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## **ABBREVIATONS**

BPL - Below Poverty Line

BSUP - Basic Services for Urban Poor

CBO - Community Based Organisation

CDG - Community Development Group

CDP - City Development Plan

CDS - Community Development Societies

CPHEOO - Central Public Health and Environmental Engineering Organisation

CRZ - Coastal Regulation Zone

CSP - City Sanitation Plan

DA - Development Authority

DC - District Collector

DPR - Detailed Project Report

**DUDA - District Urban Development Authority** 

EWS - Economically Weaker Section

**EPC - Engineering Procurement Contract** 

FAR - Floor Area Ratio

FSI - Floor Space Index

GIS - Geographical Information System

Gol - Government of India

IHSDP - Integrated Housing and Slum Development Programme

ILCS - Integrated Low Cost Sanitation Programme

LIG - Low Income Group

LPAV - Local Planning Authority, Vellore

MIS - Management Information System

Mo/HUPA - Ministry of Housing and Poverty Alleviation

NBO - National Building Organisation

NGO - Non Governmental Organisation

NNRC - National Network of Resource Centres

PHC - Primary Health Care Center

RAY - Rajiv Awas Yojana

SFCPoA - Slum Free City Plan of Action

SJSRY - Swarna Jayanti Shahari Rojgar Yojana

SUDA - State Urban Development Authority

TCPO - Town and Country Planning Office

TDR - Transfer of Development Rights

TNEB - Tamil Nadu Electricity Board

TNLD - Tallii Nadu Liectlicity Doald

TNHB – Tamil Nadu Housing Board

TNSCB - Tamil Nadu Slum Clearance Board

UAA - Urban Agglomeration Area

ULB - Urban Local Body

ULCRA - Urban Land Ceiling and Regulation Act

UPA - Urban Poverty Alleviation

SMC - Salem Municipal Corporation











#### TERMS AND CONCEPTS

"Affordable Cost" means a cost that is based on the needs and financial capability of the slum dweller, as determined by the State Government or the authorized agency.

"Below Poverty Line (BPL)" is an economic benchmark and poverty threshold used by the Government of India to indicate economic disadvantage and to identify individuals and households in need of government assistance and aid.

"Building" includes a house, out-house, stable, shed, hut and other enclosure or structure, whether of masonry bricks, wood, mud, metal or any other material whatsoever, whether used as human dwelling or otherwise; and also includes verandahs, fixed platforms, plinths, door-steps, electric meters, walls including compound walls and fencing and the like, but does not include plant or machinery comprised in a building.

"Carpet Area" The covered area of the usable rooms at any floor level (excluding the area of the wall)

"Central Government Land" means land owned by the Central Government or its undertakings.

"Density" – The residential density expressed in terms of the number of dwelling units per hectare. Note- Where such densities are expressed exclusive of community facilities and provision of open spaces and major roads (excluding incidental open spaces), these will be net residential densities. Where these densities are expressed taking into consideration the required open space provision and community facilities and major roads, these would be gross residential densities at neighbourhood level, sector level or town level, as the case may be. The provision of open spaces and community facilities will depend on the size of the residential community.

"Development / Redevelopment" – with its grammatical variations and cognate expressions, means the carrying out of any building, engineering or other operations in, on, over or under land or the making of any material change in any building or land and includes layout and sub-division of any land.

"Dilapidation" – a state of deterioration due to old age or long use, impairment - a symptom of reduced quality or strength

"Disputed Land" – means land under legal disputes.

"Dwelling Unit/ Tenement" - An Independent housing unit with separate facilities for living, cooking and sanitary requirements

"Economically Weaker Section (EWS)" – means such class of persons as may be notified by the appropriate Government from time to time, for the purpose of providing housing.

"Floor" – means the lower surface in a storey on which one normally walks in a building, and does not include a mezzanine floor.

"Floor Area Ratio (FAR)" – the quotient obtained by dividing the total covered area (plinth area) on all the floors by the area of the plot:

FAR = Total covered area of all the floors / Plot Area

"Government Land" – means any land owned or acquired by the State Government or its undertakings or the Urban Local Body or Development Authorities situated in a district or an urban area as the case may be. 9











"Group Housing" – Housing for more than one dwelling unit, where land is shared jointly (as in the case of cooperative societies or the public agencies, such as local authorities or housing boards, etc) and the construction is undertaken by one Agency)

"In-situ Slum Re-development" – means the process of redeveloping slum areas by providing proper access, dwelling unit, open spaces and other basic other services to the slum dwellers on land on which the slum exists

"In situ Slum Up-gradation" – means the process of improving the quality or expanding of dwelling spaces occupied by slum dwellers with provision of basic services and infrastructure services.

"Incremental housing" – Incremental Housing is a process in which given the security of tenure and provision of basic services is done and houses are built or expanded over the time by owners—through phased investments as per their needs and priorities over a period of time.

"Land' – includes benefits to arise out of land, and things attached to the earth or permanently fastened to anything attached to the earth.

"Low Income Group (LIG)" – means such class of persons as may be notified by the appropriate Government from time to time, for the purpose of providing housing.

"Mezzanine Floor" – means an intermediate floor between two floors overhanging or overlooking a floor beneath.

"Population Density" – is a measurement of population per unit area. Population density is population of a given area divided by total land area.

"Private Land" - means land owned by a private person or entity.

"Property Rights" – means the entitlement to a dwelling space i.e. either land or dwelling house as the case may be, by an eligible slum dweller, to be allotted at an affordable cost as determined by the appropriate authority.

"Public land" – means land owned by Municipal, TN State Government, Central Government land, or by other public sector undertakings i.e. BHEL, Railways etc.

"Rental Housing" – means the tenants use and occupy the property for a period of time through an agreement between the landlord and the tenant in which the landlord receives payment from the tenant for use of the property.

"Security of Tenure" – is an agreement between an individual or group (with respect) to land and residential property which is governed/ regulated by a legal (formal or customary) and administrative framework. The security derives from the fact that the right of access to and use of land and property is underwritten by a known set of rules, and that right is justifiable.

"Semi Tenable Slums" – are those slums which are located on land zoned for non-residential uses, as prescribed by the Master Plan.

"Slum" or "Slum Area" – is a compact settlement of at least 20 with a collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions.

"Slum Dweller" – means any person residing within the limits of a slum area.











- "Slum Resettlement" means the process of relocation and settlement of slum dwellers from the existing untenable slums to an alternative site with provision of dwelling space, basic civic and infrastructural services.
- "Squatter Settlements" is considered as a residential area in an urban locality inhabited by the poor who have no access to tenured land of their own, and hence "squat" on vacant land, either private or public.
- "Tenable Slums" means all slums which are not located on hazardous locations suitable for human habitation and the land is not earmarked for any major public facilities and therefore it can be regularized in the same location.
- "Tenure" the mode by which land/property is held or owned, or the set of relationships among people concerning and/property or its product.
- "Transfer of Development Rights (TDR)" TDR is the process of granting full or part building right which due to some restrictions imposed by the authorities could not be consumed at the original site and therefore is permitted to be used at a different site over and above the far FAR/FSI that would be available to that receiving site subject to further conditions as to how much a single receiving site could be overloaded. If the owner of the original site does not have any other land then he may sell TDR to another person and be compensated by such second site owner.
- "Trust Lands" means land owned or acquired by any Trustee.
- "Unauthorized housing" Means housing units constructed on land to which the occupants have no legal claim, or which they occupy illegally or unplanned settlements and areas where housing is not in compliance with current planning and building regulations (United Nations 1996).
- "Untenable slums" are those slums which are on environmentally hazardous sites (like riverbank, pond sites, hilly or marshy terrains, etc.), ecologically sensitive sites (like mangroves, national parks, sanctuaries, etc.), and on land marked for public utilities and services (such as major roads, railway tracks, trunk infrastructure, etc.).
- "Urban Area" means the area comprised within the limits of all cities and towns classified as urban by Census 2001 including the limits of Municipal Corporation or Municipal Council or Nagar Panchayat as constituted under the respective State Acts, including cantonment board or notified areas, and shall include the planning area as per the Development Plan of a town or city.











## **FACT SHEET**

S.No.	Parameters	Details						
1.	Location of the City (Long., & Lat.,)	77°44' E & 12°14'N						
2.	Area of the City	91.34 Sq.km						
3.	Population of the City in 2011	829267						
4.	Number of Wards in the City	60						
5.	Slum Population as per 2011 Census	180936						
6.	Slum Households as per 2011 Census	46672						
7.	Notified Slums by SMC	-						
8.	Non-notified Slums by SMC	344						
9.	Slums Surveyed	246						
10.	HHs in Slums Surveyed	38583						
11.	Pucca Houses	11538						
12.	Kutcha & Semi Pucca Houses	27045						
13.	Tenable Slums	207						
14.	Tenable Households	33512						
15.	Untenable Slums	39						
16.	Untenable Households	5071						
17.	SC ST Households	14079						
18.	ST Households	14079						
Assessment	Assessment of Land Demand for Housing for relocation of Untenable Slums							
Model EWS	House							
19.	Built-up Area for Apartment	26.3 Sq.mt						
20.	Balcony (50%)	0.85 Sq.mt						
21.	Corridor & Staircase	2.7 Sq.mt						

22.	Total Builtup Area	29.85 Sq.mt							
23.	Total Super Builtup Area for one apartment	146.84 Sq.mt							
Model Apartr	Model Apartments with EWS House								
24.	Per Floor	4							
25.	Total Floors	3							
26.	Tota No.of Houses	12							
Demand									
27.	No. of Households to be relocated	5071							
28.	No.of Apartments Required	5071							
29.	DUs/Acre	80							
30.	Area Required	63.38 Acres							
Land Require	ement for Relocation by Different Uses								
31.	Residential	39.75 Acres							
32.	Roads	9.938 Acres							
33.	Open Spaces	6.625 Acres							
34.	Commercial	3.313 Acres							
35.	Other Infrastructure	6.625 Acres							
36.	Curative Strategy	3651.28 Crore							
37.	Preventive Strategy	1008.99 Crore							
38.	Total Project Investment Summary	4660.30 Crore							

## Phase Wise Total Project Investment Summary (Rs. in Crores)- Curative Strategy

SI .No	ltem	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	TOTAL
.NO	No of Slums	17	38	26	42	28	22	38	35	246
	No of Households	1836	7676	4056	8851	3637	2460	5015	5052	38583
	No of Households Proposed for intervention	1540	5692	3327	6907	2783	2067	3981	4142	30439
	Cost per Unit	5.5	6.05	6.66	7.33	8.06	8.87	9.76	10.74	
Α	Land Cost									
В	Housing & Infrastructure									
(i)	Physical Infrastructure	12.71	51.65	33.24	75.94	33.65	27.5	58.28	66.73	359.7
(ii)	Housing (at Rs. 5.5 lakh per Unit with 10% escalation per annum)	84.7	344.37	221.58	506.28	224.31	183.34	388.55	444.85	2397.98
(iii)	Social infrastructure	6.36	25.83	16.62	37.97	16.83	13.75	29.14	33.36	179.86
	Subtotal B	103.77	421.85	271.44	620.19	274.79	224.59	475.97	544.94	2937.54
С	Other costs									
(i)	Preparation of DPRs (at 0.75 % of B)	0.78	3.16	2.04	4.65	2.06	1.68	3.57	4.09	22.03
(ii)	Design and Consultancy charges (at 0.75 % of B)	0.78	3.16	2.04	4.65	2.06	1.68	3.57	4.09	22.03
(iii)	Quality control (TIPMA) at 1% of ACA (0.5% of B)	0.52	2.11	1.36	3.10	1.37	1.12	2.38	2.73	14.69
(iv)	social audit 0.5% of ACA (0.25% Of B)	0.26	1.05	0.68	1.55	0.69	0.56	1.19	1.36	7.34
	Sub total C	2.34	9.48	6.12	13.95	6.18	5.04	10.71	12.27	66.09
D	Overheads/Administrative costs (at 5% of A+B+C)	5.31	21.57	13.88	31.71	14.04	11.48	24.34	27.86	150.19
E	Tender Excess @ 10 % of B	10.38	42.19	27.14	62.02	27.48	22.46	47.60	54.49	293.76

F	Total( A+B + C+D+E )	121.80	495.09	318.58	727.87	322.49	263.57	558.62	639.56	3447.58
G	Physical contingencies (@ 2.5% of F)	3.05	12.38	7.96	18.20	8.06	6.59	13.97	15.99	86.20
н	Total Investment Cost H = (F+G)	124.85	507.47	326.54	746.07	330.55	270.16	572.59	655.55	3533.78
ı	Operation and Maintanance cost (at 4% of B)	4.15	16.87	10.86	24.81	10.99	8.98	19.04	21.80	117.50
	Total Investment Cost (H+I)	129.00	524.34	337.40	770.88	341.54	279.14	591.63	677.35	3651.28

## Phase Wise Total Project Investment Summary (Rs. in Crore) – Preventive Strategy

SI No	ltem	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	TOTAL
	No of Slums									
	No of Households for future									
	Population at 2% growth rate	971	991	1010	1031	1051	1072	1094	1116	8336
	Cost per Unit	5.5	6.05	6.66	7.33	8.06	8.87	9.76	10.74	
Α	Land Cost									
В	Housing & Infrastructure									
(i)	Physical Infrastructure	8.01	8.99	10.09	11.34	12.71	14.26	16.02	17.98	99.4
(ii)	Housing (at Rs. 5.5 lakh per Unit with 10% escalation per annum)	53.41	59.96	67.27	75.57	84.71	95.09	106.77	119.86	662.64
(iii)	Social infrastructure	4.01	4.50	5.05	5.67	6.35	7.13	8.01	8.99	49.71
	Subtotal B	65.43	73.45	82.41	92.58	103.77	116.48	130.80	146.83	811.75

С	Other costs									
(i)	Preparation of DPRs (at 0.75 % of B)	0.49	0.55	0.62	0.69	0.78	0.87	0.98	1.10	6.08
(ii)	Design and Consultancy charges (at 0.75 % of B)	0.49	0.55	0.62	0.69	0.78	0.87	0.98	1.10	6.08
(iii)	Quality control (TIPMA) at 1% of ACA (0.5% of B)	0.33	0.37	0.41	0.46	0.52	0.58	0.65	0.73	4.05
(iv)	social audit 0.5% of ACA ( <b>0.25% 0f B</b> )	0.16	0.18	0.21	0.23	0.26	0.29	0.33	0.37	2.03
	Sub total C	1.47	1.65	1.86	2.07	2.34	2.61	2.94	3.30	18.24
D	Overheads/Administrative costs (at 5% of A+B+C)	3.35	3.76	4.21	4.73	5.31	5.95	6.69	7.51	41.51
Е	Tender Excess @ 10 % of B	6.54	7.35	8.24	9.26	10.38	11.65	13.08	14.68	81.18
F	Total( A+B + C+D+E )	76.79	86.21	96.72	108.64	121.80	136.69	153.51	172.32	952.68
G	Physical contingencies (@ 2.5% of F)	1.92	2.16	2.42	2.72	3.05	3.42	3.84	4.31	23.84
Н	Total Investment Cost H = (F+G)	78.71	88.37	99.14	111.36	124.85	140.11	157.35	176.63	976.52
ı	Operation and Maintanance cost (at 4% of B)	2.62	2.94	3.30	3.70	4.15	4.66	5.23	5.87	32.47
	Total Investment Cost (H+I)	81.33	91.31	102.44	115.06	129.00	144.77	162.58	182.50	1008.99

## Phase Wise Total Project Investment Summary (Rs. in Crore) – Curative + Preventive Strategy

SI .No	Item	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	TOTAL
Α	Tenable									
i	No of Slums	16	34	26	39	25	16	26	25	207
ii	No of Households	1796	7226	4056	8681	3232	1682	3759	3080	33512
iii	No of Households proposed for intervention	1500	5242	3327	6737	2378	1289	2725	2170	25368
iv	Investment Cost - Insitu Upgradation	125.64	482.88	337.40	751.91	291.84	174.08	404.95	354.87	2923.57
В	Untenable									
i	No of Slums	1	4	0	3	3	6	12	10	39
ii	No of Households	40	450	0	170	405	778	1256	1972	5071
iii	No of Households proposed for intervention	40	450	0	170	405	778	1256	1972	5071
iv	Investment Cost - Relocation	3.36	41.46	0.00	18.97	49.70	105.06	186.68	322.48	727.71
С	Curative Strategy - (A+B)									
i	No of Slums (Ai+Bi)	17	38	26	42	28	22	38	35	246
ii	No of Households (Aii + Bii)	1836	7676	4056	8851	3637	2460	5015	5052	38583
iii	No of Households Proposed for intervention (Aiii + Bii)	1540	5692	3327	6907	2783	2067	3981	4142	30439
iv	Investment Cost - Curative Stategy (Aiv +Biv)	129.00	524.34	337.40	770.88	341.54	279.14	591.63	677.35	3651.28
D	Preventive Strategy									
i	No of Housing units to be constructed	971	991	1010	1031	1051	1072	1094	1116	8336
ii	Investment Cost - Preventive Strategy	81.33	91.31	102.44	115.06	129.00	144.77	162.58	182.50	1008.99
	Total Investment Cost (Civ + Dii)	210.33	615.66	439.84	885.95	470.55	423.91	754.21	859.85	4660.30

## Total Project Investment Summary (Rs. in Crore) – Financial Plan for Curative + Preventive Strategy

S. No	ITEM	Year (Rs. In Crores)								Total	
5. 110		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-2022	Total	
1	SFCP INVESTMENT	210.33	615.66	439.84	885.95	470.55	423.91	754.21	859.85	4660.30	
2	SOURCES OF FUNDING										
2.1	Central Assistance	79.93	233.95	167.14	336.66	178.81	161.09	286.6	326.74	1770.92	
2.2	State Contribution	115.68	338.61	241.91	487.27	258.8	233.15	414.82	472.92	2563.16	
2.3	Beneficiaries Contribution	14.72	43.1	30.79	62.02	32.94	29.67	52.79	60.19	326.22	
3	TOTAL SOURCES	210.33	615.66	439.84	885.95	470.55	423.91	754.21	859.85	4660.30	

## **EXECUTIVE SUMMARY**

India is estimated to have the third of the world's poor. According to a 2005 World Bank estimate, 41.6 % of the total Indian population falls below international poverty line of US \$ 1.25 a day. According to 2010 data from the United Nations Development Program, an estimated 37.2 % of Indians live below the country's national poverty line. The latest UNICEF data shows that one in three malnourished children worldwide are found in India, whilst 42 percent of the nation's under five years of age are underweight. The Global Hunger Index (GHI) report 2011 places India amongst the three countries where the GHI between 1996 and 2011 went up from 22.9 to 23.7

The probable reasons for upcoming slums in India are attributed due to urbanization, industrialization, higher productivity in the secondary/tertiary sector against primary sector makes cities and towns centres of economic growth and jobs. Cities act as beacons for the rural population as they represent a higher standard of living and offer opportunities to people not available in rural areas. This results in large scale migration from rural to urban areas. Negative consequences of urban pull results in upcoming of slums characterized by housing shortage and critical inadequacies in public utilities, overcrowding, unhygienic conditions, etc.

In its endeavor to alleviate poverty, the Indian government since its first five year plan has initiated several programs like subsidizing food and other necessities, increased access to loans, improving agricultural techniques and price supports and promoting education and family planning.

Rajiv Awas Yojana (RAY) has been formulated by the Ministry of Housing and Urban Poverty Alleviation (MoHUPA) in pursuance of the Government's vision of a "Slum-free India". The scheme envisages a 'Slum-free India' with inclusive and equitable cities in which every citizen has access to basic civic and social services and decent shelter. It aims to achieve this vision by encouraging States/Union Territories to tackle the problem of slums in a definitive manner, by a multi-pronged approach focusing on:

- bringing all existing slums, notified or non-notified within the formal system and enabling them to avail of the same level of basic amenities as the rest of the town;
- redressing the failures of the formal system that lie behind the creation of slums; and
- tackling the shortages of urban land and housing that keep shelter out of reach of the urban poor and force them to resort to extra-legal solutions in a bid to retain their sources of livelihood and employment.

What is agreed is that slums, like poverty and secure tenure, are multidimensional in nature. Some of the characteristics of slums, such as access to physical services or density, can be clearly defined, and others, such as social capital, cannot. Even with well-defined indicators, measurement can be very problematic, and acceptable benchmarks are not easy to establish.

Rajiv Awas Yojana envisages that each State and Cities therein would prepare a State/City Slum-free Plan of Action. The Plan of Action considers both the up- gradation of existing slums and the action to prevent new slums. The basic aim of the assignment is to prepare Action plan for Slum Free City for Salem City under Rajiv Awas Yojna.

#### **Broad Principles**

The Slum Free City Plan of Action is based on the following broad principles:

The first principle is of inclusion. This implies no-eviction unless there is no alternative and in such cases alternative locations, chosen in consultation with the concerned urban poor communities must be provided











- In-situ upgradation of slums is the preferred option. Slum Resettlement, if absolutely necessary, will be to the extent possible within the same ward/zone or the adjoining ward/zone to minimize adverse impacts on livelihoods and community assets and access to health and education facilities. Plans are to be prepared with the involvement of the people.
- There should be no or minimum demolitions of incremental housing created by the residents of slum communities themselves.
- Resident led incremental housing to be facilitated through tenure regularisation, in-situ infrastructure extension and financing mechanisms. Incremental housing also creates rental housing in the existing low income settlements for those who prefer rental option.
- > Beneficiary identification should be done following a participatory and transparent process. The list of beneficiaries will be verified.
- Community participation should be ensured in all the stages of SFCP i.e. pre-survey activities, including mapping, conduct of survey, development of slum redevelopment model, implementation and monitoring.
- > The planning process aims at improvement in the living conditions and level of security of the urban slum dwellers. There should be universal provision of basic services like water supply and sanitation irrespective of land tenure and legal status.
- Linking this slum free city planning process with other urban poverty related programmes as well as the City Development Plans, City Sanitation Plans and Master Plans as may be the case.
- > Retaining livelihood linkages and home based economic activities in the slum redevelopment, upgradation and improvement.
- The slum-free city planning begins at ward or zone level exercise in which options for each slum in a ward or zone is decided to form ward or zone level plan. This is to ensure that slum dwellers within a ward or zone continue to live in the same area, which would promote heterogeneous neighbourhoods as well as continuation of residence-livelihood linkages.
- Rental housing is to be developed as an important component of the preventive strategy. \_ Total Station Survey needs to be conducted only in prioritized slums for the preparation of DPRs.

#### **Objectives and Scope of the Assignment**

The goal of the task is to contribute improved planning, project formulation, management and implementation capacities of Client with accurate statistics and transparent methodology. This will also help in enhanced quality of life for the urban poor.

- (a) To create a detailed slum MIS covering all socio economic parameters.
- (b) To create a database on environmental infrastructure (roads, water supply, sewerage, drain & street lights) with scale, type and condition, service levels and community infra structure to enable planning for further developments.
- (c) To prepare GIS enabled drawings for the required thematic overlays.
- (d) The data so collected will strengthen the central statistical systems pertaining to the above areas and lead to a better understanding of the issues and prioritization and targeting of investments.
- (e) Development of a digitized, GIS based slum maps linking the MIS data on the above fields for effective planning, monitoring and O&M in all the slums in Salem.

Slum Free City Plan of Action (SFCPoA) for Salem has been prepared in consideration of revised Guidelines from RAY and with Ramky's experience working in slums. The detail assessment as per the requisite has been made.











#### Salem City Profile.

#### **Location and Connectivity**

Salem town is located in the North Latitude between 11° 14' and 12° 53' and East Longitude between 77° 44' and 78° 50', surrounded by an amphitheatre of hills - the Nagarmalai in the north, the Jeragamalai in the south, the Kanjanamalai in the west and the Godumalai in the east. The N.H 68 from Ulundurpet to Salem and N.H 45 Connects from Chennai to Ulundurpet forming road connectivity. Salem has its railway staion and trains run from it all the major cities in tamil Nadu, Kerala and Karnataka.

## **Population Growth**

The town's population was 70,621in 1901, which registered almost twelve times increase i.e. 829,267 in 2011. The rural migration and small industry activity in the Salem town is parallel with the urban expansion, which became the dominant characteristic of the spatial organization. This characteristic can be seen both in the increase of urban population as well as at the territory occupied by these activities. The population in Salem has grown at a rate of 23 percent per decade between 1951 and 1971, the rate has been lower for the decade 1971 – 1981 at 17 percent and 14 percent per decade between 1991 and 2011.

#### **DIAGNOSTIC ASSESSMENT OF SLUMS**

#### Methodology

The Slum Free City Plan of Action would include two strategies -improvement of existing slums (curative strategy) and prevention of formation of new slums (preventive strategy) by organizing supply of affordable housing for the urban poor.

poor.					
Steps	Sub steps				
Step 1: Situation  Analysis  Collection of basic data on the city, its housing situation and housing program implementation, critical assessment of housing/ slum policies' implementation, Munic profiles including financial situation etc. Stakeholder consultations at ward/ zone, city level propose the idea of SFCP					
Step 2(a): Curative	1. Preparation of Geo referenced city base map using high resolation of 0.5 m statellite				
Strategy for Existing	image (Quick bird)				
Slums	2. Tenability Analysis				
	Slum Socio-economic survey				
	4. Integration of spatial data & Socio-economic (including biometric) information at				
	slum/city level to create slum MIS				
	5. Formulation of Ward/City/Zone level Slum Redevelopment Plan				
	6. Implementation Modalities				
	7. Investment Projections				
Step	Inventory of vacant and underitised lands				
2(b):Preventive	Assessment of housing needs and demand – Existing & Future				
Strategy for Future	Formulation of housing supply strategy				
Slums	4. Investment Projections				
Step 3: Financing	Assessment of resource available for both Curative and Preventive Strategies - Gol,				
Strategy	State and ULB level.				
	<ol><li>Estimation of the resource gap between the investment projections and resources that are/will be available</li></ol>				
Step 4: Institutional	1. Provision of a framework for institutional arrangement with roles and responsibilities				
Arrangement	at different stages of the SFCPoA				











Step	5:	Finaliza	ation
of Si	lum	Free	City
Plan of Action			

- 1. Prioritization of the slums
- 2. Indicative list of reforms to be undertaken and timelines for implementation
- 3. Consolidation of the outputs from the various steps, processes and the curative
- 4. and preventive strategies into the Slum Free City Plan of Action

There are 344 slums in Salem city constituting about 18 % of the population of the city. Of this 98 slums could not be surveyed for reasons like the slum being small, objection from the slum dwellers, slum developed etc., The following exhibit gives the list of 246 slums in all the 60 wards of Salem city. All the slums are non- notified slums. Please refer exhibit below for location of slums in Salem. Total slums list is enclosed in Annexure 5.

#### Zone Wise & Ward Wise Slums in Salem

S. No	Zone	Ward	Name of the slum	No. of House Holds	Total population
1	1	21	Achuanagar	49	181
2	1	1	Ambedkar odai	64	261
3	1	23	Ammasi nagar	112	415
4	1	20	Andipatti	62	263
5	1	22	Andipatti	578	1948
6	1	21	Anna nagar	33	400
7	1	19	Anthony puram odai	113	237
8	1	19	Appavu nagar	32	124
9	1	1	Arundhathiyar street w-1	170	661
10	1	18	Arundhathiyar st	22	82
11	1	2	Chinna ammapalayam	942	4085
12	1	1	Chinna mottur	91	345
13	1	28	Gandhi nagar	64	279
14	1	62	Gorikadu	76	327
15	1	21	Indira nagar	188	499
16	1	22	Indra nagar	80	346
17	1	2	Jagirammapalayam	620	2252
18	1	23	Kallukuzi	21	212
19	1	1	Kamanayakampatty	198	1344
20	1	23	Kamaraja colony	135	472
21	1	20	Kamarajstreet	36	140
22	1	21	Kabilar street	275	1098
23	1	24	Kandhampatty colony	201	752
24	1	24	Kandhampatti	159	646
25	1	21	Kattu sottan valavu	45	167
26	1	24	Konerikarai	86	348
27	1	25	Leigh bazzar odai	22	78
28	1	20	Majid street	58	787
29	1	22	Malangattan street	128	473
30	1	19	Mariamman koil st	144	545
31	1	21	MGR nagar	62	232
32	1	3	Molakaradu	72	283
33	1	1	Mottur	123	396
34	1	27	Mullah kadu	271	352
35	1	25	Muniyappan kovil st	243	909
36	1	27	Narayanapuram	195	688











37	1	3	Om shakthi nagar	47	174
38	1	25	Pallapatti	142	487
39	1	25	Pallapatty mariamman koil st	116	476
40	1	22	Pakrikaradu	19	85
41	1	18	Panankadu	236	858
42	1	20	Pandiyan street w-20	52	187
43	1	27	Pavender street	207	803
44	1	28	Periyar nagar	169	750
45	1	20	Periyar nagar	177	737
46	1	20	Periyar street	199	963
47	1	21	Periyar nagar	125	446
48	1	3	Perumal malai adivaram	111	440
49	1	25	Ravaneswar nagar	93	312
50	1	3	Sengal pettai	50	187
51	1	24	Senjikottai	85	312
52	1	28	Shevapet - (gunduchetti eri)	305	1122
53	1	22	Sivandhapuram	109	406
54	1	21	Sollampallam	243	879
55	1	23	Sugumar colony	98	392
56	1	26	Swamynathapuram	230	868
57	1	23	Thiruvakkaoundanoor	455	1831
58	1	3	Thiru v k nagar	28	106
59	1	27	Veeran nilam	70	265
60	1	20	Velaiyan gounder street	69	264
61	1	21	Veerakaliyamman nagar	162	660
			Subtotal ( zone 1)	9367	36637
62	2	17	Alamarakkadu	93	358
63	2	5	Alagapuram	201	803
64	2	5	Alagapuram periyaputhur	43	185
65	2	16	Ambedkar street	10	42
66	2	8	Amman nagar	80	212
67	2	_	A 1 11 ( )		
68		8	Ayyanar kovil street	105	271
	2	17	Ayyanar kövil street  Boyer street	105 102	271 823
69	2	17 6	Boyer street Chinna kollapatti	102 278	823 1116
70	2	17 6 8	Boyer street Chinna kollapatti Chinna tirupathi	102 278 266	823 1116 1050
70 71	2 2 2	17 6 8 12	Boyer street Chinna kollapatti Chinna tirupathi Court road colony	102 278 266 46	823 1116 1050 197
70 71 72	2 2 2 2	17 6 8 12 29	Boyer street Chinna kollapatti Chinna tirupathi Court road colony Devangapuram	102 278 266 46 57	823 1116 1050 197 224
70 71 72 73	2 2 2 2 2	17 6 8 12 29 4	Boyer street Chinna kollapatti Chinna tirupathi Court road colony Devangapuram Dhideer colony	102 278 266 46 57 153	823 1116 1050 197 224 670
70 71 72 73 74	2 2 2 2 2 2 2	17 6 8 12 29 4	Boyer street Chinna kollapatti Chinna tirupathi Court road colony Devangapuram Dhideer colony Gandhi nagar	102 278 266 46 57 153 126	823 1116 1050 197 224 670 339
70 71 72 73 74 75	2 2 2 2 2 2 2 2	17 6 8 12 29 4 8 16	Boyer street Chinna kollapatti Chinna tirupathi Court road colony Devangapuram Dhideer colony Gandhi nagar Govinda goundar thottam	102 278 266 46 57 153 126 105	823 1116 1050 197 224 670 339 398
70 71 72 73 74 75 76	2 2 2 2 2 2 2 2 2 2	17 6 8 12 29 4 8 16 7	Boyer street Chinna kollapatti Chinna tirupathi Court road colony Devangapuram Dhideer colony Gandhi nagar Govinda goundar thottam Iyyanthirumaligai	102 278 266 46 57 153 126 105 123	823 1116 1050 197 224 670 339 398 306
70 71 72 73 74 75 76 77	2 2 2 2 2 2 2 2 2 2 2	17 6 8 12 29 4 8 16 7 6	Boyer street Chinna kollapatti Chinna tirupathi Court road colony Devangapuram Dhideer colony Gandhi nagar Govinda goundar thottam lyyanthirumaligai Jallikadu	102 278 266 46 57 153 126 105 123	823 1116 1050 197 224 670 339 398 306 435
70 71 72 73 74 75 76 77 78	2 2 2 2 2 2 2 2 2 2 2 2 2 2	17 6 8 12 29 4 8 16 7 6	Boyer street Chinna kollapatti Chinna tirupathi Court road colony Devangapuram Dhideer colony Gandhi nagar Govinda goundar thottam Iyyanthirumaligai Jallikadu Johnsonpet east	102 278 266 46 57 153 126 105 123 40 823	823 1116 1050 197 224 670 339 398 306 435 2842
70 71 72 73 74 75 76 77 78	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	17 6 8 12 29 4 8 16 7 6 12	Boyer street Chinna kollapatti Chinna tirupathi Court road colony Devangapuram Dhideer colony Gandhi nagar Govinda goundar thottam Iyyanthirumaligai Jallikadu Johnsonpet east Johnsonpet west	102 278 266 46 57 153 126 105 123 40 823 392	823 1116 1050 197 224 670 339 398 306 435 2842 1756
70 71 72 73 74 75 76 77 78 79	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	17 6 8 12 29 4 8 16 7 6 12 13	Boyer street Chinna kollapatti Chinna tirupathi Court road colony Devangapuram Dhideer colony Gandhi nagar Govinda goundar thottam Iyyanthirumaligai Jallikadu Johnsonpet east Johnsonpettai	102 278 266 46 57 153 126 105 123 40 823 392 262	823 1116 1050 197 224 670 339 398 306 435 2842 1756 697
70 71 72 73 74 75 76 77 78 79 80 81	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	17 6 8 12 29 4 8 16 7 6 12 13 13	Boyer street Chinna kollapatti Chinna tirupathi Court road colony Devangapuram Dhideer colony Gandhi nagar Govinda goundar thottam Iyyanthirumaligai Jallikadu Johnsonpet east Johnsonpettai Kalli kadu	102 278 266 46 57 153 126 105 123 40 823 392 262 127	823 1116 1050 197 224 670 339 398 306 435 2842 1756 697 517
70 71 72 73 74 75 76 77 78 79 80 81 82	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	17 6 8 12 29 4 8 16 7 6 12 13 13 7	Boyer street Chinna kollapatti Chinna tirupathi Court road colony Devangapuram Dhideer colony Gandhi nagar Govinda goundar thottam Iyyanthirumaligai Jallikadu Johnsonpet east Johnsonpet west Johnsonpettai Kalli kadu Kattu valavu	102 278 266 46 57 153 126 105 123 40 823 392 262 127 85	823 1116 1050 197 224 670 339 398 306 435 2842 1756 697 517 267
70 71 72 73 74 75 76 77 78 79 80 81	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	17 6 8 12 29 4 8 16 7 6 12 13 13	Boyer street Chinna kollapatti Chinna tirupathi Court road colony Devangapuram Dhideer colony Gandhi nagar Govinda goundar thottam Iyyanthirumaligai Jallikadu Johnsonpet east Johnsonpettai Kalli kadu	102 278 266 46 57 153 126 105 123 40 823 392 262 127	823 1116 1050 197 224 670 339 398 306 435 2842 1756 697 517











85	2	5	MGR nagar	58	256
86	2	5	Mittapudhur	199	752
87	2	8	Mookaneri adikarai	91	452
88	2	14	Mulvadi maakaan street	166	760
89	2	16	Nagammal thottam	14	47
90	2	5	Odacha karai	55	238
91	2	29	Pandiyarajan st	74	295
92	2	29	Periya kollapatty	112	432
93	2	2	Periya kollapatty Periya kollapatty	210	352
94	2	6	Periyar kollapatty(gandhi nagar new colony)	168	662
95	2	6	Periyar kollapatty (gandhi nagar old colony)	144	437
96	2	5	Pidari amman koil street	30	250
97	2	16	Pudur kallanguthur & anna nagar	352	1310
98	2	4	Ramakuttai	32	82
99	2	15	Ram nagar odai	182	734
100	2	14	Shankar nagar odai	37	123
101	2	4	South alagapuram	191	437
102	2	6	Thandhai periyar nagar	305	996
102	<u> </u>	1 0	Subtotal ( zone 2)	6054	22493
103	3	32	Aatroram street	67	277
104	3	9	Allikuttai boyer street	41	474
105	3	9	Allikuttai (mariyamman kovil street)	40	155
106	3	11	Anai meadu	33	109
107	3	32	Anai road	18	63
108	3	58	Annanagar	503	1865
109	3	37	Anna nagar w-37	58	220
110	3	10	Arundhathiyar street w-10	138	546
111	3	32	Arasamara pillayar kovil street	105	414
112	3	33	Athiyaman st	384	1492
113	3	37	Bharathi nagar	37	158
114	3	35	Bharathiyar steet	48	181
115	3	35	Carpet steet	94	383
116	3	9	Chottya goundar street	89	367
117	3	10	Desiya punaramaipu colony	161	594
118	3	43	Erumapalayam main road	55	203
119	3	42	Gandhi mahan street	194	854
120	3	37	Gandhi nagar	239	1043
121	3	11	Gopalchetty street	35	123
122	3	11	Gopal street	265	123
123	3	9	Goyya thoppu	140	557
124	3	35	Jothi merku street	54	231
125	3	35	Jothi east st	79	290
126	3	35	Jothi main road	285	1170
127	3	32	Kaasi muniyappan koil street	119	450
128	3	37	Kamarajar nagar colony	393	1706
129	3	33	Karaikinaru	167	631
130	3	44	Kasthuribhai street	490	2115
131	3	42	Kitchipalayam	11	34
132	3	44	Kitchipalayam	233	948











180	4	58	Amman nagar	138	275
179	4	51	Ambedkar street	237	1003
178	4	47	Ambedkar st	166	728
177	4	51	Ambedkar street - jari kondalampatty - w-51	162	753
176	4	47	Ambedkar nagar w-47	89	374
175	4	50	Ambedkar colony w-50	67	187
174	4	49	Allikuttai colony	28	132
173	4	49	Agathiyar street	68	270
	1	1	Subtotal ( zone 3)	13232	51555
172	3	9	Venkatachalam colony	352	1226
171	3	11	Vasagar salai	63	222
170	3	9	Valluvar colony	17	67
169	3	9	Val kadu	51	187
168	3	37	Vaithiudaiyarkadu	93	361
167	3	38	Thiyagi natesan st	598	2327
166	3	9	Thadhampatti	238	933
165	3	9	Swamy nagar	88	297
164	3	44	SMC colony	597	2451
163	3	37	Sengaliacharyakadu	225	865
162	3	9	Sengal anai	253	1250
161	3	43	Sanyasi gundu extn	403	1340
160	3	37	Sanniyasi gundu	49	192
159	3	37	Sakthi nagar w-37	49	155
158	3	37	Ramanathapuram	184	724
157	3	35	Railway therku street	27	110
156	3	10	Railway vadaku street	102	449
155	3	49	Putta machine	55	237
154	3	10	Puthu mariyamman kovil st	67	284
153	3	9	Pudu valavu	21	63
152	3	39	Periya kenaru	776	2945
151	3	10	Pandian street w-10	50	202
150	3	40	Pachapatti Pachapatti 10	855	3449
149	3	40	Pachapatti (north street)	567	2291
148	3	9	Nehru nagar	53	213
147	3	41	Nathimulla makkaan street	103	390
146	3	42	Narayana nagar	199	786
145	3	36	Nanjampatti	557	2242
144	3	37	Namamalai adivaram	248	982
143	3	33	Muthavalliyakupatheru	125	509
142	3	37	Muvendar nagar	126	465
141	3	36	Millitary road	49	168
140	3	9	Mettu theru	20	75
139	3	10	Masuthi nilam	476	1732
138	3	35	Market st	173	676
137	3	35	Majid nilam	72	291
136	3	32	Majeeth street	77	361
135	3	41	Kunjaan kadu	334	1225
134	3	37	Kumaragiripettai	98	412
133	3	44	Kitchipalayam colony	167	625
122	3	11	Kitchinalayam colony	167	625











181	4	47	Andhipatti eari	336	1517
182	4	45	Attoram kilaku street w-45	64	216
183	4	45	Attoram vadaku street w-45	122	428
184	4	49	Avaiyar street	66	232
185	4	58	Chellakutti kadu	157	544
186	4	60	Chinnayan colony	41	313
187	4	50	Gandhi nagar	19	84
188	4	59	Indira nagar	149	234
189	4	58	Indra nagar	34	100
190	4	58	Jawaharlal street	197	725
191	4	50	K.p karadu thenpuram	225	970
192	4	50	Kp karadu vadapuram	388	1465
193	4	49	K.p.karaduroad(netthi medu)	60	211
194	4	56	Kaldepo	44	179
195	4	52	Kallankadu	160	666
196	4	50	Kaliyamman temple backside	86	331
197	4	49	Kannagi street	121	489
198	4	60	Kurinji nagar	288	1173
199	4	60	Madurai veeran kovil street	80	353
200	4	50	Maniyanur	68	258
201	4	46	Market street	38	137
202	4	55	Mettu street	29	121
203	4	55	Mettu kuruku street	72	237
204	4	53	Mogaboob nagar	289	1165
205	4	60	Moonangkaradu	479	1816
206	4	58	Moonangkaradu	61	212
207	4	46	Mungapadi st	193	740
208	4	48	Muniyappan kovil st	55	205
209	4	49	Muniyappan kovil street w-49	161	596
210	4	51	Muniyappan kovil street w-51	27	98
211	4	47	Murugan nagar	81	333
212	4	58	Muthu mariyamman kovil street w-58	128	508
213	4	51	Nadu st	19	60
214	4	48	Neimandi arunachala street ii	48	177
215	4	57	Nethaji street	129	513
216	4	60	Onpatham palzi	128	490
217	4	45	Panchathangi eari	671	2476
218	4	50	Panditha Nehru street	138	504
219	4	53	Pension line 1 to 5 streets	317	1480
220	4	47	Pension line kuruku street	29	110
221	4	47	P g r line	130	490
222	4	58	Ponmanam nagar	53	188
223	4	53	Pudu trichy kilai road	84	313
224	4	59	Puratchi nagar	50	170
225	4	47	Ramalingaswamy koil street	241	952
226	4	59	Ramayan kadu	175	586
227	4	59	Robert ramasamy nagar	88	336
228	4	60	Sakthi nagar w-60	121	451
229	4	54	Shanmuga nagar	236	894











			Grand total	38583	148969
	•		Subtotal ( zone 4)	9930	38284
246	4	53	Velupudu street	56	216
245	4	60	Vedipukkal parai	139	615
244	4	53	Valluvar street-2	83	296
243	4	53	Valluvar nagar-3	82	296
242	4	58	Valzi vaikal	120	471
241	4	53	Vadaku street	71	429
240	4	60	Utthukadu	65	236
239	4	50	Uthirappan kadu	126	476
238	4	48	Tholkappier street	38	139
237	4	60	Thideer nagar	93	348
236	4	60	Thalaimalai nagar	273	939
235	4	55	Tagore street	114	406
234	4	52	Sunnambukara street	141	534
233	4	52	Srirangan kadu	281	1085
232	4	46	Srirangan st	64	228
231	4	45	SMC line	113	524
230	4	50	Shanmuga nagar	141	478

Source: TNSCB Salem

With the help of TNSCB officials and corporators, slums have been identified. Total slum population (148969) of the corporation constitutes about 18 % of the total population of the Corporation in 2011. Distribution of the slums across the zones indicates that Zone III (Ammapet) has the highest share of slum population with 35 % followed by Zone 4 (Kondalampatty), Zone 1 -Suramangalam and Zone II -Hasthampatty with 26%, 24% and 15 % respectively.

## **Tenability Analysis**

Slum tenability is an important pre-requisite for in-situ slum upgrading. The priory of the tenable slum shall be to upgrade them in-situ and to minimise relocation. The survey data analysis gives the information about tenable and non-tenable slums.

## **Criteria for Tenability Assessment**

Parameter	Definition
Flooding or Drainage corridors	
Flood Plain with risk of floods	Yes/No whether in zone
Along drain channels	Yes/No whether in canal
Low lying or drainage areas	In drainage congestion zone or low lying area with sever
	or moderate flooding
Airport Corridor	Distance (in m) from airport boundary, if within 1km of
	airport
Transit or Transport Corridors	
Along railway tracks	Distance (in m) from right of way i.e. within 500m of
	centre of track
Along major roads	Distance (in m) from centre right of way i.e. within 200m
	of highways and main arteries
In Airport area	Distance (in m) from right of way











Parameter	Definition
Other Risk Conditions	
On old/ near land fill sites	Yes/No
Near urban dairies	Yes/No

## Criteria for defining not life threatening situation

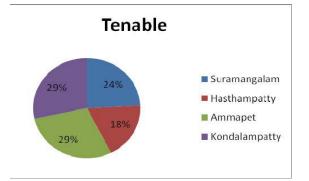
Parameter	Definition
Forest Land	Yes/No
Land use inappropriate as per Master Plan or restricted zones such as heritage sites	Land use demarcation
Industrial areas	Industrial area demarcation
Surrounding development creates life threatening conditions	Land use demarcation
Lack of planned trunk infrastructure	Infrastructure maps
Spatial locations do not permit Development	Settlement is on strip land along a wall or road

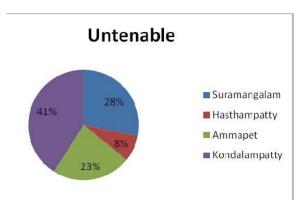
On the basis of the tenability assessment, settlements will be classified as follows.

## **Tenability Assessment**

Group	Definition	Degree of Tenability
Tenable	Can be upgraded on-site	
Potentially Tenable	Can be made tenable for on-site upgrading	More Tenable: Requires very little improvement to become tenable as in a drain wall  Less Tenable: Requires more improvement to become tenable
Non-tenable settlements	Are in extremely lifethreatening conditions, cannot be upgrade onsite and need to be rehabilitated	

Analysis of the Salem Corporation Slums has been carried out as per the standard procedure described above in this section. The Exhibit below emphasizes the tenability of the Salem slums. Tenability assessment has been carried out in the consultation with the municipal corporators, TNSCB officials and interactions with the locals. The assessment reveals that out of 246 slums about 207 slums are tenable and 39 slums are untenable.





## Distribution of Slums and households with reference to tenability



	Tenabl	Tenable No .of Slums HH		ole	Total	
Zone	No .of Slums			HH No. of Slums HH		HH
Suramangalam	50	8103	11	1264	61	9367
Hasthampatty	38	5649	3	405	41	6054
Ammapet	61	12294	9	938	70	13232
Kondalampatty	58	7466	16	2464	74	9930
Total	207	33512	39	5071	246	38583

## Distribution of Untenable Slums with reference to Physical Location

Source: TNSCB Salem Divisional Office/Ramky Assessment Source: Ramky's Analysis

Based on the cumulative scores of the poverty index and infrastructure index, the slums are ranked in a 3x3 matrix. From the matrix, a diagonal traversal starts from right bottom to top left. Based on the traversal, the facilities in the slums are observed. Based on the observation preventive and curative measures are taken place.

## **Overall deficiency Matrix**

		Vulnerability							
		1	2	3					
	1	v1i1 – 11 Slums	v2i1 – 6 Slums	v3i1 – 1 Slums					
ā	2	v1i2 – 78 Slums	v2i2 – 31 Slums	v3i2 – 4 Slums					
Infrastructure	3	v1i3 – 55 Slum	v2i3 – 47 Slums	v3i3 – 13 Slums					

The slums placed in the deficiency matrix are tenable and untenable. Already a detailed analysis made based on the tenability. The deficiency matrix according to tenability has been given in the Exhibit 4-5 & Exhibit 4-6. From the tenability analysis, tenable slums deficiency classification has been carried out as shown in the Exhibit 4-7 and untenable slums deficiency classification is also carried out as shown in Exhibit 4-8 and which is represented in the pie charts.











## **Deficiency Matrix for Tenable Slums**

		Vulnerability						
		1	2	3				
	1	v1i1 – 9 Slums	v2i1 – 6 Slums	v3i1 – 1 Slums				
ture	2	v1i2 – 67 Slums	v2i2 – 29 Slums	v3i2 – 3 Slums				
Infrastructure	3	v1i3 – 39 Slum	v2i3 – 41 Slums	v3i3 – 12 Slums				

## **Deficiency Matrix for Untenable Slums**

		Vulnerability						
		1	2	3				
	1	v1i1 – 2 Slum	v2i1 – 0 Slums	v3i1 – 0 Slums				
cture	2	v1i2 – 11 Slums	v2i2 – 2 Slums	v3i2 – 1 Slums				
Infrastructure	3	v1i3 – 16 Slum	v2i3 – 6 Slums	v3i3 – 1 Slums				

The costing has been worked out by adopting phasing of slums based on the feasibility of execution, availability of land and willingness of the people to avail the benefit of the scheme. Fund requirement for making the Salme City Slum free works out to Rs. 4660.30 Cr with Government of India assistance of Rs. 1770.92 Cr, GoTN assistance of Rs. 2563.16 Cr with beneficiary's contribution of Rs. 326.22 Cr.









