

Appraisal of City Development Plan Coimbatore

July 2006



National Institute of Urban Affairs

Core 4B, India Habitat Centre
Lodhi Road, New Delhi 110003

In case of any query, please contact Ms. Usha Raghupathi (email: uraghupathi@niua.org)

Appraisal of City Development Plan: Coimbatore

Comment 1: *The vision for the city has not been stated in the CDP.*

City's Response:

Vision:

To provide an efficient and cost effective delivery of essential services to the community enabling sustainable urban environment and economic progress, in a framework of managed development and growth.

City Development Plan for Coimbatore is prepared in compliance with JNNURM toolkit with a vision of having improved service levels as per the present and future infrastructure needs of the town and population. The vision for the future is articulated in terms of physical, social and environmental infrastructure requirements.

The vision for the city is to achieve improved service levels and better quality of life for the citizens of Coimbatore. Specific goals and service outcomes have been framed, with this vision in mind, as given in Chapter 8 of the final report.

Table: Goals and Service Outcomes

A. Water Supply

S. No	Goal	2006	2008	2011	2016	2026
1.	Network cover for general households	83%	87%	90%	100%	100%
2.	Network cover for Slum households	5%	50%	90%	95%	100%
3.	Per Capita Supply	135 lpcd	135 lpcd	135 lpcd	135 lpcd	135 lpcd
4.	24 / 7 Water Supply	0%	5%	10%	40%	90%
5.	Quality of Water	Safe & Good	Safe & Good	Safe & Good	Safe & Good	Safe & Good
6.	Non Revenue Water	25%	23%	20%	15%	15%

B. Sewerage

S. No	Goal	2006	2008	2011	2016	2026
1.	Network cover for general households	23%	60%	90%	100%	100%
2.	Network cover for Slum households	5%	35%	60%	100%	100%
3.	Treatment and Disposal	23%	60%	90%	100%	100%
4.	Recycling and Reuse	0%	10%	20%	40%	50%

C. Storm Water Drain and Water Bodies

S.No.	Goal	2006	2008	2011	2016	2026
1.	Storm Water Drain Coverage (% of road length)	92%	95%	100%	130%	150%
2.	Rehabilitation of Existing Nallah's and Water Bodies	0%	50%	100%	100%	100%
3.	Usage of water bodies as local source of water	0%	10%	30%	40%	50%

D. Solid Waste Management

S.No.	Goal	2006	2008	2011	2016	2026
1.	Door to Door Collection	20%	80%	80%	100%	100%
2.	Mechanized Handling of waste	10%	80%	80%	100%	100%
3.	Scientific Disposal	0%	80%	80%	100%	100%
4.	Waste to Energy Generation	0%	30%	50%	90%	100%

E. Traffic and Transportation

S.No.	Goal	2011	2016	2026
1.	Road length / Sqkm	8 km/sq/km	10 km/sq.km	15 km/sq.km
2.	Average Travel Time (Km / Hour)	35	45	45
3.	Park & Ride Facility	40%	60%	60%
4.	Parking Supply to Demand %	40%	70%	100%
5.	Usage of Alternate fuels	25%	40%	60%

F. Street Lighting

S.No.	Goal	2011	2016	2026
1.	Energy saving mechanisms	80%	100%	100%
2.	Adequate lighting in Non-lit areas	80%	100%	100%

G. Basic Services for Poor

S.No.	Goal	2011	2016	2026
1.	Network Coverage for slum households	90%	95%	100%
2.	UGD coverage for slum households	60%	100%	100%
3.	Adequately -lit slums	100%	100%	100%
4.	Adequate road link for the slums	100%	100%	100%
5.	Pucca houses for all slum households	80%	100%	100%
6.	Education for all in slums	100%	100%	100%

Comment 2: *The details of citizen groups and public representatives involved and the number & frequency of consultations has not been provided in the report. It is also not clear from the report whether the outcomes of these consultations were incorporated in formulating and prioritising the strategies.*

City's Response

During 1998, the Corporation initiated a series of meetings and consultation workshops with government departments, prominent citizens, city-based NGOs and other social groups to get a feedback on the improvement and requirement of infrastructural facilities in the city. The City Corporate Plan prepared in 1999 funded by TNUDP is the baseline for the report. The public participation helped in forming the goals for the vision of which following are the main goals.

