

Appraisal of City Development Plan Ambarnath

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Appraisal of City Development Plan: Ambernath

The City Development Plan (CDP) of Ambernath Municipal Council (AMC) has been prepared by AMC and provides details of objectives of the CDP, stakeholder consultations, profile of the Ambernath city, population and water demand scenario, existing infrastructure & system analysis, urban poverty, social development & slum upgrading, proposal for city development, institutional review and financial review.

1. Stakeholder Consultations

Various communities as well as non-governmental organizations (which may broadly called as 'stakeholders) were consulted in developing the CDP. A series of meetings were conducted for understanding the priorities of various groups, which mostly emphasized on better delivery of municipal services and also augmentation of the existing infrastructure. These groups are as follows:

Organizations-

- Rotary Club
- Lions Club
- Inner wheel Club
- Senior Citizens group

Professionals-

- Medical Professionals
- Chartered Accountants
- Journalists
- Architects
- Engineers
- School teachers & Faculties from Jr. and Degree Colleges

Associations-

- Kalyan Ambarnath Manufacturers Associations
- Additional Ambarnath Manufacturers Association
- Vyapari Mandal(Traders' Associations)
- Auto Richshaw Union

2. Population

As per Section 2.5.1 and Table II .2 of the CDP, the decadal growth rate for AMC has remained about 60% except for the period 1981-91 where the growth rate was registered on lower side.

Year	Population	Decadal Growth	
		Numbers	Percentage
1961	36737	-	-
1971	58797	22060	60.05
1981	100537	41740	70.99
1991	127665	27128	26.98
2001	203804	76139	59.64

The population projections for AMC area have been carried out by 5 standard methods. The projections carried out by Graphical Trend Method have been proposed as the projections carried out by Arithmetic Increase Method and Incremental Increase Methods were on lower side. In view of the declining decadal growth rates of AMC, the proposed Graphical Trend Method for working out the population projections seems to be appropriate.

Method of Projection	Year		
	2011	2021	2031
Arithmetic Increase Method	245571	287338	325104
Geometric Bores Method	308106	465788	704169
Incremental Increase Method	263597	341417	437262
Graphical Trend Method	306000	428000	556000
Geometric Ratio Method	314705	485952	750384

3. Water Supply:

As per Section 3.4 of the CDP, the existing water supply to Ambarnath city is 39 MLD. However, 125 lpcd is the available water for the citizens of Ambarnath, which is slightly less than the norms of CPHEEO. It may drop down to 64 lpcd if no sources are developed in future.

This is true that the deficit between the available water supply and demand would increase due to increase in population. It has been indicated in the CDP that deficit of 4 MLD in the year 2006 would increase up to 13.39 MLD in 2011, 46.24 in 2026 and 58.61 in 2031.

Keeping in view the future demand, the Maharashtra Jeewan Pradhikaran has identified Poshir dam as a source of water and prepared project identification report in which 70 MLD water supply has been considered from Poshir to Ambarnath. The share of AMC towards total project cost for this service is Rs. 82.00 crores. This proposal of Poshir dam project is under consideration. For projected population of 2031, the additional demand would be met through Poshir dam project.

Thus, the proposed project seems to be quite essential for Ambarnath city. The water sector investment, worked out in the CDP, is Rs.1269.43 million and Rs. 90.54 million in Phase I and Phase II of the project, respectively.

4. Sewage System:

The existing sewage collection and conveyance system has been designed for 1, 65,000 population with sewage flow of 31.13 MLD. The connectivity at property level is poor, large part of Ambernath is un- severed and existing sewage plant is not under operation.

It has been indicated in the CDP that the sewerage system proposed by the EMCON consultant has not yet been executed so far and all the sewage from the un served areas is being discharged in open nallas. Therefore it is essential to provide sewerage system and treatment to cover the entire Ambernath city. The summary of Sewerage zones and diameter wise length of Sewers given by EMCON consultant has been presented in Table IV.11 of the CDP.

The Sewerage Sector Investments for Phase I and Phase II of the project are Rs. 711.82 millions and Rs. 189.88 millions, respectively.

5. Solid Waste Management (SWM):

The total amount of waste generated in Ambernath is about 75MT per day at an average of about 300 gpcd. The collection efficiency is about 75%. In Ambernath East, the solid waste is collected from houses and is deposited at a predetermined location from where it is carried to land fill site through trucks. However, there is no door-to-door collection system in Ambernath west. Individual household dispose off their solid waste in near disposal location/bins in their locality from where it is picked by vehicles.

In view of the above existing situation, the CDP suggests following measures:

- Door to door collection system needs to be started in Ambernath West.
- Citizens should be educated on best practices in solid waste disposal.
- Covered vehicles and compactors may be used for transportation of solid waste.
- Vermi- composting facility needs to be commissioned in a scientific way.
- The landfill site needs to be developed with proper infrastructure adhering to CPHEEO manual, MSW regulation 2000 and Supreme Court guidelines.

The aforesaid suggestions seem to be imperative keeping in view the prevailing situation of SWM. The estimated investment requirements in Solid Waste Sector have been worked out as Rs. 52.00 millions and 20.00 millions in Phase I and Phase II, respectively.

6. Urban Poverty, Social Development & Slum Upgradation:

As per survey conducted by AMC in 2006, there are 11244 families are living below poverty line. Out of 52446 persons living below the poverty line, 24437 are females and 28029 are males.