## **Slum Distribution Based on Tenable Deficiency Matrix**

V1i1 9 Slums could be delisted with minor improvements in the infrastructure and housing conditions.	V2i1 In 6 Slums considerable developments on infrastructure are required and livelihood of the slum dwellers may be improved to access all amenities, similar to the urban people.	V3i1 In 1 Slum considerable developments on infrastructure are required and livelihood of the slum dwellers may be improved to to have better infrastructure amenities
V1i2 About 67 slums, considerable developments to be needed on livelihood of the slum dwellers and the infrastructure may be further improved to have better infrastructure amenities	V2i2 For about 29 slums, there is moderate attention needs to be given for improving the infrastructure of the slum and livelihood of the slum dwellers.	V3i2 For 3 Slums the livelihood of the slum dwellers needs to be improved by providing skill development Programmes to have better employment and also an immediate attention needed for improvement of theinfrastructure of the slum.
V1i3 About 39 slums, need an immediate measureto be taken to improve infrastructure facilities	V2i3 For 41 slums the livelihood of the slum dwellers needs to be improved by skill development programmes and provide pathway to get the better employment, and also attention needed for infrastructure of the slum.	V3i3 For 12 slums an immediate attentionneeds to be given for In situ-slum redevelopment

## Slum Distribution Based on Untenable Deficiency Matrix

V1i1 2 Slum need to be relocated with provision of infrastructure and housing they are equipped with as present	V2i1 None of the slums are falling in this category.	V3i1 None of the slums are falling in this category.
V1i2 About 11 slums need to be relocated with addressing livelihood improvement programs.	V2i2 2 slums need to relocated with moderate attention towards livelihood and infrastructure improvement	V3i2  1 slum need to be relocated with moderate attention towards improvement of livelihood and significant attention towards improvement of infrastructure
V1i3 For 16 slums livelihood improvement programs to be initiated immediately before relocating the slums in the next phase.	V2i3 About 6 slums need to be relocated with significant attention towards livelihood and moderate attention towards infrastructure.	V3i3 1 slum need to be relocated with significant attention towards improvement of livelihood and infrastructure.











Financial Plan

Total Project Investment Summary (Rs. in Crore) – Financial Plan for Curative + Preventive Strategy

S.	ITEM	Year (Rs. In Crores)						Takal		
No	ITEM	2014- 15	2015- 16	2016- 17	2017- 18	2018- 19	2019- 20	2020- 21	2021- 2022	Total
1	SFCP INVESTMENT	210.33	615.66	439.84	885.95	470.55	423.91	754.21	859.85	4660.30
1.2	No of affordable housing stock proposed including dormitories and night shelters.									
2	SOURCES OF FUNDING									
2.1	Central Assistance	79.93	233.95	167.14	336.66	178.81	161.09	286.6	326.74	1770.92
2.2	State Contribution	115.68	338.61	241.91	487.27	258.8	233.15	414.82	472.92	2563.16
2.3	Local body contribution									
2.2.1	BSUP Fund									
2.2.2	General Allocation from the Budget									
2.2.3	Earmarked resources									
2.2.4	PPP									
2.2.5	Loans									
2.2.6	Others - specify:									
2.3	Beneficiaries Contribution	14.72	43.1	30.79	62.02	32.94	29.67	52.79	60.19	326.22
2.4	Sources to be identified during implementation									
3	TOTAL SOURCES	210.33	615.66	439.84	885.95	470.55	423.91	754.21	859.85	4660.30



# **Chapter 1**: OVERVIEW

#### 1.1 Introduction:

he United Nations, during its fifty fifth session on September 18, 2000, passed a resolution adopted by the General Assembly referred as '55/2 United Nations Millennium Declaration' of which the 3<sup>rd</sup> declaration part 11 says, "We will spare no effort to free our fellow men, women and children from the abject and dehumanizing conditions of extreme poverty, to which more than a billion of them are currently subjected. We are committed to making the right to development a reality for everyone and to freeing the entire human race from want."

It was a group of 189 nations in 2000 making a promise to free people from extreme poverty and multiple deprivations. This pledge became the eight Millennium Development Goals to be achieved by 2015. In September 2010, the world recommitted itself to accelerate progress towards these goals. It is this growing global concern that has shifted the focus of International community to the Slum evidently manifested in the United Nations Millennium Declaration and subsequent identification of new development priorities. The increasing numbers of Slum dwellers have forced the governments to adopt a target on slums called MDG 7, Target 11, aiming at improving significantly the lives of at least 100 million slum dwellers by the year 2020. The international community in the form of this Millennium Development target is aiming for the bare minimum given the predicted growth of roughly two billion in the next 30 years. So the present efforts put in this direction are not enough. National and International policies need to be guided by the real concern and compassion to make these slums the participatory elements in driving away distress, deprivation and other facets of poverty.

#### 1.1.1 Indian Scenario

India is estimated to have the third of the world's poor. According to a 2005 World Bank estimate, 41.6 % of the total Indian population falls below international poverty line of US \$ 1.25 a day. According to 2010 data from the United Nations Development Program, an estimated 37.2 % of Indians live below the country's national poverty line. The latest UNICEF data shows that one in three malnourished children worldwide are found in India, whilst 42 percent of the nation's under five years of age are underweight. The Global Hunger Index (GHI) report 2011 places India amongst the three countries where the GHI between 1996 and 2011 went up from 22.9 to 23.7 while 78 out of 81 developing countries studied, including Pakistan, Nepal, Bangladesh, Vietnam, Kenya, Nigeria, Myanmar, Uganda, Zimbabwe and Malawi succeeded in improving huger condition.

The decadal growth of slums in India is presented in the following exhibit which elucidates that the slum population in India has increased during 2001 – 2011.

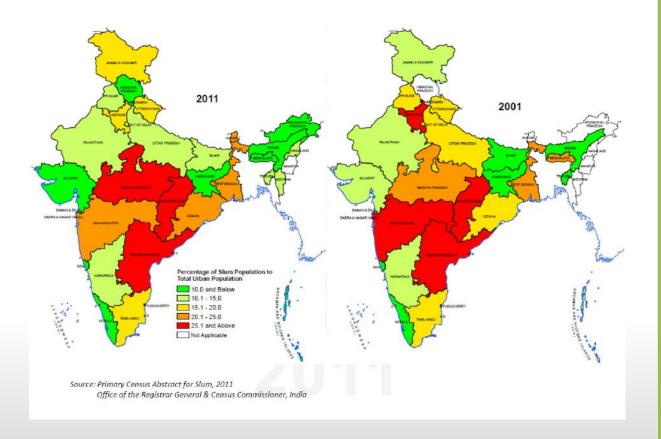












The probable reasons for upcoming slums in India are attributed due to urbanization, industrialization, higher productivity in the secondary/tertiary sector against primary sector makes cities and towns centres of economic growth and jobs. Cities act as beacons for the rural population as they represent a higher standard of living and offer opportunities to people not available in rural areas. This results in large scale migration from rural to urban areas. Negative consequences of urban pull results in upcoming of slums characterized by housing shortage and critical inadequacies in public utilities, overcrowding, unhygienic conditions, etc.

In its endeavor to alleviate poverty, the Indian government since its first five year plan has initiated several programs like subsidizing food and other necessities, increased access to loans, improving agricultural techniques and price supports and promoting education and family planning. These measures have helped to eliminate famines, cut absolute poverty levels by more than half and reduced illiteracy and malnutrition. Although India has made significant progress on macroeconomic front but still one quarter of the population still earns less than the government specified poverty threshold of Rs. 32 per day. The recent World Bank report has shown India on track to meet its poverty reduction goals. Nonetheless an estimated 53 million people are still expected to live in extreme poverty by 2015.









#### 1.1.2 Slum Free Cities

An estimated 26 % of urban population of India, as per the Planning Commission estimates is living below the threshold of Rs. 32 per day which puts them under the canopy of below poverty line. Eighty percent of their meager earnings go towards sufficing their food and energy needs, leaving very little for meeting the costs of living in ever increasing inflationary environment. Estimated around 75.2 million in 2001, most of this chunk lives in slums and squatter settlements in inhuman conditions that deny them dignity, shelter and the right to basic civic amenities or social services. To add to their misery and despair these slums are usually infested with ill-health, high rate of crime and diseases which push them further and deeper into the mire of poverty. Nearly about a guarter of Indian population lives in notified and non-



notified slums and with further urbanization, the projected share of urban households in the next two decades is expected to rise from 28 % to 50 % of the total population and with this the stretch of slums may also grow exponentially. This expansion of slums would mean crippling productive capacities of a growing number of people by the denial of basic services, shelter and security. It is in this perspective, Jawaharlal Nehru National Urban Renewal Mission, a major flagship program was started by the Government of India in December 2005 having two pronged focus. One, Sub-Mission on Basic Services to the Urban Poor targeting 65 Mission cities and the other is Integrated Housing and Slum Development Program focusing on small and medium towns which aims at holistic development of slums. The mission seeks to improve the living condition of slum dwellers and the urban poor by enabling the construction of 15 lakh dwelling units with basic amenities. Since JNNURM, the BSUP an IHSDP has not been able to achieve the optimum results and has not been able to shed off the apprehensions of many states about conferment of legal property rights to the urban poor who think the slum dwellers may sell the property and create a fresh encroachment, the government announced a policy change with the announcement of Rajiv Awas Yojina (RAY). RAY was announced by the President of India in his address to both Houses of Parliament in June 2009 and the Prime Minister on Independence day, in which the vision of a "Slum Free India" was outlined. This scheme aims at providing support to States that are willing to provide property rights to Slum Dwellers. RAY, proposes to address the problem of slums in a holistic and definitive way adopting a multi-pronged approach focusing on bringing existing slums within the formal system and enabling them to avail of the same level of basic amenities as the rest of the town; redressing the failures of the formal system that lie behind the creation of slums; and tackling the shortages of urban land and housing that keeps shelter out of reach of the urban poor and forces them to resort to extra-legal solutions in a bid to retain their sources of livelihood and employment.

## 1.1.3 Security of Tenure

Security of tenure is the most important parameter that has been stressed upon in the roadmap laid down in the Rajiv Awas Yojna (RAY). The emphasis on the security of tenure is laid only to counter the inadequacies that have surfaced while introspecting the earlier efforts to alleviate poverty and to clear the slums. Security of Tenure is the main component of Rajiv Awas Yojana (RAY) conceptualized to extend property rights to slum dwellers believing that the security of tenure has a positive relationship with living conditions, human development, economic status and access to entitlements. In other words, the higher the levels of tenure security, the higher the living conditions and the human development achievements.











Security of tenure is the concept which bestows the security and rights to the individuals or the communities to hold or own the land. It gives the privilege to occupy, to use, to develop, to inherit and to transfer the land and thus primarily is viewed as a social relation involving a complex set of rules governing land use and land ownership. Security of tenure guarantees protection by the state against forced evictions and hence making significant impact on the living and working conditions of the urban poor. Forced eviction causes disruptions in the lives of the poor and push households deep further into the poverty. The post slum demolitions studies reveal that dwellers lose their livelihoods in the wake of demolitions, children drop out of schools and some never go back, the quality of life deteriorates as a consequence of losing access to water and sanitation as well as exposure to natural elements, women's insecurity increases as a result of an increased threat of sexual violence, health conditions deteriorate, incomes decrease and overall, poverty is recreated. The tenure security hence protects the already vulnerable urban population from falling into poverty, getting trapped into the morass of distress, deprivation and hardships.

Security of tenure is viewed as being directly linked to urban citizenship since it can solidify the right of slum dwellers to exist in the city, organize, make claims on public resources and co-manage settlement with public authorities. On the other side, it could lead to improved land administration, increased local tax revenues and improved provision of basic services. Also, the extension of property titles is expected to lead to access to formal mortgage credit and an increase in small business investments. It can also lead to private sector investment in real estate and unification of land markets possibly leading to efficient land management.

## 1.2 Slums:

The term 'slum' used in the report of MDGs in a general context to describe a wide range of low income settlements and/or poor human living conditions. These inadequate housing conditions exemplify the variety of manifestations of poverty as defined in the Programme of Action adopted at the World Summit for Social Development. 'Slum', at its simplest, is 'a heavily populated urban area characterized by substandard housing and squalor'. This definition encapsulates the essential characteristics of slums: high densities and low standards of housing (structure and services), and 'squalor'. The first two criteria are physical and spatial, while the third is social and behavioral.

### 1.2.1 Defining & Measuring of Slums

United Nations agency UN-HABITAT, defines a slum as a run-down area of a city characterized by substandard housing and squalor and lacking in tenure security. UNHSP defines Slum as a contiguous settlement where the inhabitants are characterized as having inadequate housing and basic services. Slums are an urban phenomenon and they represent an imbalance between migration into cities and economic growth within the city itself. Slums grow due to the population growth of slums or migration from rural areas to more developed areas by people looking to earn more through higher paying manual labor compared to the low-returns life of agriculture or changes within a city's economic structures which contribute to urban poverty. Nonetheless, a slum is often not recognized and addressed by the public authorities as an integral or equal part of the city; it is a contiguous settlement where the inhabitants are characterized as having inadequate housing and basic services.

Various definitions like the one given by 'Cities Alliance Action Plan' give an insight into this saying, "Slum are the neglected parts of cities where housing and living conditions are appallingly poor. Slums range from high-density, squalid central city tenements to spontaneous squatter settlements without legal recognition or rights, sprawling at the edge of cities.

Although Slums have varied definitions revolving more or less around the physical and psychological conditions, the Slum measurement has no definite dimensions. The enumeration of slums has never been stipulated in the mainstream monitoring mechanisms like national population censuses, demographic and health surveys and global surveys. Although some surveys provide proxies or related variables such as 'proportion of unauthorized housing' or











'proportion of squatters', the detailed analysis and measurement has not been in any form conducted. Some of the surveys including the participatory assessments generally provide only qualitative information on urban poverty. The quantitative measurement and the integration of qualitative and quantitative information and the analysis of both have more or less been evasive. In fact, the generic definitions of slums do not suggest definite means of measuring slums. Usually the general definitions meet the common perception of what a slum is, they do not associate with operational definitions that would enable one to ascertain whether or not a particular area is a slum.

Given this scenario, a more comprehensive all encompassing definition of slums is as important as addressing the problems of slums. A more universal and objective definition especially when the global measurement and MDG targets are involved is needed and efforts to propose a more 'quantitative' definition of slums need to be put in place, not only because of divergent opinions as to what constitutes the key determinants of slums, but because of several features which outline them. All the parameters need to be taken into account since Slums are too complex to define according to one single parameter and a slum in one city may be regarded as adequate in another city also the local variations among slums are too wide to define universally applicable criteria. Likewise, the 'area' influenced by the qualitative parameters defining the slums need to be considered through spatial analysis employing GIS and other modern satellite linked tools.

#### 1.2.2 Slum Definition Adopted for Tamil Nadu

Slum is a compact settlement of at least 20 households with a collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions.

#### 1.2.3 The Genesis of Slums

A review of the definitions used by national and local governments, statistical offices, institutions involved in slum issues and public perceptions reveals the following attributes of slums.

**Lack of basic services:**Lack of basic services is one of the most frequently mentioned characteristics of slum definitions worldwide. Lack of access to sanitation facilities and safe water sources is the most important feature, sometimes supplemented by absence of waste collection systems, electricity supply, surfaced roads and footpaths, street lighting and rainwater drainage.

**Substandard housing or illegal and inadequate building structures:** Many cities have building standards that set minimum requirements for residential buildings. Slum areas are associated with a high number of substandard housing structures, often built with nonpermanent materials unsuitable for housing given local conditions of climate and location. Factors contributing to a structure being considered substandard are, for example, earthen floors, mudandwattle walls or straw roofs. Various space and dwelling placement bylaws may also be extensively violated.

**Overcrowding and High Density:**Overcrowding is associated with a low space per person, high occupancy rates, cohabitation by different families and a high number of single-room units. Many slum dwelling units are overcrowded, with five and more persons sharing a one-room unit used for cooking, sleeping and living.

**Unhealthy Living Conditions and Hazardous Locations:** Unhealthy living conditions are the result of a lack of basic services, with visible, open sewers, lack of pathways, uncontrolled dumping of waste, polluted environments, etc. Houses may be built on hazardous locations or land unsuitable for settlement, such as floodplains, in proximity to industrial plants with toxic emissions or waste disposal sites, and on areas subject to landslip. The layout of the settlement may be hazardous because of a lack of access ways and high densities of dilapidated structures.

**Insecure Tenure; Irregular or Informal Structures:**A number of definitions consider lack of security of tenure as a central characteristic of slums, and regard lack of any formal document entitling the occupant to occupy the land or











structure as prima facie evidence of illegality and slum occupation. Informal or unplanned settlements are often regarded as synonymous with slums. Many definitions emphasize both informality of occupation and the noncompliance of settlements with land-use plans. The main factors contributing to noncompliance are settlements built on land reserved for non-residential purposes, or which are invasions of non-urban land.

Poverty and Social Exclusion: Income or capability poverty is considered, with some exceptions, as a central characteristic of slum areas. It is not seen as an inherent characteristic of slums, but as a cause (and, to a large extent, a consequence) of slum conditions. Slum conditions are physical and statutory manifestations that create barriers to human and social development. Furthermore, slums are areas of social exclusion that are often perceived to have high levels of crime and other measures of social dislocation. In some definitions, such areas are associated with certain vulnerable groups of population, such as recent immigrants, internally displaced persons or ethnic minorities.

**Minimum Settlement Size:** Many slum definitions also require some minimum settlement size for an area to be considered a slum, so that the slum constitutes a distinct precinct and is not a single dwelling. The experience of 'living in a slum', according to slum dwellers, consists of a combination of these multiple dimensions, not only one. Many slum areas may show only a few of these negative attributes, while the worst may have them all. The 'worst type of slum household' is prone to all of the above disadvantages, which, to an extent, also constitute some of the main obstacles that have to be overcome in realizing the right to adequate housing: one that has no services, has poorquality housing on fragile land, does not have secure tenure, and where the occupants are poor, marginalized and belong to a vulnerable group. Less badly affected households may carry one or more of these burdens.

# 1.3 Slum-free-city Action Plan:

Rajiv Awas Yojana (RAY) has been formulated by the Ministry of Housing and Urban Poverty Alleviation (MoHUPA) in pursuance of the Government's vision of a "Slum-free India". The scheme envisages a 'Slum-free India' with inclusive and equitable cities in which every citizen has access to basic civic and social services and decent shelter. It aims to achieve this vision by encouraging States/Union Territories to tackle the problem of slums in a definitive manner, by a multi-pronged approach focusing on:

- bringing all existing slums, notified or non-notified within the formal system and enabling them to avail of the same level of basic amenities as the rest of the town;
- redressing the failures of the formal system that lie behind the creation of slums; and
- tackling the shortages of urban land and housing that keep shelter out of reach of the urban poor and force them to resort to extra-legal solutions in a bid to retain their sources of livelihood and employment.

What is agreed is that slums, like poverty and secure tenure, are multidimensional in nature. Some of the characteristics of slums, such as access to physical services or density, can be clearly defined, and others, such as social capital, cannot. Even with well-defined indicators, measurement can be very problematic, and acceptable benchmarks are not easy to establish.

Rajiv Awas Yojana envisages that each State and Cities therein would prepare a State/City Slum-free Plan of Action. The Plan of Action considers both the up- gradation of existing slums and the action to prevent new slums. The basic aim of the assignment is to prepare Action plan for Slum Free City for Salem City under Rajiv Awas Yojna.











# 1.3.1 Broad Principles

The Slum Free City Plan of Action is based on the following broad principles:

- The first principle is of inclusion. This implies no-eviction unless there is no alternative and in such cases alternative locations, chosen in consultation with the concerned urban poor communities must be provided
- In-situ upgradation of slums is the preferred option. Slum Resettlement, if absolutely necessary, will be to the extent possible within the same ward/zone or the adjoining ward/zone to minimize adverse impacts on livelihoods and community assets and access to health and education facilities. Plans are to be prepared with the involvement of the people.
- > There should be no or minimum demolitions of incremental housing created by the residents of slum communities themselves.
- Resident led incremental housing to be facilitated through tenure regularisation, in-situ infrastructure extension and financing mechanisms. Incremental housing also creates rental housing in the existing low income settlements for those who prefer rental option.
- ➤ Beneficiary identification should be done following a participatory and transparent process. The list of beneficiaries will be verified.
- Community participation should be ensured in all the stages of SFCP i.e. pre-survey activities, including mapping, conduct of survey, development of slum redevelopment model, implementation and monitoring.
- The planning process aims at improvement in the living conditions and level of security of the urban slum dwellers. There should be universal provision of basic services like water supply and sanitation irrespective of land tenure and legal status.
- Linking this slum free city planning process with other urban poverty related programmes as well as the City Development Plans, City Sanitation Plans and Master Plans as may be the case.
- > Retaining livelihood linkages and home based economic activities in the slum redevelopment, upgradation and improvement.
- The slum-free city planning begins at ward or zone level exercise in which options for each slum in a ward or zone is decided to form ward or zone level plan. This is to ensure that slum dwellers within a ward or zone continue to live in the same area, which would promote heterogeneous neighbourhoods as well as continuation of residence-livelihood linkages.
- Rental housing is to be developed as an important component of the preventive strategy. \_ Total Station Survey needs to be conducted only in prioritized slums for the preparation of DPRs.

#### 1.3.2 Objectives and Scope of the Assignment

The goal of the task is to contribute improved planning, project formulation, management and implementation capacities of Client with accurate statistics and transparent methodology. This will also help in enhanced quality of life for the urban poor.

- (f) To create a detailed slum MIS covering all socio economic parameters.
- (g) To create a database on environmental infrastructure (roads, water supply, sewerage, drain & street lights) with scale, type and condition, service levels and community infra structure to enable planning for further developments.
- (h) To prepare GIS enabled drawings for the required thematic overlays.
- (i) The data so collected will strengthen the central statistical systems pertaining to the above areas and lead to a better understanding of the issues and prioritization and targeting of investments.
- (j) Development of a digitized, GIS based slum maps linking the MIS data on the above fields for effective planning, monitoring and O&M in all the slums in Salem.











# 1.3.2.1 Scope of Services:

Following are the detailed scope of works has been carried out by the consultant.

- (a) Prepare the base map from satellite data for the entire Salem
- (b) Identification of all slums (100 %) and demarking its accurate boundaries.
- (c) Conducting socio economic survey for identified slums in the prescribed format and to prepare a detailed slum MIS.
- 1.3.3 Topographical survey of prioritised slums using Total station, with geo-referencing, including survey of individual properties / dwelling units, environmental and social infrastructure and service levels.
  - (a) Collection and digitization of existing drawing / database from the dept and geo-reference integrate to prepare the GIS enabled map. The same need to be incorporated in the final GIS maps of slum.
  - (b) Prepare CAD drawings for the specified thematic outlays and update spatial data.
  - (c) Integrate non-spatial data with spatial data in GIS mode to generate a web based GIS slum information system.

Slum Free City Plan of Action (SFCPoA) for Salem has been prepared in consideration of revised Guidelines from RAY and with Ramky's experience working in slums. The detail assessment as per the requisite has been presented in the following chapters.











# **Chapter 2**: CITY PROFILE - SALEM

# 2.1 Location and Connectivity

alem town is located in the North Latitude between 11° 14' and 12° 53' and East Longitude between 77° 44' and 78° 50', surrounded by an amphitheatre of hills - the Nagarmalai in the north, the Jeragamalai in the south, the Kanjanamalai in the west and the Godumalai in the east. The N.H 68 from Ulundurpet to Salem and N.H 45 Connects from Chennai to Ulundurpet forming road connectivity. Salem has its railway staion and trains run from it all the major cities in tamil Nadu, Kerala and Karnataka.

**Exhibit 2-1 Location of Salem City** 













# 2.1.1 Connectivity:

**By Bus:**In Salem City, there are six major arterial roads: Omalur Road, Cherry Road, Saradha College Road, Junction Main Road, Gugai Main Road and Attur Road. Three important National Highways pass through/originate from Salem. NH 7 (Varanasi – Kanyakumari), NH 47 (Salem – Kanyakumari via Coimbatore, Kochi, Kollam), NH 68 (Salem – Ulundurpet).NH68 is the preferred route to travel from Salem to Chennai. All National Highways in four directions of

the City consist of four lanes. Other important roads that originated from the city are the state highways: SH168 (Yercaud Road) and SH18 (Tirupattur Road).

**By Rail:** Salem Junction is located in Suramangalam, 5 km to the west of Salem Town. The Salem Junction is well connected to major Indian cities like Chennai, Coimbatore, Bangalore, New Delhi, Mumbai, Howrah, Trivandrum, Hyderabad, Jaipur, Kollam, Rajkot, Indore, Ahmedabad, Jammu, Kanpur and Patna. Salem Town is the another important station located in town area in Virduchalam line.



By Air: Salem Airport is located on Salem-Bangalore Highway (NH-

7) in a place called Kaamalapuram near Omalur, which is about 20 km from the city. The nearest major airports are Tiruchchirapalli(135 km), Coimbatore (159 km), Bengaluru (202 km) and Chennai (338 km).

## 2.2 Historical Importance of the Town

The name 'Salem' appears to have been derived from the word 'Sela' or 'Shalya' which refers to 'the country around

the hills', as in the inscriptions. Local tradition claims Salem as the birth place of the Tamil poetess Avvaiyar. The city was surrounded by hills on all the sides, Nagarmalai to its north, Godumalai to its east, kanajanamalai to its west and Jeragamalai to its south. The kings who ruled Salem built many temples and great forts. Salem, an important district in Tamilnadu, was under the rule of the Cheran till 18th century.

After the Chera the district came into the rule of Hyder Ali. Hyder Ali, who is a very famous king during the ancient India, took over the parts of Salem and the hills around after the Mysore Madurai war.

Later during the British rule Salem was headed by many governors and colonels till it came under the rule of Lord Clive. Since the district is situated in the middle of many other districts like Coimbatore and also an easy access to Bangalore and other cities this place was considered to be very important.













# 2.2.1 Municipal Administration History

The Centurion Municipality was declared as the Salem City Municipal Corporation from June 1994. The Salem City Municipal Council celebrated its Centenary in 1966. Fittingly the Municipality was upgraded into a special grade Municipality with effect from April 1979. Salem City Municipal Limits were further extended by the inclusion of Suramangalam Municipality, Jarikondalampatty Town Panchayat, Kannankurichi Town Panchayat and 21 other Village panchayats with effect from April 1994, with an extent of 91.34 sq.km and a total population of 8,29,267 (2011 Census). Salem is the Head guarters of Salem District.

Salem Corporation consists of 60 wards categorized under 4 Zones namely Suramangalam Zone, Hasthampatty Zone, Ammapet Zone, Kondalampatty Zone. Each Zonal Office has its own Zonal Chairman and an Asst.Commisioner to take care of Zonal Activities.

# 2.3 Physiography

# 2.3.1 Topography

Salem district forms part of the upland plateau region of Tamil Nadu with many hill ranges, hillocks and undulating terrain with a gentle slope towards east. The Kariyaperumal Hill is situated within the city to the southwest. Thirumanimutharriver flows through the city, dividing it into two parts

The southern and western sides of the town are mostly plain agricultural lands with a number of irrigation tanks. The southern bank of Palarriver forms the northern boundary of the town. The district is rich in mineral deposits like Magnesite, Bauxite, Granite, Limestone, Quartz and Iron ore. The topography of the city is mostly plain having slope.

#### 2.3.2 Climate and Rainfall

The district receives the rain under the influence of both southwest and northeast monsoons. The northeast monsoon chiefly contributes to the rainfall in the district. The normal annual rainfall over the district varies from about 800 mm to 1600 mm. It is the minimum around Sankari (800 mm) in the southwestern part of the district. It gradually increases towards north, northeast and east and attains a maximum around Yercaud (1594.3 mm) in the northern part.

The district enjoys a tropical climate. The weatheris pleasant during the period from November to January. Mornings in general are more humid than the afternoons, with the humidity exceeding 75% on an average. In the period June to November the afternoon humidity exceeds 60% on an average. In the rest of the year the afternoons are drier, the summer afternoons being the driest.

Exhibit 2-2 Average Temperature & Rainfall in Salem



Source: http://www.worldweatheronline.com/Selam-weather-averages/Tamil-Nadu/IN.aspx



The hot weather begins early in March, the highest temperature being reached in April and May. Weather cools down progressively from about the middle of June and by December, the mean daily maximum temperature drops to 30.2°C, while the mean daily minimum drops to 19.2°C and 19.6°C in January in Salem and Mettur Dam respectively.

#### 2.3.3 Soil Condition

The soils of the district can be classified under 5 categories viz. clay soil, red loam, laterite soil, red sandy soil, sandy coastal Alluvium. Black soil is considered as most fertile. The red soil is equal to loam in productivity. In and around Attur, soil is black due to alluvial deposit with red sub soil. Of the above classification, red sandy and red loam soil constitutes the major area of about 59 percent in Salem district. However, saline and alkaline soils put together were vastly around Veerapandi, Pethanicknpalayam, Valapadi, Attur, Tharamangalam Blocks of Salem district.

# 2.4 Demography Characteristics

# 2.4.1 Population Growth

The town's population was 70,621in 1901, which registered almost twelve times increase i.e. 829,267 in 2011. The rural migration and small industry activity in the Salem town is parallel with the urban expansion, which became the dominant characteristic of the spatial organization. This characteristic can be seen both in the increase of urban population as well as at the territory occupied by these activities. The population in Salem has grown at a rate of 23 percent per decade between 1951 and 1971, the rate has been lower for the decade 1971 – 1981 at 17 percent and 14 percent per decade between 1991 and 2011.

Exhibit 2-3 Population Growth Trend in Salem\*

YEAR	SALEM TOWN / CORPORATION POPULATION	DECADE VARIATION	% OF DECADE VARIATION
1901	70621	-	-
1911	59153	(-) 11468	(-) 16.24
1921	52244	(-) 6909	(-) 11.68
1931	102149	49905	95.53
1941	129702	27553	26.97
1951	202335	72633	56
1961	249145	46810	23.13
1971	308716	59571	23.9
1981	361394	52678	17.06
1991	579951	218557	60.47
2001	672330	92379	15.92
2011	829267	156937	23.34

Source: Salem Local Planning Authority Records & Census 2011

#### 2.4.2 Sex-Ratio

There were 987 females for every 1,000 males, significantly above the national average of 929.A total of 79,067 were under the age of six, constituting 40,570 males and 38,497 females.











Exhibit 2-4 Sex-ratio in Salem

Source: Census 2011

# 2.4.3 Literacy

The average literacy of the city was 76.37%, compared to the national average of 72.99%. As per 2011 estimates, total literates in Salem city are 633,314 of which 336,422are males while 296,892are females.

955

975

#### 2.4.4 City Economy

#### **Work Force Participation:**

According to 2011 census, the city had a total of 215,747 households. There were a total of 332,147 workers: 1599 cultivators, 3040 main agricultural laborers, 32,597 in household industries, 278,892 other workers, 16,019 marginal workers, 165 marginal cultivators, 544 marginal agricultural laborers, 1937 marginal workers in household industries and 13,373 other marginal workers.

# Industrial Setup and Other Prominent Economic Activities in the City:

The Salem handloom industry is one of the most ancient cottage industries and producing quality sari, dothi and angavasthram out of silk yarn and cotton yarn. In the recent past, home furnishing items are also woven, mainly for export purposes. More than 75,000 handlooms are working and the total value of cloth produced per annum is estimated at Rs.5,000 crores. With more than 125 spinning mills, with modern weaving units and garment units Salem established itself as one of the major textile center in Tamil Nadu . The history of handloom and spinning mills dates back to pre-independence period in Salem. But till 1960's there were only less than 5 spinning mills. Private handloom weaving started thriving in the region along with the large scale cooperative sector handloom weaving and marketing units. Small scale hand dying units were started around the region to support the industry. Around 1980's the textile industry saw a massive growth. Many major spinning mills and waste spinning units came up into existence. Many Handloom societies and dying houses were established. New and increased number of Power Loom units were mushroomed in the places like Gugai, Ammapet, Attayampatti, Vennandur, Magudanchavadi, Rasipuram, KomarapalayamPallipalayam, Jalakandapuram and Ellampillai.

The Salem region also houses the Tamil Nadu largest number of Sago industries which are engaged in the production Sago Foods and Starch. In Salem District alone, 34000 hectares of land is under tapioca cultivation which is the raw material for the sago industries and there are 650 units engaged in tapioca processing. In and around Salem the yield











of tapioca is about 25-30 T/ha, highest in the World. National average is 19 T/ha and World average production stands at 10 T/ha. Hence it is called land of sago. In 1981, Salem Starch and Sago Manufacturers Service Industrial Cooperative Society Ltd(popularly called as SAGOSERVE) was established to promote the growth of sago industries. Nearly 80% of the national demand for Sago and Starch is being met by the Sagoserve.

Salem Steel Plant, a special steel unit of Steel Authority of India Ltd have their plant located in Salem which produces Cold rolled stainless steel and Hot rolled stainless steel/carbon steel. The plant can produce austenitic, ferritic, martensitic and low-nickel stainless steel in the form of coils and sheets with an installed capacity of 70,000 tonnes / year in Cold Rolling Mill and 1,86,000 tonnes / year in Hot Rolling Mill. In addition, the plant has country's first top-of-the-line stainless steel blanking facility with a capacity of 3,600 tonnes / year of coin blanks and utility blanks / circles. Expansion and modernisation of Salem Steel Plant is presently on. The plan envisages installation of Steel Melting and Continuous Casting facilities to produce 1,80,000 tonnes of slabs along with, expansion of Cold Rolling Mill complex, enhancing the capacity of Cold Rolled Stainless Steel Products from 65,000 TPA to 1,46,000 TPA and an additional Roll Grinding Machine for Hot Rolling Mill for increasing production to 3,64,000 TPA. The total project area is 1130 acres and cost of the project is 1780 crores.

Southern Iron & Steel Company Ltd (joint venture with JSW Steel) the first integrated steel plant of India at a cost of 2,235 Crores, located near Salem for the production of TMT corrosion resistant bars / alloy steels. The Salem plant is the largest special steel plant in India aims to develop the Kanjamalai, Kavuthimalai and Vediappanmalai iron ore mines in Tamil Nadu on receipt of requisite approvals to improve raw material security. This will facilitate expansion of production capacity to 2 MTPA. It will also allow the unit to diversify into the production of value-added products such as annealed, drawn and peeled steel. The plant is continuously working to develop special grades for critical automotive applications.

The Madras Aluminium Company Ltd (MALCO) is part of Vedanta Resources Plc, a London Stock Exchange listed FTSE 100 diversified metals and mining major. MALCO has a state-of-the-art, coal-based Captive Power Plant at the same location which was commissioned in the year 1999. In the year 2004 MALCO augmented its smelter capacity from earlier 25,000TPA to 40,000TPA. It generates 100 MW power from 4 units of 25MW each through power plant located at Mettur, Tamil Nadu. Around 90% of the entire power generated is exported; the rest is used internally. Efficient plant operations enabled MALCO to achieve a higher plant load factor since existence.

The region around Salem is rich in mineral ores. Salem has one of the largest magnesite, and bauxite and also iron ore deposits in India. It has many magnesite factories operated by private and public sectors such as Burn Standard & Co, Dalmia Magnesites and Tata Refractories, SAIL refractories. The Leigh Bazaar market in Salem is the biggest regional market for agro products. Narasus coffee one of the famous coffee in Tamil Nadu, Nandhi Dall Mills the oldest flour mill company, BSP refineries (Usha Refined Sunflower Oil) are other few companies have their presence in Salem.

Being one of the fastest growing tier II cities, the Tamil Nadu government and ELCOT are planning to establish an IT park in Salem covering about 160 acres (0.65 km2). SAIL is planning a Steel SEZ inside the Salem Steel plant covering about 250 acres (1.0 km2). There is an exclusive Electrical and Electronics Industrial Estate in the Suramangalam area of Salem city.[16] Coimbatore-Erode-Salem stretch was well known for Industries and Textile processings and it is announced as Coimbatore-Salem Industrial Corridor and further development works are carried by SIPCOT Linking Scheme.

Salem is well known for hundreds of gold ancillary and thousands of Silver ancillary units in the city. The industry is valued around 3000 crores business and nearly 1500 TPA of silver materials is exported from here. Salem is one of the largest producer of mangoes in the world. It is cultivated across the district and a unique variety of mango called Malgova which grows in the district only, Geographical Indication (GI) registration has been sought for Salem mango.











Mettur dam hydro and thermal power station is located about 50 km from Salem. It is governed my TNEB and is the main and one of the largest power generation in the state.

#### 2.4.5 Land Use Pattern

The extent of Salem town is 91.34 Sq.km. Of this the developed area is 4449 Hectares i.e. 48.71 percent of the total area and undeveloped area is 4684 hectares i.e. 51.29 per cent of the total area. The exhibit below shows the existing land use details of Salem City Corporation area.

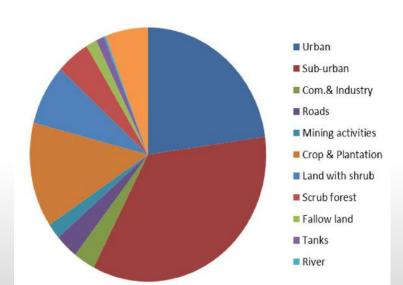


Exhibit 2-5 Existing Land Use Pattern of Salem City

The urban area of Salem has increased tremendously within the two decades. The overall percentage of increase within the decade is about 36.21% and 51.19% Urban and sub urbanrespectively. There has been an increase in major and minor roads with 90.68% in order to facilitate the urban with the state and central government initiation. There has been an increase in the area with 155.97% to dedicate to mining activities with a great demand of minerals in and around the district. The crop land and plantation part has been decreased with 29.41% as the result of migration of rural people, working community occupancy and educational institution due to the high land value and Government policy. There has been a decrease in Barren rocky surface and Fallow land with 18.11% and 65.21% with occupancy of educational institutions, and expansion and emergence of small scale industries. The breakup of land use has been presented hereunder.





# 2.4.6 Slum free City Plan

For consideration of social and economic growth, and the constitutional mandate, it is necessary to break away from past trends and practices and to take decisive action for inclusive urban development that acknowledges the presence of poor in cities, recognizes their contribution as essential to the city's functioning and redress the fundamental reasons for inequity that ties them down to poverty. Thus a comprehensive data on the city and the slums is essential for formulation of an effective and co-ordinated policy for improvement/ rehabilitation of the slum dwellers in the city. Unless this possibility of consciously taken note of, and corrective action initiated early, it leads to serious crippling of the productive capacities of a growing number of people by the denial of basic services, shelter and security, increasing inequity and retarding the GDP potential of urban areas.











# **Chapter 3**: DIAGNOSTIC ASSESSMENT OF SLUMS

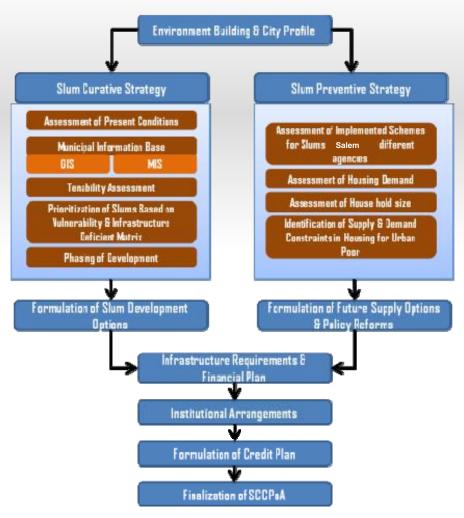
#### 3.1 Introduction

he estimation of number of slums and the slum population are very vital in planning their improvement. Authentic data base is a pre-requirement to assess the magnitude of the slum problems and undertake a formulation of plans, policies and schemes so that the potential beneficiaries are targeted in a meaningful manner. Developing a robust database on the slums and to get a definitive under standing of the sie of the problem and its distribution across the cities is critical for implementation of the proposal Rajiv Awas Yojana (RAY). The vision of slum free India can be achieved only on the foundations of sound plans based on sound data.

# 3.2 Methodology

The Slum Free City Plan of Action would include two strategies -improvement of existing slums (curative strategy) and prevention of formation of new slums (preventive strategy) by organizing supply of affordable housing for the urban poor. This section briefly lays out the broad methodology of the planning process listing out the various steps and activities that need to be undertaken along with the related outputs of each step.

Exhibit 3-1 Conceptual Framework for SFCPoA for Salem













Following steps are adopted for preparation of Slum Free City Plan of Action for Salem as per the RAY Guidelines provided Tamil Nadu Slum Clearance Board.

Steps	Sub steps
Step 1: Situation	Collection of basic data on the city, its housing situation and housing programme
Analysis	implementation, critical assessment of housing/ slum policies' implementation, Municipal
	profiles including financial situation etc. Stakeholder consultations at ward/ zone, city level to
01 01 ) 0 11	propose the idea of SFCP
Step 2(a): Curative	Preparation of Geo referenced city base map using high resolation of 0.5 m statellite
Strategy for Existing	image (Quick bird)
Slums	2. Tenability Analysis
	Slum Socio-economic survey
	4. Integration of spatial data & Socio-economic (including biometric) information at
	slum/city level to create slum MIS
	5. Formulation of Ward/City/Zone level Slum Redevelopment Plan
	6. Implementation Modalities
	7. Investment Projections
Step 2(b): Preventive	Inventory of vacant and underitised lands
Strategy for Future	Assessment of housing needs and demand – Existing & Future
Slums	Formulation of housing supply strategy
	4. Investment Projections
Step 3: Financing	3. Assessment of resource available for both Curative and Preventive Strategies - Gol,
Strategy	State and ULB level.
	Estimation of the resource gap between the investment projections and resources
<b>O</b>	that are/will be available
Step 4: Institutional	2. Provision of a framework for institutional arrangement with roles and responsibilities
Arrangement	at different stages of the SFCPoA
Step 5: Finalization	5. Prioritization of the slums
of Slum Free City	6. Indicative list of reforms to be undertaken and timelines for implementation
Plan of Action	7. Consolidation of the outputs from the various steps, processes and the curative
	and preventive strategies into the Slum Free City Plan of Action

# 3.3 Initiation of Preparation of SFCPoA

This stage involves two steps including environment building through stakeholder's consultative workshop and city profiling.

#### Activity 1: Environment Building through stakeholder's consultative workshop:

The SFCPoA involves extensive mapping processes and conducting surveys within slums and in the city in general. Further, as it is also an action plan, which needs the involvement of various stakeholders at the ULB, State and Regional level, it is important to conduct a series of meetings and workshops to ensure that these stakeholders are aware of the process and will engage actively with the SFCPoA preparation for the city.

Stakeholder's consultations have been organized in three stages initially with official meetings with officials of Salem Municipal Corporation, Executive Engineer, Assistant Executive Engineer, Assistant Engineers of Slum clearance board. Followed by city level stake holder consultations with all the officials, elected representatives and people involved in slum improvement. At this stage city level data has been assessed and discussed with sectoral officials such as housing, water supply, sanitation, solid waste management, fire fighting and slum clearance board. This stage











further proceeded with slum level consultations with the slum dwellers. After the consultation process, list of slums have been identified and then delisted which are already found to be developed with the help of TNSCB officials.

Exhibit 3-2 Snapshots of Stakeholder Meetings on 10.02.2014



# **Activity 2: City Profiling**

At this stage city profiling has been undertaken as presented in the previous chapter with city's economic, demographic, economic, housing, infrastructure and institutional profile.

# 3.4 Assessment of Present Status of Slums

Assessment of present status of slums have been carried out by survey of all slums - notified and non-notified; mapping of slums using the state-of-art technology; integration of geo-spatial and socio-economic data; and identification of development model proposed for each slum in Salem. To achieve these things, asystematic approach has been laid out which will be useful for various other developmental planning initiatives for the urban poor. Ramky's technical approach for generating Plan of Action (PoA) followed steps of slum mapping using satellite data, Total



Station Survey in preparing GISdatabase, MIS development of non-spatial data collected and integration of GIS with MIS.. The whole process could be summarized as per the Flow Chart below:

Identification of SlumPockets nthe City Ward Zone Wise Spatial - CIS Data Base Preparation Non-Spatial - MIS Preparation of Geo-SumLevel Master Plan extracts Secondary referenced base map Zonal Level **CDP**Extracts All SumBoundary WordLevel Land Values &etc. Land Cover & Land **GtyLevel** Husehold Surveys Value Primary **SlumSurveys** Hizardous Sites Livelihood Surveys Map &Ohers Integration of GS with MS Infrastructure Maps &Ohers Decision for SlumRedevelopment Model Redevelopment Relocation SlumFree CityPlan of Action

Exhibit. 3-3. Conceptual framework for curative strategy for SFCPoA

# 3.4.1 Identification of Slum Pockets Zone & Ward Wise

Salem city has been divided into 60 Municipal Wards and four zones. Almost all the wards consists of slumsthat constitute about 344 slums which are almost evenly distributed throughout the city. This report presents the survey results of about 246 slums which constitute about 18 % of the slum population of the city. The details of the remaining 98 slums are unavsailable due to non-occoperation of the people during the survey and house locked conditions. Exhibit 1 gives the distribution of the 247 slums in all the 60 wards of Salem city slum of which all are are non-notified slums. Please refer exhibit below for location of slums in Salem.

