

CE6007-Housing Planning and Management



BIRDS EYE VIEW OF PERUMBARKKAM TENEMENTS

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INSTITUTE VISION

To emerge and sustain as a center of excellence for technical and managerial education upholding social values.

INSTITUTE MISSION

Our aspirants are

- Imparted with comprehensive, innovative and value based education
- Exposed to technical, managerial and soft skill resources with emphasis on research and professionalism
- Inculcated with the need for a disciplined, happy, married and peaceful life

DEPARTMENT VISION

To inspire and mould Civil Engineering aspirants as competent and dynamic infrastructure developers to lead the society towards sustainability.

DEPARTMENT MISSION

Our Mission is to

- Integrate high quality Civil Engineering Education and Research.
- Keep the students abreast with the State of art Theory and Practice.
- Create a supportive environment to meet Professional Challenges.

PROGRAM EDUCATIONAL OBJECTIVES

- To prepare students for successful careers in Civil Engineering field that meets the needs of Indian and multinational companies.
- To develop the confidence and ability among students to synthesize data and technical concepts and thereby apply it in real world problems.
- To develop students to use modern techniques, skill and mathematical engineering tools for solving problems in Civil Engineering.
- To provide students with a sound foundation in mathematical, scientific and engineering fundamentals necessary to formulate, solve and analyse engineering problems and to prepare them for graduate studies.
- To promote students to work collaboratively on multi-disciplinary projects and make them engage in life-long learning process throughout their professional life.

Objectives of the subject:

- ✓ to have a comprehensive knowledge of planning, design, evaluation, construction and financing of housing projects.
- ✓ The course focuses on cost effective construction materials and methods.
- ✓ Emphasis is given on the principles of sustainable housing policies and programmes.

COURSE OUTCOMES

C01: Will be able to make use of the basic terms of housing, housing laws and control regulations.

C02: will be able to identify the role of public, private and non-government organizations.

C03: Will able to identify the different types of sites and improve their knowledge in design and evaluation.

C04: Will able to choose the effective materials for construction.

C05: Will able to make use of the finance assistance given by government.

Syllabus:

INTRODUCTION TO HOUSING

Definition of Basic Terms, Objectives and Strategies of National Housing Policies including Slum Housing Policy, Principle of Sustainable Housing – Integrated approach on arriving holding capacity and density norms, Institutions for Housing at National, State and Local levels.

HOUSING PROGRAMMES

Basic Concepts, Contents and Standards for Housing Programmes, Co-operative Housing, Slum Housing Programmes – Slum improvement – Slum redevelopment and Relocation – Use of GIS and MIS in Slum Housing Projects – Role of Non-Government Organizations in slum housing.

PLANNING AND DESIGN OF HOUSING PROJECTS

Formulation of Housing Projects – Land Use and Soil suitability analysis -Building Byelaws and Rules and Development Control Regulations - Site Analysis, Layout Design, Design of Housing Units (Design Problems) – Housing Project Formulation.

SYLLABUS..

CONSTRUCTION TECHNIQUES AND COST-EFFECTIVE MATERIALS

New Constructions Techniques – Cost Effective Modern Materials and methods of Construction- Green building concept

HOUSING FINANCE AND PROJECT APPRAISAL

Evaluation of Housing Projects for sustainable principles – Housing Finance, Cost Recovery – Cash Flow Analysis, Subsidy and Cross Subsidy- Public Private Partnership Projects – Viability Gap Funding - Pricing of Housing Units (Problems).

Housing:

Housing is an important economic activity besides being a basic necessity. As part of the construction industry, which accounts for more than 50 per cent of the development outlays, housing has emerged as a major sector of economy having backward and forward linkages with almost all other sectors.

Unit -1 Introduction to housing

1. House
2. Home
3. Household
4. Apartments
5. Multistoried building
6. Special buildings

House and home:

- A **house** is defined as a building or structure, whose main purpose is to be occupied for habitation by humans.
- **Home** is the place where you live and feel that you belong to.

Household:

A **household** consists of one or more people who live in the same dwelling and also share meals or living accommodation, and may consist of a single family or some other grouping of people

Apartments:

- a room or a group of related rooms, among similar sets in one building, designed for use as a dwelling.



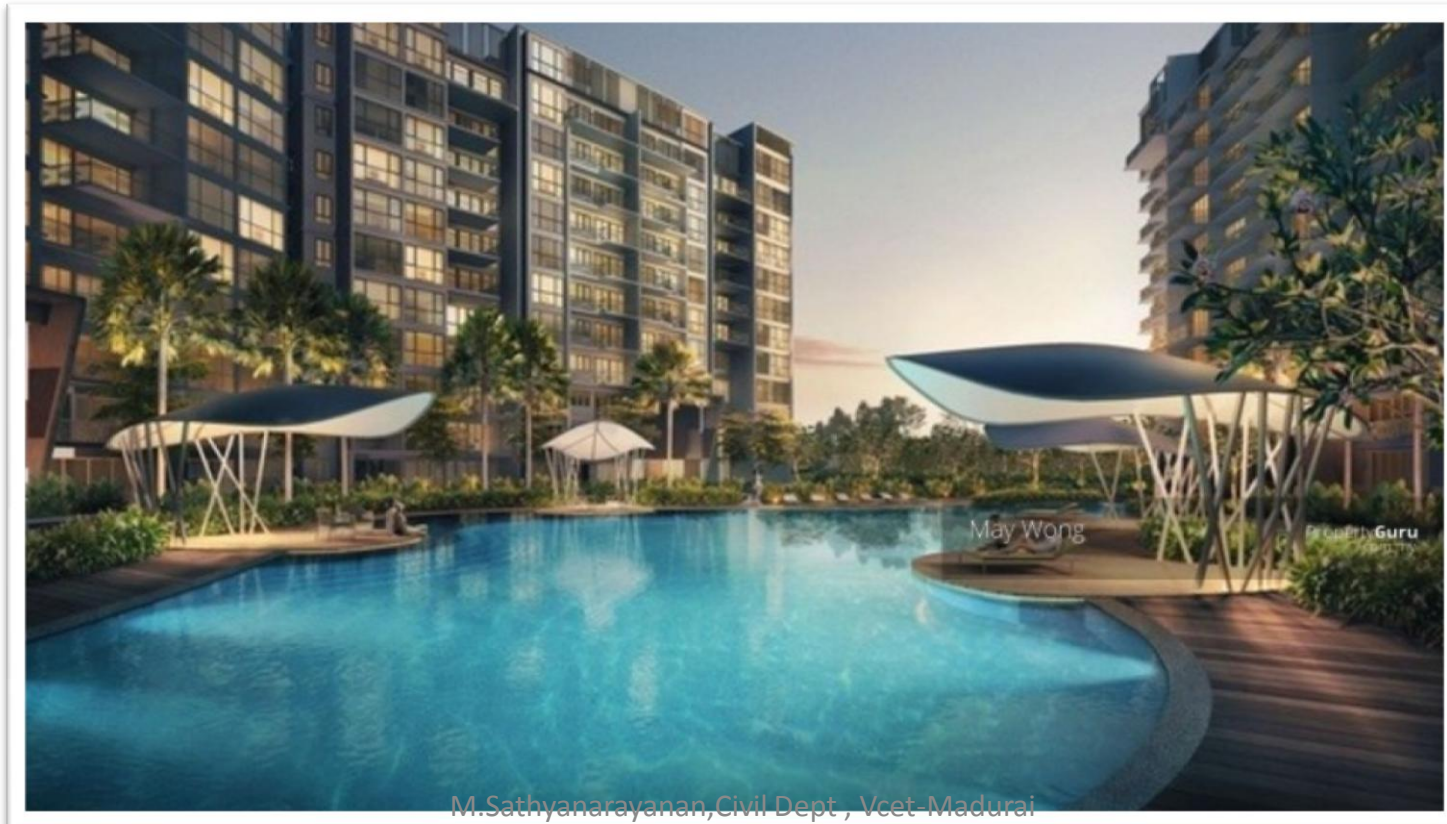
Multistoried Building:

- A multi-storey is a building that has multiple floors. In India a high-rise building is one with four floors or more in height.



Condominium

- A condominium (or condo) is a building complex containing a number of individually owned apartments with shared facilities. By owning an apartment in a condominium, a person has access to the common facilities



Duplex house:

A **duplex house** is a dwelling having apartments with separate entrances for two households. This includes two-story houses having a complete apartment on each floor and also side-by-side apartments on a single lot that share a common wall.



Dwelling unit

"**Dwelling unit**" means a structure or the part of a structure that is used as a home, residence or sleeping place by one person who maintains a household or by two or more persons who maintain a common household.



National Housing Policy:

The Central Government adopted the **National Housing** and Habitat **Policy** in July 1998. Its thrust is on creation of an enabling environment for an all-round growth of the **housing** sector. For the vulnerable and weaker sections of the society, the Government is playing the role of direct provider.

Commission forms 5 sub commissions among them.

1. Housing development
2. Finance of the works
3. Deals with rural housing
4. Welfare schemes and
5. The problems of housing requirement.

Objectives of National Housing Policy:

The basic objectives of the housing policy are:

To assist all people, and in particular the houseless, the inadequately housed and the vulnerable sections and to secure for themselves affordable shelter through access to developed land, building materials, finance and technology;

To create an enabling environment for housing activity by various sections by eliminating constraints, and by developing an efficient and equitable system for the delivery of housing inputs;

To expand the provision of infrastructure facilities in rural and urban areas in order to improve the environment of human settlements, increase the access of poorer households to basic services, and to increase the supply of developed land for housing;

Objectives...

- To undertake, within the overall context of policies for poverty alleviation and employment, steps for improving the housing situation of the poorest sections and vulnerable groups by direct initiative and financial support of the State.
- To help mobilize the resources and facilitate the expansion of investment in housing in order to meet the needs of housing construction and upgradation
- To promote a more equal distribution of land and houses in urban and rural areas, and to curb speculation in land and housing in consonance with macro- economic policies for efficient and equitable growth.
- To promote vernacular architecture and to preserve the nations rich heritage

Goals:

- reduce houselessness;
- provide larger supply of developed land and finance to different income groups;
- promote use of appropriate and energy saving building materials and cost effective construction technologies;
- assist in the upgradation of all unserviceable house in rural and urban areas, with a view to particularly improving the housing conditions of the rural homeless and the inadequately housed, slum dwellers, Scheduled Castes & Scheduled Tribes, and other vulnerable sections;
- provide the minimum level of basic services and amenities to ensure a healthy environment within the framework of integrated development of rural and urban settlements;

Salient features:

Elements of National Housing Policy :

- Housing norms
- Rural Housing
- Slums & squatter settlements and Housing for Urban Poor
- Supply and management of land
- Infrastructure
- Conservation of Housing Stock and Rental housing
- Housing finance
- Building material and technology
- Special programmes for disadvantaged groups
- Role of Government, private sector and the community
- Legal and regulatory framework
- Human resource development
- Action Plan

Rural housing :

The development of house sites and the upgradation of rural housing will be linked to activities under the Integrated Rural Development Programme (IRDP).

Jawahar Rozgar Yojana (JRY), and other programmes for the creation of rural assets and employment.

Slums and Squatter Settlements in Urban areas and Housing for Urban areas;

- avoid forcible relocation or dishousing of slum dwellers;
- encourage in-situ upgradation, slum renovation, and progressive housing development with conferment of occupancy rights wherever feasible, and to undertake selective relocation with community involvement only for clearance of priority sites in public interest;

Housing finance:

- It is envisaged that 20% of the requirement of investment in housing would be met by specialized housing finance institutions, insurance and banking sector, provident fund, mutual funds etc. and additional mobilization of household savings.
- Innovative savings and lending instruments will be introduced to integrate the
- housing Finance system into the capital market by enabling access of Housing Finance Institution (HFI) to the funds on a competitive basis with other financial institutions and by permitting NHB and HUDCO to set up mutual funds for housing, apart from their access to external aid.

Schemes:

Indira Awas Yojana (IAY) was introduced in 1985-86 in the central sector for the poorest of the poor belonging to scheduled castes and scheduled tribes and freed bonded labourers in rural areas.

The development of house sites and the upgradation of rural housing will be linked to activities under the Integrated Rural Development Programme (IRDP).

Jawahar Rozgar Yojana (JRY), and other programmes for the creation of rural assets and employment

Slum housing policy:

Jawaharlal Nehru National Urban Renewal Mission (JNNURM):

- It aims to assist state governments in providing housing and basic services to urban poor/ slum dwellers in 65 select cities under the Sub Mission Basic Services to the Urban Poor (BSUP).
- It runs under the Integrated Housing and Slum Development Programme (IHSDP) in cities and towns other than ones mentioned above.
- It was launched on December 3, 2005 for a duration of 7 years beginning 2005-06.
- It now extends up to March, 2015 for completion of projects sanctioned up to March 2012.

Rajiv Awas Yojana (RAY):

- Launched - June 2011 (pilot phase)
- Implementation phase - launched on 3.9.2013 for 2013-2022.
- The centrally sponsored scheme covers all the cities/UAs.
- The beneficiary cities/UAs are to be selected by the relevant states in consultation with Centre.
- Central government to provide assistance of 50% of the project cost for Cities/ UAs with Population more than 5 lakhs.
- For those having population less than 5 lakhs it jumps to 75%.
- There is an upper ceiling of Rs. 5 lakh per Dwelling Unit (DU) for cities with population more than 5 lakhs plus all North-Eastern / special category States/towns. .

