Upgrading Municipal Services
Norms and Financial Implications

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Upgrading Municipal Services
Norms and Financial Implications

(Prepared for the Ninth Finance Commission)

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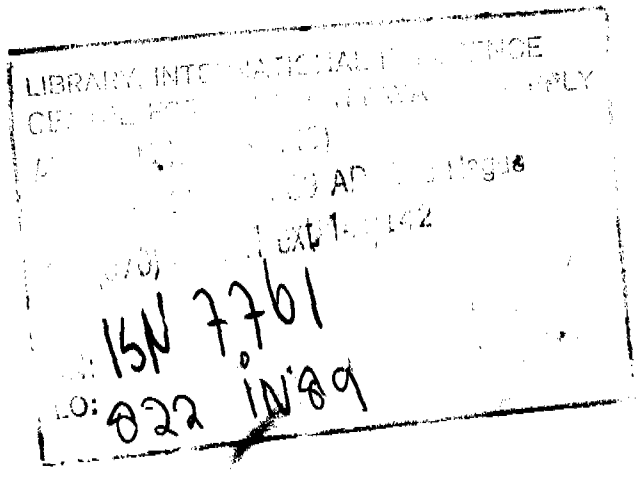

National Institute of Urban Affairs
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PREFACE

Most urban areas in the country have witnessed in recent years a deterioration in the standard and quality of public life. In almost every urban centre irrespective of size or class, the availability of core municipal services has either declined or has remained stagnant, and considerable populations in these cities have no access to certain core civic services such as water supply, sanitation, preventive health care, roads and street lighting.

It has been universally acknowledged that the municipal bodies responsible for providing a range of services and for ensuring a healthy environment for the urban community face an acute shortage of resources even to maintain the existing services at satisfactory levels, not to talk about capital investment necessary for expansion. Their dependence on the higher levels of governments for meeting their operational requirements has increased phenomenally. Many of them have also accumulated huge liabilities. It is in this context that the Ninth Finance Commission had asked the National Institute of Urban Affairs to analyse the existing levels of core municipal services in the front line urban centres, and suggest the additional financial requirements that the municipal bodies will need in the course of the next five years, corresponding to the Finance Commission period 1990-95, in order to upgrade the services to levels proposed by the various committees and agencies.

Besides working out the financial requirements for upgrading urban services, this study has also examined the problems that are associated with the municipal bodies in maintaining civic services and facilities and the steps proposed to overcome these problems. The data for this study have been drawn from two main sources: the selected municipal bodies and corporations; and the reports of the various committees and commissions set up from time to time by the Government of India and the state governments.

The results of the study reaffirm what has generally been known about the municipal services and finances. The study shows that the existing levels of services in physical as well as in financial terms are extremely low, particularly in the case of water supply and sanitation services. On an average, the municipal bodies spend Rs. 143.14 per capita per annum on the operation and maintenance of the civic services which is substantially lower than the norms proposed by the Zakaria Committee: an average of Rs.222 per capita per annum at 1986-87 prices.

The study has mentioned that the additional or incremental financial requirements of municipal bodies for upgrading the civic services are enormous. On the basis of the Zakaria Committee norms, an annual additional investment of roughly Rs. 5,563 million will need to be made only in the 157 municipal bodies which form the sample in this study, to upgrade their

service levels. The needs of all the municipal bodies, which are more than 2000 in number, will obviously be much larger, and require massive efforts at various levels including at the levels of municipal bodies, State Governments, the Planning Commission and the Ninth Finance Commission. At the level of municipal bodies, the very fact that some of them are able to maintain high levels and standards of services with low per capita expenditures shows that the efficiency in a majority of the municipal bodies is low, and will need to be raised for bringing about improvements in the operation and maintenance of services. The financial transfers from the State Governments presently contribute little to the strengthening of the maintenance of municipal services. No financial mechanisms have so far been introduced at the level of the Central Government to augment these services.

The 1989-90 award of the Ninth Finance Commission for the improvement of slums in the cities of Bombay and Calcutta has opened a new channel for direct dispensations for dealing with the problems of urban areas. This channel combined with other strong fiscal and management responses is essential to keep the cities running.

This study has been conducted and coordinated by Dr. Mukesh Mathur, Senior Research Officer at this Institute. He has designed the entire study, prepared the tabulation and processing systems, and prepared the final report. I would like to place my

appreciation for the efforts that he put in on this study. Dr. Mukesh Mathur was assisted by a team of dedicated research staff members of the Institute. To them and to the staff members of the Computer Unit, I owe a special word of appreciation. Finally, thanks are due to Shri Mahesh Prasad, Member Secretary of the Ninth Finance Commission for the time that he gave to us for discussing the various nuances of the study. Thanks are due to Shri V. Srinivasan, Director, Finance Commission for his assistance.

March 1989

Om Prakash Mathur
Director

A SUMMARY

1. The municipal bodies[1] will require an amount of approximately Rs 26,814 million over a period of five years, corresponding to the period 1990-95, in order to be able to operate and maintain the core services at levels proposed by the Zakaria Committee. This amount is over and above the financial resources that the municipal bodies will mobilise during this period through their own resource-raising efforts and resource transfers from States at existing levels of taxation and efficiency. The financial needs will, however, increase to Rs.62,926 million if the municipal bodies choose to raise their spending levels to levels that are currently being maintained by the "better-off" municipal bodies.[2] On the other hand, their financial needs will dip to Rs 9,207 million if they decide to upgrade the levels to the average spending levels of the States to which they belong. This is the main conclusion of the study on UPGRADING MUNICIPAL SERVICES : NORMS AND FINANCIAL IMPLICATIONS.

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1. Estimates of financial needs relate to the sampled and responding municipal bodies.

2. The financial needs of municipal bodies have been estimated by using four different sets of norms and standards. These are : (a) Expenditure norms laid down by the Zakaria Committee, (b) the average of the expenditure levels of the 15 better-off municipal bodies, (c) the average expenditure level of municipal bodies in each state, and (d) the average expenditure level of municipal bodies in different population size categories.

2. On an average, the municipal bodies spend Rs 143.14 per capita[3] on the operation and maintenance of the various services and facilities. This amount is substantially lower than the norms and standards proposed by the Zakaria Committee.[4] Of the 157 municipal bodies which form the sample in this study, only 24 have expenditure levels which are either at par with or higher than the Zakaria Committee norms. The situation is critical in 73 municipal bodies (46.5 per cent of the total sample), where the expenditure levels of less than Rs 100 per capita are not even 50 per cent of the norms proposed by the Zakaria Committee.

3. The levels of expenditure are particularly low in water supply and sanitation services (sewerage, drainage and refuse collection). The municipal bodies spend just Rs. 47.50 as against the norm of approximately Rs 126.27 per capita,[5] , a bare 37.6 per cent of what they ought to spend in order to provide safe drinking water and basic sanitation. Medical and health services are yet another service where the expenditure levels are also much below the standards and norms.

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3. Per annum : Figure relates to the fiscal year, 1986-87.

4. The Zakaria Committee has proposed an expenditure norm of Rs 204.74 for cities which have population ranging between 100,000 and 500,000 and Rs 239.25 for those which have population in excess of 500,000 persons. These figures are adjusted to the 1986-87 price level.

5. This figure relates to the norm for cities in the population range of 100,000 to 500,000; for cities in the range of 500,000 +, the norm is Rs 135.48.

4. The existing levels of services in physical terms are extremely low. The gross average per capita availability of water works out to approximately 142 litres per day. In 68 per cent of the sampled municipal bodies, per capita levels of water supply are substantially below the norms laid down by the Zakaria Committee. Worse still, almost one-fourth of the population of municipal bodies has no access to safe water supply, and another about 18 per cent has even less than 50 litres of water per day. There are at least 15 municipal bodies where along with low per capita supplies, the population coverage is also low.

5. One hundred and nine municipal bodies have no sewerage systems. Even among the few that have the sewerage systems, the extent of unserved population is as high as 80 per cent of the total population. The drainage systems too cover no more than 66 per cent of the population of the responding municipal bodies.

6. The performance of municipal bodies with regard to refuse collection and disposal is equally unsatisfactory. The most critical situation is presented by 12 municipal bodies where uncollected refuse is as high as 50 per cent of the total refuse generated. What is significant is that the collection ratio of refuse bears no direct relationship to the number of scavengers deployed for this task.

7. Using a number of indicators to determine the deprivation levels, this study has concluded that the municipal bodies fall into four categories*:

a. Municipal bodies which are characterised by both low levels of services and low population (or area) coverage;
b. Municipal bodies which have average-to-high levels of services but which are characterised by unequal distribution of services;
c. Municipal bodies which have low levels of services but where the coverage of population (or area) is high; and
d. Municipal bodies which are characterised by both average-to-high levels of services and high population (or area) coverage.

8. The list of municipal bodies varies for each of the six services. For each category, the lines of action also vary. The first category, for instance, would call for, on the one hand, expansion in the supply of services, and, on the other hand, improvement in the level of services, while the second category of municipal bodies will need strategies to correct the unequal distribution of services through appropriate fiscal and other measures. An illustration of municipal bodies classified on the basis of indicators used in assessing the deprivation levels of water supply is given in the chart which follows.

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* According to Norms of National Master Plan - India & Mid-term Review.

Categories of Municipal Bodies by Levels of Services
(Water Supply) and their Spatial Coverage

Categories	Names of Municipal Bodies
Low Per Capita and Low Population Coverage (<140 lpcd with < 90 % population coverage)	Anantpur, Adoni, Bhimavaram, Eluru, Machilipatnam, Proddatur, Tenali, Tirupati, Jorhat, Dhanbad, Bharuch, Porbandar, Ambala, Panipat, Rohtak, Gadag Betgari, Shimoga, Tumkur, Alleppey, Quilon, Ratlam, Bhusaval, Chandrapur, Gondiya, Jalna, Shillong, Bhatinda, Bharatpur, Cuddalore, Erode, Kanchipuram, Nagercoil, Rajapalayam, Tiruppur, Thanjavur, Amroha, Shanjahanpur, Sambhal, Bardhaman, Nabadwip, Kakinada, Nellore, Rajahmundry, Belgaum, Aurangabad, Dhule, Malegaon, Firozabad, Guntur, Calicut, Hubli Dharwad, Cochin, Ludhiana, Jaunpur.
High Per Capita and Low Population Coverage (> 140 lpcd with < 90% population coverage)	Nizamabad, Vizianagaram, Hissar, Yamunanagar, Mangalore, Raichur, Berhampur, Khandwa, Ahmednagar, Bhiwandi, Ichalkaranji, Imphal, Sambalpur, Pathankot, Dindigul, Agartala, Bulandshahar, Nasik, Farrukhabad, Faizabad, Hapur, Akola, Ulhasnagar, Cuttack, Patiala, Ghaziabad, Rampur, Warangal, Raipur, Kolhapur, Tiruchirapalli, Vijayawada, Jalandhar, Meerut, Vishakhapatnam, Solapur, Amritsar, Agra.
Low Per Capita and High Population Coverage (< 140 lpcd with > 90% population coverage)	Cuddapah, Bihar, Nadiad, Navsari, Bijapur, Davangere, Mandya, Jalgaon, Latur, Nanded, Ganganagar, Kumbakonam, Tirunelveli, Tuticorin, Vellore, Muzaffarnagar, Jamnagar, Amravati, Udaipur, Salem, Aligarh, Bareilly, Rajkot, Srinagar, Jodhpur.
High Per Capita and High Population Coverage (> 140 lpcd with > 90% population coverage)	Junagadh, Bhiwani, Karnal, Shimla, Palghat, Sangli, Haridwar, Mirzapur Vindyachal, Dehradun, Bhavnagar, Thane, Mysore, Allahabad, Vadodara.

9. The fiscal resource base of municipal bodies is not only narrow but has also shrunk in relation to the overall resource base in the country. In 1960-61, the tax revenues of municipal bodies formed roughly 8 per cent of the total tax revenues raised within the country (i.e., raised and collected by the centre and states). In 1980-81, the share of municipal bodies in total tax revenues was placed at about 4.5 per cent. Estimates (1986-87) made in this study indicate that it has further declined to about 3.4 per cent.[6]

10. The average per capita municipal incomes, placed at Rs.150.68 are extremely low. In at least 64 municipal bodies, the per capita annual incomes are less than Rs.100. It does not, however, mean that the incomes are uniformly low. The top decile of municipal bodies consisting of 20.47 per cent of the total urban population accounts for over 39.6 per cent of the total municipal incomes; the bottom decile consisting of about 6.1 per cent of total urban population has only 0.98 per cent of the total incomes. Inequalities in municipal incomes are thus substantial, strongly suggesting that the municipal bodies are themselves responsible for the fiscal crisis which they are currently facing.

11. Municipal taxes continue to be the principal source of municipal revenues. Of the average per capita income of

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6. This figure be an underestimate as it has been estimated by applying the average income of Rs. 81.80 which is the average per capita tax income of 157 sampled municipal bodies.

Rs. 150.60, taxes contribute Rs. 81.80 or 54 per cent of the total revenues.[7] A rough analysis of the time-series data shows that revenues from such taxes are gradually reaching a plateau, and are not responding to the changes in the economy of the sampled cities. These are marked by increasing inelasticities to such changes.

12. Financial transfers from States constitute an extremely important source of municipal revenues-next in importance to revenues from taxes. In 1986-87, the State Governments transferred a sum of Rs. 1401 million to the sampled municipal bodies for the operation and maintenance of various services and facilities. The transfer of resources consisted of both grants-in-aid (Rs 1040 million) and shares in those taxes whose yields are shared between the States and the municipal bodies (Rs 361 million). On a pro-rata basis, this would amount to approximately 1.85 per cent of the States' own resources. Thus, of every Rs.100 that the municipal bodies spend on the operation and maintenance of services, Rs 22.50 are not their own; this amount accrues to them in the form of financial transfers from the State Governments.

13. The system of shared taxes between the States and municipal bodies has not benefited the municipal bodies in any substantial manner. While this study did not have access to data on the total yields from the shared taxes, indirect evidence shows

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7. The analysis is termed as "rough" as the data used for time-series analysis are not strictly comparable.

that the yields have increased substantially but the increased yields have not been shared equally between the two sets of beneficiaries.

14. As mentioned at the outset, the additional or incremental financial requirements of municipal bodies for upgrading the municipal services are large. On the basis of the Zakaria Committee norms, an annual additional investment of roughly Rs.5363 million will need to be made in only the 157 municipal bodies[8] to upgrade their service levels. The needs of all the municipal bodies which are roughly 1870 in number will evidently be much larger. The table below gives the estimates of the additional financial requirements worked out on the basis of four different norms.

Additional Financial Requirements of Municipal Bodies for the Upgradation of Services (at 1986-87 Prices)

(million Rs)

Year	Zakaria Committee	Better-off Cities	State Average	City Size Averages
1990-91	4644.00	11216.80	1463.40	2127.80
1991-92	4977.00	11864.90	1626.10	2323.50
1992-93	5336.70	12547.90	1818.60	2531.20
1993-94	5722.70	13268.70	2033.80	2759.30
1994-95	6133.50	14028.00	2265.30	3007.60
Total	26813.90	62926.30	9207.20	12749.40

Note :

1. These are in addition to the resources that the municipal bodies will themselves mobilise during this period.

2. The financial requirements relate only to the sampled municipal bodies.

8. It is based on the premise that the financial health of municipal bodies will be maintained at least at the existing levels, and will not be allowed to deteriorate further.

16. In conclusion, it may be reiterated that the quantum of additional financial needs for upgrading the services is substantial, and will require massive efforts at various levels including at the levels of municipal bodies, State Governments, the Planning Commission and the Ninth Finance Commission. At the level of municipal bodies, the very fact that some of them are able to maintain high levels and standards of services with low per capita expenditures shows that the efficiency in a majority of the municipal bodies is low, and will need to be raised for bringing about improvements in the operation and maintenance of services. The financial transfers from the State Governments presently contribute little to the strengthening of the maintenance of municipal services. No financial mechanisms have so far been introduced at the level of the Central Government to augment these services.

The 1989-90 award of the Ninth Finance Commission for the improvement of slums in the cities of Bombay and Calcutta has opened a new channel for direct dispensations for dealing with the problems of urban areas. This channel combined with other strong fiscal and management responses is essential to keep the cities running.

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INTRODUCTION

In January 1988, the National Institute of Urban Affairs (NIUA) was asked by the Ninth Finance Commission (NFC) to carry out a study of the municipal finances and services, with the primary objective of assessing the financial requirements for upgrading essential municipal services such as water supply, refuse collection and disposal, sewerage and drainage, preventive health care, roads and street lighting. The Institute was to examine in this context whether the municipal bodies, particularly those which had larger populations to serve, had the capacity and financial resources to upgrade such services and maintain them at a basic minimum level. Further the Commission asked NIUA to estimate the gap between the existing resources available with the municipal bodies and the resources required to upgrade the services.

The Ninth Finance Commission explained by way of background that most urban areas in the country had witnessed in recent years a deterioration in the standard and quality of life. In almost every city and town, the availability of basic services had either declined or remained stagnant, and sizeable populations in them were without access to such services. The Commission also pointed out that the situation in urban areas had been made worse by the fact that the resources of municipal bodies who are statutorily responsible for the provision and maintenance of essential services had shrunk, and that they had no resources to even adequately maintain the services, let alone

take steps to augment them. Their dependence on the higher levels of governments for meeting the operation and maintenance expenditure had increased phenomenally. Many of them had also accumulated large debts.

It is in this context that the Ninth Finance Commission suggested that the National Institute of Urban Affairs (NIUA) should collect and analyse the data on finances and services of particularly the large-sized municipal bodies, take a view on the levels of services which the municipal bodies should provide and maintain, determine the gaps between the existing and proposed levels, and work out the financial requirements to enable the Commission to examine the feasibility of a grant-in-aid or any other form of financial dispensation for urgradation of essential municipal services.

The Commission laid down the following four objectives which provided the broad parameters for the study :

i. To examine the existing levels of basic urban services, in terms of quantity and coverage;

ii. To assess the financial health of the municipal bodies from the point of view of their capacity to adequately maintain the services;

iii. To determine the physical and financial gaps in services; and finally,

iv. To assess the existing and future financial requirements (corresponding to the period of the Ninth Finance Commission, 1990-95) of municipal bodies for upgrading the core urban services, taking into account their resource generating capabilities.

THE SUCCESSIVE FINANCE COMMISSIONS AND UPGRADATION OF SERVICES

The question of the urgradation of standards in services was first considered by the Sixth Finance Commission. This Commission recommended a grants-in-aid for the upgradation of standards in non-development sectors and services which included administration of taxes, treasury and accounts administration, judicial administration, general administration consisting of revenue, district as well as tribal administration, and the secretariat services, police and jails. The purpose of the grant was to provide financial assistance to the relatively backward states to enable them to overcome through this grant the deficiencies in general administration.[1]

The Sixth Finance Commission confined itself to the expenditure on revenue account in estimating the financial requirements. The Seventh and the Eighth Finance Commissions continued to make recommendations for upgradation of standards of administration and services. The Seventh Finance Commission examined the requirements for the upgradation of standards of administration according to physical norms. It did not make a larger provision for any State than that proposed by the State itself.