Exhibit 3-3 Zone Wise & Ward Wise Slums in Salem

S. No	Zone	Ward	Name of the slum	No. of House Holds	Total population
1	1	21	Achuanagar	49	181
2	1	1	Ambedkar odai	64	261
3	1	23	Ammasi nagar	112	415
4	1	20	Andipatti	62	263
5	1	22	Andipatti	578	1948
6	1	21	Anna nagar	33	400
7	1	19	Anthony puram odai	113	237



8	1	19	Appavu nagar	32	124
9	1	1	Arundhathiyar street w-1	170	661
10	1	18	Arundhathiyar st	22	82
11	1	2	Chinna ammapalayam	942	4085
12	1	1	Chinna mottur	91	345
13	1	28		64	
14	1	62	Gandhi nagar Gorikadu	76	279 327
15		21			
16	1	22	Indira nagar	188	499 346
17	1	2	Indra nagar	80 620	ı
			Jagirammapalayam		2252
18	1	23	Kallukuzi	21	212
19 20	1	1	Kamanayakampatty	198	1344
21	1	23	Kamaraja colony	135	472
	1	20	Kamarajstreet	36	140
22	1	21	Kabilar street	275	1098
23	1	24	Kandhampatty colony	201	752
24	1	24	Kandhampatti	159	646
25	1	21	Kattu sottan valavu	45	167
26	1	24	Konerikarai	86	348
27	1	25	Leigh bazzar odai	22	78
28	1	20	Majid street	58	787
29	1	22	Malangattan street	128	473
30	1	19	Mariamman koil st	144	545
31	1	21	MGR nagar	62	232
32	1	3	Molakaradu	72	283
33	1	1	Mottur	123	396
34	1	27	Mullah kadu	271	352
35	1	25	Muniyappan kovil st	243	909
36	1	27	Narayanapuram	195	688
37	1	3	Om shakthi nagar	47	174
38	1	25	Pallapatti	142	487
39	1	25	Pallapatty mariamman koil st	116	476
40	1	22	Pakrikaradu	19	85
41	1	18	Panankadu	236	858
42	1	20	Pandiyan street w-20	52	187
43	1	27	Pavender street	207	803
44	1	28	Periyar nagar	169	750
45	1	20	Periyar nagar	177	737
46	1	20	Periyar street	199	963
47	1	21	Periyar nagar	125	446
48	1	3	Perumal malai adivaram	111	440
49	1	25	Ravaneswar nagar	93	312
50	1	3	Sengal pettai	50	187
51	1	24	Senjikottai	85	312
52	1	28	Shevapet - (gunduchetti eri)	305	1122
53	1	22	Sivandhapuram	109	406
54	1	21	Sollampallam	243	879
55	1	23	Sugumar colony	98	392
56	1	26	Swamynathapuram	230	868
	1 '		- Strainghanaparam	1 200	











57	1	23	Thiruvakkaoundanoor	455	1831
58	1	3	Thiru v k nagar	28	106
59	1	27	Veeran nilam	70	265
60	1	20	Velaiyan gounder street	69	264
61	'	20	Volaryan godinaoi otroot		201
	1	21	Veerakaliyamman nagar	162	660
			Subtotal ( zone 1)	9367	36637
62	2	17	Alamarakkadu	93	358
63	2	5	Alagapuram	201	803
64	2	5	Alagapuram periyaputhur	43	185
65	2	16	Ambedkar street	10	42
66	2	8	Amman nagar	80	212
67	2	8	Ayyanar kovil street	105	271
68	2	17	Boyer street	102	823
69	2	6	Chinna kollapatti	278	1116
70	2	8	Chinna tirupathi	266	1050
71	2	12	Court road colony	46	197
72	2	29	Devangapuram	57	224
73	2	4	Dhideer colony	153	670
74	2	8	Gandhi nagar	126	339
75	2	16	Govinda goundar thottam	105	398
76	2	7	lyyanthirumaligai	123	306
77	2	6	Jallikadu	40	435
78	2	12	Johnsonpet east	823	2842
79	2	13	Johnsonpet west	392	1756
80	2	13	Johnsonpettai	262	697
81	2	7	Kalli kadu	127	517
82	2	16	Kattu valavu	85	267
83	2	4	Kuttai street	91	279
84	2	15	Mayor nagar	26	91
85	2	5	MGR nagar	58	256
86	2	5	Mittapudhur	199	752
87	2	8	Mookaneri adikarai	91	452
88	2	14	Mulvadi maakaan street	166	760
89	2	16	Nagammal thottam	14	47
90	2	5	Odacha karai	55	238
91	2	29	Pandiyarajan st	74	295
92	2	29	Periya kollapatty	112	432
93	2	2	Periya kollapatty	210	352
94	2	6	Periyar kollapatty(gandhi nagar new colony)	168	662
95	2	6	Periyar kollapatty (gandhi nagar old colony)	144	437
96	2	5	Pidari amman koil street	30	250
97	2	16	Pudur kallanguthur & anna nagar	352	1310
98	2	4	Ramakuttai	32	82
99	2	15	Ram nagar odai	182	734
100	2	14	Shankar nagar odai	37	123
101	2	4	South alagapuram	191	437
102	2	6	Thandhai periyar nagar	305	996
			Subtotal ( zone 2)	6054	22493











103	3	32	Aatroram street	67	277
104	3	9	Allikuttai boyer street	41	474
105	3	9	Allikuttai (mariyamman kovil street)	40	155
106	3	11	Anai meadu	33	109
107	3	32	Anai road	18	63
108	3	58	Annanagar	503	1865
109	3	37	Anna nagar w-37	58	220
110	3	10	Arundhathiyar street w-10	138	546
111	3	32	Arasamara pillayar kovil street	105	414
112	3	33	Athiyaman st	384	1492
113	3	37	Bharathi nagar	37	158
114	3	35	Bharathiyar steet	48	181
115	3	35	Carpet steet	94	383
116	3	9	Chottya goundar street	89	367
117	3	10	Desiya punaramaipu colony	161	594
118	3	43	Erumapalayam main road	55	203
119	3	42	Gandhi mahan street	194	854
120	3	37	Gandhi nagar	239	1043
121	3	11	Gopalchetty street	35	123
122	3	11	Gopal street	265	123
123	3	9	Goyya thoppu	140	557
124	3	35	Jothi merku street	54	231
125	3	35	Jothi east st	79	290
126	3	35	Jothi main road	285	1170
127	3	32	Kaasi muniyappan koil street	119	450
128	3	37	Kamarajar nagar colony	393	1706
129	3	33	Karaikinaru	167	631
130	3	44	Kasthuribhai street	490	2115
131	3	42	Kitchipalayam	11	34
132	3	44	Kitchipalayam	233	948
133	3	44	Kitchipalayam colony	167	625
134	3	37	Kumaragiripettai	98	412
135	3	41	Kunjaan kadu	334	1225
136	3	32	Majeeth street	77	361
137	3	35	Majid nilam	72	291
138	3	35	Market st	173	676
139	3	10	Masuthi nilam	476	1732
140	3	9	Mettu theru	20	75
141	3	36	Millitary road	49	168
142	3	37	Muvendar nagar	126	465
143	3	33	Muthavalliyakupatheru	125	509
144	3	37	Namamalai adivaram	248	982
145	3	36	Nanjampatti	557	2242
146	3	42	Narayana nagar	199	786
147	3	41	Nathimulla makkaan street	103	390
148	3	9	Nehru nagar	53	213
149	3	40	Pachapatti (north street)	567	2291
150	3	40	Pachapatti	855	3449
151	3	10	Pandian street w-10	50	202











152	3	39	Periya kenaru	776	2945
153	3	9	Pudu valavu	21	63
154	3	10	Puthu mariyamman kovil st	67	284
155	3	49	Putta machine	55	237
156	3	10	Railway vadaku street	102	449
157	3	35	Railway therku street	27	110
158	3	37	Ramanathapuram	184	724
159	3	37	Sakthi nagar w-37	49	155
160	3	37	Sanniyasi gundu	49	192
161	3	43	Sanyasi gundu extn	403	1340
162	3	9	Sengal anai	253	1250
163	3	37	Sengaliacharyakadu	225	865
164	3	44	SMC colony	597	2451
165	3	9	Swamy nagar	88	297
166	3	9	Thadhampatti	238	933
167	3	38	Thiyagi natesan st	598	2327
168	3	37	Vaithiudaiyarkadu	93	361
169	3	9	Val kadu	51	187
170	3	9	Valluvar colony	17	67
171	3	11	Vasagar salai	63	222
172	3	9	Venkatachalam colony	352	1226
			Subtotal ( zone 3)	13232	51555
173	4	49	Agathiyar street	68	270
174	4	49	Allikuttai colony	28	132
175	4	50	Ambedkar colony w-50	67	187
176	4	47	Ambedkar nagar w-47	89	374
177	4	51	Ambedkar street - jari kondalampatty - w-51	162	753
178	4	47	Ambedkar st	166	728
179	4	51	Ambedkar street	237	1003
180	4	58	Amman nagar	138	275
181	4	47	Andhipatti eari	336	1517
182	4	45	Attoram kilaku street w-45	64	216
183	4	45	Attoram vadaku street w-45	122	428
184	4	49	Avaiyar street	66	232
185	4	58	Chellakutti kadu	157	544
186	4	60	Chinnayan colony	41	313
187	4	50	Gandhi nagar	19	84
188	4	59	Indira nagar	149	234
189	4	58	Indra nagar	34	100
190	4	58	Jawaharlal street	197	725
191	4	50	K.p karadu thenpuram	225	970
192	4	50	Kp karadu vadapuram	388	1465
193	4	49	K.p.karaduroad(netthi medu)	60	211
194	4	56	Kaldepo	44	179
195	4	52	Kallankadu	160	666
196	4	50	Kaliyamman temple backside	86	331
197	4	49	Kannagi street	121	489
198	4	60	Kurinji nagar	288	1173
199	4	60	Madurai veeran kovil street	80	353











200	4	50	Maniyanur	68	258
201	4	46	Market street	38	137
202	4	55	Mettu street	29	121
203	4	55	Mettu kuruku street	72	237
204	4	53	Mogaboob nagar	289	1165
205	4	60	Moonangkaradu	479	1816
206	4	58	Moonangkaradu	61	212
207	4	46	Mungapadi st	193	740
208	4	48	Muniyappan kovil st	55	205
209	4	49	Muniyappan kovil street w-49	161	596
210	4	51	Muniyappan kovil street w-51	27	98
211	4	47	Murugan nagar	81	333
212	4	58	Muthu mariyamman kovil street w-58	128	508
213	4	51	Nadu st	19	60
214	4	48	Neimandi arunachala street ii	48	177
215	4	57	Nethaji street	129	513
216	4	60	Onpatham palzi	128	490
217	4	45	Panchathangi eari	671	2476
218	4	50	Panditha nehru street	138	504
219	4	53	Pension line 1 to 5 streets	317	1480
220	4	47	Pension line kuruku street	29	110
221	4	47	P g r line	130	490
222	4	58	Ponmanam nagar	53	188
223	4	53	Pudu trichy kilai road	84	313
224	4	59	Puratchi nagar	50	170
225	4	47	Ramalingaswamy koil street	241	952
226	4	59	Ramayan kadu	175	586
227	4	59	Robert ramasamy nagar	88	336
228	4	60	Sakthi nagar w-60	121	451
229	4	54	Shanmuga nagar	236	894
230	4	50	Shanmuga nagar	141	478
231	4	45	SMC line	113	524
232	4	46	Srirangan st	64	228
233	4	52	Srirangan kadu	281	1085
234	4	52	Sunnambukara street	141	534
235	4	55	Tagore street	114	406
236	4	60	Thalaimalai nagar	273	939
237	4	60	Thideer nagar	93	348
238	4	48	Tholkappier street	38	139
239	4	50	Uthirappan kadu	126	476
240	4	60	Utthukadu	65	236
241	4	53	Vadaku street	71	429
242	4	58	Valzi vaikal	120	471
243	4	53	Valluvar nagar-3	82	296
244	4	53	Valluvar street-2	83	296
245	4	60	Vedipukkal parai	139	615
246	4	53	Velupudu street	56	216
			Subtotal (zone 4)	9930	38284
			Grand total	38583	148969











With the help of TNSCB officials and corporators, slums have been identified. Total slum population (148969) of the corporation constitutes about 18 % of the total population of the Corporation in 2011. Distribution of the slums across the zones indicates that Zone III (Ammapet) has the highest share of slum population with 35 % followed by Zone 4 (Kondalampatty), Zone 1 -Suramangalam and Zone II -Hasthampatty with 26%, 24% and 15 % respectively.

The percentage share of ward wise slum distribution shows that Ward-9 has the highest number of slums of 16 Nos, followed by Ward-37 and Ward 60 with 12 and 10 no: of slums respectively The chart below represents the distribution of slums in each ward.

Zone wise slum population

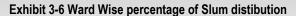
26%

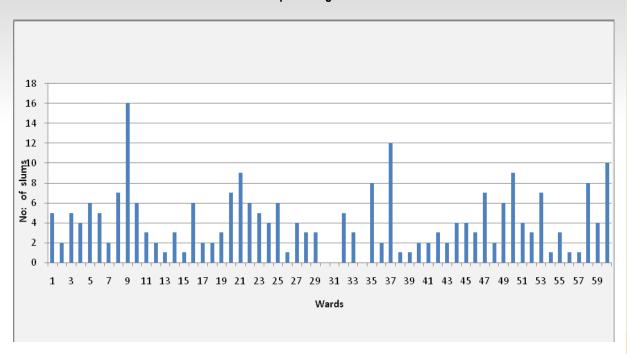
24%

2one 1.
Suramangalam
Zone 2.
Hasthampatty
Zone 3. Ammapet

Zone 4.
Kondalampatty

Exhibit 3-4 Zone Wise % of Slum Population







# 3.4.2 GIS Mapping

GIS for the slum surveys on the basis spatial and non-spatial data makes the planning process easier. Slums in Salem have not previously been mapped in detail and tend therefore to be considered as chaotic and disordered masses. In fact, they contain patterns of lanes, houses and facilities like any other part of the city. For the purposes of infrastructure provision, for example, it is essential to know the layout within a slum. GIS is useful for mapping the locations of the slums in relation to the city as a whole. In other cities, this has resulted in maps which clearly show the location of slum settlements across the urban area, in a form which can be easily updated and manipulated. GIS can also be used to analyze different aspects, for example service provision, on a city-wide level.

Briefly the following approach was adopted for preparation of spatial database. The satellite image was procured from NRSC for the study area was geo referenced to prepare a base map. Ward boundary map was procured from Municipal Office and the same was geo referenced with the satellite image. The base map was prepared in GIS environment showing ward boundaries and important place marks. It was not possible to draw the actual household boundaries from the cartosat-1 (2.5m) image therefore Total Station Survey was employed to take the exact locations of each household. A point theme was prepared. The agglomeration of these points gave an idea about the slum boundary and the same was polygonised to form slum boundary.

The detailed Land use map of the town was prepared from the Master Plan. The results from socio economic survey and matrix have been presented in the form of maps. The Maps were then linked to the individual slums. The various reports presented herein were generated using spatial query in GIS

# 3.4.3 Socio-Economic Surveys

An extensive socio-economic survey was conducted in the 246 slums precisely and conducted an elaborate survey of all households, which was uploaded into the Online Monitoring System for Slum, Household and Livelihoods and Online MIS solution provided by Ministry of Housing and Urban Poverty Alleviation, National Building Organization, Government Of India. The MIS has a very user friendly interface and after uploading the slum survey data it can generate various reports. The reports were downloaded and the survey data has been integrated on the GIS software

Exhibit 3-6 Snapshots of Survey team Conducting Surveys in Slums













# 3.4.4 Characteristics of Slum Population in Salem

#### A. Caste and Communities

There are altogether 38583 households accommodating 148969 persons in these slums. It is a common impression that the backward constituents of the society are cursed with large family along with low family and per capita incomes - the more backward the community, the worse its conditions. But the survey of these slums has shown that this is not always the case. Since castes and communities play an important role in India's public life, the survey has collected the relevant information on this aspect. We have classified the households as well on SC/ ST basis the following exhibits.

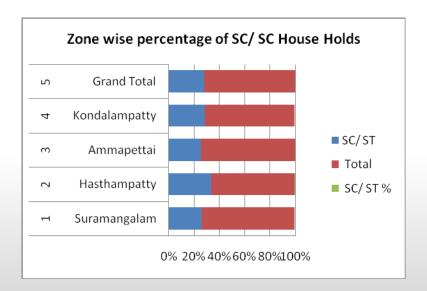


Exhibit 3-7 Zone wise distribution of SC/ST households

Exhibit 3-8 Zone wise presentation of Number of Households by caste

Zone No.	Zone	SC/ST	Total
1	Suramangalam	2957	9367
2	Hasthampatty	2987	6054
3	Ammapettai	4377	13232
4	Kondalampatty	3758	9930
	Grand Total	14079	38583

Source: Ramky's Assessment



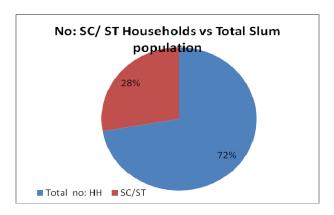


Exhibit 3-9 Number of Households by Caste& Community

Scheduled castes/ ST population constitute about 28 % of the total slum population. Zone wise assessment of caste structure, reveals that SC&ST category households are high in Hasthampatty (51.36 %) followed by Kondalampatty (39 %), and Ammapet and Suramangalam each at nearly 34 respectively.

# B. Economic Analysis of slums

At conceptual level a definition of poverty is involved both in the estimation of proportion of population living in poverty (a macro level estimate) and the identification of poor households for targeted delivery of various poverty alleviation programmes, and it is intellectually elegant to think of a common definition for both the exercises. Poverty is defined with reference to a poverty line which is the level of monthly per capita consumption expenditure considered to be a minimum necessary for living. In order to look at the relationship between estimation and identification of poor, the total number of BPL households were identified in Salem.

Overall about 52 % of the slum population fall under BPL as per the survery conducted. From the exhibit, it can be clearly seen that the no: of households falling under the BPL are as high as 80 -90 % in ward nos. 18, 26,28,29,33,36,39,41,43, 44,46,47 and 54.

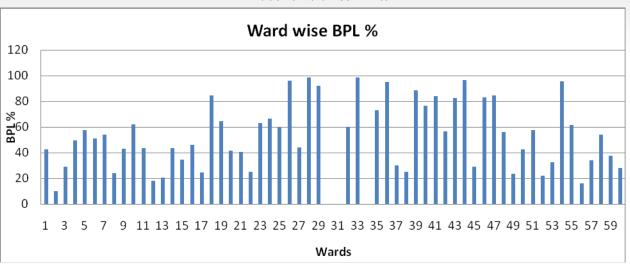


Exhibit 3-10 Wardwise BPL %











#### C. Women Headed households

UN-HABITAT's State of the World's Cities Report 2008-2009 shows that "in some countries, woman-headed households suffer disproportionately from inadequate housing in poor urban neighbourhoods." These relate to the lack of durable housing, insufficient living space, poor access to clean water, inadequate sanitation or insecure tenure. Even in cases where woman-headed households do not necessarily suffer worse conditions than other slum dwellers, shelter is a good place to start for empowering women. For women, the home is often not only a place to live, but where they raise their children and perhaps work to earn their living.

The United Nations Population Fund (UNFPA) states:

"Shelter is at the core of urban poverty: Much can be done to improve the lives of people through better policies in this area. Initiatives in this domain are particularly beneficial for poor women who are often burdened with the triple responsibilities of child rearing, management of the household and income earning. A roof and an address in a habitable neighbourhood is a starting point for poor urban people."

Government action is thus needed to increase avenues toward decent and affordable housing for poor urban women. These include housing finance schemes for low-income women. Such initiatives benefit women and their families and if

adopted on a large scale, they can also improve living conditions for the urban poor significantly and reduce the prevalence of slums. Initiatives to improve tenure security for women are also important.

This survey enumerated the no: of women headed households in the Slums as a measure of vulnerability parameter. The results indicate that in all the four zones the of women headed households contribute to about 10 -12 % of the total zonal population. The overall percentage of women headed household to the slum population is also about 12 % as can be seen from the exhibits 3.11.

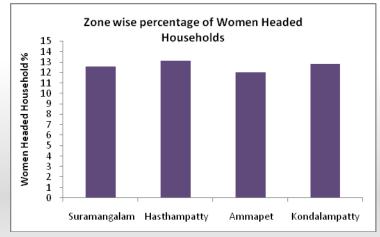


Exhibit.3.11.Percentage of women headed households

The percentage of women headed households varied as low as 2 % in Alagapuram Periyaputhur to 31 % in Kaasi Muniyappan Koil Street and Neimandi Arunachala Street II each and was the heighest in MGR nagar constituting about 34 %.

#### D. Fuel Used for Cooking:

The study also prompted us to make survey the other vulnerabilities of the slum people. The survey revealed that majority of the population still depends on the Non-conventional energy sources as means of energy to cook food.

Out of total house hold of 38583 about 27% of the population (10426 households) still use firewood as source of energy to cook food while as, 12% of the households are depend upon the Kerosene and 2% are depend upon the Charcoal.

As for as conventional sources concern a major  $59\ \%$  of the households are depend upon the

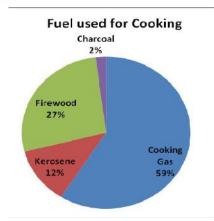


Exhibit.3.12.Percentage of women headed households











cooking gas and 2% on Electricity. The local people were indicating that gas connection is neither affordable nor is easy to get a connection due to most of the households lack of sufficient document proofs.

# 3.4.4.1 Housing &Infrastructure

While the benefits of improved water supply and sanitation, and its implications on the health and well-being of a population is well known, one-half of Salem population lacks access to adequatewater supply and sanitation. The access to water (individual connections) stands at roughly 9 percent and access to individual toilets at approximately 8 per cent, the figures are dismal, It musthowever, be mentioned that although access to individual water connections (which is ideal) in Salem slums is low, most slum households do have access to public sources of supply (public standpost taps/hand pumps/wells) within 500 meters of their dwellings (not within UNCHS Habitat's normof 200 meters). On the other hand, lack of access to sanitation (toilets) is a universal problem faced by the slum population across almost all slums in the city.

# A. Housing

Although these slums have been established for some decades, surprisingly a large proportion (70 %) of houses in this slum are Katcha fragile constructions, built with scrap or rejected materials reflecting the poverty of its residents. Normally for temporary stay katcha construction is preferred but here we find that most of the residents of the slums surveyed have been residents for several decades. 'Pucca' or good quality dwellings built with appropriate building materials are about 30 %.

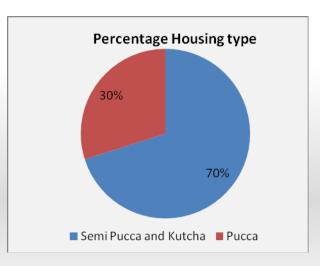


Exhibit 3-5 Classifications of house construction by type

S. NO	Ward no	Name of the slum	Kutcha & Semi Pucca	Pucca	Total House Holds
I.	Suram	angalam			
1	21	Achuanagar	44	5	49
2	1	Ambedkar odai	57	7	64
3	23	Ammasi nagar	96	16	112
4	20	Andipatti	59	3	62
5	22	Andipatti	422	156	578
6	21	Anna nagar	18	15	33
7	19	Anthony puram odai	62	51	113
8	19	Appavu nagar	20	12	32
9	1	Arundhathiyar street w-1	117	53	170
10	18	Arundhathiyar st	13	9	22
11	2	Chinna ammapalayam	2	940	942
12	1	Chinna mottur	74	17	91
13	28	Gandhi nagar	55	9	64











14 6	62 Gorikadu	53	23	76
	21 Indira nagar	121	67	188
	22 Indra nagar	65	15	80
	2 Jagirammapalayam	394	226	620
	23 Kallukuzi	19	2	21
	1 Kamanayakampatty	190	8	198
	23 Kamaraja colony	118	17	135
	20 Kamarajstreet	33	3	36
	21 Kabilar street	184	91	275
	24 Kandhampatty colony	149	52	201
24 2	24 Kandhampatti	88	71	159
25 2	. Kattu sottan valavu	43	2	45
	24 Konerikarai	84	2	86
27 2	25 Leigh bazzar odai	14	8	22
	20 Majid street	45	13	58
29 2	22 Malangattan street	104	24	128
	9 Mariamman koil st	96	48	144
31 2	21 MGR nagar	47	15	62
32	3 Molakaradu	61	11	72
33	1 Mottur	110	13	123
34 2	27 Mullah kadu	89	182	271
35 2	25 Muniyappan kovil st	155	88	243
36 2	27 Narayanapuram	51	144	195
37	3 Om shakthi nagar	34	13	47
38 2	Pallapatti	122	20	142
39 2	Pallapatty mariamman koil st	70	46	116
40 2	22 Pakrikaradu	19	0	19
41 1	8 Panankadu	150	86	236
42 2	20 Pandiyan street w-20	46	6	52
43 2	Pavender street	168	39	207
44 2	28 Periyar nagar	0	169	169
45 2	20 Periyar nagar	161	16	177
46 2	Periyar street	180	19	199
47 2	Periyar nagar	47	78	125
	3 Perumal malai adivaram	106	5	111
49 2	25 Ravaneswar nagar	71	22	93
50	3 Sengal pettai	42	8	50
51 2	24 Senjikottai	77	8	85
52 2	Shevapet - (gunduchetti eri)	218	87	305
53 2	2 Sivandhapuram	105	4	109
54 2	21 Sollampallam	217	26	243
55 2	23 Sugumar colony	81	17	98
	26 Swamynathapuram	85	145	230
	Thiruvakkaoundanoor	376	79	455
	3 Thiru v k nagar	25	3	28
59 2	7 Veeran nilam	50	20	70
	Velaiyan gounder street	65	4	69
61 2	21 Veerakaliyamman nagar	143	19	162
	Sul	ototal 6010	3357	9367











II.	Hastha	ampatty			
62	17	Alamarakkadu	83	10	93
63	5	Alagapuram	190	11	201
64	5	Alagapuram periyaputhur	36	7	43
65	16	Ambedkar street	3	7	10
66	8	Amman nagar	44	36	80
67	8	Ayyanar kovil street	61	44	105
68	17	Boyer street	86	16	102
69	6	Chinna kollapatti	208	70	278
70	8	Chinna tirupathi	161	105	266
71	12	Court road colony	45	1	46
72	29	Devangapuram	57	0	57
73	4	Dhideer colony	115	38	153
74	8	Gandhi nagar	74	52	126
75	16	Govinda goundar thottam	68	37	105
76	7	lyyanthirumaligai	75	48	123
77	6	Jallikadu	27	13	40
78	12	Johnsonpet east	465	358	823
79	13	Johnsonpet west	237	155	392
80	13	Johnsonpettai	2	260	262
81	7	Kalli kadu	111	16	127
82	16	Kattu valavu	75	10	85
83	4	Kuttai street	66	25	91
84	15	Mayor nagar	23	3	26
85	5	MGR nagar	32	26	58
86	5	Mittapudhur	109	90	199
87	8	Mookaneri adikarai	83	8	91
88	14	Mulvadi maakaan street	131	35	166
89	16	Nagammal thottam	14	0	14
90	5	Odacha karai	54	1	55
91	29	Pandiyarajan st	31	43	74
92	29	Periya kollapatty	94	18	112
93	2	Periya kollapatty	32	178	210
94	6	Periyar kollapatty(gandhi nagar new colony)	150	18	168
95	6	Periyar kollapatty (gandhi nagar old colony)	78	66	144
96	5	Pidari amman koil street	2	28	30
97	16	Pudur kallanguthur & anna nagar	266	86	352
98	4	Ramakuttai	29	3	32
99	15	Ram nagar odai	177	5	182
100	14	Shankar nagar odai	34	3	37
101	4	South alagapuram	103	88	191
102	6	Thandhai periyar nagar	219	86	305
Subtotal 3950 2104 6054					
III.	Amma			,	
103	32	Aatroram street	63	4	67
104	9	Allikuttai boyer street	29	12	41
105	9	Allikuttai (mariyamman kovil street)	24	16	40
106	11	Anai meadu	31	2	33











107	32	Anai road	15	3	18
108	58	Annanagar	399	104	503
109	37	Anna nagar w-37	57	1	58
110	10	Arundhathiyar street w-10	128	10	138
111	32	Arasamara pillayar kovil street	73	32	105
112	33	Athiyaman st	263	121	384
113	37	Bharathi nagar	32	5	37
114	35	Bharathiyar steet	41	7	48
115	35	Carpet steet	86	8	94
116	9	Chottya goundar street	54	35	89
117	10	Desiya punaramaipu colony	3	158	161
118	43	Erumapalayam main road	31	24	55
119	42	Gandhi mahan street	170	24	194
120	37	Gandhi nagar	187	52	239
121	11	Gopalchetty street	27	8	35
122	11	Gopal street	27	238	265
123	9	Goyya thoppu	106	34	140
124	35	Jothi merku street	51	3	54
125	35	Jothi east st	60	19	79
126	35	Jothi main road	179	106	285
127	32	Kaasi muniyappan koil street	101	18	119
128	37	Kamarajar nagar colony	249	144	393
129	33	Karaikinaru	82	85	167
130	44	Kasthuribhai street	348	142	490
131	42	Kitchipalayam	10	1	11
132	44	Kitchipalayam	215	18	233
133	44	Kitchipalayam colony	165	2	167
134	37	Kumaragiripettai	67	31	98
135	41	Kunjaan kadu	232	102	334
136	32	Majeeth street	70	7	77
137	35	Majid nilam	54	18	72
138	35	Market st	142	31	173
139	10	Masuthi nilam	463	13	476
140	9	Mettu theru	14	6	20
141	36	Millitary road	43	6	49
142	37	Muvendar nagar	103	23	126
143	33	Muthavalliyakupatheru	118	7	125
144	37	Namamalai adivaram	242	6	248
145	36	Nanjampatti	502	55	557
146	42	Narayana nagar	143	56	199
147	41	Nathimulla makkaan street	70	33	103
148	9	Nehru nagar	1	52	53
149	40	Pachapatti (north street)	301	266	567
150	40	Pachapatti	503	352	855
151	10	Pandian street w-10	50	0	50
152	39	Periya kenaru	442	334	776
153	9	Pudu valavu	17	4	21
154	10	Puthu mariyamman kovil st	53	14	67
155	49	Putta machine	53	2	55











156	10	Railway vadaku street	99	3	102
157	35	Railway therku street	25	2	27
158	37	Ramanathapuram	166	18	184
159	37	Sakthi nagar w-37	47	2	49
160	37	Sanniyasi gundu	40	9	49
161	43	Sanyasi gundu extn	239	164	403
162	9	Sengal anai	240	13	253
163	37	Sengaliacharyakadu	153	72	225
164	44	SMC colony	552	45	597
165	9	Swamy nagar	88	0	88
166	9	Thadhampatti	132	106	238
167	38	Thiyagi natesan st	329	269	598
168	37	Vaithiudaiyarkadu	51	42	93
169	9	Val kadu	45	6	51
170	9		2	15	17
		Valluvar colony	35		
171	11	Vasagar salai		28	63
172	9	Venkatachalam colony	327	25	352
	I/ a - a -l	Subtotal	9559	3673	13232
IV.		alampatty	C4	7	00
173	49	Agathiyar street	61	7	68
174	49	Allikuttai colony	0	28	28
175	50	Ambedkar colony w-50	41	26	67
176	47	Ambedkar nagar w-47	82	7	89
177	51	Ambedkar street - jari kondalampatty - w-51	114	48	162
178	47	Ambedkar st	128	38	166
179	51	Ambedkar street	205	32	237
180	58	Amman nagar	55	83	138
181	47	Andhipatti eari	6	330	336
182	45	Attoram kilaku street w-45	63	1	64
183	45	Attoram vadaku street w-45	110	12	122
184	49	Avaiyar street	53	13	66
185	58	Chellakutti kadu	105	52	157
186	60	Chinnayan colony	30	11	41
187	50	Gandhi nagar	15	4	19
188	59	Indira nagar	65	84	149
189	58	Indra nagar	27	7	34
190	58	Jawaharlal street	161	36	197
191	50	K.p karadu thenpuram	56	169	225
192	50	Kp karadu vadapuram	355	33	388
193	49	K.p.karaduroad(netthi medu)	56	4	60
194	56	Kaldepo	42	2	44
195	52	Kallankadu	154	6	160
196	50	Kaliyamman temple backside	81	5	86
197	49	Kannagi street	121	0	121
198	60	Kurinji nagar	238	50	288
199	60	Madurai veeran kovil street	62	18	80
,	1				
200	50	Maniyanur	60	8	68











		Subtotal	7526	2404	9930
246	53	Velupudu street	51	5	56
244	60	Vedipukkal parai	116	23	139
243	 53	Valluvar street-2	18	65	83
242	58 53	Valluvar nagar-3	36	46	82
241 242	53 58	Vadaku street Valzi vaikal	58 88	13 32	71 120
240	60	Utthukadu	63	2	65
239	50	Uthirappan kadu	119	7	126
238	48	Tholkappier street	36	2	38
237	60	Thideer nagar	84	9	93
236	60	Thalaimalai nagar	247	26	273
235	55	Tagore street	63	51	114
234	52	Sunnambukara street	129	12	141
233	52	Srirangan kadu	251	30	281
232	46	Srirangan st	52	12	64
231	45	SMC line	112	1	113
230	50	Shanmuga nagar	86	55	141
229	54	Shanmuga nagar	172	64	236
228	60	Sakthi nagar w-60	118	3	121
227	59	Robert ramasamy nagar	60	28	88
226	59	Ramayan kadu	125	50	175
225	47	Ramalingaswamy koil street	186	55	241
224	59	Puratchi nagar	34	16	50
223	53	Pudu trichy kilai road	69	15	84
222	58	Ponmanam nagar	41	12	53
221	47	P g r line	94	36	130
220	47	Pension line kuruku street	25	4	29
219	53	Pension line 1 to 5 streets	231	86	317
218	50	Panditha nehru street	134	4	138
217	45	Panchathangi eari	636	35	671
216	60	Onpatham palzi	113	15	128
215	57	Nethaji street	116	13	129
214	48	Neimandi arunachala street ii	36	12	48
213	51	Nadu st	14	5	19
212	58	Muthu mariyamman kovil street w-	89	39	128
211	47	Murugan nagar	61	20	81
210	51	Muniyappan kovil street w-51	20	7	27
209	49	Muniyappan kovil street w-49	131	30	161
208	48	Muniyappan kovil st	23	32	55
207	46	Mungapadi st	110	83	193
206	58	Moonangkaradu	3	58	61
205	60	Moonangkaradu	376	103	479
204	53	Mogaboob nagar	251	38	289
203	55	Mettu kuruku street	66	6	72
202	55 55	Mettu street	29	0	29

Source: Ramky's Analysis











# B. Water Supply

Water is needed in all aspects of life. Difficult to purify, expensive to transport and impossible to substitute,water is an indispensable element of life. Renewable fresh water is an increasingly scarce commodity and the amount of fresh water actually available to people is finite. The urban water supply and sanitation sector in the country is suffering from inadequate levels of service, an increasing demand-supply gap, poor sanitary conditions and deteriorating financial and technical performance.

As for as Salem city concern, the present water supply is a combination of various water supply schemes planned and executed at different stages as per envisaged demand. The town does not have a perennial source of water. Cauvery River passes through the city and provided water for the major part of the year. The major sources of water supply are Mettur Dam, bore wells/open wells. City has covered only 57% of the households with water connections with average water supply as 50 LPCD which is way beyond less than the norm of 135 lpcd.

### **Community Perception:**

The situation of water supply is very grim in slums of almost all wards. Merely 9 % of the households has individual piped water connection at home. About 65 % of the households depend upon the hand pump followed by 26% of the households on public taps. The maximum number of taps found to be in the slum Railway 'Therku street and Odakarai with 37% of the houses possessing inhouse tap connections. The poorest of water supply with no individual tap connections are found in slums namely Thideer Nagar, Srirangan Kadu, Agathiyar Street, Sivananthapuram etc.

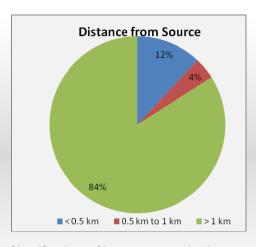


Exhibit 3-6 Classifications of house construction by type

Overall an overwhelming 90% of the households do not have access to piped watersupply and slums located on hills face extreme crisis of water due to high summer temperatures. People spend around 30 minutes to 2 hours averagely for fetching water, where they fetch waterfrom sources as close as 500 meters. Time spending increases significantly in summers, when people go to nearby areas for getting water. During summers, water is brought/fetched overeven over bi-cycles.

#### C. Sanitation

Even though the urbanization in India is among the lowest in the world, the urban water supply and sanitation sector in the country is suffering from inadequate levels of service, an increasing demand and supply gap. 4861 cities out of 5161 don't have sewerage network. Lack of treatment of wastewater is costing India \$15 billion in treating water-borne diseases. Salem city is no exception to the above scenario. In the absence of fully functional comprehensive sewage system in the city till date, the households mostly depend on septic tanks and soak pits for disposal of sewerage. Public sanitation facilities are much more at dismal stage with 50% of the toilet blocks are not functioning.











## **Community Perception:**

Access to sanitation is one of the most presseing problems in almost all slums in Salem. In most ofthe slums visited, women in particular expressed their dissatisfaction with the lack of access totoilets, forcing them to travel long distances at odd hours, for open defecation.

It is found that about 78 % of the households do not posses household toilets. Out of the 78 % without toilet facilities, predominent mode of sanitation is Open Defecation with 54 % followed by community septic tanks with 25%, Other modes with 16 %, Shared septic tank with 3 % and pay and use toilets with 2 %. Its interesting to note that although there are about 30 % houses are pucca strature, there are about only 23% of these have inhouse toilet facilities indicating the lesser size of the house.

## D. Road Infrastructure & Connectivity

The adequacy of roads is measured in terms of households connected to roads, street width and thesurface condition of the road. The study revealed that only 38 % of the roads in slum areas are motorable puccaroads.

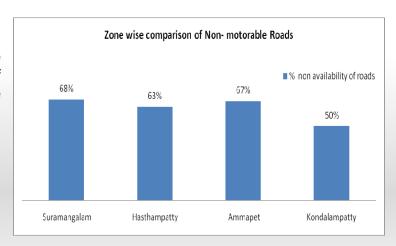


Exhibit 3-24 Ward Wise Type of Road Availability

On overall about 60% of the slums have less than 50% of the pucca roads. Average road width found to be only 3m. However the slums need to be relocated out of these need to be developed efficiently with following urban road development guidelines.

#### 3.4.5 Tenure Status

Land ownership or tenure status is one of the most important factor in planning process. As already presented above none of the slums have been notified by Municipal Corporation, thus, tenure status is expectedly poor.

Of all the slums have been assessed only 14.79% of the households hold patta and about 10.49% of the households possess the occupancy certificate. It is important to mention the importance of 1.69% of the TNSCB allotments and 19.70% of the households with rented accommodation from private parties and public agencies. All these pull together its observed that about merely 46% of the houses can be termed as with secured tenure. Most of the people per say about 52% of the households are encroached on public lands mostly nallas, lakes and roads. It's interesting to know that merely only onehouseholdhave been staying on encroached private land, who could be on temporary basis for construction purposes or other.











# 3.5 Tenability Analysis

# 3.5.1 Methodology for Assessment of Slum Tenability and Classification of Settlements

Slum tenability is an important pre-requisite for in-situ slum upgrading. The priory of the tenable slum shall be to upgrade them in-situ and to minimise relocation. The survey data analysis gives the information about tenable and non-tenable slums. For the purpose of the slum free city action plan, Tenability has defined as hereunder:

**Tenable Slums:** means all slums which are not located on hazardous locations suitable for human habitation and the land is not earmarked for any major public facilities and therefore it can be regularized in the same location.

**Semi Tenable Slums**: means slums which are located on land zoned for non-residential uses, as prescribed by the Master Plan.

**Non-Tenable slums:** means all slums which are on environmentally hazardous sites (like riverbank, pond sites, hilly or marshy terrains, etc.), ecologically sensitive sites (like mangroves, national parks, sanctuaries, etc.), and on land marked for public utilities and services (such as major roads, railway tracks, trunk infrastructure, etc.). The categorisation of the slums under tenability is as per the chart shown in the Exhibit below.

Environmental Vulnerability

Non-Conforming Users

Semi – Tenable Slums

Non Tenable

Non Tenable

Non Tenable

Non Tenable

Non Tenable

Non Tenable

Exhibit 3-257 Classification of Slums based on Tenability

# i. Settlements in areas that can be life-threatening

**Exhibit 3.26. Criteria for Tenability Assessment** 

Parameter	Definition
Flooding or Drainage corridors	
Flood Plain with risk of floods	Yes/No whether in zone
Along drain channels	Yes/No whether in canal
Low lying or drainage areas	In drainage congestion zone or low lying area with sever or moderate flooding
Airport Corridor	Distance (in m) from airport boundary, if within 1km of airport
Transit or Transport Corridors	
Along railway tracks	Distance (in m) from right of way i.e. within 500m of centre of track
Along major roads	Distance (in m) from centre right of way i.e. within 200m of highways and main arteries
In Airport area	Distance (in m) from right of way
Other Risk Conditions	
On old/ near land fill sites	Yes/No
Near urban dairies	Yes/No

# ii. Settlements in areas that are not life-threatening or on restricted land regulations

Exhibit 3-27 Criteria for defining not life threatening situation

Parameter	Definition
Forest Land	Yes/No
Land use inappropriate as per Master Plan or restricted zones such as heritage sites	Land use demarcation
Industrial areas	Industrial area demarcation
Surrounding development creates life threatening conditions	Land use demarcation
Lack of planned trunk infrastructure	Infrastructure maps
Spatial locations do not permit Development	Settlement is on strip land along a wall or road

On the basis of the tenability assessment, settlements will be classified as follows.

# **Exhibit 3-28 Tenability Assessment**

Group	Definition	Degree of Tenability
Tenable	Can be upgraded on-site	
Potentially Tenable	Can be made tenable for on-site upgrading	More Tenable: Requires very little improvement to become tenable as in a drain wall  Less Tenable: Requires more improvement to become tenable
Non-tenable settlements	Are in extremely lifethreatening conditions, cannot be upgrade on-site and need to be rehabilitated	











# b. Assessment of Land Tenure and Ownership

Tenure as defined in the RAY is the mode by which land/property is held or owned, or the set of relationships among people. The Land tenure is seen as legal ownership of land by an individual which defines her/his right to use the land for living, working, mortgaging, selling and transferring through inheritance. Land tenure is seen as key to slum upgrading and sustainable poverty reduction in the city. The survey carried out gives a broad understanding of the tenure status in the slums identified.

The land tenure analysis provides ownership status of lands on which the various slums have come up. This information shall be used for; (a) identifying settlements that can get tenure on existing sites; and (b) engaging with the particular land owning agencies to determine the possibility of insitu upgrading/tenure. Various agencies have their own set of rules and zoning restrictions based on safety/environmental considerations (as defined in the tenability parameters above) that may disallow on-site upgrading and /or settlement. Zoning restrictions of departments such as railways, airports, forests and their buffer zones shall be taken into consideration. SMC shall work closely with the concerned departments for best options for the development of slums on their lands.

#### c. Establish Authorized and Unauthorized Status

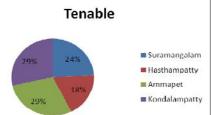
Slums have also been classified as authorized and unauthorized. Authorised slums are settlements with secure tenure. Authorized slums qualify for all municipal services however on a temporary and common basis. Residents of authorised settlements are also entitled to land, housing and other subsidies /grants from the local bodies in case of resettlement. Unauthorized settlements are often overlooked in delivery of municipal services, grants or subsidies. Services to these areas are always temporary and of lower quality than provided in authorised settlements. As per the survey conducted all the households have been found to be authorised (as they have secure tenure).

#### d. Assess Land Use Pattern

In-situ slum upgrading is also dependent on the designated land use for the land parcel (residential, commercial, institutional, industrial, heritage, right of way, green, etc.). The pattern of land use shall be determined for all slum locations by mapping these onto the city Master Plan. This will help decide which slums are in restricted zones. In Salem all the slums have been found tenable and insitu development shall be preferred.

#### 3.5.2 Tenability Analysis of Salem Slums:

It's quite obvious, that slum dwellers wouldn't choose their locality on the basis of tenable and untenable. It is indeed the locations of slums are always targeted in the sensitive areas and work wise adjacent areas where there will be no conflicts with the land lords. Analysis of the Salem Corporation Slums has been carried out as per the standard procedure described above in this section. The Exhibit below emphasizes the tenability of the Salem slums. Tenability assessment has been carried out in the consultation with the municipal corporators, TNSCB officials and interactions with the locals. There are 344 slums in Salem city constituting about 18 % of the population of the city. Of this 98 slums could not be surveyed for reasons like the slum being small, objection from the slum dwellers, slum developed etc.



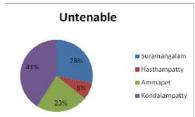


Exhibit 3-29 Distribution of Slums and households with reference to tenability











Exhibit 3-8Distribution of Untenable Slums with reference to Physical Location

	Tenable		Untenab	le	Total	
Zone	No .of Slums	НН	No. of Slums	НН	No.of Slums	НН
Suramangalam	50	8103	11	1264	61	9367
Hasthampatty	38	5649	3	405	41	6054
Ammapet	61	12294	9	938	70	13232
Kondalampatty	58	7466	16	2464	74	9930
Total	207	33512	39	5071	246	38583

Source: TNSCB Salem Divisional Office/Ramky Assessment

#### 3.5.3 Land Value

Land, as we all know is gaining prices at a very faster rate, and prices per squre feet are medium to high. It is almost impossible for a slum dweller to buy land and then construct a house. The prevailinggovt./market rates in the commercial and residential areas of wards of Salem are given below: The residential area has the approved rate of Rs. 450 to 1800 per square feet while as rates for commercial areaseems to be fixed at Rs.1200 to 4200per square feet.

Exhibit 3-30 Land Values in Salem

City	Residential	Commercial	Agriculture
Salem	Rs.450 to Rs.1800 Sq.ft	Rs.1200 to Rs.4200/Sq.ft	Rs.540000-1500000/Acre

Source: Ramky's Analysis

#### 3.5.4 MIS

An extensive socio-economic survey was conducted in the 246 surveyed slums precisely and conducted an elaborate survey of all households, which will be uploaded into the Online Monitoring System for Slum, Household and Livelihoods and Online MIS solution provided by Ministry of Housing and Urban Poverty Alleviation, National Building Organization, Government OfIndia. The MIS has a very user friendly interface and after uploading the slum survey data it can generate various reports. The GIS and MIS integration is in progress.



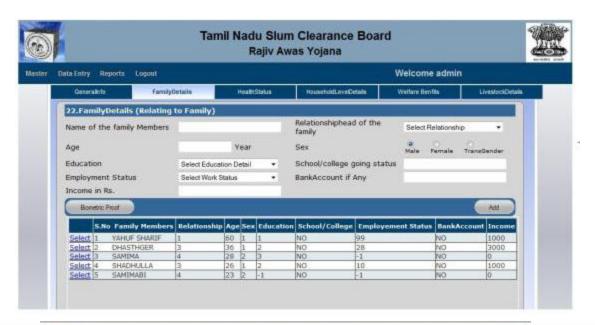


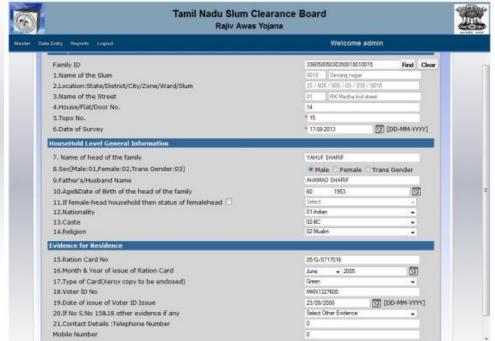






#### Exhibit 3-31 Detailed Household Survey Sheet in MIS















# Chapter 4 : DEFICIENCY MATRIX ANALYSIS & RANKING OF SLUMS

Sumboo, flattened oil drums, scrap wood, and mud. They live under constant threat of eviction and destruction of their homes. Streets are no more than narrow lanes filled with refuse that turns into a quagmire in the rain. Water is hard to get, usually of poor quality and many times more expensive than that which is piped into other parts of the city. The lack of sewers and drains means that household wastewater and sewage pools in the lanes and low lying areas, constantly exposing people to health hazards. There are no public schools, no hospitals or public health clinics, and people have little or no access to public services taken for granted in other parts of the city.

By all the above, it is easy to understand why always municipal administration want to make their slums disappear. Fortunately for administrators, there is good news with introduction of Rajiv Awas Yojana. Historical thought of slum disappearance from your own neighborhood have changed to improve the conditions as much as they will be part of your neighborhood. Its every ones responsibility as everyone is being benefited from the people who live in these slums. In this respect to understand which slum to be improved, upgraded or resettled RAY has given set of guidelines to formulate matrix on different parameters and streamline the development pattern. The deficiency matrix not only gives us an idea on what to do it also helps us to understand how to do and when to do.

The RAY guidelines stresses on the prioritization of slums on the basis of matrixes. The parameters used in matrix include housing, tenure, poverty and infrastructure. As per experiences and discussions with the local communities and this report is based on the matrix 3x3 which includes vulnerability of slums and infrastructure deficiency as main components.

It may be recalled that one of the objectives of this survey was to collect information on level of poverty in slum households, tenure status and infrastructure facilities existing in the slums. This information would be useful to arrange the slums in a 3x3 matrix in terms of selected elements/parameters like Below Poverty Line Population, SC&ST Population, deficiency in services & infrastructure and housing. This arrangement would help authorities to prioritize interventions in slums for improving the observed deficiencies. Such a prioritization is all the more necessary because funds are limited and the limited funds when deployed on pre determined priority areas and services will maximize benefits.

#### 4.1 Methodology

The prioritization of 246 slums assessed in a 3x3 matrix is based on preparation of Vulnerability Index Vs Infrastructure deficiency index matrix. The matrix 3x3 was developed on 8 parameters under two components as per exhibit listed below. Each parameter was given weights and the scores were generated. The weightages attached to each parameter is based on research and discussions with the communities.

#### Step1: Vulnerability Index:

Vulnerability assessment found to be necessary considering the slum development in Salem and its status as a medium sized city. Out of the several parameters such as women headed households, BPL population and etc., following four parameters have been chosen to assess vulnerability on the basis of communication with the local people and percentages their reflecting the overall community in their respective slums.











#### **Vulnerability Parameters**

- 1. % of Below Poverty Line families
- 2. % of Scheduled Caste & Scheduled Tribes Population
- 3. % of Women headed households
- 4. % of fuel used other than electricity and gas for cooking purposes(reflects economic, health and social parameters all alone)

#### **Scoring**

Each of the above parameter for each slum has been assessed on the one third of the average derived from difference between maximum and minimum. For example, in a slum BPL households varies from 30% to 90%, resulting a range of 90%-30% = 60%. The one third of the range is 20 has been added to minimum 30 to evolve first range(30 to 50) and further 30 for the second range(50 to 70) and further 30% for the third range(70 to 90) to reach maximum for that particular slum. The same methodology also used to find out the scores for the rest of the parameters. The example is best illustrated in the below exhibit.

Parameters	De	Total Score					
	1	2	3				
BPL Population	30 to 50	50 to 70	70 to 90	1			
SC&ST	30 to 50	50 to 70	70 to 90	1			
Population							
Women Headed	30 to 50	50 to 70	70 to 90	2			
HHS							
% of Fuel Used	30 to 50	50 to 70	70 to 90	1			
for Cooking							
	Total Score for Slum						

After assigning scores against each parameter to the slum, ranking is undertaken. For example the lowest score is 5 and the highest total score is 11, the range is 6 and one third of the range (6%3) is 2. Then the ranking is provided on the following manner.

Range for Total Score of Vulnerability Index	Rank
5 to 7 (Best Served)	1
8 to 9 (Partly Served)	2
10 to 11 (Not Served)	3

# **Step 2: Infrastructure Deficiency Index:**

The infrastructure deficiency in each slum has again been calculated on the basis of a few parameters which were derived from physical survey as well as group discussions with households in a slum and local councilor, teachers, ward members, etc. The parameters in this component includes % deficiency of in-house water supply connection as on priority weightage followed by % of pucca roads, % of households with in-house toilet facilities as given below. The percentage deficiency is measured on 5 point scale and total infrastructure score was generated by adding the scores of each parameter as specified above in vulnerability index.











All the parameters have been given scores in similar fashion specified in vulnerability index and the composite score of all the parameters has been calculated by adding the scores of each of the parameters. The composite score is taken as the infrastructure score. The composite score has thereafter been distributed in five parts taking the difference between the minimum and the maximum score and dividing it in three equal parts and each part has been assigned the final score ranging from 1 to 5. An illustration of the final scoring system of poverty level is given below.

Parameters		Total						
	1	2	3	4	5	Score		
% of HHs without individual	0 to 20	20 to 40	40 to 60	60 to 80	80 to 100	2		
water supply								
% of HHs without individual	0 to 20	20 to 40	40 to 60	60 to 80	80 to 100	3		
toilet facility								
% of HHs with Semi	0 to 20	20 to 40	40 to 60	60 to 80	80 to 100	4		
Pucca&Kutcha Houses								
% of HHs without	0 to 20	20 to 40	40 to 60	60 to 80	80 to 100	5		
motorablepucca road								
	Total	Total Score for Slum						

After assigning scores against each parameter to the slum, ranking is undertaken. For example the lowest score is 14 and the highest total score is 20, the range is 6 and one third of the range (6%3) is 2. Then the ranking is provided on the following manner.

Range for Total Score of Vulnerability Index	Rank
14 to 16 (Best Served)	1
17 to 18 (Partly Served)	2
19 to 20 (Not Served)	3

#### **Step 4: Matrix Formulation**

Slums are categorized as per the ranking provided for vulnerability index and infrastructure index to formulate a simple matrix as given below.

		Vulnerability			
		1	2	3	
Ð	1	v1i1	v2i1	v3i1	
Infrastructure	7	v1i2	v2i2	v3i2	
u	8	v1i3	v2i3	v3i3	

#### 4.2 Salem Slum Matrix

On the above specified methodology, Salem slums have been assessed on vulnerability index and infrastructure index to formulate the matrix.











# 4.2.1 Vulnerability Index Parameters

# A) BPL Family Analysis

In Salem, BPL families vary the lowest percentage of 0% in Amman nagar to the highest percentage of 100% in few other slums. Based on the lowest and highest percentages ranking was done as below.

Highest	100	
Lowest	1	Rank
Range	99	Ralik
One Third of Range	33	
1st Range	1 to 33	1
2 <sup>nd</sup> Range	34 to 67	2
3 <sup>rd</sup> Range	68 to 100	3

## B) SC & ST Population Analysis

On similar approach SC& ST Population ranking has been carried out. SC&ST population in Salem vary the lowest percentage of 0 to the highest percentage of 100. Based on the lowest and highest percentages ranking was done as below.

Highest	100	
Lowest	1	Rank
Range	99	Naiin
One Third of Range	33	
1st Range	1 to 33	1
2 <sup>nd</sup> Range	34 to 67	2
3 <sup>rd</sup> Range	68 to 100	3

# C) Women headed Families

Women headed families in Salem vary the lowest percentage of 9.6 to the highest percentage of 100. Based on the lowest and highest percentages ranking was done as below.

