarkhej Sankalit Nagar. I am 26 years old and have completed high school. I belong to Bakhial in Dehgam taluka. I was married when I was 13 years old. When I was 17 I was widowed due to a sudden heart attack suffered by my husband. I had two young children.

I returned to my parent's house with my children and started doing sewing to earn some money. One day, seven years after my having come to my parent's house, my aunt told me about Saath's Ek Mauka Udaan's training programmes and she brought me the form. They offered six different types of training. I decided to take the "Multi-skill training" because I had learnt to do electrical fittings and repairs from my father.

I was the only woman trainee in the programme, but the teachers and students were very cooperative. Men are more supportive than women. If I had not come to Ek Mauka Udaan's training, I would have learnt sewing and would have been doing sewing. In this profession of being an electrician repairing refrigerators and air conditioners, I am the only woman. In all of Gujarat there is no other woman electrician, and I feel very proud about this. In the last year, several persons from Saath have come and interviewed me.

Currently I am a technician, but I want to become a mechanic, and with additional experience I will be able to become one. In a few years I would like to open a workshop/show room. I also want to bring my brother into this profession. He is currently training in this field, and I hope to fulfill my dream in the near future.

However, I face some constraints. Currently I work as a private technician, but I do not have the tools I need. If I had the tools, I would be able to earn much more. Also, I cannot drive any vehicle, as a result of which I am not able to advance further. I also lack capital and I do not know how to speak English. This also is a limitation.

The training has led to a several changes. I used to be an introvert, but now I have become outgoing. I have come into contact with the outside world, and I like working alongside the men. The latest development is that Shabana has been appointed as an instructor in the Ek Mauka Udaan Programme, and is paid Rs. 7000 per month.

An Interview with the CEO of Saath

What is Saath's approach towards the issue of livelihoods for the poor?

Saath understands that the poor are highly motivated. This is irrespective of caste or class. People of all age groups are eager to learn and progress. However they lack the skills to do the work and to organize and interact with the market in a constructive manner. Saath enables them to organize their actions and provide them with marketing, management and financial skills to gain employment.

Over the years, a better understanding of the issues for the young age group (18-30) has developed. But what do you think about the strategies for the slightly higher age group i.e. 30 - 45?

We are still not very clear about this age group. However I believe that the poor can largely be divided into four categories.

- Unskilled- Uneducated
- Unskilled-educated
- Skilled-Uneducated
- Skilled –Educated

We need to take them towards the fourth category. Apart from this it is imperative that their skills be certified.

What are the emerging sectors for employment in the city of Ahmedabad?

Service industry has a very high potential in Ahmedabad. Apart from these, health related, leisure related industry and Apparel parks have a lot of potential for employment.

What is your experience relating to gender and livelihood for Ek Mauka Udaan?

The experience has been extremely encouraging. They are engaged in various sectors like BPOS, air-conditioning, Customer relations etc. Also our experience has been that being poor, the inhibitions of caste, creed and religion do not stay for long.

Comments on the Ek Mouka Udaan:

It is a win-win situation for politicians as well as the poor. Gujarat was lucky to have an interested Minister and an equally interested urban development secretary. However NGOs are still not seen as equal partners by the Government. It is encouraging to see that the Government has allocated Rs. 35 Crores and has a target to train 1,00,000 trainees all over the state.

What message do you have for the Government?

Over the years I see many job opportunities being created by the manufacturing sector and our efforts should be towards gearing it for the poor. Also our academic system is not geared towards providing employment. The Government should loosen their hold towards over the IT industries. The existing IT industries are largely under-utilized. The curriculum has not changed for 20 Years, it needs to be revamped to suit the industry needs.

What is your understanding of the role of Microfinance?

I can only say that it is going to be more important by the day.

90 percent of the funds of the SJSRY were being returned by the Government. Now 2000 per candidate will be allocated from SJSRY. When we went to the UCD Baroda, they were highly discouraged; however involvement with Ek Mouka Udaan has regenerated their faith.

Why would the industry prefer to recruit trained people from the informal sector?

The level of salary and the self esteem generated by these jobs is very high for the poor. Some of our trainees have been employed by Subhiksha (a local retail chain) and call centres. They state that the levels of motivation are very high and they do not tend to leave the jobs very easily.

6.5 The Pay-And-Use-Scheme

6.5.1 Objective

The Ahmedabad Municipal Corporation (AMC) implemented the “Pay-and-Use-Scheme” with the aim to improve the municipal access to safe sanitation. Under the Scheme the administration provides the general public space or a specific community with a shared toilet block facility.

The minimum number of toilet seats is 10, providing 5 pit toilets for men and 5 blue seats for women. Furthermore, the facility contains a water tank on the roof to balance the shortage in the provision of water, and there exists a room/apartment on the upper floor that is used by the managing NGO or the caretaker.

6.5.2 Cost-Sharing

This scheme is co-funded by the Central and State Governments paying Rs. 2 lakhs each while AMC usually accounts for Rs. 1 lakh. If the cost is higher than the allocated 5 lakhs, the AMC has to account for the excess. After successful AMC application money is disbursed in phases.

6.5.3 Implementation

While also private construction companies may apply for construction, the contract is preferentially awarded to NGOs. However, the developers tend to circumvent the preferential treatment by formally turning themselves into NGOs. Eventually the AMC owns the constructed facility and sources management and maintenance out to an NGO employing the caretaker.

6.5.4 Adaptations in the Past

There is no information available on any adaptations in the past.

6.5.5 Today's Challenges and Recommendations

C1. Many toilets, but especially female sections, are badly served, causing humiliating and unsafe conditions. The caretaker is usually male and avoids entering the female section, thus not maintaining these properly. Since women are more vulnerable to unsanitary conditions, they suffer to an intolerable degree in this case and tend to search for alternatives such as defecating in the open. This however is not only humiliating to them but it also causes severe health problems, both to the women themselves and to the public in general.

In some cities, the design of public toilets limits the access to the caretaker's apartment to the inside of the toilet facility. Thereby, the caretaker is forced to properly maintain the facilities through which he as well as any visitor accesses his dwelling. However, the question remains how to ensure decent conditions in the female section. This will likely not be achieved as long as a male caretaker alone maintains the facility. Therefore, adding another room for a female caretaker on top might be an alternative; or, to let the facilities be managed by a family. In both cases, according to the above design, men and women could access the caretakers' dwelling only through the male and female sections respectively. Drawings illustrating the alternative designs are appended.



Recommendation 1: Discuss viable alternatives to the current scheme with NGOs, caretakers, and users, especially including the women's perspective!

C2. In some public toilets there exist no separate sections for men and women. In these cases many women do not want to use the facilities shared with the men; therefore, again they tend to search for alternatives such as defecating in the open, imposing health problems to themselves and the general public.



Recommendation 2: Build always separate male and female sections!