Rajiv Rinn Yojana (RRY):

- This Central Sector Scheme (CSS) is applicable to all the urban areas of the Country.
- It is meant to address the housing needs of the EWS/LIG segments through enhanced credit flow.
- The scheme provides interest subsidy of 5% (500 basis points) on loans granted to Economically Weaker Section (EWS) and Low Income Group (LIG) categories to construct or renovate their houses.
- The upper loan limit is Rs. 5 lakh for EWS and 8 lakh for LIG.
- Interest subsidy will only cover the first Rs. 5 lakh of the loan amount and not beyond.

Sustainable house:

- “A sustainable house is one that uses energy and material more effectively both in production and operation while polluting and damaging natural systems as little as possible.”



Sustainable home construction.

Tips

Don't ship building materials, rather, get them locally.
Order in bulk what you'll need, to avoid extra trips.
Look for unused building materials from nearby construction.

Did You Know?

Straw bale construction uses baled straw from wheat, oats, barley, rye, rice and others in walls covered by stucco. Straw bales are traditionally a waste product which farmers do not till under the soil. This technique for constructing walls has been recently revived as a low cost alternative for building highly insulating walls. The technique was practiced in the plains states in the latter 1800's and early 1900's. Many of the early structures are still standing and being used. This technique has been applied to homes, farm buildings, schools, commercial buildings, churches, community centers, government buildings, and more. The City of Austin recently passed a straw bale construction building code which is the fifth code enacted by a government body in the United States. The bales are typically covered with concrete mortar/stucco or earthen/lime plaster, achieving a high degree of fire resistance.

Countertops

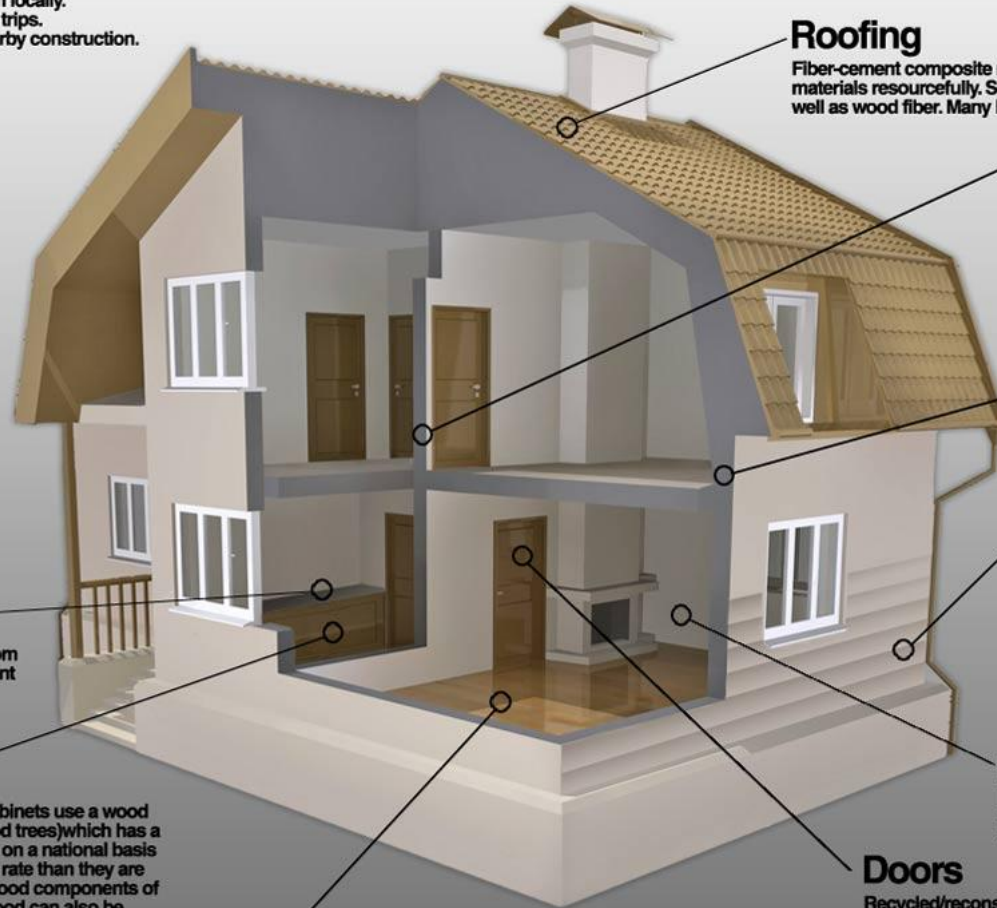
Recycled glass (rather than marble mined from the earth) can be used, and mixed with cement

Cabinets

Solid domestic hardwood cabinets use a wood resource (domestic hardwood trees) which has a positive growth/removal rate on a national basis (trees are growing at a faster rate than they are being removed). Any solid wood components of cabinets using MDF or plywood can also be specified to be a domestic hardwood.

Flooring

Reused wood flooring is often derived from remilled salvage timbers. It can also be salvaged from old flooring. From an environmental standpoint, this approach saves materials from the wastestream and does not impact living trees.



Roofing

Fiber-cement composite roof materials use fiber materials resourcefully. Some use waste paper as well as wood fiber. Many have 60 year warranties.

Framing

Engineered structural products are recycled/reconstituted wood materials that employ laminated wood chips or strands and fingerjointing (the gluing of larger pieces together). These materials drastically minimize the amount of waste created in processing the raw materials. Waste wood and entire trees, regardless of species, shape, and age, can be used in making these products.

Insulation

Engineered materials refer to the more efficient (less wasteful) Cellulose insulation is made from recycled newspaper and treated with fire retardants and insect protection.

Siding

Engineered materials refer to the more efficient (less wasteful) process of using wood or other cellulose fibers bonded together to make a material shape. Reconstituted materials are more dense and offer increased longevity. Some products have wood fibers mixed with cement to form extremely durable exterior (fiber-cement) materials. Recycled-content materials include substances that are salvaged from the waste stream such as sawdust and paper.

Paint

low voc paint uses less of the volatile organic compounds used to make it that are contribute to ozone and smog formation and are linked to respiratory illnesses and memory impairment.

Doors

Recycled/reconstituted doors are typically molded hardboard materials. Domestic hardwood veneers use a stable resource and assist our national economy. Some hardwood veneers such as iuanun are from tropical mahogany trees. Domestic hardwood panel doors use wood types which are a stable resource in our economy. The panel style reduces the need for potentially harmful adhesives. Recycled doors are reused doors salvaged from earlier projects.

The common objective:

- Efficiently using energy, water, and other resources
- Protecting occupant health and improving employee productivity
- Reducing waste, pollution and environmental degradation

The important features or principles of sustainable housing is as follows.

- The needs of the housing are to be satisfied or fulfilled for the present requirement without affecting the environment.
- Sustainable development should ensure the environmental protection while taking the housing programs.
- The sustainable development should ensure the maximum rate of resource consumption.
- The waste materials should not be harmful to the society.
- The sustainable development should minimize the reverse impacts on resources and the environment for future generation.

The important features or principles of sustainable housing is as follows.

- The should ensure the stopping of over exploitation of resources, reduce waste discharge and emissions and maintain ecological balance.
- The sustainable development will support economical growth of poor countries and help to narrow/minimize the wealth gap between the nations and within the nations.
- The sustainable development should follow an appropriate technology which should be adaptable, eco – friendly, resource efficient and culturally suitable. It involves mostly local resources and local labors.
- The 3R approach should be followed. i.e., Reduce, Reuse, Recycle.

INTERNATIONAL AGENCIES

- **UNESCO:**

- 1) Most poor people are disadvantaged and endangered by the places and physical conditions in which they live.
- 2) Unesco providing the right to adequate housing should not be understood narrowly as the right to have a roof over one's head.
- 3) This right has a number of components, including the following:
 - Legal security of tenure:
 - Habitability
 - Location
 - Economic accessibility
 - Physical accessibility
 - Cultural acceptability
- 4) In india, unesco developed some projects for homeless. They are:
 - Appropriate Grassroot Level Intervention for Cost-effective Housing- India
 - Cost Effective Environment Friendly (CEEF) Shelter Development Strategy - India



United Nations
Educational, Scientific and
Cultural Organization

INTERNATIONAL AGENCIES:

- **WORLD BANK:**

- 1) Access to shelter is a basic human right along with food and clothing.
- 2) In developing countries, investment in housing can account for from two to eight percent of the gross national product (GNP), and for 10 to 30 percent of gross capital formation.
- 3) Building regulations that limit urban density - such as floor space indexes – reduce the number of houses available, thereby pushing up property prices
- 4) Outdated rent control regulations reduce the number of houses available on rent – a critical option for the poor
- 5) Poor access to micro finance and mortgage finance limit the ability of low income groups to buy or improve their homes



The World Bank

INTERNATIONAL AGENCIES:

- **UNICEF:**

- 1) UNICEF supports improved sanitation in the rebuilt homes of Aceh and Nias
- 2) The homes of almost 200,000 families were damaged or destroyed by the earthquakes and tsunami that struck this coastal region in December 2004. Since then, more than 50,000 new houses have been built in Aceh and Nias.
- 3) According to the Indonesian Government's Reconstruction and Rehabilitation Agency (BRR), another 50,000 to 70,000 houses will be built in the next two years in tsunami-affected areas here. Another 80,000 or so will have been repaired before the end of 2009.
- 4) As early as 2005, the government instructed all housing construction agencies that they were responsible for onsite water and sanitation on their projects. Still, assessments show that many houses have non-existent or inadequate sanitation facilities.



National Level Institutes for housing:

- National Buildings Organisation (NBO)
- National housing bank(NHB)
- Housing and Urban Development Corporation (HUDCO) (Public Sector Undertaking)
- Housing Development Finance Corporation(HDFC)
- Life Insurance Corporation(LIC)
- Central Building Research Institute(CBRI)
- Building Materials and Technology Promotion Council (BMTPC)
- National Building Construction corporation(NBCC)
- Central Government Employees Welfare Housing Organisation (CGEWHO)
- Hindustan Prefab Limited (HPL) (Public Sector Undertaking)
- National Cooperative Housing Federation of India (NCHFI)
- Principal Account Office (PAO)



WHAT'S NEW / UPCOMING EVENTS

For queries on GST on Real State Sector Call Centre No. is 011-43149897 [new](#)



Shri M. Venkaiah Naidu

Minister of Housing and Urban
 Poverty Alleviation

► Know Your Minister

► Profile of Minister of State



Hon'ble Minister, M. Venkaiah Naidu, at the MoU signing between NHB and the Primary Lending Institutions (PLIs) with regard to the CLSS for MIG scheme during the workshop in Delhi



National Building Organization:

- established in 1954 as an attached office under the Ministry of Housing and Urban Poverty Alleviation for technology transfer, experimentation, development and dissemination of housing statistics.

Objective:

- To collect, collate, validate, analyse, disseminate and publish the housing and building construction statistics.
- To organize training programmes for the officers and staff of the State Government.
- To create and manage a documentation centre relating to housing, poverty, slums and infrastructure related statistics.
- To Coordinate with all state agencies.
- To conduct several sort term survey to study the impact of schemes.
- To undertake special socio economic studies.



National housing Bank:

- Owned subsidiary of reserve bank of India(RBI), was setup by an Act of parliament in 1987 and commenced its operations in 1988.

Objectives:

- To promote a sound, healthy, viable cost effective finance system to cater all segments
- To promote a network of dedicated housing finance institutions to adequately serve regions,
- To make housing credit more affordable
- To augment resources for the sector and channelize tem for housing.
- To encourage public agencies to emerge as a facilitator of service land.

HUDCO: Housing Urban Development Corporation:

- Started in the year 1971
- conferred the status of Miniratna (Category-I Public Sector Enterprise) by the GoI.
- total sanctioned loans since our inception was Rs. 1,570,870.0 million, Rs. 612,305.4 million of which, or 38.97%, were Housing Finance loans and Rs. 958,573.2 million of which, or 61.02%, were Urban Infrastructure Finance loans.

HUDCO Divides people into four categories:

1. Economically Weaker section-30%
2. Low Income Group-25%
3. Middle Income Group-25%
4. Ig Income Group-20%

AFFORDABILITY OF HOUSING LOAN:

Category	Income Limit/Annum	Cost Ceiling	Loan Ceiling	Interest Rate
EWS	1,00,000	3,25,000	2,50,000	8.75% - 9.00%
LIG	1,00,001- 2,00,000	7,00,000	5,00,000	9.25%
MIG	2,00,001- 4,00,000	No ceiling	No ceiling	11%
HIG	Above 4,00,000	No ceiling	No ceiling	11%

With respect to urban infrastructure finance, HUDCO make loans for projects relating to:

- water supply;
- roads and transport;
- power;
- emerging sectors, which includes SEZs (special economic zones), industrial infrastructure, gas pipelines, oil terminals and telecom sector projects;
- commercial infrastructure and others, which includes shopping centres, market complexes, malls-cum-multiplexes, hotels and office buildings;
- social infrastructure and area development; and
- sewerage, drainage and solid waste management (collectively, “**Urban Infrastructure Finance**”).