Highest	2	
Lowest	50	Rank
Range	48	Nalik
One Third of Range	16	
1st Range	2-16	1
2nd Range	17-33	2
3rd Range	34-50	3

# D) Houses based on cooking fuel

This particular parameter has been considered important to understand the scenario in slums at Salem. Although, this is more infrastructure parameter, it indicates not only economic backwardness but also social. Thus, this parameter











has been considered to assess the ranking. In Salem slums the percentage of households uses fuels other than gas and electricity ranges from 1% to 98%.

Highest	1	
Lowest	98	Rank
Range	97	Kalik
One Third of Range	32	
1st Range	1-32	1
2 <sup>nd</sup> Range	33-65	2
3 <sup>rd</sup> Range	66-98	3

The individual rankings from parameters BPL, SC&ST,Women headed families and houses based on cooking fuel are grouped together as a one parameter of in the slum. These parameters are considered as vulnerability index for the deficiency matrix.

Exhibit 4-1 Vulnerability Index Ranking for All Slums in Salem

S. No	Slum	SC / ST	BPL	Women Headed Households	Fuel	Total	Vulnearability Score
I.	Suramangalam	1			1		
1	Achuanagar	1	1	1	1	4	1
2	Ambedkar odai	3	1	1	2	7	2
3	Ammasi nagar	1	1	1	1	4	1
4	Andipatti	3	2	1	2	8	2
5	Andipatti	3	1	1	2	7	2
6	Anna nagar	3	1	2	1	7	2
7	Anthony puram odai	1	1	1	1	4	1
8	Appavu nagar	2	3	1	1	7	2
9	Arundhathiyar street w-1	3	1	1	1	6	1
10	Arundhathiyar st	2	3	1	1	7	2
11	Chinna ammapalayam	3	3	1	2	9	3
12	Chinna mottur	1	1	1	1	4	1
13	Gandhi nagar	3	3	1	1	8	2
14	Gorikadu	3	1	1	1	6	1
15	Indira nagar	1	1	1	3	6	1
16	Indra nagar	1	1	1	1	4	1
17	Jagirammapalayam	3	1	1	2	7	2
18	Kallukuzi	1	2	2	3	8	2











19	Kamanayakampatty	1	1	1	2	5	1
20	Kamaraja colony	1	1	1	2	5	1
21	Kamarajstreet	1	1	1	1	4	1
22	Kabilar street	2	3	1	1	7	2
23	Kandhampatty colony	3	1	1	2	7	2
24	Kandhampatti	3	3	1	1	8	2
25	Kattu sottan valavu	1	1	1	2	5	1
26	Konerikarai	1	3	2	2	8	2
27	Leigh bazzar odai	1	1	1	2	5	1
28	Majid street	1	3	1	3	8	2
29	Malangattan street	1	1	1	1	4	1
30	Mariamman koil st	3	3	1	1	8	2
31	MGR nagar	1	1	1	1	4	1
32	Molakaradu	1	1	1	1	4	1
33	Mottur	1	3	1	2	7	2
34	Mullah kadu	1	1	1	1	4	1
35	Muniyappan kovil st	1	1	1	2	5	1
36	Narayanapuram	1	3	1	1	6	1
37	Om shakthi nagar	1	1	1	2	5	1
38	Pallapatti	1	3	1	1	6	1
39	Pallapatty mariamman koil st	1	3	1	1	6	1
40	Pakrikaradu	1	1	1	2	5	1
41	Panankadu	1	3	1	1	6	1
42	Pandiyan street w-20	2	1	1	2	6	1
43	Pavender street	3	1	1	2	7	2
44	Periyar nagar	3	3	2	1	9	3
45	Periyar nagar	3	2	2	2	9	3
46	Periyar street	1	1	1	2	5	1
47	Periyar nagar	2	3	1	1	7	2
48	Perumal malai adivaram	1	1	1	2	5	1
49	Ravaneswar nagar	1	1	1	2	5	1
50	Sengal pettai	1	1	1	1	4	1
51	Senjikottai	1	3	2	1	7	2
52	Shevapet - (gunduchetti eri)	1	3	1	1	6	1
53	Sivandhapuram	1	1	1	1	4	1











54	Sollampallam	1	1	1	1	4	1
55	Sugumar colony	3	1	2	2	8	2
56	Swamynathapuram	1	3	1	1	6	1
57	Thiruvakkaoundanoor	1	3	2	1	7	2
58	Thiru v k nagar	3	3	1	2	9	3
59	Veeran nilam	1	3	2	1	7	2
60	Velaiyan gounder street	1	1	1	1	4	1
61	Veerakaliyamman nagar	1	1	1	1	4	1
11.	Hasthampatty						
62	Alamarakkadu	2	1	1	1	5	1
63	Alagapuram	1	3	2	1	7	2
64	Alagapuram periyaputhur	3	3	1	1	8	2
65	Ambedkar street	3	3	2	1	9	3
66	Amman nagar	2	1	1	3	7	2
67	Ayyanar kovil street	2	1	1	1	5	1
68	Boyer street	2	1	1	1	5	1
69	Chinna kollapatti	1	3	1	1	6	1
70	Chinna tirupathi	3	1	1	1	6	1
71	Court road colony	3	1	1	1	6	1
72	Devangapuram	1	3	2	3	9	3
73	Dhideer colony	3	1	2	3	9	3
74	Gandhi nagar	3	3	1	1	8	2
75	Govinda goundar thottam	1	3	1	1	6	1
76	lyyanthirumaligai	1	3	1	1	6	1
77	Jallikadu	1	3	1	2	7	2
78	Johnsonpet east	2	1	1	1	5	1
79	Johnsonpet west	3	1	1	2	7	2
80	Johnsonpettai	3	2	1	1	7	2
81	Kalli kadu	1	1	1	1	4	1
82	Kattu valavu	3	2	1	1	7	2
83	Kuttai street	1	1	1	1	4	1
84	Mayor nagar	1	3	1	1	6	1
85	MGR nagar	3	2	3	2	10	2
86	Mittapudhur	1	1	1	1	4	1
87	Mookaneri adikarai	3	1	1	2	7	2











- 00						6	
88	Mulvadi maakaan street	1	3	1	1		1
89	Nagammal thottam	2	3	1	1	7	2
90	Odacha karai	3	1	1	2	7	2
91	Pandiyarajan st	1	3	1	1	6	1
92	Periya kollapatty	2	3	2	1	8	2
93	Periya kollapatty	2	1	1	1	5	1
94	Periyar kollapatty(gandhi nagar new colony)	3	2	1	1	7	2
95	Periyar kollapatty (gandhi nagar old colony)	3	1	1	2	7	2
96	Pidari amman koil street	1	1	2	3	7	2
97	Pudur kallanguthur & anna nagar	3	2	1	2	8	2
98	Ramakuttai	1	1	1	1	4	1
99	Ram nagar odai	2	1	2	1	6	1
100	Shankar nagar odai	1	3	1	1	6	1
101	South alagapuram	3	3	1	1	8	2
102	Thandhai periyar nagar	1	1	1	1	4	1
//	7. Ammapet						
103	Aatroram street	1	1	1	1	4	1
104	Allikuttai boyer street	3	2	1	2	8	2
105	Allikuttai (mariyamman kovil street)	1	1	1	2	5	1
106	Anai meadu	1	2	1	1	5	1
107	Anai road	1	3	1	1	6	1
108	Annanagar	1	3	1	1	6	1
109	Anna nagar w-37	2	1	1	1	5	1
110	Arundhathiyar street w-10	3	1	1	1	6	1
111	Arasamara pillayar kovil street	1	1	1	1	4	1
112	Athiyaman st	1	3	1	1	6	1
113	Bharathi nagar	3	1	1	2	7	2
114	Bharathiyar steet	1	1	1	2	5	1
115	Carpet steet	3	2	1	2	8	2
116	Chottya goundar street	1	1	1	2	5	1
117	Desiya punaramaipu colony	3	3	1	1	8	2
118	Erumapalayam main road	1	2	1	1	5	1
119	Gandhi mahan street	3	1	1	3	8	2











120	Gandhi nagar	2	1	2	2	7	1
121	Gopalchetty street	1	3	1	2	7	2
122	Gopal street	1	3	1	1	6	1
123	Goyya thoppu	2	3	1	1	7	2
124	Jothi merku street	1	2	1	1	5	1
125	Jothi east st	1	3	1	1	6	1
126	Jothi main road	1	3	1	1	6	1
127	Kaasi muniyappan koil street	1	3	2	2	8	2
128	Kamarajar nagar colony	1	1	1	1	4	1
129	Karaikinaru	1	3	1	1	6	1
130	Kasthuribhai street	3	3	2	2	10	3
131	Kitchipalayam	2	3	2	2	9	3
132	Kitchipalayam	3	3	1	2	9	3
133	Kitchipalayam colony	3	3	1	3	10	3
134	Kumaragiripettai	1	2	1	1	5	1
135	Kunjaan kadu	1	3	1	1	6	1
136	Majeeth street	1	3	1	1	6	1
137	Majid nilam	1	1	1	3	6	1
138	Market st	1	3	1	1	6	1
139	Masuthi nilam	1	3	2	2	8	2
140	Mettu theru	1	3	1	2	7	2
141	Millitary road	1	3	1	1	6	1
142	Muvendar nagar	3	1	1	2	7	2
143	Muthavalliyakupatheru	1	3	2	1	7	2
144	Namamalai adivaram	1	3	1	1	6	1
145	Nanjampatti	3	3	1	1	8	2
146	Narayana nagar	2	3	2	2	9	3
147	Nathimulla makkaan street	1	3	2	1	7	2
148	Nehru nagar	1	1	2	1	5	1
149	Pachapatti (north street)	1	2	1	1	5	1
150	Pachapatti	1	3	1	1	6	1
151	Pandian street w-10	3	1	1	1	6	1
152	Periya kenaru	1	3	1	1	6	1
153	Pudu valavu	3	2	2	2	9	3
154	Puthu mariyamman kovil st	2	3	1	1	7	2











155	Putta machine	3	1		2	6	1
156	Railway vadaku street	2	1	1	3	7	2
157	Railway therku street	1	1	2	2	6	1
158	Ramanathapuram	1	1	1	1	4	1
159	Sakthi nagar w-37	2	1	1	1	5	1
160	Sanniyasi gundu	3	3	1	1	8	2
161	Sanyasi gundu extn	1	3	1	1	6	1
162	Sengal anai	1	1	2	2	6	1
163	Sengaliacharyakadu	3	1	2	2	8	2
164	SMC colony	3	3	1	1	8	2
165	Swamy nagar	3	1	1	2	7	2
166	Thadhampatti	1	3	1	1	6	1
167	Thiyagi natesan st	1	1	1	1	4	1
168	Vaithiudaiyarkadu	1	3	1	1	6	1
169	Val kadu	2	1	1	2	6	1
170	Valluvar colony	1	3	1	1	6	1
171	Vasagar salai	1	3	1	1	6	1
172	Venkatachalam colony	1	1	1	1	4	1
/۱	/. Kondalampatty						
173	Agathiyar street	3	1	1	1	6	1
174	Allikuttai colony	3	3	1	1	8	2
175	Ambedkar colony w-50	2	1	1	1	5	1
176	Ambedkar nagar w-47	3	2	1	3	9	3
177	Ambedkar street - jari kondalampatty - w-51	3	1	1	3	8	2
178	Ambedkar st	3	3	1	2	9	3
179	Ambedkar street	3	3	1	2	9	3
180	Amman nagar	1	2	1	3	7	2
181	Andhipatti eari	3	3	1	1	8	2
182	Attoram kilaku street w-45	2	1	1	2	6	1
183	Attoram vadaku street w-45	2	1	1	1	5	1
184	Avaiyar street	2	1	1	2	6	1
185	Chellakutti kadu	1	1	1	1	4	1
186	Chinnayan colony	3	2	1	2	8	2
187	Gandhi nagar	1	3	1	1	6	1
188	Indira nagar	1	1	1	1	4	1











189	Indra nagar	1	1	1	1	4	1
190	Jawaharlal street	2	1	1	2	6	1
191	K.p karadu thenpuram	2	1	1	2	6	1
192	Kp karadu vadapuram	2	3	1	1	7	2
193	K.p.karaduroad(netthi medu)	1	2	1	1	5	1
194	Kaldepo	3	1	2	2	8	2
195	Kallankadu	2	1	1	2	6	1
196	Kaliyamman temple backside	1	3	1	1	6	1
197	Kannagi street	3	1	1	1	6	1
198	Kurinji nagar	3	1	1	1	6	1
199	Madurai veeran kovil street	3	1	1	1	6	1
200	Maniyanur	2	3	1	1	7	2
201	Market street	1	3	1	1	6	1
202	Mettu street	1	1	2	1	5	1
203	Mettu kuruku street	1	1	1	1	4	1
204	Mogaboob nagar	1	1	1	1	4	1
205	Moonangkaradu	1	3	1	1	6	1
206	Moonangkaradu	1	3	1	1	6	1
207	Mungapadi st	1	3	1	1	6	1
208	Muniyappan kovil st	1	3	1	1	6	1
209	Muniyappan kovil street w-49	1	1	1	2	5	1
210	Muniyappan kovil street w-51	1	1	2	1	5	1
211	Murugan nagar	3	1	1	3	8	2
212	Muthu mariyamman kovil street w-58	1	1	1	2	5	1
213	Nadu st	1	3	2	1	7	2
214	Neimandi arunachala street ii	1	3	2	1	7	2
215	Nethaji street	1	2	1	2	6	1
216	Onpatham palzi	3	1	1	2	7	2
217	Panchathangi eari	1	1	1	2	5	1
218	Panditha nehru street	3	1	1	2	7	2
219	Pension line 1 to 5 streets	1	1	1	2	5	1
220	Pension line kuruku street	3	2	1	2	8	2
221	P G R line	3	3	2	1	9	3
222	Ponmanam nagar	1	1	1	2	5	1











223	Pudu trichy kilai road	1	1	1	1	4	1
224	Puratchi nagar	1	2	1	2	6	1
225	Ramalingaswamy koil street	2	3	1	1	7	2
226	Ramayan kadu	1	1	1	2	5	1
227	Robert ramasamy nagar	3	3	1	1	8	2
228	Sakthi nagar w-60	2	1	2	2	7	2
229	Shanmuga nagar	1	3	1	1	6	1
230	Shanmuga nagar	1	3	2	1	7	2
231	SMC line	3	3	2	1	9	3
232	Srirangan st	1	3	2	1	7	2
233	Srirangan kadu	1	1	1	1	4	1
234	Sunnambukara street	1	2	2	2	7	2
235	Tagore street	1	3	1	1	6	1
236	Thalaimalai nagar	1	1	1	2	5	1
237	Thideer nagar	1	1	1	2	5	1
238	Tholkappier street	1	1	1	2	5	1
239	Uthirappan kadu	1	3	1	1	6	1
240	Utthukadu	1	3	1	3	8	2
241	Vadaku street	1	1	1	3	6	1
242	Valzi vaikal	1	2	1	2	6	1
243	Valluvar nagar-3	2	3	1	1	7	2
244	Valluvar street-2	2	3	1	1	7	2
245	Vedipukkal parai	2	1	1	3	7	2
246	Velupudu street	2	1	1	1	5	1

The ranking has been defined with the following parameters as specified below.

Highest	10.0	
Lowest	4.0	Rank
Range	6.0	IXalik
One Third of Range	2	
1st Range	4.0 to 6.0	1
2 <sup>nd</sup> Range	7.0 to 8.0	2
3 <sup>rd</sup> Range	9.0 to 10.0	3











#### 4.2.2 Infrastructure Index Parameters

For the infrastructure index, there are seven parameters were considered. The above specified, vulnerability index procedure is followed for the ranking of the slums on the infrastructure.

Infrastructure Deficiency Index: The sum of scores Percentage of water supply deficiency in terms of unavailability of in house tap in the houses, percentage of absence of inhouse toilet facility, percentage of households without pucca road access as for infrastructure concern and percentage of households living in semi pucca & kutcha houses brought the infrastructure deficiency index.

#### i) Water Supply:

Water supply found to be one of the services served poorly across all the slums in Salem. The deficiency ranges from 1 percentage to 100 percentage. Based on the lowest and highest percentages ranking was done as below.

Highest	100	
Lowest	1	Donle
Range	33	Rank
One Third Fifth of Range		
1st Range	1-33	1
2 <sup>nd</sup> Range	34-66	2
3 <sup>rd</sup> Range	67-100	3

#### ii) Toilet Facilities:

For the most of the households Open defecation is the primary mode for sanitation purposes. The deficiency ranges from minimum 1 to maximum 100%. About more than 50% of the households depended upon open defecation for toilet facility. Based on the above ranking has been undertaken as below.

Highest	100.0	
Lowest	1	- Rank
Range	33	Naiin
One Third of Range		
1st Range	1-33	1
2 <sup>nd</sup> Range	34-66	2
3 <sup>rd</sup> Range	67-100	3

#### iii) Road Infrastructure Facilities:

The deficiency in road infrastructure varies from minimum 0% to 100%. Reflecting the statistics, there are couple of slums where road infrastructure found to be 100% and about 9 slums without any road facility.

		,
Highest	100.0	
Lowest	1	Rank
Range	33	Kalik
One Third of Range		
1 <sup>st</sup> Range	1-33	1
2 <sup>nd</sup> Range	34-66	2
3 <sup>rd</sup> Range	67-100	3











# iv) Housing Type

Type of the housing has been classified as Pucca, Semi-Pucca and Kutcha. The percentage of deficiency is based on the number of households in a slum with semi-pucca and kutcha housing. The deficiency range between 1% to 100%

Highest	100.0	
Lowest	1	Rank
Range	33	Naiin
One Third of Range		
1st Range	1-33	1
2 <sup>nd</sup> Range	34-66	2
3 <sup>rd</sup> Range	67-100	3

Exhibit 4-2 Infrastructure Deficiency Scores for All Slums in Salem

S. No	Slum	Without Individual Tap	Without Septic tank	Semipucca and Katcha			I. Matrix
I.	Suramangalam						
1	Achuanagar	3	3	3	1	10	3
2	Ambedkar odai	3	1	3	3	10	3
3	Ammasi nagar	3	1	3	1	8	2
4	Andipatti	3	3	3	2	11	3
5	Andipatti	3	1	3	1	8	2
6	Anna nagar	1	1	2	3	7	2
7	Anthony puram odai	2	1	2	2	7	2
8	Appavu nagar	2	2	2	1	7	2
9	Arundhathiyar street w-1	1	1	3	1	6	3
10	Arundhathiyar st	3	3	2	3	11	3
11	Chinna ammapalayam	1	2	3	1	7	2
12	Chinna mottur	3	1	3	1	8	2
13	Gandhi nagar	3	2	3	3	11	3
14	Gorikadu	3	1	3	2	9	2
15	Indira nagar	2	1	2	1	6	1
16	Indra nagar	3	2	3	2	10	3
17	Jagirammapalayam	3	1	2	2	8	2
18	Kallukuzi	3	2	3	3	11	3











19	Kamanayakampatty	3	3	3	3	12	3
20	Kamaraja colony	3	3	3	3	12	3
21	Kamarajstreet	3	1	3	1	8	2
22	Kabilar street	3	2	2	2	9	2
23	Kandhampatty colony	3	1	3	2	9	2
24	Kandhampatti	3	3	2	2	10	3
25	Kattu sottan valavu	3	1	3	2	9	2
26	Konerikarai	3	3	3	1	10	3
27	Leigh bazzar odai	3	1	2	1	7	2
28	Majid street	3	3	3	3	12	3
29	Malangattan street	3	1	3	1	8	2
30	Mariamman koil st	3	2	2	1	8	2
31	MGR nagar	3	2	3	1	9	2
32	Molakaradu	3	2	3	3	11	3
33	Mottur	3	3	3	2	11	3
34	Mullah kadu	2	1	1	1	5	1
35	Muniyappan kovil st	3	2	2	1	8	2
36	Narayanapuram	2	1	1	1	5	1
						12	
37	Om shakthi nagar	3	3	3	3		3
38	Pallapatti Pallapatty mariamman koil	3	3	3	3	12	3
39	st	3	3	2	3	11	3
40	Pakrikaradu	3	2	3	1	9	2
41	Panankadu	3	2	2	1	8	2
42	Pandiyan street w-20	3	1	3	1	8	2
43	Pavender street	3	1	3	2	9	2
44	Periyar nagar	3	1	1	1	6	1
45	Periyar nagar	3	3	3	2	11	3
46	Periyar street	3	2	3	3	11	3
47	Periyar nagar	2	1	2	1	6	1
48	Perumal malai adivaram	3	2	3	2	10	3
49	Ravaneswar nagar	3	2	3	1	9	2
50	Sengal pettai	3	3	3	2	11	3
51	Senjikottai	3	3	3	1	10	3
52	Shevapet - (gunduchetti eri)	3	2	3	1	9	2











53	Sivandhapuram	3	2	3	1	9	2			
54	Sollampallam	3	2	3	1	9	2			
55	Sugumar colony	3	1	3	1	8	2			
56	Swamynathapuram	3	2	2	1	8	2			
57	Thiruvakkaoundanoor	3	2	3	2	10	3			
58	Thiru v k nagar	3	2	3	3	11	3			
59	Veeran nilam	3	2	3	3	11	3			
60	Velaiyan gounder street	3	1	3	1	8	2			
61	Veerakaliyamman nagar	3	2	3	2	10	3			
II. Hasthampatty										
62	Alamarakkadu	3	1	3	3	10	3			
63	Alagapuram	3	3	3	1	10	3			
64	Alagapuram periyaputhur	3	3	3	1	10	3			
65	Ambedkar street	3	3	1	3	10	3			
66	Amman nagar	3	3	2	3	11	3			
67	Ayyanar kovil street	3	1	2	2	8	2			
68	Boyer street	3	3	3	3	12	3			
69	Chinna kollapatti	3	3	3	1	10	3			
70	Chinna tirupathi	3	1	2	2	8	2			
71	Court road colony	2	3	3	3	11	3			
72	Devangapuram	3	3	3	2	11	3			
73	Dhideer colony	3	3	3	1	10	3			
74	Gandhi nagar	3	1	2	1	7	2			
75	Govinda goundar thottam	2	1	2	1	6	1			
76	lyyanthirumaligai	3	1	2	1	7	2			
77	Jallikadu	3	1	3	3	10	3			
78	Johnsonpet east	3	2	2	2	9	2			
79	Johnsonpet west	3	2	2	2	9	2			
80	Johnsonpettai	2	2	3	1	8	2			
81	Kalli kadu	3	1	3	2	9	2			
82	Kattu valavu	3	1	3	2	9	2			
83	Kuttai street	2	1	3	2	8	2			
84	Mayor nagar	3	1	3	1	8	2			
85	MGR nagar	3	3	2	2	10	3			
86	Mittapudhur	3	2	2	1	8	2			











87	Mookaneri adikarai	3	3	3	3	12	3
88	Mulvadi maakaan street	3	3	3	1	10	3
89	Nagammal thottam	2	1	3	2	8	2
90	Odacha karai	1	3	3	3	10	3
91	Pandiyarajan st	1	1	2	2	6	1
92	Periya kollapatty	3	2	3	2	10	3
93	Periya kollapatty	2	1	1	1	5	1
94	Periyar kollapatty(gandhi nagar new colony)	3	2	3	2	10	3
95	Periyar kollapatty (gandhi nagar old colony)	2	1	2	2	7	2
96	Pidari amman koil street	3	3	1	1	8	2
97	Pudur kallanguthur & anna nagar	3	1	3	1	8	2
98	Ramakuttai	3	3	3	1	10	3
99	Ram nagar odai	3	2	3	2	10	3
100	Shankar nagar odai	2	2	3	1	8	2
101	South alagapuram	2	1	2	1	6	1
102	Thandhai periyar nagar	3	2	3	1	9	2
III.	Ammapet						
103	Aatroram street	3	1	3	2	9	2
104	Allikuttai boyer street	3	2	3	3	11	3
105	Allikuttai (mariyamman kovil street)	3	3	2	3	11	3
106	Anai meadu	3	1	3	2	9	2
107	Anai road	3	2	3	2	10	3
108	Annanagar	2	1	3	1	7	2
109	Anna nagar w-37	3	1	3	2	9	2
110	Arundhathiyar street w-10	3	2	3	2	10	3
111	Arasamara pillayar kovil street	2	1	3	3	9	2
112	Athiyaman st	2	2	3	1	8	2
113	Bharathi nagar	3	2	3	2	10	3
114	Bharathiyar steet	3	2	3	2	10	3
115	Carpet steet	3	2	3	2	10	3
116	Chottya goundar street	3	2	2	3	10	3
117	Desiya punaramaipu colony	3	1	1	3	8	2
118	Erumapalayam main road	2	2	2	1	7	2











119	Gandhi mahan street	3	2	3	2	10	3
120	Gandhi nagar	3	2	3		8	2
121	Gopalchetty street	2	1	3	2	8	2
122	Gopal street	2	1	1	2	6	1
123	Goyya thoppu	3	3	3	3	12	3
124	Jothi merku street	2	3	3	2	10	3
125	Jothi east st	3	2	3	2	10	3
126	Jothi main road	3	2	2	1	8	2
127	Kaasi muniyappan koil street	3	3	3	3	12	3
128	Kamarajar nagar colony	3	1	2	1	7	2
129	Karaikinaru	3	2	2	1	8	2
130	Kasthuribhai street	3	3	3	1	10	3
131	Kitchipalayam	3	3	3	2	11	3
132	Kitchipalayam	3	3	3	1	10	3
133	Kitchipalayam colony	3	3	3	3	12	3
134	Kumaragiripettai	3	3	3	1	10	3
135	Kunjaan kadu	2	1	3	1	7	2
136	Majeeth street	3	3	3	1	10	3
137	Majid nilam	3	2	3	2	10	3
138	Market st	3	2	3	2	10	3
139	Masuthi nilam	3	3	3	3	12	3
140	Mettu theru	3	2	3	3	11	3
141	Millitary road	3	2	3	1	9	2
142	Muvendar nagar	3	1	3	2	9	2
143	Muthavalliyakupatheru	3	2	3	1	9	2
144	Namamalai adivaram	3	1	3	1	8	2
145	Nanjampatti	3	3	3	2	11	3
146	Narayana nagar	3	3	3	1	10	3
147	Nathimulla makkaan street	2	1	3	2	8	2
148	Nehru nagar	1	1	1	2	5	1
149	Pachapatti (north street)	3	1	2	1	7	2
150	Pachapatti	3	2	2	1	8	2
151	Pandian street w-10	3	1	3	2	9	2
152	Periya kenaru	2	2	2	1	7	2
153	Pudu valavu	3	3	3	1	10	3











154	Puthu mariyamman kovil st	3	3	3	1	10	3
155	Putta machine	3	1	3	2	9	2
156	Railway vadaku street	2	3	3	3	11	3
157	Railway therku street	2	3	3	3	11	3
158	Ramanathapuram	3	2	3	1	9	2
159	Sakthi nagar w-37	3	1	3	1	8	2
160	Sanniyasi gundu	2	2	3	3	10	3
161	Sanyasi gundu extn	2	2	2	1	7	2
162	Sengal anai	3	3	3	3	12	3
163	Sengaliacharyakadu	3	3	3	2	11	3
164	SMC colony	3	3	3	1	10	3
165	Swamy nagar	2	3	3	2	10	3
166	Thadhampatti	3	2	2	2	9	2
167	Thiyagi natesan st	2	2	2	3	9	2
168	Vaithiudaiyarkadu	3	2	2	1	8	2
169	Val kadu	2	2	3	2	9	2
170	Valluvar colony	3	2	1	2	8	2
171	Vasagar salai	3	1	2	1	7	2
172	Venkatachalam colony	3	1	3	1	8	2
IV.	Kondalampatty						
173	Agathiyar street	3	2	3	3	11	3
174	Allikuttai colony	3	1	1	1	6	1
175	Ambedkar colony w-50	3	1	2	1	7	2
176	Ambedkar nagar w-47	3	2	3	1	9	2
177	Ambedkar street - jari kondalampatty - w-51	3	2	3	3	11	3
178	Ambedkar st	3	3	3	1	10	3
179	Ambedkar street	3	3	3	3	12	3
180	Amman nagar	1	2	2	2	7	2
181	Andhipatti eari	2	1	1	3	7	2
182	Attoram kilaku street w-45	3	2	3	1	9	2
183	Attoram vadaku street w-45	3	2	3	2	10	3
184	Avaiyar street	3	2	3	2	10	3
185	Chellakutti kadu	3	1	2	3	9	2
186	Chinnayan colony	3	3	3	3	12	3
187	Gandhi nagar	3	2	3	1	9	2











188	Indira nagar	2	1	2	1	6	1
189	Indra nagar	3	1	3	3	10	3
190	Jawaharlal street	3	2	3	2	10	3
191	K.p karadu thenpuram	3	2	1	2	8	2
192	Kp karadu vadapuram	1	1	3	3	8	3
193	K.p.karaduroad(netthi medu)	2	1	3	2	8	2
194	Kaldepo	3	3	3	3	12	3
195	Kallankadu	3	1	3	2	9	2
196	Kaliyamman temple backside	3	3	3	3	12	3
197	Kannagi street	3	1	3	2	9	2
198	Kurinji nagar	3	2	3	2	10	3
199	Madurai veeran kovil street	3	2	3	2	10	3
200	Maniyanur	3	3	3	1	10	3
201	Market street	2	1	1	1	5	1
202	Mettu street	3	2	3	2	10	3
203	Mettu kuruku street	3	1	3	1	8	2
204	Mogaboob nagar	3	2	3	2	10	3
205	Moonangkaradu	1	1	3	2	7	3
206	Moonangkaradu	3	2	3	1	9	3
207	Mungapadi st	2	1	2	3	8	2
208	Muniyappan kovil st	1	1	2	1	5	1
209	Muniyappan kovil street w- 49	3	2	3	2	10	3
210	Muniyappan kovil street w- 51	2	2	3	2	9	2
211	Murugan nagar	3	2	3	2	10	3
212	Muthu mariyamman kovil street w-58	3	2	3	3	11	3
213	Nadu st	3	2	3	1	9	2
214	Neimandi arunachala street ii	3	2	3	1	9	2
215	Nethaji street	3	2	3	2	10	3
216	Onpatham palzi	3	2	3	3	11	3
217	Panchathangi eari	3	3	3	3	12	3
218	Panditha nehru street	3	3	3	3	12	3
219	Pension line 1 to 5 streets	3	2	3	3	11	3
220	Pension line kuruku street	3	2	3	2	10	3











221	P g r line	3	2	3	1	9	2
222	Ponmanam nagar	3	1	3	3	10	3
223	Pudu trichy kilai road	3	1	3	1	8	2
224	Puratchi nagar	3	2	3	1	9	2
225	Ramalingaswamy koil street	2	2	3	1	8	2
226	Ramayan kadu	3	2	3	1	9	2
227	Robert ramasamy nagar	2	1	3	1	7	2
228	Sakthi nagar w-60	3	1	3	2	9	2
229	Shanmuga nagar	3	2	3	1	9	2
230	Shanmuga nagar	2	1	2	1	6	1
231	SMC line	3	2	3	1	9	2
232	Srirangan st	2	2	3	2	9	2
233	Srirangan kadu	3	1	3	1	8	2
234	Sunnambukara street	3	1	3	1	8	2
235	Tagore street	2	2	2	1	7	2
236	Thalaimalai nagar	3	2	3	2	10	3
237	Thideer nagar	3	3	3	2	11	3
238	Tholkappier street	3	2	3	2	10	3
239	Uthirappan kadu	1	1	3	2	7	2
240	Utthukadu	3	3	3	3	12	3
241	Vadaku street	3	3	3	3	12	3
242	Valzi vaikal	3	2	3	1	9	2
243	Valluvar nagar-3	2	1	2	1	6	1
244	Valluvar street-2	1	1	1	1	4	1
245	Vedipukkal parai	3	3	3	3	12	3
246	Velupudu street	3	1	3	2	9	2

Highest	12.0	
Lowest	04.0	Rank
Range	8.0	Naiin
One Third of Range	3	
1st Range	04.0 to 06.0	1
2 <sup>nd</sup> Range	07.0 to 09.0	2
3 <sup>rd</sup> Range	10.0 to 12.0	3











Based on the cumulative scores of the poverty index and infrastructure index, the slums are ranked in a 3x3 matrix. From the matrix, a diagonal traversal starts from right bottom to top left. Based on the traversal, the facilities in the slums are observed. Based on the observation preventive and curative measures are taken place.

**Exhibit 4-3 Overall deficiency Matrix** 

			Vulnerability	
		1	2	3
	-	v1i1 – 11 Slums	v2i1 – 6 Slums	v3i1 – 1 Slums
Infrastructure	2	v1i2 – 78 Slums	v2i2 – 31 Slums	v3i2 – 4 Slums
	3	v1i3 – 55 Slum	v2i3 – 47 Slums	v3i3 – 13 Slums

Exhibit 4-4 Vulnerability & Infrastructure Indexes for Matrix Formulation

S. No	Slum	Vulnerability	Infra	Matrix	T/UT	Households
I.	Suramangalam			•		
1	Achuanagar	1	3	V1 i3	Tenable	49
2	Ambedkar odai	2	3	V2 i3	Untenable	64
3	Ammasi nagar	1	2	V1 i2	Tenable	112
4	Andipatti	2	3	V2 i3	Tenable	62
5	Andipatti	2	2	V2 i2	Tenable	578
6	Anna nagar	2	2	V2 i2	Tenable	33
7	Anthony puram odai	1	2	V1 i2	Tenable	113
8	Appavu nagar	2	2	V2 i2	Tenable	32
9	Arundhathiyar street w-1	1	3	V1 i3	Tenable	170
10	Arundhathiyar st	2	3	V2 i3	Tenable	22
11	Chinna ammapalayam	3	2	V3 i2	Tenable	942
12	Chinna mottur	1	2	V1 i2	Tenable	91
13	Gandhi nagar	2	3	V2 i3	Untenable	64
14	Gorikadu	1	2	V1 i2	Untenable	76
15	Indira nagar	1	1	V1 i1	Tenable	188











16	Indra nagar	1	3	V1 i3	Untenable	80
17	Jagirammapalayam	2	2	V2 i2	Tenable	620
18	Kallukuzi	2	3	V2 i3	Tenable	21
19	Kamanayakampatty	1	3	V1 i3	Tenable	198
20	Kamaraja colony	1	3	V1 i3	Tenable	135
21	Kamarajstreet	1	2	V1 i2	Tenable	36
22	Kabilar street	2	2	V2 i2	Tenable	275
23	Kandhampatty colony	2	2	V2 i2	Tenable	201
24	Kandhampatti	2	3	V2 i3	Tenable	159
25	Kattu sottan valavu	1	2	V1 i2	Tenable	45
26	Konerikarai	2	3	V2 i3	Untenable	86
27	Leigh bazzar odai	1	2	V1 i2	Untenable	22
28	Majid street	2	3	V2 i3	Tenable	58
29	Malangattan street	1	2	V1 i2	Tenable	128
30	Mariamman koil st	2	2	V2 i2	Tenable	144
31	MGR nagar	1	2	V1 i2	Untenable	62
32	Molakaradu	1	3	V1 i3	Untenable	72
33	Mottur	2	3	V2 i3	Tenable	123
34	Mullah kadu	1	1	V1 i1	Untenable	271
35	Muniyappan kovil st	1	2	V1 i2	Tenable	243
36	Narayanapuram	1	1	V1 i1	Tenable	195
37	Om shakthi nagar	1	3	V1 i3	Tenable	47
38	Pallapatti	1	3	V1 i3	Tenable	142
39	Pallapatty mariamman koil st	1	3	V1 i3	Tenable	116
40	Pakrikaradu	1	2	V1 i2	Tenable	19
41	Panankadu	1	2	V1 i2	Tenable	236
42	Pandiyan street w-20	1	2	V1 i2	Tenable	52
43	Pavender street	2	2	V2 i2	Tenable	207
44	Periyar nagar	3	1	V3 i1	Tenable	169
45	Periyar nagar	3	3	V3 i3	Tenable	177
46	Periyar street	1	3	V1 i3	Tenable	199
47	Periyar nagar	2	1	V2 i1	Tenable	125
48	Perumal malai adivaram	1	3	V1 i3	Tenable	111
49	Ravaneswar nagar	1	2	V1 i2	Tenable	93
50	Sengal pettai	1	3	V1 i3	Tenable	50











51	Senjikottai	2	3	V2 i3	Tenable	85
52	Shevapet - (gunduchetti eri)	1	2	V1 i2	Untenable	305
53	Sivandhapuram	1	2	V1 i2	Tenable	109
54	Sollampallam	1	2	V1 i2	Tenable	243
55	Sugumar colony	2	2	V2 i2	Tenable	98
56	Swamynathapuram	1	2	V1 i2	Tenable	230
57	Thiruvakkaoundanoor	2	3	V2 i3	Tenable	455
58	Thiru v k nagar	3	3	V3 i3	Tenable	28
59	Veeran nilam	2	3	V2 i3	Tenable	70
60	Velaiyan gounder street	1	2	V1 i2	Tenable	69
61	Veerakaliyamman nagar	1	3	V1 i3	Untenable	162
II.	Hasthampatty	T	ı	ı	1	
62	Alamarakkadu	1	3	V1 i3	Tenable	93
63	Alagapuram	2	3	V2 i3	Tenable	201
64	Alagapuram periyaputhur	2	3	V2 i3	Tenable	43
65	Ambedkar street	3	3	V3 i3	Tenable	10
66	Amman nagar	2	3	V2 i3	Tenable	80
67	Ayyanar kovil street	1	2	V1 i2	Tenable	105
68	Boyer street	1	3	V1 i3	Tenable	102
69	Chinna kollapatti	1	3	V1 i3	Tenable	278
70	Chinna tirupathi	1	2	V1 i2	Tenable	266
71	Court road colony	1	3	V1 i3	Tenable	46
72	Devangapuram	3	3	V3 i3	Untenable	57
73	Dhideer colony	3	3	V3i3	Tenable	153
74	Gandhi nagar	2	2	V2 i2	Tenable	126
75	Govinda goundar thottam	1	1	V1 i1	Tenable	105
76	lyyanthirumaligai	1	2	V1 i2	Tenable	123
77	Jallikadu	2	3	V2 i3	Tenable	40
78	Johnsonpet east	1	2	V1 i2	Tenable	823
79	Johnsonpet west	2	2	V2 i2	Tenable	392
80	Johnsonpettai	2	2	V2 i2	Tenable	262
81	Kalli kadu	1	2	V1 i2	Tenable	127
82	Kattu valavu	2	2	V2 i2	Tenable	85
83	Kuttai street	1	2	V1 i2	Tenable	91
84	Mayor nagar	1	2	V1 i2	Tenable	26











85	MGR nagar	2	3	V2 i3	Tenable	58
86	Mittapudhur	1	2	V1 i2	Tenable	199
87	Mookaneri adikarai	2	3	V2 i3	Tenable	91
88	Mulvadi maakaan street	1	3	V1 i3	Untenable	166
89	Nagammal thottam	2	2	V2 i2	Tenable	14
90	Odacha karai	2	3	V2 i3	Tenable	55
91	Pandiyarajan st	1	1	V1 i1	Tenable	74
92	Periya kollapatty	2	3	V2 i3	Tenable	112
93	Periya kollapatty	1	1	V1 i1	Tenable	210
94	Periyar kollapatty(gandhi nagar new colony)	2	3	V2 i3	Tenable	168
95	Periyar kollapatty (gandhi nagar old colony)	2	2	V2 i2	Tenable	144
96	Pidari amman koil street	2	2	V2 i2	Tenable	30
97	Pudur kallanguthur & anna nagar	2	2	V2 i2	Tenable	352
98	Ramakuttai	1	3	V1 i3	Tenable	32
99	Ram nagar odai	1	3	V1 i3	Untenable	182
100	Shankar nagar odai	1	2	V1 i2	Tenable	37
101	South alagapuram	2	1	V2 i1	Tenable	191
102	Thandhai periyar nagar	1	2	V1 i2	Tenable	305
III.	Ammapet					
103	Aatroram street	1	2	V1 i2	Untenable	67
104	Allikuttai boyer street	2	3	V2 i3	Tenable	41
105	Allikuttai (mariyamman kovil street)	1	3	V1 i3	Untenable	40
106	Anai meadu	1	2	V1 i2	Untenable	33
107	Anai road	1	3	V1 i3	Untenable	18
108	Annanagar	1	2	V1 i2	Tenable	503
109	Anna nagar w-37	1	2	V1 i2	Tenable	58
110	Arundhathiyar street w-10	1	3	V1 i3	Tenable	138
111	Arasamara pillayar kovil street	1	2	V1 i2	Tenable	105
112	Athiyaman st	1	2	V1 i2	Tenable	384
113	Bharathi nagar	2	3	V2 i3	Tenable	37
114	Bharathiyar steet	1	3	V1 i3	Tenable	48
115	Carpet steet	2	3	V2 i3	Tenable	94
116	Chottya goundar street	1	3	V1 i3	Tenable	89
117	Desiya punaramaipu colony	2	2	V2 i2	Tenable	161











118	Erumapalayam main road	1	2	V1 i2	Tenable	55
119	Gandhi mahan street	2	3	V2 i3	Tenable	194
120	Gandhi nagar	1	2	V1 i2	Tenable	239
121	Gopalchetty street	2	2	V2 i2	Tenable	35
122	Gopal street	1	1	V1 i1	Tenable	265
123	Goyya thoppu	2	3	V2 i3	Tenable	140
124	Jothi merku street	1	3	V1 i3	Tenable	54
125	Jothi east st	1	3	V1 i3	Tenable	79
126	Jothi main road	1	2	V1 i2	Tenable	285
127	Kaasi muniyappan koil street	2	3	V2 i3	Tenable	119
128	Kamarajar nagar colony	1	2	V1 i2	Tenable	393
129	Karaikinaru	1	2	V1 i2	Tenable	167
130	Kasthuribhai street	3	3	V3 i3	Tenable	490
131	Kitchipalayam	3	3	V3 i3	Tenable	11
132	Kitchipalayam	3	3	V3 i3	Tenable	233
133	Kitchipalayam colony	3	3	V3 i3	Tenable	167
134	Kumaragiripettai	1	3	V1 i3	Tenable	98
135	Kunjaan kadu	1	2	V1 i2	Tenable	334
136	Majeeth street	1	3	V1 i3	Tenable	77
137	Majid nilam	1	3	V1 i3	Untenable	72
138	Market st	1	3	V1 i3	Tenable	173
139	Masuthi nilam	2	3	V2 i3	Untenable	476
140	Mettu theru	2	3	V2 i3	Tenable	20
141	Millitary road	1	2	V1 i2	Tenable	49
142	Muvendar nagar	2	2	V2 i2	Tenable	126
143	Muthavalliyakupatheru	2	2	V2 i2	Tenable	125
144	Namamalai adivaram	1	2	V1 i2	Tenable	248
145	Nanjampatti	2	3	V2 i3	Tenable	557
146	Narayana nagar	3	3	V3 i3	Tenable	199
147	Nathimulla makkaan street	2	2	V2 i2	Untenable	103
148	Nehru nagar	1	1	V1 i1	Tenable	53
149	Pachapatti (north street)	1	2	V1 i2	Tenable	567
150	Pachapatti	1	2	V1 i2	Tenable	855
151	Pandian street w-10	1	2	V1 i2	Tenable	50
152	Periya kenaru	1	2	V1 i2	Tenable	776











153	Pudu valavu	3	3	V3 i3	Tenable	21
154	Puthu mariyamman kovil st	2	3	V2 i3	Tenable	67
155	Putta machine	1	2	V1 i2	Tenable	55
156	Railway vadaku street	2	3	V2 i3	Untenable	102
157	Railway therku street	1	3	V1 i3	Untenable	27
158	Ramanathapuram	1	2	V1 i2	Tenable	184
159	Sakthi nagar w-37	1	2	V1 i2	Tenable	49
160	Sanniyasi gundu	2	3	V2 i3	Tenable	49
161	Sanyasi gundu extn	1	2	V1 i2	Tenable	403
162	Sengal anai	1	3	V1 i3	Tenable	253
163	Sengaliacharyakadu	2	3	V2 i3	Tenable	225
164	SMC colony	2	3	V2 i3	Tenable	597
165	Swamy nagar	2	3	V2 i3	Tenable	88
166	Thadhampatti	1	2	V1 i2	Tenable	238
167	Thiyagi natesan st	1	2	V1 i2	Tenable	598
168	Vaithiudaiyarkadu	1	2	V1 i2	Tenable	93
169	Val kadu	1	2	V1 i2	Tenable	51
170	Valluvar colony	1	2	V1 i2	Tenable	17
171	Vasagar salai	1	2	V1 i2	Tenable	63
172	Venkatachalam colony	1	2	V1 i2	Tenable	352
IV.	Kondalampatty	ı	T	ı	ı	
173	Agathiyar street	1	3	V1 i3	Tenable	68
174	Allikuttai colony	2	1	V2 i1	Tenable	28
175	Ambedkar colony w-50	1	2	V1 i2	Tenable	67
176	Ambedkar nagar w-47	3	2	V3 i2	Tenable	89
177	Ambedkar street - jari kondalampatty - w-51	2	3	V2 i3	Tenable	162
178	Ambedkar st	3	3	V3 i3	Tenable	166
179	Ambedkar street	3	3	V3 i3	Tenable	237
180	Amman nagar	2	2	V2 i2	Tenable	138
181	Andhipatti eari	2	2	V2 i2	Untenable	336
182	Attoram kilaku street w-45	1	2	V1 i2	Untenable	64
183	Attoram vadaku street w-45	1	3	V1 i3	Untenable	122
184	Avaiyar street	1	3	V1 i3	Tenable	66
185	Chellakutti kadu	1	2	V1 i2	Tenable	157
186	Chinnayan colony	2	3	V2 i3	Tenable	41











187	Gandhi nagar	1	2	V1 i2	Tenable	19
188	Indira nagar	1	1	V1 i1	Tenable	149
189	Indra nagar	1	3	V1 i3	Untenable	34
190	Jawaharlal street	1	3	V1 i3	Untenable	197
191	K.p karadu thenpuram	1	2	V1 i2	Tenable	225
192	Kp karadu vadapuram	2	3	V2 i3	Tenable	388
193	K.p.karaduroad(netthi medu)	1	2	V1 i2	Tenable	60
194	Kaldepo	2	3	V2 i3	Tenable	44
195	Kallankadu	1	2	V1 i2	Tenable	160
196	Kaliyamman temple backside	1	3	V1 i3	Untenable	86
197	Kannagi street	1	2	V1 i2	Tenable	121
198	Kurinji nagar	1	3	V1 i3	Tenable	288
199	Madurai veeran kovil street	1	3	V1 i3	Tenable	80
200	Maniyanur	2	3	V2 i3	Tenable	68
201	Market street	1	1	V1 i1	Tenable	38
202	Mettu street	1	3	V1 i3	Tenable	29
203	Mettu kuruku street	1	2	V1 i2	Untenable	72
204	Mogaboob nagar	1	3	V1 i3	Untenable	289
205	Moonangkaradu	1	3	V1 i3	Tenable	479
206	Moonangkaradu	1	3	V1 i3	Tenable	61
207	Mungapadi st	1	2	V1 i2	Tenable	193
208	Muniyappan kovil st	1	1	V1 i1	Untenable	55
209	Muniyappan kovil street w-49	1	3	V1 i3	Tenable	161
210	Muniyappan kovil street w-51	1	2	V1 i2	Tenable	27
211	Murugan nagar	2	3	V2 i3	Tenable	81
212	Muthu mariyamman kovil street w-58	1	3	V1 i3	Tenable	128
213	Nadu st	2	2	V2 i2	Tenable	19
214	Neimandi arunachala street ii	2	2	V2 i2	Tenable	48
215	Nethaji street	1	3	V1 i3	Tenable	129
216	Onpatham palzi	2	3	V2 i3	Tenable	128
217	Panchathangi eari	1	3	V1 i3	Untenable	671
218	Panditha nehru street	2	3	V2 i3	Tenable	138
219	Pension line 1 to 5 streets	1	3	V1 i3	Tenable	317
220	Pension line kuruku street	2	3	V2 i3	Tenable	29
221	P G R line	3	2	V3 i2	Tenable	130











		1				
222	Ponmanam nagar	1	3	V1 i3	Tenable	53
223	Pudu trichy kilai road	1	2	V1 i2	Untenable	84
224	Puratchi nagar	1	2	V1 i2	Untenable	50
225	Ramalingaswamy koil street	2	2	V2 i2	Tenable	241
226	Ramayan kadu	1	2	V1 i2	Tenable	175
227	Robert ramasamy nagar	2	2	V2 i2	Tenable	88
228	Sakthi nagar w-60	2	2	V2 i2	Tenable	121
229	Shanmuga nagar	1	2	V1 i2	Tenable	236
230	Shanmuga nagar	2	1	V2 i1	Tenable	141
231	SMC line	3	2	V3 i2	Untenable	113
232	Srirangan st	2	2	V2 i2	Tenable	64
233	Srirangan kadu	1	2	V1 i2	Tenable	281
234	Sunnambukara street	2	2	V2 i2	Tenable	141
235	Tagore street	1	2	V1 i2	Untenable	114
236	Thalaimalai nagar	1	3	V1 i3	Tenable	273
237	Thideer nagar	1	3	V1 i3	Tenable	93
238	Tholkappier street	1	3	V1 i3	Untenable	38
239	Uthirappan kadu	1	2	V1 i2	Tenable	126
240	Utthukadu	2	3	V2 i3	Tenable	65
241	Vadaku street	1	3	V1 i3	Tenable	71
242	Valzi vaikal	1	2	V1 i2	Tenable	120
243	Valluvar nagar-3	2	1	V2 i1	Tenable	82
244	Valluvar street-2	2	1	V2 i1	Tenable	83
245	Vedipukkal parai	2	3	V2 i3	Untenable	139
246	Velupudu street	1	2	V1 i2	Tenable	56

The slums placed in the deficiency matrix are tenable and untenable. Already a detailed analysis made based on the tenability. The deficiency matrix according to tenability has been given in the Exhibit 4-5 & Exhibit 4-6. From the tenability analysis, tenable slums deficiency classification has been carried out as shown in the Exhibit 4-7 and untenable slums deficiency classification is also carried out as shown in Exhibit 4-8.