The Eighth Finance Commission selected nine sectors and services for upgradation. These comprised of (i) police, (ii) education, (iii) jail administration, (iv) tribal administration, (v) health, (vi) judicial administration, (vii) district and

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1. Report of the Finance Commission, 1978, p. 71-80.

revenue administration, (viii) training, and (ix) treasury and accounts administration. Though education and health are conventionally treated as development sectors, the Commission included them for upgradation "in view of their crucial importance". The Eighth Finance Commission noted that "33 years of planning have brought into existence large-sized infrastructural facilities in health and education sectors. But the vital inputs which these sectors need are lacking. Accordingly, we have sought to rectify some of the deficiencies in these two sectors".[2]

The Eighth Finance Commission observed that one of the objectives of the grants-in-aid was to support the States in their efforts to solve "special problems" facing them. The Commission considered in this connection a number of proposals from the States which included upgradation grants for the District Autonomous Councils of Assam, Meghalaya and Tripura, development of Bastar district, border problems of Punjab, development of desert areas in Rajasthan, creation of infrastructure in Leh district and so on. The proposals from the States also included upgradation grants for solving the problems of congestion in the cities of Bombay, Calcutta and Madras, and grants for raising the levels of services of the urban local bodies in particular.

The Eighth Finance Commission did not recommend any grant-in-aid for raising the service levels of urban local bodies on

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2. Report of the Eighth Finance Commission, 1984, p. 74-88.

the ground that the "problem is too large to be dealt with through upgradation".[3] It also made no provisions for dealing with the urban congestion problems of Bombay, Calcutta and Madras as in their view, the Planning Commission was the "appropriate body to deal with these problems".[4]

The Ninth Finance Commission in its first report for 1989-90 has made a significant departure from the preceding Commissions in that it has recommended a one-time grant of Rs. 50 crores each to the Governments of Maharashtra and West Bengal for environmental improvement of slums and provision of basic amenities in the cities of Bombay and Calcutta. The Ninth Finance Commission has suggested to the States that they should restructure "the rent control legislation so as to lead to the growth of revenues of the municipal corporations and to strive for relocation of industry with a view to releasing prime land for improving the environment".[5] The Ninth Finance Commission has observed in addition, that "equalisation of certain social and community services is regarded as one of the objectives of the Finance Commission". It has accordingly provided for significantly higher levels of grants-in-aid for education and health services.

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3. Report of the Eighth Finance Commission, p. 86

4. Ibid.

5. First Report of the Ninth Finance Commission for 1988-89 July 1988, p. 45

SCOPE OF THE STUDY

The starting point of the study on UPGRADING MUNICIPAL SERVICES : NORMS AND FINANCIAL IMPLICATIONS is the recognition by the Ninth Finance Commission that the problems of slums, environment, revenues of municipal bodies, and disparities in the levels of social services are important, and that these should be dealt with not only through plan subventions but in a broader framework involving both the Planning Commission and the Finance Commission. The study responds directly to the fact that the population of Indian cities has been increasing at an extraordinarily rapid rate, and with that has also been increasing the demand for basic urban services. The municipal bodies, on the other hand, have not shown any active interest in expanding their resources. Many of them are "sick", and suffer from deep-seated fiscal crisis and distress.

In the light of this general perspective, this study has attempted to provide an assessment of the dimension of the problem in financial terms, by addressing the following sets of questions:

i. What are the existing levels of municipal services in the urban areas? Are the levels adequate from the point of view of what might be called a "barest minimum" that the urban areas should have?

ii. What are the existing levels of municipal spendings on the operation and maintenance of services? Are the spendings constrained in any way by the levels of municipal incomes? Are the levels of spendings adequate in relation to the norms at which different services should be operated and maintained?

iii. What are the estimated requirements of finances for maintaining the services at different levels of upgradation?

iv. What is the magnitude of the gap between the financial resources that are available with the municipal bodies and the financial requirements of municipal bodies to maintain and operate services at upgraded levels?

THE SAMPLE OF CITIES AND SERVICES

This study covers all cities which fall in the population range of 100,000-750,000 (1981), and six municipal services, namely water supply, sewerage and drainage, refuse collection and disposal, roads, street lighting, and preventive medical and health services.

As of the 1981 Census, there were in India 3301 urban centres of various sizes and functions. Of these 218 urban centres had populations in excess of 100,000. These included 12 metropolitan cities too, that is, those which had in 1981, a population of 1 million and more.

In taking a view on the size of the sample for this study, the National Institute of Urban Affairs and the Ninth Finance Commission considered three alternatives:

i. To extend the study to all urban centres which have municipal status and all municipal services, both obligatory and discretionary;

ii. To extend the study to all urban centres having municipal status but limit the number of services to only those which the municipal bodies are obliged to provide under the statutes;

iii. To limit the study to selected large urban centres and also selected major services provided by the municipal governments.

The third alternative was preferred for the study on the grounds that firstly, the population pressures were severe in large cities; secondly, the extent and magnitude of the problem of availability and adequacy of services were equally severe and, finally, the financial resources at the command of the Ninth Finance Commission were limited and could be better utilised if these were used selectively, that is, in selected areas and on selected services. The study was accordingly designed to cover those cities (municipal corporations and municipal councils) which had in 1981 populations ranging between 100,000 and 750,000 persons.

The respondent sample consists of municipal bodies of 159 cities. The balance of 25 cities (out of a design sample of 184 cities) has either not responded or responded inadequately. The size and regional distributions of sampled cities are given in Tables and 1 and 2 respectively. In terms of numbers, these constitute about 73 per cent of the total number of cities in the 100,000 + population category; in terms of population, their share is approximately 63 per cent of the total population of cities (excluding the 12 metropolises) in the 100,000 + population category (1981).

Table 1.1

Statewise Distribution of Selected and Responding Urban Centres (Municipal Corporations and Municipal Councils)

States	Urban centres		
	No. selected	No. responded	% to selected
Andhra Pradesh	19	19	100.0
Assam	04	03	75.0
Arunachal Pradesh	01	Nil	Nil
Bihar	11	04	36.0
Gujarat	09	09	100.0
Goa	01	01	100.0
Haryana	08	07	88.0
Himachal Pradesh	01	01	100.0
Jammu & Kashmir	02	02	100.0
Karnataka	13	13	100.0
Kerala	06	06	100.0
Madhya Pradesh	11	05	45.0
Maharashtra	22	22	100.0
Manipur	01	01	100.0
Meghalaya	01	01	100.0
Mizoram	01	Nil	Nil
Nagaland	01	01	100.0
Orissa	05	05	100.0
Punjab	06	06	100.0
Rajasthan	10	10	100.0
Sikkim	01	Nil	Nil
Tamil Nadu	15	14	93.0
Tripura	01	01	100.0
Uttar Pradesh	28	23	82.0
West Bengal	06	05	83.0
All States	184	159	86.0

Table 1.2

Distribution of Sampled Urban Centres by Size Class of Cities

Size class	Population range, 1981		Sampled urban centres
VII	Above	700,000	1
VI	600,000	700,000	3
V	500,000	600,000	7
IV	400,000	500,000	6
III	300,000	400,000	13
II	200,000	300,000	28
I	100,000	200,000	101
All			159

On the services, the National Institute of Urban Affairs and the Ninth Finance Commission reviewed the range of services which the municipal bodies throughout the country were responsible for and recognised that some of these such as water supply and refuse collection and disposal were of universal importance. Other services were of value to the majority of the urban population such as the provision and maintenance of roads and street lighting. Many services were of special value to the people of different ages and interest such as parks, libraries, and open spaces.

Finally, it was decided to focus on six services, namely: water supply, refuse collection and disposal, sewerage and drainage, roads, street lighting, and preventive medical and health services, these being the more crucial services provided by the municipal bodies.

DATA BASE AND METHODOLOGY

Data for this study have been drawn from two main sources. One: the municipal bodies and corporations. Data on municipal finances and the levels of services have been obtained from them. These data relate to the year 1986-87. Two: the reports of the various Committees and Commissions set up from time to time by the Government of India and State Governments. The major ones among them include:

1. Augmentation of Financial Resources of Urban Local Bodies, Report of the Committee of Ministers constituted by the Central Council of Local Self Government, 1963 (known as the Zakaria Committee Report);

2. Report on Norms and Space Standards for Planning of Public Sector Project Towns, Town and Country Planning Organisation, Ministry of Works and Housing, 1974;

3. Manual on Water Supply and Treatment, Central Public Health and Environmental Engineering Organisation, Ministry of Works and Housing, 1977;

4. National Master Plan, India, International Drinking Water Supply and Sanitation Decade, 1981-90, Ministry of Works and Housing, 1983;

5. Task Forces on Housing and Urban Development, Planning Commission, 1983;

6. Motor Transport Statistics of India, Ministry of Surface Transport, 1986-87; and

7. Report of the National Commission on Urbanisation, Government of India, 1988.

8. A study of the Financial Resources of Urban Local Bodies in India and the Level of Services Provided, NIUA, 1983.

9. Management of Urban Services, NIUA, 1986.

DATA CONSTRAINTS

The collection of numerical data specially on the levels of services posed insurmountable difficulties. In many cases, the information supplied by the municipal bodies appeared unreliable. A weak data information system and lack of expertise at municipal level, seem to be the prime factors for this. Further, in many cases, the Public Health and Engineering Department is the responsible agency for water supply, sewerage and drainage in urban areas. Although, questionnaires were sent to all the concerned agencies at the state level, the information has not been received from them. Hence, the analysis in the report is based only on municipal data sources.

The National Institute of Urban Affairs have adopted a three-stage analysis in this study:

i. In the first stage, an assessment has been made of the existing levels of municipal services. This has been done in both physical and financial terms;

ii. In the second stage, comparisons have been drawn between the existing levels of services and the norms and standards that have been laid down by the various committees (Table 1.3) and the gap between them thus assessed. Comparisons have been drawn by using a mix of financial and physical indicators (Vol.2 : Annex.D); and

iii. In the final stage, estimates have been made of the additional financial needs that the municipal bodies will require to upgrade the service levels-currently (1986-87) and also during the 1990-95 period. Four different methods have been used for this purpose:

Table 1.3

Physical Standards and Norms Proposed by Various Committees and Agencies for Selected Services

Service	Proposed by	Standards
I. Water Supply	Zakaria Committee (i)	Population size - 1.0 lakh - 5.0 lakhs: 157.5 lpcd*
	(ii)	Population size - 5.0 lakh and above : 202.5 lpcd*
	National Master Plan - India & Mid-term Review	90% population coverage by piped water supply with average per capita supply 140 lpcd.
II. Sewerage/ Drainage System	National Master Plan - India	100% population coverage by sanitation facilities in class I cities.
III. Refuse Disposal	NIUA: Management of Urban services (Research Study)	100% disposal of generated wastes
IV. Street Lighting	Committee on Plan Projects (COPP)	One lighting pole per 100 feet of distance (road length)
V. Roads	Central Road Research Institute (CRRI) - on the basis of personal discussion with the scientists	75-100 % coverage by surfaced (all weather) roads in municipal area
VI. Health Centres and Dispensaries	Committee on Plan Projects (COPP)	One health centre for every 20,000 population

* Litres per capita per day.

FIRST METHOD

By using the Zakaria Committee norms of expenditures. The Zakaria Committee had laid down the desirable levels of expenditures on the maintenance of basic services at 1960 prices. These have been adjusted to 1986-87 prices by using the All India consumer price index for urban non-mannual workers. These are given in the following table.

Table 1.4

Financial Standards and Norms of Operational Expenditure on Various Municipal Services Proposed by the Zakaria Committee at 1986-87 Prices

(Rs. per capita/annum)

Service	Size class	
	1 - 5 lakhs	5 - 7.5 lakhs
I. Public Health		
- Water Supply	60.07	62.53
- Sewerage and Drainage Including Sewage Disposal	66.20	72.95
- Medical and Other Health Services	6.13	12.26
II. Roads and Paths	11.03	13.49
III. Street Lighting including Electric Distribution	15.33	17.47
IV. General Administration	18.39	24.12
V. Others (education, horticulture, etc.)	27.59	36.43
All Services	204.74	239.25

SECOND METHOD

By using the average expenditure levels of better-off municipal bodies. For this purpose, the data of 15 municipal bodies (10% of sampled cities) which had attained high levels of expenditures were used.

THIRD METHOD

By using the average expenditure levels of municipal bodies for each state.

FOURTH METHOD

By using the average expenditure levels of municipal bodies for each size class. All sampled municipal bodies were divided into seven size classes for purpose of computing for each size class.

The formula for computing the resource gap at individual city/class/state level is as follows:

$$R_h = (P_r \times U_h) - I$$

Where : h = Methods i.e. Ist, IInd, IIIrd and IVth.

R = Resource gap at constant prices of 1986-87.

r = Reference year

P = Projected population

U = Per capita expenditure norm (desired level of upgradation) at constant prices of 1986-87.

I = Revenue receipts/income (1986-87)

This report is in two volumes. The main analysis is contained in Volume 1. The city-wise data, arranged both statewise and by size class of cities on population estimates, municipal finance and municipal services is given in Volume 2 of the report.

CHAPTER II

LEVELS OF MUNICIPAL SERVICES : A CROSS SECTIONAL ANALYSIS OF SAMPLED URBAN CENTRES

Municipal governments in India are responsible for providing a range of service and are obliged to ensure a healthy environment for the urban community as a whole. However, as has been universally acknowledged, financial constraints and rapidly increasing urban population have limited the ability of the local governments to produce and distribute services adequately and efficiently. Such a situation has generated a disequilibrium between the demand for and the supply of public services.

Keeping in view the close relationship between urbanisation and infrastructural development in urban settlements, attention is focused on the current levels of core municipal services in the sampled cities. An assessment of the existing infrastructural gaps taking into account the adopted norms and standards is also made in this chapter for each service.

As mentioned earlier the study has considered a selected set of public services, namely, water supply, environmental sanitation (sewerage, drainage and refuse disposal), street lighting, roads and preventive medical services which are directly operated by the municipal governments. It may be noted that this selection of services is governed by two criteria : Firstly, data limitations have not allowed us to widen the scope of the analysis and secondly, we were reconciled by the fact

that these are by and large, the only important functions of municipal bodies which fall in the category of 'Obligatory duties'.

WATER SUPPLY

The present system of piped water supply was introduced in the country about 100 years ago. The state municipal acts have made it very clear that water supply is one of the prime functions of the local bodies. These acts have given full powers to state governments to frame rules for the efficient functioning of the water supply systems in the local bodies and to supersede them in case they fail to discharge their duties satisfactorily.

Recognising the urgent need for potable water supply for the human survival water supply standards have been designed by various agencies after making an assessment of the requirements of water for different purposes and checking up the physical and financial feasibility of attaining these requirements.

As a basic principle cities of smaller sizes (as per population) do not need the same level of service that a bigger urban centre needs. For example in major urban centres, use of water for industries, and for general purposes is much higher compared with the requirements of a small city or town. In smaller towns, some of the non-essential uses can be satisfied by non-protected sources (wells, ponds, etc.) say, for washing clothes and utensils, which in a larger city have to be met from piped water sources only.

Minimum standards have been set by the Central Public Health and Environmental Engineering Organisation (CPHEEO) at 125 to 200 litres per capita per day for cities with the population of 50,000 and above. The Zakaria Committee has however, suggested that a per capita supply of 157.5 to 270.0 litres per day per head would be an ideal goal for cities with population of 100,000 and above.

The National Master Plan of India has suggested water standards of 70 to 250 litres per capita per day (lpcd) with an average supply of 140 lpcd irrespective of the population size of the town.[1] The Master Plan has also recommended on an average, coverage of 90 per cent of the urban population by protected water supply.[2]

The current analysis has been done against these norms and standards.

Water Sources and Utilisation

Of the total number of sample cities, 131 have provided data on water supply sources. Ninety-five of these 131 cities rely on a single source of water, either surface (50) or ground (45); The remaining 36 cities have access to both sources of water supply.

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1. National Master Plan-India, International Drinking Water Supply and Sanitation Decade 1981-90, Ministry of Works & Housing, (Ministry of Urban Development), Govt. of India.

2. Mid-term Review of Water Decade Programme, Ministry of Urban Development, Government of India, 1985.

Table 2.1

Distribution of Responding Urban Centres by Sources of Piped Water Supply, 1986-87

Sources	Number of responding urban centres	% to total
Surface	50	38.17
Ground	45	34.35
Both	36	27.48
Total	131	100.00

The underutilisation of installed capacity is one of the most striking features of the municipal governments in urban areas. Table 2.2 indicates that against the average designed capacity of 34.3 mlpd., the availability of water for distribution is only to the extent of 82.68 per cent. However, the utilisation ratio varies significantly, from approximately 70 per cent in Class I urban centres to even more than 100 per cent in some of the Class III and IV cities. It is important to note that underutilisation cases are significantly low in those states which have surface water sources.

Table 2.2

Water Utilisation Ratio by Size Class of Cities, 1986-87

Size class	No. of responses	Designed capacity			Actual supply			% Utilisation ratio
		Total (mlpd)	AUC* (mlpd)	Per-capita (lpcd)	Total (mlpd)	AUC* (mlpd)	Per-capita (lpcd)	
I	86	1675.52	19.5	139.45	1171.15	13.6	115.66	70.28
II	19	803.35	42.3	137.89	665.68	35.0	151.91	82.86
III	11	548.60	49.9	140.02	612.80	55.7	158.45	111.70
IV	5	370.01	74.0	174.10	372.18	74.4	190.73	100.59
V	7	488.70	69.8	106.41	441.60	63.1	131.64	90.36
VI	3	517.00	172.3	351.68	382.78	127.6	228.24	74.04
VII	1	167.50	167.5	173.73	136.55	136.5	151.72	81.52
All	132	4531.00	34.3	146.58	3739.00	28.3	142.39	82.68

* Average per urban centre.

It can be seen from the Annex C-1 (Vol.II) that in almost one-third of the urban centres, the water utilisation ratio is even less than the average level of 82.68. The states in which the situation is particularly grave are Himachal Pradesh, Gujarat, Manipur, Tamil Nadu and Uttar Pradesh. Non-availability of stand-by pump sets and inadequate maintenance of the system are the prime factors for low utilisation of raw water sources in most of the cases.

Population Coverage

Population coverage by piped water supply is the most important indicator of the adequacy of the water supply system.

According to the mid-term review of the National Master Plan (1985), on an average nearly 73 per cent of the population at all India level is being served by piped water supply in urban areas. It is noteworthy that in almost half the states the population coverage is less than this average of 73 per cent (Table 2.3).

Table 2.3

Statewise Population Coverage by Piped Water Supply, 1985

States	Population coverage (% to Total)	Below (-)/ Above (+) Average
Andhra Pradesh	52.1	-
Assam	37.5	-
Bihar	59.5	-
Gujarat	83.2	+
Goa	81.9	+
Haryana	69.1	-
Himachal Pradesh	89.1	+
Jammu & Kashmir	86.6	+
Karnataka	81.2	+
Kerala	64.5	-
Madhya Pradesh	79.7	+
Maharashtra	87.1	+
Manipur	51.5	-
Meghalaya	22.1	-
Nagaland	46.7	-
Orissa	38.1	-
Punjab	71.2	-
Rajasthan	56.0	-
Tamil Nadu	83.8	+
Tripura	51.5	-
Uttar Pradesh	70.1	-
West Bengal	63.7	-
All India Average	72.9	-

Source : Mid-term review of water decade programme, Ministry of Urban Development, Govt. of India, 1985.

Another feature that emerges from the above table is that in a few states, namely, Gujarat, Himachal Pradesh, Jammu & Kashmir, Karnataka, Maharashtra, Tamil Nadu and Goa, the population covered by piped water supply is not more than the national average level but also satisfies the standards prescribed by the National Master Plan.