Hindustan Prefab Limited (HPL) (Public Sector Undertaking) 1948

- To become a Rs. 500 crores turnover company within 3 years;
- To be a financially sustainable company with a robust order book;
- To play an active role in Central Govt. agenda of “Providing Housing To All by 2022”.
- To take up a major role under ‘Swachh Bharat Abhiyaan’ for providing sanitation facilities in all schools in the country.
- To propagate and adopt prefab and PEB technology;
- To explore the possibility for setting up manufacturing facility of prefab components;

HPL Housing Technology Park



HPL is committed to facilitate conversations across architecture, industrial design, manufacturing, construction and research in the prefab sector to take advantage of 21st century transformations of our built environment to achieve – innovation, design quality, construction quality, sustainability and value. The Technology Park will prove a milestone towards this. Spread in the area of approx. 2 acres amidst green surroundings, the technology park will provide a platform to various Innovative prefabricated technologies.

"PREFAB TECHNOLOGIES EXHIBITED"

- *Pre-Engineered Building,*
- *Monolithic EPS,*
- *Polypropylene Honeycomb,*
- *Precast Technology,*
- *Production on Site Precast Concrete,*
- *PUF Wall & Roof Panel,*
- *Glass Fiber Reinforced Gypsum,*
- *Light Gauge Steel Frame, Structure,*
- *Monolithic Concrete Shear Wall,*
- *EPS with PEB*



Polypropylene Honeycomb Technology

Polypropylene Honeycomb Technology that was previously used in making containers for ships and aircrafts is now being used in other industrial and consumer applications to save on cost and time by using light weight ,eco friendly honeycomb panels.

Wood Housing

Wood House structures are made from Prefabricated Structural elements made from wood, then to be Arranged/Joined on Site.Special types of Wood is being used to suit Residential & commercial viability. It is time saving, energy efficient & seismic resistant.



Expanded Polystyrene Core Panel (EPS)

Expanded Polystyrene Core Panel System is a factory produced panel system for the construction of low rise buildings upto G+3 and as filler walls in high rise RCC and steel frame buildings. In this technique a core of undulated polystyrene is covered with interconnected zinc coated welded wire mesh on both sided reinforcement and shortcrete concrete.



EPS with Double Panel & RCC



EPS with PEB



EPS Single Panel (Load Bearing)

Swachh Bharat Abhiyaan Pavilion

The Park displays several prefab toilet options which have been used by HPL in projects under the 'Swachh Bharat Abhiyaan'.



HPL Prefab History Section

This section displays various components manufactured by HPL over the years since 1948.





Precast Concrete Technology

Precast concrete means a concrete member that is cast and cured at a location other than its final designated location. Precast concrete is used extensively in building structures, for e.g. structural frames, floors and roofs, claddings etc. Concrete elements, cast and cured in a manufacturing plant, then transported to

Glass Fiber Reinforced Gypsum (GFRG)

GFRG also known as Rapid wall is made of gypsum plaster, reinforced with glass fibres is suitable for mass-scale building construction. The product is eco-friendly and also resistant to water and fire.



Light Gauge Steel Frame Structure (LGSF)

In LGS technology the framing members are thin steel sections called cold formed sections, which are formed or given shape at room temperature. This is in contrast to thicker hot rolled sections, that are shaped while the steel is molten hot. The steel used here is coated with zinc (called galvanized) or a mixture of zinc and aluminum (called zincalume or galvalume by some) to protect it from corrosion.

Polyurethane Foam (PUF)

Polyurethane foam is sandwiched between the two outer skins /PPGI sheets and hence is known as PUF Sandwich. PUF Insulated Panels are used for the various applications such as Cold Storages, Pack Houses, Prefabricated Shelters, Accommodation Shelters, Health Centres, Community Shelters and many more. PUF Sandwich Panels are light in weight easy to handle, rigid and sturdy with higher mechanical strengths having high fire resistance.



Pre-Engineered Buildings (steel structure with LGS & Sandwich Panels)

In PEB, All structures are manufactured in factory under strict quality control environment. All connections are bolted. It is 30 to 40% faster than masonry construction. Sandwich wall panels are 75mm/50mm made of light weight fiber reinforced areated concrete core composed of portland cement, flyash, etc. and 4mm thick Fiber Cement Board on either side of the core.

Monolithic Concrete Technology (Shear Wall technology)

In monolithic RCC construction, Hardware used in the formwork consists of various aluminium and pvc sections, a shear wall is a structural system composed of braced panels (also known as shear panels) to counter the effects of lateral load acting on a structure. Wind and seismic loads are the most common loads that shear walls are designed to carry





Pre Engineered Building

Mr.Sathyaniarayanan,Civil Dept , Vcet-Madurai

National Building Construction corporation:



NBCC (INDIA) LIMITED
(Formerly National Buildings Construction Corporation Limited)
(A Government of India Enterprise)



Areas of operations are categorized into three main segments,

- (i) Project Management Consultancy (PMC),
- (ii) Real Estate Development &
- (iii) EPC Contracting

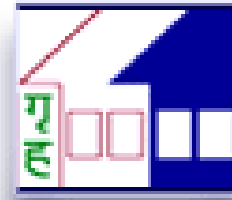
The strategic objectives in brief of NBCC are listed as follows:

- To be the first ranked construction Business Company in India.
- To adopt best practices and state-of-the art technology in construction business to achieve a premier position and gain sustainable competitive advantage.

CENTRAL GOVERNMENT EMPLOYEES WELFARE HOUSING ORGANISATION

About the Organisation:

Central Government Employees Welfare Housing Organisation (CGEWHO) has been established to promote, control and co-ordinate the development of houses at selected places, across India, on no profit-no loss basis as a welfare measure.



CGEWHO

(An Autonomous Body of Government of India)

* Constructing 2 Houses Per Day Since 1995



BUILDING MATERIALS AND TECHNOLOGY PROMOTION COUNCIL

In order to bridge the gap between research and development and large scale application of new building material technologies, the erstwhile Ministry of Urban Development, Government of India, had established the BUILDING MATERIALS AND TECHNOLOGY PROMOTION COUNCIL in July 1990.



Objectives of BMTPC:

- Building Materials & Construction Technologies
- Capacity Building and Skill Development
- Disaster Mitigation & Management
- Project Management & Consultancy



BMTPC Innovations:



Rural Kit for housing: Building components for single storey house of 220 sq. ft can be constructed within 6 days (excluding curing time)





भारतीय राष्ट्रीय सहकारी आवास संघ

National Cooperative Housing Federation of India

The National Cooperative Housing Federation of India (NCHF)

The National Cooperative Housing Federation of India (NCHF) is the nation wide organization of the Indian Cooperative Housing Movement. It was founded in September, 1969 by the apex cooperative housing federations.

The basic thrust of its formation was to have an organization at the national level to assume the responsibility of promoting, developing and coordinating the activities of housing cooperatives in the country.

State Level Institutes for housing:

- Tamil Nadu Housing Board
- Tamil Nadu Slum Clearance Board
- Tamil Nadu Police Housing Corporation Limited
- Cooperating housing societies
- Rural Housing by District Rural Development Agencies

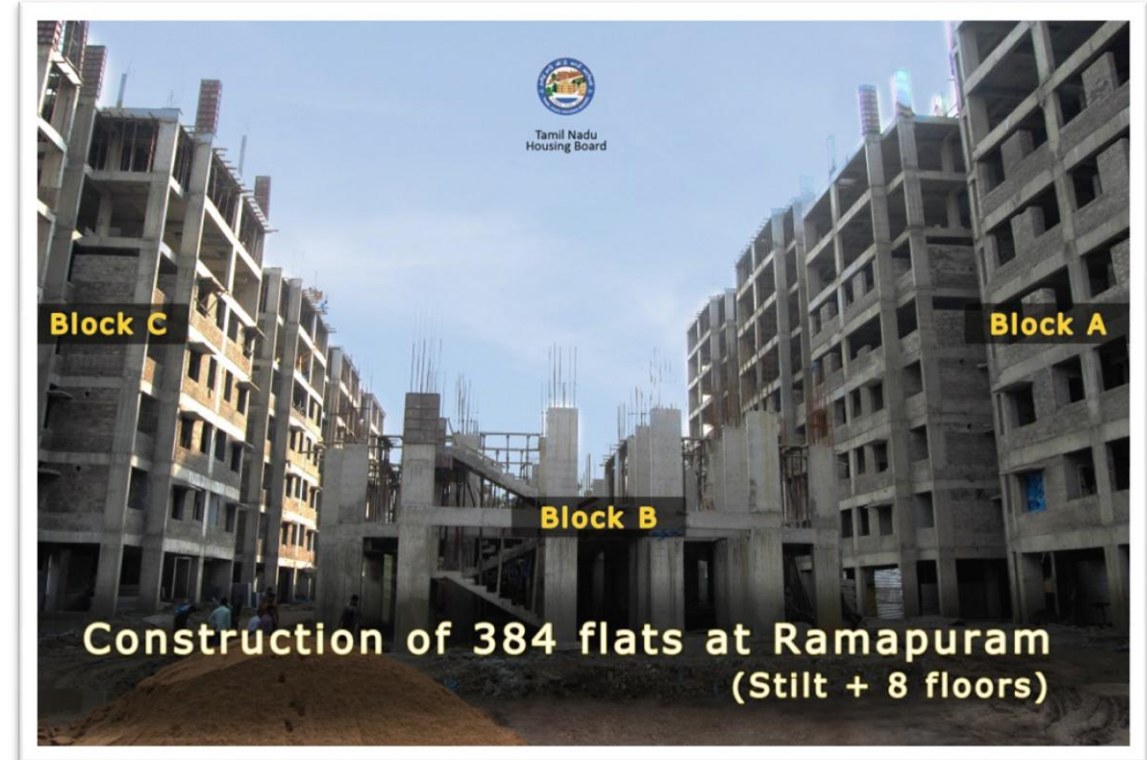
- 1. Indira Awaas Yojana – Rural Free Housing Scheme to Rural poor people
 2. Credit-cum-Subsidy scheme
 3. Habitat Development
 4. Rural shelters - Prime Minister Gramodaya Yojana
 5. Fishermen Housing Scheme
- Tamilnadu Adidravidar housing Development Corporation Scheme.

Tamil Nadu Housing Board



Tamil Nadu Housing Board
தமிழ்நாடு வீட்டு வசதி வாரியம்

- TNHB has been catering to the needs of various categories of people at an affordable cost, payable over a period of several years, in addition, it provides School sites, Public Purpose Sites, Commercial/Shops Sites etc.
- allotting apartments exclusively to the employees of Government of Tamil Nadu under Tamil Nadu Government Servants Rental Housing Scheme (TNGRHS)



Income eligibility for various category:-

E.W.S.	Upto Rs.12,000/- per month.
L.I.G	Rs. 12,001/- to Rs. 18,000/- per month
M.I.G.	Rs. 18,001/- to Rs. 37,000/- per month
H.I.G.	Rs. 37,001/- to Rs. 62,000/- per month
Super HIG	Rs. 62,001/- and above per month

Category wise reservation:

1) Scheduled Caste including Adi Dravidas	18 %
2) Scheduled Tribes	1%
3) State Government Servants	18%
4) Central Govt. Servants including Employees of TNEB.	8 %
5) Defense Personnel including Ex-serviceman	7%
6) Dhobies & Barbers	4%
7) Working Journalists	3%
8) Language Crusaders	1%
9) Employees of TNHB	2%
10) General public	38%

Co-operative Societies (Housing) / Tamil Nadu Co-operative Housing Federation Ltd:-



The main objectives of Co-operative housing societies are

- (i) to advance loans to members for construction of new houses,
- (ii) to buy or acquire lands, develop house sites for distribution among the members and
- (iii) to construct or cause to construct building or other works of common utility and maintain them properly for the well being of the members.

SCHEMES IMPLEMENTED THROUGH COOPERATIVE HOUSING SOCIETIES

- Rural Housing Scheme for Economically Weaker Sections.
- Special Housing Scheme for Economically Weaker Sections in Urban areas.
- LIG/MIG Schemes in Rural areas
- Urban Housing Schemes
- Valmiki Ambedkar Awas Yojana (VAMBAY) Scheme
- Repairs and Renewal of existing houses.
- Implementation of Housing Layout Schemes

SCHEME	INCOME	MAXIMUM LOAN	MAXIMUM SQFT
EWS	Up to Rs. 8300/-	Up to Rs.2,50,000 /-	35 sqm or 377 sqft
LIG	Rs 8301 to Rs.21000	Up to Rs.5,00,000 /-	55 sqm or 592 sqft
MIG	Rs 21001 to Rs.42000	Up to Rs.7,50,000 /-	95 sqm or 1022 sqft
HIG	Rs 42001 and above	Up to Rs.10,00,000 /-	190 sqm or 2000 sqft
NEW HOUSE / PURCHASE OF FLAT	Rs 42001 and above	Up to Rs.25,00,000 /-	---
Cash credit for construction materials and Jewel loan for Rs.2 Crores (Maximum)			



Tamil Nadu Police Housing Corporation

தமிழ்நாடு காவலர் வீட்டுவசதிக் கழகம்



ABOUT TNPHC:

- Government of Tamilnadu with a view to raising the level of satisfaction in housing for police personnel decided to construct houses for the Policemen and Police Officers
- Accordingly this Company was registered under the Companies Act 1956, as a wholly owned Company of Tamil Nadu Government and came into being with effect from 13-4-1981.