**Exhibit 4-5 Deficiency Matrix for Tenable Slums** 

		1 2		3
ē	-	v1i1 – 9 Slums	v2i1 – 6 Slums	v3i1 – 1 Slums
Infrastructure	2	v1i2 – 67 Slums	v2i2 – 29 Slums	v3i2 – 3 Slums
<u>n</u>	3	v1i3 – 39 Slum	v2i3 – 41 Slums	v3i3 – 12 Slums

Exhibit 4-6 Deficiency Matrix for Untenable Slums

		Vulnerability				
		1	2	3		
e.	1	v1i1 – 2 Slum	v2i1 – 0 Slums	v3i1 – 0 Slums		
Infrastructure	2	v1i2 – 11 Slums	v2i2 – 2 Slums	v3i2 – 1 Slums		
Ē	3	v1i3 – 16 Slum	v2i3 – 6 Slums	v3i3 – 1 Slums		









# Exhibit 4-7 Slum Distribution Based on Tenable Deficiency Matrix

V1i1 9 Slums could be delisted with minor improvements in the infrastructure and housing conditions.	V2i1 In 6 Slums considerable developments on infrastructure are required and livelihood of the slum dwellers may be improved to access all amenities, similar to the urban people.	V3i1 In 1 Slum considerable developments on infrastructure are required and livelihood of the slum dwellers may be improved to to have better infrastructure amenities
V1i2 About 67 slums, considerable developments to be needed on livelihood of the slum dwellers and the infrastructure may be further improved to have better infrastructure amenities	V2i2 For about 29 slums, there is moderate attention needs to be given for improving the infrastructure of the slum and livelihood of the slum dwellers.	V3i2 For 3 Slums the livelihood of the slum dwellers needs to be improved by providing skill development Programmes to have better employment and also an immediate attention needed for improvement of theinfrastructure of the slum.
V1i3 About 39 slums, need an immediate measureto be taken to improve infrastructure facilities	V2i3 For 41 slums the livelihood of the slum dwellers needs to be improved by skill development programmes and provide pathway to get the better employment, and also attention needed for infrastructure of the slum.	V3i3 For 12 slums an immediate attentionneeds to be given for In situ-slum redevelopment

# Exhibit 4-8 Slum Distribution Based on Untenable Deficiency Matrix

V1i1 2 Slum need to be relocated with provision of infrastructure and housing they are equipped with as present	V2i1  None of the slums are falling in this category.	V3i1  None of the slums are falling in this category.
V1i2 About 11 slums need to be relocated with addressing livelihood improvement programs.	V2i2 2 slums need to relocated with moderate attention towards livelihood and infrastructure improvement	V3i2  1 slum need to be relocated with moderate attention towards improvement of livelihood and significant attention towards improvement of infrastructure
V1i3 For 16 slums livelihood improvement programs to be initiated immediately before relocating the slums in the next phase.	V2i3 About 6 slums need to be relocated with significant attention towards livelihood and moderate attention towards infrastructure.	V3i3 1 slum need to be relocated with significant attention towards improvement of livelihood and infrastructure.











# 4.3 Stakeholders Consultative Meeting

The tenability analysis, the deficiency matrices, the list of slums and the development options were discussed with the community. The City Mayor, the Commisioner and Ward Counsellors were present for the meeting. The representatives of the community were encouraged to attend the meeting. The stakeholders consultative meeting was held on 10/02/2014 at A.M.R. Hotel, Salem. The views of the community were taken into account and the SFCPoA modified.

Exhibit 4-9 Stakeholder Meetings on 10.02.2014























# Chapter 5 : Slum Development, Prevention Strategy and Implementation Plan

## 5.1 Slum Development and Curative Strategy

s envisaged by the Government of India, the identified cities under RAY shall become slum free infuture. The city would use the following principles and a broad and comprehensive range of optionsand solutions to achieve this goal.

# 5.1.1 Principles of Upgrading Action Plan

Five key principles for Slum Prevention Strategy will be:

- Upgrade on-site and minimize relocation of families;
- Provide tenure in all tenable sites and facilitate self-investments by poor in their own housing and upgrading;
- Preserve existing investments by residents to reduce demand on SMC resources and rapid scale up to reach larger numbers;
- ➤ Include people in the planning, implementation, financing and maintenance of services;
- > Connect families legally to service and enable them to contribute for connections and user fees, etc.; and
- Reduces overall the subsidy by increasing slum dwellers own investment in housing upgrading based on affordability.

Ramky 's strategy for slum upgrading shall therefore focus on:

#### 5.1.2 Provisioning of Secure Land Tenure

Land tenure is legal ownership of land by an individual. Security of land tenure is the level of confidence a holder has with regard to her/his right to use the land/house for living, working, upgrading, mortgaging, selling and transferring through inheritance. Recognition and formalization of land rights or secure land tenure is seen to be critical to addressing the challenge of slums and an important pre-requisite for economic development. There is now clear evidence that secure land tenure helps release household savings in housing upgrades reducing demand on city resources. It is recommended that the tenure be extended to all slum households in tenable settlements on landwithout ownership disputes with legal Record of Rights (ROR). Tenure arrangements will range fromlimited to full ownership and will be incrementally upgraded from restricted to full title. SMC will ensure that tenure or property title is in the joint name of women and men.

# 5.1.3 In-situ Upgrading in Tenable Sites

Tenability of slums under Rajiv Awas Yojana has been defined as "means all slums which are not located on hazardous locations suitable for human habitation and the land is not earmarked for anymajor public facilities and therefore it can be regularized in the same location". The tenability of allexisting slum settlements has been identified using objective and verifiable parameters (landownership, land use, spatial location, health risk, etc.) and has been categorised into Tenable andNon-Tenable.











Tenure with ROR to be provided to all slum households that qualify under authorized and/or tenableand once fully upgraded /integrated, these settlements will be de-notified as slums and householdstherein will qualify for property titles, legitimate and in-the-house services, and affordable but deferred taxation.

# 5.1.4 Minimizing Relocation

Ramky shall minimise relocation and encourage in-situ upgrading. Settlements that have to be relocated (if any) will be provided tenure with ROR near the existing site. Far-site relocation will be resorted to only in special circumstances.

## 5.1.5 Providing Housing for All

Housing for all will form a key part of the Ramky strategy for sustainable slum development and will be in synergy with RAY. Affordable housing with full property rights granted incrementally (from living, working, upgrading and transfer through inheritance to mortgaging, and selling), in-the-house municipal services, and access to social services (education, health, transport, social welfare, etc.) shall be made available to slum dwellers through a range of strategies; self-development with housing credit; community cooperatives and land trust arrangements; built, rental and for-salehousing developed by SMC in partnership with the private sector participation. Housing subsidies tobe minimised to discourage encroachments and reduce requirements for resources. New slum settlements will be enlisted and notified biannually and will be supported for housing in legitimatesites and services but will be expected to pay full cost of these.

# 5.1.6 Community Participation and Organization

Community participation is critical for successful slum upgrading. SMC shall ensure appropriate processes and community structures for inclusive planning and implementation. Systems/mechanisms will be developed for strengthening capacity, community contracting, voice, grievance redressal, monitoring and will be institutionalised within SMC. SMC will also facilitate area and Ward Committees with representation of slum communities in accordance with the CommunityParticipation Law for participatory area and ward level planning and budgeting. To implement community mobilization at scale, TNSCB will prepare a phased action plan, and work with NGOs tostrengthen and empower communities, in particular women, for participatory and gender-basedplanning and budgeting.

#### 5.1.7 Equitable Norms and Standards for Municipal Services

SMC shall ensure legitimate and equitable services in all the slums; with ROR and tenure, unlisted, tenable, to be tenured, resettled slums. Services will be improved incrementally and in a phased manner in all the settlements if these are likely to be on the existing site for at least 2 years. The service standards will be advanced gradually from free-and-community to paid-and-shared to paid and-private based on supply capacity of the concerned agencies. SMC will also specify high quality standards for all municipal services to be delivered in slums (water; sanitation-toilets, sewerage, solid waste, drainage, waste water disposal, street sweeping; power and streetlights; roads and pavements, etc.) SMC will also work with departments of health and education for enhancing their service standards. SMC is working with Government of Tamil Nadu (GoTN) on connection cost reductions for water and sewerage to all slum households and simplification of mandatory requirements for legal connections. These provisions will be applicable to all settlements.











# 5.1.8 Improving Access to Micro-finance

Poor people will be assisted with credit for housing, service connections, micro-enterprises, education, health care, etc. SMC will ensure micro financing arrangements at affordable rates through government schemes such as the Interest Subsidy Scheme for Housing for the Urban Poor (ISHUP) of the National Housing Bank and HUDCO, private micro finance institutions and formal banks. SMC will also set up a Housing Credit Fund capitalised out of state/BSUP Mission Funds designed to function as a simple and single window system. Community Savings Groups will be facilitated for people to save up and pay their share and linked to SJSRY to support community lending initiatives.

# 5.1.9 Promoting Sustainable Livelihoods

The SJSRY programme for sustainable livelihoods will be strengthened and targeted to all slum communities, in particular at relocated sites, new housing programmes, poorest, women, marginal groups, elderly, disabled, widowed, etc. The purpose will be to ensure decent livelihoods for people through employment and self-enterprise development with an enabling environment for development of skills, markets, affordable financing, transport, legal licences, friendly bye-laws, etc.

#### 5.1.10 Access to Social Services

In order to implement the comprehensive urban development and poverty reduction, access of urban poor to education, health and welfare services shall be integral part of the program. SMC shall ensure all slum settlements in the city have access to the social services, and will work in partnership with the concerned departments towards achieving the objective. Convergence initiatives will comprise data sharing arrangements, collaboration at the ground level for effective implementation, joint planning, review and oversight processes, complementary support such as for access to land, etc. SMC will ensure provisioning of the entire band of welfare schemes (food subsidies, pensions, relief funds, school fee subsidies, maternity entitlements, girl child benefits) to the poorest in the slum communities identified through participatory processes through a single window transparent system. TNSCB's citizen's charter will be broadened to include a welfare services with standards and delivery time lines and will be subject to participatory annual social audits, in particular for food security and benefit schemes. Redressal mechanisms will also be decentralised to the ward level and made user-friendly.

#### 5.1.11 Focusing on an Enabling Policy and Reform Framework

While the RAY provides a broad and enabling environment for building slum free city in TN, the SMC/TNSCB shall also actively develop policies such as the City Slum Sanitation Policy, Policy for Street Vendors and Hawkers, etc. These are also recommended under JNNURM. The effort would be to create synergy between the various policies, both in concept and implementation, so that these complement each other and are cost-effective.

A large number of reforms are intended at the city level to facilitate achievement of slum and infrastructure development. SMC will design and implement the following city level reforms under BSUP: Basic Services for the Urban Poor to set high quality standards and norms for services in slum settlements including for social services such as schools, crèches, play grounds and parks, health centres, bus services, etc.; Internal Earmarking of Budgets for the Poor (IEBP) to ensure adequate municipal (at least 25%) and other resources, effectively managed for citywide slum development; Earmarking Developed Land for the Poor (EDLP) for earmarking 20-25% developed land in all housing projects for pro-poor housing through various land management instruments to meet the demand for housing and land for slum dwellers in the city. SMC will also make appropriate modifications to urban governance reforms that have relevance for the poor such as User Charges to make payments affordable to the poor with appropriate relaxation and











subsidies; and Accounting Reforms linked to IEBP for more robust finances and tracking expenditures on slum upgrading; Building Byelaws to support mixed land use in upgraded or built housing sites.

# 5.1.12 Institutional Arrangements and Partnerships

Implementing citywide slum upgrading is a huge and challenging task and will require substantial planning, initiative, innovation, prioritisation and customization. Although SMC is chiefly responsible for slum upgrading, SMC will need the concerted efforts of several partners to achieve its goals and mission. Partnership arrangements between relevant government agencies, private sector and civil society groups shall be set up and institutionalised for successful and sustainable slum development. SMC shall formulate a institutional framework, which shall facilitate the effective implementation of the Slum Redevelopment Project Salem (SRPS). The Institutional Structure shall have a small subgroup called the Technical Advisory Group (TAG) for technical inputs into slum upgrading and development. A Slum Upgrading Unit (SUU) shall be formalised to ensure a more focussed approach to city slum development. The SUU will be able to draw upon required technical assistance for knowledge and sustainable capacity building.

#### 5.1.13 Resource Mobilization

Citywide slum upgrading will require considerable financial resources and plans for resource mobilization. Resources for Slum development under RAY will be generated from funds earmarked for slum development within Municipal, State and Central Government budgets but will not be limited to them and shall include the private sector participation and contribution from beneficiaries. SMC will proactively access the funds from various donor resources for gap financing and for upgrading at scale.

# 5.1.14 Monitoring and Impact Assessment

Monitoring the outputs of upgrading and measuring its impact on poverty outcomes will be essential for SMC/TNSCB to track achievement of goals and measure change. In particular, SMC/TNSCB will undertake participatory and process monitoring. Community Based and Participatory Monitoring Systems (CBPMS) will provide implementation oversight. Feedback and response system will ensure timely response by SMC. The CBPMS will be linked through IT to a MIS for progress mapping. SMC will also undertake periodically, impact assessment studies using the 2012 baseline data on key impact areas and annual social and gender audits.

#### 5.1.15 Implementation Plan

#### 5.1.15.1 Implementing Slum Redevelopment

Upgrading all slum settlements in the city will require a realistic implementation plan, phasing, time line and financing strategy. The Plan provided below is based on the current information on slums and their access to basic services in the city. Data on slums however, is variable and could change over time based on demographic, economic, spatial, and/or policy modifications. The strategic steps to implementation will however, remain constant even as the exact nature of the intervention could vary and/or evolve. GoTN/SMC will take the following steps to implementation of SFCPoA.

# 5.1.15.2 Development options

The slums have been categorised on the basis of the matrix formulated after considering the Vulnerability and Infrastructure Deficiency. Guidelines of Rajiv Awas Yojana stress about three development models including











- 1. Slum Up-gradation Slum upgrading will involve (i) Up-gradation of kutcha and semi-pucca houses to pucca (ii) Incremental housing byaddition of one or two rooms to existing houses (iii) the provision ofbasic services: i.e. water and sanitation, drainage, roads, street lighting, footpaths, and community facilities. The slum upgradation alsoinvolves re-adjustment of existing units to ensure optimum use of landand releasing surplus land for common facilities.
- 2. In Situ Slum Re-Development: In this option people have the advantage of remaining where they are close to their current sources of employment and social networks but the whole or part of the settlement is cleared and rebuilt.
- 3. Slum Resettlement: Relocation of untenable slums if absolutely necessary will be to the extent possible or feasible within the same zone or ward or the adjoining ward or zone, vacant pockets or existing low-density slums keeping in mind their relation to employment centres. Resettlement Plans should be prepared in close consultation with the affected families to ensure their acceptability. If the location identified is at a distance from the existing site then suitable facility for transport and security may be made. In addition, if possible, continuation of livelihoods may also be ensured for the slum dwellers.

The development option for the classified clusters shall be as per the guidelines provided by the Government of India. The land costs at the slum sites have been found to be medium to high. The development options have accordingly been selected for both the clusters.

**Exhibit 5-1 Selection of Development Options** 

Deficiency Index	Slum deficiency & vulnerability	Land Ownership	Land Value	Dwelling unit's density	Development Options
v3xi3	Highly Vulnerable with Poor Infrastructure	Public Municipal or State	Low to Medium	High/Medium	Redevelopment (group housing) with Private Participation
	Facilities	State	Medium	Low	In-situ slum redevelopment
v2xi3	Moderately Vulnerable with Poor Infrastructure	Public Municipal or State	Low to Medium	High/Medium	Redevelopment (group housing) with private participation
	Facilities	O.G.		Low	In-situ slum redevelopment
v1xi3	Less Vulnerable with Poor Infrastructure	Public Municipal or	Low to	High/Medium	Redevelopment (group housing) by public agency or by own community
	Facilities	State	Medium	Low	In-situ slum redevelopment
				High/Medium	In-situ redevelopment by public agency and credit support
v3xi2	Highly Vulnerable with moderate infrastructure facilities	Public Municipal or State	Low to Medium	Low	Slum up gradation though improvement of infrastructure and tenure regularization and activities towards livelihood improvement
				High/Medium	Tenure Regularization and layout rationalization
v3xi1	Highly Vulnerable with Good Infrastructure Facilities	Public Municipal or State	Low to Medium	Low	Slum up gradation with densification including remunerative use of land and tenure regularization and livelihood training programs
v2xi1	Moderately	Public Municipal or State	Low to Medium	High/Medium	Redevelopment with through land sharing











Deficiency Index	Slum deficiency & vulnerability	Land Ownership	Land Value	Dwelling unit's density	Development Options
	Vulnerable with Good Infrastructure Facilities			Low	Tenure regularization with emphasis on livelihood improvement with skill development programs
v2xi2	Moderately Vulnerable with Moderate	Public Municipal or	Low to	High/Medium	Improvement of slum conditions through
VZXIZ	Infrastructure Facilities	State	Medium	Low	Redevelopment by public agency with credit support
v1xi2	Moderately Vulnerable with Moderate	rable with Public Municipal or	Low to	High/Medium	Redevelopment through PPP
VIAIZ	Infrastructure Facilities	State	Medium	Low	
v1xi1					Delisting with slight improvement in infrastructure and housing

Considering the factors such as slum dwelling unit density, land value and land ownership, which is prominently owned by government authorities, development option shall be *Slum up-gradation, In Situ Slum Redevelopment for tenable slums* and *slum resettlement for Untenable slums*. However SMC can chose the option of relocation depending on the availability of land and cost of the land. Relocation would lead to various our factors that need to be taken into consideration. A total station survey of the public vacant land has been carried out as part of this study and the details are enclosed in this report. The steps required for In-situ Redevelopment and Resettlement are described hereunder:

# 5.1.15.3 Tenable Slums - In Situ Slum Re-development Modality

This modality has been chosen for the slums where infrastructure and housing found to be at very poor condition, though the vulnerability varies from low to high. In situ slum re-development has been chosen even the slums tend to be at lower density to utilize available space for maximum purposes.

#### Strategies for In Situ Slum Re-development:

In situ slum re-development provides an opportunity to slum dwellers to improve their neighborhood without changing their place of stay. Its intended not only improvement of the structural and infrastructure condition of the slums but also their quality of living by providing available space for social infrastructure purposes. It is important for the municipal authority to bring trust among the slum dwellers for successful implementation of this modality. It's also very important to involve the slum dwellers in every stage including from planning to implementation. The daily labor or casual labor from the slums could be utilized for the construction purposes. Some of the precautionary measures need to be undertaken are as follows:

#### i. Transit camps

ldentification of alternatives sites for transit camp and acceptance by the community for a specific site for transit camp.











Assessment of time and cost of transit camp construction Informing the community about the schedule of shifting and compensation package if any Explaining role of community in maintaining and managing the project

# ii. Detailed project report for in-situ slum redevelopment will include the followings

- > Detail project design with layout plans including livelihoods spaces and approvals from the competent authorities
- > Details of the ground coverage and height
- > Working drawings and detailed project report
- Financial operating plan and cost sharing
- ➤ Loans and finalizing repayments schedules for slum communities
- > Schedule for transit camp construction and for shifting families
- Models for private sector participation where appropriate Health and education inputs as required

# iii. Model House Design for Slum Re-development

It is important to have a house design amicable to the local conditions and considering the level of vulnerability of slums in Salem, it's also important to improve the neighborhood conditions for better standard of living. Considering standard guidelines for economic weaker sections housing, a built-up-area of 26.30 sq.km for a house has been proposed. To maximize the utility of space in slums, it is proposed to develop housing on cluster basis. Each cluster will contain three to four apartments depends upon the slums and each apartment would be build on three floors each containing four houses per floor.

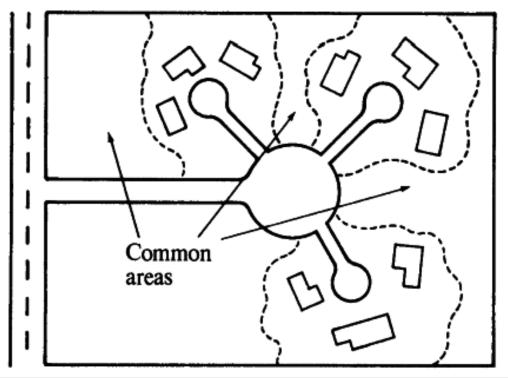












**Exhibit 5-2 Housing on Cluster Development** 

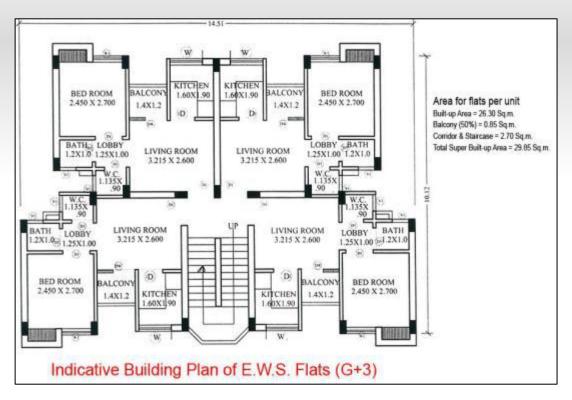


Exhibit 5-3 Model Layout out of House & Apartment



# **Strategies for Slum Up-gradation:**

In Salem out of the 246 slums assessed, 207 slums are identified as tenable slums as per the assessment presented in this report. There are 33512 households living in these slums located in all four zones of Salem.

S.No	Zone	Ward No.	Slums	House- holds	Population	Matrix
1	1	21	Achuanagar	49	181	V1 i3
2	4	49	Agathiyar Street	68	270	V1 i3
3	2	17	Alamarakkadu	93	358	V1 i3
4	2	5	Alagapuram	201	803	V2 i3
5	2	5	Alagapuram Periyaputhur	43	185	V2 i3
6	4	49	Allikuttai Colony	28	132	V2 i1
7	3	9	Allikuttai Boyer Street	41	474	V2 i3
8	4	50	Ambedkar colony W-50	67	187	V1 i2
9	4	47	Ambedkar Nagar W-47	89	374	V3 i2
10	4	51	Ambedkar Street - Jari Kondalampatty - W-51	162	753	V2 i3
11	4	47	Ambedkar St	166	728	V3 i3
12	2	16	Ambedkar Street	10	42	V3 i3
13	4	51	Ambedkar Street	237	1003	V3 i3
14	1	23	Ammasi Nagar	112	415	V1 i2
15	2	8	Amman Nagar	80	212	V2 i3
16	4	58	Amman Nagar	138	275	V2 i2
17	1	20	Andipatti	62	263	V2 i3
18	1	22	Andipatti	578	1948	V2 i2
19	3	58	Annanagar	503	1865	V1 i2
20	3	37	Anna Nagar W-37	58	220	V1 i2
21	1	21	Anna Nagar	33	400	V2 i2
22	1	19	Anthony puram odai	113	237	V1 i2
23	1	19	Appavu Nagar	32	124	V2 i2
24	1	1	Arundhathiyar Street W-1	170	661	V1 i3
25	3	10	Arundhathiyar Street W-10	138	546	V1 i3
26	3	32	Arasamara Pillayar Kovil Street	105	414	V1 i2
27	1	18	Arundhathiyar St	22	82	V2 i3











28	3	33	Athiyaman St	384	1492	V1 i2
29	4	49	Avaiyar Street	66	232	V1 i3
30	2	8	Ayyanar Kovil Street	105	271	V1 i2
31	2	17	Boyer Street	102	823	V1 i3
32	3	37	Bharathi Nagar	37	158	V2 i3
33	3	35	Bharathiyar Steet	48	181	V1 i3
34	3	35	Carpet Steet	94	383	V2 i3
35	4	58	Chellakutti kadu	157	544	V1 i2
36	4	60	Chinnayan Colony	41	313	V2 i3
37	2	6	Chinna Kollapatti	278	1116	V1 i3
38	1	2	Chinna Ammapalayam	942	4085	V3 i2
39	1	1	Chinna Mottur	91	345	V1 i2
40	2	8	Chinna Tirupathi	266	1050	V1 i2
41	2	12	Court Road Colony	46	197	V1 i3
42	3	9	Chottya goundar Street	89	367	V1 i3
43	3	10	Desiya Punaramaipu Colony	161	594	V2 i2
44	2	4	Dhideer Colony	153	670	V3i3
45	3	43	Erumapalayam Main Road	55	203	V1 i2
46	3	42	Gandhi Mahan Street	194	854	V2 i3
47	2	8	Gandhi Nagar	126	339	V2 i2
48	4	50	Gandhi Nagar	19	84	V1 i2
49	3	37	Gandhi Nagar	239	1043	V1 i2
50	3	11	Gopalchetty Street	35	123	V2 i2
51	3	11	Gopal Street	265	123	V1 i1
52	2	16	Govinda Goundar Thottam	105	398	V1 i1
53	3	9	Goyya Thoppu	140	557	V2 i3
54	4	59	Indira Nagar	149	234	V1 i1
55	1	21	Indira Nagar	188	499	V1 i1
56	2	7	lyyanthirumaligai	123	306	V1 i2
57	1	2	Jagirammapalayam	620	2252	V2 i2
58	2	6	Jallikadu	40	435	V2 i3
59	2	12	Johnsonpet East	823	2842	V1 i2
60	2	13	Johnsonpet West	392	1756	V2 i2
61	2	13	Johnsonpettai	262	697	V2 i2
62	3	35	jothi merku street	54	231	V1 i3











63	3	35	Jothi East St	79	290	V1 i3
64	3	35	Jothi Main Road	285	1170	V1 i2
65	4	50	K.P KARADU THENPURAM	225	970	V1 i2
66	4	50	Kp Karadu Vadapuram	388	1465	V2 i3
67	4	49	K.P.KARADUROAD(Netthi medu)	60	211	V1 i2
68	4	56	KALDEPO	44	179	V2 i3
69	4	52	KALLANKADU	160	666	V1 i2
70	2	7	KALLI KADU	127	517	V1 i2
71	1	23	KALLUKUZI	21	212	V2 i3
72	1	1	KAMANAYAKAMPATTY	198	1344	V1 i3
73	1	23	Kamaraja Colony	135	472	V1 i3
74	1	20	KAMARAJSTREET	36	140	V1 i2
75	3	32	Kaasi Muniyappan Koil Street	119	450	V2 i3
76	1	21	Kabilar Street	275	1098	V2 i2
77	1	24	Kandhampatty Colony	201	752	V2 i2
78	3	37	Kamarajar Nagar Colony	393	1706	V1 i2
79	4	49	Kannagi Street	121	489	V1 i2
80	1	24	Kandhampatti	159	646	V2 i3
81	3	33	Karaikinaru	167	631	V1 i2
82	3	44	Kasthuribhai Street	490	2115	V3 i3
83	1	21	Kattu sottan valavu	45	167	V1 i2
84	2	16	Kattu Valavu	85	267	V2 i2
85	3	42	Kitchipalayam	11	34	V3 i3
86	3	44	Kitchipalayam	233	948	V3 i3
87	3	44	Kitchipalayam Colony	167	625	V3 i3
88	3	37	Kumaragiripettai	98	412	V1 i3
89	3	41	Kunjaan Kadu	334	1225	V1 i2
90	4	60	Kurinji Nagar	288	1173	V1 i3
91	2	4	Kuttai Street	91	279	V1 i2
92	4	60	Madurai Veeran Kovil Street	80	353	V1 i3
93	1	20	Majid Street	58	787	V2 i3
94	3	32	Majeeth Street	77	361	V1 i3
95	1	22	Malangattan Street	128	473	V1 i2
96	4	50	Maniyanur	68	258	V2 i3
97	1	19	Mariamman Koil St	144	545	V2 i2











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98	3	35	Market St	173	676	V1 i3
99	4	46	Market Street	38	137	V1 i1
100	2	15	Mayor Nagar	26	91	V1 i2
101	4	55	Mettu Street	29	121	V1 i3
102	3	9	Mettu Theru	20	75	V2 i3
103	2	5	MGR Nagar	58	256	V2 i3
104	2	5	Mittapudhur	199	752	V1 i2
105	3	36	Millitary Road	49	168	V1 i2
106	2	8	Mookaneri Adikarai	91	452	V2 i3
107	4	60	Moonangkaradu	479	1816	V1 i3
108	4	58	Moonangkaradu	61	212	V1 i3
109	1	1	Mottur	123	396	V2 i3
110	4	46	Mungapadi St	193	740	V1 i2
111	1	25	Muniyappan Kovil St	243	909	V1 i2
112	4	49	Muniyappan Kovil street W-49	161	596	V1 i3
112	7	73	Maniyappan Novii succe vv 43	101	000	V 1 10
113	4	51	Muniyappan Kovil Street W-51	27	98	V1 i2
114	4	47	Murugan Nagar	81	333	V2 i3
115	4	58	Muthu mariyamman kayil atraat W 59	128	508	V1 i3
	3	37	Muthu mariyamman kovil street W-58	126		
116			Muvendar Nagar		465	V2 i2
117	3	33	Muthavalliyakupatheru	125	509	V2 i2
118	4	51	Nadu St	19	60	V2 i2
119	3	37	Namamalai Adivaram	248	982	V1 i2
120	2	16	Nagammal Thottam	14	47	V2 i2
121	3	36	Nanjampatti	557	2242	V2 i3
122	3	42	Narayana Nagar	199	786	V3 i3
123	1	27	Narayanapuram	195	688	V1 i1
124	3	9	Nehru Nagar	53	213	V1 i1
125	4	48	Neimandi Arunachala Street II	48	177	V2 i2
126	4	57	Nethaji street	129	513	V1 i3
127	1	3	Om Shakthi Nagar	47	174	V1 i3
				1.		
128	2	5	Odacha Karai	55	238	V2 i3











129	4	60	Onpatham Palzi	128	490	V2 i3
130	3	40	Pachapatti (North street)	567	2291	V1 i2
131	3	40	Pachapatti	855	3449	V1 i2
132	1	25	Pallapatti	142	487	V1 i3
133	1	25	Pallapatty Mariamman Koil St	116	476	V1 i3
134	1	22	Pakrikaradu	19	85	V1 i2
135	1	18	Panankadu	236	858	V1 i2
136	4	50	Panditha Nehru Street	138	504	V2 i3
137	3	10	Pandian Street W-10	50	202	V1 i2
138	1	20	Pandiyan Street W-20	52	187	V1 i2
139	2	29	Pandiyarajan St	74	295	V1 i1
140	1	27	Pavender street	207	803	V2 i2
141	4	53	Pension Line 1 to 5 streets	317	1480	V1 i3
142	4	47	Pension Line kuruku street	29	110	V2 i3
143	3	39	Periya Kenaru	776	2945	V1 i2
144	2	29	Periya Kollapatty	112	432	V2 i3
145	2	2	Periya Kollapatty	210	352	V1 i1
146	2	6	Periyar Kollapatty(Gandhi Nagar new Colony)	168	662	V2 i3
147	2	6	Periyar Kollapatty (Gandhi Nagar Old Colony)	144	437	V2 i2
148	1	28	Periyar Nagar	169	750	V3 i1
149	1	20	Periyar Nagar	177	737	V3 i3
150	1	20	Periyar Street	199	963	V1 i3
151	1	21	Periyar Nagar	125	446	V2 i1
152	1	3	Perumal Malai Adivaram	111	440	V1 i3
153	4	47	P G R Line	130	490	V3 i2
154	2	5	Pidari amman koil street	30	250	V2 i2
155	4	58	Ponmanam Nagar	53	188	V1 i3
156	3	9	Pudu Valavu	21	63	V3 i3
157	2	16	Pudur kallanguthur & Anna nagar	352	1310	V2 i2
158	3	10	Puthu Mariyamman Kovil St	67	284	V2 i3
159	3	49	Putta Machine	55	237	V1 i2
160	2	4	Ramakuttai	32	82	V1 i3
161	4	47	Ramalingaswamy Koil Street	241	952	V2 i2











162	3	37	Ramanathapuram	184	724	V1 i2
163	4	59	Ramayan Kadu	175	586	V1 i2
164	1	25	Ravaneswar nagar	93	312	V1 i2
165	4	59	Robert Ramasamy Nagar	88	336	V2 i2
166	3	37	Sakthi Nagar W-37	49	155	V1 i2
167	4	60	Sakthi Nagar W-60	121	451	V2 i2
168	3	37	Sanniyasi Gundu	49	192	V2 i3
169	3	43	Sanyasi Gundu Extn	403	1340	V1 i2
170	1	3	Sengal Pettai	50	187	V1 i3
171	3	9	Sengal Anai	253	1250	V1 i3
172	3	37	Sengaliacharyakadu	225	865	V2 i3
173	1	24	Senjikottai	85	312	V2 i3
174	2	14	Shankar Nagar Odai	37	123	V1 i2
175	4	54	Shanmuga Nagar	236	894	V1 i2
176	4	50	Shanmuga Nagar	141	478	V2 i1
177	3	44	SMC Colony	597	2451	V2 i3
178	2	4	South Alagapuram	191	437	V2 i1
179	4	46	Srirangan St	64	228	V2 i2
180	1	22	Sivandhapuram	109	406	V1 i2
181	1	21	Sollampallam	243	879	V1 i2
182	4	52	Srirangan Kadu	281	1085	V1 i2
183	1	23	Sugumar Colony	98	392	V2 i2
184	4	52	Sunnambukara Street	141	534	V2 i2
185	3	9	Swamy nagar	88	297	V2 i3
186	1	26	Swamynathapuram	230	868	V1 i2
187	3	9	Thadhampatti	238	933	V1 i2
188	4	60	Thalaimalai Nagar	273	939	V1 i3
189	2	6	Thandhai Periyar nagar	305	996	V1 i2
190	4	60	Thideer Nagar	93	348	V1 i3
191	1	23	Thiruvakkaoundanoor	455	1831	V2 i3
192	1	3	Thiru V K Nagar	28	106	V3 i3
193	3	38	Thiyagi Natesan St	598	2327	V1 i2
194	4	50	Uthirappan Kadu	126	476	V1 i2
195	4	60	Utthukadu	65	236	V2 i3
196	4	53	Vadaku Street	71	429	V1 i3











197	3	37	Vaithiudaiyarkadu	93	361	V1 i2
198	3	9	Val Kadu	51	187	V1 i2
199	4	58	Valzi Vaikal	120	471	V1 i2
200	3	9	Valluvar Colony	17	67	V1 i2
201	4	53	Valluvar Nagar-3	82	296	V2 i1
202	4	53	Valluvar Street-2	83	296	V2 i1
203	3	11	Vasagar Salai	63	222	V1 i2
204	1	27	Veeran Nilam	70	265	V2 i3
205	1	20	Velaiyan Gounder street	69	264	V1 i2
206	4	53	Velupudu street	56	216	V1 i2
207	3	9	Venkatachalam Colony	352	1226	V1 i2

# a. Access to Municipal Services

All slums shall have access to basic municipal services of water, sanitation, power, roads, transport, etc. on an equitable basis as for the rest of the city. While authorised and tenable slums granted tenure will become eligible for household level services under the tenure policy/socialrental housing programme, the potentially tenable and non-tenable settlements will be upgraded with improvements in the current service levels. Provisioning of equitable services to potentially tenable or untenable slums will not be deemed as granting occupancy rights unless tenure is granted through policy as discussed above.

All settlements with secure and insecure tenure prior to the upgradation/redevelopment will get access to basic municipal services ramped up over time from their current levels (e.g. from community stand posts and common toilets) to equitable levels (e.g. household connection for tap and in-house toilet). Services in these settlements will be incrementally improved from community and common services to in-the-house services.

In-situ upgrading may also happen through redevelopment of slums i.e. by re-blocking, realigning plots and land equalization with infrastructure improvements and strengthening of tenure rights

**Exhibit 5-4 Action Plan for Slum Redevelopment** 

	Curative Strategy		Preventive
Criteria	In Situ Slum Redevelopment	Upgradation of Slums	New Migrants
Group Typology	V1i3, v2i3, v3i3	V1i1,v1i2,v2i1,v2i2,v3i1,v3i2	
Upgrading/	SMC develops plan for insitu and	urpgradation/redevelopment for	
redevelopment plan	each slum in consultation with TNSC	В	
Municipal Services			
Water & Sanitation	<ul> <li>➤ SMC provides underground sewer supply connections to homes.</li> <li>➤ Set up micro-finance for services or lmprove services up to the norms Urban Poor</li> </ul>	connections.	Build houses/night shelters/lease houses with water supply & Sanitation
Streets, power, fire etc.	SMC/PWD builds roads with street lig TNSCB provides households with me SMC makes available sufficient fir vicinity of slums	etered power supply	Develops sites with all municipal services











# b. Prepare Plans for In-situ Upgrading/Redevelopment

A detailed project report shall be prepared on the basis of this action plan wherein all the components shall be detailed out for slum upgrading/redevelopment on a case-to-case basis Settlements shall be redeveloped in such a way that the space utilisation is optimal and have improved mobility within the settlement. The development shall incorporate the space provision for bringing in municipal infrastructure. Detailed planning for re-development or upgrading shall be done in consultation with the community.

# c. Setting Equitable Norms and Standards

SMC will review and revise the norms for provisioning of services to slum settlements and gradually ramp these up to reach equitable and desirable levels as in the rest of the city. The set of standards that could be adopted by SMC for slum upgradation/redevelopment are provided in the following exhibit.

**Exhibit 5-5 Norms of Service** 

Services	Desired Norms	Provisional Arrangements
	Norms for Household level services	Norms for Community Level
		Services
Water Supply	<ul> <li>➢ Individual tap connections with meters and lifeline tariff, with supply equivalent to rest of the city and linked to covered drains.</li> <li>➢ Slums have to be connected with the comprehensive water supply scheme which is proposed for the city from the Cauvery River and plan to be implemented by 2015.</li> </ul>	<ul> <li>➤ Where household-level provision is not immediately possible, 1 public water supply stand post for 25 persons or less or 1 stand post in every street if number of households is low with links to covered drains for waste water disposal.</li> <li>➤ For community services minimum 40lpcd supplied at convenient timings, for adequate duration, with appropriatepressure and good water quality.</li> <li>➤ Shared Paid Connections where families with low affordability may like to apply for shared connections close to the homes.</li> </ul>
Sewerage & Sanitation	<ul> <li>➢ Individual toilets connected to underground sewerage where possible or septic tanks.</li> <li>➢ Underground sewerage scheme which is under implementation in Salem has to be extended to the slums</li> </ul>	➤ Where individual toilets are not possible, small group latrines (1 for 5-10 households) or community latrines (1 seat for 25 persons) will be provided with adequate water supply, power and O&M plans.
Drainage	Covered drainage should be brought up a integrated sewerage scheme.	along with the under implementation
Solid Waste Management	Salem Municipal Corporation has already system in all 60 wards of the corporation.	•
Power	It is heartening to know that Chief Mister across Tamil Nadu very soon, which expet the slums as well.	ected to solve power supply problems in
Roads& Street Lights	All the kutcha and semi pucca roads need to be made motorable pucca roads. Street lights to be implemented	On immediate effect all the kutcha roads to be made motorable pucca and the rest in phased manner











# d. Mainstreaming with City Systems

Services to slums shall be improved and slum settlements mainstreamed with city infrastructure; municipal piped water supplies, proper collection systems for solid waste linked to regular waste disposal to land fill or composting sites, drainage linked to storm water drains or sewerage, slum pathways linked to city roads, metered power supplies, access to municipal schools and health care centres, etc. will be ensured.

Network designs will be developed by engineers /planners of the concerned departments to provide links to households/settlements. Various departments will review current supply arrangements to the settlements as also to the entire neighbourhood/ward/zone, and plan for resource augmentation. Consultations with the communities will be used to identify local solutions.

# e. Legal and Affordable Connections

Legal water, sewerage and power connections shall be provided to all slum households on payment basis. However, cost of connections shall be reduced to make these affordable with approval the State Government. Families with low affordability or lack of space, or who are renters; will be permitted shared connections for improving coverage. Reduction in connection costs and/or shared connections will enable slum families to get services at home and to pay for these. These householdswill also be linked to livelihood initiatives under SJSRY to enhance their incomes. SMC will also announce an amnesty scheme to enable households to convert illegal connections to legal ones.

# f. Simplification of connection procedures

Procedures for slum families will be simplified to enable them to get connected. Connections will be de-linked from house ownership which slum dwellers are unlikely to possess as most buildinformally. By targeting subsidies to slum dwellers rather than BPL card holders, SMC will improve targeting and collection. The legal connection scheme will be advocated with support of local NGOsand Ward Councillors. A help desk in SMC will help facilitate applications for/conversion from illegal to legal connections. SMC will also ensure connections within 15 days of application.

#### g. User charges and tariff

Slum households will pay the monthly fixed user charges. Slum households will be enabled to payuser charges through on-site collections, payment in installments and linkages with livelihoodactivities. In case of tariff hikes or metering as in case of power, a life line slab will be set for BPL and slum households (not granted tenure) to ensure that user charges are affordable.

#### h. Access to Micro-finance

Access to micro-finance will be critical to enable slum families to pay connection costs as a lump sum even after approved reductions. This is because most slum families get paid irregularly and find it difficult to save. They also do not have access to formal banks for regular savings. TNSCB and SMC will need to link up to micro-finance agencies to help finance house connections for two reasons: (a) the amounts required for service connections are small; and (b) formal banks have had little successin extending credit to the poor, except in a few cases, because of requirements such as for collateral /formal documentation and lengthy and difficult procedures for checking credit worthiness, which the poor are unlikely to possess as they do not own the land. Micro-finance agencies ratherthan formal banks are therefore considered a better option for managing the loaning processes andmaking loan recoveries as described.

#### i. Participatory Design of On-plot services

Design for on-plot work will be developed in consultation with the community and/or households. Arange of options will be developed so that households could choose depending on their particular conditions and affordability. This will ensure that every family gets a customised solution that bestresponds to their needs.











# j. Wage Employment Opportunities in Infrastructure Development

Construction works for network infrastructure will be used for generating wage employment for slum households. Large numbers of slum dwellers are construction workers and this can help generate income for the families. It will be mandatory for contractors to engage 25% labour locally for construction purposes and SMC will monitor this closely.

# k. Technical Assistance in Construction

Construction of on-plot infrastructure will be managed by households themselves with technical assistance from local agencies. SMC will prepare a list of material requirements with quantities and costs, sample contracts with contractors with payment schedules and guidance on construction monitoring. SMC will draw up a list of material suppliers and petty contractors with skills in plumbing, toilet making, metering, etc. for residents who would like to use these facilities. Help desk at SMC will also deal with service deficiency/default by contractors and supervise on-plot works to ensure proper connections to main trunk infrastructure. Technical assistance will also be made available through NGOs.

#### I. Community Managed O&M systems

For community or common services, community based O&M systems will be developed. Communities will be mobilised and organised as described earlier and will be supported in setting up sub committees for O&M. Communities will determine user charges based on affordability, plan and manage community toilets, door-to-door waste collection, maintenance of water points, drains, etc. SMC will set up a community fund in each settlement to complement community collections. SMC contributions will decline as community collections increase and will be provided for a minimum period of 3 years by when it is expected that these services will be fully managed from member contributions. While community will be responsible for small repairs, SMC will undertake major repair works on drains, toilets, roads, etc. O&M activities will also be structured as microenterprises.

# m. Beneficiary Contribution

Beneficiaries will contribute their share to the cost of the housing as specified in the guidelines for Interest Subsidy Scheme for Housing the Urban Poor (ISHUP) provided by the Gol. SMC will improve access to housing micro-finance to ensure affordability and repayments in easy instalments.

#### n. Transfer of Rights to Slum Dwellers of Redeveloped Houses:

The SMC will transfer tenancy rights along with inheritance rights to individual slum dweller households. These rights would be incrementally strengthened from restricted to full property titles and in joint ownership of men and women.

# 5.1.15.4 Untenable Slums - Relocation

The very last option of the curative strategy is to relocate untenable slums which are located either in hazardous sites or on conflicting land uses. Relocation of the slums has direct and indirect effect on the slum dwellers and SMC should make sure that it to be more on a positive side. Relocation of slums needs conscious building among the slum dwellers on one side and it cost more for SMC on the other side. However, as it is inevitable slum dwellers need to be motivated with better infrastructure and secure tenures.

In Salem out of the 246 slums assessed, 39 need to be relocated on the basis of tenability assessment presented in this report. There are about 5071 households are living in these slums located in all four zones of Salem. It is indeed very important to know the present location of ward and zones to relocate them in the proximity depending upon the land availability with the local authority.











**Exhibit 5-6 Untenable Slums for Relocation** 

S.No	Zone	Ward No	Slums	House-holds	Population	Matrix
1	3	32	Aatroram street	67	277	V1 i2
2	3	9	Allikuttai (Mariyamman Kovil Street)	40	155	V1 i3
3	1	1	Ambedkar Odai	64	261	V2 i3
4	3	11	Anai Meadu	33	109	V1 i2
5	3	32	Anai Road	18	63	V1 i3
6	4	47	Andhipatti Eari	336	1517	V2 i2
7	4	45	Attoram Kilaku Street W-45	64	216	V1 i2
8	4	45	Attoram Vadaku Street W-45	122	428	V1 i3
9	2	29	Devangapuram	57	224	V3 i3
10	1	28	Gandhi Nagar	64	279	V2 i3
11	1	25	Gorikadu	76	327	V1 i2
12	1	22	Indra Nagar	80	346	V1 i3
13	4	58	Indra Nagar	34	100	V1 i3
14	4	58	Jawaharlal Street	197	725	V1 i3
15	4	50	Kaliyamman Temple Backside	86	331	V1 i3
16	1	24	Konerikarai	86	348	V2 i3
17	1	25	Leigh Bazzar Odai	22	78	V1 i2
18	3	35	Majid Nilam	72	291	V1 i3
19	3	10	Masuthi Nilam	476	1732	V2 i3
20	4	55	Mettu Kuruku Street	72	237	V1 i2
21	1	21	MGR Nagar	62	232	V1 i2
22	1	3	Molakaradu	72	283	V1 i3
23	4	53	Mogaboob Nagar	289	1165	V1 i3
24	1	27	Mullah Kadu	271	352	V1 i1
25	2	14	Mulvadi Maakaan Street	166	760	V1 i3
26	4	48	Muniyappan Kovil St	55	205	V1 i1
27	3	41	Nathimulla Makkaan Street	103	390	V2 i2
28	4	45	Panchathangi Eari	671	2476	V1 i3
29	4	53	Pudu Trichy Kilai Road	84	313	V1 i2
30	4	59	Puratchi Nagar	50	170	V1 i2
31	3	10	Railway Vadaku Street	102	449	V2 i3
32	3	35	Railway Therku Street	27	110	V1 i3
33	2	15	Ram Nagar Odai	182	734	V1 i3
34	1	28	Shevapet - (Gunduchetti Eri)	305	1122	V1 i2
35	4	45	SMC Line	113	524	V3 i2
36	4	55	Tagore Street	114	406	V1 i2
37	4	48	Tholkappier Street	38	139	V1 i3
38	4	60	Vedipukkal Parai	139	615	V2 i3
39	1	21	Veerakaliyamman Nagar	162	660	V1 i3
			Total	5071	19149	











Among the untenable slums, it is need to be mentioned that about one slum is categorized with good infrastructure and less vulnerable and two slums are categorized with worst infrastructure and highly vulnerable condition. TNSCB salem has identified land required for resettlement of untenable slums. Following exhibit brief about TNSCB area identification and alienation.

Exhibit 5-7 Details of Identified & Alienated Land in SMC

Name of the City	Requirement	Identified	Alienated	Alienation in process	Proposal to be Submitted
In Acres					
Salem 66.25 23.00 2 21.00					
Total	66.25	23.00	2	21	0

Source: TNSCB Salem

Based on the number of families to be relocated, demand for land has been assessed. The new construction of housing shall be on apartment design proposed for the option In situ slum redevelopment above in this chapter. The necessary land requirement for housing and other uses have been categorized in the following exhibits.

Exhibit 5-8 Assessment of Land Demand for Housing for relocation of Untenable Slums

S. No	Components	Units	Area
1	Model EWS House		
a)	Built-up Area for Apartment	Sq.mt	26.3
b)	Balcony (50%)	Sq.mt	0.85
c)	Corridor & Staircase	Sq.mt	2.7
d)	Total Builtup Area	Sq.mt	29.85
	Total Super Builtup Area for one apartment	Sq.mt	146.84
2	Model Apartments with EWS House		
a)	Per Floor	no.	4
b)	Total Floors	no.	3
	Tota No.of Houses	no.	12
3	Demand		
a)	No. of Households to be relocated	no.	5071
b)	No.of Apartments Required	no.	5071
	DUs/Acre	no.	80
	Area Required	Acres	63.38









Exhibit 5-9 Land Requirement for Relocation by Different Uses

S. No	Land Use Pattern for Proposed Development	Area in Acres	%
1	Residential	39.75	60%
2	Roads	9.938	15%
3	Open Spaces	6.625	10%
4	Commercial	3.313	5%
5	Other Infrastructure	6.625	10%
	Total Area required	66.25	100%

**Exhibit 5-10 Housing Demand Estimation** 

Year	Growth Rate	Slum HHs	Additional Housing requirement
2011		46672	
2012		47605	
2013		48558	
2014		49529	971
2015		50519	991
2016	2% per annum	51530	1010
2017	2 % per amium	52560	1031
2018		53611	1051
2019		54684	1072
2020		55777	1094
2021		56893	1116
2022		58031	1138

# **Preparing a Phased Action Plan for Upgrading**

Slum upgrading and resettlement shall be implemented in a phased manner. Phasing has been prepared considering the existing level of infrastructure in the slums, tenability and housing scenario.

# 5.1.16 Start-up Activities

Starting actions will include:

- i. Information gathering as described above and the development of a Salem Slum Information System using GIS maps. This activity has been completed as part of the preparation of Slum-free-city action plan.
- ii. Actions for improving the tenability of more and less tenable settlements such as boundary walls along drains and canal banks, relocation of urban dairies, de-silting of drainage channels etc;
- iii. Initiate the procedure for notification of Tenable Settlements for upgrading purposes;
- iv. Promoting sustainable livelihoods.