Urban Governance:

Develop a cohesive organization, which understands the aspirations and needs of the community and provides an optimum level of service striving towards effective management of the city.

Municipal Finance:

Manage organizational resources to meet the long term and short term needs of Coimbatore city by adopting proven financial assessment techniques such as Financial and Operating Plan that captures the strategies of the City Plan.

Economy:

Promoting Coimbatore as a key regional centre for soft ware industry (Hitech Centre) by exploiting the entrepreneurial skills of the city populace and supporting the Textiles and Engineering industry of the city to facilitate the coexistence of residents and factories.

Land Use:

To maintain a good living environment in the city neighbourhoods through judicious land use planning to tune with the growth dynamics of the city.

Transportation:

To ensure smooth and safe mobility of the city populace through efficient transport planning measures, which accommodate secure spaces for pedestrians and guarantee hazard free environment.

Basic services:

Providing efficient and effective basic services such as water supply, sewerage, solid waste, etc. to meet the social, economic and environmental needs of the community.

Urban Environment:

Support and contribute to the environmental protection efforts, which ensure clean water and air environment of Coimbatore city by sensitive, integrated and progressive planning initiatives.

Private Sector Participation:

To facilitate private sector participation to undertake active role in providing public services.

Community Development:

To involve the community in supporting initiatives to enhance the quality of life, living environment and to upgrade level of services to the citizens, on the whole.

Heritage & Conservation:

To protect and conserve the rich cultural heritage of Coimbatore city by controlling human intervention and by providing protective measures.

Recreation and Leisure:

To develop and promote recreational facilities in order to support leisure activities of the citizens.

During the preparation of CDP, experts from the consultants' firm visited and arranged meetings and workshops with municipal officials and stakeholders. Comments and suggestions received during the consultation workshops conducted on February 22, 2006, April 04, 2006 and July 05, 2006 were incorporated in the CDP report, which also helped in prioritising investments for the city. The minutes of the meeting are enclosed in the final report.

The City is divided into four Zones namely, North Zone, South Zone, West Zone, and East Zone with 18 wards each. Mayor of Coimbatore Corporation conducts weekly meetings at zonal level with public and councillors to review the problems and issues related to their wards.

Comment 3: *The proportion of population growth due to natural growth, in-migration and jurisdictional changes has not been given. The trend of growth of municipal area is not given. The CDP is silent on population and area in the periphery and its growth over the years.*

City's Response:

The Local Planning Area of Coimbatore comprises of 14 rural villages. The total LPA in 2001 is 1,287 sq. km. The population growth in the LPA is given in table 1 below:

Table: Chronology of Population Growth in Coimbatore LPA

Year	1961	1971	1981	1991	2001*
Population	7.93	10.12	12.4	14.35	16.95
Percentage of population increased	-	27.62	22.53	15.73	18.12

Note: * Projected

The details of 14 rural villages within the Coimbatore LPA are given in Table 2. Kurichi Municipality houses maximum population of 77,853 followed by Kuniyathur Municipality with 58,900. The population in the remaining villages ranges from 6,477 to 48,276.

Table: Rural Villages in Coimbatore LPA (2001)

Village	Area in sqkm	Population
Kavundampalayam Municipality	8.55	48,276
Vadavalli T P	12.84	24,779
Vellakinar T P	9.10	9,772
Saravanampatty TP	11.76	17,737
Villankurichy TP	10.02	9,124
Irugur TP	20.69	18,622
Vellalore TP	16.18	17,340
Chinnavedampatty TP	16.32	10,981
Pattanam Panchayat	10.55	6,477
Kurichi Municipality	15.84	77,853
Kuniyathur Municipality	11.73	58,900
Perur T P	11.18	12,932
Vedapatty TP	6.14	9,732
Veerakeralam TP	8.99	19,994
Total	169.88	342,519

Source: Coimbatore Corporation

Urbanization in the peripheral areas is mainly attributed to industrial activities in the region. As per Directorate of Economic and Statistical Department (1999), there exist 36,579 of industrial units in Coimbatore District, out of which 2,462 units are present in Corporation Limits. This is about 6 percent of total industrial units in the district.

The new industrial development lies largely outside the Corporation limits. Hence, population increase due to immigration does not have major impact on city population.

Population growth estimates are based on past trends as obtained from Census records. There has been no change in the Corporation area (105.42 sq. km) since 1981.