TAMILNADU SLUM CLEARANCE BOARD

GOD WE SHALL SEE IN THE SMILE OF THE POOR

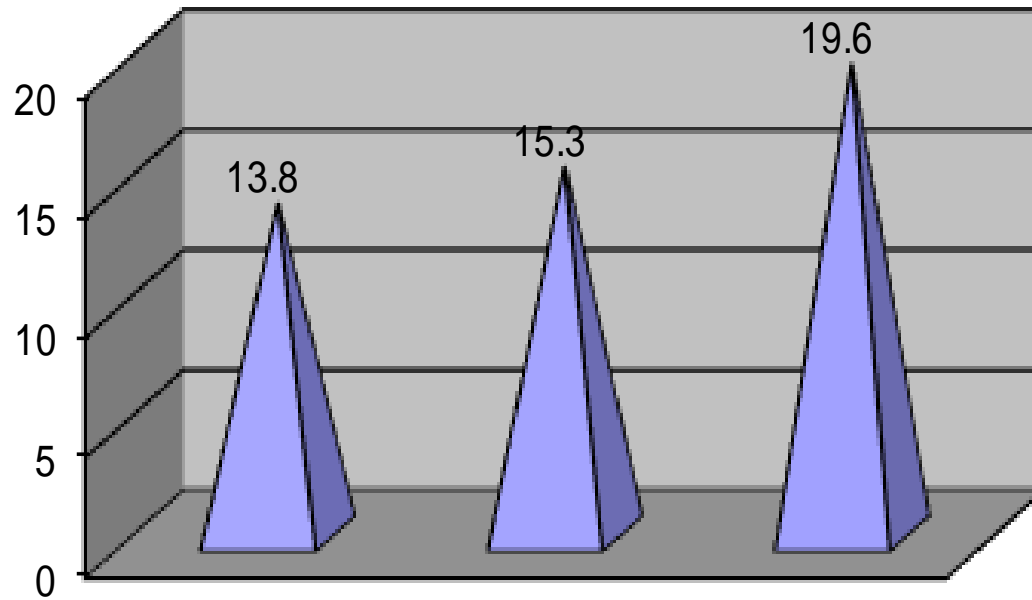
தமிழ்நாடு குடிசைப்பகுதி மாற்று வாரியம்

ஏழைகளின் சிரிப்பில் இறைவனை காண்போம்

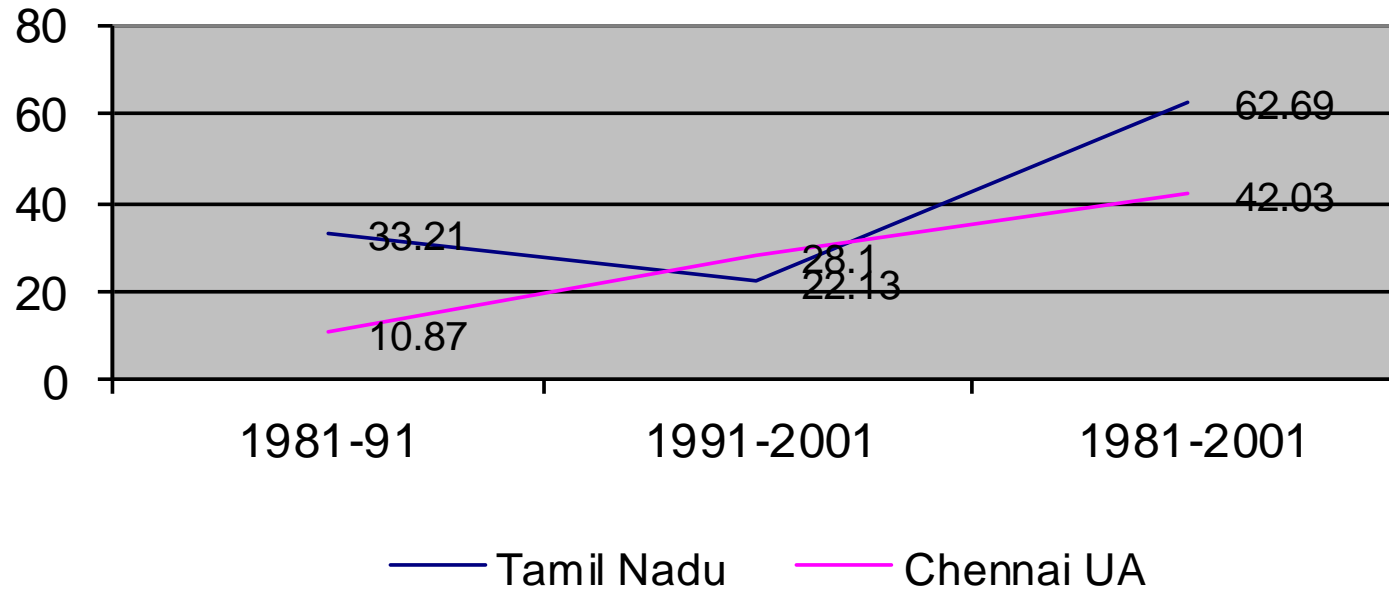


About..

- Tamil Nadu Slum Clearance Board was established in September 1970 and has been implementing various Housing, Slum Development and Rehabilitation and Resettlement programmes
- The Board initially started its activities in Chennai and its activities were gradually extended to other urban areas of Tamil Nadu since 1984 onwards in phased manner.



Growth Rates of Slum Population in Tamil Nadu and Chennai UA : 1981-2001.



No.	Details	Per cent		
		India	Tamil Nadu	Chennai
1.	Households Living in Slums	26.34	9.23	15.28
2.	Slum Dwellers Living in Kutcha Houses	88.07	5.43	10.18

Tenements Constructed by T.N. Slum Clearance Board.

Source: Tamil Nadu Slum Clearance Board, Programmes for 2004-05

No.	Area	Number
1.	Chennai	61396
2.	Others	7730
3.	Tamil Nadu	69126

Strategies:

- The slum families are protected from calamities like fire, floods, etc.
- Each tenement built will have a multipurpose room, bed room, kitchen, an independent toilet, with water supply and sewerage arrangements.
- Paved access, street light, surface drain are provided.
- These tenements are allotted to the slum families on a heavily subsidized hire purchase system, at the rate of Rs.250/- per month for a period of 20 years.
- The slums located in unobjectionable areas, wherein equitable distribution of space to all is not feasible, are cleared and tenemental schemes put up.

The construction of houses under Housing for All will be implemented through the following four verticals:

Vertical 1 In- situ slum redevelopment :

In-situ slum rehabilitation using land as a resource with private participation for providing houses to eligible slum dwellers. This in-situ redevelopment aims at providing houses to all eligible slum dwellers. Slum rehabilitation grant of Rs.1.00 lakh per house, on an average would be admissible for all houses built for eligible slum dwellers in all such projects.

Vertical 2 Credit linked subsidy scheme :

The Mission, in order to expand institutional credit flow to the housing needs of urban poor will implement credit linked subsidy component as a demand side intervention on home loans taken by eligible urban poor (EWS / LIG) for acquisition, construction of house. The beneficiaries would be eligible for an interest subsidy at the rate of 6.5% for a tenure of 15 years for the loan amount upto Rs.6.00 lakhs.

Vertical 3 Affordable housing in partnership :

To increase the availability of houses for EWS categories, the States either through its agencies or in private partnership can plan affordable housing projects. Central assistance at the rate of Rs.1.50 lakh per EWS house would be available for all EWS houses.

Vertical 4 Beneficiary led individual house construction :

The fourth component of the mission is assistance to individual eligible families belonging to EWS categories to either construct new houses or enhance existing houses on their own. Such families may avail of central assistance of Rs.1.50 lakh for construction of new houses under the mission. The States may also contribute financially for such individual house construction. The persons living in kutchha houses in or outside slums with proof of land may also avail of this facility.

Policies:

- Insitu plotted development and infrastructure improvement
- Insitu tenemental schemes
- Rehabilitation and resettlement scheme

Kannagi nagar: Slum Clearance board



Both Kannagi Nagar in Okkiyum Thoraipakkam and Semmenchery were constructed by the Tamil Nadu Slum Clearance Board (TNSCB) that was set up for the clearance and improvement of slum areas of Chennai city and subsequently extended to all the Corporations and Municipal Towns in Tamil Nadu in a phased manner from 1984.

S.No	Scheme	Rupees in Crores
1	Government Grant	20.00
2	Mega City Programme Loan	25.82
3	Government of India – VAMBAY Grant	15.49
4	NSDP Grant	5.82
	Total	67.13

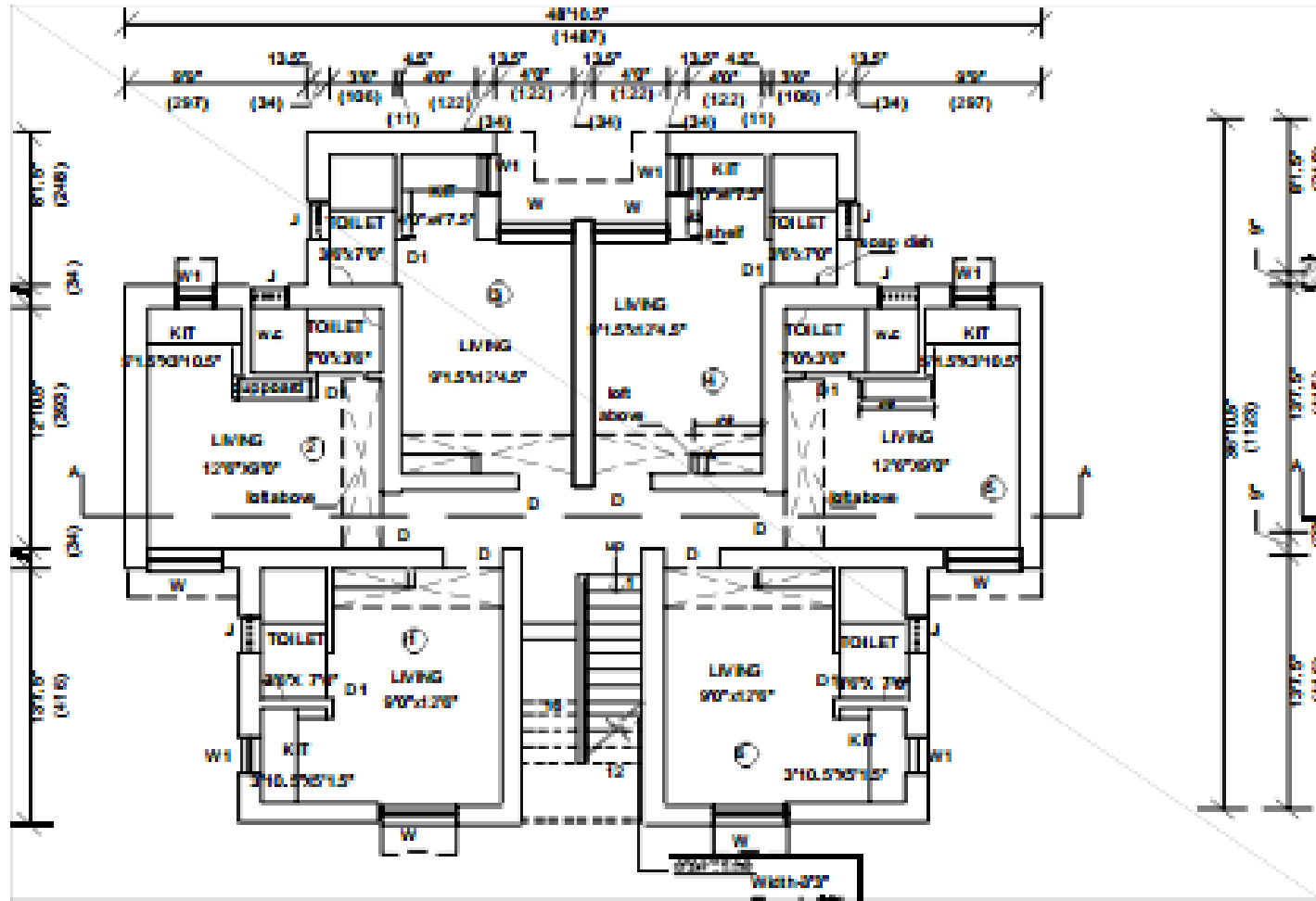


Kannagi Nagar near the Buckingham Canal

Semmenchery Tenements



For a family of four members each member will be entitled to 39 Sq. Ft. of Living Space as per the Typical Design proposed by the Tamil Nadu Slum Clearance Board. The field verification states that 140 Sq. Ft. is the inner carpet area and in this case in a family of four members each member will be entitled to 35 Sq. Ft. of living space. Moreover the rooms are designed in such a way there is no provision for a separate room with a door a family with grown up children have no provision for privacy.



