

EXECUTIVE SUMMARY

The need for Revised Coimbatore City Development Plan emerged in view of the physical extension of the city boundaries in 2011 and to examine the requirements and plan for infrastructural facilities in additional areas. Coimbatore city area is expanded to 257.04 sq. km. by merging various peripheral urban and rural settlements mostly located within the city's urban fringe.

In this reference, the Ministry of Urban Development (MOUD), Government of India has proposed to include the expanded Coimbatore City under Jawaharalal Nehru National Urban Renewal Mission (JnNURM) programme. Hence, under the initiative of Coimbatore City Municipal Corporation (CCMC), **Tamil Nadu Urban Infrastructure Financial Services Limited (TNUIFSL)** has appointed consultant to prepare a City Development Plan for **Expanded Coimbatore City**.

City Overview

Coimbatore city located on the banks of Noyyal River is at a distance of 495 km from Chennai in south west direction and serves as an entry and exit point to the neighbouring states of Kerala and Udhagamandalam. The city also known as Kovai is the administrative headquarters of Coimbatore district which is also a major industrial and engineering hub of South India. The city is presently divided into five administrative zones: East, West, North, South and Central. Each zone is further sub-divided into 20 wards.

In 1866, Coimbatore was constituted as a Municipal town with an area of 10.88 Sq.Km, and in the same year Madras- Podanur rail link passing through Erode was opened thus improving its connectivity in the region. Coimbatore Corporation was upgraded from special grade municipality to corporation in the year of 1981 spreading over an area of 105.60Sq.Km. Recently during the year 2011, the city boundary has been expanded to 257.04 Sq.Km. The areas added to **Coimbatore City Municipal Corporation (CCMC)** in 2011 are as provided below:

Recently Added Areas

Sl.No	Recently Added Areas	Ward Nos.
1	Kavundampalayam municipality	5, 6, 7, 8, 9
2	Kurichi municipality	94, 95, 96, 97, 98, 99, 100
3	Kuniamuthur municipality	87, 88, 89, 90, 91, 92, 93
4	Chinnavedampatti town panchayat	27, 42
5	Kalapatti town panchayat	33, 34, 35, 36
6	Saravanampatti town panchayat	28, 29, 30, 31
7	Vellakinar town panchayat	26, 43
8	Thudiyalur town panchayat	1, 2, 3, 4
9	Vadavalli town panchayat	16, 17
10	Veerakeralam town panchayat	18, 19
11	Vilankurichi village panchayat	32

The city is also well connected through road, rail and air. There are three National Highways passing through the city NH 47, NH 67 and NH 209. The Coimbatore junction station is well connected to the major Indian cities and is the second highest revenue yielding station in the Southern Railway Division of Indian Railways.

Demography and Social Profile

As per Census of India 2011, the total population of the expanded Coimbatore City Municipal

Corporation is 1,617,711 people. This consists of the population of the Erstwhile Corp. along with that of the recently added 11 municipalities.

Over the years, the city has also experienced a decline in its population density which may be attributed to the repeated expansion of the city limits. The population density of the city was found to decrease from 6667 persons per sq km in 1981 to 6,294 persons per sq. km in 2011.

The average sex ratio of the city is 999 females per 1000 males and is higher than the national average of 940 females per 1000 males. The average literacy rate of Coimbatore city is 91% of which male literacy is 95% and female literacy is 88%. Hence, it has been broadly concluded that status of women in the city is quite high.

Based on specific selected criteria, client feedback and vision, the population projection for Coimbatore has been calculated. The projected population for the city may be referred from the table below:

Year / Stage	Projected Population	Floating Population
2015	1,724,674	2,58,701
2030	2,192,704	3,34,213
2045	2,787,745	4,53,004

City's Economy

Coimbatore city experienced economic development as early as in 1900 when Industrial development led to the establishment of Coimbatore Cotton and Weaving Mills Association. The textile industry boom in the city along with its backward and forward linkages, initiated large scale economic development and substantial growth of the city.

The Chief industries contributing to economic growth of the city are key engineering and textile industries, foundries, manufacturing of motors and pumps along with hosiery, Software industries and poultry industries.

Urban Infrastructure

1. Water Supply:

Key Issues:

The major issues are Inequitable Distribution and Intermittent water supply, Inadequate Service Coverage in added areas, Refurbishment of the Existing System and Problems in Feeder Main Systems.

