
Part III

IMPROVING CIVIC SERVICES

IMPROVING CIVIC SERVICES

Providing Civic Services for the well being of its citizens is an obligatory function of the Local bodies. The core Civic Service are water supply, roads, streetlights, sewerage and sanitation, storm water drains and solid waste management. Fixing norms for the above services is a complex task as it depends on variables like the fiscal capacity of the local bodies, topography of the area, technology opted for etc; therefore, a given set of norms is at best a good guideline. Various studies have been undertaken as early as 1963 by Zakaria Committee until the recent one made by Working Group III on Expenditure norms, sponsored by the Ministry of Urban Affairs and Employment, Government of India during November '95 headed by the noted economist Dr.Raja Chelliah. Previous studies have mostly concentrated in urban areas though some of them did highlight the service levels in the rural areas too; some provided physical standards, others worked out the financial implications, both for capital expenditure and Operation and Maintenance. It may be pertinent to note that Damodaran Committee, constituted by Government of Tamilnadu in 1990, did look into the maintenance of roads, hand-pumps and the replacement of tubelights for the rural local bodies. Besides, the Sector Policy Study commissioned by TWAD Board in 1994 did look into the long term goals in source development, project financing, cost recoveries and issues of Operation and Maintenance.

The SFC had arranged to take sample local bodies basing on certain economic characters and geographical features over 12 districts covering 4 Corporations, 10 Municipalities, 25 Town Panchayats, 38 Panchayat Unions and 100 Village Panchayats. The methodology adopted were structured questionnaires, field visits and informal discussions with the officials and the local citizens. The service level indicators generated through this study were compared with the universal figures available with various line agencies on services such as water supply (except village panchayats) roads, storm water drains (except in village panchayats) and streetlighting. Based on the norms and forecast of population by the year 2002, the quantum of service required had been estimated. Comparing with the existing levels, the service gaps have been assessed. Depending on the technology used, the unit cost were arrived and by multiplying the same with the gaps in services, the investment requirements have been worked out. In doing so, various assumptions have also been made, for example in Corporation and Municipalities, the solid waste collection will be done everyday except for the internal roads where it has to be done every alternate days. Similarly, the patch work maintenance of roads will be done once in two years and re-surfacing once in every six years. Based on the sample study of the task force universal figures available, past studies of the expert groups with regard to expenditure norms, the following conclusions have been drawn for a period of five years upto 2002, at the existing (1995-96) price level:

VILLAGE PANCHAYATS:

1. The existing (1995-96) Population of Village Panchayat of 350.51 lakhs is expected to go up to 378.28 lakhs by 2002. The civic service needs have been assessed accordingly. [Table 3.24]
2. In **Water Supply**, the per-capita supply would increase from the existing level of 22 litres to 40 litres per person per day. [Tables 3.25/26]

3. 5% of the population would be covered through House Service Connection, 50% through Stand-posts and the remaining 45% through Hand-pumps. [Table 3.26]

4. For providing the above service levels, a capital investment of Rs.198.24 crores over a period of 5 years will be needed. [Table 3.27]

5. The O&M needs for the existing assets in Water Supply would be Rs.78.45 crores per year by 2002. [Table 3.62]

6. Under **Sewerage and Sanitation**, the coverage will increase from the existing 3% to 20% by 2002. This would include population covered with underground drainage, low cost sanitation and public convenience. [Tables 3.28/29]

7. For the above, a Capital Investment of Rs.257.46 crores will be needed by 2002. [Table 3.32]

8. The O&M needs for the existing assets will be Rs.47.72 crores per year by 2002. [Table 3.62]

9. Under **Solid Waste Management**, the collection performance to waste generated would be increased from 0% to 15%. [Table 3.33/34]

10. To improve the above service level, a capital investment of Rs.22.40 crores will be required over a period of five years. [Table 3.37]

11. The O&M needs for the maintenance of the assets existing for the Solid Waste Management in the Village Panchayats would be in the tune of Rs.20.62 crores a year by 2002. [Table 3.62]

12. Among the Village **Roads**, 20% would be covered with BT and another 25% through WBM in the next five years. The existing levels are 15% and 16% respectively. [Table 3.38/39]

13. This would need a Capital Investment of Rs.619.39 crores by 2002. [Table 3.42]

14. The O&M needs for the existing assets would be Rs.157.15 crores per year at the end of the 5th year. [Table 3.62]

15. Under **Storm Water Drains**, percentage of length of Road to be covered with Pucca Open Drains would be increased from 1.5% to 10%. [Table 3.38/39]