Description	Kannagi Nagar		Semmenchery
	Scheme 1 Oldest	Scheme 2 Latest	Scheme 1
Amount paid as advance	Rs. 600/-+ Rs. 150	Rs. 1000/-+ Rs. 200/-	Rs. 1000/-+ Rs. 500/-
How much you paid before entering the house.	The amount has to be paid 7 days before the house allotment is issued	The amount has to be paid 7 days before the house allotment is issued	The amount has to be paid 7 days before the house allotment is issued
How much you paid after settled there as rent	150 per month	Rs. 250 per month	250 per month

Case Study: A disaster :Resettlement of Kannagi Nagar

TAHDCO



TAHDCO

Tamil Nadu Adi Dravidar Housing & Development Corporation



Tamil Nadu Adi Dravidar Housing and Development Corporation Limited (TAHDCO) was incorporated in 1974 under the Companies Act, 1956 with a objective to improve socio economic status in Tamilnadu.

Main Activities of the Corporation

- To implement economic development schemes for the Welfare of Scheduled Caste / ST in the State.
- To provide skill development training to youth belonging to Scheduled Caste and Scheduled Tribes for job / self employment.
- To undertake construction activities entrusted by the Government

National Scheduled Caste Finance and Development Corporation (NSFDC)



National Scheduled Castes
Finance and Development Corporation
(MINISTRY OF SOCIAL JUSTICE AND EMPOWERMENT)
An ISO-9001:2008 Certified Company

- National Scheduled Castes Finance Development Corporation (NSFDC) is a Government of India undertaking working under the Ministry of Social Justice and Empowerment.
- TAHDCO is the Channelizing agency of NSFDC in Tamil Nadu.
- NSFDC provides term loan for projects costing upto Rs.30.00 lakhs for any income generating activity. The applications should be routed through the State Channelling agency only (TAHDCO).
- Government of Tamilnadu has given Guarantee of Rs.25 Crores for the term loan received from NSFDC.

National Scheduled Caste Finance and Development Corporation (NSFDC)

- Project assistance up to Rs.5 Lacs per beneficiary is given.
- 30% of the Project cost subject to a maximum of Rs.25,000/- is given as subsidy.
- Balance up to 90% is given as term loan from NSFDC.
- Assistance is given for any viable income generating activity to Scheduled Caste and beneficiaries.
- Margin Money assistance - 20% of the Project Cost (or) Max. Rs.1.25 Lacs

Promoter's Contribution:

- For Project costing up to Rs.1.00 Lacs- Nil
- For Project costing above Rs.1.00 Lacs and up to Rs.2.50 Lacs- 2% of Project cost.
- For Project costing above Rs.2.50 Lacs and Rs.5.00 Lacs - 3% of Project cost.
- For Project costing above Rs. 5.00 Lacs - 5% of Project cost

Interest:

- Up to Rs.5.00 Lacs - 6.5% per annum.
- Above Rs.5.00 Lacs - 8.5% per annum.

Type of activities

- Hostels - ADW
- Hostels - Tribal
- Schools
- School
- Community Hall
- Science Lab
- Teachers Quarters
- Infrastructure facilities to ADW Habitations – NABARD scheme RIDF XIV
- Infrastructure facilities to ADW & Tribal Schools – NABARD scheme RIDF XII
- Repairs, special repairs, maintenance and additional constructions to the hostels.
- Toilet blocks to schools.



National Scheduled Tribes Finance and Development Corporation

A Govt. of India Undertaking - Under Ministry of Tribal Affairs



Objectives

- i. Identification of economic activities of importance to the Scheduled Tribes so as to generate employment and raise their level of income.
- ii. Upgradation of skills and processes used by the Scheduled Tribes
- iii. To make the existing State/U.T Scheduled Tribes Finance and Development Corporations who are nominated as the State Channelizing Agencies (SCAs) for availing assistance from NSTFDC
- iv. To assist SCAs in project formulation implementation of NSTFDC assisted Schemes and in imparting necessary training to their staff.
- v. To provide financial support for meeting the working capital requirement of the Central / State government.
- Vi. To innovate experiment and promote rather than replicate the work of the existing agencies.



ISO 9001: 2008

National Safai Karamcharis Finance & Development Corporation

नेशनल सफाई कर्मचारी फाइनेंस एंड डेवलपमेंट कॉर्पोरेशन

(A Government of India undertaking under the Ministry of Social Justice & Empowerment)

- To promote self-employment ventures for the benefit and/or rehabilitation of Safai Karamcharis /Scavengers.
- To extend loans to students from the community of Safai Karamcharis/Scavengers
- To promote training, quality control, technology up-gradation for sanitation work.
- To impart the Skill Development Training and entrepreneurial skills
- To work as an apex corporation for co-ordination with State Governments
- To help in strengthening the policies and programmes of the Government for socio-economic development of Safai Karamcharis/Scavengers

National Safai Karamcharis Finance and Development Corporation (NSKFDC)



- Project assistance up to Rs. 5.00 Lacs per beneficiary is given.
- 30% of the project cost subject to a maximum of Rs. 25,000/- is given as subsidy.
- Balance is given as term loan from NSKFDC/Banks.
- Assistance is given for any viable income generating activity to sanitary workers and their dependents.

NSLRS:

National Scheme for Liberation and Rehabilitation of Scavengers

The NSLRS Scheme aims at rehabilitation of liberated manual scavengers in alternative and dignified occupations after giving them necessary training and financial assistance in the form of subsidy, margin money loan and bank loans.

- Rs.50,000 project assistance.
- 30% as subsidy
- Remaining is arranged as loan from NSKFDC

Density — The residential density expressed in terms of the number of dwelling units per hectare.

- 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.

Table 3 Comparative Floor Area Ratios for Occupancies Facing One Public Street of at Least 9m Width
(Clauses 2.26, 9.2 and 9.2.1)

Occupancy Classification (1)	Type of Construction			
	Type 1 (2)	Type 2 (3)	Type 3 (4)	Type 4 (5)
Residential	UL	2.0	1.4	1.0
Educational	UL	2.0	1.4	1.0
Institutional	UL	1.5	1.0	0.8
Assembly	UL	1.0	0.7	0.5
Business	UL	2.9	2.3	1.6
Mercantile	8.0	1.8	1.4	1.0
Industrial	7.5	1.9	1.6	1.3
Storage (see Note 4)	6.0	1.5	1.3	1.0
Hazardous (see Note 4)	2.8	1.1	0.9	NP
UL – Unlimited				
NP – Not Permitted				

Table 4 Floor Area Ratio and Coverage for Group Housing
(Clause 9.6.2)

Sl No. (1)	Net Residential Density in Dwelling Units/Hectare (2)	Maximum Coverage in Percent (3)	Floor Area Ratio (4)
i) 25		25	0.50
ii) 50		30	0.75
iii) 75		33	0.90
iv) 100		35	1.00
v) 125		35	1.25
vi) 150		35	1.50
vii) 175		35	1.75

NOTE — The coverage shall be calculated on the basis of the whole area reserved for group housing.

<i>Type of Development</i>		<i>Range of Densities (Gross)</i>
a)	Plotted development	65-120 plots per hectare
b)	Mixed development	
	i) Small towns	75-100 dwelling units per hectare
	ii) Cities	100-125 dwelling units per hectare
	iii) Metropolitan Cities	125-150 dwelling units per hectare

C-2.4.2 In case of development with per dwelling unit covered area of 15m^2 maximum densities of 500 dwelling units per hectare shall be permissible.



Emeryville, CA – 55 units per net acre

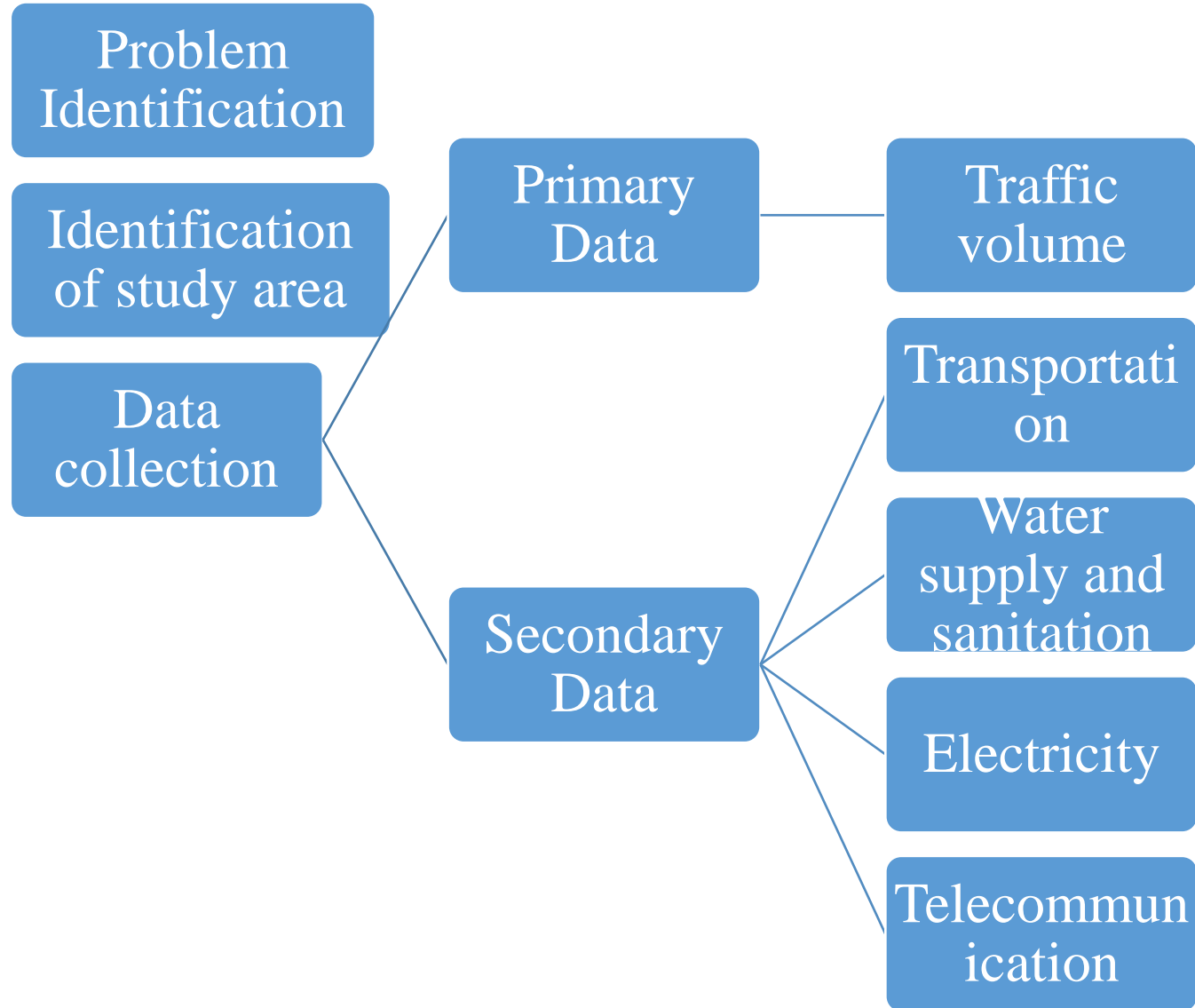


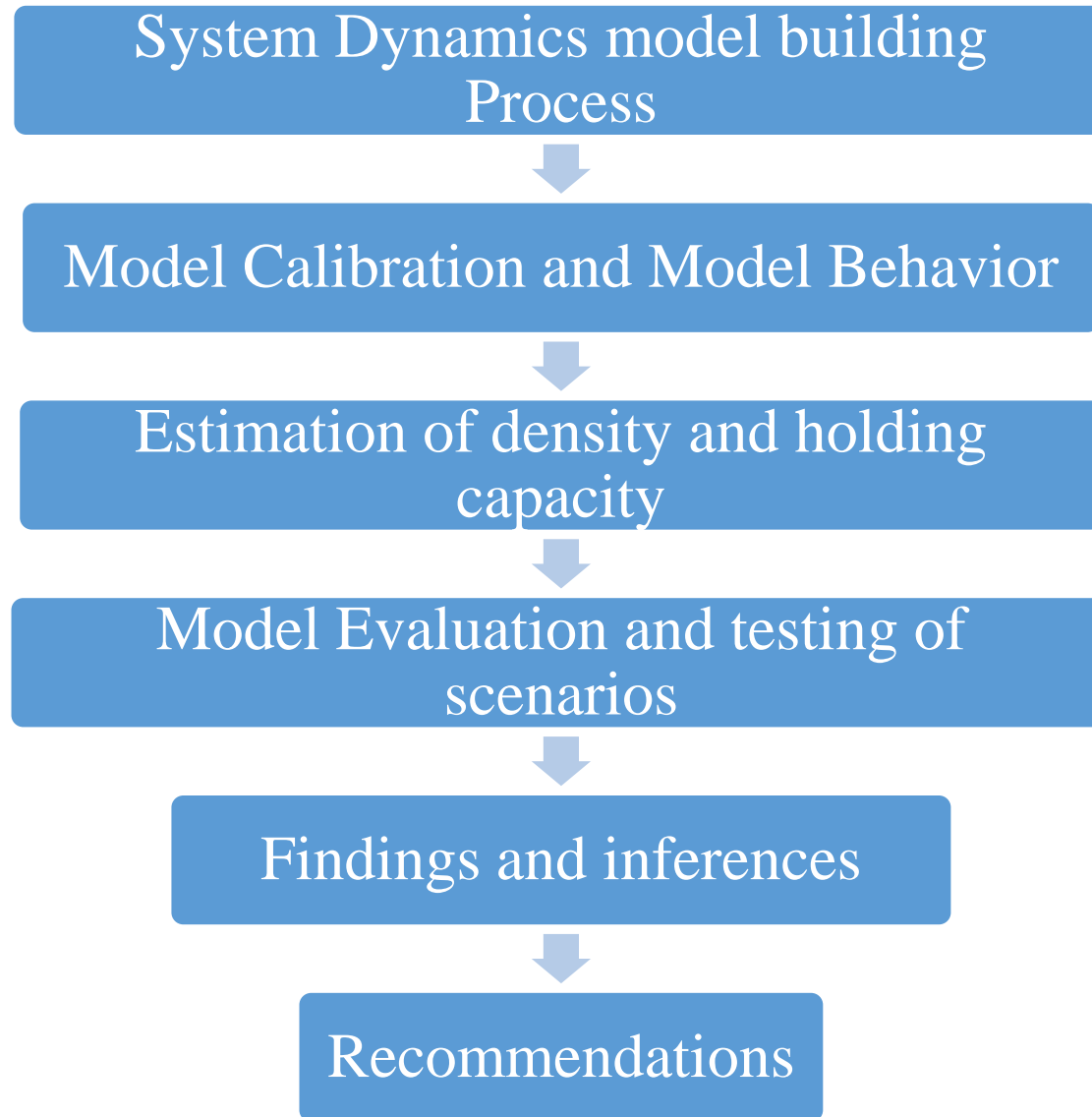
Pasadena, CA – 4.3 units per net acre

Estimation of Holding Capacity Based on Basic Infrastructures

- to optimum density norms by considering basic infrastructures such as transportation, water supply, sanitation, electricity and telecommunication.

