

## **EXECUTIVE SUMMARY**

The need for this revised City Development Plan emerges in view of the recent expansion of the city wherein four Grade III Municipalities, two Town Panchayats and five Village Panchayats were merged with the erstwhile Erode Municipality to form the Erode City Municipal Corporation (ECMC) and the need for a comprehensive holistic Vision and strategic Plan for compliant with the requirements outlined under the toolkit for preparation of revised CDPs formulated under the Jawaharlal Nehru National Urban Renewal Mission (JnNURM) by the Ministry of Urban Development (MoUD), Government of India (GoI).

The Ministry of Urban Development (MOUD), Government of India (GOI) is proposed to include the Erode Corporation in its Jawaharlal Nehru National Urban Renewal Mission (JNNURM) programme. Now the Corporation proposes to prepare a City Development Plan (CDP) for the erstwhile corporation and including the expanded areas in the JNNURM programme and for signing an MOA with MoUD under JNNURM.

### **About the City**

Erode district is located in the western part of Tamil Nadu. Erode District was formed in 1996 before which it was known as Periyar district. Earlier to that till September 1979, Erode was part of Coimbatore District. Erode District is one of the industrialized districts of the state of Tamil Nadu.

Erode is the head-quarter of Erode District. Rapid increase in the economic and industrial activities, population growth, rise in per capita incomes and other such urban factors have resulted in the formation of the Urban Agglomeration areas of Erode City, thereby compelling the expansion of Erode Corporation to include nearby Municipalities/Town Panchayats/Village Panchayats into its jurisdiction.

The town was constituted as a Municipality in the year 1871 and was elevated to Special Grade during the year 1980 and upgraded as Corporation by merging Four (4) grade III municipalities Two (2) Town Panchayat and Five (5) Village Panchayats. The total area of the Corporation is 109.52 sq.km. It has been divided into four zones, which consist of 60 wards.

### **City Economy**

Erode is well known for handloom, powerloom textile products and readymade garments and hence it is called Loom City of India or Texvalley of India. Erode is also known as “The Turmeric City” or “Yellow City”. Erode is the largest producer of turmeric in the state and has one of the largest markets for coconut. It is famous also for rice cultivation and oil mills, as well as for dairy products. It is also one of the largest coconut oil producers in south India. Sugarcane and floriculture are an important source of income to the people.

### **Demography & Population Projections**

As per Census of India 2011, ECMC had a population of 4.98 lakhs. The future requirements (i.e. for short, medium and long term) in terms of level of services and infrastructure across all sectors is made by adopting the population projections done for

‘Dedicated Water Supply Scheme’ for ECMC. The population projections as per DPR prepared for the Dedicated Water Supply Scheme is represented in the table below;

Year	2011	2015	2030	2045
Population	498121	5,35,000	7,00,000	9,05,000
CAGR		1.8%	1.8%	1.8%

Adopting the same CAGR of 1.8%, the population has been projected for the horizon year of short, medium and long terms i.e. 2017, 2024 & 2042 respectively as shown in the table below:

Plan	Base Year	Short	Medium	Long
Year	2012	2017	2024	2042
Projected Population	507,100	554,000	628,300	866,400
CAGR		1.8%	1.8%	1.8%
Projected Population of Erstwhile Erode + 4 Municipalities	416,218	438,267	471,111	592,246
Other area	90,882	115,733	157,189	274,154

### City Assessment: Sector wise Analysis & Growth Strategies

The status of various infrastructure components of the city in terms of the major issues faced and the corresponding growth strategies identified for the short and long term period of CDP is as below:

#### Water Supply

**Issues:** The major issues are absence of an integrated water supply system, declining ground water levels, increased expenditure and power consumption, ground water pollution, etc.

**Goals:** The major goals are to create 100% water supply network within ECMC area, minimize the system losses, achieve 100% metered connections as well as to create sufficient storage for treated water.

**Strategies:** To achieve the above goals, the strategies adopted shall include tapping of raw water from a pollution free source, continuous monitoring to ensure minimal losses, to carry out water audit programs regularly, ensure 100% collection of water charges and create alternative sources of water like through rain water harvesting technique.