16. For the above, the Capital Investment required would be Rs.191.56 crores over a period of 5 years. [Table 3.42]

17. The O&M needs for the existing assets under Storm Water Drain would be Rs.3.08 crores per year by 2002. [Table 3.62]

18. Under **Streetlighting**, the distance between 2 posts would be reduced from 121 to 80 metres. The coverage of tubelights would be around 98%. [Tables 3.43/44]

19. The Capital Investment to achieve the above level of service by the year 2002 would be Rs.150.52 crores. [Table 3.47]

20. The O&M needs for the existing assets per year at the end of 5th year would be Rs.73.75 crores. [Table 3.62]

21. The **Total Capital Investment** for the above six core civic service would be Rs.1439.57 crores over a period of 5 years. This works out to Rs.76.10 **per-capita** per year. [Table 3.48]

22. The **Total O&M requirements for the existing assets** to be maintained at a normative level would be Rs.380.77 crores by the end of 2002. It would mean a **per-capita** maintenance of Rs.100.66. [Table 3.60]

PANCHAYAT UNIONS:

23. The present **Population** of 350.51 lakhs is likely to go up to 378.28 lakhs in the 384 Panchayat Unions of the State by 2002. [Table 3.24]

24. Of the existing **Roads** of the Panchayat Unions, 19% is covered with BT. This is proposed to be raised to 30% by 2002. [Tables 3.38/39]

25. For the above, a Capital Investment of Rs.756.79 crores would be needed over a period of 5 years. That would work out to per-capita of Rs.40/- per year. [Table 3.42]

26. The O&M needs for the existing Roads will be Rs.78.06 crores per year by 2002. This would work out to Rs.20.64 per-capita per year. [Table 3.62]

TOWN PANCHAYATS:

27. The **Population** covered would increase from the existing level of 92.51 lakhs to 99.84 lakhs by 2002. [Table 3.24]

28. In case of **Water supply**, the supply level would improve to 55 Litres Per capita per day from the existing 34 Litres Per capita per day. [Tables 3.25/26]

29. 30% of the Population would be covered through House Service Connection, another 50% through Stand-post and remaining 20% through Hand-pumps. [Table 3.26]

30. For reaching the above service level, the Capital Investment required will be Rs.133.39 crores over a period of five years. [Table 3.27]

31. The O&M needs for the existing assets at 2002 would be Rs.40.17 crores per year. [Table 3.62]
32. Under **Sewerage and Sanitation**, the coverage of population will go up from 17% to 30%; 20% under low cost sanitation and 10% under public convenience. [Table 3.28/29]
33. For this, the Capital Investment required will be Rs.100.97 crores over a period of 5 years. [Table 3.32]
34. The O&M needs for the existing assets will be Rs.12.59 crores per year by 2002. [Table 3.62]
35. Under **Solid Waste Management**, the Collection Performance would go up from 46% to 50%. [Table 3.33/34]
36. For this, the Capital Investment required would be Rs.18.75 crores. [Table 3.37]
37. The O&M needs for the existing assets by 2002 would be Rs.24.59 crores. [Table 3.62]
38. Under **Roads**, 40% would be covered with BT and another 40% with WBM by the year 2002. [Table 3.39]
39. For the above, a Capital Investment of Rs.153.34 crores will be required for the next five years. [Table 3.42]
40. The O&M needs for the maintenance of existing Roads at a normative level would be Rs.31.07 crores per year by 2002. [Table 3.62]
41. Under **Storm Water Drains**, 40% of the length would be pucca open. The existing level is around 23% [Table 3.38/39]
42. For the above, the Capital Investment required upto 2002 is Rs.49.12 crores. [Table 3.42]
43. The O&M needs for the existing assets at a normative level by 2002 would be Rs.3.01 crores a year. [Table 3.62]
44. Under **Streetlighting**, the distance between the posts would be reduced from 62 metres to 40 metres by 2002. [Tables 3.43/44]
45. For this, the Capital Investment required would be Rs.49.90 crores over a period of 5 years. [Table 3.47]

46. The O&M needs for the maintenance of existing assets will be Rs.19.72 crores per year at the end of 5th year. [Table 3.62]

47. The **Total Capital Investment** for the above services will be Rs.505.46 crores over a period of 5 years. That would work out to Rs.101.25 **per-capita** per year. [Table 3.48]

48. The **Total O&M requirements for the maintenance of existing assets** in all the core civic services would be Rs.131.57 crores a year at the end of 2002. That would mean Rs.131.36 **per-capita**. [Table 3.60]

MUNICIPALITIES:

49. All the 103 Municipalities in the State cover a **Population** of 76.89 lakhs at the moment. This is likely to increase to nearly 83 lakhs by 2002. [Table 3.24]