Estimation of Holding Capacity





Case study:

International Journal of Emerging Technology and Advanced Engineering

Website: www.ijetae.com (ISSN 2250-2459, ISO 9001:2008 Certified Journal, Volume 5, Issue 6, June 2015)

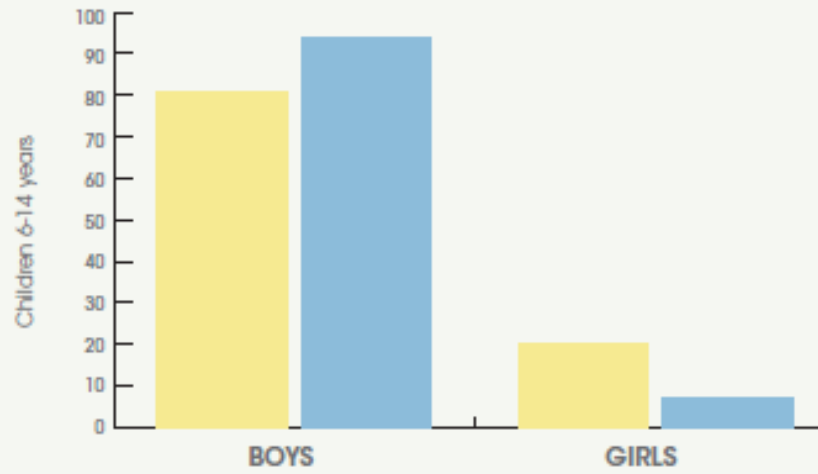
[Estimation of Holding Capacity Based on Basic Infrastructures - A Systems Approach](#)

Profile of the Population

TOTAL POPULATION OF 300 HOUSEHOLDS

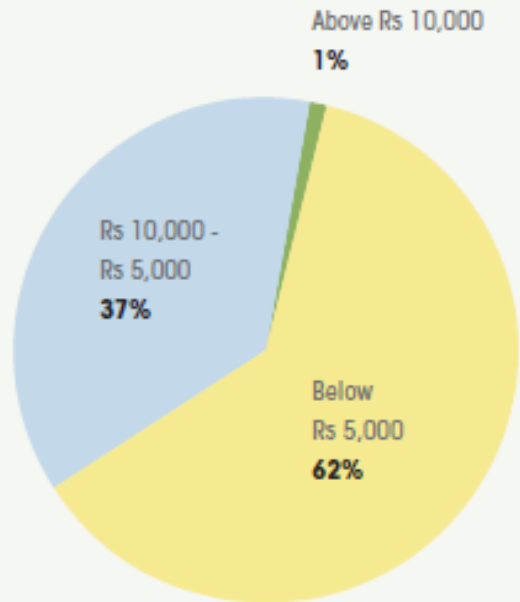
	Particulars	Total Population	Percentage
1.	Men	397	32%
2.	Women	433	35%
3.	Children (Boys)	211	17%
4.	Children (Girls)	202	16%
	Total	1,243	100%

The study reveals that 77.6% of the respondents are dalits and 22.4% belong to Other Backward Classes (OBC). Forty-six per cent of the respondents are illiterate, 49.6% have completed high school, and 4.4% have a college education.

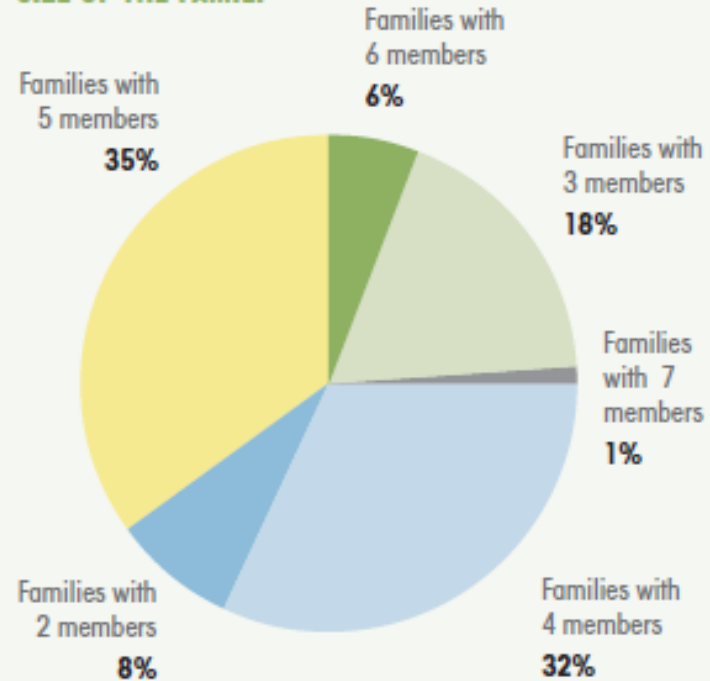


Children in School	81	94
School Dropouts	20	7

MONTHLY FAMILY INCOME



SIZE OF THE FAMILY



I. Adherence to the United Nations Basic Principles and Guidelines on Development-based Evictions and Displacement (2007)

a) Fulfillment of the Obligations of the State and Duty Bearers

UN Basic Principles and Guidelines	Gaps in Implementation in Tamil Nadu
<p>Any eviction must be authorized by law, carried out in accordance to human rights laws and in accordance to the present guidelines (Paragraph 21)</p>	<p>According to this study, only 40.6% of the respondents received legal notices of the eviction. (Legal notices were not issued separately to the individuals but to the entire community.) The others reported receiving only verbal information from officials of the Tamil Nadu Slum Clearance Board who had come to the area for the purpose of enumerating families.</p>

UN Basic Principles and Guidelines

States must adopt legislative and policy measures prohibiting the execution of evictions that are not in conformity with their international human rights obligations (Paragraph 22)

Gaps in Implementation in Tamil Nadu

There is no resettlement and rehabilitation policy in Tamil Nadu; the resettlement is either project-based or department-oriented.

At the national level, the policy that relates to housing is the National Urban Housing and Habitat Policy (NUHHP) 2007, which states that, "The State Government would (in consultation with the Urban Local Bodies) prepare the State Urban Housing and Habitat Policy (SUHHP) and take all necessary steps for implementation of the same." The NUHHP also mentions that, "Plan funds and other assistance for housing and infrastructure would be dovetailed according to the Action Plan prepared and adopted by the States under their SUHHP. This would bring about synergies in the operation of various schemes and funding sources." In the State of Tamil Nadu, there is still no SUHHP in place.

UN Basic Principles and Guidelines

Mandatory presence of government officials or their representatives on site during evictions. The officials must identify themselves to the persons being evicted and present formal authorization for the eviction.

(Paragraph 45)

Neutral observers, including regional and international observers, should be allowed access upon request...

(Paragraph 46)

Gaps in Implementation in Tamil Nadu

Of the respondents who participated in the survey, 24.66% mentioned that police officials were involved in the eviction process, while 73.6% of them said that politicians along with officials of the land owning department were present at the site during the eviction process.

No neutral observers were present at any of the sites during the eviction process.

e) Remedies for Forced Evictions

Policy Guidelines from the UN Basic Principles

When eviction is unavoidable for the promotion of general welfare, the State must provide fair and just compensation for any losses of personal, real or other property of goods. Compensation should be provided for any economically assessable damage. Compensation should be provided for loss of life or limb; physical or mental harm; lost opportunities including employment, education and social benefits; loss of earning and earning opportunities; moral damage; and costs required for legal or expert assistance, medicine and medical services, and psychological and social services.

(Paragraph 60)

Gaps in Implementation in Tamil Nadu

The Tamil Nadu government has not provided any compensation to any of the evicted families for the loss of property and personal belongings or for lost educational and work opportunities and income. There is no practice of assessing economic damage incurred by the people in any of the eviction processes.

Core Elements of the Human Right to Adequate Housing

Gaps in Implementation in Kannagi Nagar

Legal Security of Tenure

The houses provided to the resettled communities are under the 'Hire Purchase Scheme' of the Tamil Nadu Slum Clearance Board. The residents are entitled only to an allotment order and they have to pay an installment of Rs 150 to Rs 250 per month for a period of 20 years. These allotment orders do not grant them security of tenure, as they are subject to cancellation based on various conditions. Moreover, the allotment for the houses could be cancelled if people consecutively failed to pay three monthly installments. At the end of 20 years, families will be provided with a sale deed, which also does not provide complete security of tenure. The resettled families, thus, continue to live with insecurity.

Availability of Services

For a population of 15,656 houses, Kannagi Nagar has only 19 Integrated Child Development Services (ICDS) centres, whereas according to the Government of India (Ministry of Women and Child Development) norms, there should be one ICDS / *anganwadi* centre for a population of 800 in urban areas. This implies that Kannagi Nagar should have 80 to 90 ICDS centres. The 19 existing centres are able to cater to only 410 children in the age group of 0-6 years. This survey of 300 households indicates that there are about 98 children in the age group of 0-6 years; this works out to around 4,900 children between 0-6 years in the entire settlement.

Affordability

Each family has to pay Rs 150 to Rs 250 as a monthly installment for a flat in Kannagi Nagar for a period of 20 years, depending on the year of allotment by TNSCB. This amounts to Rs 36,000 to 60,000 per flat. According to this study, 79.3% of the respondents lost their employment immediately after the relocation to Kannagi Nagar because of the increased distance of the site from their original place of habitation and work. The study also reveals that 92.3% of the workforce in Kannagi Nagar consists of those in the unorganised sector. The family income of 62% of the respondents is below Rs 5,000 per month. Hence payment of monthly installments for their homes is burdensome for the families. Since the allotment for the houses can be cancelled if people fail to pay three consecutive monthly installments, people have been forced to take loans at higher rates of interest in order to pay their monthly installments and cost of basic services at the site. About 90% of the residents surveyed reported being more in debt after the relocation process, as they had to take loans for the reasons mentioned above.

Core Elements of the Human Right to Adequate Housing

Gaps in Implementation in Kannagi Nagar

Physical Security

The site is reportedly not safe for women and girls.

Many girl children have been forced to drop out of school, as their mothers prefer to take them along to their work places because they are afraid to leave their daughters alone at home after school hours. The women work until 7 pm every day, but children finish school by 4 pm. Since the girls would have to be alone at home for about three hours in the evenings, their mothers prefer not to send them to school, as they are worried about their safety.

There is no women's police station at Kannagi Nagar.

The open and inadequately insulated electrical (junction) boxes placed on every street are a cause of concern, as they pose a risk to the health / lives of residents, especially during the rainy season.

Participation and Information

The study reveals that 92.6% of the respondents were neither consulted about the resettlement nor were their opinions or views considered. The special needs of women have not been taken into consideration either.