C3. While appropriate for the general public space, the Scheme does not suit the needs of poor communities. Already the Rs. 1 fee exceeds the capacity to pay of poor households. This can be illustrated by following finger-exercise: A poor household is likely to have 7 members. Assuming that each family member uses the facility only once per day, the accumulated cost is Rs. 7 per family per day. This is Rs. 2,555 in a single year. Given the problems of large community facilities, an “individual” toilet shared by 3 to 4 families (owning and maintaining the facility themselves) would suit their needs much better. Such a shared “individual” toilet is also easier affordable to them: their annual expense for the Pay-and-Use Scheme would be Rs. $4 \times 2,555 =$ Rs. 10,220 per year, which is more than the amount required to construct and operate an individual toilet in the first year; in any consecutive year the families would save a lot of money while enjoying better service as of the first day.



Recommendation 3: Together with local communities and NGOs, develop a programme for (shared) individual toilets – or include this option into the 90-10-Scheme – to serve very poor households!

C4. Shared “individual” toilets require formal network extensions. In many informal communities there do not exist local branch lines of the water and sewage networks. In this case the individual households connect directly to the main utility line. Such informal connections however reduce the pressure in the entire network. (The reduction in pressure is caused by innumerable individual connections; technically only few branch lines may be connected to the main line while the many individual households connect to the branch line only.) Therefore, the lack of a branch line in informal communities eventually causes an externality to the entire network, including the formal city.

Though shared individual toilets would provide better services than Pay-and-Use community facilities, this alternative is not available on a sustainable basis until the community gets connected to the formal network. Therefore, instead of spending Rs. 5 lakhs on Pay-and-Use community toilets, extending the formal network would be more efficient. According to MHT cost estimates (based on SNP), extending both water and sewer branch lines into local communities would be available at Rs. 3,100 per meter.

(The assumptions for the cost estimate are that water and sewage lines have a 150 and 230 mm diameter respectively, serving a community with 200 households, which is the average size of slums in AMC.) Thus, for Rs. 5 lakh AMC could extend the water and sewer lines by approximately 160 meter into the informal communities. Due to the positive externality in the entire network (through reducing informal household connections) the branch lines' real cost is significantly lower than the construction costs!



Recommendation 4: Instead of building Pay-and-Use community toilets, construct local water and sewage networks and give the targeted community access to the 90-10-Scheme!



Recommendation 5: Assess the viability of increasing spending on local area networks, such as making funds from the Pay-and-Use-Scheme or other alternative funds available for this alternative!

C5. Water availability limits the facilities functionality. Both the pressure and the time at which water is available cannot provide the amount necessary to keep the facility running continuously; therefore, complementary water supply by tanker delivery is needed, which is more costly than tap water and not always reliable. It might be more cost-effective to build an additional water tank on the roof, or more sustainable to extend the formal water and sewer network to the community.



Recommendation 6: Discuss potential solution to this problem with the communities!

C6. Land disputes frequently delay reconstruction and leave communities without any sanitary facilities. In the scope of the Scheme some existent toilets of poor quality are demolished in order to replace them with an improved facility. If the demolished toilet was located on a disputed property, the dispute over the property's tenure may cause a stoppage of the reconstruction. In such a case the area is left behind without the sanitary facility.

Therefore, the delicate question arises how to avoid the problem. It might be necessary to make written agreements with the stakeholders involved in the dispute before

beginning construction; however, waiting for such arrangements may also become a “project killer”. Other options should be evaluated.

Recommendation 7: Ensure that at all stages of planning and construction there are sanitary facilities available to the community!

6.6 Swarna Jayanti Shahari Rozgar Yojana

6.6.1 Objective

In December 1997, the Government of India launched Swarna Jayanti Shahari Rozgar Yojana (SJSRY). SJSRY seeks to provide gainful employment to the urban poor (living below the urban poverty line) through wage employment or self-employment. Inputs under the scheme are to be delivered both through the medium of community structures set up on UBSP pattern and through Urban Local Bodies (ULBs). The scheme funding is shared between the Central and State Governments, with the former providing 75% of the funds and the latter 25%.

The main objectives of SJSRY are to:

1. Provide gainful employment to urban poor through self-employment or wage-employment;
2. Promote community empowerment through creation of suitable community structures;
3. Promote women’s groups for small enterprises and thrift-cum-credit activities.

6.6.2 Cost sharing

Subsidy would be provided at the rate of 15% of the project cost, subject to a ceiling of Rs. 7500/- per beneficiary (for individual USEP). In case of more than one beneficiary join together and set a project under partnership, subsidy would be calculated for each partner separately at the rate of 15% of his share in the project cost limited to Rs 7500/- per partner. Contribution of 5% as margin money is to be borne by the applicant. Jointly set up projects shall be eligible for subsidy equal to the total subsidy per person. The provision relating to 5% margin money per person will be applicable.

6.6.3 Eligibility

Under-employed and unemployed urban youth whose annual family income is below the poverty line and who have got education upto ninth standard shall be assisted with bank's loan and Government subsidy. The definition of 'below poverty line' (BPL) is annual income of Rs. 24,180 or below, based on a survey conducted in 1998.

6.6.4 Scheme Implementation

The SJSRY is designed to rest on a foundation of community empowerment. Instead of relying on top down implementation, this programme aims to promote community organisations for local development. Community organisation like Neighbourhoods Groups (NHGs) and Neighbourhood Committee (NHCs) are to be set up in the target areas and federated under Community Development Societies (CDSs).

The CDSs are the focal point for:

1. Identification of beneficiaries
2. Preparation of applications
3. Monitoring of recovery of loans given under the scheme
4. Identification of viable livelihood projects suitable to their area

The CDS is also supposed to facilitate health, welfare, education services by linking the community with different line departments that provide these services. A maximum expenditure of Rs. 100 per member for the first year, and Rs. 75 per member for each subsequent year is allowed for activities connected with the CDSs.

To encourage community savings and links with institutional financial organizations, the SJSRY design also includes carrying out of Thrift and Credit activities, either as part of the CDS' activities or through a separate Thrift and Credit society. The savings and credit activities are to be carried out by a registered body.

The employment creation part of SJSRY consists of two components, viz. the Urban Self-Employment Programme (USEP) and the Urban Wage Employment Programme (UWEP).

Under USEP, the scheme provides assistance to individuals for setting up gainful self-employment ventures, including loans and training of beneficiaries for acquisition or

upgradation of vocational and entrepreneurial skills. The UWEP aims at providing wages to the urban poor working on improving infrastructure facilities like roads, drainages, community halls, etc.

The scheme also promotes the formation of women's groups under the Development of Women and Children Groups in Urban Areas programme. The DWCUA groups undertake income generating activities with financial support from the programme.

In Ahmedabad city, the SJSRY scheme is being implemented by the Urban Community Development Centre (UCDC-AMC). According to its Director⁶, the Ahmedabad UCDC centre has used 31% of its available resources, and is the best in country. Details under the various sub-programmes of SJSRY are as follows.