50. The present **Water Supply** level is 48 litres per capita per day. This will increase to 70 Liters per capita per day. [Tables 3.25/26]

51. From the present level of 32% to nearly 70% of the population are likely to be covered through House Service Connection. [Tables 3.25/26]

52. To reach the above service level, a Capital Investment of Rs.168.78 crores is required over a period of 5 years. [Table 3.27]

53. The annual cost of Operation and Maintenance for the existing assets of Water Supply at a normative level would be Rs.51.66 crores a year by 2002. [Table 3.62]

54. Under **Sewerage and Sanitation**, the present coverage is 23%. It is expected to increase to 50% by 2002 either with underground drainage, low cost sanitation and through public convenience. [Tables 3.28/29]

55. To achieve the above service level, a capital investment of Rs.414.74 crores will be required over a period of five years. [Table 3.32]

56. The Operation and Maintenance Cost for the existing assets at the normative level will be Rs.38.48 crores a year by 2002. [Table 3.62]

57. Under **Solid Waste Management**, the Collection Performance would be improved from the present level of 70% to 90% by 2002. [Tables 3.33/34]

58. For the above, a capital investment of Rs.25.91 crores would be needed over a period of five years. [Table 3.37]

59. The Operation and Maintenance cost for the existing assets by 2002 would be Rs.95.33 crores a year. [Table 3.62]

60. For the total **Road** length in the Municipalities, 69% are to be covered with BT. This will be improved to 100% by 2002. [Tables 3.38/39]

61. For the above, a capital investment of Rs.99.43 crores will be required over a period of 5 years. [Table 3.42]

62. The O&M needs for the existing assets will be Rs.59.56 crores per year by 2002. [Table 3.62]

63. Of the **Storm Water Drains**, 70% would be pucca open and 10% pucca closed by 2002. The existing level is around 53% pucca open only. [Tables 3.38/39]

64. For the above, a capital investment of Rs.157.28 crores will be required over five years and the Operation and Maintenance needs for the existing assets would be Rs.2.78 crores per year by 2002. [Tables 3.42/62]

65. Under **Streetlighting**, the distance between posts would be reduced from 34 to 30 metres. Better quality of lights will be fixed. [Tables 3.43/44]

66. For the above, a Capital Investment of Rs.16.82 crores will be needed by 2002. [Table 3.47]

67. The O&M needs for the existing assets by the end of 5th year would be Rs.20.65 crores per year. [Table 3.62]

68. The **Total Capital Investment** for the period of 5 years for the above core civic services for all the Municipalities in the State would be Rs.882.96 crores. It works out to Rs.212.45 **per capita** per year. [Table 3.48]

69. **Total O&M Requirements for the Existing Assets** by 2002 would be in the tune of Rs.268.45 crores. In terms of **per-capita**, it would be Rs.323.45 per person per year. [Table 3.60]

OTHER CORPORATIONS:

70. The total **Population** covered by other Corporations by 2002 is likely to be increased to 36.44 lakhs from the existing coverage of 33.76 lakhs. [Table 3.24]

71. Under **Water Supply**, the per-capita supply would go up from 73 to 90 Litres per capita per day. [Tables 3.25/26]

72. The House Service Connection would cover 80% of the population. The balance 20% would be covered equally by stand post and hand pumps. [Table 3.26]

73. The Capital Investment required to reach the above level of service is Rs. 152.87 crores over a period of 5 years. [Table 3.27]

74. The O&M needs for the existing assets under Water Supply at a normative level would be around Rs.34.76 crores. [Table 3.62]

75. Under **Sewerage and Sanitation**, the coverage will go up from 22% to 50%. Of this, 30% of the population would be covered through underground drainage and 10% each with Low Cost Sanitation and Public Convenience. [Table 3.28/29]

76. The Capital Investment required to reach the above level of service would be Rs.540.44 crores over a period of 5 years. [Table 3.32]

77. The O&M needs for the existing assets per year by 2002 would be Rs.33.45 crores. [Table 3.62]

78. Under **Solid Waste Management**, the Collection Performance would go up to 90% of the waste generated. [Tables 3.34]

79. This would need a Capital Investment of Rs.14.39 crores by 2002. [Table 3.37]

80. The O&M Needs for maintenance of existing assets at a normative level would be Rs.53.11 crores a year by 2002. [Table 3.62]

81. Under **Roads**, 100% would be covered through BT. The existing coverage is 65%. [Tables 3.38/39]

82. This will need a Capital Investment of Rs.54.23 crores over a period of 5 years. [Table 3.42]

83. The O&M needs for the maintenance of existing assets at a normative level would work out to Rs.25.51 crores per year by 2002. [Table 3.62]