STAGNATION OF SEWAGE WATER AND UNCOLLECTED GARBAGE BETWEEN TENEMENTS



UNSAFE HABITATION



TOILETS IN SCHOOL FOR BOYS AND GIRLS

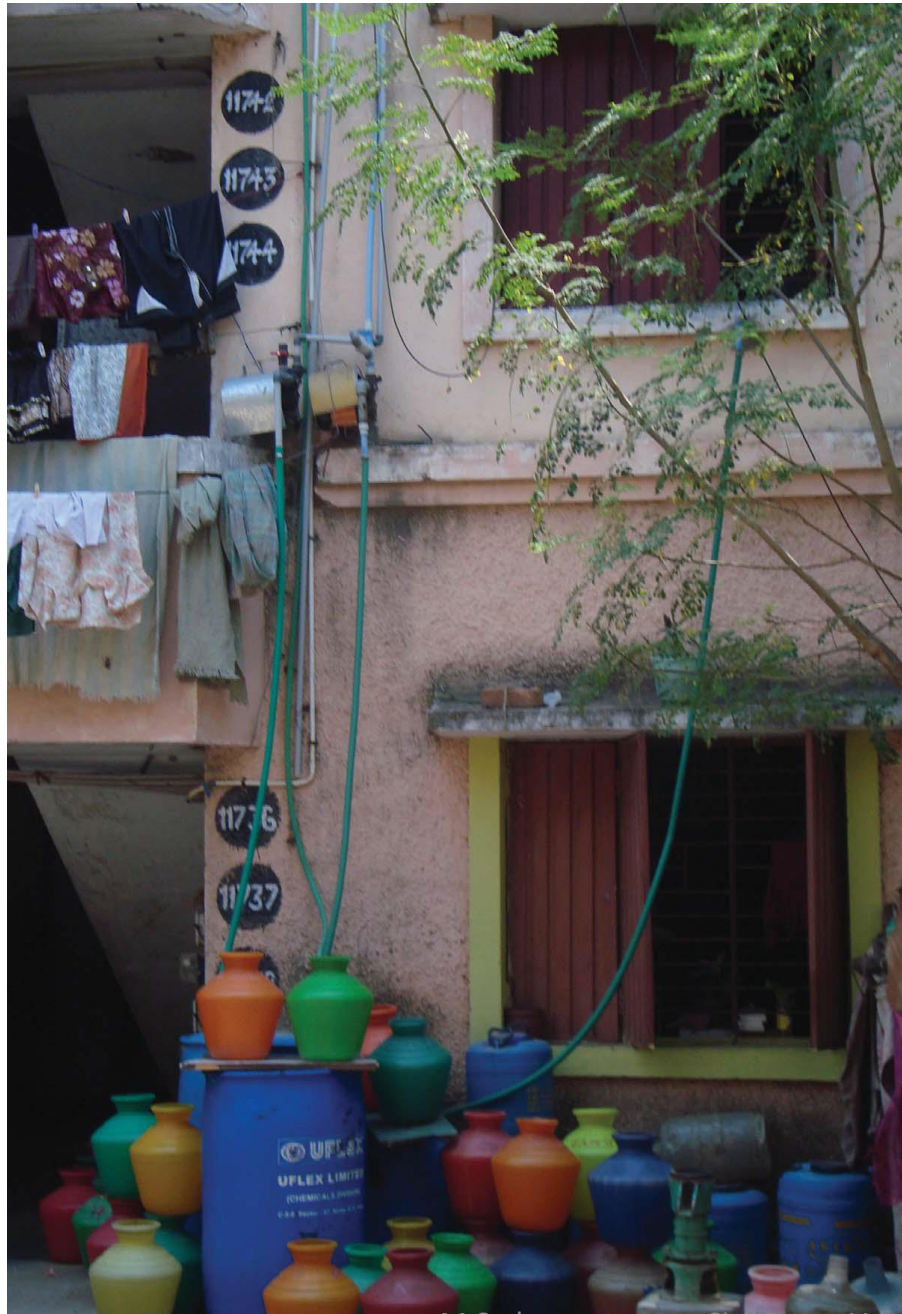


THE WASH AREA WITH NO TAPS

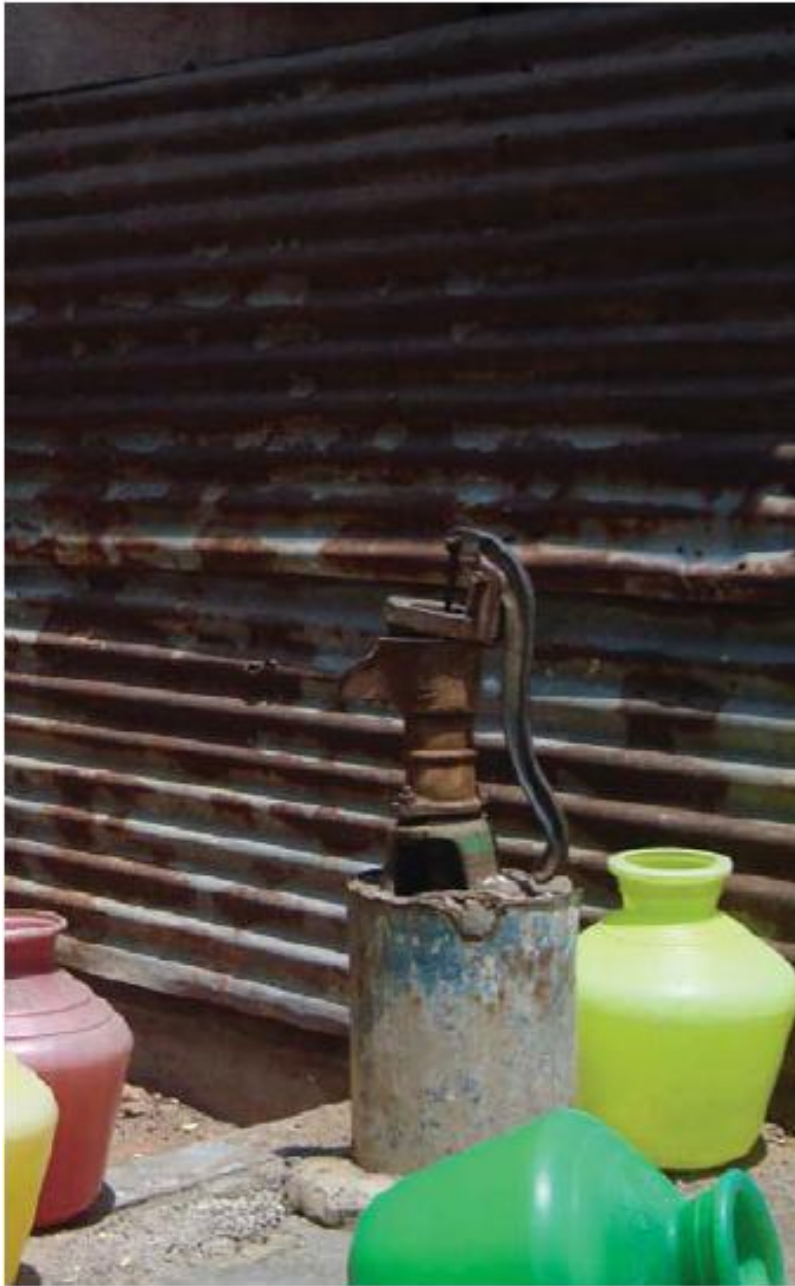




**LACK OF SPACE FOR
CHILDREN IN THE
ICDS CENTRE**



M.Sathyannarayanan,Civil Dept , Vcet-Madurai



**UNCOVERED
WATER TANK**

Relocated and forgotten by the State

Nalini Ravichandran | ENS Chennai, December 28

A RECENT study done by the Forum for Securing Land and Livelihood Rights of the Coastal Communities (FLLRC) on the appalling conditions of ICDS (Integrated Child Development Services) centres in the tsunami relocation sites of Chennai is a grave reminder of the injustice faced by those whose lives were torn apart by the killer waves four years ago.

About 7,432 families were relocated as part of the post-tsunami rehabilitation initiative, to the urban coastal areas of Chennai district. While relocation sites in Kannagi Nagar in Okkiyum Thoraipakkam and Semmenchery were constructed prior to the tsunami, the HUL Land and Thilagar Nagar Site were constructed exclusively for those affected by the tsunami.

Inadequate staff and poor implementation of government norms plague the running of anganwadi centres. The report states that there are just nine government ICDS centres established for 78,919 persons in the relocation sites of Chennai district. According to government norms, there should be at least one centre for a population of 400-800. Going by this, there should be at least 98 more centres.

Children were found bringing food from home to an NGO-run centre. Many centres did not follow the government norm of providing three eggs per week. Only seven government centres follow the norms.

The study also found that apart from nine centres, none of the centres provided sundal for the children, which was mandatory. Almost all the NGO-run ICDS centres were found to provide uncooked and spoilt supplementary food. About two-third centres reported insufficient plates, while 55 per cent lacked adequate vessels. Only 12 centres

had direct electric supply, while the rest survived on illegal connections. Small and congested centres were surrounded by garbage. Only eight centres were run in their own building, while the rest were being run in rented buildings. Discoloured walls in 17 centres, insufficient charts in 13 centres, irregular health check-ups in 25 centres, no toys in 14 centres; the anganwadi centres are in desperate need for attention.

The sanitary conditions were appalling too, as 40 per cent of the toilets in the sites were not in usable conditions. The children end up using the open space.

One centre did not even have a teacher and in another, one teacher took care of two centres, as only seven teachers were available for the nine government centres. Some teachers end up paying the rent for some centres, and do not get reimbursed either.

Two government-run centres in Semmenchery were found to be providing only two eggs, instead of three per week. These two centres do not provide sundal either. Twenty two centres have been reported to supply uncooked and unhygienic food, of which, 20 centres are run by NGOs, which calls for a better monitoring on the NGO-run centres also. Moreover, none of the centres has proper drinking water facilities, as they get water only once in four to six days.

In Tondiarpet, 180 children below the age of five access ICDS centres, while 48 children still do not access it because they have to go to the one in V O C Nagar.

Problems aplenty for school students



RUSH HOUR: Students boarding a bus at Thoraipakkam

Nalini Ravichandran | ENS Chennai, September 29

IT IS 6.45 am. The 1,000-odd school children from Thoraipakkam rush to the bus stop. They are students of different schools in Santhome.

It is a two-hour ride to their schools and there are just four buses between 7 am and 9 am. The daily ordeal of the students has thrown up several questions on safety.

There are about 13,000 families living in the area and the number of buses woefully inadequate.

For Ranjita of class VII, getting the 7 am bus is all that matters, as missing it will mean being late for school. Mani of class XI suffered injuries to his leg when he slipped and fell down from a bus. He was travelling on footboard in an overcrowded T21 bus. Mani's mother Viji says the hospital expenditure came up to Rs 10,000.

Children of tsunami-hit families, relocated here, continue to go to schools in San-

thome. There are two primary and a high school in Thoraipakkam.

"Hardly any teaching goes on in the schools," said a parent. "There is no discipline in the schools," said another parent, whose children discontinued studies.

The only option is to send them to schools outside the area. "But I don't want them to risk their lives in the daily rigorous bus rides," he says. "They are now at home doing nothing. I hate to see them wither away their time like this, but what is the alternative," he asked.

Community leader Stephen says the children wait desperately for their buses, which are always erratic and overcrowded. And when they manage to get on a bus, they are at the receiving end of other passengers, says Dhanalakshmi, a parent.

Buvana, chief community development officer, Tamil Nadu Slum Clearance Board, says there is a proposal to put more buses on the route.

Poor facilities in tenements leave families out in the cold

Vivek Narayanan | TNN

Chennai: About 1,200 families evicted from Langs Garden in Pudupet for encroaching upon the land along the Cooum and allotted "homes" at Kannagi Nagar on the Old Mahabalipuram Road (OMR) now do not have a roof over their heads. Their new homes lack electricity and other basic facilities. Some children appearing for the board exams say they are unable to study in the dark.

In the last week of February, revenue and PWD-officials along with the police and corporation staff shifted over 100 families from Langs Garden and gave them tokens to move into slum board tenements in Kannagi Nagar.

But they were in for a shock. The houses were in no condition to be occupied. "For the past three days everyone is suffering in Kannagi Nagar. We are living out in the open with our kids. Some of the children, exposed to the cold weather at night, have fallen ill," said Nagalakshmi, a resident.

As there is no power, preparing for the board exams has become difficult for students. "I study in Class 12 at a government school in



FROM BAD TO WORSE: Many families who were rehabilitated from the slums at Pudupet to Kannagi Nagar on OMR are living out in the open as the tenements lack basic amenities

Chintadripet. Ever since I shifted here, I have not been able to study as there is no power. Sleeping is also impossible because of the mosquitoes," said Rajesh.

Women are forced to attend to the call of nature in the open as there is no water. "Miscreants hide behind bushes and tease us. About 15 days ago, some officials came and asked us to list out the reasons why we were not willing to move from Pudupet. But before we could tell them, they removed us forcibly.

They should have ensured proper facilities in Kannagi Nagar," said Kala, another resident. "We cannot live here till we have proper facilities. Without electricity, we cannot even charge our mobile phones if we have to call someone in an emergency," she said.

Neither Tamil Nadu Slum Clearance Board managing director T K Ramachandran nor Corporation Mayor M Subramaniam was available for comment.

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CITY'S SUICIDE POINT

To beautify Chennai by clearing it of slums that are an eyesore, the State government developed Kannagi Nagar. Billed as Asia's largest resettlement site for slum dwellers, Kannagi Nagar should have been a model in urban rehabilitation. But with no basic amenities there, the place stinks of gross mismanagement. For the relocated people, it is an unending nightmare. **Sangeetha Neeraja** reports

Kannagi Nagar, the resettlement site of slum dwellers in Chennai, is also turning into a suicide spot. Ever since families that lived in various slums along different water bodies crisscrossing the metropolis were shifted there, many of the residents, particularly women, are living on the edge.

Unlike Kannagi, the legendary heroine of Silapathigaram who has lent her name to the resettlement colony, the harried women choose to destroy themselves instead of setting the city ablaze.