#### Sewerage & Sanitation

**Issues:** The major issues are absence of UGSS, no sewage treatment facility, lack of adequate public conveniences, nearly 1/4<sup>th</sup> of the population doesn't have individual toilet facility, etc.

**Goals:** The major goals are to create 100% coverage of sewerage network within ECMC area, create 100% treatment capacity, develop a disposal quality monitoring system, aim for zero defecation status and adopt sustainable waste water management practices.

**Strategies:** To achieve the above goals, the strategies adopted shall include preparation of integrated city sanitation plan for ECMC, construct sewerage treatment plant, create public awareness, and interception and diversion of Perumapllam Odai and Petchikaranpallam Odai under National River Action Plan (NRAP) and pumping of untreated sullage to Lakkapuram for treatment works.

### **Storm Water Drainage**

**Issues:** The major issues are problems of water logging, pollution in the Perumapllam Odai, major portion of coverage consisting of open drains, discharge of debris and solid waste in open drains and culverts causing blockage, etc.

**Goals:** The major goals are to effectively manage urban watershed to prevent flooding and promote water resources conservation and preservation.

**Strategies:** To achieve the above goals, the strategies adopted shall include upgradation and renovation of existing drains, public awareness to prevent throwing of garbage into the drains and detailed design for storm water drainage of low lying areas.

### **Solid Waste Management**

**Issues:** The major issues are the non-segregation of waste at sources including hospital waste, low coverage of door to door waste collection, inadequate equipments and manpower, unscientific disposal of Bio-medical waste and un-engineered dumping to name the few.

**Goals:** The major goals are to create environmentally sustainable waste management system, 100% efficiency of collection system, recycling and reuse of segregated waste and bio-medical waste management.

**Strategies:** To achieve the above goals, the strategies adopted shall include segregation and storage at source, systematic waste collection, transportation and disposal, minimum exposure of waste & avoid multiple & manual handling and s Scientific Waste Disposal facility, as per the MSW Rules, 2000 to name the few.

### **Roads & Transportation Planning**

**Issues:** The major issues are the inadequate road network coverage, absence of proper road hierarchy in existing road network, encroachments along the main roads, poor condition of roads, absence of footpath, parking, etc.

**Goals:** The major goals are to improve accessibility in the city, create hierarchy of road network and smooth traffic flow within the ECMC area.

**Strategies:** To achieve the above goals, the strategies adopted shall include improvisation of road surface and undertaking regular maintenance, develop new roads / improve earthen roads to BT roads (expanded areas), improve mobility and efficiency of road network by developing new link roads, improving traffic junctions, and introducing proper traffic management systems, identify & prioritize major junctions for interventions like Flyovers, Sub-ways, Foot Over-bridge and create adequate parking in the ECMC area through PPP approach.

### **Financial Performance of ECMC**

The capital account reveal a deficit for every year of the review period which shows Capital investments are happening consistently and capital expenditure is exceeding the capital income consistently. Even the revenue account shows a deficit over the review period except for the last year. It is inferred that ECMC has substantial reserves to cater to the extra spending in both the accounts.

Sr. No.	Items	2007-08	2008-09	2009-10	2010-11	2011-12
		Rs.Crores				
I	Revenue Account					
i	Revenue Income	26.13	28.13	28.04	37.15	65.44
ii	Revenue Expenditure	30.12	37.11	35.48	40.91	51.11
	<b>Surplus/deficit</b>	<b>-3.99</b>	<b>-8.98</b>	<b>-7.44</b>	<b>-3.76</b>	<b>14.33</b>
II	Capital Account					
i	Capital Income	43.46	60.09	79.05	101.51	83.88
ii	Capital Expenditure	81.13	97.19	107.64	123.64	105.82
	<b>Surplus/deficit</b>	<b>-37.67</b>	<b>-37.1</b>	<b>-28.59</b>	<b>-22.13</b>	<b>-21.94</b>

The capital account Income has swollen from Rs.43.46 crores to Rs. 83.88 crores at an average growth rate of 20% during the review period whereas the capital expenditure has grown from Rs. 81.13 crores to Rs. 105.82 crores at an average growth rate of 8% over this period. The Capital Utilization Ratio has remained well above 1 during the review period.