The data received from the sampled cities regarding population coverage by piped water supply show that, on an average, almost one-fourth of the population of these cities has no access to a protected water supply system.

The proportion of population which is not served varies significantly in various classes of urban centres, ranging from merely 6.65 per cent in Class VII cities to as high as 26.95 per cent in class V urban centres (Table 2.4).

Table 2.4

Piped Water Supply : Population Coverage
by Size Class of Cities, 1986-87

Size class	No. of reported cases	Population served (%)	Population unserved (%)
I	86	74.35	25.65
II	19	75.21	24.79
III	11	82.92	17.08
IV	5	73.19	26.81
V	7	73.05	26.95
VI	3	74.46	25.54
VII	1	93.35	6.65
All/Average	132	75.92	24.08

At the level of individual cities, the position regarding access to piped water supply is distressing. In 11 out of 132 cities less than 40 per cent of the population is covered by a safe source of water. As against this more than 45 per cent of urban centres provide municipal water supply to more than 80 per cent of their population. The notion that the water supply situation is more acute in the larger cities is not supported by the data (Table 2.5).

Table 2.5

Distribution of Responding Urban Centres According to Population Served with Piped Water Supply, by Size Class of Cities, 1986-87

Population served (% to Total)	Size class								
	I	II	III	IV	V	VI	VII	All	Percentage
< 20	3	0	0	0	0	0	0	3	2.3
20 - 40	7	1	0	0	0	0	0	8	6.1
40 - 60	8	3	1	1	2	1	0	16	12.1
60 - 80	27	6	4	2	3	1	0	43	32.6
80 +	41	9	6	2	2	1	1	62	46.9
All	86	19	11	5	7	3	1	132	100.0

Per capita Supply

The average per capita per day gross availability of water in the sampled urban centres is about 142 litres which is lower than the norms laid down by the Zakara Committee. According to these norms, the average availability ofwater for cities in the population range of 100,000-750,000 should be between 157.5 and 202.5 lpcd. The municipal bodies place the shortfall in per

capita supply at about 38 per cent of the demand for water. Variations are noticed in the per capita per day supply of water from one class of urban centres to another, ranging from about 116 lpcd in Class I urban centres to as high as 228 lpcd, in the cities with population ranging from 600,000 to 700,000 Table 2.6).

Table 2.6

Per Capita Demand and Supply of Water for Various Uses by Size Class of Cities, 1986-87

Size class	Per capita demand (lpcd)	Per capita supply (lpcd)	% supply to demand	% shortfall in supply
I	228.64	115.66	50.59	49.41
II	242.74	151.91	62.58	37.42
III	237.17	158.45	66.81	33.19
IV	232.41	190.73	82.07	17.93
V	180.12	131.64	73.08	26.92
VI	316.22	228.24	72.18	27.82
VII	250.56	151.72	60.55	39.45
Average	231.24	142.39	61.58	38.42

Variations in the per capita water supply levels can also be seen in different functional categories of urban centres. Table 2.7 shows that in cities which have a viable industrial base the per capita water supply is 150 lpcd., almost 15 per cent higher compared to multi-functional urban areas. In service sector cities the per capita water availability is at a moderate level of 150 lpcd (Table 2.7).

Table 2.7

Per Capita Water Supply by Functional Category of Responding Urban Centres, 1986-87

Functional category	No. of urban centres	% to total	Average per capita supply (lpcd.)
Industry	20	15.15	150.02
Service	13	9.85	149.76
Multi functional	99	75.00	129.69
All/Average	132	100.00	142.39

It is significant to note that in a majority of cities, (nearly 68% of the responding urban centres), the per capita water supply levels are below the established norms and these cities are largely concentrated in Class I, II and III categories of urban centres. In contrast, in nearly 18 per cent of the urban centres belonging to comparatively higher population groups, the per capita supply is higher than the prescribed norms (Table 2.8).

Table 2.8

Distribution of Responding Urban Centres by Per Capita Water Supply Levels and Size Class of Cities, 1986-87

Per capita water supply (lpcd)	Size class							
	I	II	III	IV	V	VI	VII	All
< 50	20	0	1	0	2	1	0	24
50 - 100	19	6	0	0	0	0	0	25
100 - 150	24	6	6	1	2	0	0	39
150 - 200	14	2	0	2	1	0	1	20
200 - 250	4	2	3	1	1	0	0	11
250 +	4	3	1	1	1	2	0	12
All	85	19	11	5	7	3	1	131

The 15 urban centres where less than 60 per cent of the population gets less than 150 lpcd happen to be the most critical cities as far as water supply is concerned (Table 2.9).

Table 2.9

Distribution of Responding Urban Centres by Per Capita Water Supply Levels and Population Served, 1986-87

Per capita water supply (lpcd.)	Population served (% to total)			
	< 60	60-80	80-100	All
< 100	7	15	27	49
100 - 150	8	14	17	39
150 - 200	5	5	10	20
200 - 250	3	6	2	11
250 +	4	3	5	12
All	27	43	61	131

The extent of disparities in water supply is evident from Table 2.9 which shows that while in seven urban centres the per capita water supply is more than 200 lpcd, the population coverage is even less than 60 per cent.

ENVIRONMENTAL SANITATION

The recent cholera-gastro enteritis epidemic in which hundreds of people died in Delhi and other areas is one of the most tragic results of unhealthy environmental conditions in Indian cities. The prevailing conditions are indicative of gross neglect of sanitation services by the municipal authorities, not just in the last few months but over the years.

To examine the level of sanitation services in the sample urban centres, the services have been divided into two sectors namely, sewerage/drainage and refuse disposal.

Sewerage/Drainage

Sewerage System

Unlike water supply, standards for sewerage and drainage have not been specified. Many cities do not have a sewerage system, even where the system exists, the capacity is not adequate to cope with the requirements. The adequacy of the sewerage system depends on the total water consumed for industry, domestic and other purposes. According to the "Zakaria Committee Report" and the "Manual of water supply & sewerage", 90 per cent of water consumed by industry and 80 per cent of per capita water supply in residential areas is reckoned as sewage flow.

In terms of population coverage, the National Master Plan: International Drinking Water Supply and Sanitation Decade : 1981-1990, has recommended a 80 per cent population coverage with proper sewerage and sewage treatment facilities for Class I urban centres.

According to the mid-term review of the water supply and sanitation decade programme 1981-1990 (1985), at All India level, the proportionate share of population served by sanitation services (sewerage/drainage) in urban areas is about 28 per cent. Besides Punjab and Tamil Nadu, only in the states of Gujarat, Karnataka, Maharashtra and Sikkim the sanitation coverage is above the All India average. A large number of states including

some of the developed ones have only partial coverage by sewerage services in some of the urban centres (Table 2.10).

Table 2.10

Statewise Urban Population Coverage by Sanitation Services (Sewerage/Drainage), 1985

States	Urban population coverage (% to total)	Below (-)/ above (+) average
Andhra Pradesh	10.9	-
Assam	15.7	-
Bihar	22.9	-
Gujarat	38.0	+
Goa	13.3	-
Himachal Pradesh	13.7	-
Haryana	28.4	Average
Jammu & Kashmir	7.7	-
Karnataka	38.4	+
Kerala	28.2	-
Madhya Pradesh	7.8	-
Maharashtra	39.8	+
Manipur	0.8	-
Orissa	9.5	-
Punjab	48.5	+
Rajasthan	9.6	-
Sikkim	32.9	+
Tamil Nadu	47.5	+
Tripura	13.2	-
Uttar Pradesh	14.1	-
West Bengal	19.5	-
All India Average	28.4	-

Source : Mid term review of water supply and sanitation decade, Ministry of Urban Development, Govt. of India, 1985.

Table 2.11 indicates the abysmal state of the sewerage facilities in a majority of the urban centres. It is, indeed alarming that as many as 109 of the sampled urban centres have no sewerage system. The gross inadequacy of this most basic urban service is further compounded when considered in the

Table 2.11

Statewise Distribution of Responding Urban Centres having Sewerage System, 1986-87

States	Responding urban centres	Urban centres reporting sewerage systems	
		No.	% to total
Andhra Pradesh	19	6	31.6
Assam	3	0	0.0
Bihar	4	0	0.0
Gujarat	9	2	22.2
Goa	1	0	0.0
Haryana	7	6	85.7
Himachal Pradesh	1	1	100.0
Jammu & Kashmir	2	0	0.0
Karnataka	13	5	38.5
Kerala	6	0	0.0
Madhya Pradesh	5	1	20.0
Maharashtra	22	7	31.8
Manipur	1	0	0.0
Meghalaya	1	0	0.0
Nagaland	1	0	0.0
Orissa	5	0	0.0
Punjab	6	6	100.0
Rajasthan	10	3	30.0
Tamil Nadu	14	2	14.2
Tripura	1	0	0.0
Uttar Pradesh	23	11	47.8
West Bengal	5	0	0.0
All/Average	159	50	31.5

context of population coverage by the service concerned. It can be seen from the Table 2.12 that except in five urban centres, namely, Navsari, Belgaum, Mysore, Hubli-Dharwad and Solapur, where 80 per cent or even more of the population is covered by sewerage systems, in the remaining cities there is a serious shortfall in this critical core urban service in comparison with the prescribed norms.

Table 2.12

Distribution of Responding Urban Centres by Population Served with Sewerage System and Size Class of Cities, 1986-87

Population served (% to total)	Size class								
	I	II	III	IV	V	VI	VII	All	Percentage
< 20	8	2	1	0	1	0	0	12	24.0
20 - 40	5	4	2	1	0	1	0	13	26.0
40 - 60	4	3	1	0	0	1	0	9	18.0
60 - 80	6	0	0	1	2	1	1	11	22.0
80 +	1	1	0	1	2	0	0	5	10.0
All	24	10	4	3	5	3	1	50	100.0

The situation is most critical in 12 urban centres where significant proportions of the population remain unserved by sewerage systems. In these cities the extent of unserved population is even more than 80 per cent. (Annex C(5), Vol.II).

It needs to be pointed out that as many as 22 urban centres out of the 47 which do not have an effective sewerage system. As per the accepted norms, at least 150 litres per capita per day water supply is needed for efficient functioning of the sewerage system in any city or town. Even if this norm is lowered to 100 litre level, only 81 per cent of the responding urban centres would seem to have effective sewerage systems in terms of per capita water availability (Table 2.13).

Table 2.13

Statewise Distribution of Urban Centres having Sewerage System by Per Capita Water Supply Levels, 1986-87

States	Per Capita Water Supply Levels (lpcd)					
	< 50	50-100	100-150	150-200	200 +	All
Andhra Pradesh	0	1	3	1	1	6
Gujarat	1	0	0	1	0	2
Haryana	0	1	1	4	0	6
Himachal Pradesh	0	0	1	0	0	1
Karnataka	1	1	1	1	1	5
Madhya Pradesh	0	0	0	0	1	1
Maharashtra	0	0	2	3	2	7
Punjab	1	0	1	2	2	6
Rajasthan	0	1	1	0	0	2
Tamil Nadu	0	1	1	0	0	2
Uttar Pradesh	1	0	2	2	4	9
All	4	5	13	14	11	47
Percentage	8.5	10.6	27.7	29.8	23.4	100.0

Drainage System

Out of the 159 responding urban centres, only 127 have furnished information on the surface drainage system, meant for disposal of surface water from streets and other city areas. The data given in Table 2.14 show that on an average, the drainage system covers no more than 66 per cent of the total population and significant proportions remain unserved by the drainage network.

Considering cities by size class, the maximum proportion of unserved population is to be found in Class II cities, followed by Class VI and Class IV urban centres (Table 2.15).

Table 2.14

Population Coverage by Surface Drainage System in Responding Urban Centres by Size Class of Cities, 1986-87

Size class	Responding urban centre having drainage system	Projected population 1987	Population served by drainage	Population	
				Served (%)	Unserved (%)
I	80	12845108	8705704	67.77	32.23
II	24	7342044	4135991	56.33	43.67
III	12	5219200	4130523	79.14	20.86
IV	4	2125292	1345414	63.30	36.70
V	5	3402481	2313505	67.99	32.01
VI	2	1488438	870261	58.47	41.53
VII	0	0	0	0.0	0.0
All/Av.	127	32422563	21501398	66.32	33.68

Table 2.15

Distribution of Responding Urban Centres by Population Served with Drainage System and Size Class of Cities, 1986-87

Size class	Population served (% to Total)					
	< 20	20-40	40-60	60-80	80 +	ALL
I	3	6	15	32	24	80
II	1	5	5	9	4	24
III	0	0	1	6	5	12
IV	0	0	2	1	1	4
V	1	0	1	1	2	5
VI	0	1	0	0	1	2
All	5	12	24	49	37	127

The extent of drainage system and its adequacy can be seen from the fact that in about one-third of the urban centres more than 40 per cent of the urban population is not being served by the drainage system. What is interesting is that in 17 urban centres which belong to the States of Andhra Pradesh (4), Gujarat (1), Jammu & Kashmir (1), Karnataka (3), Maharashtra (3), Punjab (2), Tamil Nadu (1), and Uttar Pradesh (2), the extent of unserved population is more than 60 per cent (Table 2.16). This could not be said to be a satisfactory situation by any standard. On the other hand, the coverage by the system in 37 cities - many of which fall in the population range of 100,000 to 200,000 - is more than 80 per cent, which is a satisfactory level.

Table 2.16

Statewise Distribution of Responding Urban Centres by Population Served with Drainage System, 1986-87

States	Population served (% to total)					
	< 20	20-40	40-60	60-80	80 +	All
Andhra Pradesh	2	2	3	7	3	17
Assam	0	0	1	0	2	3
Bihar	0	0	0	3	1	4
Gujarat	0	1	2	3	1	7
Haryana	0	0	2	2	1	5
Himachal Pradesh	0	0	0	0	1	1
Jammu & Kashmir	0	1	0	0	0	1
Karnataka	1	2	1	3	3	10
Kerala	0	0	2	0	0	2
Madhya Pradesh	0	0	1	3	1	5
Maharashtra	1	2	3	10	6	22
Manipur	0	0	1	0	0	1
Orissa	0	0	1	1	2	4
Punjab	0	2	2	0	2	6
Rajasthan	0	0	2	5	1	8
Tamil Nadu	0	1	1	5	5	12
Tripura	0	0	0	0	1	1
Uttar Pradesh	1	1	2	7	7	18
All	5	12	24	49	37	127

Refuse Disposal

The collection of solid waste from different city points is one of the most important functions of the municipal governments but no norms or standards have been worked out for effective functioning of this core service. However, a recent study conducted by the National Institute of Urban Affairs[3] has suggested that local bodies should collect and dispose off the entire waste generated in their jurisdiction to avoid an unhealthy environment.

Table 2.17

Refuse Disposal Level as Proportion to Refuse Generation by Size Class of Cities, 1986-87

Size class	No. of responding urban centres	Average per capita refuse (grams/day)		% Disposal (as proportion to generation)
		Generation	Disposal	
I	98	302.8	217.6	71.9
II	27	479.9	319.0	66.5
III	13	375.9	288.9	76.9
IV	6	483.8	354.4	73.3
V	7	413.7	341.4	82.5
VI	2	294.4	203.4	69.1
VII	-	-	-	-
All/Av.	153	377.8	273.8	72.5

3. NIUA: Management of Urban Services, 1986.

As in the other sanitation service sectors, the performance of the local governments on this front is also not very encouraging and as high a proportion as 27.5 per cent of total waste generated remains uncollected and scattered on streets and other city areas. However, a large disparity is noticed between the level of refuse disposal and the level of refuse generated in every urban centre surveyed.

Table 2.18 shows that of the 153 urban centres which provided data on this subject 41 per cent have a refuse disposal level below the sample average (72.5 %) and only in marginal cases (10 Urban Centres - Porbandar (Gujarat), Panipat (Haryana), Hissar (Haryana), Bellary (Karnataka), Gadag Betgeri (Karnataka), Mangalore (Karnataka), Kolhapur (Maharashtra), Malegaon (Maharashtra), Erode (Tamil Nadu), and Mirzapur (Uttar Pradesh), disposal as a proportion of generated waste is 90 per cent or even more. Significantly, all these cities are in the population range of 100,000 - 400,000.

Table 2.18

Distribution of Responding Urban Centres by Refuse Disposal Levels and Size Class of Cities, 1986-87

% Disposal to generation	Size class							
	I	II	III	IV	V	VI	VII	ALL
< 40	1	2	0	1	0	0	0	4
40-50	3	5	0	0	0	0	0	8
50-60	12	4	1	1	0	1	0	19
60-70	25	1	3	1	1	0	0	31
70-80	31	4	3	1	1	1	0	41
80-90	19	9	5	2	5	0	0	40
90 +	7	2	1	0	0	0	0	10
ALL	98	27	13	6	7	2	0	153

The situation is serious in 12 urban centres (Annex C(3), Vol. II) where the level of uncollected waste is 50 per cent or even more.

The inadequate levels of sanitation services in the urban centres of the country indicate the operational inefficiency at all levels of the municipal service management structure. It is significant to note that staff deployment has no direct relationship with the levels of waste collection.

Table 2.19 given below shows that in the cities which have a larger number of scavengers per 10,000 population the proportion of waste collected is as high as in cases which have a smaller number of scavengers for the same number of people. Therefore, the usual argument of the municipal governments about the inadequacy of scavenging staff seems to be without foundation.

Table 2.19

Distribution of Responding Urban Centres by Per Cent Refuse Disposal Level and No. of Scavengers per 10,000 Population, 1986-87

% Disposal as proportion to generation	No. of scavengers/10000 population				
	<5	5-10	10-15	15-20	ALL
< 40	1	1	0	0	2
40 - 50	5	0	0	1	6
50 - 60	8	3	3	1	15
60 - 70	14	4	3	4	25
70 - 80	24	12	8	15	59
80 -90	14	8	7	5	34
90 - 100	2	0	4	2	8
All	68	28	25	28	149

Although, there is no corelation between staff deployment and extent of waste collection, the scavenging staff among the sample cities is far below the norms laid down by the Uttar Pradesh Health Manual for this purpose. According to these norms, at least 62 to 78 scavengers are needed to serve a city population group of 10,000 persons (Table 2.20).

Table 2.20

Norms for Scavenging Staff and Actual Staff Deployment in Sampled Urban Cities by Size Class of Cities, 1986-87

Size class	No. of scavengers per 10,000 persons		
	Norms at lowest level	Actual deployment	Gap (-)
I	62	10	- 52
II	62	12	- 50
III	62	13	- 49
IV	62	13	- 49
V	62	10	- 52
VI	62	12	- 50
VII	62	-	-
Average	62	11	- 51

If measured in terms of prescribed standards, it is surprising that none of the class of local bodies satisfies the staff requirement standards for scavengers which shows the magnitude of the problem. The authorities should therefore make efforts to improve the sanitary conditions at all levels of operational management.

STREET LIGHTING

Street lighting is gradually developing into one of the major functions of municipal governments. The tremendous increase in vehicular traffic, changes in life styles and a network of internal road systems have increased the movement of city population during all hours of day and night. Therefore, street lighting has become an essential service for city transport. However, street lighting today involves more than the mere installation of a few electric poles on streets, it has to conform to certain standards and requirements of traffic in the area concerned. According to Dr. Walrauf, an eminent illumination engineer, adequate public street lighting is one in which vehicles can be driven at the designed speed of a highway without the use of head lights, so that the objects can be seen on the road with a safe stopping distance. In cities where the average speed limit is between 30-35 mph., the safe stopping distance is about 130 feet.