84. Under **Storm Water Drains**, the percentage of length to be covered with Pucca Open Drain would be 40% and Closed drains would be 10%. The existing level is around 23% pucca open drains only. [Tables 3.38/39]

85. This would entail a Capital Investment of Rs.166.47 crores over a period of 5 years. [Table 3.42]

86. The O&M needs for Maintenance of Existing Assets at a normative level by 2002 would be Rs.0.37 crores a year. [Table 3.62]

87. Under **Streetlighting**, the distance between the posts would be reduced to 25 metres from the existing distance of 31 metres. [Table 3.43/44]

88. The Capital Investment required for the above level of service for streetlight would be Rs.15.08 crores over a period of 5 years. [Table 3.47]

89. The O&M needs for the existing assets would be Rs.10.21 crores per year by 2002. [Table 3.62]

90. The **Total Capital Investment** for the above level of services by 2002 for a period of 5 years would be Rs.943.48 crores. That would work out to Rs.517.85 **per-capita** per year. [Table 3.48]

91. The **Total O&M requirements for the maintenance of above assets** would be Rs.157.41 crores a year. The **per-capita** would be Rs.466.26. [Table 3.60]

CHENNAI CORPORATION:

92. The existing **Population** of 41.58 lakhs is like to go up to 44.87 lakhs by 2002. [Table 3.24]

93. In **Water Supply**, the per capita would go up from 73 to 90 Litres per capita per day by 2002. [Table 3.25/26]

94. House Service connection would go up from 78 to 80%. The balance 20% would be covered equally by stand posts and hand pumps. [Table 3.26]

95. For the above service levels in water supply, the Total Capital Investment that would be required is Rs.263.36 crores over a period of 5 years. [Table 3.27]

96. The O&M requirements for maintenance of the existing assets would be Rs.48.48 crores a year at the end 2002. [Table 3.62]

97. Under **Sewerage and Sanitation**, the coverage would go up from 92% to 100%. Of this, 90% would be through underground drainage. [Table 3.28/29]

98. This would entail a Capital Investment of Rs.156.82 crores over a period of 5 years. The O&M needs for the existing assets under the Sewerage and Sanitation would be Rs.68.66 crores per year at the end of the 5th year. [Tables 3.32/62]

99. Under **Solid Waste Management**, the collection performance would go up from 85% to 90% of the total waste generated. [Table 3.33/34]

100. This would entail a Capital Investment of Rs.17.91 crores over a period of 5 years. [Table 3.37]

101. The O&M needs for the maintenance of existing assets would be Rs.53.45 crores per year by 2002. [Table 3.62]

102. Under **Roads**, 100% will be upgraded to BT. The existing coverage is 99%. [Table 3.38/39]

103. For this, the Capital Investment Required will be Rs.174.99 crores over five years. [Table 3.42]

104. The O&M needs for the maintenance of existing roads, would be Rs.31.89 crores per year by the end of 2002. [Table 3.56]

105. Under **Storm Water Drains**, 20% of the length would be covered by Pucca Open and another 40% through Pucca closed. The existing coverage is 29% pucca closed drains only. [Table 3.38/39]

106. This would entail a Capital Investment of Rs.102.08 crores over a period of 5 years. [Table 3.42]

107. The O&M needs for the existing assets would be Rs.1.42 crores per year by the end of 5th year. [Table 3.57]

108. Under **Streetlighting**, the distance between the posts would be reduced to 25 metres and 40% of the lights would be Sodium Vapor Lamps. [Table 3.44]

109. This would need a Capital Investment of Rs.5.87 crores. [Table 3.47]

110. For Operation and Maintenance of the existing assets, Rs.14.74 crores would be needed per year at the end of 2002. [Table 3.62]

111. The **Total Capital Investment required** for the above civic services would be Rs.721.03 crores over a period of 5 years. This would mean **per-capita** investment of Rs.321.40 a year. [Table 3.48]

112. The **Total O&M Requirement for maintenance of the existing assets** at a normative service level would be Rs.218.64 crores. That would mean **per-capita** of Rs.487.27 per year. [Table 3.60]

GENERAL:

113. For **all the six - core civic services**, a **total Capital Investment** of Rs.5249.32 crores (at the **price-level of 1995-96**) is required by 2002 to achieve the improved levels of services as discussed. This would work out **per capita** of Rs.176.40 a year. [Table 3.48]

114. Since the above capital investment is to be made over a period of five years, it has been **phased** over 1997-2002 providing for **20% every year** with **12% escalation** in a year. The **total Capital Cost** over the period, after phasing and escalation, would work out to Rs.8366.51 crores. This would work out **per capita** of Rs.281.15 a year. [Table 3.49]

115. A question has arisen at this point as to whether the SFC should look into Capital Investment or should confine itself to Revenue expenditure needed for O&M only. In as much as

the quality of life of a common man depends upon improved level of civic services, and in as much as the various Conferences held at the national level have emphasized the need to identify the capital needs, the SFC has decided to indicate the Capital requirements as well. As to, how to raise resources for investing in Capital works has been suggested partly under Project finance and more elaborately in Part V under Capital fund with Tenth Finance Commission award.