Refer Chapter 4 for details.

Comment 4: *Growth in the number and type of industries; employment in industries and various services; and contribution to economy have not been given in the CDP. These are necessary to establish the growth of the lead sector of the city's economy. The role and contribution of informal sector in city's economy is also not given.*

City's Response:

Coimbatore's growth is sustained by a variety of industrial activities, with textiles being at the core of all industrial activity, which revolutionised the region's industrial scene. This revolution was set off towards the end of the 19th century when the first textile mill was set up.

There are 36,579 industrial units in Coimbatore District, out of which 2,462 units (Large industrial units – 138, Medium industrial units – 1,082 and Small industrial units – 1,242) are present in Coimbatore Corporation Limits. The industries occupy about 6 percent of total corporation area. Most of the engineering units both light and heavy are located along Mettupalayam and Avinashi Road.

As per the 2001 census, 38.49 percent of the total population of the city constitute the workforce, which has registered an increase of over 4 percent from the last decade. 90 percent of the total workforce is in the tertiary sector followed by secondary sector contributing 5 percent. (Refer chapter II Para 41)

Table: Workforce Participation

S.No.	Goal	1981	2001
1.	Population	8,06,321	9,30,882
2.	Primary Sector	8,962	6,507
3.	Secondary Sector	11,220	15,340
4.	Tertiary Sector	2,10,348	319,916*
5.	Non- Workers		5,72,628
6.	Work Force Participation Rate	32.72%	38.90%

Note: * Includes the figures of Livestock & Mining, HH & Industry and the tertiary sector

The informal sector plays an important role in the city's economy – most ancillary units for the engineering units are informal sector units.

Comment 5: *Involvement of private sector in service delivery, if any, has not been presented in the report.*

City's Response:

Currently, the private sector does not play a major role in service delivery. The Corporation has privatised maintenance of streetlights and collection of property tax. The other initiatives taken by the Corporation are management of Vellalore compost yard and rehabilitation of rag pickers (it has been entrusted to NGO), Management of the bore wells has been privatised. The local Courier service for all corporation mails has been entrusted to self-help groups. It is proposed to introduce private sector participation in solid waste management. The city based NGO Siruthuli, is active in rainwater harvesting, restoration of River Noyyal, afforestation - Pasumai Payanam and other works. The L&T company has constructed Coimbatore By-pass on BOT basis.

Comment 6: *The Local Planning Area notified by the State Government under Town and Country Planning Act, 1971, extending upto 1287 sq.km. should have been shown on the map along with the Corporation boundary.*

City's Response:

A map showing Coimbatore Local Planning Area has been incorporated in the final report. (Refer Page 11 in Final Report).

Comment 7: *The environmental analysis of the city is not given.*

City's Response:

Water Pollution.

The City lies within the watershed expanse of the Noyyal River Basin and consists of a network of tanks and canals. About 18 tanks in the city act as storage and percolation tanks and are major sources of ground water. Canals that act as natural drainage courses, serves as storm water drains for the city.

An analysis of nine water bodies of city by a local NGO indicates that most of the water bodies are contaminated. The discharge of industrial and domestic effluents, encroachments of tank and canal beds, exploitation of ground water are some of the important factors causing damage to these water bodies.

A key factor responsible for polluting the water bodies is the discharge of untreated effluents from small-scale industrial units lacking in adequate individual treatment facilities. With major water bodies being polluted, an immediate effect is noticed on the health of the vulnerable communities residing on the banks of the canals and tanks.

Further, there is a risk of contamination of ground water, resulting from over exploitation of ground water by domestic and industrial users.

Air Pollution.

The principal sources of Air pollution in Coimbatore are from vehicular emissions, industrial emissions and construction related activities. Industrial emissions are mainly from the foundries and small-scale industries. Most of the large industries have installed pollution control equipment like air filters, electrostatic precipitators, etc. whereas the small-scale ones lack these devices. In addition, the impact of emissions manifested from levels of Total Suspended Particles and Carbon Monoxide cannot be quantified due to the absence of data. The Tamil Nadu Pollution Control Board limits its monitoring to the individual industry level and is specific for large industries alone.

Pollution from Solid and Hazard Wastes.