The Revenue income of ECMC has grown to a level of Rs 65.44 crores (unaudited figures) from Rs 21.65 crores during the review period at an average rate of 28.5% whereas the revenue expenditure has increased from Rs 30.12 crores in financial year 2007-08 to Rs. 51.11 crores (unaudited figures) in financial year 2011-12 at an average rate of 15%. The revenue account shows a surplus in year 2011-12 which may be attributed to the increase in revenue base after the extension of ECMC limits.

### Stakeholder's Consultation & Visioning Exercise

The Stakeholders meeting was attended by more than 30 stakeholders of the city which included representatives from various departments of the civic body, traders, and representatives of industry and community welfare organizations.

Strategic visioning exercise was also conducted by asking the participants to (1) identify the vision and plans for their city; (2) challenges that hinder the implementation of the vision and plans; and (3) possible solutions to these challenges. The following responses emerged during the visioning exercise:

- Accessibility to infrastructure services – the basic issue (Regulated water supply, underground sewerage/drainage system, affordable housing etc.)
- Improved Road networks with adequate parking
- Major challenge is to plan the extended areas
- Involvement of Private sector for infrastructure services
- Finalize Long Term Vision and Action Oriented Plans

### SWOT Analysis: Current Status of the City

Strengths	Weakness
<ul style="list-style-type: none"> <li>• Good Connectivity: Road and Rail</li> <li>• Highly urbanised</li> <li>• Rich Agricultural Resource base</li> <li>• Excellent industrial base: textile &amp; leather</li> <li>• Trade centre</li> </ul>	<ul style="list-style-type: none"> <li>• Congestion in inner areas</li> <li>• Inefficient Traffic Management</li> <li>• Inadequate service levels - water supply</li> <li>• Absence of underground sewerage system</li> <li>• Polluting industries in the extended areas (textiles and tanneries)</li> </ul>

	<ul style="list-style-type: none"> <li>Frequent power cuts causing disruption to municipal services &amp; industries</li> </ul>
<b>Opportunities</b> <ul style="list-style-type: none"> <li>Potential for trade/ Agro processing/ Logistics (Due to connectivity)</li> <li>Improving Municipal finance</li> <li>Introducing balance of projects for Infrastructure/Environment / Non- polluting industries</li> </ul>	<b>Threats</b> <ul style="list-style-type: none"> <li>Presence and Enlargement of slums</li> <li>Lack of quality work force</li> <li>Lack of sufficient employment opportunity</li> </ul>

Various **growth drivers** that would impact the Future growth of ECMC are as follows:-

- Coimbatore – Erode- Salem Industrial Corridor
- Coimbatore – Erode- Salem Expressway
- Perundurai SIPCOT Industrial Park

### Vision

**To develop Erode as the Regional Hub catering to the requirements of textile, agro-processing, trade and commerce, wholesale etc.**

### Capital Investment Plan (CIP) & Priority Projects

The total estimated Capital Investment requirement for the medium term for providing efficient infrastructure and services for the population of Expanded ECMC by 2024-25 is **Rs. 2123.52 Crores**. The table below presents the summary of Sector-Wise Investment requirement for the Core Service Sectors.