116. For the **additional investment** indicated above, an **O&M** of Rs.241.02 crores would be required in a year from third year onwards at 1995-96 price level. This works out to 4.59% of the capital investment. State Finance Commission suggests that this O&M amount should be raised with the increased use of cost recovery through the user charges and by privatization of civic services wherever possible. [Table 3.61]

117. For the **O&M of the existing assets under all the six core civic services**, an amount of Rs.1234.49 crores would be required in a year (at 1995-96 price level) by 2002. In that case, the **per capita** O&M would go up from Rs.74/- to Rs.195/-. [Table 3.60]

118. The **O&M** costs for the existing assets would escalate at the rate of 10% in a year for 5 years, upto the year 2002.

PROJECT FINANCE:

119. The available windows are loans from **LIC** and Government for Water Supply which is raised by TWAD Board on behalf of the local bodies on Government guarantees. [Para 3.6.01]

120. **MUDF** provides a mixture of loans and grants basing on the performance and needs. However, this is coming to a close by September '96. **TNUDF** is likely to replace this. It will be managed by an Assets Management Company with the participation of ILFS, ICICI, HDFC and Government of Tamilnadu. [Para 3.6.01]

121. In small Municipalities and Town Panchayats, loan based assistance is available under **IDSMT**. [Para 3.6.01]

122. **TUFIDCO** operates investment in infrastructure in lower income areas like low cost sanitation, Prime Ministers' Urban Poverty Alleviation Programme, NRY etc. [Para 3.6.01]

123. Within the Madras Metropolitan Area, **MIDC** provides financial support in implementing projects under mega city project by providing upto 50% of the project cost and 10% subsidy. [Para 3.6.01]

124. The Public Debt Act 1944 and Local Authorities Loan Rules 1937, permit the Centre, the State and the Local bodies to **raise resources**. In case of Madras Corporation, it is permitted under Madras City Municipal Corporation Act 1919. Similar provisions are made to raise resources under Section 32 of the Metro Act 1978 and Section 34 of the TWAD Act 1971. [Para 3.6.02]

125. The State Government provides **guarantees** for approved public developmental purposes. However, the guarantees are generally not provided in the activities taken up on a commercial basis. By March '94, the amount guaranteed by Government of Tamilnadu is Rs.6303 crores. Of this, nearly Rs.3538 crores towards principal is still outstanding. A major portion of the outstanding (Rs.240 Crores) is the loan taken by TWAD Board from LIC. Most of the loan guaranteed involves revision of tariff and levy of new taxes or rates. But in practice, this is not done leading to the violation of the guarantee conditions and to the subsequent sickness of the local bodies. [Para 3.6.03]

126. It is suggested that for **capital investment**, the **Corporations** can go for public issues of equity or bonds or approach the institutional finance on its own credit worthiness. In case of **Municipalities** and even well off Town Panchayats they could go for a mix of remunerative and service projects with loans and grants. [Para 3.6.06]

PRIVATIZATION:

127. The reasons for privatization is poor performance of the public systems and drying up of traditional source of funds. This is neither new nor unique. It is wrong to expect all public services can be privatized. A factor crucial to privatization is the fixation of tariff and the willingness to pay for the services. [Paras 3.8.1/2]

128. In case of privatization of infrastructure the method generally followed are **BOT, BOO** and **BOOT**. [Para 3.8.03]

129. The advantages of privatization is better efficiency and better access to current technology. Besides it reduces the financial burden on the Government for wages and operating cost on servicing.

130. The maintenance of water supply systems, sewerage treatment and pump houses should be privatized. The experience by CIDCO and MMWSSB proves that savings are in the range of 25 to 30%. Solid Waste Management, Street sweeping, debris removal, garbage collection and cleaning of markets can be entrusted to private parties. **Exnora** is a model of public participation in primary collection of garbage. [Para 3.8.07]

131. Collection of service charges can be entrusted to NGOs and Social Organizations. [Para 3.8.09]

132. Similarly, development and maintenance of parks and gardens, streetlights can be taken up by the private sector. [Para 3.8.10]