The main causes for pollution include increasing household and commercial wastes as well as hazardous wastes from the industrial activities. However, the Corporation is making efforts to ensure collection and disposal of the same, inadequacies in operations results in accumulation of wastes.

Inability to dispose waste in a scientific manner has been a prime major factor resulting in pollution. In addition, hazardous wastes and medical wastes are disposed along with the domestic wastes without any separation at the source posing a potential health hazard. The disposal facilities at Mettupalyam Road and Ukkadam are devoid of facilities and the wastes are disposed in an unscientific manner. The city does not have a sanitary landfill and the disposal points are close to the residential areas causing grave danger to the health of the nearby residents.

Comment 8: *The proportion of population and slum population covered by WS is not given? The proportion of area covered by WS and also the total demand, supply & hence the shortfall (in mld) is not given in the report.*

City's Response:

The Corporation has provided 99,615 water supply connections in the city, out of which 96,543 are domestic, 2,718 are non-domestic while the remaining 354 connections are given to government buildings. Thus, the population coverage (Year 2001) with water supply connections is about 40 percent of the total city population.

Public stand posts serve as the major source of water supply for the slums. There are about 392 public fountains spread across the slums indicating that each stand posts serves about 480 persons. Thus, dependency on public stand posts is high.

Comment 9: *Some more specific information and clarifications are sought.*

9. i. *In 'Water Supply' Section, the following figures of quantity of water being drawn from surface sources have been given:*

- a. *Water drawn from Siruvani as 70 mld & 87 mld of water drawn from Pilloor (para 119)*
- b. *The Corporation's share from Siruvani Scheme is estimated at 87 mld (para 120)*
- c. *The Corporation's share from Pillur Scheme is estimated at 87 mld (para 121)*
- d. *While Table 5.1 on page 44 gives the following figures:*
 - *Daily drawal from Siruvani Scheme as 87 mld*
 - *Daily drawal from Pilloor Scheme as 65 mld*

These figures need to be clarified /correct ed.

City's Response:

Water drawn from Siruvani - 87 MLD and 65 MLD from Pilloor.

The Corporation's share from Siruvani Scheme is estimated at 87 MLD.

The Corporation's share from Pillur Scheme is estimated at 65 MLD

9. ii. *The sewage treatment capacity is not given here. Information on recycling and reuse of wastewater is not given.*

City's Response:

The estimated cost for covering the entire Corporation area by under ground drainage is Rs. 168.28 crores.

Capacity of Sewage Treatment Plant – 217.22 MLD (For design period of 2037)

9. iii. *The Storm Water Drainage and Rejuvenation of Water Bodies section gives the length of natural drains as 48.82 km in Table 5.14 while Table 5.15 gives the break-up of 44.82 km of drains. This needs correction.*

City's Response:

The total length of natural drains in the city is 44.82 km.

9. iv. *The solid waste generated is 565 MT per day and collected is 564 MT per day, thus collection efficiency works out as 99.8%. In Table 5.18 on page 59 the collection efficiency is given as 80% while in table 5.23 on page 62 the collection performance is given as 120%. This needs clarification/correction.*

City's Response:

The collection performance of the Corporation is estimated at 91 percent (564 tons per day). This is calculated by considering the vehicles engaged in primary collection, which transfers the waste collected from primary collection to the transfer station.

9. v. *Roads and Traffic Management section, states the name of the city as **Madurai** at two places in para 170. It needs to be clarified whether the problems described in the para relate to Madurai or Coimbatore.*

City's Response:

The problems described in para 170 relate to Coimbatore.

Comment 10: *The financial status of other parastatal organizations like Tamil Nadu Water Supply and Drainage Board & Tamil Nadu Slum Clearance Board could have also been analysed in this chapter.*

City's Response:

TWAD Board is responsible for supply of bulk water to the Corporation, while the operation and maintenance of the distribution network and collection of water charges is the responsibility of the Municipal Corporation. Owing to TWAD Board's limited role in service delivery, analysis of its financial status is not undertaken.

The Tamil Nadu Slum Clearance Board (TNSCB) is responsible for

- Providing infrastructure in slum settlements
- Clearing slums in congested, unhygienic urban areas and construction of tenements, and
- Constructing tenements under rehabilitation and resettlement programs

The Corporation is responsible for implementation of poverty alleviation programs, maintenance of infrastructure in slum areas, SJSRY schemes, etc.