S.No.	Sectors	Total Investments		Investments (in Rs. Crores)											
		%	Rs. Crores	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
				Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12
1	Water Supply	18.9%	401.2	39.3	98.1	98.1	117.8	39.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2
2	Sewerage & Sanitation	14.7%	312.8	86.0	39.6	30.7	2.9	2.9	26.5	26.5	26.6	35.6	35.5	-	-
3	Roads & Transportation	41.2%	875.5	56.3	90.1	88.9	89.4	86.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4
4	Storm Water Drains	11.3%	240.3	31.3	38.8	38.8	38.8	38.8	1.1	1.1	1.1	1.1	1.1	1.1	1.1
5	Solid Waste Management	2.8%	58.8	8.2	16.2	15.0	9.2	3.0	0.5	4.2	0.5	0.5	0.5	0.5	0.5
6	Street Lights	1.9%	39.9	0.2	6.2	1.1	1.1	1.1	1.5	1.5	1.5	1.5	1.5	1.5	1.5
7	Basic Infrastructure Facilities for Notified Sl	1.4%	30.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
8	Urban Environment	1.8%	39.0	-	26.5	12.5	-	-	-	-	-	-	-	-	-
9	Social Infrastructure	0.6%	11.8	0.9	0.6	4.1	0.6	0.6	1.1	1.1	1.1	1.1	0.6	-	-
10	Heritage & Tourism	0.4%	8.5	0.1	0.4	2.2	2.0	1.1	0.9	1.1	0.4	0.1	0.1	-	-
11	Urban Governance, Capacity Building & Poli	0.1%	8.0	3.3	1.8	1.0	1.0	1.0	-	-	-	-	-	-	-
12	Commercial & Industrial Infrastructure	4.6%	97.7	-	20.4	23.2	38.6	15.4	-	-	-	-	-	-	-
	<b>Total Investment (Rs. Crores)</b>	<b>100.0%</b>	<b>2,123.52</b>	<b>228.5</b>	<b>341.6</b>	<b>325.2</b>	<b>311.0</b>	<b>199.1</b>	<b>108.3</b>	<b>112.3</b>	<b>181.4</b>	<b>117.1</b>	<b>116.5</b>	<b>77.3</b>	<b>77.3</b>

The identified projects have been prioritized based on the importance of their immediate requirement and the prevailing condition of the area under study. Each sector has been ranked in the table below in order of their priority.

Sectors	Rank	Investments (Rs.Crores)
Water Supply	1	401.2
Urban Environment	2	39.0
Roads & Transportation	3	875.5
Sewerage & Sanitation	4	312.8
Storm Water Drains	5	240.3
Street Lights	6	39.9
Urban Governance, Capacity Building & Policy Studies	7	8.0
Social Infrastructure	8	11.8

Basic Infrastructure Facilities for Notified Slums	9	30.0
Heritage & Tourism	10	8.5
Commercial & Industrial Infrastructure	11	97.7
Solid Waste Management	12	58.8

### Financial Operating Plan (FOP)

The Financial and Operating Plan (FOP) models future investment needs; income and expenditure projections to evaluate and assess long-term financial sustainability, potential areas for improvement in revenues and investment capacity of the ULB with focus on assessing investment capacity of the ULB for the short / medium term.

The FOP is generated for the sustainable investment while also incorporating availability and adequacy of internal revenues to cater to the additional Repair and Maintenance works that would arise out of the proposed Capital Investment.

The funding for the entire identified investment of **Rs. 2123.52 Crores** as worked out in the FOP model would be by way of:

For projects under JnNURM ((WS,UGSS (Phase-II) & Sanitation, SWD, SWM, heritage & Urban Governance):

- JnNURM Grants Rs. 715 Crores (80%)
- State Government Rs. 089 Crores (10%)
- ECMC/ULB Contribution Rs. 089 Crores (10%)

For UGSS project (Phase-I):

- TNUDF Loans Rs. 46.0 Crores (34.0%)
- Grants Rs. 50.0 Crores (36.42%)\*
- ECMC/ULB Contribution Rs. 40.0 Crores (29.58%)

\*Grants includes KfW Grant of 30%, Additional Grant of 4.7% and LPA grant of 1.72%

Funding structure (Roads, Street light, Basic Infra for slums, Urban Environment, Social Infrastructure)-TNUDF Funding:

- TNUDF Loans Rs. 598.0 Crores (60.0%)
- Grants Rs. 299.0 Crores (30.0%)
- ECMC/ULB Contribution Rs. 100.0 Crores (10.0%)

Funding structure for commercial and industrial infrastructure;

- Loans Rs. 88.0 Crores (90.0%)
- Grants Rs. 00.0 Crores (00.0%)
- ECMC/ULB Contribution Rs. 10.0 Crores (10.0%)

Since the FOP provides a sustainability level of only **55%**, the funding at sustainable level for the entire identified investment comes to around **Rs. 1167.9 Crores**.