According to the accepted norms and standards, there should be cent-percent coverage of roads in the urban centres by lighting with an average distance level of 30 metres between two lighting poles.

Table 2.21

Distribution of Urban Centres by Percentage Lighted Road Length and No. of Lamp Posts Per Km. Road Length, 1986-87

% Lighted road length	No. of lamp posts (per k.m. road length)							
	< 10	10-20	20-30	30-40	40-50	50 +	All	Percentage
< 50	10	9	3	5	0	2	29	18.95
50 - 75	1	5	4	1	0	1	12	7.84
75 - 100	0	6	17	5	3	4	35	22.88
100 %	1	8	20	20	8	20	77	50.33
All	12	28	44	31	11	27	153	100.00
Percentage	7.84	18.30	28.76	20.26	7.19	17.65	100.00	

Table 2.21 clearly shows that in a significant proportion of the responding urban centres, street lighting is provided adequately both in terms of coverage and quantity. Of the 153 urban centres which provided data, 77 (50.3%) have 100 per cent coverage of roads by street lighting and in an almost equal number of cases (89) the number of lamp posts compare favourably with the accepted norms. However, all is not well with the service under reference and in a substantial number of urban centres (29) the proportion of lighted roads is even below 50 per cent.

Table 2.22

Distribution of Responding Urban Centres by No. of Lamp Posts and Size Class of Cities, 1986-87

No. of lamp posts per km. road length	Size class							
	I	II	III	IV	V	VI	VII	ALL
< 10	10	1	1	1	0	0	0	13
10 - 20	17	6	2	0	2	1	1	29
20 - 30	24	15	1	3	1	0	0	44
30 - 40	20	1	5	1	2	2	0	31
40 - 50	6	2	2	0	1	0	0	11
50 +	21	3	2	1	0	0	0	27
All	98	28	13	6	6	3	1	155

It is important to note that a majority of urban centres which are inadequately served by street lighting in quantative terms (no. of lamp posts per km. road length), are in the population range of 100,000 to 300,000, and are largely concentrated in the northern states of the Indian Union (Table 2.23).

Table 2.23

Statewise Distribution of Responding Urban Centres by No. of Lamp Posts Per Km. Road Length, 1986-87

States	No. of lamp posts per km. road length						
	< 10	10-20	20-30	30-40	40-50	50 +	All
Andhra Pradesh	1	5	10	1	0	2	19
Assam	2	0	0	0	0	1	3
Bihar	1	2	0	0	0	1	4
Gujarat	0	2	2	3	1	1	9
Goa	0	1	0	0	0	0	1
Haryana	1	0	1	0	3	2	7
Himachal Pradesh	0	0	1	0	0	0	1
Jammu & Kashmir	0	0	0	0	0	1	1
Karnataka	2	1	4	4	1	0	12
Kerala	0	1	1	2	0	2	6
Madhya Pradesh	0	0	2	0	1	2	5
Maharashtra	0	3	7	6	0	6	22
Meghalaya	0	0	0	0	0	1	1
Nagaland	0	1	0	0	0	0	1
Orissa	0	2	3	0	0	0	5
Punjab	0	0	4	1	0	1	6
Rajasthan	0	0	1	2	2	5	10
Tamil Nadu	0	0	2	10	1	0	13
Tripura	0	0	0	0	0	1	1
Uttar Pradesh	4	11	4	2	1	1	23
West Bengal	2	0	2	0	1	0	5
All	13	29	44	31	11	27	155

MEDICAL RELIEF

Medical relief includes maintenance of hospitals and dispensaries and the control of communicable diseases. However, as per the information received from the sampled municipal bodies it is observed that in general, municipalities do not own and run hospitals or large scale dispensaries. In a majority of the cases they simply provide preventive health services to their citizens such as vaccination against smallpox and inoculations to secure immunity from cholera or enteric fever when an epidemic is suspected. In addition in some places,

municipal bodies also provide maternity and child welfare services at these health units.

The medical facilities recommended for various sizes of cities in India show wide variations both in term of terminology adopted for various levels of medical units as well as in the suggested physical planning standards. For example, the population threshold standard for health centres/clinics/ dispensaries ranges between 5,000-20,000. Space standards suggested vary from 0.50 acres to 3 acres. In the absence of any uniform guidelines for medical units and health services, we have adopted COPP norm (Committee On Plan Projects), that is, one health unit for every 20,000 persons.

It is surprising to note that in all the urban centres, except 21 (15.1% of the total) with a population size 100,000 - 400,000, the number of health units is significantly lower than the norms laid down by COPP (Table 2.24).

Table 2.24
Urban Centres with Health Units Below/Above Prescribed Standard,* 1986-87

Size class	No. of urban centres		
	Total reported	Below norm	Above norm
I	87	71	16
II	25	21	4
III	10	9	1
IV	6	6	-
V	7	7	-
VI	3	3	-
VII	1	1	-
All	139	118	21
Percentage	100.0	84.9	15.1

* One Health Unit for Every 20,000 Persons.

The statewise analysis show that Himachal Pradesh has the maximum number of health units per 20,000 persons (5.39) followed by Goa (2.45), Kerala (1.34) and Meghalaya (1.12). All the other states have a lower number of health units than the adopted norms. The lowest number of health units for every 20,000 persons are in Assam (0.0510), Uttar Pradesh (0.062), Tamil Nadu (0.066), and West Bengal (0.082).

Table 2.25

Statewise Average Number of Health Units for Every 20,000 Persons, 1986-87

States	Reported cases	Health units per 20,000 persons
Andhra Pradesh	15	0.1573
Assam	2	0.0510
Bihar	4	0.4579
Gujarat	8	0.3076
Goa	1	2.4494
Haryana	5	0.1017
Himachal Pradesh	1	5.3862
Jammu & Kashmir	2	0.4601
Karnataka	11	0.1892
Kerala	5	1.3380
Madhya Pradesh	5	0.2329
Maharashtra	20	0.1943
Meghalaya	1	1.1230
Nagaland	1	0.8806
Orissa	5	0.1515
Punjab	6	0.5638
Rajasthan	9	0.4010
Tamil Nadu	11	0.0662
Tripura	1	0.6409
Uttar Pradesh	21	0.0629
West Bengal	5	0.0815
All/Average	139	0.1367

In short, it is observed that the medical facilities provided by the municipal bodies are not adequate in a majority

of the urban centres and there should be a greater participation of the local governments in matters relating to public health.

ROADS AND STREETS

A well designed and well laid out road network is as much a civic necessity as a convenience. The internal road network in a town is constantly put to intensive use by various sections of the population for very different purposes than the national and state highways which are mostly confined to business traffic. The workers, the entertainment seekers, the shop goers, and other categories of urban dwellers, are regular users of city roads. While the state and national highways are managed and maintained by union and state governments, the town's internal road network, including main roads as well as link roads, is the responsibility of municipal bodies.

The municipal road pattern is generally dependent on (i) the town's physical plan, (ii) area, and (iii) population. The total road length in an urban centre compared to its area gives a fairly good indication of the extent of conectivity achieved. Road density can be expressed in terms of Kms. per Sq. Km. of area.

The distribution of sampled urban centres by length of road per square kilometer of municipal area (road density) is given in Table 2.26.

Table 2.26

Distribution of Responding Urban Centres
by Road Density Levels*, 1986-87

Road density kms./sq. km.)	No. of urban centres	% to total
< 2.5	18	11.6
2.5 - 3.0	9	5.8
3.0 - 6.0	46	29.7
6.0 - 9.0	30	19.4
9.0 +	52	33.5
All	155	100.0

* Road density (total road network, surfaced and unsurfaced).

The most striking feature of the road network among the sample cities is a fairly high road density level in a majority of the urban centres compared to the national average of 2.45 kms./sq. km. for urban areas.[4] However, the road density varies widely from one urban centre to another, ranging from 0.50 km./sq. km. in Thane (Maharashtra) to 41.45 kms./sq.km. in Muzaffarnagar (U.P.)[5]. This is partly due to the growth pattern of the cities. Generally as the city area increases, the average road length per square kilometer declines. In case of Thane and Muzaffarnagar the area is 147.80 sq. kms. and 12.40 sq. kms. respectively. Table 2.27 gives the statewise picture of road density levels in the sample urban centres.

4. Calculated on the basis of road statistics of Urban India pertaining to the year 1983. Source - Motor Transport Statistics of India, Ministry of Surface Transport, Govt. of India, 1986-87.

5. Worked out on the basis of data given in Annex C-13 Vol.II.

Table 2.27

Statewise Urban Road Density, 1986-87

Major states	Reported cases	Road length (kms.)			Area (sq. km.)	Road density (km./ sq.km.)	Rank
		Sur-faced	Unsur-faced	Total			
Andhra Pradesh	19	4022.32	711.59	4733.59	483.92	9.78	3
Assam	3	180.54	109.58	290.12	36.74	7.90	5
Bihar	4	272.20	57.90	330.10	81.45	4.05	18
Gujarat	9	2356.97	821.76	3178.73	329.71	9.64	4
Goa	1	40.00	0.0	40.00	7.46	5.36	10
Haryana	7	585.80	119.13	704.73	133.42	4.63	14
Himachal Pradesh	1	112.00	19.72	131.72	19.55	6.74	21
Jammu & Kashmir	2	295.59	55.00	350.59	32.00	2.34	7
Karnataka	12	2668.52	424.61	3093.13	549.72	5.63	9
Kerala	6	1548.18	206.86	1755.04	338.35	5.19	11
Madhya Pradesh	5	694.08	28.15	722.23	200.78	3.60	19
Maharashtra	22	4228.99	585.34	4814.33	775.10	6.21	8
Manipur	1	68.00	54.00	122.00	29.59	4.12	17
Meghalaya	1	26.36	2.62	28.98	10.36	2.80	20
Nagaland	1	88.00	14.00	102.00	23.00	4.43	16
Orissa	5	1067.41	171.34	1238.75	245.09	5.05	13
Punjab	6	1585.41	647.50	2232.91	484.46	4.61	15
Rajasthan	10	1604.27	435.15	2039.42	1007.09	2.03	22
Tamil Nadu	13	1448.73	67.36	1516.09	220.61	6.87	6
Tripura	1	152.41	20.49	172.90	15.81	10.94	2
Uttar Pradesh	23	6464.94	1656.22	8121.16	735.36	11.04	1
West Bengal	5	648.31	106.75	755.06	148.69	5.08	12
Sample Average (1986-87)	157	30159.03	6315.07	36474.10	5908.27	6.11	
Urban India Average (1983)				*129487.00	52649.00	2.45	

* Break up is not available for surfaced and unsurfaced urban roads.

The average level of road density in sample urban centres is 6.11 kms./sq.km. which is more than twice than the national level average. Another feature which has emerged from the

above table is that in all the states except in Rajasthan and Jammu & Kashmir, road density is higher than the Urban India average of 2.45 kms./sq.km.

Although, the above analysis indicates a satisfactory picture of road density in the sample urban centres, nearly half of the urban centres have road density level below the sample average of 6.11 kms./sq.km. which seems to be the real indicator in the case of Class I urban centres.

It would be important to note that this analysis is confined to Class I cities having a population size in the range 100,000 - 750,000. The road density at national level has been worked out on the basis of (i) total roads length of urban India (1983) and (ii) total area (sq.kms.) of urban India (1981). Therefore, at the national level, all the urban centres have been included irrespective of their population size and other local characteristics.

Roads are of two categories : Surfaced (all weather) and unsurfaced (Kutcha). A statewise comparison of the percentage of surfaced roads network among in the sample cities is given in Table 2.28.

Table 2.28

Municipal Roads - Per Cent Surfaced Roads to Total Road Network, 1986-87

Major states	% Surfaced roads	Rank
Andhra Pradesh	85.1	6
Assam	54.2	15
Bihar	79.5	12
Gujarat	71.5	14
Haryana	82.0	9
Karnataka	84.5	8
Kerala	87.4	3
Madhya Pradesh	84.6	7
Maharashtra	86.8	4
Orissa	87.5	2
Punjab	73.3	13
Rajasthan	81.1	10
Tamil Nadu	95.4	1
Uttar Pradesh	80.5	11
West Bengal	85.4	5
Sample Average	83.3	-
All India Average*	47.0	-

* Motor Transport Statistics of India, Ministry of Surface Transport, Govt. of India, 1986-87.

The ratio of surfaced and unsurfaced roads is an indicator of the quality of roads in any city or state. It is seen that in all the states under reference, the percentage in the sampled cities is above the national average of 47.0. Tamil Nadu and Orissa top the list with 95.4 per cent and 87.5 per cent respectively in this respect. The surfaced roads network in Assam is the worst off (54.2%) among all the states under reference.

Table 2.29

Distribution of Responding Urban Centres
by Level of Surfaced Roads and Size Class of Cities, 1986-87

% Surfaced roads	Size class								
	I	II	III	IV	V	VI	VII	ALL	Percentage
25 - 50	5	2	1	0	0	0	0	8	5.1
50 - 75	22	5	3	2	0	1	0	33	21.0
75 - 100	67	21	9	4	7	2	1	111	70.7
100 +	5	0	0	0	0	0	0	5	3.2
All	99	28	13	6	7	3	1	157	100.0

Unlike the case of other service sectors, comparatively better levels of road network among the sampled urban centres is perhaps the most striking feature of this study. The data given in Table 2.29 show that in almost three - fourths of the urban centres the level of surfaced roads is between 75-100 per cent of the total road network.[6] The worst off cases in this respect are eight urban centres (Classes I,II and III) where this level is below 50 per cent.

To sum up, the foregoing analysis shows that :

- On an average, almost one - fourth of the population of the reported cities have no access to any protected water supply system. In another 20 per cent of the cities less than 60 per cent of population is served by piped water supply;

6. Adopted Standard.

- the average per capita per day availability of water in the sampled urban centres approximately works out to 142 litres which is significantly lower than the norm laid down by the Zakaria Committee. In all the urban centres except a few inequities are found in the water distribution system;

- the sewerage facilities in a majority of the urban centres is abysmal. It is indeed alarming that as many as 109 of the sampled cities have no sewerage systems. The gross inadequacy of this most basic urban service is further compounded when considered in the context of population coverage by the service concerned;

- on an average, the drainage system covers no more than 66 per cent of the total population of the responding cities and a significant proportion of their population is unserved by the drainage network;

- the performance of the local governments with regard to refuse collection and disposal work is equally deplorable. Out of the 153 urban centres from where data have been received 41 per cent have a refuse disposal rate even below the sample average of about 72 per cent, and only in marginal cases the disposal as a proportion of the generated waste is 90 per cent or even more;

- staff deployment has no direct relationship with the level of waste collection. The statistics shows that cities which have a larger number of scavengers per 10,000

population have as high a proportion of collected waste as those which have fewer scavengers;

- in a majority of urban centres, street lighting is provided adequately both in terms of coverage and quantity. However, everything is not well with the service under reference and in a substantial number of urban centres the percentage of lighted roads is even below 50 per cent;

- the medical facilities provided by the municipal bodies are not adequate in many of the urban centres and there should be a greater participation of local governments in matters relating to public health;

- In a majority of urban centres the road density level is fairly high compared to the national average of 2.45 kms/sq.km. (urban areas). However, the road density various widely from one urban centre to another, ranging from 0.50 km./sq.km. in Thane (Maharashtra) to 41.45 kms/sq.km. is Muzaffarnagar (U.P.), and almost half of the urban centres have road density levels below the sample average of 6.11 kms/sq.km; and finally

- in a majority of the urban centres the services are at low levels, specially in the case of water supply, sanitation and preventive health. Perhaps, the municipal governments have paid less attention to these services in comparison to street lighting and roads where performance levels seem to be at a higher level. Besides resource constraints, operational negligence, mismanagement and technological

snags seem to be the chief reasons for unsatisfactory levels of municipal services in a majority of the urban areas under reference.

CHAPTER III

LEVELS OF MUNICIPAL EXPENDITURE : SECTORAL DISTRIBUTION

It is clear from the previous chapter that the quantity and quality of services provided by a majority of the sampled municipal bodies is poor. Since municipal spendings have a direct impact on the delivery and maintenance of urban services, we have examined the pattern of municipal expenditure on the selected services in this chapter. The following questions have been addressed :

- What is the aggregate (1986-87) level of municipal expenditure on critical urban services? How do these compare with the expenditure norms laid down by the Zakaria Committee (updated to 1986-87 prices)?
- What is the behaviour of the different components of expenditure in relation to priority service areas? Has there been a shift in the expenditure pattern both in scale as well as in proportion, between 1974-75 and 1986-87?
- Do the expenditure levels differ with the population size of urban centres?

As a starting point, the functions of municipal bodies and resources to finance these functions may be stated briefly. The duties of municipal bodies can broadly be grouped into two categories, namely, (i) obligatory and (ii) discretionary. Simply speaking these two categories may be considered as compulsory and non-compulsory. Municipal acts however, normally permit municipal bodies to undertake any aspect which

is likely to promote public health, safety and convenience of the citizens.

While all the services under reference fall within the network of obligatory functions of municipal governments, construction and maintenance of parks and playgrounds, primary education, establishment of commercial ventures, and so on, are some of the discretionary functions of local bodies.

In addition to laying down the functions, the State Municipal Acts also specify the resource generating powers of municipal governments for financing various civic services both from internal as well as external sources. However, this issue will be taken up separately in the next chapter.

As stated earlier, the study covers only revenue expenditures (non-plan)[1] which include the financial spendings on the establishment and operations of urban services. These are of recurring nature. While the salaries of staff in different service sectors including various administrative expenses is part of the establishment, the 'operation' includes expenditure on the regular maintenance of municipal services and facilities such as the repair of plants & machinery, use of chemicals and so on. Chart-A gives the classification of municipal expenditures by functional category.