According to Census 2001, the slum population of AMC was 78670, which constitutes 38.60% of total population. There are 52 slum pockets in AMC area.

AMC has been implementing slum and settlement upgrading and improvement of slum area programme successfully for last many years. The process adopted for provision of all amenities is formulated by AMC as per guidelines of the Central Government and state government.

In the process of City vision and while formulating the CDP, AMC has carried out exclusive survey that revealed the need to plan different strategies for rehabilitation of slum dwellers in an adequate and safe shelter as per BSUP under JNNURM.

Some major objectives of the proposed project are:

- Redevelopment and rehabilitation of selected slums in the city;
- Providing affordable, safe, self owned and adequate shelter to urban poor;
- Providing integrated basic services and civic amenities simultaneous;
- Upliftment and improvement of living conditions of the urban poor;
- Creating the housing stock in the city, etc.

The total estimated cost of Rs. 238.48 Crore for house construction and infrastructure development on page 72 of the CDP.

7. Proposal for City Development:

The sectors involved under the CDP are water, sewerage, storm drainage, roads, streetlights and solid waste managements. Sector wise investment estimates have been given in this section. All proposed projects have been divided into two phases – Phase I i.e upto the year 2016 and Phase II i.e. upto the year 2026. The total investment requirement is about Rs. 4564 million. The project wise summary of capital investments has been presented in the following table:

(Rs. Million)				
Sr. No.	Sector	Amount Phase I	Amount Phase II	Total Investment Required
1	Water Supply	1269.43 (31.87)	90.54 (15.57)	1359.97 (29.79)
2	Sewerage	711.82 (17.87)	189.88 (32.65)	901.70 (19.75)
3	Storm Water Drainage	410.00 (10.29)	-	410.00 (8.98)
4	Roads and Street Lights	1439.50 (36.14)	281.00 (48.32)	1720.50 (37.69)
5	Solid Waste Management	52.00 (1.30)	20.00 (3.43)	72.0 (1.57)
6	Other Municipal Projects	100.00 (2.51)	-	100.00 (2.19)
	Total	3982.75 (100.00)	581.42 (100.00)	4564.17 (100.00)

Figures in parentheses are the percentages.

It may be seen from the above table that the top priority has been given to Roads and Streetlights (38 percent of the total cost of Rs.4564 million), followed by Water Supply, Sewerage, Storm Water, Solid Waste Management etc.

8. Institutional Arrangements:

The AMC is responsible for providing almost all services viz. water supply, sewerage, storm water drainage, solid waste management, slum improvement, construction and maintenance of city roads, provision and maintenance of streetlights, land use planning, parks and open spaces, primary education and health services. AMC does not provide public transport. The role and responsibilities of AMC and other organizations / departments for providing urban services to the citizens of Ambarnath has been given in Table VII.1 of the CDP.

9. Financial Review:

This section on Financial review of the CDP covers all main components of revenue income, revenue expenditure and surplus revenue for last 5 years; capital receipts and capital expenditure for last 5 years; revenue improvement measures; financial projections; revenue improvement measures sustainability of investment etc.

It may be noted that the revenue expenditure is growing at a CAGR of 11.70%, which is much higher than the CAGR of 2.60 % of the revenue income as. As a result, the surplus in revenue account has declined from Rs. 949.03 lakh in 2001-02 to Rs. 338.86 lakh in the year 2005-06. The marginal growth in revenue income (2.60 %) of the AMC might become a serious constraint for AMC for raising the money from external sources. Hence, it may be suggested that the AMC should take some measures to enhance its revenue income.

On the other hand, the annual capital expenditure has decreased from Rs. 569.49 lakh in 2001-02 to Rs. 471.34 lakh in 2005-06, which might indicate that the AMC was not having many capital expenditure, plans because there was annual surplus even after funding of entire capital expenditure from the internal sources.

Section 8.9 of the CDP indicates that the financial projections have been calculated for 7 years i.e. from 2006-07 to 2012-13 (Table VIII.18 of the CDP) on the basis of past trends, base and basis, collection efficiencies and revenue enhancement plan of the AMC. It may be noted that **the revenue collected from the property tax was Rs. 392.33 in the year 2006-07 which jumped to Rs.618.66 lakhs in 2007-08**, showing an increase of 58 percent (Table VIII. 18). This dramatic hike in the property tax collection has not been explained in the section.

Based on this revenue income, expenditure and surplus has been estimated keeping in view the debt servicing of existing term loans. The investment sustainability has been assessed assuming that the AMC shall adopt the financing pattern as per JNNURM

guidelines i. e. 90% grants and 10% contribution through internal resources or term loans. The sustainable investment level has been determined by assuming Debt Service Coverage Ratio (DSCR = Net Operating Income/ Total Debt Service).

During the period from 2006-07 to 2012-2013, the average revenue surplus of Rs. 827 lakhs has been worked out at current prices. The incremental debt-servicing capacity of the AMC has been worked out as 16% **per year**, assuming that the 40% of the annual revenue surplus would be available for debt servicing.

One draw the inference from the above analysis that the financial performance of the AMC is not very good but the debt- servicing capacity is 16%, which may be considered quite high. In other words, the AMC can avail loans to meet the prescribed requirement of the local body contribution of 35% of the City Investment plan.

The CDP of Ambernath Municipal Corporation has been prepared according to the JNNURM Toolkit No. 2.