(a) Urban Self-Employment Programme (USEP)

- Assistance is provided to individuals for upto Rs 50,000. Projects with higher costs are also covered if two or more eligible persons join together in a partnership. In this case, the share of each person in the project cost is Rs 50,000 or less.
- Subsidy is provided at the rate of 25% (30% and 40% for ST and SC)⁷ of the project cost (for individual USEP). In case of joint projects, the subsidy is calculated for each partner separately at the rate of 25% of his share (30% and 40% for ST and SC) in the project cost. The rest part is given as loan.
- UCD also ties up with private and nationalized banks to provide the loan component. The details are given further in the document.

(b) 'Development of Women and Children in Urban Areas (DWCUA)'

- Loans of upto Rs. 25,000 are made to these groups for taking up collective livelihood activities.
- These groups are eligible for a variety of training programs, e.g. embroidery, stenography and fancy readymade garment making..

⁶ In personal interview with Mr. D. P. Shah, Director, UCD-AMC in his office.

⁷ Though literature about SJSRY shows 15% flat for all, without much mention of SC and ST, the data here is based on series of personal interviews of Director of UCD-AMC in his office.

- UCD Ahmedabad is supporting 23 groups of women for various training programs in different wards

(c) *Savings and Thrift Groups*

- There are currently 17 savings group for women, with upto 21 members saving from Rs. 50 to Rs. 100 per month. These groups have ties with various nationalised and private banks like Bank of Baroda, Dena Bank, ICICI Bank etc.

(d) *Training of beneficiaries*

- UCD runs 15 training centers in Ahmedabad city, and has a list of 12 training programmes, e.g. stitching, typewriting, computer knowledge and beauty parlours.
- There is a provision for Rs. 2000 to be spent on each trainee, for a training lasting 300 hours. On average, the training is conducted for 3 hours each day.
- There is no fee for members of below poverty line (BPL) families.

The table below shows the activities conducted during year 2005-06⁸.

Table 6.1 List of activities conducted under SJSRY 2005-2006

Sr. No.	Type of Activity	Number of Classes	Number of Beneficiaries
A	Social Sector Activities		
	1) Health related Activities	250	92880
	2) Welfare and other Activities	46	1744
	3) Educational Activities	21	571
	TOTAL	317	95195
B	Physical Activities	26	2600
C	Employment Related Economical Activities	134	4417
D	Community Mobilisation Programmes	142	1954
	TOTAL BENEFICIARIES	619	104166

⁸ Data provided by UCD-AMC. The data for previous or proceeding years is not made available.

6.6.5 Today's Challenges and Recommendations

C1 . Linking the groups with nationalized banks for loans is difficult. As can be seen from Table 2 below, the actual numbers of loans sanctioned are far smaller than the number of loans applied for.



Recommendation 1: Provide orientation to nationalized banks about the scheme so that they are more responsive to loan applications. Allow participation of private banks in the scheme.

C 2. The AMC finds it difficult to ensure regular loan repayment by the borrowers to the banks. Once loans are made, it is challenging to get repayments from the members. However, the AMC has to make all the efforts for this, because the bank holds the AMC responsible for these loans.



Recommendation 2: Include NGOs in the scheme design as intermediaries between the AMC and the participants.

C3.The types of trainings typically offered under the scheme and the funding provided for the training is not always sufficient. An NGO working in Ahmedabad city used the capacity building component under the SJSRY scheme to provide training to construction workers in Ahmedabad city. Construction work is not one of the trainings listed in the project – however, the AMC was open to using SJSRY funds for this training. However, the NGO had to supplement the available training funds because these were inadequate for carrying out a satisfactory training.



Recommendation 3: Permit greater flexibility in types of training available and increase existing funds provided for training to increase employment opportunities for the trainees.

7. Best Practices on Poverty Alleviation – Slum Networking Project

7.1 Objective

The Government of India declared the year 2007 to be the “Year of Water and Sanitation”. In this light the Ahmedabad Municipal Corporation’s (AMC) Slum Networking Programme (SNP) is of particular importance as a best-practice example for the upgradation and provision of basic infrastructure and services to informal communities without requiring the formal proof of tenure.

In 1995 the owner of Aravind Mills in Ahmedabad City wanted to improve the basic services for his mill’s workers so that he decided to launch the Parivartan Scheme. Parivartan means “Improvement” in the Gujarati language. The Aravind Mill intervention was completed in 1998 becoming the pilot for SNP. Today, SNP offers not only basic services but also, of outmost importance, a verbal no-eviction guarantee for the ten years following implementation.

The package of basic services includes individual water and sewer/toilet connections, paved roads, street lighting, and solid waste management. In some cases the package is complemented with household electrification, being sensible because with the provision of street lighting the marginal cost for formally metered provision of electricity is marginal. Originally also storm water drainage was included in the scheme; however, even in the formal city the drainage system is limited so that it is difficult to get target areas connected to a branch line. Therefore, storm water drainage is usually no longer part of the package delivered but the road’s paving is inclined so that the water flows off, guaranteeing a minimal standard in the face of water logging problems.

7.2 Cost-Sharing

First, the slum dwellers contribute Rs. 2,000 per household for individual connections, plus an advance of Rs. 100 for maintaining the infrastructure. The households’ payments are matched by AMC and the private sector contributing another Rs. 2,000 each.

If a community decides not to pursue individual water or toilets/sewer connections, then the household contribution is reduced by Rs. 500 or Rs. 300 respectively. If the community decides to pursue neither water nor toilet/sewer then the individual household contributions are waived entirely; this is because in this case usually one of the ward's elected representatives pays for the upgradation out of his electoral budget. Secondly, AMC pays for all costs occurring in the formal infrastructure network extension into the community. AMC costs sum up to Rs. 15.800 on average. The AMC and the intermediary NGO contribute Rs. 700 and Rs. 300 respectively for community work such as health campaigns, micro-finance and insurance or literacy and vocational training.

7.3 Eligibility

A community has to fulfill the following criteria in order to be eligible:

1. The households do not already have formal access to the services delivered under the Scheme, i.e. the scheme does not aim at improving existing formal infrastructure.
2. The AMC needs to "clear" the land giving informal tenure and de facto protection against forced evictions to the residents.

Land clearance is awarded for AMC land, if it is not allocated for public purposes such as schools or hospitals.

Land clearance is awarded for private land, if it is not being under litigation, i.e. if there are no legal disputes about the formal land tenure.

Land owned by the State of Gujarat is not being cleared because the State Government denies any rights to the slum dwellers.