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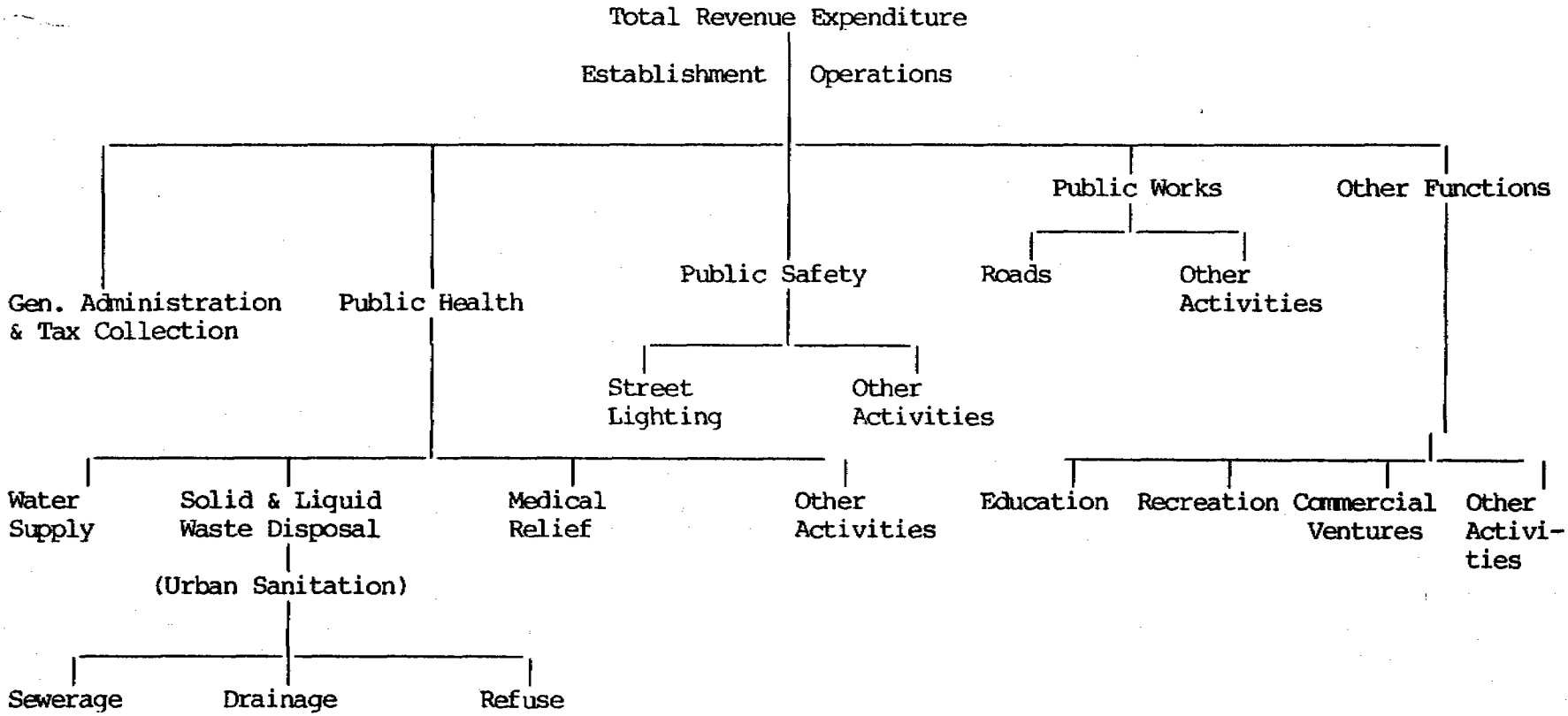
1 The study is confined to the revenue aspect of municipal finances (non-plan); the capital nature of financing which witnesses quite a substantial degree of variations from place to place, depending upon the geo-socio-economic and other regional/local disparities have been excluded as it is difficult to generalize or highlight the basic characteristics of such variations.

CHART A

Classification of Municipal Expenditures by Functional Category



The analysis of municipal expenditures shows that the per capita expenditure level in many of the urban centres is far below the levels proposed by the Zakaria Committee (Table 3.1).

Table 3.1

No. of Urban Centres Below/Above the Zakaria Committee Expenditure Norms, 1986-87

Size class	Z.C. expenditure norms at 1986-87 prices (Rs./per capita/annum)	No. of urban centres				
		Total responses	Below norms	% to total	Above norms	% to total
1.0-5.0 lakh	204.74	146	125	85.6	21	14.4
5.1-7.5 lakh	239.75	11	8	72.7	3	27.3
All	222.00	157	133	84.7	24	15.3

The table indicates that out of 157 urban centres, 133 (84.7%) have per capita expenditures lower than the Zakaria Committee's suggested level of Rs. 222.00. The degree of variation in per capita expenditures among the sampled cities is very wide, ranging from a mere Rs.9.66 in Jorhat (Assam) to as much as Rs.544.39 in Nasik (Maharashtra), thus making an average of Rs.143.14.

The situation is very grim in 73 out of 157 urban centres where the annual per capita expenditure levels on account of the operations and maintenance of public services are even below Rs. 100 (Table 3.2).

Table 3.2

Distribution of Urban Centres by Annual Per Capita Expenditure Levels, 1986-87.

Per capita expenditure (Rs.)	No. of urban centres	% to total
< 50	26	16.6
50 - 100	47	29.9
100 - 150	51	32.5
150 +	33	21.0
All	157	100.0

Leaving aside a few exceptional cases, all urban centres in the states of Assam, Bihar, Jammu & Kashmir, Kerala, Meghalaya, Nagaland, Rajasthan, Uttar Pradesh and West Bengal are in the worst-off category of municipal expenditures. On the other hand, all except six of the urban centres of Maharashtra, have higher per capita annual expenditures on services than proposed in the norms laid down by the Zakaria Committee. Among the better-off states Gujarat ranks next; in seven urban centres out of the nine selected, the per capita expenditures exceed the All India sample average of Rs. 143.14 (Annex B (i), Vol. II).

Even in the two remaining urban centres namely, Navsari and Porbandar, the per capita expenditures on services are very close to the All India averages (Rs. 137.87 and Rs. 139.16 respectively).

As the city size increases so does the level of expenditures as can be seen from Table 3.3. In some cases, however, the increase is marginal while in others, it is enormous, emphasising the lack of proportion between municipal spendings on services an one hand and population size of cities on the other. This statement is further strengthened by the fact that per capita levels of expenditure on services have no relationship with the size class of city. A close look at the data revealed that in many of the cases there is an inverse relationship between these two variables. It may be mentioned that generally, cities of comparatively smaller sizes do not require the same level of expenditure on the operations and maintenance of civic services as bigger cities. It is observed that in bigger cities the operational cost of services rendered by the local body is higher compared to smaller towns or cities, mainly because of the scale and volume of urban infrastructure.

Table 3.3

Average Revenue Expenditure on Services by Size Class of Cities, 1986-87

City size	No. of resp-onses	Revenue expenditure (`000 Rs.)		Per capita expendi-ture (Rs.)	% share of expendi-ture	% share of popu-lation
		Total	AUC *			
I	100	1947393.3	19281.1	120.61	33.0	39.1
II	28	1473636.1	52629.9	173.29	24.9	20.6
III	13	825811.1	63523.9	146.98	14.0	13.6
IV	5	358971.7	59828.6	112.20	6.1	7.8
V	7	595890.0	85127.1	129.75	10.1	11.1
VI	3	379326.9	126442.3	168.42	6.4	5.5
VII	1	327499.4	329499.4	339.68	5.5	2.3
All/Av.	157	5908528.7	37160.6	143.14	100.0	100.0

* Average per urban centre.

The above analysis based on the overall scale of expenditures confirms the poor levels of municipal services in a majority of the sample cities. However, in order to examine the state of municipal spendings on various service sectors and also the relative importance of each services in the pattern of expenditure of municipal bodies, sectoral analysis of municipal spending has been carried out.

PRODUCTIVITY OF MUNICIPAL SPENDINGS

Before examining the levels and pattern of municipal expenditure on different services, it is important firstly to analyse the productivity of such expenditure (Table 3.4).

Table 3.4

Service-Wise Productivity of Municipal Spendings, 1986-87

Service sectors	Total expenditure (`000 Rs.)	% Expenditure on	
		Establishment	Operations
1. Water Supply	755,720.6	28.1	71.9
2. Environmental Sanitation (Drainage/Sewerage/ Refuse)	1,170,519.3	75.9	24.1
3. Medical Relief	162,778.1	63.9	36.1
4. Roads	561,124.3	22.1	77.9
5. Street lighting	278,813.4	33.9	66.1
6. General Admn. & Tax Collection	753,257.3	61.6	38.4
7. Other Activities (Education, Re-creation, Commercial Ventures, etc.,)	2,226,315.7	36.4	63.6
All Functions	5,908,528.7	45.6	54.4

It may be seen that on an average, roughly 46 per cent of the total municipal spendings are on the salaries of staff and other administrative matters. The ratios, however, vary significantly from one service sector to another, ranging from 76 per cent for sanitation to 22 per cent for road maintenance. It may be mentioned that although more than 75 per cent of the total municipal spendings on sanitation services are spent on salaries and other administrative obligations, the existing number of sanitary workers are far below the norms laid down by the U.P. Health Mannual. If staff deployment would have been according to norms, one can imagine the levels of municipal spendings on account of administrative obligations.

Such a high proportion of municipal spendings to support the administrative back up of various civic services, affect adversely the maintenance of the services concerned. This has meant that municipal bodies are not paying adequate attention to the productuvity of various civic functions which are closely related to the levels of municipal spendings on regular maintenance. A well established example in this regard is the extremely poor level of sanitation services in a majority of urban centres.

In per capita terms, the average expenditure on establishment and operations of services works out to be Rs.65.31 and Rs. 77.83 respectively (Table 3.5).

Table 3.5

Annual Per Capita Municipal Spendings on Establishment and Operations of Services by Size Class of Cities, 1986-87

Size class	Average per capita expenditure (Rs.)	
	Establishment	Operations
I	62.04	58.58
II	70.41	102.88
III	67.68	79.30
IV	48.60	63.60
V	59.07	70.68
VI	66.03	102.39
VII	145.05	194.63
All	65.31	77.83

Among all the classes of urban centres, the best situation has emerged in Class II and VI urban centres where the level of per capita spendings on administrative matters works out to be 30-40 per cent of total municipal spendings. Whereas in other categories of urban centres, this ratio is more than 50 per cent.

POSITION OF CIVIC SERVICES

The position of the selected critical urban services in the overall municipal spendings has been analysed with a view to ascertain the relative importance of such services vis-a-vis other services provided by the municipal administration. Whereas the critical urban services, namely, water supply, sanitation, roads, street lighting and medical relief are in the priority list of civic affairs, the `other services' such as recreation, commercial activities (hotels, shopping centres, etc.) and so on, have comparatively lower weight in the municipal functional hierarchy as far as peoples' welfare is concerned.

Table 3.6 indicates that within the priority areas of operation, urban sanitation which includes expenditure on solid and liquid waste disposal accounts for the highest share of municipal spendings - roughly one-fifth of the total. A significant proportion of this amount is spent just for the administrative back up needed for the routine maintenance of sanitation infrastructure. Besides 'other sectors', water supply occupies the next position in the overall financial spending outlay of municipal bodies. This shows that the priorities of the municipal bodies are not misplaced.

Table 3.6

Pattern of Revenue Expenditure by Size Class of Cities, 1986-87
(Positional Importance of Civic Services)

Size Class	% Expenditure as a proportion to total revenue expenditure								
	Water supply	Sanitation	Roads	Street lighting	Medical relief	Education	Recreation	Others	Gen. admn.
I	15.2	22.0	8.9	4.9	3.4	10.4	2.3	12.2	12.9
II	8.6	18.1	11.2	4.1	2.1	10.6	1.6	22.4	11.9
III	13.8	19.3	6.5	3.2	3.6	15.0	2.3	13.0	14.8
IV	11.6	12.1	10.9	6.3	1.2	10.0	0.7	18.3	13.4
V	13.8	22.3	11.9	3.2	2.8	7.3	2.1	11.2	14.3
VI	15.5	30.4	11.3	2.4	2.1	0.2	2.4	29.4	5.2
VII	11.4	7.8	5.2	14.1	2.1	17.6	3.9	15.2	16.0
All/ Average	12.8	19.8	9.5	4.7	2.8	10.5	2.1	16.4	12.8
Rank	3.5	1	6	7	8	5	9	2	3.5

An exceptionally high proportion of municipal spendings on primary education shows that municipal bodies are putting in greater efforts in this field, mainly because of the high cost of education in private sector schools. It may be mentioned, that the expenditure on education is not on the priority (obligatory) list of municipal governments in many of the State Municipal Acts. In addition education is a state subject as per the Constitution of India. Hence, the spendings on this sector could not be said to be productive as far as municipal obligatory duties are concerned.

A comparatively lower proportion of municipal spendings on road maintenance and public street lighting with better levels of services in these sectors indicate efficient functioning of the services under reference. Incidentally, the share of the expenditure on administrative back up in these two services is also low as compared to other service sectors.

Only 122 out of the 159 municipal bodies have responded on expenditure on medical services. It may be seen that a majority of the municipal bodies are spending between one to five per cent of their total revenue expenditure on account of medical and health services (average 2.8%). Medical and health services are provided by both the state and the local governments. Medical institutions such as dispensaries, maternity & child welfare centres, health centres and clinics are run by both the state governments and the municipal bodies. Thus in the absence of comparative data which is out of the scope of the present

study, it is difficult to assess the nature and levels of these services.

Except in a few cases, the city size analysis shows a pattern similar to the overall pattern of proportionate municipal spendings on core urban services. Two cases, however, need to be noted. Firstly, in the class VII urban centre (Vadodara), exceptionally lower municipal spending on urban sanitation is accompanied by a proportionality high level of expenditure on education and public street lighting. This is not the case with other sizes of municipal bodies. The data on the physical performance of sanitation services, however, are not available for Vadodara city to analyse its impact. Secondly, the municipal spendings have no relationship with the size of the city. While the proportionate expenditure on water supply in Class I, II and III cities is 15.2 per cent, 8.6 per cent and 13.8 per cent respectively, in the case of Class IV, V, VI and VII cities the proportion is 11.6 per cent, 13.8 per cent, 15.5 per cent and 11.4 per cent respectively.

PER CAPITA EXPENDITURE LEVELS

The foregoing analysis shows the ratios of municipal spendings on various civic services. But this alone does not mean much without considering the population factor. The following analysis has been made using the per capita expenditure as an index of comparison (Table 3.7).

Table 3.7
Average Per Capita Annual Expenditure
on Various Municipal Services by Size Class of Cities, 1986-87
(Rs.)

Size class	Gen. admn.	Water supply	Sani-tation	Roads	Educa-tion	Recre-ation	Others	Street lighting	Medi-cal
I	15.5	18.5	28.9	10.8	12.5	2.8	14.7	6.0	4.2
II	20.7	14.9	31.3	19.5	18.4	2.8	38.8	7.1	3.6
III	21.7	20.2	28.3	9.5	22.1	3.4	19.0	4.7	5.3
IV	15.0	15.6	16.3	14.7	11.2	0.7	20.5	8.5	1.7
V	18.5	17.9	28.8	15.5	9.5	2.7	14.5	4.2	3.6
VI	8.7	26.1	51.2	19.0	0.4	4.1	49.6	4.0	3.5
VII	54.2	38.6	26.5	17.6	59.9	13.3	51.6	47.8	7.2
All/ Average	18.3	18.6	28.9	13.8	15.0	3.0	23.4	6.9	4.0
Rank	4	3	1	6	5	9	2	7	8

Core urban services (average per capita expenditure)	72.30
Other services (average per capita expenditure)	70.84
Total Revenue Expenditure	143.14

Although the per capita spendings on prime urban services such as sanitation and water supply recorded the highest position among all the variables of municipal expenditure (excluding 'others'), the municipal bodies in fact spend only 50 per cent of their total expenditures on core urban services. Table 3.7 shows that of the total per capita spendings of Rs.143.14, the share of core urban services is only Rs. 72.30 which is almost half of the total value. This indicates that there is a mismatch between areas of expenditure and the obligatory functions of the civic bodies.

The per capita spendings on various civic services varies significantly from one urban centre to another which can be seen from Annex B (9 & 10), Vol.II of the report. Generally speaking, the application of money by municipal bodies on the maintenance

of various civic services has been governed by the following six major factors :

i) Capacity to spend in tune with resources;

ii) statutory ceiling on spendings;

iii) efficiency in managing urban services - financial, technical and administrative;

iv) productivity of service components - how old are they? There is a positive relationship between the age of the system (tool & machinery) and cost of maintenance. As the age of the system increases, the per unit expenditure on its maintenance also goes up. On the other hand, productivity goes down;

v) technology used; and

vi) city topography.

The data given in Table 3.8 show that more than half of the sampled municipal bodies spend less than Rs. 20 per capita on maintenance of core urban services. The ratios, however, vary substantially from one service sector to another, ranging from 52.4 per cent for sewerage to as high as 98.1 per cent for street lighting.

Table 3.8
Distribution of Urban Centres by Per Capita Expenditure Levels on Services, 1986-87

Services	Per capita expenditure (Rs.)					
	Total responses	< 20	< 40	< 50	50 +	% Urban centres with expenditure less than Rs.20 per capita
Water Supply	138	99	28	3	8	71.7
Sewerage	126	66	51	6	3	52.4
Drainage	105	96	8	1	0	91.4
Refuse	76	52	20	2	2	68.4
Medical	122	115	6	0	1	94.3
Roads	151	116	29	2	4	76.8
Street Lighting	154	151	1	1	1	98.1
General Admn. & Tax Collection	154	107	31	6	10	69.5

In the previous section of this chapter an analysis of norms vis-a-vis existing spending levels has been made which pointed out that as many as 133 urban centres out of the 157 responding cases have a per capita expenditure (in aggregate) level which is lower than the Zakaria Committee updated figure of Rs. 222.00. The following analysis has been made to examine the position at inidividual service levels.

Table 3.9

Expenditure Norms vis-a-vis Existing levels of Municipal Spendings on Various Services, 1986-87

Service sectors	Per capita expenditure norms as per Zakaria committee, at 1986-87 prices (Rs./capita/annum)	No. of responses	No. of urban centres having per capita spendings			
			Below norms	% to total	Above norms	% to total
Public Health	140.07	154	149	96.8	5	3.2
Public Safety (Street Lighting)	16.40	154	130	84.4	24	15.6
Public Works (Roads)	12.26	151	63	41.7	88	58.3
General Admin-istration	21.26	153	110	71.9	43	28.1

It may be seen that among all the services under reference, the situation of public health, which includes expenditure on water supply and solid and liquid waste disposal, is very critical and almost all the sampled urban centres have lower per capita spendings than the norms laid down by the Zakaria

Committee. Of the 154 responding urban centres, in 149 (96.8%) the per capita levels of expenditure are below the norms.

The remaining five urban centres which have higher per capita spendings than the prescribed norms are:

Name of urban centres	State	Per capita annual spending on public health (Rs.)
1. Shimla	Himachal Pradesh	172.99
2. Davangere	Karnataka	295.63
3. Bhiwandi	Maharashtra	240.76
4. Thane	Maharashtra	183.36
5. Nasik	Maharashtra	160.65

Street lighting is another service in which expenditure on maintenance is low. In more than 80 per cent of the urban centres the expenditure is below the norm level. It may be mentioned that although a significant proportion of urban centres have low spendings in the street lighting and road sector, the performance of these services in physical as well as in financial terms is far better than in the other service sectors.

IMPACT OF MUNICIPAL SPENDINGS ON PHYSICAL PERFORMANCE OF SERVICES

The analysis of per capita municipal spendings brings out clearly the glaring disparities in the levels of expenditure between various sizes of municipal bodies as also financial inadequacy in many of the cases.

In this part of the report, therefore, an attempt has been made to analyse the impact of municipal spendings on the physical performance of various civic services in the sampled cities (Table 3.10).

Table - 3.10

Distribution of Urban Centres by Financial and Physical Performance Indicators- Servicewise, 1986-87

Physical performance indicators (services)	Financial performance indicators (per capita per annum revenue expenditure (in Rs.)						
	< 10	10-20	20-30	30-40	40-50	50+	All
1.	2.	3.	4.	5.	6.	7.	8.
I. Water Supply: (litres per capita per day)							
< 100	20	16	3	2	1	2	44
100 - 150	9	17	3	3	1	2	35
150 +	10	11	10	6	1	4	42
Sub Total (I)	39	44	16	11	3	8	121
II. Sewerage: (% population served)							
< 20	2	2	0	3	1	1	9
20 - 40	3	4	2	1	0	1	11
40 - 60	0	1	0	5	1	1	8
60 - 80	3	2	1	1	1	0	8
80 +	1	0	2	2	0	0	5
Sub Total (II)	9	9	5	12	3	3	41
III. Drainage: (% population served)							
< 20	5	0	0	0	0	0	5
20 - 40	5	1	1	0	0	0	7
40 - 60	13	2	0	0	1	0	16
60 - 80	24	6	4	2	0	0	36
80 +	21	3	0	0	0	0	24
Sub Total (III)	68	12	5	2	1	0	88

Contd..