Prioritized Objectives:

- To increase the supply levels to achieve an average supply of 135 lpcd and to cater to 100% population
- Augmentation of installed capacity of existing facilities to meet the growing demand;

Strategies:

- Development of a sustainable and quality source of water for onward supply with requisite treatment/ disinfection.
- Provision of Water Supply Scheme to added areas;
- Water supply system to meet the 30-year demand (2015-2045);

- Redistribution/re-zoning of distribution system in existing areas;
- Rehabilitation of existing service reservoirs;
- Augmentation of WTP and Clear Water Transmission Mains for ultimate stage demand.
- Rainwater harvesting techniques to be adopted to meet the growing water demand

2. Sewerage and Sanitation:

Key Issues:

The key issues in sewerage and sanitation facilities are incomplete coverage of the city's sewerage system, trunk sewer mains with smaller diameter unable to cater to the current sewage load and leading to manhole overflow, the extension and newly developed areas lack in sewer facilities and discharge untreated sewage into open drains, discharge of untreated sewage into the Noyall River and 8 major water bodies in the city resulting in environmental threat.

Prioritized Objectives:

- The sewerage coverage in Coimbatore needs to be enhanced atleast to 40% by the year 2015 and 95% by the year 2021.
- 100% of the wastewater should be treated and disposed and 70% of the wastewater should be recycled and reused by the year 2045.

Strategies:

- Increased coverage of sewer network recommended especially for the newly added CCMC areas
- Restoration and capacity augmentation of the existing sewerage system
- Sewage treatment & re-use alternatives to be planned and implemented for efficient sewage management
- Operation and maintenance plan, including options of using the private sector for O&M (e.g. management contract) for an efficient sewerage and sanitation system

3. Storm Water Drainage:

Key Issues:

The key issues with regard to the storm water drainage system in Coimbatore are its inadequate tertiary drains. Coimbatore has only 82 percent of such drains against a desirable norm of about 130%. Silting and obstructions in the primary and secondary drains hamper the natural flow channels. Also, almost 20% of the residential houses which do not have a sewer connection or a septic tank are discharging their domestic sewage into the existing storm water drains, causing serious environmental problems.

Prioritized Objectives:

- The natural system should be streamlined effectively for safe disposal of the storm water. Silting and blockages of the storm water drains to be removed for efficient disposal and decline in flooding frequency.
- Storm water drains coverage should be enhanced to 50% by 2015 and 100% by 2030.

Strategies:

- The primary drains are required to be restored and rehabilitated as many are inadequate to handle the flash floods and are not fully constructed in some sections.

- Improvement Works and Construction of Tertiary Drains
- Effective execution & construction of box gutter and pipe gutter
- Awareness programme for locals

4. *Solid Waste Management:*

Key Issues:

The major issues in solid waste management are waste is left unattended due to lack of door to door collection facilities, 100% source segregation has not yet been achieved which results in revenue loss from recyclable materials, Old inefficient vehicles lead to frequent breakdowns and increased O&M costs.

Prioritized Objectives:

- Awareness building and community involvement in segregation of recyclable waste and storage of waste at source
- Effective waste minimization
- Integrated Waste Treatment & Creating a Regional sanitary Landfill Facility

Strategies:

- 100% door to door collection of solid waste through “two bin system”
- Segregation of Municipal Solid Waste at the Source of Generation
- Augmentation and expansion of primary collection of waste
- Modernization and expansion of existing waste transportation system
- Municipal solid waste treatment and disposal

5. *Traffic and Transportation:*

Key Issues:

The key issues in this sector are mix of regional traffic on city roads, absence of road hierarchy and traffic carrying corridors, lack of an efficient public transport system, Parking Facility and appropriate and efficient road infrastructure.

Prioritized Objectives:

- Ensure free flow of traffic through junction improvement and providing sufficient off-street parking
- Ensure free and safe movement of pedestrians
- To provide better and affordable public transport system

Strategies:

- Road planning, Widening and Strengthening of Road Structures
- Traffic Enforcement and Regulations, provisions of pay and park facilities
- Pedestrian Facilities & Safety Measures
- Enhance the coverage and frequency of public transport facilities within the city

Social Infrastructure

The social infrastructure scenario of the city is found to be well developed. The city serves as an education hub for students from all over South India. Hence, overall education scenario in the city is

found to be adequate along with appropriate number of play grounds and halls in Municipal Schools. However, more parks and open spaces in the city are required for a better, green and healthy living.