3. The number of households participating has to be equal to or larger than 25.

7.4 Implementation

<i>Step</i>	<i>Duration</i>	<i>Costs</i>
<p><i>Usually AMC identifies the target communities and then approaches an intermediary NGO that raises awareness among the residents and facilitates CBO formation.</i></p> <p><i>Alternatively, an NGO that has been working in a vulnerable community suggests to AMC to implement SNP in the area.</i></p> <p><i>Finally, also a community may apply for the scheme independently; however, this rarely happens due to the lack of awareness and organization.</i></p>	3-4 months	NGO: Rs. 4,800 per community
<p><i>AMC investigates the land status and eventually declares approval.</i></p>	3-12 months	
<p><i>The residents open savings accounts with a MFI, usually SEWA Bank, and start saving. In the case of SEWA Bank, the account is opened only for the Parivartan Scheme.</i></p> <p><i>The Bank provides information to AMC about the savings process even without written permission.</i></p> <p><i>Furthermore, the Bank does not allow withdrawing from these accounts without the permission of the intermediary NGO. Both measures are extremely beneficial to all stakeholders.</i></p>	12-24 months	HHs: Rs. 25 per hh for opening bank account.
<p><i>AMC departments develop the master plan for the area; in some cases the NGO facilitates the planning process with their own engineers. The infrastructure construction starts as soon as the land clearance is given.</i></p>	6-8 months	HHs: Rs. 2,100 AMC: Rs. 2,000 Private Sector: Rs. 2,000. NGO:

7.5 Adaptations in the Past

B1. Today, the slum dwellers usually save the entire amount, instead of taking a loan. Originally, the residents would save just Rs. 500 and then, while the construction starts, they would take a loan for the remaining Rs. 1,600. However, the administrative procedure of land clearance and urban planning became so lengthy that the community usually completes saving the entire Rs. 2,100. It would however be desirable to speed up the administrative process again and to return to the loan approach.

7.6 Today 's Challenges and Recommendations

Before giving any recommendations in this section we would like to emphasize that the SNP is the most promising scheme for solving the problems of informal slum and chawl communities in Ahmedabad. Above all, the SNP success is owed to not requiring any formal proof of tenure so that AMC may serve the informal poor, as required by the Bombay Act. This noble and sensible decision is acknowledged in innumerable international publications such as the

We therefore recommend scaling the SNP programme up significantly. The recommendations made in the following sections focus on the requirements to (i) upscale SNP and (ii) assure a sustainable impact of the physical upgradation in the post-SNP era.

C1. The beneficiaries' contribution was never adjusted to inflation. When the SNP was implemented in 1998 the residents' contribution was decided to be Rs. 2,100. Over time, due to inflation, all costs have significantly increased; however, household contributions were never adjusted over time, though according to the Mahila Housing SEWA Trust (MHT) many slum dwellers are willing to pay more.

C2. The budget for community development projects is too limited. A rather important component under the scheme is the community work after construction is completed. The community work aims at maximizing the positive impact of infrastructure upgradation. For example, in order to really harvest the benefits of individual toilet provision the residents need to be educated about hygienic habits such as washing hands with soap after defecation; otherwise, the desired impact cannot be fully

achieved. Another example is vocational training or literacy classes, providing the beneficiaries with better chances within the labor market, without the training/education the improvement in health and, thus, the increase in working days results in a lower than possible increase in family income. These are only two under many examples why the post-construction community work is essential.

Paradoxically, though the slum dwellers are willing to pay more for individual infrastructure connections, they are not willing to spend any money on shared infrastructure or community activities. It might therefore be appropriate to increase household contributions for individual connections while shifting the public subsidy to community capacity building.



Recommendation 1: Evaluate the viability of alternative financing models increasing the budget allocated to community activities and capacity building to assure the sustainable impact of physical slum upgradation.

C3. In order to scale up the program the process needs to speed up first. Current delays in the process risk the carefully built trust between the involved stakeholders. These delays originate in different reasons: (i) budget allocation for material needed is pending, e.g. water pipes or street light poles and lamps cannot be bought in a timely and sufficient manner; (ii) issuing the No-Objection-Certificate (NOC) to the community is currently delayed due to uncertainties about the legal implications so that the infrastructure departments are hesitant to proceed with project planning/implementation; (iii) co-ordination between different departments in AMC could be approved upon.

We see therefore the need for improving the efficiency of programme implementation. For example, all duties and responsibilities related to poverty reduction in slums (including physical planning, tenure regularization, as well as livelihood development) could be assigned to a single AMC department (such as the already existing Slum Networking Cell), being responsible for solving any problems encountered on the way of including informal settlements into the formal city and building sustainable communities, as required for cities funded through JNNURM.

In such ways the upgradation and formalization process would be bundled in a “one-stop booth” for all stakeholders, including other AMC’s departments, intermediary NGOs, the private sector and the the beneficiaries themselves. In order to be able to successfully fullfill its tasks the department would need independent resources., e.g. some share from the JNNURM budget to be allocated for the poor.

The department would also have the capacity to address the other needs, such as the below laid out needs for programmes complementing the physical infrastructure upgradation or post-SNP community work.



Recommendation 2: Evaluate options to improve the scalability of SNP, such as making the Slum Networking Cell a “one-stop-booth” for urban poverty reduction within AMC!

C4. In order to sustain the community process it is sensible to develop a complementary scheme for the post-SNP era. On the one hand working with post-SNP communities is relatively easy and cost-efficient because the community is already organized and the CBO’s capacity is built; on the other hand a post-SNP community is still lacking some of the infrastructure that would fully include them into the formal city. Depending on the size of the community, for example anganwadi, community hall, primary health care centre, public and recreational space, etc. belong to such infrastructure items. Furthermore, specific solutions for very dense settlements such as Sunjai Nagar could be developed, including interventions within individual houses to address inadequate living space or the continuing lack of individual toilets. Even partial relocation might be discussed with affected households to create public space in the far-too-dense community, etc.



Recommendation 3: Evaluate options for a post-SNP programme, including additional infrastructure, such as anganwadi, health care, community hall, etc!

C5. Land prices and rents go up in SNP areas. In communities that decide to participate in the program rents go up already after the program is announced even if construction has not yet started. This is actually a positive story illustrating the hope and enthusiasm

of the community to eventually get connected to the formal infrastructure networks; however, in the case of renters, and especially female-lead households this creates large problems. For example, already the announcement that Sharif Khan Bathan Ni Chali was being considered for SNP led to a rent increase of 43% (though SNP was never implemented there due to the tenure being under litigation). Again, shows the necessity to complement the physical upgradation intervention with other programs aimed at improving the income of the most vulnerable, otherwise being forced out of the community due to increased living costs.



Recommendation 4: Develop special programmes aimed at the most vulnerable such as renters and female-lead households in SNP areas to reduce their vulnerability!

C6. Current land tenure problems need to be solved in an inclusive way. Given the dilemma that it is already difficult to describe the stakes of the various groups involved in land disputes, it is even more difficult to come to an agreement. Though any strategy in this area is outmost difficult – and may turn into a boomerang striking the party that starts consultations about the issue – not doing so is no alternative for developing Ahmedabad over the long-term. In this light we raise the question, if the disputes can be solved in a more inclusive way. We see two potential ways out of the dispute:

1. In many cases the poor have bought the land from the person holding formal tenure at the time of acquisition (or a middleman); however, the poor never paid the required stamp amount that would legalize the transaction. It is well known among development professionals that high transaction costs reinforce the problem of informal transaction costs.