# a. Providing Tenure Security

Secure land tenure is critical for slum upgrading and sustainable poverty reduction. Secure land tenure is about granting permission/ license to residents to stay on the squatted or illegally occupied land and to get legitimate access to equitable basic services. Land tenure creates an enabling environment for poor people to participate in their own development, thereby reducing pressure on local governments. Provisioning of land tenure will also be in accordance with the JNNURM directives under Basic Service for Urban Poor (BSUP) on providing legal spaces/housing to the poor to live, work, sell, mortgage and transfer. A majority of household in slums identified in Salem have secure tenure. However, the limited households who don't have secure tenure shall be taken into consideration for providing the tenure for the inclusive development of the slums. As far as possible, tenure shall be granted on existing sites. Where tenure on existing sites may be difficult on grounds of tenability, land disputes, zoning or land use restrictions, etc. it will be granted on nearby sites to minimise disruption in livelihoods of poor households. Tenure or ROR on faroff relocated sites will be the last option and only in special circumstances. Depending on the status of land SMC shall provide residents; licence, lease, free hold, ROR, or cooperative land ownership. Licence to stay on the site will be granted to settlements that are less tenable for a minimum of 20 years so that families feel secure enough to invest in their own housing and SMC is able to improve tenability/upgrade these settlements. Leases will be of longer or shorter duration and on the same lines as those provided to other citizens in the same area. Leases or cooperative land ownership to slum cooperatives shall be provided to fully tenable or more tenable settlements that have been identified for in-situ upgrading. Over time and once the sites are completely integrated within the city families will be provided the opportunity to convert licence and leasehold lands to freehold lands.

Towards granting land tenure to individuals/cooperatives, GoTN/SMC will undertake the following actions:

- i. Review the data generated from the survey on land ownership, proposed grouping of settlements and state rules and restraints on grant of tenure.
- ii. Authorize the identified settlements and notify the authorization.
- iii. Prepare draft legislation for grant of tenure on tenable and potentially tenable settlements subject to resolution of any restraints, and put up for the approval of the SMC Standing Committee.
- iv. For all tenable settlements on residential or mixed land use areas allocate land for upgrading purposes.
- v. For settlements that may be tenable but on non-residential, land use conversion/transfer to be taken up.
- vi. Issue notification of authorization and land tenure once the permissions are granted.

#### b. Community Participation at City Scale

Community participation and engagement is critical to successful slum upgrading and development. Community development has been part of the Slum free city action plan. Accordingly appropriate group discussions have been taken up with the community group in the identified slums. Further SMC will ensure that during the entire slum upgradation program, the community mobilization exercise shall be taken up time to time.

# i. Mobilizing Community Structures

A range of community structures will be facilitated in the city. Slum communities have been organised under RAY and have involved various stakeholders Besides these structures selfhelp groups, livelihood and micro enterprise groups, micro credit groups, etc. shall be organised as per community need/demand and will provide the linkages to micro finance for accessing services and /or housing. Slums proposed for in-situ upgrading with housing or resettlement will be organised into housing cooperatives that may be granted land for housing development.

Community structures, where these exist, will be utilised to plan and implement upgrading actions. SMC will in a phased manner expand the community mobilization processes from authorised to tenable and non-tenable











settlements. The purpose will be to strengthen and empower the communities, especially women, to engage with local government agencies and participate in slum upgrading planning and implementation.

# ii. Institutionalizing Community-Government Interactions

SMC will create an institutionalised platform for voice and participatory governance. Successful models for community-local government interaction such as the Bhagidari-Sanjha Prayas in Delhi replicated in Rajasthan and Madhya Pradesh or Janagraha in Bangalore will be reviewed for replication. Community representatives of the various organised groups in slums will meet on a periodic basis to discuss key implementation concerns with follow-up action by the concerned department. A senior officer in TNSCB will head the 'Bhagidari for Salem' cell in the TNSCB' and ensure compliance and follow-up action on demands raised in the various meetings with the support of the Slum Implementation Unit. The Bhagidari for Salem' cell will have separate budget provisions for organising meetings, etc. A SMC team will visit Delhi, Bangalore etc. to study the institutional arrangements.

# iii. Capacity Building for Participatory Planning

Capacities of SMC officials and partner agencies will be improved in participatory planning and community engagement and to sensitise them to the needs of urban poor communities. SMC can join hands with the National Institute of Urban Affairs (NIUA) to develop a plan for capacity enhancement for all implementers, officials and elected representatives. The capacity building plan will be aimed at providing hands-on training and opportunities for experience exchange.

#### iv. Partnerships with Stakeholders

SMC will form partnerships with concerned stakeholders identified on the basis of the cluster-wise stakeholder mapping. These partnerships will be critical for addressing some of the key constraints to upgrading and bringing about greater synergy in action at the ground level, in particular with other local agencies, social sector departments and land owning agencies.

# v. Monitoring Community Participation

A GIS based MIS has been developed under Slum-free-city action plan that shall be updated time to time by the SMC. SMC may engage a local agency to update information on the the MIS and shall develop in-house capacity to use the MIS for tracking interventions

#### c. Promoting Sustainable Livelihoods

Promoting sustainable livelihoods will be critical for poverty reduction. Better incomes will also enable poor households to access basic quality basic and social services and upgrade their housing. Sustainable livelihoods is about improving skills for income generation, linking people to employment opportunities, promoting micro-enterprises through access to credit, markets, design inputs, banking services, etc.

Early actions will focus on promotion of sustainable livelihoods. SMC through its State Urban Development Agency implements the national urban livelihoods programme, Swaran Jayanti Shahri Rozgar Yojna (SJSRY). SJSRY is aimed at the development of skills, mostly for women, and access to credit for micro-enterprises, both by individuals and groups. It will also be responsible for the implementation of the new Urban Livelihoods Mission to be launched by the MoHUPA aimed at supporting urban poor with livelihood strategies.

#### i. Synergise SJSRY with Slum Upgrading and Housing Programme

SMC will synergise slum upgrading/redevelopment and housing with SJSRY. This link will be critical to enable families to pay their contributions towards housing/services, monthly user charges, EMIs, and property tax, once tenure and











ownership titles are granted. All families under the slum upgrading or housing projects, in particular the poorest, will be included in the livelihood programme and supported with skill development, access to employment or markets for micro-enterprises, micro-credit through formal banks or micro-finance institutions and other savings instruments, development of management skills, etc.

# ii. Promoting Sustainable Livelihoods with Capacity Creation and Saving Practices

A Livelihood Mapping and Value Chain Analysis study will help to explore new and emerging markets for both micro-enterprise products and employment, in particular in the construction industry. At least one member of each poor family will be offered the opportunity to re-trained and develop skills for employment in the new and emerging markets and /or construction industry which could provide employment to the poor under upgrading and housing projects. For the development of micro-enterprises, SMC will support market linkages, orders and their management, access to micro-finances, etc. Training for micro-enterprise development will also be managed through the existing SJSRY training network with additional support of local NGOs. Saving programmes will be crucial for promoting livelihoods among women who are less credit worthy and lack formal collateral. Saving practices in general, will improve creditworthiness of poor households for formal finance for upgrading or housing.

# iii. Designing Home and Community Spaces for Livelihoods

Slum upgrading designs will focus on promoting economic activity at home and in the neighbourhood. House and community designs will be developed in consultation with residents with each household having a voice in choosing the best fit option. Access to municipal services at the household level will broaden the range of potential livelihood activities and improve household productivity. At the community level, spaces will be developed to enable parking of carts/rickshaws, storage of material, micro-enterprise activity, vending, etc. Such spaces will also be developed within and in the neighbourhoods of upgraded slums, resettlement sites, commercial markets, industrial areas, etc.

# iv. Modification of Building Byelaws for Livelihood Promotion

Building Byelaws applicable in upgraded or tenured settlements, housing projects, resettlement sites, etc. will be converted to mixed land use patterns to enable poor households to pursue livelihoods without fear of authorities and /or be liable to pay commercial charges for water and power. However, to protect commercialization and gentrification of these communities, SMC will determine through a consultative process a permissible range of livelihoods, current and emerging markets. This list will be revised every two years to ensure that poor continue to benefit from the city's economic growth.

#### 5.1.17 Notification and De-notification of Settlements

SMC will need to initiate the process of notification and de-notification of slums to enable upgrading to happen at a city scale. Presently, all the slums in Salem are non-notified. SMC will take the necessary steps to notify all slum settlements to enable it to improve services to these areas.

Settlements with insecure tenure shall be granted tenure and household level services as per the norms indicated above will be deemed to be fully upgraded and de-notified. De-notification implies that these settlements would no longer be in the list of slums, but will become an integral part of the city. Upgraded de-notified settlements would be eligible for services as per other developed areas in the city and after a 5-year amnesty period, will become part of the property tax system. It is felt that in these 5 years, the families, if assisted with livelihoods, may no longer be in need of special state assistance.

Even as the city will develop plans for new migrants and take measures to prevent formation of new slums, till such measures are fully in place, new slums may get added to the city. The city will therefore update its lists and slum maps every two years and notify any new settlements that may have formed emerged to enable provisioning of services.











#### 5.1.18 Access to Social Services

The basic services for urban poor mission of Government of India have laid down a 7-point charter to promote sustainable poverty reduction. Of the services under the charter, three are aimed at converging education, health and welfare services to slum and poor communities. SMC shall ensure all slum settlements in the city have access to these services as per norms laid down by the concerned departments.

Exhibit 5-11 Action Plan for Implementing 7-Point Charter

Criteria	Slum Up gradation & Re-developmer		Slum Resettlement	New Migrants
Social Services	Education & departments set up sch health centres as per no			
Welfare Services	Welfare department prepares lists of all eligible beneficiaries for various social programmes			r various social programmes
Customer/Grievance Redressal System	Set up a voice platform and customer/grievance redressal cellsat Ward level in association with elected representatives			

#### **Norms for Social Services**

SMC will work with the concerned departments to improve norms for provisioning of social servicesor education, health, etc. and will monitor achievement of the norms. In case of gaps/deficiency inservices, SMC will inform the concerned department for appropriate follow-up action.

**Exhibit 5-12 Norms of Social Service** 

Services	Desired Norms	Provisional Arrangements	
	Norms for Household Level Services	Norms for Community Level Services	
Primary Education	Schools within 1km reach of child with appropriate infrastructure, staff, equipment, conforming to the standards of quality set under the Sarva Shiksha Abhiyan.		
Primary Healthcare	Urban Health Posts/Clinics/Dispensaries with full facilities as specified in the NUHM provided through convergence with the Health Department.		
Social Services	Provisioning of social services such as day-care centres, pre schools, PDS, welfare and welfare services for elderly, widowed, marginalized, etc. in convergence with concerned departments.		

# 5.1.19 Convergence for Improved Education Outcomes

SMC will ensure full support to promote education outreach in slum communities for attaining the goals of universal enrolment, retention and achievement of eight years of education for every child. SMC will through this fulfill its role to further the "educational objects including establishment, maintenance and improvement of schools". SMC will converge with department of Human Resource for policy and programme implementation.

# a) Joint Planning for Education Service Delivery

SMC will coordinate and extend all the support to the State School Education Department for education services for Salem. It will work jointly with TNSED in planning for school services in /near slums. SMC will share the information from slum surveys, identify service gaps, and plan for new schools in slum neighbourhoods and resettlement sites to ensure education access/ continuity. SMC will support school enrolment, access to land for schools, birth certificates/ proof of residence for slum and migrant families without record, and monitor school drop outs and learning outcomes. It will develop and share disaggregated data on status of primary education for Salem slums and provide feedback to State School Education Department from the ground and ensure need-based planning and service delivery.











# b) Participatory Education Planning and Community Based Monitoring

SMC will support mobilization of communities for education planning and monitoring through its community organisers. These will be synergised with the School SSA Committees. Community leaders will be trained under SMC's capacity building programme to monitor education services and outcomes. SMC will also give greater advocacy to the weekly Grievance Day in the Department to address citizen's complaints.

# 5.1.20 Linkages for Health Service Delivery

Provisioning of health services is a discretionary function of urban local bodies and subject to availability of resources, SMC may construct, establish and maintain hospitals, dispensaries, and maternity and infant welfare centres. At present the Health and Family Welfare Department is responsible for service delivery in Salem and for implementing a range of schemes for improving access and demand for health services among the poor and unreached populations. SMC will synergise its slum upgrading work with interventions by the department of Health for a holistic impact.

#### a) Setting Goals for Slum Areas

As per the survey only limited slums have access to a health dispensary in the vicinity of the settlement. The majority of the settlements do not have access to to public health services close totheir settlements. SMC will support Health & Family Welfare Department (HFWD) in setting ofhealth service delivery goals for slum areas. Overlaying health infrastructure on city slum maps willhelp identify service availability gaps and prepare plans for services to un-reached settlements. SMC will provide feedback to HFWD on services' quality based on responses from the community.

#### b) Joint Planning for Health Service Delivery

SMC will be proactive in the District Health Committee/ Office to help improve access of slumdwellers to health care services in Salem. It will work jointly with the district officials in the planning for health services in /near slums. SMC will share information on slums (i.e. on pregnant women for institutional deliveries, immunization status of children, illnesses, etc.), identify service gaps, and plan for new schools in slum neighbourhoods and resettlement sites to ensure health access. SMC will develop and share disaggregated data on status of health for Salem slums and provide feedbackto HFWD from the ground to ensure need-based planning and service delivery.

SMC will assist HFWD in implementing its various health schemes for maternity benefits, ambulance, etc. in slum communities. It will also help HFWD to access land for health centres inslums/wards. SMC will complement this through provision of water and sanitation services (toilets, solid waste disposal, drainage, underground sewerage, etc.) to all slums as part of its city wide upgrading plans.

#### c) Community Participation in Health Service Delivery

SMC will support mobilization of communities over health issues and for joint planning and monitoring services. ASHAs and SMC community organisers will work together in organizing theArea Health Committees and developing Community Action Plans for Health. Community leaders will be trained under SMC's capacity building programme to monitor health services and outcomes andto provide feedback to HFWD. SMC will also give greater advocacy to the weekly Grievance Day inthe Department to address citizen's complaints.

# 5.1.21 Access to Welfare Services

Large numbers of national and state schemes are being implemented for welfare of poor families. SMC will work with concerned departments to ensure better targeting of welfare services to the poor and slum dwellers for accessing food subsidies, pensions, relief funds, school fee subsidies, maternity entitlements (JSY), girl child benefits and other schemes that SMC/ state launches fromtime to time. The more vulnerable will get access to welfare benefits such as old age, disability orwidow pensions, etc.











SMC will improve access of poor households, in particular women and children, to adequate food as a matter of right. The poorest households will be entitled to subsidised food and/or meals undervarious programmes such as mid-day meal schemes. Those capable of working such as migrantworkers and their families will also be linked to livelihoods under SJSRY. SMC will ensure easy access to ration cards, implement new schemes such as food stamps, community managed publicdistribution scheme shops, etc. to target the poorest. Food security programmes will be subject toannual social and gender audits.

# a. Set up a Single-window and Transparent System

SMC will help set up a single-window system for access to welfare services by sharing the lists ofbeneficiaries and biometric identification system with relevant local agencies responsible forimplementing the welfare schemes, and to converge the several benefits such as maternity, freemedicines, food subsidies, and girl child benefits or pensions, skill training, micro-credit assistance, etc. The effort will be to make welfare service delivery as transparent as possible.

#### b. Include Welfare Services within SMC Citizens' Charter

SMC citizens' charter will be revised to include welfare services, eligibility criteria, application procedures and time lines for services. This charter will be subject to the provision of the Right to Information Act (RTI) in the State.

# 5.2 Slum Preventive Strategy - Planning for Affordable Housing for All

Strategy for prevention of slums in future will include, on one hand, prevention of encroachments, illegal structures and supply of affordable housing on the other. The plan of action should encompass proposed action to be undertaken by the city to commensurate the lands and promote the construction of affordable housing in consonance with the housing demand. This plan of action would also need to outline the necessary legislative and administrative changes to enable urban land expansion, and in town planning regulations to stipulate reservations for EWS/LIG housing in all new developments and changes in building bye- laws and procedures to facilitate and incentivize affordable housing. This strategy will involve assessment of existing vacant lands, existing and future housing needs, assessment of housing supply, future strategy to meet the gap, assess future housing requirements, land requirements, and investment requirements in order to ensure that the future housing needs for low-income groups are met.

#### 5.2.1 Housing Supply Trends

Land ownership in Salem is largely private, which is one of the prime reasons for very high prevailing land prices. The land supply constraint is further compounded by the nature of land in Salem viz. 1) Institutional Land 2) Commercial Land 3) Reserved Forest area and 4) Non developable area which limits the potential supply of land for residential development. High land prices and limited supply of land, and a private rental market for housing which is inadequate in terms of amenities and infrastructure has resulted in proliferation of slums across the Salem City. The objective of the preparation of the preventive strategy is, to restrict or prevent the formation of slums in future, by bringing in necessary policy reforms and correcting the supply and demand constraints in the housing market.

The situation makes housing and amenities and especially housing for the poor and economically weaker section a top priority for the Govt. of Tamil Nadu. Formed in 1947 as "City Improvement Trust" in order to cater to the Housing needs of Madras City, has developed into full fledged organization as TNHB. TNHB is under Housing & Urban Development Department of Tamil Nadu. All residential township developments of TNHB have been a success due to their compliance to the development rules and their not-for-profit motive. The organization caters to all sectors of the society through their HIG, MIG and LIG offerings. TNHB offers houses on sale by LOTs and also have rental schemes.











The housing situation and slum improvement initiative in Salem is a complex and challenging process mainly due to:

- Availability of the land as the city historically developed as one of the commercial and institutional center
- ❖ Substantial number of slums being in "reserved forest" land
- High Land Values
- Absence of sufficient credit facility to the EWS/LIG Sections of the society.

Absence of formal supply for affordable housing for this segment of population has resulted in the growth of private rental market which is absolutely inadequate from both safety concerns as well as basic minimum quality of life standards.

# 5.2.2 Urban Housing Delivery System in Salem

It is indeed very important to understand the schemes implemented to know affordability and successes rate for implementation of new schemes. Various schemes have been implemented in Salem by Tamil Nadu Housing Board and Tamil Nadu Slum Clearance Board.

# 5.2.2.1 IHSDP Scheme Implemented by Salem Municipal Corporation

Salem Municipal Corporation implemented IHSDP Scheme in Salem benefiting 1006 households. It is estimated about Rs.10.94 Crores have been allocated to implement these schemes.

Exhibit 5-13 IHSDP Scheme Implemented in Salem by the Salem Corporation

Suramanagalam Zone	Ward	Slum Details	No of HH
1	2	Chinnaammapalayam	139
2	19	Mariamman Kovil Street	49
3	19	Anthonipuram Odai	30
4	24	Kandampatty Adihidravidar Colony	44
5	24	Kandampatty MGR Nagar	21
6	25	Korikkadu	40
7	22	Andipatty	52
Hasthampatty			
1	12	Johnsonpet East street	51
2	13	Johnsonpet West Street	49
3	5	Alagapurapudur	23
4	8	Chinnathirupathi Gandhi Nagar	23
5	8	Amman Nagar	16
6	4	Thenalagapuram	55
Ammapet Zone		-	
1	10	Pandiyan Steet	41
2	11	Gopal Street	19
3	11	Vasagasalai Street	19
4	36	Nanjampatty	153
5	40	Pachappatty	75
Kondalampatty			
1	47	Ambedkar Nagar	3
2	49	Kannagi Street	83
3	50	Ambedkar Street	11
4	60	Maduraiveerankovil Street	10
		Total	1006

Source: Salem Municipal Corporation











# Exhibit 5-14 Implementation by TNSCB

# **TNUDP**

			No.of		
			House	Expr (Rs.	
S.No.	Zone	Name of Scheme	holds	In Lakhs)	Year
3.110.	Suramangalam	Name of Scheme	noids	III Eakiisj	rear
1	Zone	Rajakalaiamman nagar	65	2.82	90-91
2		Anthonipuram	103	2.31	88-89
3		Majid Street	81	2.75	94-95
4		Pandian Street	78	1.82	90-91
5		Periyar Street	24	0.31	93-94
6		Indira nagar Suramangalam	60	2.18	90-91
7		Anna nagar Suramangalam	75	1.93	91-92
8		Achivan nagar	123	2.82	90-91
9		Kattusothan Valasu	29	0.72	89-90
10		Pakkirikaradu	47	1.84	94-95
11		Kallukuzi	35	0.74	88-89
12		Kamaraj Coloyn Suramangalam	92	3.79	88-89
13		Sanjikottai Phase I	54	2.02	95-96
14		Senjikottao Phase II	49	2.08	95-96
15		Soth palapatti	16	0.23	89-90
		Gandhi Nagar Shavapet	71	1.65	89-90
	Hasthampatti				
16	Zone	Pidariamman Koil Street Phase I	25	1.43	95-96
		Pidariamman Koil Street Phase	1.50		
17		II all	156	1.43	95.96
18		Pilliyar Nagar	31	1.39	95-96
19		Odachakarai	40	0.945	89-90
20		Thaneer pandal colony	84	2.063	90-91
21		Thanthaiperiyar Nagar Phase I	156	4.987	95-96
22		Thanthaiperiyar Nagar Phase II	28	1.063	95-96
23		Court Road Colony	182	5.206	89-90
24	A	Shankar Nagar	30	0.626	89-90
25	Ammapet	Valkadu Privu	32	0.79	90-91
26		MGR Nagar	84	2.15	90-91
27		Ponnamapet	90	3.07	89-90
28		Carpet Cherry	56	0.56	88-89
29		Jothi thearte back side	19	0.466	89-90
30		kadambur Muniappan Koil Street	71	2.602	93-94
31		Pudupet Phase I	134	4.162	93-94
32		Pudupet Phase II	99	3.16	93-94
		·			
33	ļ	Pudupet Phase III	52	1.959	94-95











34		Namamalai nagar	38	0.993	94-95
35		Vaithiudaiyar kadu	32	0.801	91-92
36		pachapatti	27	0.707	89-90
37		Gandhi Mahan Street	159	4.808	90-91
38		New Sunnambu Colony	115	2.519	90-91
39		Erumapalayam Phase I	408	10.75	90-91
40		Erumapalayam Phase II	83	1.925	92-93
41	Kondalampatti	K.P.Karadu Phase I	24	2.67	91-92
42		K.P.Karadu Phase II	73	1.89	91-92
43		K.P.Karadu Phase III	88	3.98	95-96
44		K.P.Karadu Phase IV	39	1.88	95-96
45		Gandhi Nagar Annadanapatti	55	1.32	91-92
46		Gandhi Nagar Phase II	78	2.596	93-94
47		Gandhi Nagar Phase III	40	1.14	93-94
48		Kamaraj Colony Annadanapatti	79	1.72	91-92
49		Kamaraj colony East	88	2.09	91-92
50		Kondalampatti Cherry	102	1.72	90-91
51		Shanmuga nagar	25	0.6	90-91
52		Amman nagar	77	1.68	89-90
53		Moonankaradu North	345	7.897	90-91
54		Moonankaradu South	289	6.99	90-91
55		Muthumariamman Koil Street	42	1.24	93-94
56		Ponmanan Nagar	58	1.64	92-93
57		Purachi Nagar	25	0.71	94-95
58		Indira Nagar	62	2.18	90-91
59		Mahaliamman Koil Street	71	2.36	93-94
60		Thiruvallavar nagar	72	1.68	90-91
61		Uthukuzhil kadu	29	0.67	92-93
		Total	4994	139.221	

**NRY** Year 1991 to 1995

Sl.No.	Zone	Name of Scheme	No.of House holds	Expr (Rs. In Lakhs)
	Suramangalam			
	Zone			
1		Anthonipuram	16	0.50
2		Majid Street	1	0.003
3		Pandian Street	21	0.66
4		Periyar Street	2	0.06
5		Indira nagar Suramangalam	18	0.57
6		Achivan nagar	11	0.35
7		KattusothanValasu	13	0.41
_	0 /31280			











8		Kallukuzi	21	0.66
9		Kamaraj Colony suramangalam	3	0.09
10		Sanjikottai Phase I	4	0.13
11		Senjikottao Phase II	4	0.13
12		South palapatti	8	0.25
13		Gandhi Nagar Shavapet	33	1.04
	Hasthampatti	,		
14	Zone	Court Road Colony	5	0.16
15		Shankar Nagar	10	0.32
		Thanthaiperiyar Nagar East	29	0.91
16	Ammapet	Valkadu Privu	31	0.98
17		MGR Nagar	39	1.23
18		Ponnamapet		
19		Carpet Cherry	2	0.06
20		Jothi thearte back side	19	0.60
		kadambur Muniappan Koil		
21		Street	35	1.10
22		Pudupet Phase I	58	1.83
23		Pudupet Phase II	32	1.00
24		Namamalai nagar	1	0.03
25		Vaithiudaiyar kadu	16	0.50
26		Gandhi Mahan Street	50	1.58
27		New Sunnambu Colony	17	0.53
28		Erumapalayam Phase I	25	0.79
29		Erumapalayam Phase II	37	1.16
30	Kondalampatti	K.P.Karadu Phase I	2	0.06
31		K.P.Karadu Phase II	7	0.22
32		Gandhi Nagar Annadanapatti	24	0.76
33		Gandhi Nagar Phase II	50	1.57
34		Gandhi Nagar Phase III	34	1.07
35		Kamaraj Colony Annadanapatti	7	0.22
36		Kamaraj colony East	14	0.44
37		Shanmuga nagar	18	0.57
38		Amman nagar	12	0.38
39		Moonankaradu North	88	2.77
40		Moonankaradu South	87	2.74
41		Muthumariamman Koil Street	21	0.66
42		Ponmanan Nagar	7	0.22
43		Purachi Nagar	18	0.57
44		Indira Nagar	18	0.57
45		Mahaliamman Koil Street	17	0.54
46		Thiruvallavar nagar	29	0.91
47		Othukuzhil kadu	10	0.31
		Total	1024	32.1











# **Cash Loan** year 1989 to 1995

			No.of	5 /D:
Sl.No.	Zone	Name of Scheme	House holds	Expr (Rs. In Lakhs)
31.140.	Suramangalam	Name of Scheme	Holus	iii Lakiis)
	Zone			
1		Anthonipuram	6	0.49
2		Majid Street	1	0.08
3		Pandian Street	15	1.22
4		Periyar Street	2	0.16
5		Indira nagar Suramangalam	6	0.49
6		Anna nagar Suramangalam	13	1.05
7		Achivan nagar	28	2.28
8		Pakkirikaradu	13	1.06
9		Kallukuzi	1	0.08
10		Kamaraj Colony Suramangalam	9	0.73
11		Sanjikottai Phase I	9	0.73
12		Senjikottao Phase II	3	0.24
13		Gandhi Nagar Shavapet	2	0.16
	Hasthampatti			
14	Zone	Pidariamman Koil Street Phase I	11	0.89
15		Odachakarai	8	0.65
16		Thaneer pandal colony	13	1.06
17		Thanthaiperiyar Nagar East	25	2.04
18		Court Road Colony	8	0.66
19		Shankar Nagar	5	0.41
20	Ammapet	Valkadu Privu	1	0.08
21		MGR Nagar	14	1.14
22		Carpet Cherry	19	1.55
23		kadambur Muniappan Koil	19	1.55
24		Street	9	1.55
25		Pudupet Phase I Pudupet Phase II	2	0.16
26		Pudupet Phase III	6	0.16
27		Namamalai nagar	9	0.49
28		Vaithiudaiyar kadu	8	0.75
29		pachapatti	10	0.82
30		Gandhi Mahan Street	46	3.74
31		New Sunnambu Colony	11	0.90
32		Erumapalayam Phase I	88	7.17
33		Erumapalayam Phase II	2	0.16
34	Kondalampatti	K.P.Karadu Phase I	7	0.16
34	Romanampatti	N.F.Nai auu Pilase i	<u>'</u>	0.57











		620	51.32	
48 Thiruvallavar nagar		6	0.49	
47	Mahaliamman Koil Street	5	0.41	
46	Indira Nagar	9	0.73	
45	Purachi Nagar	1	0.08	
44	Muthumariamman Koil Street	1	0.08	
43	Moonankaradu South	17	1.39	
42	Moonankaradu North	55	4.48	
41	Amman nagar	32	2.61	
40	Kondalampatti Cherry	7	0.57	
39	Kamaraj colony East	30	2.45	
38	Kamaraj Colony Annadanapatti	6	0.49	
37	Gandhi Nagar Phase II	4	0.33	
36	Gandhi Nagar Annadanapatti	10	0.82	
35	K.P.Karadu Phase II	8	0.65	

# Vambay

Sl.No.	Zone	Name of Scheme	No.of Households	Expr (Rs.in Lakhs)	Com.year
1	Hasthampatti	Fairlands	1	0.40	2005-2006
2	Ammapet	Erumapalayam	22	8.80	2005-2006
3	Suramangalam	Jagir Ammapalayam	12	4.80	2005-2006
			35	14.00	

# Clearance

			No.of	Expr (Rs.	
Sl.No.	Zone	Name of Scheme	Households	In Lakhs)	Com.year
1	Ammapet	Vellakuttai Eri	176	0.70	1992-93
2	Kondalampatti	Andipatti Eri LIG	456	3.18	1994-95
			632	3.88	

# **Urban Renewals**

			No.of	Expr (Rs.	
Sl.No.	Zone	Name of Scheme	Households	In Lakhs)	Com.year
1	Kondalampatti	Andipatti Eri MIG	132	2.23	1997-98
			132	2.23	











# **XII Finance Commission**

			No.of	Expr (Rs.	
Sl.No.	Zone	Name of Scheme	Households	In Lakhs)	Com.year
1	Hasthampatti	Kannankadu	240	3.80	2009-10
2	Ammapet	Erumapalayam	400	9.37	2013-14
			640	13.17	

# TNHB Schemes

			No.of	Expr (Rs.	
Sl.No.	Zone	Name of Scheme	Households	In Lakhs)	Com.year
1	Hasthamaptti	Nalukkalmandapam	66		1965-67
2	Hasthampatti	Narayanasamypuram	82		1965-67
3	Kondalampatti	Annadanapatti	68		1965-67
			216		

Roof and enclosure walls (Fire proof sheds)

	roof and enclosure wans (The proof sheds)	No.of	Expr (Rs.	
SI.No.	Name of Scheme	Households	In Lakhs)	Com.year
1	Chinnathirupathy	145	20.010	1999-2000
2	Gorimedu	51	7.038	1999-2000
3	Kannankadu	35	4.830	1999-2000
4	JagirAmmapalayam	134	18.492	1999-2000
5	Kandampatti	85	11.730	1999-2000
6	Mariamman koil theru	50	6.900	1999-2000
7	Johnsonpet	60	7.500	1999-2000
8	Alagapuram	135	16.875	1999-2000
9	Then Alagapuram	130	16.250	1999-2000
10	Amman Nagar	55	6.875	1999-2000
11	Thiruvagoundanur	75	9.375	1999-2000
12	Ariyagoundampatti	45	5.625	1999-2000
13	Andipatti Colony	41	5.125	1999-2000
14	Thalamalai Nagar Ph I	73	10.950	2000-2001
15	Thalamalai Nagar Ph II	69	9.140	2000-2001
16	Dhideer Nagar	57	8.290	2000-2001
17	Indira Nagar	73	10.430	2000-2001
18	Jagir Ammapalayam	100	15.000	2000-2001
19	Jagir Ammapalayam	100	15.000	2000-2001
20	Malankattan theru	75	11.250	2000-2001
21	Sugumar Colony	42	6.300	2000-2001
22	Periyar Nagar	75	11.250	2000-2001
23	Mecheriyan Vattam	75	11.250	2000-2001











		1476	205.885	
2	Kakkan Nagar Phase II	45	6.750	2000-2001
2	Kakkan Nagar Phase I	43	6.450	2000-2001
2	Mookan Eri	38	5.700	2000-2001
2	Meenatchi Nagar	70	10.500	2000-2001

# 5.2.3 Estimation of Land Requirement for the Relocation of Slums

Mere construction of houses would not benefit the people as the housing should be associated with sufficient physical and social infrastructure facilities. Considering this fact land requirement has been projected for residential and non-residential purposes keeping density as major factor for determination of the land requirement.

# 5.2.4 Strategies for Housing for New Migrants

Even as SMC will ensure housing for all slum dwellers currently in the city, there will always be new migrants to the city in need of housing. To prevent formation of new slums by new migrants to the city, SMC will undertake the following actions:

- a. Design and build affordable, social rental housing; and
- b. Plan for transitional or temporary housing sites.

# a. Social-Rental Housing

Development of rental housing shall be undertaken considering the timeline for the development of the housing for the entire slum. In case the housing for slum can be taken up within 1-2 years, it may not be required to develop rental housing as the development has been faced out as such that in the tenable slums sufficient area would be available to contruct houses for un-tenable slums.

In case the timeline to develop housing for all the slums is of a longer duration, SMC will implement rental housing for new migrants. Social-rental housing is about provisioning of houses on rent for slum and BPL households and new migrants. Rental housing may be offered as transition accommodation to be used by families for limited time periods or as self-financing scheme where monthly rental contribute to the repayment of the housing loan and house ownership.

Social-rental dwellings are constructed or owned by public institutions, housing cooperatives, nonprofit organizations or private agencies, which rent these dwellings to persons with low incomes. The rent from the housing is fixed by the local government and used to finance other similar schemes.

SMC will design and construct rental housing for new migrants through public private partnership (PPP) arrangements, both big and small contractors, housing cooperatives or NGOs. SMC will engage with various agencies in the state to identify and acquire land for social-rental housing. Preference will be for lands located close to industrial/commercial areas as these offer livelihood opportunities and reduce need for transportation. While planning for temporary arrangement closer to the commercial/industrial establishments, the tenability shall be kept in view.

Rental housing schemes will be designed under RAY and will be given wide publicity with support of private /NGO developers. Registration will be open to slum dwellers, BPL, EWS and LIG households. Different sizes of houses will be built to suit income /affordability levels. Facilitation counters will be set up at the SMC office, offices of the private developer, ward or zonal offices, etc. where slum /BPL families /new migrants can register themselves. SMC will select the tenants based on proof of occupation and income and validated through house/site visits. Poor households











who have registered for rental/owned housing may have a waiting period in case social-rental housing or selffinancing schemes are under construction.

House designs will be developed through people's participation and will offer options and choices on housing types, features, etc. All housing will have private toilets linked to sewerage and municipal piped water connections in-house. Sites will be fully developed with roads, transportation systems, drainage, underground sewerage, municipal water supply, schools, health centres; through partnerships with appropriate service provider agencies. Where social-rental housing is developed through PPP mode, the private agency will be responsible for site services. SMC will provide linkages to micro-finance, formal credit through banks, Housing Credit Fund as described above.

Rentals here will be lower to make these more affordable and families/individuals would be able to use these for a maximum period of 2 years.

#### b. Temporary or Transition Housing

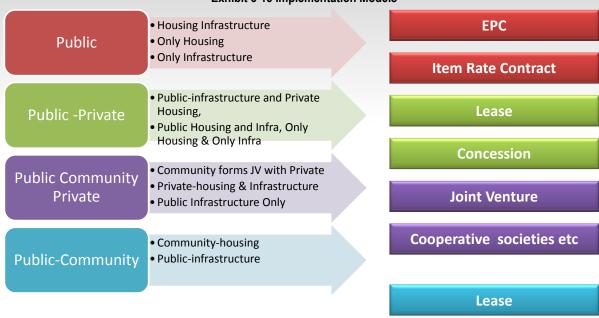
SMC will develop temporary or transitional housing if required for in-situ redevelopment or for those who will be relocated. Temporary or transition housing developed for relocation may eventually be converted into low-income rental housing for new migrants or the poorest who cannot afford to buy a new house.

SMC may also permanently construct some multifamily dormitory/workforce housing at appropriate locations in the city. These will be available to migrants/slum dwellers/BPL families for short stays.

# **5.3** Implementation Formats

There are different formats possible for implementing the project. The format needs to be adopted upon due consideration of the relative benefits of the different modes. The figure below illustrates the possible models:

#### **Exhibit 5-15 Implementation Models**













# 5.3.1 Implementation Mode 1: Public through EPC/Item rate

In this format the implementing government agency can carry out the implementation of thedevelopment option identified on its own through conventional contracting, i.e. EPC or item ratecontract. In the case of an EPC/ item-rate contract, it would be a completely SMC-led operation, the implementation may therefore be smoother in terms of obtaining clearances. There may be lessopposition, to the implementation as the general perception would be that a government led project would have social upgradation as the objective. However, this option may not prove to thebe the most efficient in terms of implementation because it may result in poor quality of endproducts, potential time and cost overruns, and O&M issues and therefore defeat the purpose of rehabilitation of slum dwellers.

Financing the project would depend on the budgetary provisions for slum rehabilitation. This could pose problems of stalling projects mid way due to deficiency in the budget. However, in case of Tamil Nadu the Central Government has proposed to contribute upto 50% of the project cost and the StateGovernment/ULB shall meet only the 50% of the cost.

# 5.3.2 Implementation Mode 2: PPP

The implementation could be shared between the public entity and the private partner in two ways:

- 1. The public entity develops the infrastructure and the private entity develops the housing
- 2. Private entity develops both infrastructure and the housing

Either of the above project structures can be adopted depending on the nature of the slum, landavailable and other parameters that decide viability of the project. The private partner in some casescould also be an NGO along with business organizations/ developers.

It may be perceived that the involvement of a private entity may compromise the inclusion ofcommunity requirements and needs in the implementation of the project. Hence, the requirementsof the community must be specified right at the start of the project and must be made binding onthe private partner. Due to private participation, higher efficiency in implementing the project is expected. This would result comparatively lesser time and lower cost overruns. Typically, in a PPP structure, the project must be viable in order to obtain any private investment. The valuation of the land must be carried out and its viability ensured in order to attract the participation of a private entity.

The revenues would be expected from the value of freed up real estate in the land parcel and theexpected lease rentals from the housing infrastructure. The developer's revenue model will be basedon the best use of the land made available to him for commercial or high end housing purposes. Minimum specifications for construction of housing for slum rehabilitation must be determined and stipulated at the beginning of the project. The contractual frameworks must be strong in order toprotect the interests of the community. In the case the project is not viable, it could be structured on an annuity model. This can happen incases where no land can be freed up. In such a situation, the ability of the ULB to make the annuity payments must be established. This format is adopted where the land value is high, which make the private investment lucrative. The private developer can also be offered Tradable Development Right, which enables the Privatedeveloper to invest in an establishment commercially more attractive at a different place in the city.

Considering Salem is a small and medium city and the land value at the settlement in Salem is on the medium side and this option may not be optimal.











# 5.3.3 Implementation Mode – Public-Community-Private

This option would encompass a structure between the private partner and the representative of thecommunity such as a cooperative society. The joint entity as a whole would partner with the publicagency for the implementation of the project. In this option, the project structure can be that theprivate entity could take up both the housing and the infrastructure, or only the housing with thepublic entity constructing the infrastructure.

The public entity partnering in the project must have the capacity to oversee the entire project andserve as an interface between the community and the private partner. It must balance therequirements of all the stakeholders involved and help in structuring the project so as to achieve awin-win achievement. Models for community contracting could be explored.

# 5.3.4 Implementation Mode 4: Public-Community

This option would encompass a structure between the public entity and the community, which is thebeneficiary/ the representative of the community such as a cooperative society. In this option, theentire infrastructure provision is made by the public entity and the community takes up the housingcomponent. The public entity partnering in the project must have the capacity to oversee the entireproject.

# 5.3.5 Order of Priority for Implementation Options

The priority for the implementation model has been arrived at considering the budget, Tenability(relocation or redevelopment), Tenure status and affordability of the units by the beneficiaries. Involvement of Private Developer increases the cost of the units. Also the lease model will not beappropriate for the households with secure tenure. The priority for the model shall accordingly be ashereunder:

**Exhibit 5-16 Order of Priority for Implementation Model** 

Priority	Agency	Responsibility	Mode
1	Public (SMC)	Housing & Infrastructure	EPC/Item rate
2	Public-Community	Community-Housing	Cooperative Society
		Public – Infrastructure	
3	Public-Community-Private	Private-Housing	Cooperative Society
		Public/Community-Infrastructure	
4	Public-Private	Private-Only housing	Lease

We also have another view for successfull implementation of the project including above all stakeholders and formation of Special Purpose Vehicle. Especially this could be practical for preventive strategy housing.

# 5.4 Policy and Reforms

Policies and reforms are backbone for implementation of any successful program. Some policy interventions at the state and local level have been presented hereunder:











## 5.4.1 Development Policies

Under JNNURM, state governments are required to implement several policies aimed at creating anenabling environment for slum upgrading and development. These include; a Slum Upgrading Policy, Housing and Habitat Policy, and Sanitation Policy. City governments are also required to developpolicies such as a City Sanitation Policy.

The state shall be developed a State Slum Rehabilitation and Development Policy (SRDP). The Slumsin the state will be implemented within the framework of SRDP.

The State Government shall also set up various committees and is seeking technical assistance indeveloping other required policies. SMC, through membership in these committees, will contribute policy convergence and ensure these complement each other and are cost-effective. SMC willalso set up city level committees to develop policies relevant for Salem. These will be in synergywith State Policies.

## 5.4.2 Implementing Reforms

SMC is required to implement several reforms as part of Basic Service for Urban poor (BSUP)/IHSDP thatinclude both mandatory and optional reforms. These reforms are also critical for the successfulimplementation of Slum Redevelopment Project Salem (SRPV). SMC will design and implement thefollowing city level reforms as also assist the State Government with the design and implementation of relevant State level reforms.

#### a. BSUP/IHSDP Reform

The BSUP/IHSDP reform is about setting equitable standards and norms for service provision in slumsettlements. Norms for services (municipal and social) to be provided to slum areas and theproposed strategy to incrementally improve these from community and shared services tohousehold level and paid facilities has been described in this report. SMC will obtain necessary Stateapprovals and authorization from its Standing Committee for implementing the revised norms.

BSUP norms will be used for measuring outputs and outcomes defined norms. For example; number of families having access to individual toilets linked to sewerage systems or number of families withaccess to in-house water connections, etc. SMC will develop a baseline for the city to enable it tomeasure change over time and to de-notify fully upgraded settlements.

#### b. Internal Earmarking of Budgets for the Poor (IEBP)

IEBP reform is intended to ensure adequate resources are provided for and targeted to thedevelopment of poor and slum communities. SMC is required to earmark 25% of its budget for the poor and transfer this to a BSUP Fund. These funds, together with JNNURM assistance under Sub-Mission II, will be directed for slum upgrading, housing, services, livelihood promotion, and access toeducation, health, etc. BSUP Fund will enable SMC to spend appropriately and carry forward anyunspent balance to the following year. SMC will develop an accounting system to monitor expenditure under IEBP. BSUP funds and expenditure will be subject to annual social and genderaudits.

The IEBP reform will be aligned to the municipal accounting reforms in urban development, designed to improve the functioning of municipal systems; making for a more robust local body. Inparticular, the reform will aim at better tracking of expenditures on slum upgrading and pro-poorurban development under IEBP and JNNURM.

## c. Earmarking Developed Land for the Poor (EDLP)

Based on MoHUPA guidelines, SMC will design a reform proposal for earmarking 20-25% developedland in all new housing projects for pro-poor housing. All private housing projects in the city will berequired to provide 25% land (or











compensation in lieu of land) for housing the poor. Otherinstruments used for generating land for housing projects will include requests to GeneralAdministrative Department (GAD) for land lease, proposal for in-situ upgrading on forest lands toForest Department, grant of tenure to tenable sites, TDRs (Tradable Development Rights) provisionsfor private builders, increase in FAR (Floor Area Ratio) in dense areas, modification to buildingbyelaws and simplification of property registration and sale procedures.

According to JNNURM, housing for the poor is defined as a place to live, work and sell. SMC willmake necessary provisions in the EDLP reform to ensure this and enable the poor to mortgage andor inherit property rights. SMC will relax the building byelaws so that the poor can use houses aswork spaces. The EDLP will build in safeguards under instruments such as TDR. It will also protectpoor from conspiring real estate developers through joint titles, bank loans against house collateral,moratorium on sale for minimum 5 years, housing MIS to exclude those provided housingpreviously, etc. to prevent return to slum living.

### d. User Charges

Once households are connected to in-house water and sanitation services and power supply, theywill be required to pay user charges. SMC will facilitate implementation of following reforms tomake these payments affordable to the poor:

- Reduced connections costs with provision to make payments in instalments.
- Lifeline tariffs, to ensure poor people mostly pay minimum tariff for basic facilities.
- Provision to pay as per earning pattern without fear of disconnection/penalties.

Like for housing, these relaxations will be applicable for 5 years or till households are reported tohave moved above the poverty line. Besides reducing connection fees for all slum dwellers as per SMC slum lists, the effort will be to simplify procedures and minimise documentation required forconnections. By focusing the reform on to slum dwellers, the SMC will be able to better targetsubsidies to the poor communities.

### 5.4.3 State Level Reforms

SMC will align its activities on slum upgrading with the following State level reforms.

## a. Community Participation Law (CPL)

CPL is to be enacted at the state level to ensure decentralization of planning functions and to enablethe poor to have a voice in city planning and development. CPL will also require an implementation plan at the city level for inclusive and participatory development. SMC will on the basis of spatiallymap, develop area sabhas and ward committees with representation of various groups and communities in the ward area, including of slum dwellers, women, people from marginal /minoritycommunities, etc. Where formed, CDS groups under SJSRY will be linked to the area sabhas forgreater synergy. SMC will partner with a well reputed NGO (national or local) with considerable experience in community partnership processes and voice mechanisms to set up the area and wardlevel structures/strengthen CDS groups and develop mechanisms for community-governmentengagement.

## b. Public Disclosure Law

The Public Disclosure Law is aimed at making the processes of government transparent and accountable by improving access to information. Access to information also empowers people. It is expected that such mechanisms for transparency-accountability will strengthen voices of the poor incity planning processes.

In accordance with the Public Disclosure Law, the SMC will implement the Right to Information Act(RTI). Institutional arrangements, preferably at the ward level, will be made to ensure poor haveaccess to information such as their rights











to basic services, norms of entitlement, land rights, resettlement issues, etc. These arrangements will be well publicised in slum areas so that more poorpeople can have access.

Through mechanisms such as participatory and gender-based budgeting, SMC will ensure poorpeople have access to information and a voice in resource allocations in the city. In particular, the poor will be involved in the planning for BSUP Fund.

#### c. E Governance

This reform is to improve the functioning and accountability of local governments. SMC willcomputerize all data and records on slums, slum dwellers, BPL households, housing, land ownership, tenure, services, etc. SMC will also ensure transparency by making placing information in the publicdomain. SMC will also computerise and link its regional/ward offices for easy access to and transferof information.

As defined under IHSDP/BSUP, Housing is space for living, working, owning and selling. Housing under Ray shall also aim to, over time, provide full rights and title to the space to enable families to mortgage, access credit and transfer these rights through inheritance. To achieve this goal will require strategic shifts in policy and approach to slums and a broad mix of options to respond to specific contexts. Housing for all is a permanent solution that will require significant planning and time to achieve the intended outcomes. Actions for housing development will be three pronged; supporting self-investment in housing development through grant of tenure, formation of housing cooperatives or redevelopment, technical assistance and credit; developing new housing for non-tenable settlements in on-site, near-site or far-site development, and providing affordable housing for new migrants.

Housing upgrading and development will be at the core of the slum free city program. SMC will plan and implement a comprehensive housing programme to ensure housing for all poor, now and for future migrants. Housing for all will be undertaken in partnership with SMC and TN State Housing Board (TNHB). Housing also can be developed through the PPP mode.











# Chapter 6 : Credit Plan

"...Slum and urban poverty are not just a manifestation of a population explosion and demographic change... slums must be seen as the result of failure of housing policies, laws and delivery systems, as well as of national and urban policies" (UN-HABITAT, 2003b, p. 5).

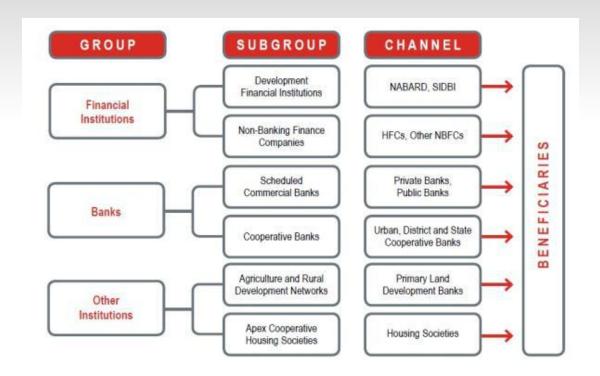
#### 6.1 Objectives of the study:

his study is the result of interviews of key organizations involved in affordable housing in the state, Focus Group Discussions with the selected slum dwellers and Meetings with NGOs, CBOs and SHG's in Salem. The objectives of the study are

- 1. To give an overview of low income housing sector and market in India and its stakeholders
- 2. To better understand urban poor housing needs through a short study in Salem slums
- 3. To identify key innovations and initiatives on housing for the poor

#### 6.2 **Review of Existing Housing Finance Options for Urban Poor:**

It is known fact that low-income people in Salem city do not have the financial ability to enjoy a decent housing environment. There is a clear lack of knowledge on how low-income people, drawing upon both their available income together and support from formal financial institutions, would be able to afford housing. It is commonly considered a fact that their access to formal financial means is largely hindered by their poor financial status, along with the absence of any form of land tenure security.













An important trend during the last decade has been the increasing interest in housing cooperatives as well as rotating savings and credit societies). Communitybased financing of housing and services has been used for both settlement upgrading and for building new housing on serviced sites for upper-middle class rich people who can afford to own their plots. Some attempts were made to provide access to housing subsidies by providing some bridge financing for poor people. However, these efforts were unsuccessful because the urban poor had income levels too low to be able to take advantage of any of these subsidies.