Under JNNURM, the funds are available to the ULBs only, in this case, Coimbatore Corporation. The Financial and Operating Plan (FOP) for Coimbatore Corporation is prepared with the assessment of past trend of corporation finances and proposed reforms for the Corporation to improve the sustainability of more projects. Thus, it becomes insignificant to study the fiscal status of any other organisations.

Comment 11: *Changes in the population below poverty line and slum population should also have been presented and analysed in this chapter.*

City's Response:

The slum population in the year 2003 is 3,42,694, which has increased to 3,52,219 in the year 2006. The growth in slum population is low for past three years, which shows the annual growth rate around 1 percent. The Population of BPL and Slum is given in table 4 below:

Table: Chronology of BPL and Slum Population

Year	Slum and BPL Population (Nos)
2002	2,20,970
2003	3,42,694
2005	3,52,219

Note: * Projected Population

Comment 12: *The vision for the city should have been presented as the opening para of this chapter.*

City's Response:

The initial building blocks of the Corporate Plan are the "elements" required to sustain the City's growth; public utility, urban environment, economic and social development, land use and transportation, municipal resources, urban governance and capital facilities. The ideas in the plan were developed through a consultative process carried out between the Local Body Officials, Council Staff and Elected Officials, Public Interest Groups, Project Stakeholders and the local citizens.

From the beginning of the planning process, discussion among the citizens of Coimbatore focused on defining the future in terms of providing an efficient and cost effective delivery of service to the community, enabling a sustainable urban environment facilitating economic progress, in a framework of managed development and growth. Choices among policy directions and the weighting of priorities have been made on the basis of publicly expressed values.

From the many discussions and debates of the council, with the voluntary organisations, citizen's interest groups and intellectuals of the city, that contributed to the development of the Corporate Plan, a simple set of values has emerged. These core values are

1. Urban Environmental Management

- a) Water Supply
- b) Sewerage and Sanitation
- c) Solid Waste Management
- d) Storm Water Drains
- e) Roads, Traffic and Transportation
- f) Urban Service for Poor (Slum Upgradation)

Comment 13: *'Strategies and Time frame for Road sector' have not been provided.*

City's Response:

Roads Infrastructure Planning / Strategy:

Six percent of the total area of the town is under roads with a total length of about 635 km. Surfaced roads comprise 94.6 percent of the roads in the town. Accordingly, strategy shall focus on 100 percent coverage by surfaced roads, including up-gradation of roads.

The current area under roads (6%) is below the planning average of 10-15%. Coverage shall increase to a minimum of 15 km/ sq. km by 2026. Roads planning shall also ensure that road; parking and traffic infrastructure provision matches the city's present and future needs for both private and public transport.

Asset Rehabilitation.

Plans include upgradation of earthen roads to Bituminous Topped roads.

Widening.

The road widening projects can provide succour to a certain extent in increasing the area under roads, but is limited to certain commercial corridors only. The Strategies and Time Frame for Roads is given in table 5 below:

Table: Strategies and Time Frame – Roads

1. Upgradation of Roads to Bituminous Roads

Year	Amount in lakh
2006	- 740.60
2007	- 741.60
2008	- 371.80
2009	- 371.80
2010	- 371.80

2. Formation of new Roads

Year	Amount in lakh
2006	- 165.90
2007	- 1455.20
2008	- 1475.00
2009	- 1475.00
2010	- 1475.00
2011	- 1289.30

Comment 14: Few discrepancies that need corrections are:

14 i. Population covered by sewage network is not clear (as Para 289, page 101, gives this figure as 54% while this figure is 58% on p-52).

City's Response:

The sewerage system in Coimbatore was commissioned in 1954. The sewerage system covered an area of 23.10 sq. km and mainly present in the city's core areas. The total area covered by the sewer network is only 21.8 percent of the total corporation area.

The total length of the sewerage network is 162 km and cover only 25 percent of the total road length. The total number of household connected to the sewerage system is only 29,017 nos. covering 15 percent of the total population.

14 ii. Total sewage generation in 2021 has been given as 173 mld (Para 291, page 101). While for the year 2026 the capacity is given as 175 mld. It is not clear from this whether an increase of 2 mld will be sufficient for increase in the quantity of sewage during those 5 years.