In the 2006 World Bank conference “Urban Forum” experts briefed the audience that in many developing countries transaction costs can be as high as several monthly incomes and registration times as long as several months, while in the USA or Europe it is available at lower than 10 percent of a monthly income and in a few days time. The situation for AMC’s poor is similar, while registering a Rs. 50,000 house costs about 2 to 3 monthly incomes also the

process needed to register it is lengthy, thus costing working days and causing significant additional opportunities costs.

It is therefore required to significantly reduce transaction costs (fees and time) in order to solve the tenure problems. In the case of existing informal assets, the responsible authorities might consider the option for ceasing (reducing) the costs in order to regularize them. It is also required to develop strategies for future cases, in which the residents cannot afford to purchase their assets formally.

2. The second issue is how to solve tenure problems that are currently being disputed. We see the opportunity to engage honest brokers such as a judge or law professor (or even a public celebrity) to build bridges between the disputing stakeholders; however, the broker needs to be (i) carefully chosen and (ii) be accepted by all stakeholders.



Recommendation 5: Develop inclusive, sustainable and scaleable strategies to solve tenure problems!

8. Stakeholder Consultations

8.1 Consultative Meeting with Ahmedabad Municipal Corporation

The first consultative meeting was organized in Ahmedabad Municipal Conference Hall on 21-07-2007 from 2.00 PM to 5.45 PM. Deputy Municipal Commissioner, Additional City Engineer (West Zone) and Planning Officer were representative from AMC.

Meeting started with introduction. Bijal ben briefed participants on NIUA study on Urban Poverty Reduction Strategy and its Task II report. She also explained in detail about main focus of the study and various task to be accomplished by the MHT. She also requested AMC official for their guidance, coordination and support to complete various task assigned in the study.

After consultation following suggestion were given by the AMC official.

1. Desegregation of data by slums and chawls.
2. In Chapter 1 the section on drainage would imply storm water drainage.
3. The methodology for score and weightage should be clearly explained.
4. Add some weightage to education in fact sheet.
5. Need to put demographic details from the template in the map.
6. Slum level activities are related with health activities.
7. Mr. Mahajan recommended to circulate the documentation of schemes to the Zonal officers in AMC and hold another meeting with Zonal chiefs on 28th July, 2007.
8. It was discussed by MHT that the new map of the city with extended limits was not available, when the study was initiated. Mr. Mahajan informed that the map was available now with AMC. While the scope of the study was limited to the city before extension. MHT could bring out the new map in the study for information.

Minutes of meeting and list of participants is attached as **Annexure no II**

8.2 Consultative Meeting on Urban Livelihood and Poverty Reduction Strategy

The second consultative meeting was organized with the help of CARE – Ahmedabad in The Hotel Pride on 27-08-2007 from 10.00 AM to 5.00 PM. The meeting was attended by representative of GUDC, GUDM, AMC, UNDP, CEPT, NGOs working with urban poor of Ahmedabad.

In session 2 of the consultative meeting Ms Paramita Dutta, Senior Research Officer, NIUA provided a brief power point presentation on NIUA strategy and role in the urban poverty reduction process. National Institute of Urban Affairs is at present preparing Urban Poverty Reduction Strategy for 12 Cities covered in JNURM. Ms Bijal Bhatt, Coordinator, Mahila Housing SEWA Trust presented the mid term finding of the study on UPRS for Ahmedabad City. After presentation following observation and suggestion were given by the participants.

Urban poverty has complex features. There is requirement of multiple strategies to eradicate urban poverty. There are efforts on devising urban poverty reduction by various stakeholders. Coordination amongst them will help in the final implementation. The poverty reduction strategy can reflect the following points:

1. Linking up livelihood strategy with housing
2. Space for urban poor to get participation in the implementation of this strategy

Measurement of poverty: The study has taken many dimensions while measuring poverty in Ahmedabad city. Since urban area posses complex socio-economic features (social exclusion, conflict and failing governance are some of the root causes of poverty, there is need to study these feature.

There should be some bench marking project at National and State level. This will help us knowing the verifiable progress. City Development Plan (CDP) undertaken is very educative and empowering process. However the implementation of the CPD with a focus on poverty eradication is important. It needs strong management for ensuring such.

Minutes of meeting and list of participants is attached as **Annexure no III**

9. Existing Institutional Structure

There are primarily two departments formulated at the city level for the urban poor they are:

1. The Urban Community Development Department
2. The Slum Networking Cell

Apart from this there is a dedicated team for implementation of the housing activities under the JNNURM.

Following suggestion have come out in consultative meeting with AMC officials.

1. There existing size of the team in the Urban Community Development Department should be received and increased by the AMC.
2. ADHOC transfers/ delegation of responsibilities in these departments should be avoided pro-active and interested individuals from within the AMC should be identified and entrusted the work. Alternatively direct recruitments could be undertaken for these programmes by the AMC.
3. Special performance incentives could be designed to alleviate the implementation of pro-poor programmes.
4. Alternatively an SPV may be created as a nodal agency for networking with all concerned departments and for implementing the slum up gradation process in the cities with NGOs and CBOs with community participation.
5. SPV may comprise of all Stakeholders and have powers to implement programmes and project with the broad policy framework of the state and ULBs. The AMC has already undertaken a draft design of the SPV in the past, in consultation with all stakeholders which could be utilized.

10. Way Forward

10.1 Livelihoods among the Poor in Ahmedabad City – Issues, Policies and Strategies

10.1.1 Issues

The urban poor constitute the majority of the urban workforce, and most are part of the informal economy. In a study conducted in Ahmedabad city, it was found that the informal sector contributed around 47% of the city's GDP.⁹

Most poor cannot afford not to work, and are therefore engaged in some type of income generating activity. Most of the slum dwellers in Ahmedabad city work in the informal economy. Their earning opportunities are limited due to lack of employment opportunities, compounded by a lack of education, modest skills and limited access to credit, among other things. The unhygienic living conditions have a negative effect on their health and well-being, and cut into their work productivity.

Until the 1970's, Ahmedabad had a thriving textile industry. It is reported that from 1982 to 1996 nearly 67,541 workers were retrenched due to the closure of 35 mills. Most of these workers had low skill levels, and in the absence of other opportunities joined the informal economy as casual or self-employed workers.¹⁰ This has resulted in the marked increase in the numbers of informal economy workers in Ahmedabad.

Diversity is another important characteristic of the urban poor, in terms of their habitat, culture, social capital, bargaining capacities and economic opportunities. The strategies that are devised to address livelihoods among the urban poor must recognize this diversity to ensure that the strategy is inclusive and builds on the existing strengths among the poor.

MHT, in collaboration with the Center for Environmental Planning and Technology, Ahmedabad and Care India, carried out a research study aimed at understanding

⁹ Unni, J and Rani, U, "Informal Economy Center Stage"

¹⁰ "Livelihood options amongst the vulnerable groups in informal economic sectors of Ahmedabad city" Care India, 2007

livelihood options among the poor in Ahmedabad city. Table 1 below lists some industries that have high or moderate employment potential for the urban poor. It also indicates the types of inputs required to enhance the livelihood potential in these industries.