A review of existing housing finance options for urban poor in Salem city has been carried out with Focus Group Discussions in Slums and target oriented enquiries with banks, housing societies and NGOs. Assessment revealed that Banks and Co-operative Housing societies are extending their hand towards financial assistance to the urban poor.

## 6.2.1 Cooperative Housing Department of Tamil Nadu Housing Board:

The Cooperative Housing Department was established as a separate wing in Tamil Nadu Housing Board under the control of Joint Registrar of Cooperative Societies as per G.O.Ms.No.533, Housing and Urban Development Department Dated: 19.03.1979. From 01.09.1979 the Department was separated and converted as Cooperative Housing Department and is being headed by Registrar of Cooperative Societies (Housing) in the cadre of Additional Registrar.

Cooperative Housing Societies in Tamil Nadu: There are 834 Urban Cooperative Housing Societies and 196 Taluk Cooperative Housing Societies and along with a state level Apex Body namely Tamil Nadu Cooperative Housing Federation Limited, Chennai-7 are functioning to cater the Housing needs of the members in Urban and Rural areas. The main objectives of these Cooperative Housing Societies are:

- a) To advance loan to members for construction of new houses.
- b) To buy or acquire lands, layout them as developed house sites for distribution amongst the members.
- c) To construct or cause to construct buildings or other works of common utility and maintain them properly for the well being of the members.
- d) To implement all the new schemes announced by the Government from time to time.

### Organization:

The Registrar of Cooperative Societies (Housing) heads the Cooperative Housing Department. The Joint Registrar of Cooperative Societies (Housing) (Inspection) and Deputy Registrar / Personal Assistant to Registrar of Cooperative Societies (Housing) are assisting Registrar of Cooperative Societies (Housing) at headquarters. At the District levels, 11 Regions i.e., Chennai, Chengalpattu, Salem, Cuddalore, Trichy, Thanjavur, Madurai, Salem, Coimbatore, Tirunelveli and Virudhunagar are functioning under the control of Deputy Registrar (Housing) of concerned Region, Cooperative Sub Registrar and Senior Inspectors assisting them for organization of Housing Societies and inspecting them for better promotion.

Schemes Implemented Through Cooperative Housing Societies

- 1. Rural Housing Scheme for Economically Weaker Sections.
- 2. Special Housing Scheme for Economically Weaker Sections in Urban areas.
- 3. LIG/MIG Schemes in Rural areas
- 4. Urban Housing Schemes











- 5. Valmiki Ambedkar Awas Yojana (VAMBAY) Scheme
- 6. Repairs and Renewal of existing houses.

As an apex level body for the housing cooperative societies in the State, the Tamilnadu Cooperative Housing Federation mobilise finances for construction of dwelling units for the members of the affiliated Housing Cooperative Societies in the State. The resources for Housing Finance for State Cooperative Housing Federation flow from Government, LIC, Housing and Urban Development Corporation, National Housing Bank, Housing Development Finance Corporation, Commercial and Cooperative Banks with and without Government guarantee.

"However, we have been found out with the discussions of local officials in the cooperative housing societies and cooperative building societies that, sanction of loans have been stopped from the year 2008 and as for as now the socities are acting as only agents of the collection for previous distributed loans. With the initial research we could also find out that In 2011, ICRA has suspended the LB+ (SO) (pronounced L B plus Structured obligation) rating assigned to the Rs. 473.46 crore long term loans fully guaranteed by Government of Tamil Nadu, LB (SO) (pronounced L B Structured obligation) rating assigned to the Rs. 330.76 crore long term loans guaranteed by Government of Tamil Nadu for repayment of principal only & LC (pronounced L C) rating to the Rs. 717.34 crore long term loans (non-guaranteed) of Tamil Nadu Cooperative Housing Federation Limited. The suspension follows ICRA's inability to carry out a rating surveillance in the absence of the requisite information from the company."

## 6.2.2 Other Housing Finance Players for Urban Poor:

While the middle-class and upper class segments of population are wellserved by the financial community, with various mortgage finance options available to them, there is little or no availability of finance to a huge section within the low income category and the informal sector as a whole. A recent survey from Ashoka among 45 housing finance institutions in India reveals that only 7 of them provide loans to customers from the informal sector: GRUH Finance, Mas Financial Services, Dewan, HUDCO, Mahindra Housing finance, Repco and MHFC.

## 6.2.2.1 Public players and regulatory bodies:

There are two main public players in housing finance in India: the Housing and Urban Development Corporation (HUDCO) and the National Housing Bank (NHB).

- NHB is the referent authority for housing finance institutions. It regulates them and also provides refinancing to the financial institutions that provide loans for low-income housing.
- > HUDCO was created with the goal of facilitating housing finance accessibility to low and middle-income households by financing infrastructure development and increasing credit options. It also provides loans to housing finance institutions which are then lent to low-income households.

### 6.2.2.2 Commercial banks involved in affordable housing finance don't reach the informal sector:

Very few commercial banks have entered the low-income housing market. HDFC, one of the largest housing loan providers in India, has been one of the pioneers in that field in 1988 with the creation of GRUH Finance Ltd, a subsidiary dedicated to servicing low income population. Other banks have also proposed objectives to serve middle and lower income clients such as Dewan Housing Corporation Ltd or Repco. Big banks like SBI, ICICI, MRHFL (Mahindra Rural Housing Finance) have regulated requirement, to invest a portion of their capital for low income population, but they have not been very active in that field so far.

The population of poor people, can be divided into 2 categories: the poor people that are formally employed, and who have formal documentation in terms of payslips or bank account and the informal category such as street workers, vegetable venders, which have no formal documentation on their income or the assets that they own. As



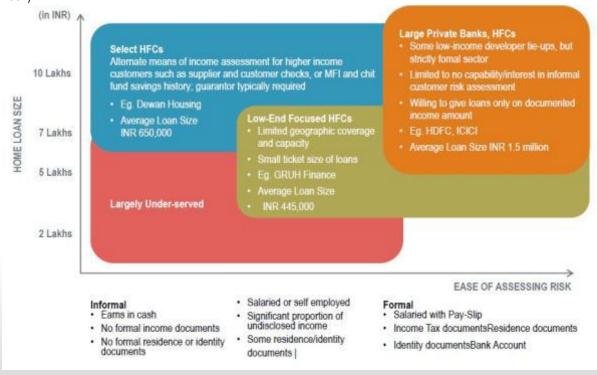








demonstrated by Ashoka survey mentioned earlier, very few housing finance companies are targeting this latter category of customers. Even in the case of GRUH Finance Ltd, they require clients to be formally employed or business owners with audited financial statements and exclude informal workers. Consequently, « only about 10% of their consumer housing portfolio is directed towards the lower middle and low income groups » (source IFMR, Chennai 2007).



## 6.2.2.3 Housing microfinance is still at an evolutionary stage in India

Among the Non-Banking Finance Companies, only a handful microfinance institution (MFI) explicitly offer housing finance loans and there is no large scale housing microfinance programme in India. For microfinance institutions, housing finance is completely different job: it means individual loans and the amount of money lent are neither micro, nor short term. As a result, MFIs involved in housing finance tend to focus on housing upgrades and infrastructure improvements loans. Another key barrier for MFI's is that to comply with Indian regulation, housing finance cannot exceed 20% of the whole amount of money lent.

However, housing microfinance is still regarded as a area for development for many MFIs as their clients are demanding affordable housing finance and thus they know their credit worthiness. Many MFIs are currently testing out housing loans such as SKS Microfinance or Sewa Bank (which has just launched a new "Mortgage Housing Loan")

### MHFC, first housing finance company dedicated to low-income and informal sector in India

MHFC (Micro Housing Finance Corporation), is a housing finance start-up created in 2008 and dedicated to providing home loans to lowincome individuals (earning less than Rs.20 000 (\$430) per month) belonging to the informal sector. For M. Merchant of Monitor, « The entry of MHFC marks a breakthrough in the housing market as it addresses the pressing need for funding informal sector customers in affordable housing. Following the exemple of MHFC, we have heard that at least 5 companies are willing to enter this market and are in the process of getting regulatory clearance from NHB.











## 6.2.2.4 Private Lending's:

Very few private lending's available for the slum dwellers. However, we could find out local chit fund companies organized informally tend to give short term loans on day to day basis for house reconstruction or modification purposes.

## 6.3 Policy Framework and Regulations for Affordable Housing

#### 6.3.1 Central Level Schemes

Several policies adopted by Central Government have assisted in the delivery of affordable housing for the EWS, LIG and lower MIG. The first National Housing Policy was formulated in 1988. It was followed by a series of public sector interventions and related developments of human settlement sector in India, with the formulation of National Housing Policy in 1994, National Housing and Habitat Policy (NHHP) in 1998 and follow-up of 74th Constitution Amendment of 1992. These policy initiatives focused on transition of public sector role as 'facilitator', increased role of the private sector, decentralization, development of fiscal incentives and concessions, accelerated flow of housing finance and promotion of environment-friendly, cost-effective and pro-poor technology. The NHHP introduced landmark initiatives such as involvement of multiple stakeholders, repeal of Urban Land Ceiling Act and permitting foreign direct investment in housing and real estate sector.

However, all these policies were generic and applicable to both rural and urban areas. Taking into account the emerging challenges of required shelter and growth of slums, the first policy specific to urban areas, the National Urban Housing and Habitat Policy was announced in December 2007.

### National Urban Housing and Habitat Policy (NUHHP), 2007

NUHHP 2007 has identified 'Affordable Housing for All' as a key focus area to address concerns that could potentially impede sustainable urban development. The policy seeks to promote various types of partnerships between public, private, cooperative and the institutional sectors in order to attain some of the objectives listed below:

- facilitating accessibility to serviced land and housing with focus on economically weaker sections and lowincome group categories;
- land assembly, development and disposal to be encouraged by both private and public sectors;
- forging strong partnerships between public, private and cooperative sectors for accelerated growth in the housing sector and sustainable development of habitat;
- accelerating the pace of development of housing and related infrastructure;
- creating adequate housing stock both on rental and ownership basis with special emphasis on the economically weaker sections through appropriate capital or interest subsidies; and
- using technology to modernise the housing sector and enhance energy and cost efficiency, productivity and quality.











## Jawaharlal Nehru National Urban Renewal Mission (JNNURM)

JNNURM was launched in December 2005 with an aim to encourage and expedite urban reforms in India. For the housing sector in particular, its main aim was construction of 1.5 million houses for the urban poor during the mission period (2005–2012) in 65 mission cities.

#### Basic Services for the Urban Poor (BSUP) -

The scheme is managed by the Ministry of Urban Development. It seeks to provide seven entitlements or services – security of tenure, affordable housing, water, sanitation, health, education and social security to low-income segments in the 65 mission cities

## Integrated Housing and Slum Development Programme

(IHSDP) – Integrated Housing and Slum Development Programme aims to combine the existing schemes of Valmiki Ambedkar Awas Yojana (VAMBAY) and National Slum Development Programme(NSDP) for having an integrated approach in ameliorating the conditions of the urban slum dwellers who do not possess adequate shelter and reside in dilapidated conditions. The scheme is applicable to all cities and towns as per 2001 census except cities/towns covered under BSUP.

- ❖ The sharing of funds would be in the ratio of 80:20 between Central Government and State Government/ULB/Beneficiaries.
- ❖ A minimum of 12% beneficiary contribution is stipulated, which in the case of SC/ST/BC/OBC/PH and other weaker sections is 10%.

## Affordable Housing in Partnership (AHIP) -

The scheme of Affordable Housing in Partnership aims to promote various types of public-private partnerships amongst the private sector, cooperative sector, financial services sector, state parastatals and urban local bodies, for realizing the goal of affordable housing for all. This scheme is a part of the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) and takes into account experience of implementing Basic Services to the Urban Poor (BSUP) and Integrated Housing and Slum Development Programme (IHSDP).

- modification in the guidelines of JNNURM (BSUP) to facilitate and incentivize land assembly for affordable housing
- central assistance of 25% for the cost of the provision of civic services at an approximate cost of INR 5,000
- support the construction of 1 million affordable dwelling units in Phase I, with a minimum of .25 million EWS dwelling units.
- disbursement of funds linked to the actual provision of amenities. A normative cap per EWS/LIG dwelling unit is fixed in consultation with the states for the purpose.

### Interest Subsidy Scheme for Housing the Urban Poor (ISHUP)

As a means of Credit Enablement, the Interest Subsidy Scheme for Housing the Urban Poor (ISHUP), has been dovetailed with RAY, with the existing ceiling of the subsidized loan of 1 lakh, so as to give the option to the State/ULB to release a part of the subsidy for housing as per the guidelines of ISHUP to reduce the cost of the loan taken by the beneficiary to build or purchase his/her house.











ISSHUP has now been revamped as RRY. The Scheme envisages the provision of a fixed interest subsidy of 5% (500 basis points) on interest charged on the admissible loan amount to EWS and LIG segments to enable them to buy or construct a new house or for carrying out addition (of a room / kitchen / toilet / bathroom) to the existing building. The scheme will provide an interest subsidy for a maximum amount of Rs.5,00,000 for an EWS individual for a house at least of 21 sq.mts. maximum loan amount of Rs.8,00,000 for a LIG individual will be admissible. However, subsidy will be given for loan amount up to Rs. 5 lakhs only.

As the emphasis of the strategy is to encourage housing facilitated by credit linkages, review of the implementation of the scheme in the city with the bankers is very important from the point of view of formulating the credit plan as explained in the next section.

## Rajiv Awas Yojana

Rajiv Awas Yojana (RAY) for the slum dwellers and the urban poor envisages a 'Slum-free India' by encouraging states and union territories to tackle the problem of slums in a definitive manner. RAY will provide the support to enable states to redevelop all existing slums in a holistic and integrated way and create new affordable housing stock. The existing schemes of Affordable Housing in Partnership and Interest Subsidy for Housing the Urban Poor (ISHUP) would be dovetailed into this scheme. No new projects under the BSUP and IHSDP scheme of the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) will be sanctioned once implementation of RAY scheme is taken up except to consume existing 11th Five- Year Plan allocations that may be left uncommitted.

## The scope of RAY envisaged is as follows

- ❖ integrated development of all existing slums, notified or nonnotified, i.e. development of infrastructure and housing in the slums or rehabilitation colonies for the slum dwellers or urban poor, including rental housing.
- development, improvement and maintenance of basic services to the urban poor, including water supply, sewerage, drainage, solid waste management, approach and internal roads, street lighting, community facilities such as community toilets and baths, informal sector markets and livelihoods centres.
- other community facilities like preschools, child care centres, schools, health centres to be undertaken in convergence with programmes of respective ministries.
- convergence with health, education and social security schemes for the urban poor and connectivity infrastructure for duly connecting slums with city-wide infrastructure facilities and projects.
- creation of affordable housing stock, including rental housing with the provision of civic infrastructure and services, on ownership, rental or rental-purchase basis.

#### Credit Risk Guarantee Fund

As a means of Credit enablement, for loans up to 5 lakhs to be availed by EWS/LIG buyers of new homes, with first loss borne by the banks, a Credit Risk Guarantee Fund has been established by the Ministry of Housing and Urban Poverty Alleviation. This is envisaged as a risk mitigation measure to further incentivize and encourage participation by banks.

The fund will cover the housing loans to EWS/ LIG borrowers for the purposes of home improvement, construction, acquisition, and purchase of new or second hand dwelling units, involving an amount not exceeding Rs. 5 lakh per loan. The guarantee cover available under the scheme is to the extent of 90% of the sanctioned housing loan amount for a loan amount of up to Rs.2 lakh and 85% for loan amounts above Rs.2 lakh and up to Rs. 5 lakh.

The initial corpus of this fund would be Rs 1200 crores of which Rs 1000 crores would come from the Centre and Rs 200 crores from the State Governments who draw on it, in accordance with their slum population.











## **External Commercial Borrowing for Affordable Housing**

Under the Union Budget 2012–13, External Commercial Borrowing (ECB) has been allowed for affordable and low-cost housing. This has been done to ensure a lower cost of borrowing for the segment. Under the norms, ECB may have to be routed through the National Housing Bank (NHB), which could act as a centralised mechanism to help small developers avail the facility. The government would also allow developers to raise such debt only for projects where a significant portion of units (75–90%) are reserved for the LIG and EWS.State Sponsored Initiatives

#### 6.4 Formulation of an Effective Credit Plan

Several countries have adopted a range of strategies and formulated a number of policies to make an effective provision for affordable housing. Suitable to the need of the market, different models of subsidisation have evolved, incentives to developers have been devised and planning provisions have been made.

#### Strategies and Policies

Some of the countries adopt a universal approach, wherein the target group constitutes the whole population that is provided with decent and affordable housing. Countries like Singapore, the Netherlands, Sweden and Denmark are followers of this approach.

A more common approach is targeted approach, wherein housing is provided to the weaker section of the society, which otherwise is excluded from the housing market distribution system. Followers ofthis approach include Canada, Malaysia, United States and most of the European Union.

Poor people shall need access to credit for building up houses, adding toilets, getting water connections, etc. They shall also need finance for setting up and operating business enterprises. The State Nodal Agency for RAY shall, besides providing the housing subsidies, also facilitate access to credit. They shall do so in the following ways

#### **Subsidies**

Whilst designing housing subsidies, the government either provides supply-side subsidies or demand-side subsidies. Supply-side subsidies include development of public housing and providing subsidy to developers and encourage them to develop more units. On the other hand, the demand-side subsidies involve periodical cash allowances to the households to support housing cost (rental) or capital grants to rehabilitate or buy units.

Preference of house ownership in case of demand-side subsidies depend on sociocultural elements and traditions in countries. Whilst in the Netherlands, low-income housing assistance is provided only through subsidised rentals; in Spain, subsidised ownership is the practice. Many countries combine rental and ownership schemes depending on the target group's profile and income level.

## Incentives and Administrative Streamlining

In order to attract private participation in the segment, the governments provide a range of incentives at the central and local levels. These include tax deductions, density bonuses (percentage allocation of units in residential projects by the developer, and in return, the developer is allowed extra market rate units), direct subsidies, land grants, land use changes etc. In the US, density bonuses are popular, whilst in United Kingdom, mixed-use development with retail on ground floor and affordable housing in upper floors is prevalent. Some countries like Malaysia and Canada have streamlined theadministrative requirements through fee waivers and fast-trackingprocedures.











## **Planning Support**

Some countries have adopted inclusionary zoning, stipulating agiven share of new construction to be allocated for low-income grouphousing. In the US, California has successfully implemented a comprehensive package of legislation. California is noted as a leading US state in low-income housing provision. On the other hand, zoning has failed in countries with weak regulatory framework. In Canada, some of the municipal initiatives have failed due to lack of support from provincial legislation.

In Malaysia, the government has established Public Private Partnership, wherein the government provides land for low-income housingand streamlines administrative procedural aspects, and the private partner provides financial resources, supports implementation and delivers units. Some countries with high-density zoning such as Hong Kong and Singapore have effectively provided high-rise buildings linked to an effective public transport system. In this case, a part of the development allocated for commercial usage, which cross-subsidises the housing for low-income groups.

**Linkages with formal banking/ housing finance institutions:** The Nodal Agency shall provide lists of beneficiaries to formal banks or housing finance institutions identified. The agency shall organise a consultation between people and finance managers to agree upon a pro-poor system for fund disbursement and repayment plans. In the case of housing loans, most people with ownership rights shall have collateral. For other beneficiaries, especially the poor, the SHG or the Nodal Agency shall stand guarantee.

**Setting up a Community Credit Fund (CCF):** The Nodal Agency shall create a CCF from its housing grant. 25% of the total approved housing subsidy budget for each project shall be forwarded into the CCF and shall be used for extending credit to the poor. DUDA shall invest this amount into bank securities to generate resources for the CCF. CCF shall also be capitalised from private sector housing projects in the city.

CCF shall be a revolving fund and shall be open to all beneficiaries who may want credit. Credit shall be provided on low/affordable interest rates to the poor.

Recommended Guidelines for lending to the poor

- 1. Simplification of procedure for lending based on only ID proof and slum tenure.
- 2. Prioritization of slum dwellers for lending
- 3. TPA between beneficiaries, lenders and intermediary (CBO/NGO/SHG)
- 4. Encourage the beneficiary for saving.
- 5. Enhancing the extent of Govt. funding.
- 6. Special purpose vehicle fund to be provided to SHG against their financial viable proposal.

### Strategy for Sustenance Recommended guidelines for lending to the poor:

- a) Banks may be given a target for loans to the needy and monitoring will be needed.
- b) SHGs may be provided loan from the bank on lower interest rate to encourage more participation or urban poor in such groups.
- c) Loan instalments release to be done timely.
- d) Govt. may release housing loans immediately after houses are complete.
- e) Co-operative banks role to be increase channelize housing credit.
- f) Housing finance may be routed through federation of SHG.
- g) Sensitizing bankers, NGO and SHG on the implementation of housing microfinance.
- h) Direct transfer of subsidy under RAY on the basis of Adhaar Card.











 Govt. of India may establish the credit guarantee fund scheme for low income housing to provide credit guarantee support to collateral free/third party guarantee free individual housing loan upto Rs.5.00 lacs extended by lending institutions for low income housing.

## Roles and Responsibilities of Institutions

Following exemptions/incentives may be proposed for all models of affordable housing:

- i) Reduction in external development charges
- ii) Nil building plan approval charges.
- iii) No conversion charges
- iv) Non-charging of facility area, land cost

## 6.4.1 The Private Play to Affordable Housing in India

Conventionally, housing development for the EWS and LIG sections has been the responsibility of the government. However, in the past few years, private players have increasingly begun to realise the untapped opportunities at this section of the pyramid. Most of the developers, barring a few, started as 'experimenters' to explore the depth of demand and now have long-term plans in the segment.

## Entry of Private Players in the Affordable HousingSegment

#### **The Push Factors**

- During the demand slowdown in 2008–2009, residential developers realised that they had concentrated development portfolios in upper-mid and luxury segments, where the market has become very competitive in the last decade due to the entry of new players. Affordable housing segment provides an appropriate option to diversify their risks.
- Lack of land parcels within the city limits has pushed developers to aggregate land at far-flung suburban locations where a mid-income or luxury segment housing project might not be successful. Since these land parcels have lower costs of acquisition, they can be developed for low-income housing.
- Several facilitators of affordable housing have increased activity in recent years and are pushing developers to increase their development footprint in this segment.
  - Public authorities such as National Housing Bank
  - **International developmental organisations** such as World Bank, International Finance Corporation and Asian Development Bank
  - International nongovernmental organisations such as Michaelvand Susan Dell Foundation
  - Some **private equity** players have also funded low-income housing developers, e.g. Carlyle invested USD 26 million in Value Budget and Housing Corporation (VBHC) in 2011.

#### The Pull Factors

- The existing shortage of urban housing for this segment has created a huge demand leading to high sale velocities and lower risk.
- **Vast economies of scale** lead to significant lowering of the costs of development for low-income housing.
- Since there were few branded players in the lower-mid and lowincome housing segment, these developers wanted to gain the **first-movers advantage**.











- ❖ Improvement in infrastructural connectivity to far-flung locations is increasing their acceptability as residential destinations. Developers want to tap into the changing perception before land prices appreciate such levels that do not support lowincome housing.
- ❖ Emergence of microfinance institutions focused on low-income housing has helped in improving buyer's access to housing finance. Apart from established HFCs such as GRUH Housing Finance (subsidiary of HDFC) and Micro-Finance Housing Corporation, some of the emerging players in the segment are Muthoot Housing Finance, Adhar Housing Finance (subsidiary of Dewan Housing Finance), Aptus Value Housing Finance and Shriram Housing Finance.
  - Developers having concentrated development portfolios in upper-mid and luxury segments want to diversify.
  - Lack of land parcels within the city limits has pushed developers to aggregate land at fair-flung suburban locations.
  - Several facilitators of affordable housing such as public authorities, international development organisations, international NGOs and private equity players have increased activity in this segment

PUSH FACTORS

#### Huge demand leading to high sale velocities in low-income housing.

- Vast economies of scale lead to significant lowering of the costs of development.
- Few branded players in the lower-mid and lowincome housing segment attract developers to gain the first movers advantage.
- Improvement in infrastructural connectivity to farflung locations is increasing their acceptability as residential destinations.
- Emergence of microfinance institutions focused on low-income housing has helped in improving buyer's access to housing finance.











## **Chapter 7**: Investment Plan & Road Map

#### 7.1 Institutional Framework

## 7.1.1 Slum Development Steering Committee and Technical Advisory Group

ven as slum upgrading is a city function, SMC will need policy guidelines to facilitate the process. The following institutional arrangements are expected at the State level and will facilitate slumdevelopment. Under SRDP, Tamil Nadu Slum Clearance Board (TNSCB) headed by Chief Secretary isto be set up to provide support in the implementation of SRPV. The Housing and Urban Development Department (HUDD) shall also set up a Technical AdvisoryGroup (TAG) chaired by the Secretary HUDD. TAG will be the nodal agency for slum development project implementation in the State and will have as members concerned MLAs, State Secretary-Finance, experts and civil society representatives. TAG will provide an enabling framework for pro-poordevelopment action based on ground realities, review progress against time goals, pursuesanctions with Gol and ensure smooth flow of funds for implementation.

## a) Technical Advisory Group for Salem

A Technical Advisory Group for Salem (TAGS) will be formed at the SMC. TAGS will oversee andadvise on slum upgrading actions for Saleme. TAGS will comprise heads of key developmentagencies, civil society members, Mayor and selected Ward Councillors and slum developmentexperts in the State or from the national pool of resource persons. TAGS will be chaired by theMayor. SMC Commissioner will be the Member Secretary and will share with the TAGS information plans, proposals, progress, problems, etc. Other departments will also be required to present their work and time plans to ensure coordinated implementation. TAGS will be responsible forconvergent action planning and implementation. TAGS will meet at least once a quarter.

### b) A Slum Upgrading Unit (SUU) within PIU

It is recommended that a Project Implementation Unit (PIU) be set up to manage various urbandevelopment projects. The PIU is required to hire staff with appropriate technical skills; engineers, architects, urban planners, finance consultants, and social development consultants to implementurban project activities. A dedicated Slum Upgrading Unit (SUU) will be set up within the PIU forimplementing SRPV. The PIU itself will be headed by the SMC Deputy Commissioner to facilitatequick decisions. The SUU will be managed by a Slum Improvement Officer (SIO) drawn from StateServices and of senior rank with experience of slum upgrading work in other cities. The SIO will be ondeputation for a minimum period of 3 years and will be responsible for implementing slumupgrading activities. SIO will be responsible for appointment of consultants for development of DPRs; inviting proposals from the private sector for housing and other infrastructure development; undertaking SWOT analyses of local NGOs and getting into partnership agreements with them for social mobilization; ensuring micro-finance arrangements with local banks and micro-finance institutions; obtaining financial and administrative approvals for land, housing, infrastructuredevelopment, etc.; releasing timely resources to concerned agencies for upgrading works andoverseeing community inclusion, mobilization and development progress; setting up voice andgrievance redressal systems; developing a baseline database with MIS, using GIS-based slum maps tomonitor progress, and develop/modify action plans based on ground progress. PIU will keep track ofland earmarked for housing in various housing projects and prepare plans for resettlement of slumdwellers on developed sites/houses. The SUU will synergise its implementation strategy with various departments of education, health, welfare, food and civil supplies, social welfare, etc., to ensure convergence and coordinated action. The SUU will also be responsible for setting up and managingthe BSUP Fund, the Housing











and Credit Fund, and municipal budgets earmarked for slumdevelopment. The SIO will be responsible for developing reports for the TAGS and submission of timely progress reports and utilization statements to the TAGV and GoI.

## c) SUU Staffing and Capacity Building

Two senior project officers will support the SIO in implementing slum upgrading, housing andresettlement activities at a citywide scale. The two project officers may be drawn from NGOs orgovernment departments on deputation with skills in community mobilization and slumdevelopment work. They will be supported by project officers for livelihoods promotion, education /health / Solid waste development activities; community organisers, and an MIS/ITspecialist.

To begin with, SMC will contract a consultant agency from the GOI recommended list for the PIU/SUU. The consultant agency will be hired for the first 3 years of the implementation process toprovide necessary technical assistance for citywide upgrading. The consultants will be chieflyresponsible for starting up the citywide upgrading processes (databases, housing and upgradingdesigns, inclusive planning, etc.) and for developing SMC institutional capacity for SlumDevelopment. Besides implementing all the required upgrading actions, the consultants will beresponsible for procurement of experts, NGOs, private sector partners, etc. and prepare appropriate TORs and deliverables for their work. The PIU consultants will over their contract period, hire/co-optappropriate staff from other departments and develop their capacities for slum upgrading throughexperience exchange visits, training programmes and hands on actions. This will ensure smoothtransfer of responsibilities at the end of the consulting period.











Steering Committee TN (SCTN) **Members SCTN**  Mayor/Chairman of ULBs Commisioners Technical Advisory Group TN State Secretary Finance (TNGAG) **Members TNTAG** Sectretary PHE MLAs • ULB Commissioners TAG Salem at Salem – Chair: • State Secretary Finance Municipal Commissioner Members TAGS • TNSCB Officials Secretatry PHE Experts Mayor District Civil Society Project Implementation Unit **Ward Councilors** RAY Represenatives Deputy Commissioner, GAD Comm Salem ittee PHED **Education Board**  Health Board Slum Upgrading Unit Civil Society Experts **Evening college** (SUU)-SIO facility in 2 ITI's, 1 **Diploma College** with annual Senior Project Officer -1 Senior Project Officer -2 Women Help target for training Groups in each of the slums Project Officers (Livelihoods, Education, Health and SW) Community Organizers, MIS/IT Specialist

Exhibit 7-1 Institutional Arrangements for Citywide Slum Upgrading

Source: Ramky's Analysis

## 7.2 Financing Plan

## 7.2.1 Estimated Number of Slums Requiring Redevelopment

The number of slums to be redeveloped is arrived at based on the detailed household survey carriedout. It is evident that almost all the household structures in the city are either kachha or semi-pacca. Accordingly the housing shall be developed for all the households without pacca structure. It is assumed following types of slum upgrading interventions will be required:

- Provision of basic services, through an incremental program focusing on infrastructure and home improvements over time;
- Housing development new and rental;
- In situ redevelopment.

Based on slum tenability analysis on the basis of the detailed household survey, the following requirements for housing, on-site development, relocation and basic services have been estimated.



## 7.2.2 Estimated Financial Requirements for Slum Redevelopment Project Salem

The estimated requirement of resources using the above gap analysis has been prepared based onthe following guiding principles:

- Average number of households in each slum is 4.21; the average number of households per settlement from the slum mapping study; final costs are being developed for 38583 Households.
- Estimates are on the basis of total number of households and for the complete package of services. It is however, recognised that some houses / settlements may not require the complete package.
- ➤ It is assumed that land for the housing shall be facilitated by the SMC/State Government. Accordingly the cost of the land has not been loaded on the Project cost.
- > Costs for infrastructure development are for onsite work and do not include investments in trunk infrastructure development/upgrading/augmentation as these are met from concerned department funds.
- Various sources have been used for estimating cost of infrastructure. These include estimates from other RAY cities of a similar nature; estimates used in Chennai, Bhubaneswar. The costing also considers assumptions on thumb rule basis. The rates have been assumed based on the Unit rates provided by TNSCB Salem in consultation with PWD.











Exhibit 7-2Phase Wise Total Project Investment Summary (Rs. in Crores)- Curative Strategy

SI .No	Item	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	TOTAL
	No of Slums	17	38	26	42	28	22	38	35	246
	No of Households	1836	7676	4056	8851	3637	2460	5015	5052	38583
	No of Households Proposed for intervention	1540	5692	3327	6907	2783	2067	3981	4142	30439
	Cost per Unit	5.5	6.05	6.66	7.33	8.06	8.87	9.76	10.74	
Α	Land Cost									
В	Housing & Infrastructure									
(i)	Physical Infrastructure	12.71	51.65	33.24	75.94	33.65	27.5	58.28	66.73	359.7
(ii)	Housing (at Rs. 5.5 lakh per Unit with 10% escalation per annum)	84.7	344.37	221.58	506.28	224.31	183.34	388.55	444.85	2397.98
(iii)	Social infrastructure	6.36	25.83	16.62	37.97	16.83	13.75	29.14	33.36	179.86
	Subtotal B	103.77	421.85	271.44	620.19	274.79	224.59	475.97	544.94	2937.54
С	Other costs									
(i)	Preparation of DPRs (at 0.75 % of B)	0.78	3.16	2.04	4.65	2.06	1.68	3.57	4.09	22.03
(ii)	Design and Consultancy charges (at 0.75 % of B)	0.78	3.16	2.04	4.65	2.06	1.68	3.57	4.09	22.03
(iii)	Quality control (TIPMA) at 1% of ACA (0.5% of B)	0.52	2.11	1.36	3.10	1.37	1.12	2.38	2.73	14.69
(iv)	social audit 0.5% of ACA (0.25% of B)	0.26	1.05	0.68	1.55	0.69	0.56	1.19	1.36	7.34
	Sub total C	2.34	9.48	6.12	13.95	6.18	5.04	10.71	12.27	66.09











D	Overheads/Administrative costs (at 5% of A+B+C)	5.31	21.57	13.88	31.71	14.04	11.48	24.34	27.86	150.19
E	Tender Excess @ 10 % of B	10.38	42.19	27.14	62.02	27.48	22.46	47.60	54.49	293.76
F	Total( A+B + C+D+E )	121.80	495.09	318.58	727.87	322.49	263.57	558.62	639.56	3447.58
G	Physical contingencies (@ 2.5% of F)	3.05	12.38	7.96	18.20	8.06	6.59	13.97	15.99	86.20
Н	Total Investment Cost H = (F+G)	124.85	507.47	326.54	746.07	330.55	270.16	572.59	655.55	3533.78
ı	Operation and Maintanance cost (at 4% of B)	4.15	16.87	10.86	24.81	10.99	8.98	19.04	21.80	117.50
	Total Investment Cost (H+I)	129.00	524.34	337.40	770.88	341.54	279.14	591.63	677.35	3651.28

Source: Ramky Analysis











## Exhibit 7-3Phase Wise Total Project Investment Summary (Rs. in Crore) – Preventive Strategy

SI No	ltem	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	TOTAL
	No of Slums									
	No of Households for future									
	Population at 2% growth rate	971	991	1010	1031	1051	1072	1094	1116	8336
	Cost per Unit	5.5	6.05	6.66	7.33	8.06	8.87	9.76	10.74	
Α	Land Cost									
В	Housing & Infrastructure									
(i)	Physical Infrastructure	8.01	8.99	10.09	11.34	12.71	14.26	16.02	17.98	99.4
(ii)	Housing (at Rs. 5.5 lakh per Unit with 10% escalation per annum)	53.41	59.96	67.27	75.57	84.71	95.09	106.77	119.86	662.64
(iii)	Social infrastructure	4.01	4.50	5.05	5.67	6.35	7.13	8.01	8.99	49.71
	Subtotal B	65.43	73.45	82.41	92.58	103.77	116.48	130.80	146.83	811.75
С	Other costs									
(i)	Preparation of DPRs (at 0.75 % of B)	0.49	0.55	0.62	0.69	0.78	0.87	0.98	1.10	6.08
(ii)	Design and Consultancy charges (at 0.75 % of B)	0.49	0.55	0.62	0.69	0.78	0.87	0.98	1.10	6.08
(iii)	Quality control (TIPMA) at 1% of ACA (0.5% of B)	0.33	0.37	0.41	0.46	0.52	0.58	0.65	0.73	4.05
(iv)	social audit 0.5% of ACA ( <b>0.25% 0f B</b> )	0.16	0.18	0.21	0.23	0.26	0.29	0.33	0.37	2.03











	Sub total C	1.47	1.65	1.86	2.07	2.34	2.61	2.94	3.30	18.24
D	Overheads/Administrative costs (at 5% of A+B+C)	3.35	3.76	4.21	4.73	5.31	5.95	6.69	7.51	41.51
E	Tender Excess @ 10 % of B	6.54	7.35	8.24	9.26	10.38	11.65	13.08	14.68	81.18
F	Total( A+B + C+D+E )	76.79	86.21	96.72	108.64	121.80	136.69	153.51	172.32	952.68
G	Physical contingencies (@ 2.5% of F)	1.92	2.16	2.42	2.72	3.05	3.42	3.84	4.31	23.84
Н	Total Investment Cost H = (F+G)	78.71	88.37	99.14	111.36	124.85	140.11	157.35	176.63	976.52
ı	Operation and Maintanance cost (at 4% of B)	2.62	2.94	3.30	3.70	4.15	4.66	5.23	5.87	32.47
	Total Investment Cost (H+I)	81.33	91.31	102.44	115.06	129.00	144.77	162.58	182.50	1008.99











Exhibit 7-4Phase Wise Total Project Investment Summary (Rs. in Crore) – Curative + Preventive Strategy

SI .No	lhore	2014-	2015-	2016-	2017-	2018-	2019-	2020-	2021-	TOTAL
_	Item	2015	2016	2017	2018	2019	2020	2021	2022	TOTAL
Α	Tenable									
i	No of Slums	16	34	26	39	25	16	26	25	207
ii	No of Households	1796	7226	4056	8681	3232	1682	3759	3080	33512
iii	No of Households proposed for intervention	1500	5242	3327	6737	2378	1289	2725	2170	25368
iv	Investment Cost - Insitu Upgradation	125.64	482.88	337.40	751.91	291.84	174.08	404.95	354.87	2923.57
В	Untenable									
i	No of Slums	1	4	0	3	3	6	12	10	39
ii	No of Households	40	450	0	170	405	778	1256	1972	5071
iii	No of Households proposed for intervention	40	450	0	170	405	778	1256	1972	5071
iv	Investment Cost – Relocation	3.36	41.46	0.00	18.97	49.70	105.06	186.68	322.48	727.71
С	Curative Strategy - (A+B)									
i	No of Slums (Ai+Bi)	17	38	26	42	28	22	38	35	246
ii	No of Households (Aii + Bii)	1836	7676	4056	8851	3637	2460	5015	5052	38583
iii	No of Households Proposed for intervention (Aiii + Bii)	1540	5692	3327	6907	2783	2067	3981	4142	30439
iv	Investment Cost - Curative Stategy (Aiv +Biv)	129.00	524.34	337.40	770.88	341.54	279.14	591.63	677.35	3651.28
D	Preventive Strategy									
i	No of Housing units to be constructed	971	991	1010	1031	1051	1072	1094	1116	8336
ii	Investment Cost - Preventive Strategy	81.33	91.31	102.44	115.06	129.00	144.77	162.58	182.50	1008.99
	Total Investment Cost (Civ + Dii)	210.33	615.66	439.84	885.95	470.55	423.91	754.21	859.85	4660.3 <mark>0</mark>









Exhibit 7-5 Phase Wise Total Project Investment Summary (Rs. in Crore) – Financial Plan for Curative + Preventive Strategy

S. No	ITEM				Year (Rs	. In Crores	)			Total
S. NU	HEM	2014- 15	2015- 16	2016- 17	2017- 18	2018- 19	2019- 20	2020- 21	2021- 2022	Total
1	SFCP INVESTMENT	210.33	615.66	439.84	885.95	470.55	423.91	754.21	859.85	4660.30
1.2	No of affordable housing stock proposed including dormitories and night shelters.									
2	SOURCES OF FUNDING									
2.1	Central Assistance	79.93	233.95	167.14	336.66	178.81	161.09	286.6	326.74	1770.92
2.2	State Contribution	115.68	338.61	241.91	487.27	258.8	233.15	414.82	472.92	2563.16
2.3	Local body contribution									
2.2.1	BSUP Fund									
2.2.2	General Allocation from the Budget									
2.2.3	Earmarked resources									
2.2.4	PPP									
2.2.5	Loans									
2.2.6	Others - specify:									
2.3	Beneficiaries Contribution	14.72	43.1	30.79	62.02	32.94	29.67	52.79	60.19	326.22
2.4	Sources to be identified during implementation									
3	TOTAL SOURCES	210.33	615.66	439.84	885.95	470.55	423.91	754.21	859.85	4660.30

Source: Ramky Analysis











## 7.2.3 Resource Mobilization for Slum Redevelopment

The city will need resources as well as commitment over the proposed period of 10 years for implementing the project. Considering the 38% share of the state Government, the state contribution shall be about Rs.2541.49 Laks.

While Central Government shall contribute 50% of the total project cost which would be about Rs.1755.95 Laks crores. The rest 25% shall be met through beneficiaries contribution or from the State and Municipal budget.

In addition, SMC is required to create a Slum redevelopment fund earmarking 25% of its municipal resources for slum prevention. Resources will also be mobilised through State funds and various instruments of taxation and municipal bonds, and through convergence withprogrammes of other departments such as education, health, PHED, etc.

There is an option for housing under preventive strategy through public private partnerships.

## 7.3 Monitoring and Impact Assessment

The SUU with the support of community will be responsible for monitoring slum upgrading andmeasuring impact.

## 7.3.1 Community Based Monitoring Systems

Community based organizations, mobilised by the SUU with the support of local NGOs, will be responsible for overseeing slum upgrading within their own settlements. Capacity will be created at the community level to monitor upgrading actions. SMC will set up a feedback and quick responsemechanism. The Community organisation will ensure action and report to the people.

## 7.3.2 Management Information System

A GIS /web-based MIS system, which has been developed under the RAY Slum free city action planshall be updated time to time to track progress on slum redevelopment. A separate MIS system tobe developed and be integrated with the slum maps prepared under this study. SMC will reviewsimilar systems in other cities/sectors that have been developed for tracking health services and adapt these.

#### 7.3.3 Baseline Data and Indicators

Baseline data will be developed for all slums on selected indicators and will be inputted into the MIS. SMC will undertake a sample household survey to generate the baseline. Information of thebeneficiary shall be incorporated as and when these are undertaken on a slum-by-slum basis forupgrading, housing purposes. The data and indicators developed under this study shall be thebaseline data which shall be reviewed time to time during and after implementation of the project.

#### 7.3.4 Social and Gender Audit

SMC will undertake an annual social and gender audit of slum redevelopment activities with thesupport of civil society groups and to ensure that the reforms and development processes are ontrack.

## 7.3.5 Impact Assessment

SMC will measure impact of slum upgrading using the above indicators in the following ways:











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- > Sample-based impact assessment studies once every year; this will also enable SMC to see
- incremental improvements;
- Commission external evaluation studies (selective or comprehensive) to measure change in the quality of lives of slum dwellers; and
- Update slum mapping profile after five years/before declaring Salem slum free.

## 7.4 Learning & Conclusions

The proliferation of slums appears to be, at least atpresent, an unavoidable part of urbanisation in India. Slum dwellers, recently arrived migrantsand the very poor are all parts of the city's populationand, as such, they require infrastructure and servicesjust like other inhabitants. At the same time, they are regarded as a potential human resource for thedevelopment of the city; a resource that requires someattention both for social and economic developmentand for necessary infrastructure development. The absence of basic support services saps the strength of the urban poor and denies society the full contribution they could make. The paradox is that the slum dwellers, if given a little support, can be come worthy citizens and even act as a potential human resource. Furthermore, they can be profitably employed in development work, through community participation, social mobilisation, incomegenerating activities, skill training and adequate credit.

## **Multifaceted Development Strategies:**

- Generalization of 'top-down or centralised' and some as 'bottom-up or decentralised'. Each has an alternative delivery method and can result in a sustainable development.
- City wide programmes which engage with governments to ensure state control of the upgrading while seeking to reform centralised, institutional structures which enable the scalability of a programme to reach the maximum number of beneficiaries.
- Individual community level. External actors such as NGOs work with the community to support the formation
  of community based organizations to represent and strengthen the voice of the poor with an aim to influence
  governments to take notice of their constituency.

In the interviewed slum dwellers' point of view, the existence of an association of slum dwellers was the first key to their autonomous development. Through the association they can form alliances with the local authorities, NGOs, and SHGs, that would not otherwise be formed due to the low social status of individual slum dwellers.

A second key to the livelihood improvement is creation of strategies for more homogeneous participation. The requirements for peer participation are that their vital needs are fulfilled, confidence in themselves, and willingness to take risks.

A third key for the sustainable improvement of slum-livelihood is the diversification of income source. When a household depends on daily wage it is subjected to strong variations in income because the job oppurtunities is highly dependent on macro-economic situations outside of their control and to conditions imposed by intermediaries. Daily wages alone can sustain a household only when the majority of its members participate in it; but in situations where only few people are able to work it is not enough.

A fourth key social condition is the recognition by the slum dwellers that maintenance of clean environment will not only benefit on their own but also reflects in the overall city environmental conditions











The attitudes of the general community are key for the slum dwellers in two respects: first to improve their chances of social status upward mobility (if stigmas attached to them are eliminated) and second for economic status with better employment oppurtunities.

Another key social condition is support of the institutional, cultural and infrastructural type by the authorities and other groups, such as an NGO. This external support provides the physical base to fulfil vital needs, the education and recognition of their importance for the city's functioning.

Other key social conditions were found in the literature that were not brought up or considered as very important by the slum dwellers interviewed: secure tenure (which motivates the investment of time and money in the improvement of the living arrangements), strong social safety nets and community ties.

A key social condition identified by Ramky is political involvement. If the authorities are not willing to provide support, the sustainability of slum dwellers's livelihood improvement strategies is at risk because all improvements should respect the current laws and policies. Political involvement can lead to small scale rapid improvement or become a larger transformative force.