1.	2.	3.	4.	5.	6.	7.	8.
IV. Refuse : (% disposal to generation)							
< 20	0	0	0	0	0	0	0
20 - 40	0	1	0	3	0	0	4
40 - 60	5	5	2	1	0	0	13
60-80	17	5	4	1	1	2	30
80 +	13	4	7	2	1	0	27
Sub Total (IV)	35	15	13	7	2	2	74
V. Roads : (% surfaced roads)							
< 50	6	0	2	0	0	0	8
50 - 75	17	9	3	1	0	1	31
75 - 100	63	20	16	6	2	3	110
Sub Total (V)	86	29	21	7	2	4	149
VI. Street lighting: (no. of lamp posts per km. road length)							
< 10	8	4	0	0	0	0	12
10 - 20	26	1	0	0	1	0	28
20 - 30	40	2	1	0	0	0	43
30 - 40	29	2	0	0	0	0	31
40 - 50	10	0	0	0	0	0	10
50 +	23	4	0	0	0	0	27
Sub Total (VI)	136	13	1	0	1	0	151

One striking fact that is evident from this table is that the levels of municipal spendings have no direct impact on the physical performance of the service concerned. For instance, though 44 municipal bodies out of the 121 which reported (in terms of comparable data) have the same range of per capita expenditures on water supply, that is between Rs. 10 and Rs. 20,

their per capita water supply levels differ considerably. Whereas 17 urban centres are supplying 100-150 litres of water percapita per day to their consumers, in 16 urban centres this level is even below 100 lpcd. A similar situation is seen in the other service sectors as well.

This analysis therefore suggests that without taking revolutionary steps in increasing the efficiency of the municipal service management structure, financial adequacy for maintaining civic services alone may not bring any substantial reform in the present state of urban infrastructure.

TRENDS AND SHIFTS IN MUNICIPAL EXPENDITURE PATTERNS*

Whereas trends in the municipal expenditure indicate the change in resource spending capacity of municipal bodies, the shift shows the relative importance of various heads of expenditure.

It may be seen from Table 3.11 that during the period 1974-75 to 1986-87, the aggregate expenditure of municipal bodies has shown a constantly increasing trend. The reasons for this increase are many, such as increase in the population resulting in increased civic expenditure on civic amenities and services; technological changes; general increase in the cost of materials; and relatively higher cost of maintenance owing to advancing age of the system; In addition, the inevitable

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* The analysis is termed as `rough' as the data used for time series analysis are not strictly comparable.

increase in the strength of establishment and labour for various developmental schemes and the grant of dearness and other allowances to municipal staff have led to considerable increase in the expenditure of municipal bodies year after year.

Table 3.11

Growth of Municipal Revenue Expenditure in Class I Municipal Centres, 1974-75, 1979-80 and 1986-87

Year	No. of responses	AMC* ('000 Rs.)	(% Increase : (1974-75 - Base Year)						
			Total	Gen. admn.	Public health	Public safety	Public works	Edu- cation	Others
1974-75**	173	7140.48	-	-	-	-	-	-	-
1979-80**	173	13712.09	92.0	86.9	1687.6	127.0	115.2	83.5	95.5
1986-87	159	37160.55	378.3	402.9	378.3	242.9	408.2	382.5	40

* Average expenditure per municipal centre.

** NIUA: A study of financial resources of urban local bodies in India and the level of service provided, 1983.

The table shows that average annual revenue municipal expenditure of Class I municipal bodies has increased from Rs. 71.40 lakhs in 1974-75 to Rs. 371.60 lakhs in 1986-87, an increase of 420.4 per cent or 47.3 per cent per annum.

The computed averages of expenditure show that while the expenditure increase for public works is 408 per cent, the corresponding figure for public safety is roughly 243 per cent. the general administration sector has recorded nearly 403 per cent increase during the same period.

It is important to note that though the overall and aggregate expenditure on different civic services has shown an upward movement from 1974-75 to 1986-87, no substantial shift has taken place in the manner in which the benefits of such expenditure are distributed. It may be seen that the proportionate share of municipal spendings on different functions such as general administration, public health, public works, education and so on has remained almost static during the period 1974-75 to 1986-87.

Table 3.12

Shift in Municipal Spending Pattern : 1974-75 to 1986-87

Year	No. of responses	% Share in total spendings						
		Gen. admn.	Public health	Public safety	Public works	Edu- cation	Recre- ation	Others
1974-75	173	12.10	38.40	8.60	12.90	10.40	2.00	15.6
1986-87	159	12.70	38.40	6.20	13.70	10.50	2.10	16.40

This static situation in the pattern of municipal expenditure has meant that municipal governments have not undergone any major changes in their functional hierarchy in the last ten years or so.

The above analysis based on the absolute figures will not, however, give us a complete picture of the present trends unless the implications of population growth and inflation on municipal spendings are taken into account. An attempt has been made to do this in the following paragraphs.

Table 3.13

Per Capita Municipal Expenditure at Constant Prices 1974-75, 1979-80 and 1986-87 (Base 1979-80)

(Rs.)

Year	Total	Gen. admn.	Public health	Public safety	Public works	Edu-cation	Recre-ation	Others
1	2	3	4	5	6	7	8	9
1974-75	55.4	6.7	21.3	4.8	7.1	5.7	1.1	8.7
1979-80	59.1	7.0	21.1	6.0	8.5	5.9	0.4	10.2
1986-87	77.1	9.9	29.6	4.7	10.6	8.1	1.6	12.6
% Increase (from 1974-75 to 1986-87)	39.2	47.8	39.0	-2.0	49.3	42.1	45.5	44.8

It was stated earlier that the overall expenditure of the municipal bodies rose during the reference period by 378.3 per cent, or about 34 per cent annually. What is important is that the rate of increase in expenditure is not favourably related (in proportionate terms) with the rate of increase in prices and population growth. This implies a deterioration in the level of urban services. For example, while the absolute expenditure on public safety has gone up by roughly 243 per cent during the eleven year period (1974-75 to 1986-87), at constant prices the per capita expenditure has actually declined by two per cent.

To sum up, the foregoing analysis shows that:

- Per capita expenditure level in many of the urban centres is far below the desired level suggested by the Zakaria

Committee (on 1986-87 prices). The situation is very grim in 73 urban centres where the annual per capita expenditure is even below Rs. 100;

- on an average, roughly 46 per cent of the total municipal spendings are on the salaries of staff and other administrative obligations. These ratios, however, vary significantly from one service sector to another, ranging from 76 per cent on sanitation to 22 per cent on road maintenance;

- of the total per capita spendings of Rs.143.14 per annum on various municipal functions, the share of core urban services is only Rs.72.30 which is almost half the total value. This indicates that the municipal bodies do not spend according to the duties assigned to them;

- on an average, more than half of the sampled municipal bodies are spending less than Rs. 20 per capita on core urban services. Among all the services the situation of public health, which includes water supply and solid and liquid waste disposal, is very critical and almost all the sampled cities spend less than the norms laid down by the Zakaria Committee;

- the level of municipal spendings have no direct impact on the physical performance of the service concerned. Thus without taking revolutionary steps in increasing the

efficiency of municipal service management strucuture, financial adequacy for maintaing civic services alone may not bring any substantial reform in the present state of urban infrastructure; and

- although the overall and aggregate expenditure on different civic services has shown an upward movement during the period 1974-75 to 1986-87, no substantial shift has been taken place in the manner in which the benefits of such expenditure are distributed. Further, the proportionate share of municipal spendings on different functions has remained more or less static during the period 1974-75 to 1986-87. What is important is that the rate of increase in expenditure is not related to the rate of increase in prices and population which implies a deterioration in the level of municipal services in most cases.

CHAPTER IV

MUNICIPAL FINANCES:

RESOURCE PATTERNS & PROSPECTS

It is evident from the preceding discussion that municipal bodies do not spend adequately on services both in terms of physical standards and operational spendings. A study of the both the sources of revenue as well as the structure of revenue is thus necessary in order to find out the weaknesses and explore ways in which the financial health of municipal governments can be improved.

INCOME - EXPENDITURE DIFFERENTIAL

Before analysing the fiscal resources of municipal bodies in the sample urban centres, it is essential to examine the present levels of municipal revenue with regard to their expenditure needs. It may be seen from Table 4.1 that both absolute and annual per capita revenue income of sample municipal bodies is higher than their expenditure level. The average per capita income of municipal bodies is about Rs.150.68 against the expenditure level of Rs.143.14. While prima facie evidence shows that incomes are not a constraint, the fact is that under various State Municipal Acts, municipal bodies are barred from preparing and presenting 'deficit budgets'. For example, the Karnataka Municipal Act, 1964, states that the municipal council shall "allow for a balance at the end of the said year of not less than such sums as may be required to meet the establishment charges for a period of 3 months". The marginal surplus

balance in the reference year 1986-87 in the income-expenditure statistics of the sample municipal bodies is, therefore, illusory as it is maintained to satisfy the statutory provisions only. Further, any surpluses at low levels of services are hardly a dependable indicator.

Table 4.1

Revenue Income - Expenditure Differentials: Sampled Municipal Bodies, 1986-87

Component	Total amount * ('000 Rs.)	Per capita (Rs.)
Incomes	6,219,365	150.68
Expenditures	5,908,528	143.14
Income - Expenditure Differential	310,837	7.54
Per cent to Income	5.0	5.0

* For 157 responding urban centres.

The position with regard to municipal incomes at individual city level is that the per capita income levels of a majority of the sampled urban centres is far below the average of roughly Rs.151 for the entire sample (Table 4.2).

Table 4.2

Distribution of Responding Urban Centres by Per Capita Revenue Incomes, 1986-87

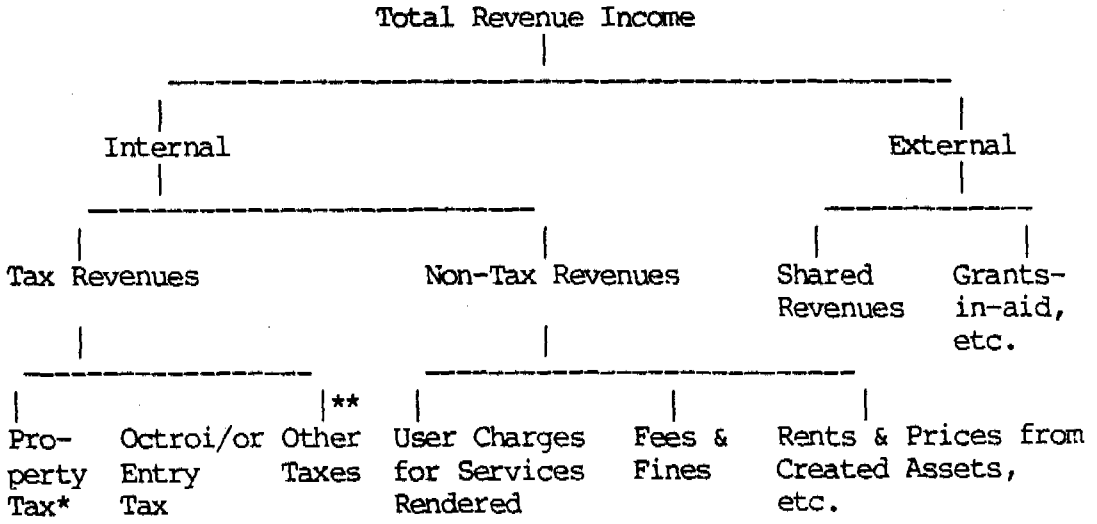
Range (Rs.)	No. of urban centres	% to total
< 50	21	13.5
50 - 100	43	27.7
100 - 110	42	27.1
150 +	49	31.7
All	155	100.0

The table shows that out of 155 responding urban centres, 106 (68.4%) have an annual income of less than Rs. 150 and only 49 (31.7%) municipal bodies have recorded higher per capita incomes than the sample average of Rs. 150.68. Wide disparities are noticed in per capita income levels among the various urban centres ranging from merely a token of Rs. 5.59 in Imphal (Manipur) to as high as Rs. 776 in Thane (Maharashtra) (Annex B (5), Vol. II). It is significant to note that in 33 municipal bodies, most of which are in Maharashtra and Gujarat the per capita income levels are close to the norms set by the Zakaria Committee (Rs.222.00 per capita). On the other hand, the per capita income of 64 municipal bodies is even below Rs. 100.00 per annum. Except a few, all the urban centres in Assam, Bihar, Jammu & Kashmir, Kerala, Rajasthan, Uttar Pradesh and West Bengal are in this worst-off category that is, if we use municipal income as a measure of distress.

REVENUE INCOME COMPONENTS

The main sources of municipal bodies can be categorised as follows :

Chart B : Sources of Revenue in Municipal Bodies



* Includes service taxes such as water tax, sanitation cess, lighting tax, health cess, etc.,

** Includes tax on professions, trade and commerce, pilgrim tax, advertisement tax, show tax, etc.

Table 4.3 gives the percentage distribution of municipal revenues according to major components.

Table 4.3

Sources of Revenue in the Sampled Municipal Bodies, 1986-87

Size class	Total revenue income ('000 Rs.)	% Share to total income				
		Tax revenue	Non-Tax revenue	Assigned taxes (shared revenues)	Grants-in-aid	Others
I	1925881.8	46.7	17.1	6.4	22.2	7.5
II	1585195.9	51.7	8.8	5.2	17.6	16.7
III	942727.6	59.4	12.7	9.2	10.8	7.9
IV	534820.0	63.9	7.1	8.5	11.3	9.3
V	614004.9	49.5	23.2	3.4	17.8	5.9
VI	322595.4	73.1	9.6	-	10.4	7.0
VII	294139.0	73.2	12.5	0.5	9.4	4.5
All	6219364.6	54.3	13.5	5.8	16.7	9.7

Taxes form the most important source of municipal revenue as is evident from the above table. More than 54 per cent of the revenue accrues from municipal taxes and 13.5 per cent from non tax sources. Grants come next and assigned or shared taxes come last in order. It is important to note that internal sources of municipal finances which comprise of tax revenue and non-tax

revenue account for more than two-thirds of the total municipal incomes.

It is obvious from the table that the relative importance of the two most important sources of municipal income, revenue taxes and grants-in-aid, vary with the size of the urban centres in a majority of cases. The trend is, however, different in these two different cases. While the incomes from taxes are positively correlated with the city size, in case of grants-in-aid the relationship is negative.

Statewise comparisons of the composition of municipal revenues show that the dominant position of taxes in municipal income structure is not a universal case. Some states are more dependent on non-tax revenues such as rates and charges for services rendered, rents and premiums from created assets, and so on, while others are using the state finances in the form of grants-in-aid for financing critical urban services. The incidences of municipal dependency on external funding is however, seen only in few cases as is evident from Table 4.4.

Table 4.4 shows that grants-in-aid are a major source of municipal income in Jammu & Kashmir (59%), Meghalaya (53%) and Tripura (79%) which are highly sensitive states from the political point of view.

Table 4.4

Component-Wise Distribution of Municipal Incomes, 1986-87

States	Total income ('000 Rs.)	% Distribution of income					
		Internal sources			External sources		
		Taxes	Non-tax	Both	Grants-in-aid	Shared taxes	Others
Andhra Pradesh	674084	26.29	23.63	49.92	26.50	11.23	12.34
Assam	6134	29.49	61.84	91.38	5.20	2.64	0.78
Bihar	12390	30.48	16.59	47.07	38.86	NR	14.09
Gujarat	750948	64.41	10.54	74.95	13.98	4.35	6.62
Goa	10376	21.95	21.05	43.00	38.45	NR	18.56
Haryana	125877	49.89	20.70	70.59	21.98	0.67	6.75
Himachal Pradesh	36835	31.56	29.79	61.35	10.86	NR	27.79
Jammu & Kashmir	105991	33.59	7.29	40.88	58.55	NR	0.57
Karnataka	421526	54.81	19.76	74.57	2.84	7.75	14.83
Kerala	130655	63.42	20.20	83.62	5.82	10.56	NR
Madhya Pradesh	134591	42.05	14.41	56.46	22.87	2.00	18.67
Maharashtra	1914041	59.54	7.42	66.96	15.80	4.91	12.33
Manipur	1144	2.79	76.33	79.12	NR	20.87	NR
Meghalaya	9667	29.67	11.18	40.85	52.54	NR	6.62
Orissa	176566	56.57	8.14	64.71	24.06	0.47	10.76
Punjab	544499	78.54	13.08	91.62	2.79	NR	5.59
Rajasthan	243013	74.61	11.33	85.94	7.03	0.15	6.88
Tamil Nadu	304951	25.29	34.71	60.00	9.24	28.67	2.09
Tripura	30946	2.69	2.42	5.11	79.21	NR	15.69
Uttar Pradesh	533653	52.57	9.37	61.94	28.25	0.91	8.90
West Bengal	51478	33.09	3.74	36.83	34.11	29.06	NR
All	6219365	54.29	13.45	67.74	16.72	5.81	9.73

NR Not Reported.

In Punjab, almost 79 per cent of the municipal income comes from taxes; the corresponding figure is about 75 per cent in Rajasthan. Tripura and Manipur have the weakest tax base; Other states with a weak taxation base and capacity are Tamil Nadu (25%), Andhra Pradesh (26%), Assam (29%), Bihar (30%), Himachal Pradesh (32%), West Bengal (33%) and Madhya Pradesh (42%).

From the view point of financial autonomy, it is desirable that internal sources are the main source of revenue and dependency on higher levels of government may be as low as possible. One danger of liberal provisions of grants-in-aid is that the efforts of municipal bodies to mobilize their own resources get slackened. In some states such as Maharashtra and Gujarat, therefore, the level of grants-in-aid have been linked with the internal tax efforts of municipal bodies.

Tax Revenue

There is not much variation between states in the matter of tax powers entrusted to municipal governments. But a significant variation exists in the application of tax powers, in the rate structure of taxes and in the exemptions granted. The levy of octroi in some states and its absence in others is one such example. Property tax also, though levied in all the states, varies significantly in terms of rates, structure and exemptions. In all the cases, however, the state governments have the final say in matters related to municipal tax power and administration.

In proportionate terms, tax income forms the major source of municipal incomes in most states. However its importance does not show in per capita terms which is the real indicator to gauge the tax collection efforts at the level of the individual citizen. Table 4.5 shows that out of the twenty two states under reference, in only five states per capita tax income exceeds the all India average of Rs. 81.80. These are Gujarat (165.41), Punjab (163.51), Himachal Pradesh (142.31), Maharashtra (199.85) and Orissa (87.52).

Table 4.5

Per Capita Tax Income Incidence, 1986-87

(Rs.)

States	Per capita income
Andhra Pradesh	35.33
Assam	3.28
Bihar	5.96
Gujarat	165.41
Goa	46.48
Haryana	57.61
Himachal Pradesh	142.31
Jammu & Kashmir	40.89
Karnataka	67.76
Kerala	41.90
Madhya Pradesh	43.06
Maharashtra	199.85
Manipur	0.16
Meghalaya	23.00
Orissa	87.52
Punjab	163.51
Rajasthan	61.05
Tamil Nadu	26.73
Tripura	5.33
Uttar Pradesh	43.28
West Bengal	16.53
All	81.80

The situation is most critical in Assam, Bihar, Manipur, Tripura and West Bengal where per capita tax income is even less than Rs. 20.80 per annum. Besides these states, in the entire southern region, except Karnataka, the per capita tax income is less than Rs. 50. It may be noted that these are the states where octroi is not levied any more thus confirming the significant role of octroi in municipal finances.