Table 10.1 Industries with high and moderate employment potential in Ahmedabad city

	Industry	Potential employment for urban poor	Activities to be carried out
1	Construction	Very high	Training, and upgrading skills of masons, plumbers, carpenters, painters etc.
2	Retail	High	<ul style="list-style-type: none"> • Training persons for sector • Linking with organized retailing outlets
3	Garments	High	<ul style="list-style-type: none"> • Training persons for sector • Linking with production units
4	Hospitality	Moderate	High demand for food and processing industry. Need to professionalize activity
5	Horticulture and floriculture (including urban agriculture)	Moderate	<ul style="list-style-type: none"> • Promote urban agriculture • Promote links with organized retail
6	Handicrafts	Moderate	<ul style="list-style-type: none"> • Upgrade skills of certain sectors, e.g. idol making, kite-making etc. • Provide market linkages • Develop special area for display and marketing
7	Khadi and village industries	Moderate	Can be linked with handicraft promotion
8	Gems and Jewelry	Moderate	<ul style="list-style-type: none"> • Training persons for sector • Linking with production units

Two categories of workers that constitute a large proportion of the urban poor in Ahmedabad city today are construction workers and vendors. We take up these two

occupational categories for an in-depth illustration of the issues and strategies for promoting livelihoods among the poor.

Construction workers

Construction workers are the largest category of casual labour in Ahmedabad city. 50% of these workers are women. Increasing mechanization in industries like dyeing, chemicals and screen printing and closing down of textile mills has led to even more people moving into construction. According to an estimate in 2000, Ahmedabad city has about 50,000 construction workers. The main issues concerning construction workers are listed below

1. No work security. In fact in the last five years there has been increased competition as the workforce increased due to closure or mechanization of other industries. Even within the construction industry, there is increasing mechanization. Migrant workers from other areas further add to increased competition, lower wages and exploitation by contractors.
2. Low skill level among the majority
3. High degree of occupational risk due to nature of work, leading to high incidence of accidents resulting in temporary or partial disabilities
4. They have no identity cards and the majority are not organized
5. Poor working conditions, with drinking water being the only facility provided to the workers.

Vendors

Vendors are a critical part of the urban economy. One of the major livelihood related concerns of workers in the informal economy, and particularly vendors, is the harassment and exploitation by authorities while pursuing their trade. According to the National Policy on Street Vendors formulated in 2004, Ahmedabad had 100,000 vendors around that time. A large proportion of vendors are women.

10.1.2 Existing Policies

Testing and certification of skills of workers acquired through informal means: This scheme was initiated by the Government of India in 2004 and aims to certify informally

trained workers who can demonstrate competency. It also has provision for skill upgradation.

Skill Development Initiatives: The Government of Gujarat has launched the Gujarat Diamond Industries Training Institute. This was established in 1988 for workers who were retrenched from the shutdown textile mills. In 1999 this was opened for the general public, and currently trainees come from all over Gujarat.

Swarna Jayanti Shahari Rozgar Yojana (SJSRY): In December 1997, the Government of India launched SJSRY. This scheme seeks to provide gainful employment to the urban poor (living below the urban poverty line) through wage employment or self-employment.

Ummeed: The Ahmedabad Municipal Corporation piloted a skill training project “ Ek Mauka Udaan” in 2005 in partnership with Saath and Heritage Livelihood. Saath is an Ahmedabad based NGO working in the city’s slums. The Heritage Livelihood is a Hyderabad based organization working to promote livelihoods. This programme was first piloted in Andhra Pradesh (AP) by Dr.Reddy’s group. This programme has now been adopted by the State Government and named ‘Ummeed’.

Given the large numbers of workers in the construction industry and those working as vendors, we give below some details of the policies that have been formulated for these workers.

Construction Workers

The Government of India formulated a Bill for Construction Workers in 1985 which was finally passed in 1996 and known as the Construction Workers’ Act. Under the act, construction workers should get:

1. Formation of a tripartite for Construction Workers’ Welfare Board, with representation from the State, employers and workers
2. Social security including medical aid, maternity benefits, life insurance, financial support for children’s education, provident fund.
3. Immediate compensation in case of accidents
4. Identity cards
5. Housing loans

The Government of Gujarat has set up a Construction Workers' Welfare Board. Additional steps should be taken to safeguard the livelihoods of this growing category of workers. For example, the state of Andhra Pradesh has made a progressive move of certifying construction workers. It also gives tax breaks to persons that hire certified construction workers. A similar strategy should be adopted by Gujarat.

Vendors

The central government formulated a national policy for street vendors in 2004. Under the policy, municipal authorities are supposed to provide sufficient space for vendors to enable them to make a living. The policy also has provision for forming a Town Vending Committee to oversee the interests of the vendors. All vendors are required to be registered with the local bodies and be issued family identity cards.

10.1.3 Strategies

Strategies need to address both direct and indirect factors that have an impact on livelihoods. Indirect factors include housing, access to basic services like water and sanitation, infrastructure and transportation. Women particularly are able to enhance their livelihood options and earnings if these indirect factors are addressed.

Direct factors relate to skills, working spaces and work availability. The strategies for promoting livelihoods of the urban poor thus need to address a range of issues as discussed below.

1. Developing data base of skill availability and nature of work carried out in different slums: The poor are engaged in a heterogeneous set of occupations and work under diverse contractual arrangements. Some are home-based, others work in factories, and yet others are self-employed. As a first step it is critical to prepare an inventory of all the economic activities. Such an inventory will help identify activities which have the potential to be promoted in the market.
2. Skill training and up gradation in high-potential sectors/industries: Low literacy and educational levels impede the acquisition of skills among the poor. Skill training therefore has to be preceded by non-formal education with a focus on basic literacy

and numeracy. The infrastructure of municipal schools can be used to impart this non-formal education and training.

3. Multi-skilling to combat seasonality of many occupations: As mentioned in the point above, many types of work carried out by the poor are seasonal in nature. Offering training in more than one skill will provide the ‘multi-skilling’ to provide income stability to the poor. This strategy is being adopted by some ITIs in India.
4. Employment guarantee programmes for urban areas: Many types of work carried out among the poor are seasonal in nature, e.g. kite-making or retailing of fire crackers. Training programmes or employment guarantee programmes like the NREGP in rural areas will reduce the vulnerability of the urban poor.
5. Creating appropriate institutional structures: One of the limitations of several livelihood support programmes is unsatisfactory institutional support provided for the activities. Institutional support is important to enhance skills, improve habitat and negotiate and bargain with other stakeholders. In some areas NGOs provide this type of support. However, this type of support is needed to cover the entire target population if the objective is to be achieved. The implementation of the 74th Amendment Act and the newly proposed Nagara may be effective in this regard. Local civic bodies to provide good governance of all the development programmes are critical.
6. Ensuring information dissemination: Weak information about the labour market among the poor is a major livelihood constraint. They are unaware of the market situation, demand for services, wages and skill requirements. Information about several programmes for skill upgradation and training do not reach the target groups. In this regard, it is important to have centers for making such information available to the urban poor. The Urban Resource Center run by Saath in Ahmedabad is an important step forward in this direction.
7. Convergence of pro-poor programmes: It is important that there be coordination between all the pro-poor programmes aimed at strengthening the livelihoods of the poor.