7.5 Year Phasing of the Slums

S. No	Zone	Ward	Slum	No.of Househ olds	Tenable / Untenable	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019	2019 - 2020	2020- 2021	2021 - 2022
1	3	32	Aatroram street	67	Untenable							√	
2	1	21	Achuvan Nagar	49	Tenable								√
3	4	49	Agathiyar Street	68	Tenable					√			
4	2	17	Alamarakadu	93	Tenable				√				
5	2	5	Alagapuram	201	Tenable			$\sqrt{}$					
6	2	5	Alagapuram Periyaputhur	43	Tenable				$\sqrt{}$				
7	3	9	Allikuttai Boyer Street	41	Tenable	√							
8	4	49	Allikuttai Colony	28	Tenable					√			
9	3	9	Allikuttai Mariyamman Koil Street	40	Untenable	V							
10	4	50	Ambedthkar Colony	67	Tenable			<b>V</b>					
11	4	47	Ambedthkar Nagar	89	Tenable								V
12	4	51	Ambedkar Street - Jari Kondalampatty	162	Tenable								V
13	1	1	Ambedkar Odai	64	Untenable				√				
14	4	47	Ambedkar Street	166	Tenable						√		
15	2	16	Ambedkar Street	10	Tenable				$\sqrt{}$				











16	4	51	Ambedkar Street	237	Tenable								√
17	2	8	Amman Nagar	80	Tenable			<b>V</b>					
18	4	58	Amman Nagar	138	Tenable		√						
19	1	23	Ammasi Nagar	112	Tenable								√
20	3	11	Anai Meadu	33	Untenable							√	
21	3	32	Anai Road	18	Untenable							√	
22	4	47	Andhipatti Eari	336	Untenable						$\sqrt{}$		
23	1	20	Andipatti	62	Tenable				√				
24	1	22	Andhipatti	578	Tenable				√				
25	1	21	Anna Nagar	33	Tenable								√
26	3	37	Anna Nagar	58	Tenable	√							
27	3	10	Annanagar	503	Tenable		$\sqrt{}$						
28	1	19	Anthonipuram Odai	113	Tenable				√				
29	1	19	Appavu Nagar	32	Tenable								√
30	1	18	Arundhathiyar Street	22	Tenable			√					
31	1	1	Arunthathiyar Street	170	Tenable		$\sqrt{}$						
32	3	10	Arundathiyar Street	138	Tenable			$\sqrt{}$					
33	3	32	Arusumara Pillayar Koil Street	105	Tenable							$\sqrt{}$	
34	4	45	Attoram Kilaku Street	64	Untenable								√
35	4	45	Attoram Vadaku Street	122	Untenable								<b>√</b>
36	3	33	Athiyaman St	384	Tenable					<b>V</b>			
37	4	49	Avaiyar Street	66	Tenable					<b>V</b>			
38	2	8	Ayyanar Koil Street	105	Tenable			<b>V</b>					
39	3	37	Bharathi Nagar	37	Tenable	<b>V</b>							
40	3	35	Bharathiyar Street	48	Tenable								√
41	2	17	Boyer Street	102	Tenable					V			
42	3	35	Carpet Street	94	Tenable			$\sqrt{}$					
43	4	58	Chellakutti Kadu	157	Tenable		$\sqrt{}$						
44	1	2	Chinna Ammapalayam	942	Tenable				√				
45	2	6	Chinna Kollapatti	278	Tenable		$\checkmark$						
46	1	1	Chinna Motur	91	Tenable				√				
47	2	8	Chinna Tirupathi	266	Tenable				√				
48	4	60	Chinnayan Colony	41	Tenable		$\sqrt{}$						
49	3	9	Chotya Gounder Street	89	Tenable						√		











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50	2	12	Court Road Colony	46	Tenable				√				
51	3	10	Desiya Punaramaipu Colony	161	Tenable			$\checkmark$					
52	2	29	Devangapuram	57	Untenable					√			
53	2	4	Dhidheer Colony	153	Tenable								√
54	3	43	Erumapalayam Main Road	55	Tenable					√			
55	2	8	Gandhi Nagar	126	Tenable					√			
56	4	50	Gandhi Nagar	19	Tenable							√	
57	1	28	Gandhi Nagar	64	Untenable		$\sqrt{}$						
58	3	37	Gandhi Nagar	239	Tenable	$\sqrt{}$							
59	3	42	Gandhi Mahan Street	194	Tenable			√					
60	3	11	Gopal Street	35	Tenable							√	
61	3	11	Gopalchetty Street	265	Tenable					V			
62	1	62	Gorikadu	76	Untenable								√
63	2	16	Govinda Goundar Thottam	105	Tenable				√				
64	3	9	Goyya Thoppu	140	Tenable		$\sqrt{}$						
65	1	21	Indira Nagar	188	Tenable								$\sqrt{}$
66	4	58	Indira Nagar	34	Untenable				√				
67	1	22	Indra Nagar	80	Untenable							√	
68	4	59	Indra Nagar	149	Tenable		$\sqrt{}$						
69	2	7	lyyanthirumaligai	123	Tenable					√			
70	1	2	Jagir Ammapalayam	620	Tenable				√				
71	2	6	Jallikadu	40	Tenable		√						
72	4	58	Jawaharlal Street	197	Untenable		√		,				
73	2	12	Jhonsonpet East	823	Tenable				√ /				
74	2	13	Jhonsonpet West	392	Tenable				√ /				
75	2	13	Johnsonpettai	262	Tenable				√		1		
76	3	35	Jothi East Street	79	Tenable					1	√		
77	3	35	Jothi Main Road	285	Tenable			,		√			
78	3	35	Jothi Merku Street	54	Tenable			√					
79	3	32	Kaasi Muniyappan Koil Street	119	Tenable					√			
80	1	21	Kabilar Street	275	Tenable			√					
81	4	50	Kaliyamman Temple Backside	86	Untenable							√	
82	4	56	Kal Depo	44	Tenable	$\checkmark$							











B4	83	4	52	Kallankadu	160	Tenable							√	
B6	84										V			
Ref	85	1	23	Kallukuzi	21	Tenable								<b>V</b>
Ramaraj Street   36	86	1								1				
1	87	1	23	Kamaraja Colony	135	Tenable							√	
90	88	1	20		36	Tenable			√					
91	89	3	37		393	Tenable				√				
91	90	1	24		159	Tenable			√					
93 3 33 Karaikinaru 167 Tenable	91	1	24		201	Tenable			√					
94	92	4	49	Kannagi Street	121	Tenable					V			
95 2 16 Kattu Valavu 85 Tenable	93	3	33	Karaikinaru	167	Tenable				$\sqrt{}$				
96 1 21 Kattu Sottan Valavu 45 Tenable	94	3	44	Kasthuribhai Street	490	Tenable		$\sqrt{}$						
97 3 42 Kitchipalayam 11 Tenable	95	2	16	Kattu Valavu	85	Tenable				$\sqrt{}$				
98	96	1	21	Kattu Sottan Valavu	45	Tenable			$\sqrt{}$					
98         3         44         Kitchipalayam         233         Tenable         √           100         1         24         Konerikarai         86         Untenable         √           101         4         50         Thenpuram         225         Tenable         √           102         4         50         Kp Karadu Vadapuram         388         Tenable         √           103         4         49         (Netthi Medu)         60         Tenable         √           104         3         37         Kumaragiripettai         98         Tenable         √           105         3         41         Kunjaan Kadu         334         Tenable         √           106         4         60         Kurunji Nagar         288         Tenable         √           107         2         4         Kuttai Street         91         Tenable         √           108         1         25         Leigh Bazzar Odai         22         Untenable         √           109         4         60         Street         80         Tenable         √           110         4         53         Mahaboob Nagar         289	97	3	42	Kitchipalayam	11	Tenable							√	
99   3	98	3	44	Kitchipalayam	233	Tenable						√		
101	99	3	44	Kitchipalayam	167	Tenable				√				
101	100	1	24	Konerikarai	86	Untenable								√
102	101	4	50		225	Tenable								<b>V</b>
103	102	1	E0		200	Tonoblo							V	
104   3   37   Kumaragiripettai   98   Tenable   √	102	4	50		366	renable								-1
105   3		4	49	(Netthi Medu)	60	Tenable		,						٧
106	_	3	37	Kumaragiripettai	98	Tenable								
107   2   4   Kuttai Street   91   Tenable   √	$\vdash$	3	41	Kunjaan Kadu	334	Tenable								
108       1       25       Leigh Bazzar Odai       22       Untenable       √         109       4       60       Street       80       Tenable       √         110       4       53       Mahaboob Nagar       289       Untenable       √         111       1       20       Majeeth Street       58       Tenable       √         112       3       32       Majeeth Street       77       Tenable       √         113       3       35       Majid Nilam       72       Untenable         114       1       22       Malangattan Street       128       Tenable       √	106	4	60	Kurunji Nagar	288	Tenable		√	_					
109	107	2	4	Kuttai Street	91	Tenable			√					
109    4    60    Street	108	1	25		22	Untenable							√	
111       1       20       Majeeth Street       58       Tenable       √         112       3       32       Majeeth Street       77       Tenable       √         113       3       35       Majid Nilam       72       Untenable       √         114       1       22       Malangattan Street       128       Tenable       √	109	4	60		80	Tenable		√						
112       3       32       Majeeth Street       77       Tenable       √         113       3       35       Majid Nilam       72       Untenable       √         114       1       22       Malangattan Street       128       Tenable       √	110	4	53	Mahaboob Nagar	289	Untenable							V	
113         3         35         Majid Nilam         72         Untenable         √           114         1         22         Malangattan Street         128         Tenable         √	111	1	20	Majeeth Street	58	Tenable	$\checkmark$							
114 1 22 Malangattan Street 128 Tenable √	112	3	32	Majeeth Street	77	Tenable	$\sqrt{}$							
1 22 Ividiangulari olicot 120 Toriabio	113	3	35	Majid Nilam	72	Untenable								
115	114	1	22	Malangattan Street	128	Tenable								
-   -+   J∪   Ivianiyanui   00   Lenable               '	115	4	50	Maniyanur	68	Tenable	·		_				√	











116	1	19	Mariamman Koil St	144	Tenable			V				
117	3	35	Market St	173	Tenable				√			
118	4	46	Market Street	38	Tenable				√			
119	3	10	Masuthi Nilam	476	Untenable							V
120	2	15	Mayor Nagar	26	Tenable				$\sqrt{}$			
121	4	55	Mettu Kuruku Street	72	Untenable			√				
122	4	55	Mettu Street	29	Tenable						V	
123	3	9	Mettu Theru	20	Tenable	$\sqrt{}$						
124	2	5	MGR Nagar	58	Tenable	$\sqrt{}$						
125	1	21	MGR Nagar	62	Untenable							√
126	2	5	Mittapudur	199	Tenable	$\sqrt{}$						
127	3	36	Millitary Road	49	Tenable				$\sqrt{}$			
128	1	3	Molakaradu	72	Untenable							√
129	2	8	Mookaneri Adikarai	91	Tenable			$\sqrt{}$				
130	4	58	Moonangkaradu	61	Tenable	$\sqrt{}$						
131	4	60	Moonangkaradu	479	Tenable	$\sqrt{}$						
132	1	1	Mottur	123	Tenable			$\sqrt{}$				
133	1	27	Mullaah Kadu	271	Untenable							√
134	2	14	Mulvadi Maakaan Street	166	Untenable				$\sqrt{}$			
135	4	46	Mungapadi St	193	Tenable				$\sqrt{}$			
136	1	25	Muniyappan koil street	243	Tenable				√			
137	4	49	Muniyappan koil street	161	Tenable				√			
138	4	51	Muniyappan koil street	27	Tenable							√
139	4	48	Muniyappan Kovil St	55	Untenable					V		
140	4	47	Murugan Nagar	81	Tenable					V		
141	4	21	Muthu Mariyamman koil street	128	Tenable			<b>V</b>				
142	3	33	Muthavalliyakupather u	125	Tenable				√			
143	3	37	Muvendar Nagar	126	Tenable	V						
144	4	51	Nadu St	19	Tenable							√
145	3	37	Namamalai Adivaram	248	Tenable	 V						
146	2	16	Nagammal Thottam	14	Tenable					√		
147	3	36	Nanjampatti	557	Tenable		$\checkmark$					











148	3	42	Narayana Nagar	199	Tenable				√			
149	1	27	Narayanapuram	195	Tenable							V
150	3	41	Nathimulla Makkaan Street	103	Untenable					√		
151	3	9	Nehru Nagar	53	Tenable	$\sqrt{}$						
152	4	48	Neimandi Arunachala Street II	48	Tenable					√		
153	4	57	Nethaji street	129	Tenable						√	
154	2	5	Odacha Karai	55	Tenable		√					
155	1	3	OM Shakthi Nagar	47	Tenable					√		
156	4	60	Onpathampalzi	128	Tenable		V					
157	3	40	Pachapatti (North street)	567	Tenable		√					
158	3	40	Pachapatti	855	Tenable		√					
159	1	22	Pakri karadu	19	Tenable					√		
160	1	25	Pallapatti	142	Tenable						√	
161	1	25	Pallapatty Mariamman Koil St	116	Tenable					√		
162	1	18	Panankadu	236	Tenable					√		
163	4	45	Panchathangi Eari	671	Untenable							$\sqrt{}$
164	4	50	Pandithar Nehru Street	138	Tenable			√				
165	3	10	Pandiyan Street	50	Tenable							√
166	1	20	Pandiyan Street	52	Tenable						√	
167	2	29	Pandiyarajan St	74	Tenable						√	
168	1	27	Pavender Street	207	Tenable			V				
169	4	53	Pension Line	317	Tenable						√	
170	4	47	Pension Line Kuruku Street	29	Tenable						√ .	
171	3	39	Periya Kenaru	776	Tenable						√	
172	2	2	Periya Kollapatty	210	Tenable		√					
173	2	29	Periya Kollapatty	112	Tenable		√					
174	2	6	Periyar Kollapatty Gandhi Nagar New Colony	168	Tenable	$\checkmark$						
175			Periyar Kollapatty Gandhi Nagar Old			$\sqrt{}$						
176	2	6	Colony	144	Tenable						<b>√</b>	
170	1	28	Periyar Nagar	169	Tenable						٧	











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177	1	20	Periyar Nagar	177	Tenable								<b>√</b>
178	1	20	Periyar Street	199	Tenable	<b>V</b>							
179	1	21	Periyar Nagar	125	Tenable							√	
180	1	3	Perumal Malai Adivaram	111	Tenable						√		
181	4	47	P G R Line	130	Tenable						V		
182	2	5	Pidariamman Koil Street	30	Tenable	V							
183	4	58	Ponmanam Nagar	53	Tenable		$\sqrt{}$						
184	4	53	Pudu Trichy Kilai Road	84	Untenable						√		
185	3	9	Pudu Valavu	21	Tenable						V		
186	2	16	Pudur Kallanguthur & Anna Nagar	352	Tenable				√				
187	4	59	Puratchi Nagar	50	Untenable		$\sqrt{}$						
188	3	10	Puthu Mariyamman Kovil St	67	Tenable				√				
189	4	49	Putta Machine	55	Tenable					V			
190	3	10	Railway Vadaku Street	102	Untenable							√	
191	3	35	Railway line Therku Street	27	Untenable							√	
192	2	4	Ramakuttai	32	Tenable				√				
193	4	47	Ramalingaswamy Koil Street	241	Tenable						√		
194	3	37	Ramanathapuram	184	Tenable			√					
195	4	59	Ramayankadu	175	Tenable		√						
196	2	15	Ram Nagar Odai	182	Untenable					V			
197	1	25	Ravaneswar Nagar	93	Tenable			√					
198	4	59	Robert Ramasamy Nagar	88	Tenable				√				
199	3	37	Sakthi Nagar	49	Tenable	<b>√</b>							
200	4	60	Sakthi Nagar	121	Tenable	√ 							
201	3	37	Sangli Acaraya Kadu	225	Tenable	√							
202	3	37	Sanniyasi Gundu	49	Tenable				√				
203	3	43	Sanyasi Gundu Extn	403	Tenable				√				
204	3	9	Sengalannai	253	Tenable	√			ı				
205	11	3	Sengalpettai	50	Tenable				√				
206	1	24	Senjikottai	85	Tenable								<b>√</b>
207	2	14	Shankar Nagar Odai	37	Tenable					√			











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208	4	54	Shanmuga Nagar	236	Tenable			√				
209	4	50	Shanmuga Nagar	141	Tenable						√	
210	1	28	Shevapet - (Gunduchetti Eri)	305	Untenable						√	
211	<u>'</u> 1	22	Sivathapuram	109	Tenable							<b>√</b>
212	3	44	SMC Colony	597	Tenable			<b>√</b>				
213	4	45	SMC Line	113	Untenable						√	
214	1	21	Sollampallam	243	Tenable			√				
215	2	4	South Alagapuram	191	Tenable		√					
216	4	52	Srirangan Kadu	281	Tenable						V	
217	4	46	Srirangan St	64	Tenable				√			
218	1	23	Sukumar Colony	98	Tenable						<b>V</b>	
219			Sunnambukara								<b>V</b>	
220	4	52	Street	141	Tenable			√				
221	3	9	Swamy Nagar	88	Tenable			V				√
222	1	26	Swamynathapuram	230	Tenable						√	\ \ \
223	4	55	Tagore Street	114	Untenable	V					<b>V</b>	
224	3	9	Thadhampatti	238	Tenable	√ √						
	4	60	Thalai Malai Nagar Thanthai Periyar	273	Tenable							
225	2	6	Nagar	305	Tenable	√						
226	4	60	Thideer Nagar	93	Tenable	√						
227	1	23	Thiruvakkaoundanoo r	455	Tenable		$\sqrt{}$					
228	1	3	Thiru V K Nagar	28	Tenable							√
229	3	38	Thiyagi Natesan St	598	Tenable							$\checkmark$
230	4	48	Tholkappier Street	38	Untenable					$\sqrt{}$		
231	4	50	Uthirappan Kadu	126	Tenable						$\sqrt{}$	
232	4	60	Utthukadu	65	Tenable	$\checkmark$						
233	4	53	Vadaku Street	71	Tenable						√	
234	3	37	Vaithiudaiyarkadu	93	Tenable		$\sqrt{}$					
235	3	9	Valkadu	51	Tenable					√		
236	3	9	Valluvar Colony	17	Tenable		$\sqrt{}$					
237	4	53	Valluvar Nagar-3	82	Tenable						√	
238	4	53	Valluvar Street-2	83	Tenable							√
239	4	58	Valzivaikal	120	Tenable			√				
240	3	11	Vasagar Salai	63	Tenable		√					
241	4	60	Vedipukkal Parai	139	Untenable	$\sqrt{}$						











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242	1	21	Veerakaliyamman Nagar	162	Untenable						$\sqrt{}$		
243	1	27	Veeran Nilam	70	Tenable								$\sqrt{}$
244	1	20	Vellayan Gounder Street	69	Tenable				~				
245	4	53	Velupudu Street	56	Tenable							$\checkmark$	
246	3	9	Venkatachalam Colony	352	Tenable			$\sqrt{}$					
Total			38583		17	38	26	42	28	22	38	35	











# Annexure



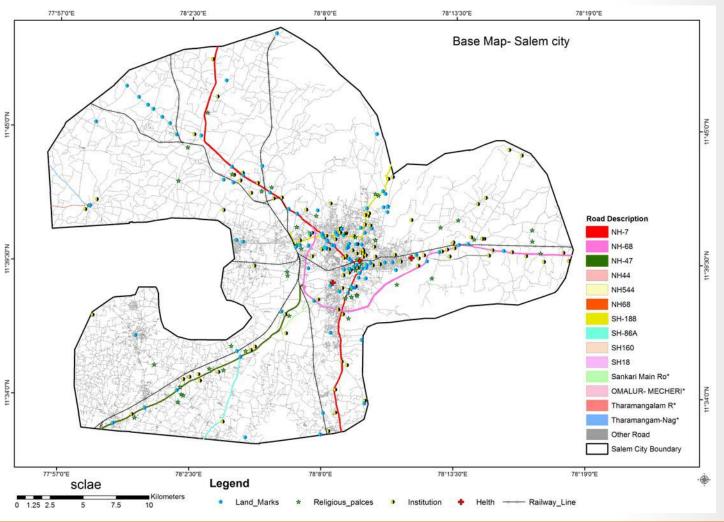








Map 1: Base Map of Salem City





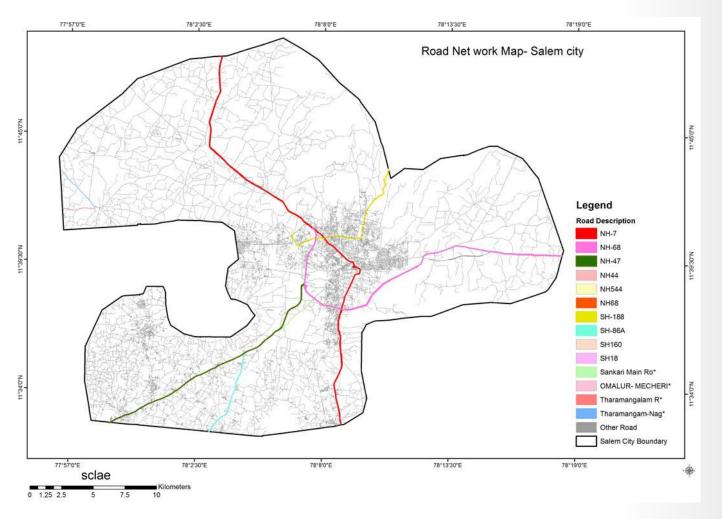








Map 2: Road Network Map of Salem



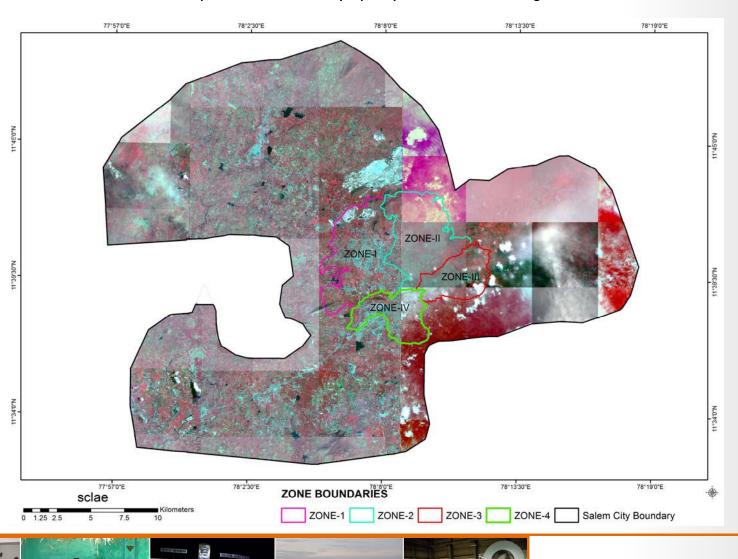




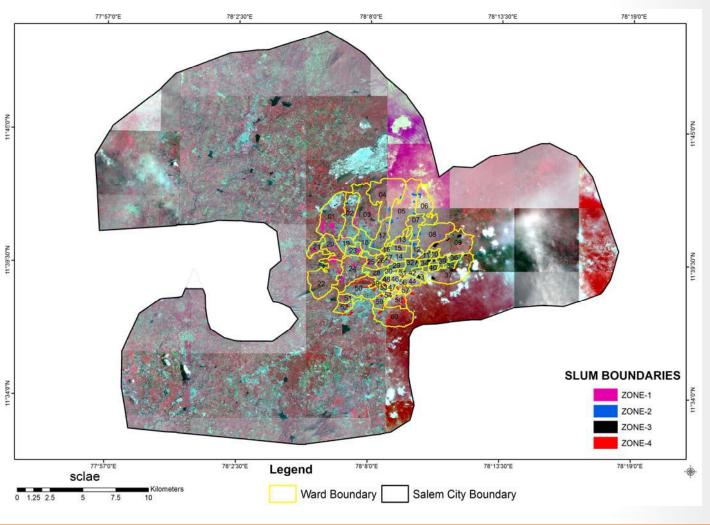








Map 3: Salem Zone Boundary superimposed in the Satellite Image



Map 4: Salem Ward Boundary superimposed in the Satellite Image



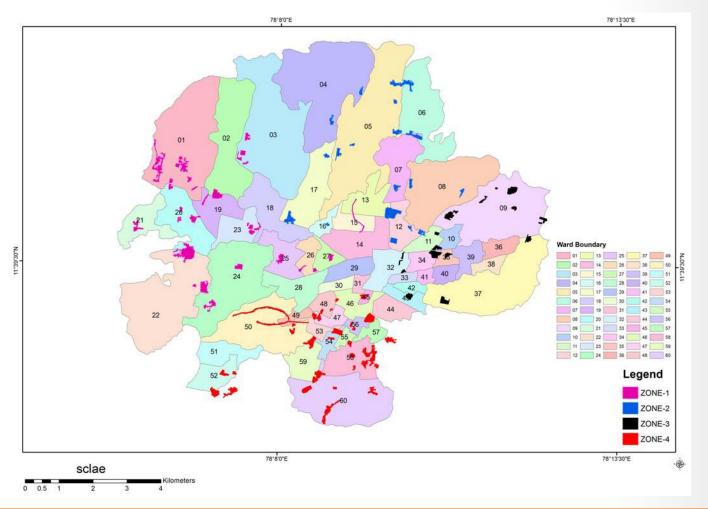








Map 5: Ward Wise Slum Map of Salem



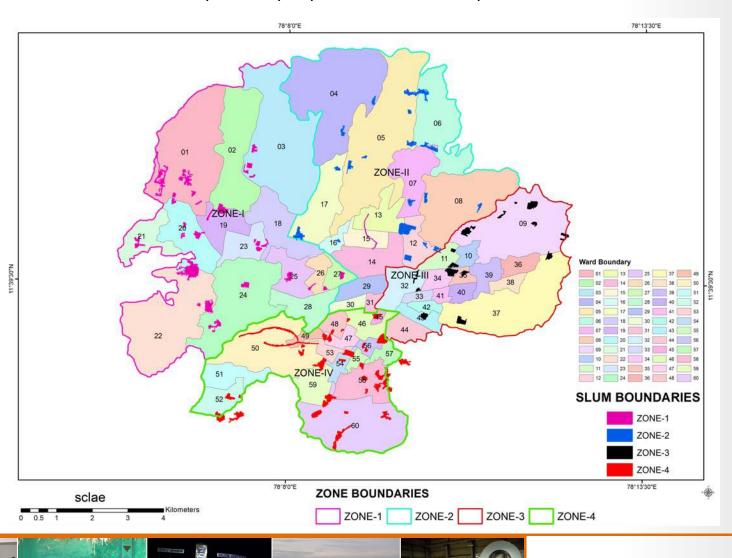






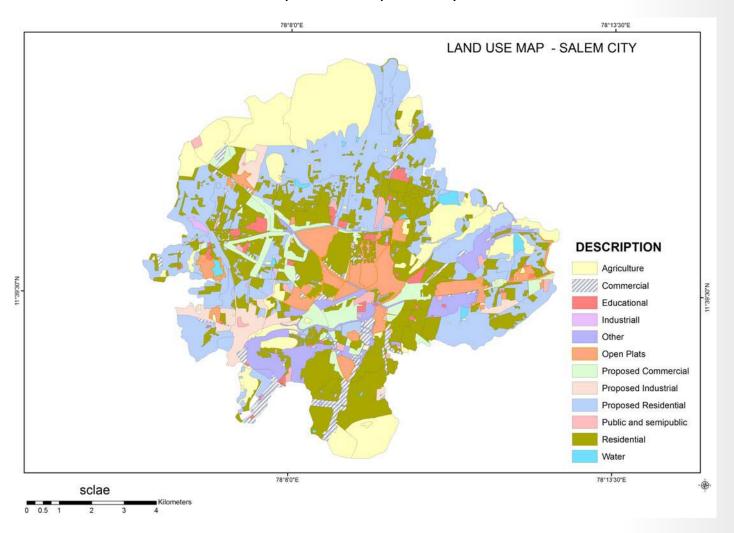






Map 6: Zones superimposed on Ward Wise Slum Map of Salem

Map 7: Land Use Map - Salem City



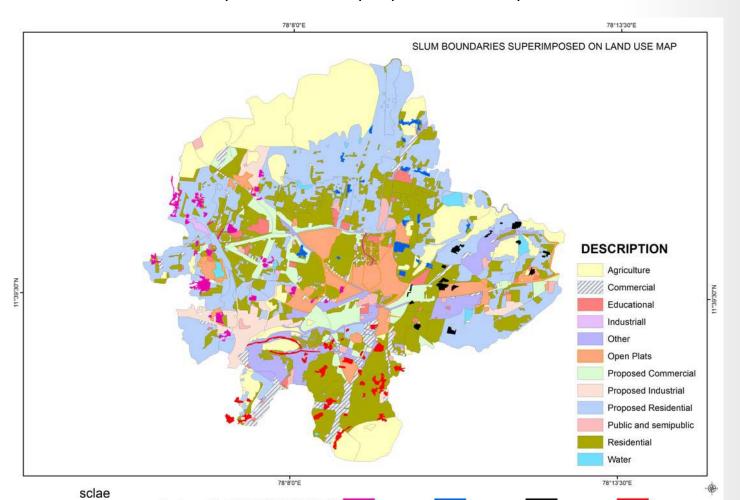












Map 8: Slum Boundaries Superimposed on Land Use Map







**SLUM BOUNDARIES** 



ZONE-1

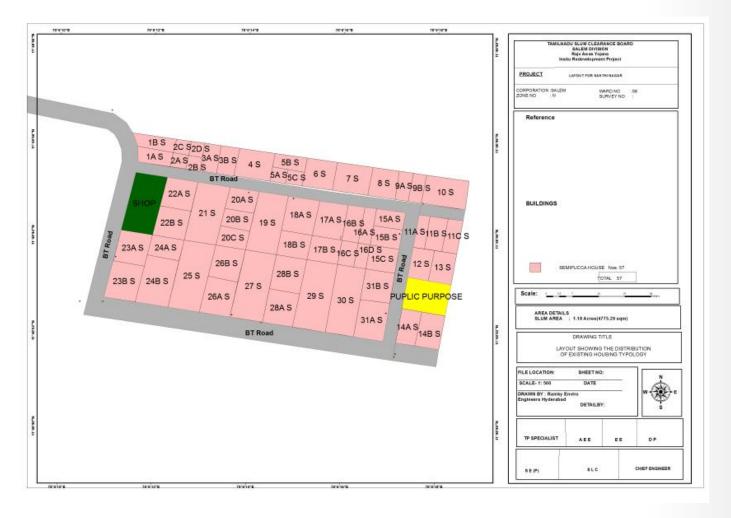


ZONE-2

ZONE-3

ZONE-4

Map 9: Slum Map – Sakthi Nagar





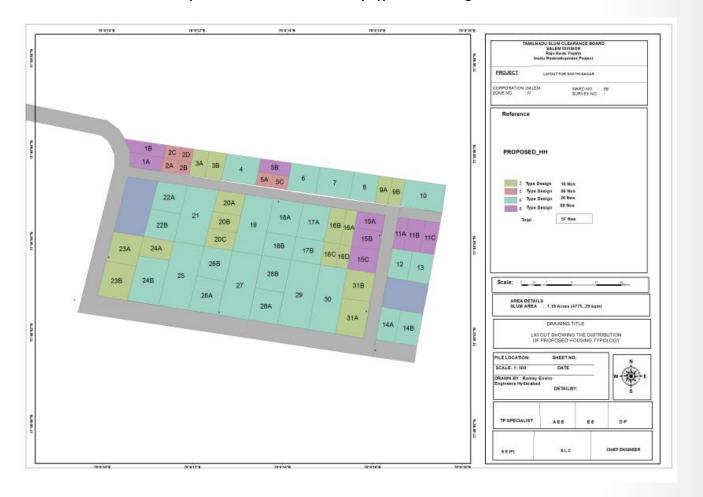








Map 10: Classification of Houses by Type in Sakthi Nagar Slum





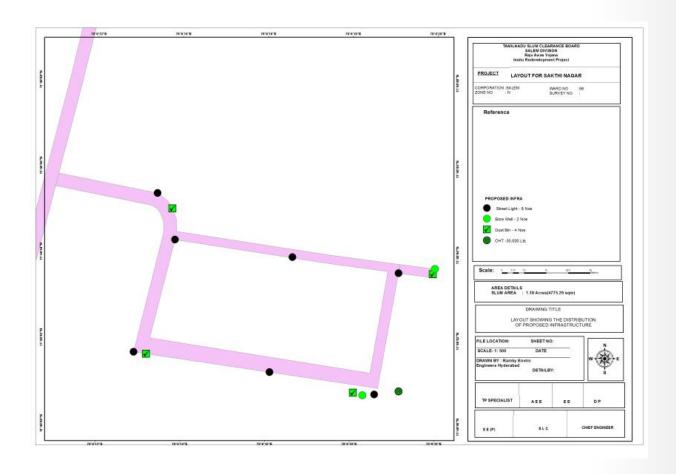








Map 11: Proposed Infrastructure map – Sakthi Nagar













Out of the 344 slums in Salem, 246 slums have been surveyed.

S. No	Zone	Ward	Name of the slum	TNUDP	Cash Loan	NRY		
Suram	Suramangalam (Zone 1)							
1	1	21	Achuanagar	$\sqrt{}$	V	V		
2	1	1	Ambedkar Odai					
3	1	23	Ammasi Nagar					
4	1	20	Andipatti					
5	1	22	Andipatti					
6	1	21	Anna Nagar					
7	1	19	Anthony puram odai	$\sqrt{}$	√	V		
8	1	19	Appavu Nagar					
9	1	1	Arundhathiyar Street W-1					
10	1	18	Arundhathiyar St					
11	1	2	Chinna Ammapalayam					
12	1	1	Chinna Mottur					
13	1	28	Gandhi Nagar					
14	1	25	Gorikadu					
15	1	21	Indira Nagar					
16	1	22	Indra Nagar					
17	1	2	Jagirammapalayam					
18	1	23	Kallukuzi	$\sqrt{}$		V		
19	1	1	Kamanayakampatty					
20	1	23	Kamaraja Colony					
21	1	20	Kamaraj street					
22	1	21	Kabilar Street					
23	1	24	Kandhampatty Colony					
24	1	24	Kandhampatti					
25	1	21	Kattu sottan valavu			V		
26	1	24	Konerikarai					
27	1	25	Leigh Bazzar Odai					
28	1	20	Majid Street	$\checkmark$	√	V		
29	1	22	Malangattan Street					
30	1	19	Mariamman Koil St					
31	1	21	MGR Nagar					
32	1	3	Molakaradu					
33	1	1	Mottur					
34	1	27	Mullah Kadu					











35	1	25	Muniyappan Kovil St	1 1		
36	1	27	Narayanapuram			
37	1	3	Om Shakthi Nagar			
38	1	25	Pallapatti	√	√	√
39	1	25	Pallapatty Mariamman Koil St	·	· · · · · · · · · · · · · · · · · · ·	
40	1	22	Pakrikaradu	√	<b>√</b>	√
41	1	18	Panankadu	,	•	'
42	1	20	Pandiyan Street W-20	√		√
43	1	27	Pavender street	,	•	,
44	1	28	Periyar Nagar			
45	1	20	Periyar Nagar			
46	1	20	Periyar Street	√	<b>√</b>	√
47	1	21	Periyar Nagar		<b>Y</b>	· ·
48	1	3	Perumal Malai Adivaram			
49	1	25	Ravaneswar nagar			
50	1	3	Sengal Pettai			
51	1	24	Senjikottai	√		√
52	1	28	Shevapet - (Gunduchetti Eri)	V	v	<b>-</b>
53	1	22	Sivandhapuram			
54	1	21	Sollampallam			
55	1	23	Sugumar Colony			
56	1	26	Swamynathapuram			
57	1	23	Thiruvakkaoundanoor			
58	1	3	Thiru V K Nagar			
59	1	27	Veeran Nilam			
60	1	20	Velaiyan Gounder street			
61	1	21	Veerakaliyamman Nagar			
	ampatty ( Z		Veerakaiiyaiiiiilaii Nagai			
62	2	17	Alamarakkadu			
63	2	5				
64	2	<u> </u>	Alagapuram Alagapuram Periyaputhur			
65	2	5 16	Ambedkar Street			+
66	2	8				
67	2	8	Amman Nagar			
	2	17	Ayyanar Kovil Street			
68 69	2		Boyer Street Chinna Kollanatti			
		6	Chinna Kollapatti			
70	2 2	8 12	Chinna Tirupathi	√	ء ا	1
71			Court Road Colony	ν	V	√
72	2	29	Devangapuram Philippe Output			
73	2	4	Dhideer Colony			











74	2	8	Gandhi Nagar			
75	2	16	Govinda Goundar Thottam			
76	2	7	lyyanthirumaligai			
77	2	6	Jallikadu			
78	2	12	Johnsonpet East			
79	2	13	Johnsonpet West			
80	2	13	Johnsonpettai			
81	2	7	Kalli Kadu			
82	2	16	Kattu Valavu			
83	2	4	Kuttai Street			
84	2	15	Mayor Nagar			
85	2	5	MGR Nagar			
86	2	5	Mittapudhur			
87	2	8	Mookaneri Adikarai			
88	2	14	Mulvadi Maakaan Street			
89	2	16	Nagammal Thottam			
90	2	5	Odacha Karai	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
91	2	29	Pandiyarajan St			
92	2	29	Periya Kollapatty			
93	2	2	Periya Kollapatty			
94	2	6	Periyar Kollapatty(Gandhi Nagar new Colony)			
95	2	6	Periyar Kollapatty (Gandhi Nagar Old Colony)			
96	2	5	Pidari amman koil street	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
97	2	16	Pudur kallanguthur & Anna nagar			
98	2	4	Ramakuttai			
99	2	15	Ram Nagar Odai			
100	2	14	Shankar Nagar Odai	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
101	2	4	South Alagapuram			
102	2	6	Thandhai Periyar nagar	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
Ammapet ( Zone 3)						
103	3	32	Aatroram street			
104	3	9	Allikuttai Boyer Street			
105	3	9	Allikuttai (Mariyamman Kovil Street)			
106	3	11	Anai Meadu			
107	3	32	Anai Road			
108	3	58	Annanagar			
109	3	37	Anna Nagar W-37			
110	3	10	Arundhathiyar Street W-10			
111	3	32	Arasamara Pillayar Kovil Street			
112	3	33	Athiyaman St			











113	3	37	Bharathi Nagar	1 1		1 1
114	3	35	Bharathiyar Steet			
115	3	35	Carpet Steet	√	√	1
116	3	9	Chottya goundar Street	· ·	v	<b>'</b>
117	3	10	Desiya Punaramaipu Colony	+		
	3					
118	3	43	Erumapalayam Main Road Gandhi Mahan Street	√	-1	- 1
119		42		V	√	√
120	3	37	Gandhi Nagar			
121	3	11	Gopalchetty Street	+		
122	3	11	Gopal Street			
123	3	9	Goyya Thoppu			+
124	3	35	jothi merku street	,		,
125	3	35	Jothi East St	√	√	√ √
126	3	35	Jothi Main Road			
127	3	32	Kaasi Muniyappan Koil Street			
128	3	37	Kamarajar Nagar Colony			
129	3	33	Karaikinaru			
130	3	44	Kasthuribhai Street			
131	3	42	Kitchipalayam			
132	3	44	Kitchipalayam			
133	3	44	Kitchipalayam Colony	$\sqrt{}$	√	$\sqrt{}$
134	3	37	Kumaragiripettai			
135	3	41	Kunjaan Kadu			
136	3	32	Majeeth Street			
137	3	35	Majid Nilam			
138	3	35	Market St			
139	3	10	Masuthi Nilam			
140	3	9	Mettu Theru			
141	3	36	Millitary Road			
142	3	37	Muvendar Nagar			
143	3	33	Muthavalliyakupatheru			
144	3	37	Namamalai Adivaram			
145	3	36	Nanjampatti			
146	3	42	Narayana Nagar			
147	3	41	Nathimulla Makkaan Street			
148	3	9	Nehru Nagar			
149	3	40	Pachapatti (North street)			†
150	3	40	Pachapatti	$\sqrt{}$	√	+
151	3	10	Pandian Street W-10	1	,	+
152	3	39	Periya Kenaru	+		+ -
102			T onya Nonara			











154 155	3					
155		10	Puthu Mariyamman Kovil St			
	3	49	Putta Machine			
156	3	10	Railway Vadaku Street			
157	3	35	Railway Therku Street			
158	3	37	Ramanathapuram			
159	3	37	Sakthi Nagar W-37			
160	3	37	Sanniyasi Gundu	V	$\sqrt{}$	
161	3	43	Sanyasi Gundu Extn			
162	3	9	Sengal Anai			
163	3	37	Sengaliacharyakadu			
164	3	44	SMC Colony			
165	3	9	Swamy nagar			
166	3	9	Thadhampatti			
167	3	38	Thiyagi Natesan St			
168	3	37	Vaithiudaiyarkadu			
169	3	9	Val Kadu	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
170	3	9	Valluvar Colony	$\sqrt{}$		$\sqrt{}$
171	3	11	Vasagar Salai			
172	3	9	Venkatachalam Colony			
Kondala	mpatty (	Zone 4)				
173	4	49	Agathiyar Street			
174	4	49	Allikuttai Colony			
175	4	50	Ambedkar colony W-50			
176	4	47	Ambedkar Nagar W-47			
177	4	51	Ambedkar Street - Jari Kondalampatty - W-51			
178	4	47	Ambedkar St			
179	4	51	Ambedkar Street			
180	4	58	Amman Nagar			
181	4	47	Andhipatti Eari			
182	4	45	Attoram Kilaku Street W-45			
183	4	45	Attoram Vadaku Street W-45			
184	4	49	Avaiyar Street			
185	4	58	Chellakutti kadu			
186	4	60	Chinnayan Colony			
187	4	50	Gandhi Nagar			
188	4	59	Indira Nagar			
189	4	58	Indra Nagar			
190	4	58	Jawaharlal Street			
191	4	50	K.P Karadu Thenpuram			











192	4	50	K.P Karadu Vadapuram	$\sqrt{}$	√	√
193	4	49	K.P.Karaduroad (Netthi medu)			
194	4	56	Kaldepo			
195	4	52	Kallankadu			
196	4	50	Kaliyamman Temple Backside			
197	4	49	Kannagi Street			
198	4	60	Kurinji Nagar			
199	4	60	Madurai Veeran Kovil Street			
200	4	50	Maniyanur			
201	4	46	Market Street			
202	4	55	Mettu Street			
203	4	55	Mettu Kuruku Street			
204	4	53	Mogaboob Nagar			
205	4	60	Moonangkaradu	V	V	√
206	4	58	Moonangkaradu	V	√	√
207	4	46	Mungapadi St			
208	4	48	Muniyappan Kovil St			
209	4	49	Muniyappan Kovil street W-49			
210	4	51	Muniyappan Kovil Street W-51			
211	4	47	Murugan Nagar			
212	4	58	Muthu mariyamman kovil street W-58			
213	4	51	Nadu St			
214	4	48	Neimandi Arunachala Street II			
215	4	57	Nethaji street			
216	4	60	Onpatham Palzi			
217	4	45	Panchathangi Eari			
218	4	50	Panditha Nehru Street			
219	4	53	Pension Line 1 to 5 streets			
220	4	47	Pension Line kuruku street			
221	4	47	P G R Line			
222	4	58	Ponmanam Nagar	$\sqrt{}$		
223	4	53	Pudu Trichy Kilai Road			
224	4	59	Puratchi Nagar	V		
225	4	47	Ramalingaswamy Koil Street			
226	4	59	Ramayan Kadu			
227	4	59	Robert Ramasamy Nagar			
228	4	60	Sakthi Nagar W-60			
229	4	54	Shanmuga Nagar	√		
230	4	50	Shanmuga Nagar			
231	4	45	SMC Line			











232	4	46	Srirangan St		
233	4	52	Srirangan Kadu		
234	4	52	Sunnambukara Street		
235	4	55	Tagore Street		
236	4	60	Thalaimalai Nagar		
237	4	60	Thideer Nagar		
238	4	48	Tholkappier Street		
239	4	50	Uthirappan Kadu		
240	4	60	Utthukadu	$\checkmark$	
241	4	53	Vadaku Street		
242	4	58	Valzi Vaikal		
243	4	53	Valluvar Nagar-3		
244	4	53	Valluvar Street-2		
245	4	60	Vedipukkal Parai		
246	4	53	Velupudu street		

The list of slums 98 slums which could not be surveyed is furnished below.

SI. No	Ward Nos	Name of slum
Suramanga	alam (Zone 1)	
1	1	Ambedkhar nagar
2	1	Uthukinadru
3	1	Kilakadu
4	3	Anna Nagar
5	3	Kamaraj Nagar
6	3	Rajakaliamman nagar
7	18	Puthu theru
8	20	Kk Nagar (Bodinaickenpatty)
9	21	EVK colony
10	22	Meyyan theru
11	22	Perumal kiolkaradu
12	22	Pattakaran street
13	23	Sengankadu
14	23	Ramasamy nagar
15	23	Veydiappan colony
16	25	Vasakattu colony
17	25	Kodi Pallam
Hasthampa	atty (Zone 2)	
18	5	Thoppukadu Karuppanasamy koil street
19	5	Indira nagar











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20	5	Pillaiyar koil theru (Pillaiyar Nagar)
21	5	Kallamedu (Kalliyankaradu)
22	5	Oddan kudiyiruppu
23	5	Periyar Nagar
24	6	Boyar street/Kaliamman nagar
25	7	Athukadu Muniappan koil st
26	7	Athu kadu (Anbu Nagar)
27	 7	Udayar theru
28	 7	Pallakadu
29	7	Sengoda gounder salai south
30	8	Gorimedu/KK nagar
31	30	Muthvalli Ibrahim st
Ammapet (Z		Mutivalii isidiilii St
32	9	Ganga Pudhur
33	9	Veeeranam main Road (Vaikal pattarai)
34	9	Sathyanagar
35	9	Valkadu Pirivu
36	9	Indira Nagar.
37	9	Rettai Kinaru
38	10	Vasagar salai
39	10	Perumal koil theru
40	32	Siddhan theru &Milakaikaratheru
41	32	Angalaamman koil theru
42	32	Chairman Rajaratinam street
43	32	Majeeth Street(Periyar Theru.)
44	32	Mettumakkan theru Sivappu Majid st.
45	32	Sakattai Basanatheru
46	32	Kavari theru and Periyar theru
47	32	Govindan theru
48	35	Mariudaiyar theru
49	37	Siddivinayagar Koil Theru.
50	37	M.G.R. Nagar.
51	37	Kadambur Muniyapan Koil Theru.
52	37	V. O. C. Nagar.
53	37	Singarapettai &Kandasamy Pudur.
54	37	Sangli Achary Kadu
55	37	Kombai Kadu.(Kandagiri Main Raod)
56	37	Poonkattu colony.
57	37	Nagar Padayatchi colony.
58	37	Perumal koil medu
59	37	Sasthiri nagar
60	37	Puthupettai I,II,III (Kumaragiripettai)











61	37	Namamalai Nagar.(Rasia.
62	37	Vaithiudaiyarkadu
63	38	Mettu Strreet
64	38	Arunagiri Theru.
65	39	Eravadar street.
66	40	Thiru. V. K. Pathai
67	40	Kundu Pillaiyar Koil Theru.
68	40	Muthusamy Theru.
69	40	Manikavasagar Theru. (1&2).
70	40	Cholan Theru & Cholan West Theru.
71	40	Pinnangu Ramasamy Theru
72	40	Arumugam Nagar.
73	40	Vidhya Nagar.
74	42	Narayana Nagar (Kuringi Nagar.)
75	43	Thirunavukarasu Road.
76	44	Sunder st. & Apper st.
77	44	Kalarampatti Main road.
Kondalamp	atty (Zone 4)	
78	45	Salavaiyalar colony
79	48	Meenakshipuram
80	50	Nethaji nagar
81	50	Pallar street
82	50	Alavagounder street
83	51	Conductor Raji street
84	51	Perumal kovil street
85	51	Pillyar kovil street
86	51	Chinna kondalampatty
87	52	Subiramaniya swami koil street
88	52	Kunju mariyamman koil street
89	53	Raja theru
90	53	Kaliyamman panthal street
91	53	Rajammal comunityhall back side
92	55	Radio park street
93	57	Panditha Nehru Street
94	57	kaligar nagar,1to6
95	58	Vazlivaikal kaliamman koil street
96	58	kothadimi colony
97	59	Sivasakthi nagar
98	60	Subas chandrabose nagar











### **Annexure 2: Minutes of the Consultative Meeting for Salem Corporation**

Date: 10-02-2014, Monday 11.00 AM

Place: AMR Hotel , Salem

The State Level Coordinator, Ray, TNSCB welcomed the members and made a presentation of the salient feature of Ray/contents of SFCPoA.

The following are the list of slums zone wise, suggested by the respective Ward Councilors for consideration for inclusion in the survey.

S.No	Zone	No of Slums
1	Zone I Suramanagalam	76
2	Zone II Hasthampatty	55
3	Zone III Ammapet	115
4	Zone IV Kondalampatty	98
	Total	344

### Questions / Observations and Replies / Remarks made during the Meeting

S.No.	Questions	Replies
1.	All the ward councilors were requested to extend their full cooperation for successful Implementation of RAY scheme.	Complied
2.	Whether tiled houses be converted into pucca houses under RAY.	Yes
3.	Whether Tenants in the slum areas will be taken care of under RAY?	As a Preventive Strategy for future growth of slums, dwelling units will be built in various places to accommodate the needs of the people living as Tenants in slum areas.
4.	There are pockets of undeveloped areas within developed bigger slums. Whether such small pockets having less than 20 huts can be taken up for improvement under RAY?	Yes
5.	Whether RAY project will be executed in any kind of Government lands?	Yes. But the land should be in an unobjectionable location
6.	The zonal officer requested for the zone meeting for missing slums	Yes we will do











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## **Tamil Nadu Slum Clearance Board**

Rajiv Awas Yojana

Consultative Meeting for SFCPoA for Salem

Venue: Corporation Zonal Office, Vellore.

Date: 10-02-2014

# List of participants-Invitees

S.No	Name	Contact Number	Designation Department/ward/Zone
01	Thiru. M. Ashokan	0427-2213131	Salem Commissioner
02	Thiru. S.Soundappan	94433 - 30129	Salem Mayor
03	Thiru. M. Natesan	94433 - 75777	Deputy Mayor
04	Mr.Venkatesan		Town Planning Officer
Suramangalam Zone			
	Councillors		
1	T.Thiyagarajan	9443824549	Ward-1
2	C.Ashokkumar	9443233923	Ward-2
3	M.Balu	9443745547	Ward-3
4	P.Murugasan	9345086202	Ward-18
5	C.Anuradha	9677814205	Ward-19
6	P.Ravindran	9443342487	Ward-20
7	A.Madiyan	9364211556	Ward-21
8	J.Ponnai	9750062513	Ward-22
9	T.Indira	9443053735	Ward-23
10	A.Kirubakaran	9443289040	Ward-24
11	A.Mariyappan	9443434948	Ward-25
12	N.Jamunarani	9442905837	Ward-26
13	V.Sasikala	9003646923	Ward-27
14	N.Markbanth	9362101441	Ward-28











	Hasthampatty Zone		
15	M.Bovaneshwari	9361105019	Ward-4
16	A.Manonmani	9150414570	Ward-5
17	S.Mani	9443261434	Ward-06
18	C.Saravanan	9443409799	Ward-07
19	K.Bama	9944625853	Ward-08
20	M.Mathalana	9443621089	Ward-12
21	A.Ramasamy	9003597946	Ward-13
22	K.madeshwaran	9362107201	Ward-14
23	K.Murugan	9362111140	Ward-15
24	A.Pragesh	9842741016	Ward-16
25	M.Rajendran	9443349935	Ward-17
26	S.S.Krishnamoorthy	94432123436	Ward-29
27	P.Athimathavan	90039446666	Ward-30
28	A.Hainagam	9443177955	Ward-31
	Ammapet Zone		
29	M.R.Jayakumar	9842720372	Ward-9
30	V.Daivalingam	9443236964	Ward-10
31	P.Muruganatham	9894527028	Ward-11
32	U.chithira	9443718677	Ward-32
33	S.Kapeer	9443262815	Ward-33
34	V.Jayapragesh	9362105411	Ward-34
35	S.Gokilavani	9443162815	Ward-35
36	A.Thamaraiselvan	9443039753	Ward-36
37	K.Supramani	9345742709	Ward-37
38	J.Manikam	9842527358	Ward-38
39	K.Monoharan	9443086284	Ward-39











40	K.Dasithin	9443663786	Ward-40
41	A.Geetha	9842790123	Ward-41
42	G.Sarala	9842734338	Ward-42
43	J.Senthikumar	9842744844	Ward-43
44	P.Magala	9944000128	Ward-44
	Kondalampatty Zone		
45	R.Selvi	9360535824	Ward-45
46	E.Balasuramaniyam	9443264744	Ward-46
47	M.Karnan	9790514931	Ward-47
48	R.Vijaya	9976221038	Ward-48
49	K.Muthu	9894344777	Ward-49
50	M.Nadasan	9443375777	Ward-50
51	M.Paramasivam	9443546476	Ward-51
52	N.Meenachisundaram	9443718956	Ward-52
53	R.S. Kulamjohn Sahul	9842784820	Ward-53
54	S.P. Saravanan	9842742761	Ward-54
55	J.Thangammal	8870994499	Ward-55
56	S.Nageshwaran	9865286827	Ward-56
57	M.Maliga	9894535473	Ward-57
58	N.Sanmugam	9842774499	Ward-58
59	P.Murugan	9366644459	Ward-59
60	S.Santhi	94435858163	Ward-60
	RAMKY Consultant		
1	Mr. Rathanam	9952294963	
2	Mr. Varaunkumar	9655112073	











## **Tamil Nadu Slum Clearance Board**

Rajiv Awas Yojana

# List of participants-TNSCB officials

S.No	Name	Contact Number	Designation
1	Dr.V. Shanmugasundaram	9841283885	State Level Coordinator / RAY
2	Mr.V. Subramaniyan	9445040719	Superending Engineer
3	Mr.S.P Vasantha Kumar	9442258087	Executive Engineer
4	Mr.R. Ravikumar	9443944047	Assistant Executive Enigneer
5	Mr.Balamurali		Assistant Engineer
6	Mr. A.Vaiyapuri	9865262047	Assistant Engineer
7	Mr.K. Rajesh	9791538636	GIS Specialist
8	Mr.P. Nirmala Devi	9003030648	Town Planning Specialist











Annexure 3: Photographs of few slums in Salem