It is clear from the above analysis that tax structure in terms of application, rates, exemption and collection efficiency vary significantly from one state to another and even in many cases within the same state from one urban centre to another.

Among various components of municipal taxes, octroi and property taxes are found to be most important tax sources. It may be seen from Table 4.6 that from octroi alone municipal bodies receive more than 70 per cent of the total tax income.

Table 4.6

Tax Income Components, 1986-87

Component	Amount* ('000 Rs.)	% to total	Rank
Property Tax	608495.9	19.9	2
Octroi	2152171.0	70.5	1
Other Taxes	291439.2	9.6	3
Total Tax Income	3052106.1	100.0	-

* Data for 142 responding Urban Centres.

Incomes from property tax come next while `other' taxes are the smallest contributors. The outstanding feature that has emerged from the analysis of municipal resources of sampled cities is that more than 90 per cent of their tax income is derived from two sources namely octroi and tax on properties.

The study reveals that other taxes make no significant contribution to the municipal revenues. This situation leads to the conclusion that despite the provisions in the respective State Municipal Acts, many of the municipal bodies selected for the study, do not levy other taxes in the areas of their jurisdiction. Raipur (Madhya Pradesh) for instance, has not been levying any tax on professions, pilgrims, advertisements, and so on. Table 4.7 indicates the major municipal taxes that could be levied as per the Act in different states.

It may be important to note that out of 22 states, twelve states do not levy octroi. These are Assam, Andhra Pradesh, Bihar, Karnataka, Kerala, Madhya Pradesh, Manipur, Nagaland, Tamil Nadu, Tripura, Sikkim and West Bengal. The municipal bodies of these States however receive grants-in-aid in lieu of octroi from the state governments. Grants-in-Aid are however, not as elastic as octroi, which is being collected on a daily basis and is linked positively with the inflation rates.

Table 4.7

Major Municipal Taxes that could be Levied as Per Act, Statewise

States	House/ property	Water	Light-ing	Drainage & conser-vancy	Animal & vehicle	Octroi	Profe-ssional	Trade & calling	Enter-tain-ment	Termi-nal tax	Adver-tise-ment	Educa-tion	Others*
Andhra Pradesh	Y	Y	Y	Y	Y		Y	Y			Y		Y
Assam	Y	Y	Y	Y	Y								Y
Bihar	Y	Y	Y	Y	Y		Y	Y					Y
Gujarat	Y	Y	Y	Y	Y	Y						Y	Y
Haryana	Y	Y		Y	Y	Y	Y	Y					Y
Kerala	Y	Y	Y	Y	Y		Y		Y		Y		Y
Karnataka	Y	Y	Y	Y	Y		Y				Y		Y
Madhya Pradesh	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y		Y
Maharashtra	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y
Meghalaya	Y	Y	Y	Y	Y								Y
Orissa	Y	Y	Y	Y	Y	Y	Y	Y					Y
Punjab	Y	Y		Y	Y	Y	Y	Y					Y
Rajasthan	Y	Y	Y	Y	Y	Y	Y	Y					Y
Tamil Nadu	Y	Y	Y	Y	Y		Y					Y	Y
Uttar Pradesh	Y	Y		Y	Y	Y	Y	Y	Y				Y
West Bengal	Y	Y	Y	Y	Y		Y	Y					Y

Y Yes

* Others includes - Toll tax, boat tax, market fee, fee for registration of cattle & vehicles, betterment levy, tax on domestic menial servants, stamp duty on sale of property, tax on timber, fire fighting, etc.

The National Commission on Urbanisation has pointed out that the maximum growth factor in the form of grants-in-aid from government in lieu of octroi, is 10 per cent per annum as against the 18 per cent annual growth rate of octroi in Madhya Pradesh before its abolition in 1976. The Task Force on Housing and Urban Development has also suggested that octroi revenue tends to grow by 16 per cent per annum as against about 10 per cent in the case of property tax.

The analysis of municipal resources shows that octroi forms the largest single source of revenue of the sampled municipal bodies situated in those states where it is levied. Looking at its high revenue potential and absence of a suitable alternative, the abolition of octroi will adversely effect the financial health of municipal bodies in general, and level of core services in particular. Incidentally, the level of essential municipal services such as water supply and sanitation is extremely poor in many of those municipal centres where octroi is not being levied.

Non-tax Revenue

The non-tax sector of municipal bodies includes income from their commercial enterprises, investments and regulatory fees and such other minor sources of income. Broadly, the components of the non-tax sector are:

- Income (charges) from commercial enterprises such as water supply, local transport, supply of electricity, and so on;

- rents on municipal lands and buildings;
- sale proceeds of lands and buildings;
- licence fees;
- fees and revenue from educational and medical institutions, markets, slaughter houses, etc.; and
- interest on investments.

It is noted that in a majority of the municipal bodies non-tax receipts are an insignificant component of municipal revenue. It is evident from Table 4.8 that in 129 municipal bodies out of 155 responding cases, the share of non-tax income in total revenue is less than 30 per cent.

At state level with the exception of Assam and Manipur in no state does the non-tax revenue income exceed 35 per cent of the total municipal income (Table 4.4).

Table 4.8

Distribution of Responding Urban Centres by Per Cent Share of Non-tax Revenues in Total Revenues,1986-87

% Share to total revenue income	Urban centres	
	No.	%
< 30	129	83.2
30 - 50	17	11.0
50 +	9	5.8
All	155	100.0

Since the source of non-tax revenue and their rates vary widely from state to state and even within the states, the proportionate share of non-tax receipts in the total municipal incomes also show wide variations, ranging from a mere 0.26 per cent in Kharagpur (West Bengal) to slightly higher than 76 per cent in Imphal municipality of Manipur State. However, in the absence of data on rates and other important indicators of various non-tax components, the variations as in the case of Kharagpur and Imphal cannot be explained (Annex B(3), Vol.II).

An analysis of the non-tax income components of a few sample municipal bodies shows that a large proportion of non-tax income is derived from sale proceeds of municipal property. Table 4.9 shows that `Rents & Prices' (income from municipal properties) form the most important source of the non-tax revenue of the sample municipal bodies and more than 80 per cent of revenue comes from this sector. 'Fees & Fines' come next and 'user charges' come last in order.

Table 4.9

Distribution of Non-tax Revenues in the Sampled Cities*, 1986-87

('000 Rs.)

Non-tax components	Total receipts	Average receipts per urban centre	% to total
User Charges	3543	236	4.9
Fees & Fines	10889	726	15.2
Rents & Prices	57397	3827	79.9
Total	71829	4789	100.0

* Data pertain to 15 urban centres.

Keeping in view the legal constraints of municipal tax structure, income expansion can be realised only from the non-tax sector. However, for further improvement in this sector, municipal bodies need (i) proper pricing of services rendered and (ii) capital funds for investment in remunerative projects.

Grants-in-aid and Tax Sharing

Taking into account the increasing magnitude and complexity of urban problems on the one hand and limitations of internal resources at the local level on the other, the various committees set-up at different levels of governments had come to the conclusion that the state should support the functions of municipal bodies by way of grants-in-aid and tax sharing of certain state levied duties. The Taxation Enquiry Commission (1953-54) had observed that taxes, even if they are fully and efficiently exploited, can not alone provide adequate finances to municipal bodies to enable them to perform their assigned functions adequately. The Commission had suggested that the taxes should be supplemented by a well designed system of general purpose grants-in-aid. In addition the Commission had also recommended specific grants for particular items and services.

The Zakaria Committee (1963) observed that "the principle that grants-in-aid should form one of the important sources of revenue of local authorities, has been accepted all over the world. It has been estimated that in UK grants constituted about

42 percent of the total local revenue[1]. The Committee adopted the normative approach to grants-in-aid and recommended that the municipal bodies be divided into six categories based on their population size for general purpose grants. The rates they suggested varied from Rs. 0.25 per capita in metropolitan centres and major industrial towns to Rs. 1.50 per head in respect of smaller municipalities at the price level prevailing in 1960-61 (Table 4.10).

Table - 4.10

Per Capita Grants-in-Aid Norms as Suggested by Zakaria Committee

(Rs.)

Category	Population size	At 1960-61 prices	At 1986-87 prices (updated figures)
A. Special	Above 20 lakhs and industrial cities above 10 lakhs	0.25	1.53
A	5 - 20 lakhs	0.25	1.53
B	1 - 5 lakhs	0.50	3.06
C	50,000-1 lakhs	0.75	4.59
D	20,000-50,000	1.00	6.13
E	Below 20,000	1.50	9.19

1. Report of Augmentation of Financial Resources of Urban Local Bodies, 1963, p.56-61.

With regard to specific grants for various developmental works specially water supply and drainage, the Committee had suggested that this may be decided by the respective state governments after taking into account all the relevant factors with a view to make the project a practical proposition.

In later years, many of the state governments appointed committees and commissions[2] to look into the financial health of municipal bodies and also their grants-in-aid structure. These committees have suggested a number of measures to modify the grants-in-aid code in their respective states:

- There should be a periodic review after 3-5 years of the grants-in-aid structure and pattern by the expert committee to take stock of inflation, population growth and other indicators;
- Grants-in-aid may be linked to the resource mobilisation efforts of the municipal body;
- Due weightage should be given to the special problems of each municipal body; and
- Adequate grants may be given to bridge the gap between the service standards among the various municipal bodies by way of two fold funding: capital funds for carrying out such projects and recurring nature grants for operational and maintenance purposes.

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2. Such as Municipal Finance Commission, Orissa; Municipal Finance Commission, West Bengal Committee on Grants-in-aid, Gujarat and so on.

Regarding the role of grants-in-aid in the development process of municipal bodies, divergent views have been expressed by different committees and commissions - both in favour of strengthening their financial position, and against because this may curtail the autonomous character of municipal governments and increase the functional dependency on states. However, it may be reiterated that the municipal bodies are the creatures of states, and the states, accordingly, lay down their functions and resource-raising powers in the municipal Acts. Thus the argument in favour of grants-in-aid seem to be more appropriate. In fact, the state governments have a dual responsibility. Firstly, to make available adequate finance for the functions assigned, and secondly, to ensure that the assigned functions are performed efficiently. Without adequate grants-in-aid, neither of the functions - obligatory nor discretionary - can be discharged efficiently.

In the foregoing discussion it is clear that grants-in-aid is a fiscal instrument for the devolution of funds from the state to urban local bodies to perform their functions effectively. Grants-in-aid may be broadly classified into three categories:

i. Recurring or general purpose grant meant for budgetary support to local revenues;
ii. grants in lieu of resources taken over from the municipal bodies such as grants in lieu of octroi; and
iii. specific grants for development purpose or maintenance of certain services.

The structure of grants-in-aid varies from state to state; the amount of grant, is however determined largely on the following basis :

- Unit basis - per capita population or works;
- Resource deficiency basis - gap between needs and resources;
- Service standardisation basis - gap between demand and supply or standard norms and actual supply;
- Priority areas in the context of overall regional and national development; and
- Formula basis - taking into account all the developmental indicators such as population, income, expenditure, priority attached to service, and so on.

Madhya Pradesh, for example has adopted a combined method both on population and service criteria. Gujarat has adopted the per capita system of grants-in-aid based on population size of the municipal bodies while in Uttar Pradesh and some other states, the grants structure and pattern is ad hoc. Specific functions such as roads, education, and so on are covered, in addition to a share in salaries of municipal staff. In fact, the grants-in-aid system in various states is very confusing and largely on an ad hoc basis. This has resulted in budgetary suspense, lack of capital formation and neglect of maintenance on essential civic services.

Thus for a better utilisation of grants-in-aid in the context of overall national regional development in general and the financial health of municipal bodies in particular, the state governments may modify the grants-in-aid structure and its application at individual municipal level by taking into account their functional roles, financial position and other local characteristics. Besides these factors, there should be a regular flow of grant money from state to local level to avoid any level of confusion for effective functioning of municipal bodies.

Having analysed the theoretical framework of grants-in-aid, it is time now to examine the role of grants-in-aid in the finances of sample municipal bodies.

As stated, on an average, the grants component of municipal income formed more than 16 per cent of total municipal revenue income of 1986-87. This proportionate share, however, varied significantly from one state to another and even within the same state, from one urban centre to another. The distribution of urban centres according to proportionate share of grants in the total municipal revenues is given in Table 4.11.

Table 4.11

Role of Grants-in-Aid in Municipal Revenues - Distribution of Sampled Urban Centres by Per Cent Share, 1986-87

% Share to total Revenues	Urban Centre	
	No.	%
< 10	40	29.4
10 - 20	29	21.3
20 - 30	28	20.6
30 - 40	17	12.5
40 - 50	8	5.9
50 +	14	10.3
All	136	100.0

It may be seen that out of 136 responding urban centres, in more than half the proportionate share of grants in total revenues was below 20 per cent and only in marginal cases (10%) the incidence of dependency on state governments is higher - more than 50 per cent of the total municipal revenues of 14 municipal bodies has been derived only from grants from state governments. These are Anantpur, Kurnool and Vizainagaram (Andhra Paradesh); Bihar (Bihar); Bhiwani (Haryana); Srinagar (Jammu & Kashmir); Ujjain (Madhya Pradesh); Bhusawal (Maharashtra); Shillong (Meghalaya); Agartala (Tripura); Amroha, Jaunpur, Meerut and Sambhal (Uttar Pradesh). It may be noted that a majority of these urban centres have a population between 100,000 - 300,000.

This shows that comparatively larger sized urban centres are less dependent on governmental aids in the form of grants as compared to smaller municipal bodies which have a lesser coverage of their tax and non-tax base (Annex B (3 & 4), Vol. II).

It is significant to note that specific purpose grants-in-aid which are meant for operation and maintenance of certain civics services such as water supply, roads, education and medical relief constitute almost 44 per cent of the total amount of recurring grants (Rs. 140.13 crores) of sample municipal bodies (Table 4.12). Grants for general purpose occupy next position (32%) and grants in lieu of resources are last in order (25%).

Table 4.12

Sampled Municipal Bodies: Nature of Grants-in-aid, 1986-87

States	No. of responses	Total receipts under all types of grants (000'Rs.)	% share in total		
			General purpose	Specific purpose	In lieu of taxes (octroi,etc.)
Andhra Pradesh	15	254324	24.0	46.2	29.8
Assam	3	481	36.7	29.6	33.7
Bihar	2	4815	12.6	87.4	-
Gujarat	9	137684	21.5	54.8	23.8
Goa	1	3989	-	100.0	-
Haryana	7	28518	64.3	32.8	3.0
Himachal Pradesh	1	4000	100.0	-	-
Jammu & Kashmir	2	62061	65.4	34.6	-
Karnataka	11	44661	17.1	9.8	73.2
Kerala	6	21398	10.9	24.7	64.5
Madhya Pradesh	5	33469	9.8	82.2	8.0
Maharashtra	22	396455	16.8	59.5	23.7
Manipur	1	239	-	-	100.0
Meghalaya	1	5079	82.1	17.9	-
Orissa	5	43315	64.4	33.7	1.9
Punjab	2	15195	46.9	53.1	-
Rajasthan	10	17462	47.0	50.9	2.1
Tamil Nadu	12	115602	6.4	18.0	75.6
Tripura	1	24512	98.8	1.2	-
Uttar Pradesh	21	155570	55.8	41.1	3.1
West Bengal	5	32518	-	54.0	46.0
All (Average)	142	1401348	28.5	45.7	25.8

The statewise analysis of grants-in-aid by purpose shows that whereas in Himachal Pradesh, Meghalaya and Tripura, general purpose grants have the highest proportionate share in their total state transfers (excluding shared taxes), the municipal bodies in the states of Bihar, Madhya Pradesh and Goa are the reciepents of specific purpose grants in the range of 75 - 100 per cent of their respective state fundings.

Table 4.13

Highest and Lowest Proportions of Grants-in-Aid for Various Purposes - State Dominance, 1986-87

Type of grants	% share in total grants	States
General purpose	75 - 100	Himachal Pradesh, Meghalaya, Tripura,
	1 - 20	Bihar, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Tamil Nadu.
Specific purpose	75 - 100	Bihar, Madhya Pradesh, & Goa
	1 - 20	Karnataka, Kerala, Meghalaya Tamil Nadu & Tripura
In lieu of taxes	75 - 100	Karnataka, Manipur, Tamil Nadu
	1 - 20	Haryana, Madhya Pradesh, Orissa & Rajasthan.

In case of `grants in lieu of taxes' the proportion is very high in almost all the non-octroi states except Madhya Pradesh where it is only 8.04 per cent of total state transfers.

Shared Revenues

There are certain taxes which are levied and collected by the State governments but a share of the collected amount is paid to the municipal bodies. Such revenues are known as 'Shared Revenues'. This sharing of taxes is an important feature in centre - state relations in a federal set-up. It may be noted that, it is only a constitutional obligation and at local level, sharing is not necessarily a commitment from the state.

The components of these taxes differ from state to state and are mainly known as entertainment and theatre tax, vehicle tax, profession tax and real property registration stamp duties, and so on. These shared revenues supplement the grants-in-aid given by the state government to the municipal bodies. It gives the flexibility and operational freedom to the local system. A number of questions arise at this point. What is the proportion of the collected tax that could be assigned to the municipal bodies? how can the revenues be distributed among the municipal bodies? and so on. It is really very difficult to give uniformly satisfactory answers to the said questions. However, as a basic principle, the shared revenues of each municipal body should be approximately equal to the amount that would have been raised if the taxes had been levied by the municipal bodies themselves.

To study the fiscal resources of municipal bodies, it is essential to work out the proportion of these shared taxes to the total revenues collected as well as on a per capita basis. In this context, Table 4.14 gives the full spectrum in respect of responding municipal bodies in different states.

It may be seen that among the selected municipal bodies, Tiruchirapalli municipal corporation of Tamil Nadu has the highest percentage, around 41 per cent of the shared revenue to total revenue, followed by Tirupati municipality (Andhra Pradesh) where this percentage works out to around 39 per cent. In these municipalities, motor vehicle tax and entertainment taxes collected by the state government are shared with the concerned municipal bodies. In Siliguri municipality the shared taxes are 30 per cent of the total revenue. Whereas shared revenues range from nine to twenty two per cent in a majority of municipal bodies of Uttar Pradesh, Karnataka, Kerala, Tamil Nadu, West Bengal and Andhra Pradesh, in a significant proportion of municipal bodies of other states the level of shared taxes is even below four per cent as is the case of Ratlam municipal corporation (Madhya Pradesh). This may be attributed to the fact that more or less no tax revenues are transfared to the municipalities of Madhya Pradesh.

It is assumed that the per capita shared revenue is high usually in those local bodies in which the percentage of shared revenues is also high. But this is not true in all cases. For

Table 4.14

Sampled Municipal Bodies: Shared Taxes, 1986-87

(Amount in Rs.)

State & sample urban centres	Total revenue receipts ('000 Rs.)	Receipts from govt. as shared taxes ('000 Rs.)	% shared taxes to the total revenue	Per capita shared taxes (Rs.)	Reported shared taxes
1.	2.	3.	4.	5.	6.
Andhra Pradesh					
Vijayawada	105095	22829	21.72	40.47	Entertainment tax, stamp duty
Tirupati	18216	7087	38.91	43.92	Entertainment tax, motor vehicle tax.
Assam					
Jorhat	2124	162	7.63	0.59	Not specified
Gujarat					
Vadodara	294139	1396	0.48	1.45	Education cess
Navsari	29742	649	2.18	4.84	Education cess
Haryana					
Hissar	26949	845	3.13	5.10	Land Revenue
Karnataka					
Hubli-Dharward	95515	12488	13.07	19.44	Not specified
Shimoga	20681	3267	15.80	17.03	Not specified
Kerala					
Trivandrum	37150	15	0.04	0.03	Not specified
Palghat	17288	2874	16.62	23.62	Stamp duty, motor vehicle tax.
Madhya Pradesh					
Ratlam	24263	656	2.70	3.88	Not specified

Contd..