8. Legal protection for self-employed workers: Land use planning does not identify and allocate spaces for the poor to carry out their livelihood activities. For example, special hawking zones are often ad hoc and the vendors continue to be harassed. The Development Plan and the City Plan should recognize this need to and ensure protection of the livelihoods of the urban poor.
9. Building alliances with new stake-holders: Building livelihoods among the poor requires a multi-pronged approach as indicated in the strategies listed above. There are a number of private and public players who can contribute to this effort. There has been an increasing movement towards forging public private partnerships for a variety of programmes. For promoting urban livelihoods among the poor, it will be useful to build alliances amongst the multiple stake holders such as training institutes, private businesses, civil society organizations and government departments.
10. Mapping vulnerable areas to permit rapid action in case of disturbances: When there are social and political disturbances in a city, informal sector workers are the first to be affected and their earnings are immediately affected. They can also suffer loss of their meager livelihood assets such as pull carts and carry baskets. To minimize such losses, it is important to map the vulnerable areas in the city. This will enable rapid action at times of such disturbances.
11. Involvement of civil society/NGOs in outreach and implementation: A recent evaluation of the SJSRY programme for instance recommended this for helping in prioritization of local trades and helping beneficiaries make the required linkages with banks etc.

Further, the more direct requirements that should rightfully be given to all workers are listed below. Though not an exhaustive list, it gives certain key areas that need to be taken care of.

1. Identify cards that are proof of their worker identity
2. Social security: The poor face a number of crises in their lives and many of these drive them deeper into poverty. The state should have a policy for protecting the

poor from crises like death of an income earner, accident, sickness and natural and man-made disasters. For e.g., the State Government of Gujarat is proposing to launch a health insurance programme for BPL families to be implemented by NGOs and civil society organizations.

3. Safe working conditions (by identification of safety measures and equipment to minimize Organizing workers
4. Skill training to ensure their employability

There is a need to review the functioning of the ITIs, both in terms of course content and admission criteria. The courses need to be revised in line with market demand for skilled persons. In addition, the current admission criteria of completion of 7th grade should be removed. There are many competent persons who can acquire marketable skills even though they have not been to formal schools.

As listed in Section B on policies, the government has formulated several policies to promote livelihoods among the urban poor. Satisfactory implementation of these schemes will go a long way in improving the incomes of the urban poor.

10.2 Housing and Basic Services – strategies and issues

Urban settings have extremely good targeting characteristics. Due to high population densities, the delivery, production and consumption of basic infrastructure can be undertaken in high cost effective manner as they are high density pockets of poverty. On a per household basis it is therefore more efficient to serve informal urban settlements than serving the equivalent number poor rural households scattered throughout country side. Therefore any urban local body should take advantages of these factors.

The section below profiles some of the specific issues and strategies related to housing and infrastructure provision of the poor in Ahmedabad.

10.2.1 Definition of a Slum

A broad and inclusive definition of a slum settlement may be evolved by developing a matrix on the lines of Kudumb shree model under the slum networking project a slum settlement having more than 50 percent permanent pucca structures is not being considered as the slum pocket this should be suitably amended.

10.2.2 In-situ upgradation of slums

In-situ upgradation should be preferred to relocation. In our sample of AMC household any second slum or chawl household had invested Rs. 50, 000 or more into their real estate property one half of the household earned Rs. 3,000 or more, these poor AMC household invest near one half annual incomes in their housing assests also about two third household have at one time or the other paid taxes to the Government. All the here described facts indicate that demolishing informal settlements is not economically or socially sensible policy. Layout Planning: Where in-situ upgradation projects are taken up, proper layout planning including plot re-alignment and equalization of land may be undertaken as necessary in consultation with local residents.

10.2.3 Upgradation of Slums

A package of physical service at household level, comprising of water supply, sewerage, disposal of solid waste matter and toilets, street- lighting, street paving, on the lines of slum networking project has a maximum impact. However individual services could be provided on a need basis using some of the programmes already existing at the city level. Upgradation should also include provision of social services such as health, education, income generation activities, etc and facilitating electric connections. Where individual services are not possible, common services will be provided.

At places where individual toilets cannot be provided, Pay & Use community toilet facilities will be provided especially by repairing community toilets constructed earlier. National schemes such as Nirmal Bharat Abhiyan sanitation scheme of maintenance of community toilet blocks by community based groups and family pass for 1 or 2 household @ Rs.20 per month per family for daily use of such toilets, will be considered. Such charges will be subject to change from time to time to meet the costs of services rendered.

10.2.4 Delinking Service Provisions from Nature of Land Ownership

75 percent slums in Ahmedabad are on private land providing a service on private land has always been a debatable issue in the ULBs. Ahmedabad however has an excellent example in the slum networking project when majority of the slums up graded, are on private lands the slum networking project however cannot be implemented on land owned by the states due to nature of its design. A dialogue had already been initiated by the AMC on these issues with the state to make the programme more inclusive. Service provision under the fifteen hundred NOC programme should also be upscale.

10.2.5 Shelter Improvement

Shelter improvement shall be the responsibility of individual settlers. The Urban Local Body may facilitate through NGOs, economic empowerment through formation of local self – help groups (SHGs), particularly women’s groups, and train them for savings and thrift mechanisms so as to make such SHGs cognizable by micro finance institutions for extending further financial support. The ULBs may also promote NGOs to establish material banks to facilitate shelter up gradation.

10.2.6 Operation and Maintenance

The ULB will carry out regular O&M of services laid within the slums as done in other parts of the city or facilitate provision of operation and maintenance through private sector and /or NGOs.

10.2.7 Land-use Classification

Land use for in-situ upgradation projects will be designated as high density mixed use. This will be subject to the condition that any commercial or trading ventures existing on such lands shall only be those that are non – polluting, environment friendly and which provide services/employment opportunities to local slum dwellers.

10.2.8 Residents’ Association

It should be pre requisite for the residents to form an association or a cooperative housing society that must be recognized by the concerned urban local body. This association or society should consist of all resident families in that area where at least 33% families will be represented by women and it should have at least 33% women in

their governing council. Its office bearers should have the authority to interact with the ULBs and other governmental agencies for the well being of the slum dwellers.

10.2.9 Necessity of Building Decentralised Structures and CBOs

The study based on analysis identifies that only 2 percent of total respondents were aware of ward committees. It is not only desirable to build community based organizations (with at least 33 percent reservation of women) but it is required to involve them in the wards committees where they be given relevant voice. The AMC might evaluate the option two pilot Community Action Planning (CAP) in one ward. In the case of CAP the AMC should delegate some degree of public decision making to the ward committees and local CBOs.