Urban Heritage & Tourism

Coimbatore city has a great potential of religious tourism or pilgrimage. There are numerous temples in and around the city such as the Perur temple, Konniamman temple, Thandu Mariamman temple, Echanaari temple, Karamadai temple, and Marudamalai Murugan temple. The mosques on Oppanakara Street and Big Bazaar Street date back to the period of Hyder Ali. Christian missions date back to 1647. Close proximity to Western Ghats Coimbatore district is rich in fauna with its urban wetlands harbouring 116 species of birds.

Various strategies have been suggested to promote tourism in Coimbatore. Madurai – Dindigul – Kodaikanal - Coimbatore – Ooty circuit could be developed for promoting tourism in Coimbatore.

Capital Investment Plan

The Capital Investment Plan (CIP) for a city is a multi-year scheduling of identified and prioritized investments. The scheduling or phasing of the CIP has been developed keeping in mind the likely fiscal resource availability (for new investments and O & M), technical capacity for construction and O&M and the choice of specific improvements to be carried out for a period of six years and in subsequent phases.

The total estimated capital investment required for providing efficient services to the present population and future population of CCMC by the year 2045 is Rs.1,862,275Lacs at 2013 prices. The projects identified in sectors of urban poor, slum improvements, land use development planning and other similar sub-projects investment is proposed for funding in short term. The planning horizon for core service sectors of Water Supply and Sewerage are 2045, and for sectors such as Storm Water Drainage and Solid Waste Management are planned for 2030 and hence, mindful of the need for efficient resource planning, only part of the identified investment is proposed for funding in short-term. In case of Roads, Traffic and Transport sector, part of the identified investment is proposed for funding in short-term considering the immediate need for improving road network and transport systems in the city. Large-scale capital investment projects such as construction of MRTS, Ring Road, Elevated Roads etc. are proposed for funding in long-term period. A summary of Sector-wise Total Investment Proposed is given in the table below.

S.No.	Sector	Investment(Rs. Lac)	% of Total investment
1	Water Supply	189,562	10.18
2	Sewerage & Sanitation	178,850	9.60
3	Roads, Traffic And Transportation	981,291	52.69
4	Storm Water Drains	153,898	8.26
5	Street Lighting	11,323	0.61
6	Solid Waste Management	95,337	5.12
7	Disaster Management	5,250	0.28
8	Environment Improvement	25,509	1.37
9	Heritage & Tourism	4,497	0.24
10	Urban Poor	32,453	1.74
11	Urban Governance	3,100	0.17
12	Other Development Proposals	45,897	2.46
13	Development Of Existing Drains	135,300	7.27
Total (All Sectors)		1,862,275	100

To sustain this CIP an FOP (Financial Operating Plan) is essential which is a multi-year forecast similar to the CIP period and provides the year over year picture of finances of the ULB to plan for phased or termed strategy.

Financial Operating Plan

Financial Operating Plan (FOP) for CCMC provides understanding and examines the financial feasibility and sustainability aspect in the context of not only the fiscal management of the urban local bodies (ULB) level, but also the institutional arrangements for state-local, and center-state fiscal transfers, and the fiscal capacities of the state and central governments.

In order to prepare this FOP, basic assumption of JNNURM has been continued in absence of any other existing benchmark/sources and the project funding structure comprises of grants either of continued JNNURM framework or substitute source. The reserves/surplus/deficits and operating ratios, debt servicing ratios etc. provide the understanding of operational capacity of the ULB (Please refer Chapter 16 for the detailed FOP).

Based on the FOP, strategies need to be developed for increasing the investment capacity of the Corporation. Few of the major recommended strategies proposed by the consultant are:

- The property tax rates should be revisited and existing taxation mechanism should be compared with alternative mechanisms like asset value based assessment, property location and size based assessment along with other modes of rental based tax calculation formula. This strategy of updating the tax rates would help the corporation in rationalizing the tax rates and build necessary corpus for investing in various projects.
- Projects like waste to energy, production of refuse derived fuel, methane extraction from landfill sites etc. can be promoted through PPP mode. Sale of fuel and energy from these projects can be a potential source of revenue for the corporation. These projects can be developed over long term contracts and marketed as green energy projects.
- Analysis of assets that are currently idle or being under used may be assessed by the corporation periodically to device revenue generating alternatives e.g. vacant land belonging to corporation may be leased or rented out for exhibitions, fairs. Similarly plant equipments when idle can be rented out (concept similar to equipment bank)