City's Response:

The year wise sewage generation is given in table 6 below:

Table: Estimation of Sewage Generation

Year	Population Nos.	Sewage Generation MLD
2001	930,882	100.54
2006	1,009,677	109.05
2007	1,026,219	110.83
2011	1,091,759	117.91
2016	1,182,341	127.69
2021	1,288,387	139.15
2022	1,309,495	141.43
2026	1,397,442	150.92
2031	1,515,731	163.70
2036	1,644,032	177.56
2037	1,670,967	180.46

The sewage generation is calculated based on 135 lpcd water supply and wastewater generation at 80 per cent of total supply. Hence, for 2021 the sewage generation is 139.15 MLD and for 2026 the sewage generation is 150.92 MLD.

14 iii. The area under roads has been given as 7% (Para 352, page 116); another figure of 6% is given on the same page (Para 355) while Para 169 on page 64 gives the figure of 9%. This needs clarification/correction.

City's Response:

The total area under roads is 6%.

Comment 15: *Network coverage for slums households in Table 8.26 refers to which service?*

City's Response:

Network coverage for slum households refers to coverage of water supply network.

Comment 16: *The Network coverage for slum households is given as 90% for 2011 and 100% for 2016 (Table 8.26, page 125) while the figure for same aspect has been given as 70% in 2011 and 85% in 2016 under 'Goals and Services Outcomes for Water Supply' (Table 8.1 on page 98). This needs clarification/correction.*

City's Response:

The water supply network coverage for slum households is 90 % in 2011, 95 % in 2016 and 100 % in 2026.

Comment 17: *The coverage for slum households by UGD is given as 90% in 2011 (Table 8.26, page 125) while the table on 'Goals and Services Outcomes for Sewerage' give the figure of 60% (Table 8.5 on page 101). This needs clarification/correction.*

City's Response:

The coverage for slum households by UGD is 60 % in 2011, 100 % in 2016 and 100 % in 2026.

Comment 18: *A few discrepancies have been observed. These are as follows:*

- i. *In Table 8.32 on the "Projects for Sewerage" (page 130) the total given is Rs. 19,364.23 lakh. While the sum of figures comes to be Rs 19,357 lakh. This needs correction.*

City's Response:

The total estimated investment for "Projects for Sewerage" is Rs. 19,370 lakh.

- ii. *In Table 8.36 on the "Projects for Road Enhancement" (page 133) the sub-total given is Rs. 8074.75 lakh. While the sum of figures comes to be Rs. 7335.2 lakh. This needs correction.*

City's Response:

The total estimated investment for "Projects for Road Enhancement" is Rs. 7,335.2 lakh.

- iii. *In Table 8.37 on the "Projects for Traffic and Transportation" (page 133-135) the Grand Total given is Rs. 2,07,300 lakh. While the sum of figures comes to be Rs. 2,07,100 lakh. This needs correction.*

City's Response:

The total estimated investment for "Projects for Traffic and Transportation" is Rs. 2,23,111.9 lakh.

- iv. *In Table 8.38 on the "Project Costing for Street Lighting" (page 136) the total given is Rs. 2, 230.02 lakh. While the sum of figures comes to be Rs. 2,231 lakh. This needs correction.*

City's Response:

There is a correction in the cost of High Mast Lamp in the report. It is given as Rs. 103.7 lakh instead of Rs. 102.7 lakh. Hence, the total of Rs 2,230.02 lakh is correct.

Comment 19: In Table 9.3 on “Investment phasing for Road and Traffic and Transportation”(pages 140 & 141) , the total given is Rs. 22,745.2 lakh for the year 2006. While the sum of figures under the year 2006 comes to be Rs. 23,651.8 lakh. Similarly situation exists for the remaining years also. This needs correction.

City’s Response:

The corrected figures for “Investment phasing for Road and Traffic and Transportation” is given in table 7 below:

Table: Investment phasing for Road and Traffic and Transportation

Year	Total Amount <i>Rs. Lakh</i>
2006	24,792.10
2007	46,481.40
2008	51,081.40
2009	44,414.70
2010	28,942.90
2011	20,257.20
2012	7,142.90

Comment 20: In Table 9.5 on “Investment phasing for Solid Waste Management”(pages 142 & 143) the total given under the year 2007 is Rs. 4,632.7 lakh, while the sum of figures comes to be Rs. 4,632.8 lakh. The total given under the year 2012 is Rs. 358.3 while there are no figures in this column. This needs correction.