10.2.10 Investing in Community Mobilisation Organisation and Formulation of CBOs

Due to limited resource of AMC (relative to immense work load implied in building CBOs on a city wide basis) it is necessary to involve intermediary NGOs. Further more some NGOs have a long tradition in working with local communities an involving them would therefore include their expertise and additional value to the process. However, high costs are involved in community mobilization. It is therefore necessary to assess the correct cost and include in the budgetary provision.

10.2.11 Financing Mechanisms

The financing mechanisms will be participatory in nature. ULB shall endeavour to create partnerships between communities, NGOs, social and charitable institutions, business houses and ULB to meet the costs of the projects.

10.2.12 Share of ULB

The Municipal Corporation will meet their share of cost for slum upgradation within their means. For this purpose, ULB shall set apart a minimum of 20% of the revenues and capital budget available for developmental work for slum upgradation activities after meeting the establishment cost and other fixed costs. The BMC Act will be suitably amended. The Act could also be amended to enable local bodies to levy a cess for slum improvement.

10.2.13 Share of community

The slum dwellers may share the cost of internal infrastructure to the extent as mutually decided.

10.2.14 Micro – Finance

Micro-finance facilities will be made available through NGO organized financial institutions.

10.2.15 Devoting the grants of MLA's/MP's/Councilors

The finances available with the MPs, MLAs and municipal councilors for providing infrastructure facilities in their constituencies/cities could be dovetailed and they could be made partners. They could be encouraged to contribute a fixed amount per dwelling unit.

10.2.16 Relocation of Slums

Many urban poor communities may not be able to stay where they are because their settlement cannot be improved relocation can create many problems for urban poor communities. Housing has to demolished and rebuild income earners may loose their employment transport cost may increase. There are many different kinds of urban poor even in one community. Some may not want to move to new site some renter may not want to become house owners. The best approach is to provide rang of options.

All relocation processes will be carried out in consultation with the affected slum dwellers, keeping in mind the distance from workplace and other livelihood facilities and after the Government considers such re-location as unavoidable. The relocation should be preferably within 2 km of original location. Where slum dwellers are to be re-located, they will be given shifting assistance as mutually decided.

10.2.17 Multiple approaches to housing the urban poor

Most poor households are satisfied with their house, which they progressively built over time, though desperately awaiting formal service delivery the announcement that Sharif Khan Pathan Ki Chali was being considered for SNP let to rent increase of 43 percent. Additionally any other SNP communities the scope and scale of housing loans significantly increased after basic infrastructure and services become available in

communities. Provision of basic infrastructure by the AMC promote the investment of poor into housing and should be encouraged as an alternative approach to improve habitats for the poor.

10.2.18 Need to develop a more flexible housing menu for urban poor household

There exist the needs to develop more flexible and easier affordable housing menu from which the poor can choose. Though we might think that the poor should live in a minimum standard 25 sq m apartment this standard may be too low for some of the poor. During the course of the study it is evident from focus groups that people were ready to pay between the range of Rs. 25, 000 to Rs. 1,00,000. According to our case in Soria nagar slum 45 percent of the total household had a carpet area of 45 sq m or more. Household those are willing to contribute more for larger apartment nearer to the city could be allowed to do so.

10.2.19 Allocation of Land for Housing

The Government shall allot all the land that have been rendered surplus under urban land ceiling act for housing the slum dwellers preferably. In the town planning schemes maximum permission land shall be reserved for weaker section of the society delivery mechanisms to provide the poor and access to such land will be evolved. Such land should be made available at a concessional rate to housing cooperatives or associations of the urban poor. Such land should be identified at locations where provision of infrastructure could be made easily.

10.2.20 Private Sector Low-cost Housing

The Government should promote the construction of housing stock by the private sector for the economically weaker sections. As far as possible cooperative and associations of the urban poor should be preferred for such constructions. The SRA model of Mumbai city is actively being promoted as housing strategy however in interactions with the AMC officials it has been understood that it can be successfully undertaken only on large land plots and where the difference between costs of land and construction is more than 3 times.

10.2.21 Transfer of Titles to Slum Dwellers

Private Land

As the slum dwellers are to be given title of land, which they occupy, they could collectively buy the private land under their occupation. Cases where there is adverse possession of 12 years or more can be taken up in the initial phase. In other cases, the ULB shall endeavor to facilitate transfer of the land through negotiated settlement with the owner at the price not exceeding 33% of the market value as may be ascertained from the stamp duty records. The representatives of all the stakeholders should be invited to participate in the negotiations to promote transparency. Such a transfer shall be in dwelling a registered association or housing cooperative society of the slum dwellers. Slum dwellers may be required to pay the amount upfront by taking loans from micro finance institutions, if needed. The contribution for each dwelling units shall be worked out after adding the proportionate cost of open land, streets, etc....., to each square meter of land occupied by the slum dwellers.

- The association or cooperative society of slum dwellers may allot sub plots in the joint name of the wife first and then husband. If such an arrangement is not possible, the same may be done in the joint name of the main earning member and a female member of the family.
- The sub plot allotment will be for the portion of the land occupied.

Other forms of Tenure

Other forms of tenure may also be considered, if so desired by the community. This may include – group tenure, collective tenure, co-operative tenure etc.

10.2.22 Access to Social Infrastructure

Families in urban poor communities may have problems of access to education and health facilities. The problem may be the absence of such a facility in the area (availability); it may be the formal or informal cost of admission to the facility (affordability); it may be the complexity of the procedure, the timing or the documents required for admission (accessibility). The Municipality should (a) check the

availability of education and health facilities for urban poor families, (b) review the formal and informal costs of admission to make sure that the service is affordable, and (c) review admission procedures, documentation requirements, timings etc. to make sure that there are no obstacles for the urban poor to have access to education and health care.

10.2.23 Regularization of sales transactions made without a valid sale deed

The state government shall make suitable amendments in law to the effect that the documents made on plain paper or stamp paper of any low denomination for the sale of land on which eligible slums shall be treated as valid. The short fall in stamp duty payable for such transactions shall be either waved or an amount as may be prescribed by the state government shall be levied for regularizing such transactions from time to time, and that any further sale of such property in favour of slum dwellers will be made on a stamp paper of a lower value as may be prescribed by the government.

10.2.24 Relaxation in rules for building permission

It will be permissible for the slum dwellers to upgrade their built environment and or shelter without insisting on obtaining the permission for construction of building under municipal or town planning act.

10.2.25 De-Notification

Once basic amenities and services are provided in a slum pocket it shall be de-notified.

10.2.26 Legal Reforms

To achieve this objective of this policy, the state will endeavor to bring about amendments in the various Acts, Rules and Regulations that shall include, among others, the following:

- a. Gujarat Slum Act, 1973
- b. Bombay Land Revenue Code, 1879
- c. Bombay Provincial Municipal Corporation Act 1949
- d. Bombay Stamp Act, 1958
- e. The Gujarat Town Planning and Urban Development Act, 1976

- f. Government policies in form of various resolutions (GRs).

10.2.27 Action Plan for Implementation