Most of the suicides are related to marital discords stemming from desperate financial situations that they are unable to tackle. Majority of those who killed themselves during the past few years were women the age group of 25 to 35.

The women, who managed to run the household somehow by finding work when they were in the slums, turn helpless when the family coffers are dry. When there is no way of finding a job in the vicinity for both men and women, domestic quarrels start and some of them lead to tragedies.

Ranjitha, 27, (name changed) a mother of three children had a fight with her husband, a painter, who didn't go for work for a couple of days because he was not sure he would get any and didn't want to waste money on travel. Ranjitha, too couldn't go for work as she was sick. The crisis snowballed as there was no money in the house. Angry and frustrated, she took her children, who were also sick, and left for her parents' home. Though she returned the next day, she hanged herself to death.

As per records in the City Police Commissioner's office, a minimum of five suicides

are reported from Kannagi Nagar a month. "Not all the suicides get reported," says Manju, another resident.

"When we lived in the city, it was easier to find employment for us and also for our menfolk. Now after we have been moved to this god-forsaken place, traveling to the city for employment costs us an average of Rs 30 to 40 per day depending on mode of transport - buses or share autos," says Latha, a resident.

"In a week, our men are able to find work only for three-four days. Sometime they go to city expecting work, but return empty handed because there wasn't any. Some days our men don't go to work because they are not sure of finding employment. When they don't do for work, there is no money in the house. This triggers fights between husbands and wives," points out Latha.

In some cases, the men too commit suicide. Their cases are a little more complicated as along with family discord they cannot shake off their drinking habits. Then there are cases of students who have killed themselves.

On June 3, Rajeshwari (15), a student of Raphael Girls Higher Secondary School, Santhome, hanged herself to death when the school didn't give her admission in the group of her choice in the higher secondary course.

When her family moved into Kannagi Nagar from Santhome, she stayed back in a city hostel to continue her studies to save travel time, while her brother Prakash (13) dropped out of school. "The dynamics at play here is pushing the people to take snap decisions," says Stephen, a resident.

Can someone help them overcome the depression?



Blame it on myopic rehab policies

The Resettlement and Rehabilitation Policy 2006 (R&R Policy) calls for preparation of a Social Impact Assessment (SIA) report and Environmental Impact Assessment (EIA) report by the Requiring Body for all projects (except linear projects) involving physical displacement of 400 or more families on masse in the plains. But there is no provision for inclusion of the affected persons or their representatives while conducting EIA and SIA.

The policy provides for the constitution of a "multi-disciplinary expert group" to examine the SIA and EIA reports. The

Central and State governments nominate members, but there is no accountability, independence and transparency in the process of examination of the SIA and EIA reports. There is no provision for consultation with the affected families during the final preparation of the SIA and EIA reports prior to their submission to the expert group for vetting.

"The sad part is when the TNSCB makes their project proposal, there is no allocation of funds for supporting social infrastructure like schools, balwadis and hospitals for the population that is to be relocated. The social

lack of supportive infrastructure like transportation, drinking water, electricity, schools and hospitals are grossly ignored," said Vanessa Peter, member of the Citizen's Rights Forum.

"Even the R&R policy is a loosely framed guideline, which is not comprehensive and is hardly followed. The Rehabilitation and Resettlement Bill, 2007 is pending. Only when it becomes a law, there can be better enforcement; till then these frameworks remain loosely worded and hardly followed," said Alvino, member of Citizen's Right Forum at a Civil Society platform. The Bill

for traditional tribal institutions, social impact assessment... "the appropriate Government shall, inter alia, take into consideration the impact that the project will have on public and community properties, assets and infrastructure; particularly roads, public transport, drainage, sanitation, sources of drinking water, sources of water for cattle, community ponds, grazing land, plantations, public utilities, such as post offices, fair price shops, food storage godowns, electricity supply, healthcare facilities, schools and educational or training facilities, places of worship, land for cremation grounds.

No change in quality of life

KANNAGI Nagar at Okkiyum Thoraipakkam, where settlement started in 1997, was developed to make Chennai slum-free. Ironically it has been named after Kannagi, the legendary character of Silapathikaram who burnt down the city of Madurai seeking justice for her husband's unfair killing by the king.

To put it otherwise, Asia's largest rehabilitation site for slum dwellers has actually hurt the livelihood of the people resettled there by taking them away from the city, their place of work. The occupants of the 15,471 houses earlier lived in 49 slums in the city.

It all started with a survey conducted under the World Bank funded Tamil Nadu Urban Development Project-II (TNUDP II) - "Identification of Environmental Infrastructure Requirement of Slums in Chennai Metropolitan Area," which classified 122 slums (41,683 families) as Objectionable Slums. They were part of the total 242 slums within the Chennai Corporation Area. The remaining 120 slums (30,157 families) were termed Unobjectionable Slums. Of the 122 Objectionable Slums, 33 slums (5,425 families) were found along the road margins, six slums (2,306 families) along the railway margins, 73 slums (29,144 families) along waterways and 10 (4,805 families) along the seashore. Since the land on which the slums were located had to be retrieved, 30,157 families faced relocation.

As a result, alternative sites for relocation were developed at Kannagi Nagar in Okkiyum Thoraipakkam, Semmenchery, All India Radio site, Thondiarpet and Perumbakkam. Buildings came up, but without basic infrastructure like water and sanitation. The sites too did not have enough facilities to transport their residents to their work places, some of them in the heart of the city. In sum, people living in shanties moved to concrete slums. The quality of life did not change one bit.

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Human dumpyard

Sangeetha Neeraja | ENS
Chennai, July 26

OFF the bustling multi-lane Information Highway, on its eastern side, is Kannagi Nagar, a housing colony developed on what was once a tract of marshland. But even as you approach the tenements, the mounds of uncleared garbage and puddles give a clear indication of what you can expect inside. Stepping in, you find nothing but squalor and depravation all around.

Home for over 15,000 families, it is touted as Asia's largest resettlement site for slum dwellers. But in real terms it is just a human dumpyard, where people living in 49 different slums in the city have been relocated. Most of them struggle to eke out a living. Many borrow from moneylenders who could put Shylock to shame.

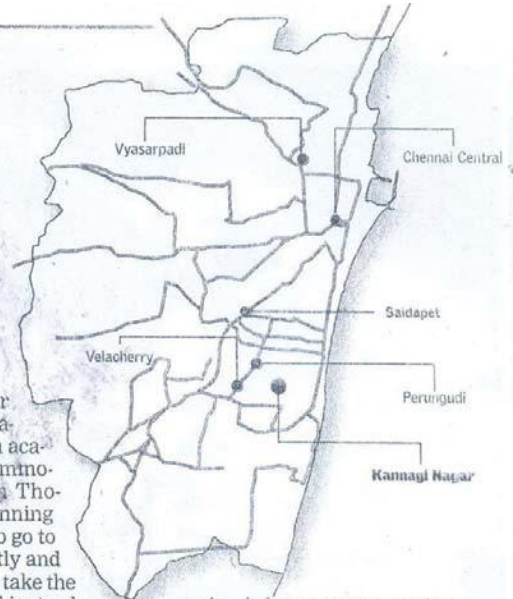
Thandal (money lent for a day) does roaring business - for Rs 1,000 the interest is Rs 150. Kanthu Vatti (weekly interest) is a regular affair - for every Rs 1,000 the interest is Rs 100 per week. They also have other monthly schemes.

Ezhaltharian of Nagar Senai, one the youth cultural groups that is creating awareness amongst the people, says: "Thandal is big business here. On a daily basis the money turnover here is about Rs 10 lakh. Financers from the city come here to lend money. The agents arrive around 9 am and stay as late as 9.30 pm to collect the dues. Our own dadas are also into this business."

A back-of-the-envelope estimate suggests that there are around 25,000 children of school going age at Kannagi Nagar. Dropping out of school is a normal occurrence. According to Asha Nivas, an NGO, the dropout rate is high in the age group of 11

to 16.

Most dropouts are tied to their month of relocation. If the relocation happens in the middle of an academic year, they don't get accommodated in the nearby schools in Thoraipakkam as they are already running full. So, the children are forced to go to city schools by bus, which is costly and tiresome. So, quite a few of them take the easy route and drop out of school instead. "There aren't enough buses or enough schools in the neighbourhood to accommodate the children," reasons Stephen, a



morning is between 5 am and 8 am. If they miss a bus, they take share autos to reach the city.

"Going by the expansion plan of the Tamil Nadu Slum Clearance Board (TNSCB), 10,000-plus slum dwellers could soon make Kannagi Nagar their home. Things may get even worse," worries Stephen.

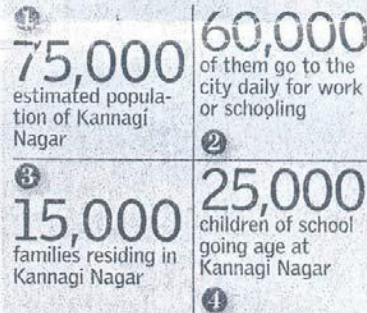
For the 75,000 odd residents here life is hell as they suffer from various diseases. Blame it on the open sewerage and the piled up garbage, which are ideal breeding places for mosquitoes and houseflies. "Once in 10 to 15 days the civic body cleans up the mess, that too only on the main road. The alleys are left untouched," complains Kalai, a resident.

"The garbage is burnt once in 15 days. It triggers wheezing among children," claims Latha, another resident.

The garbage pile and the open drainage are adjacent a water sump. "As we get water once in four days for two hours, we store it in this sump. Within two days of its storing mosquito larvae start appearing, yet we have to use the water as we don't have any other option. As a result, every other week one person in the household is down with dysentery, abdominal pains, cough or fever," says Shanathi.

Will their woes ever end?

In figures



resident of Kannagi Nagar. According to conservative estimates, each year some 150-odd students dropout of school.

Everyday, 60,000 people - men, women and children - travel into the city for work and schooling. The bus service starts at 5 am. They get a bus every 10 minutes. In all, there are 24 buses. The peak period in the M.Sathyarayanan, Civil Dept, Vcet-Madurai

Lack of better schooling adds to their woes

Schools and anganwadis are struggling to cope with the large influx of students

Vidya Venkat

CHENNAI: It has been two years since S. Sudha moved from a tiny hut along the Adyar river to a Slum Board tenement in Semmenchery, close to the much-touted IT corridor. But Sudha is not too happy. She says her 10-year-old son Vijay had better schooling back in Adyar.

Now enrolled in the Government Middle School in Semmenchery, her son Vijay refuses to go to school because he does not enjoy classes.

The school, she says, has only five teachers including the headmistress and with over 500 students enrolled, the child does not get proper attention in school. This adds to her list of woes which includes absence of a steady income, lack of water and other basic facilities.

Not only is the resettlement colony ill-equipped to cater to all their demands, the schools and anganwadis are struggling to cope with the large influx of students. The Government High School in Sholinganallur reportedly turned down admissions this year to several students as

they did not have the capacity to absorb more students.

G. Adikesavan, who works as a security guard at an IT company, said his son was attending the Government High School in Semmenchery, but he was not happy with the quality of instruction. Adikesavan secured this job with great difficulty and could not afford to send his 16-year old to a private school. "And these days without clearing X Standard one cannot even qualify for a security guard's job," he grumbled.

Anganwadis

Most families living in the resettlement colonies such as Semmenchery and Kannagi Nagar depend on wage labour. Anganwadis become essential so that labourers can leave their children there before going for work. But residents here say the number of anganwadis is not sufficient.

T.K. Ezhumalai, who heads voluntary organisation Rural Development Trust, says there should ideally be one anganwadi for every 500 families. Semmenchery needs, at least, 12 anganwadis and Kannagi Nagar needs 20. But

both the places, the existing number of anganwadis is less than half the number. Women are forced to stay back to tend to their children.

"This could result in students dropping out of schools owing to poor quality of instruction and also encourage them to take up work at an early age to help the families financially," says Ezhumalai. Already about 13 children belonging to kuravar families in Semmenchery were seen picking waste paper in nearby IT companies in order to support their families, he notes.

Also, absence of water facility in toilets in the government schools of Semmenchery and Kannagi Nagar is a deterrent for students. "Grown up girls are forced to return home during lunch hours. This also encourages absenteeism," said Manimegalai, whose daughter studies in Class VI.

Also, with teenage boys cutting classes often, parents fear they would get into evil habits. It is a common sight at resettlement colonies to see boys in small groups playing cards and passing comments on young girls, says Mangai-



MUDDLED: Children at the Slum Board Resettlement Colony in Semmenchery seen missing classes and playing about in murky waters. — PHOTO: VIDYA VENKAT

Conclusion

This study, through its detailed examination of the various issues in the resettlement site of Kannagi Nagar, demonstrates how the state has treated the urban poor as experimental subjects, and has forced them to the peripheries of cities without understanding the adverse socio-economic and long-term impacts of the resettlement process on the people.

- An alarming finding of this study is that 35% of children in the age group of 15-18 years are school dropouts.
- Sixty-seven per cent of the total school dropouts of this age group are boys.
- Forty-five percent of the boys of this age group are out of school, while for girls, the figure is 24%.
- The number of children discontinuing their education increases as they enter adolescence; however, the rate of drop out among boys is significant.