City’s Response:

The corrected figures for “Investment phasing for Solid Waste Management” is given in table 8 below:

Table: Investment phasing for Solid Waste Management

Year	Total Amount <i>Rs. Lakh</i>
2006	501.16
2007	4,775.56
2008	1,579.06
2009	430.56
2010	262.96
2011	252.96
2012	142.86

Comment 20: In Table 9.7 on “Investment phasing for Slum Infrastructure” (page 144) sum of project components is Rs. 12,632.7 lakh while the text gives Rs. 12186.6 lakh as the Corporation’s liability. This needs clarification/correction.

City’s Response:

For the improvement of slum infrastructure, an investment of Rs. 40,336.5 lakh is proposed. The Corporation’s liability will be Rs.12,186.60 lakh and the housing component, which works out to Rs. 28,149.90 lakh, which will be the liability of the TNSCB or other line agency.

The corrected figures for “Investment phasing for Slum Infrastructure” is given in table 9 below:

Table : Investment phasing for Slum Infrastructure

Water Supply	Cost in Lakh
In the year 2006	63.7
In the year 2007	63.7
In the year 2008	63.7
In the year 2009	63.7
In the year 2010	63.7
In the year 2011	63.7
In the year 2012	63.7
Road	
In the year 2006	999.0
In the year 2007	999.0
In the year 2008	999.0
In the year 2009	999.0
In the year 2010	999.0
In the year 2011	999.0
In the year 2012	999.0
Sanitation	
In the year 2006	250.90
In the year 2007	250.90
In the year 2008	250.90
In the year 2009	250.90
In the year 2010	250.90
In the year 2011	-
In the year 2012	-
Storm Water Drains	
In the year 2006	275.80
In the year 2007	275.80
In the year 2008	275.80
In the year 2009	275.80
In the year 2010	275.80
In the year 2011	275.80
In the year 2012	275.80
Solid Waste Management	
In the year 2006	39.30
In the year 2007	39.30
In the year 2008	39.30
In the year 2009	39.30
In the year 2010	-
In the year 2011	-
In the year 2012	-
Street Lighting	
In the year 2006	200.80
In the year 2007	200.80
In the year 2008	200.80
In the year 2009	200.80
In the year 2010	200.80
In the year 2011	200.80
In the year 2012	200.80

Housing – TNSCB

In the year 2006	4021.40
In the year 2007	4021.40
In the year 2008	4021.40
In the year 2009	4021.40
In the year 2010	4021.40
In the year 2011	4021.40
In the year 2012	4021.40

Comment 21: In view of the above corrections the summarised Table 9.9 on ‘Component wise phasing’ (page 145) will also require revision.

City’s Response:

The corrected figures for “Component-Wise-Investment” is given in table 10 below:

Table: Component-wise Investment

Corporation Investment

S. No	Sector	Capital Expenditure (Rs. Lakh)
1.	Water Supply	7,637.1
2.	Sewerage & Sanitation	19,370.0
3.	Roads	9,561.9
4.	Traffic and Transportation	69,950.0
5.	Storm Water Drains, Desilting of Natural Drains & Water Body restoration	15,575.06
6.	Solid Waste Management	7,874.3
7.	Street Lighting	2,230.0
8.	Slum Up gradation	12,186.6
9.	Others	2,529.6
Sub-Total (Corporation Investment)		146,914.5

Non-Municipal Infrastructure

S. No	Sector	Capital Expenditure in Rs. Lakh
1.	Traffic Management – National & State Highway	143,600.0
2.	Housing – Tamil Nadu Slum Clearance Board	28,149.9
Sub-Total (Other Agency Investment)		1,71,749.9
Grand Total		3,18,664.5

Comment 22: In Table 9.12 the fall in collection performance from 100% (Base case scenario) to 90% (in case of Investment scenario) needs to be explained.

City's Response:

The observed trend during assessment work is 100 % collection of sewerage charges. Hence, in the base case scenario ("do nothing" / no projects) the same has been presented. However, in the investment scenario, assuming a collection drive / implementation of the reform agenda combined with a more realistic assumption, collection efficiency of 90 % is adopted.

The CDP is now in accordance with the guidelines provided in the JNNURM Toolkit Number 2.