1.	2.	3.	4.	5.	6.
Maharashtra					
Thane	344109	6420	1.86	14.49	Road, land revenue, entertainment tax
Parbhani	14456	1217	8.42	7.88	Road, entertainment tax, land revenue.
Manipur					
Imphal	6130	239	3.90	1.17	Not specified
Orissa					
Sambalpur	20620	826	4.01	5.44	Entertainment tax
Rajasthan					
Jodhpur	40682	324	0.80	0.48	Entertainment tax
Bhilwara	15873	42	0.27	0.27	Entertainment tax
Tamil Nadu					
Tiruchirapalli	51325	21114	41.14	52.87	Motor vehicle tax, entertainment tax
Rajapalayam	6694	1282	19.15	11.49	Motor vehicle tax, entertainment tax
Uttar Pradesh					
Gorakhpur	54462	1670	3.07	5.00	Not specified
Bulandshahar	12727	1179	9.26	8.18	Not specified
West Bsengal					
Barddhaman	19537	358	18.37	19.54	Motor vehicle tax, entry tax
Siliguri	11099	3396	30.60	10.20	Motor vehicle tax, entry tax

example, in Siliguri municipality, per capita assigned revenues amount to Rs.10.20 while the percentage of these revenues to the total revenue is around 31 per cent. In Tamil Nadu, Tiruchirapalli municipal corporation has the highest per capita shared revenues, that is Rs. 52.87. Next in rank are the municipalities of Andhra Pradesh where the level of per capita shared taxes are around Rs. 40. In the case of Vadodara municipal corporation, both the percentage of shared taxes to the total revenue and per capita shared taxes are marginal which indicates that transfer of funds from the state on account of assigned taxes is insignificant.

The higher per capita incidences of shared taxes in some states with comparative low level of per capita grants-in-aid shows that the concerned states are following the guidelines of the Seventh Finance Commission which stated that the grants-in-aid element should as far as possible be a residual item and attempts should be made to make the bulk of transfers through tax share (Table 4.15).

Table 4.15

Per Capita Grants-in-aid and Shared Taxes, 1986-87

(Rs.)

States	Grants-in-aid	Shared taxes
Andhra Pradesh	12.69	17.27
Assam	0.32	0.09
Bihar	0.96	2.76
Gujarat	10.12	17.00
Haryana	16.81	7.80
Himachal Pradesh	48.97	125.30
Jammu & Kashmir	46.62	0.69
Karnataka	2.23	18.33
Kerala	1.18	0.0
Madhya Pradesh	2.48	19.11
Maharashtra	11.67	41.37
Meghalaya	33.45	5.13
Orissa	24.46	16.65
Punjab	2.72	11.64
Rajasthan	2.77	5.63
Tamil Nadu	2.55	2.21
Tripura	155.15	31.11
Uttar Pradesh	13.38	7.33
All	9.74	14.75

The table shows that in eight states namely Andhra Pradesh, Bihar, Gujarat, Himachal Pradesh, Karnataka, Madhya Pradesh, Maharashtra and Punjab the per capita shared revenues are higher than the per capita grants-in-aid. This indicates the positive attitude of the concerned state governments in improving the financial health of their municipal centres through resources generated locally rather than in the form of donations which adversely effect the efficiency of the civic bodies.

EFFICIENCY IN TAX COLLECTION

An important indicator of the efficiency of a municipal body is the proportion of tax collected to the amount demanded. Figures available for only 80 municipal bodies and given in

Table 4.14, show that only 13 municipal bodies have collection ratios in the range of 70-90 per cent while all the others have smaller ratios in terms of tax collection efforts. A majority of these better placed municipal bodies belong to the states of Andhra Pradesh, Gujarat, Karnataka, Maharashtra and Tamil Nadu.

Table 4.16

Efficiency in Tax Collection : Property Tax, 1986-87

States	No. of responses	% collection to projected demand				
		1-30	30-50	50-70	70-90	Average collection (% to demand)
Andhra Pradesh	9	2	2	4	1	41.5
Assam	2	1	1	0	0	29.2
Bihar	3	2	0	1	0	33.5
Gujarat	6	1	1	2	2	59.3
Goa	1	0	0	1	0	69.8
Haryana	3	0	0	2	1	68.6
Karnataka	6	0	0	3	3	67.4
Kerala	4	0	1	3	0	55.4
Madhya Pradesh	3	0	1	1	1	64.0
Maharashtra	12	2	3	4	3	57.0
Manipur	1	1	0	0	0	21.6
Orissa	1	0	1	0	0	36.0
Punjab	2	0	1	1	0	50.3
Rajasthan	6	2	3	1	0	20.4
Tamil Nadu	4	0	1	1	2	63.6
Tripura	1	0	0	1	0	52.6
Uttar Pradesh	12	3	6	3	0	42.4
West Bengal	4	2	1	1	0	31.4
Total	80	16	22	29	13	
Percentage	100.0	20.0	27.5	36.3	16.2	50.7

Inefficiency in municipal tax efforts is apparent from the fact that tax collection in almost half of the responding municipal bodies is less than 50 per cent of their projected demands. Even in this category, more than 40 per cent of them have tax collection ratios in the range of one per cent to 30 per

cent. The situation is vary alarming in some of the north-eastern and eastern states (Assam, Bihar, Manipur, Orissa, Uttar Pradesh and West Bengal), where inefficiency in tax collection efforts can be seen in a majority of the municipal bodies. It is significant to note that the above states have recorded the lowest per capita incomes from tax sources.

Efficiency in tax collection efforts at any level has a direct impact on the financial performance of the municipal body concerned, which in turn, affects the physical performance of the municipal body in different ways. In this connection, it may be noted, that in many cases both the financial and physical performance of the sample municipal bodies belonging to the north-eastern and eastern states of India are unsatisfactory.

Another aspect of inefficiency in municipal tax collection efforts can be judged from the fact that accumulated tax arrears or uncollected amount of taxes account for almost one-fifth of the current municipal tax incomes (Table 4.17).

Table 4.17

Accumulated Tax Arrears
Sampled Municipal Bodies as on 31.3.1987

Total responses (municipal bodies)	Total tax income, 1986-87 ('000 Rs.)	Accumulated tax arrears ('000 Rs.)		% arrears to to current tax income, 1986-87
		Total	Average per municipal body	
136	3116438	572584	4210.17	18.4

In absolute terms, the aggregate amount of unrealised taxes was approximately Rs.57.26 crores in 136 responding municipal bodies as on 31.3.1987. On an average, this figure works out to be Rs.42.10 lakhs per municipal body which seems to be quite significant, keeping in view the evergrowing fiscal gap between expenditure needs and resources of municipal bodies to perform their functions efficiently.

The three major reasons for low collection ratios in most municipal centres generally are:

i. In the absence of punitive powers with the municipal authorities, no tax payer is inclined to pay the tax when it falls due;

ii. the assessee, especially those liable to pay large sums as property tax gain time by filing appeals against the valuations by municipal authorities; and

iii. lack of motivation on part of the municipal administration for effective realisation of tax dues.

These factors result in considerable loss of municipal revenues. Therefore, to improve the tax collection efforts, it is suggested that proper incentives may be given to good tax payers and penal provisions incorporated for defaulters. The allowance of rebates for self-occupied properties with a condition of paying tax dues within the given time could be provided for. Similarly, incentive schemes for the collecting staff may help to step up the collection drive.

TRENDS AND SHIFTS IN MUNICIPAL RESOURCES[3]

The changes that took place in the structure as well as pattern of municipal resources during the reference period 1974-

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3. The analysis is termed as `rough' as the data used for time series analysis are not strictly comparable.

75 to 1986-87 form the theme of this section. The implication of population growth and prices on the municipal revenues will also be examined in the latter part of the present section.

As in the case of expenditure, the average receipts of municipal bodies have also increased from Rs. 69.33 lakhs per municipal body in 1974-75 to Rs. 396.13 lakhs in 1986-87, an increase of 471.31 per cent or 51.9 per cent per annum (Table 4.18).

Table 4.18

Class I Municipal Bodies: Growth of Revenues, 1974-75, 1979-80 and 1986-87

Years	No. of responses	AMC* (000'Rs.)	% increase (Base Year :1974-75)		
			Tax	Non-tax	Grants
1974-75**	173	6933.84	-	-	-
1979-86**	173	14626.36	82.9	84.9	203.2
1986-87	157	39613.78	342.3	424.4	406.4

* Average revenue income per municipal centre.

** NIUA: A study of financial resources of urban local bodies in India and the level of services provided, 1983.

It is significant that among the components of municipal income, the highest growth has been recorded by the non-tax sector amounting to 424.4 per cent during the 11-year period of study. Grants come next and tax revenues come last in order. This high level of resource generation from the non-tax sector in terms of periodical growth, has meant that there is a positive departure of the municipal resource base from traditional sources of funding to the profitable commercialized sector which offers

greater scope for resource mobilization to finance municipal activities.

Although, the non-tax sector has shown maximum growth during the period 1974-75 to 1986-87, the revenues from tax sources continued to maintain their leading position in the overall revenue structure of the municipal bodies with contibutions from other sources being comparatively lower (Table 4.19).

Table 4.19

Composition of Municipal Incomes
1974-75 and 1986-87

Year	% Share in total revenues			
	Tax	Non-tax	Grants	Others
1974-75	63.6	13.3	23.1	-
1986-87	54.3	13.5	22.5	9.7

The most striking feature of the above analysis is the declining role of the tax incomes in the overall finances of the sampled municipal bodies during the reference year. Table 4.19 shows that the share of tax revenues declined from 63.6 per cent in 1974-75 to 54.3 per cent in 1986-87. In the absence of requisite data on various tax income components it is not possible to find out the specific reasons. However, the following factors could be responsible for the declining role of tax revenues in the overall municipal resource network:

- Abolition of octroi in some states after the base year 1974-75. For example, 'octroi' was abolished in Madhya Pradesh and Karnataka in 1979;

- further decline in efficiency in the collection of taxes; and
- non-elastic character of tax income in terms of rates and structure.

The above analysis based on the absolute figures will not, however, give a complete picture of the growth pattern of municipal resources and their shifts in terms of different sectors, unless the implications of population growth and inflation ratios are taken into account.

The component-wise per capita incomes given in Table 4.20 confirm the earlier statement that the pace of growth of municipal revenues from the non-tax sector is highest among all the components of municipal income. More important than this feature are, however, the figures on the per capita receipts from grants-in-aid during the three reference years of the study. As may be seen from the table, whereas the per capita grants-in-aid have increased from Rs. 12.30 in 1974-75 to Rs. 20.90 in 1979-80, in the latter period of the study, they declined by 12.90 per cent, from Rs.20.90 in 1979-80 to Rs. 18.20 in 1986-87.

Table 4.20

Per Capita Revenue Income:1974-75, 1979-80, 1986-87 at Constant Prices (Base 1979-80)

(Rs.)

Year	Total	Tax	Non-tax	Grants
1974-75	53.5	34.1	7.1	12.3
1979-80	62.9	34.7	7.3	20.9
1986-87	81.0	44.0	10.9	18.2
% Increase (1974-75 to 1986-87)	52.8	29.4	53.5	48.0
Per Annum Growth Rate (%)	4.8	2.6	4.9	4.4

This sharp decline in per capita receipts from grants-in-aid during the last seven years is mainly due to the policy of the states to adopt the census year for disbursement of grants-in-aid. As a consequence the populations given in the 1981 census have been used for computing grants. Therefore, it is suggested that the states may modify their grants-in-aid code keeping in view population growth, inflationary trends and other economic indicators in order to enable the local bodies to perform their functions efficiently and effectively.

In sum, the foregoing analysis shows that:

- The annual per capita revenue income of sampled municipal bodies is higher than the expenditure level. The average per capita income of municipal bodies is about Rs.150.68 against the expenditure level of Rs.143.14;

- the per capita income of municipal bodies varies widely ranging from a mere Rs.5.59 in Imphal (Manipur) to slightly more than Rs.776 in Thane (Maharashtra). The per capita income in many of the urban centres is far below the sample average of Rs.151. In 30 municipal bodies the per capita income levels compare favourably with the expenditure norms laid down by the Zakaria Committee (Rs.222.00). On the other hand the per capita incomes of 64 municipal bodies are even less than Rs.100.00 per annum;

- taxes are the most important source of revenue for municipal bodies and more than 54 per cent of revenue comes from this

sector. Grants come next and the non-tax sector last in order;

- out of twenty two states under reference, in only five the per capita tax income is more than the All India average of Rs.81.80. These better-off states are Gujarat (165.41) Punjab (163.51), Himachal Pradesh (142.31), Maharashtra (199.85) and Orissa (87.52);

- most of the financially weak states are those where octroi is no longer levied confirming the role of octroi in municipal finances;

- more than 90 per cent of municipal tax income has been derived only from two sources, namely, octroi and tax on properties. The other taxes do not make any significant contribution to municipal finances;

- a maximum proportion of non-tax income is derived from municipal property;

- in more than half of the 136 responding urban centres the proportionate share of grants in total revenues is below 20 per cent and only in a marginal number of cases (10%) the incidence of dependence on state governments is at a higher level;

- efficiency in tax collection efforts at any level has a direct impact on the financial performance of the municipal body concerned. This in turn, affects the physical performance of the municipal body in various ways. The

financial and physical performance of the sampled municipal bodies belonging to the north eastern and eastern parts of India are at unsatisfactory levels;

Another level of inefficiency in municipal tax collection efforts can be judged from the fact that accumulated tax arrears or uncollected amount of taxes accounts for almost one-fifth of the current municipal tax incomes.

To improve the tax collection efforts, it is suggested that proper incentives may be given to good tax payers and penal provisions incorporated for defaulters;

- the average receipts of municipal bodies have increased from Rs.69.33 lakhs per municipal body in 1974-75 to Rs.396.13 lakhs in 1986-87, an increase of 471.31 per cent or 51.9 per cent per annum. Whereas the highest growth has been recorded by the non-tax sector, grants come next and tax revenues come last in order. This high growth of revenue from the non-tax sector implies a positive departure of municipal resource base from traditional sources of funding to the profitable commercialized sector which has greater flexibility for resource mobilization;

- although the non-tax sector has shown the maximum growth during the period 1974-75 and 1986-87, the revenues from tax sources continued to maintain their leading position in the overall revenue structure of the municipal bodies. However, the share of tax revenues declined from 63.6 per cent in 1974-75 to 54.3 per cent in 1986-87 owing to various reasons

such as non-elastic character of tax income components, decline in efficiency of tax collection efforts and abolition of octroi in some states; and

- whereas the per capita grants-in-aid have increased from Rs.12.30 in 1974-75 to Rs.20.90 in 1979-80, in the latter part of the study period, they have declined by 12.9 per cent - from Rs.20.90 in 1979-80 to Rs.18.20 in 1986-87. This sharp decline in per capita receipts from grants-in-aid during the last seven years is mainly due to the policy of the states to adopt the census year for the disbursement of grants-in-aid. Therefore, the states may modify their grants-in-aid code keeping in view population growth, inflationary trends and other economic indicators.

CHAPTER V

EXPENDITURE NORMS AND FINANCIAL IMPLICATIONS : AN ASSESSMENT OF FISCAL RESOURCE GAP

It is very clear from the preceding analysis that muncipal bodies which are responsible for managing city services, face an acute shortage of resources even to maintain the existing infrastructure at a satisfactory level, not to talk about capital investment necessary for expansion.

On the basis of certain standards of civic services, the then per capita annual recurring expenditure on the civic services and the population of India, the Zakaria Committee in 1963 had come to the conclusion that even to maintain civic services at absolute minimum levels, the gap between needs and resources was nearly Rs.990 million annually. The minimum levels were defined in terms of per capita expenditure norms at 1960-61 prices.

On behalf of the Eighth Finance Commission, the National Institute of Urban Affairs (1983) approached the problem of assessing the gap between municipal resources and desirable levels of expenditure on basic services from a number of angles, including the Zakaria Committee approach. The study suggested that, even at the level of services existing in 1979-80, the municipal bodies of India needed an additional Rs.8,330 million per annum for maintenance alone, excluding the massive capital investment required for the enhancement of the quality of the services.

The Task Force on Housing and Urban Development, set up by the Planning Commission in 1983 to look into issues relating to the financing of urban development has mentioned that most municipal bodies of India are financially sick and unable provide adequate services to their citizens. They have mentioned that the share of municipal governments in the total tax revenues of the country had come down to about 4.5 per cent in 1980-81 from roughly 8 per cent in 1960-61.[1] This despite the fact that in the same period the urban population had increased from about 16 per cent of the total in 1960-61 to approximately 24 per cent in 1980-81.

The situation further deteriorated during the period 1980-81 to 1986-87, as the share of municipal tax incomes in the overall tax revenues of central, state and local governments has come down from about 4.5 per cent in 1980-81 to almost 3.4 per cent in 1986-87.[2] It may be noted that the urban population of the country had increased from 159.72 million in 1981 to almost 201 million (projected) in 1987, an increase of 25.7 per cent or 4.3 per cent per annum.

These facts are indicative of the unsatisfactory levels of civic services. Therefore, to make a normative assessment of additional fiscal requirements (non-plan) for upgrading basic urban services to a `reasonable level', the sitting Ninth Finance

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1. The Task Forces on Housing and Urban Development - Financing of Urban Development, Planning Commission, Government of India, 1983, p. 3-4.

2. This figure may be an underestimate as it has been estimated by applying the average income of Rs.81.80 which is the average per capita tax income of 157 sampled municipal bodies.

Commission had approached NIUA to work out suitable norms specifically for the Commission's award period 1990-95, keeping in view the resource generating capacities of municipal governments and existing expenditure on services.

In the absence of accepted norms for reasonable (optimum) level of services and per capita expenditure requirements for rendering optimum municipal services, an estimate of the additional financial requirements for the current year (1986-87) as well as for horizon years 1990-91 to 1994-95 at 1986-87 prices, has been worked out on the basis of the following four methods :

i. Zakaria Committee approach;

ii. Better-off cities approach;

iii. State average approach; and

iv. City size (class) averages approach.

The methodology adopted to assess the resource gap between the actual and desired levels of services by using the above methods, has been discussed in Chapter I (Introduction).

It may be noted that the desirable level of per capita expenditure to maintain the service at absolute minimum level is different in each of the above cases. Whereas the expenditure norms worked out by using methods I, III and IV have already been discussed in the respective sections of the report, the desirable level of per capita expenditure worked out on the basis of 10 per cent sampled cities (15 in number) which have the highest per capita expenditure on services (method-II) is given in Table 5.1

Table 5.1

Better-off Cities-Annual Per Capita Revenue Expenditure on Services, 1986-87

Name of urban centre	State	Per capita expenditure level (Rs.)
Jalgaon	Maharashtra	276.74
Ludhiana	Punjab	282.11
Malegaon	Maharashtra	303.88
Jamnagar	Gujarat	307.06
Sangli	Maharashtra	312.20
Khandwa	Madhya Pradesh	318.93
Vadodara	Gujarat	339.68
Kolhapur	Maharashtra	357.21
Davangere	Karnataka	365.94
Latur	Maharashtra	378.89
Aurangabad	Maharashtra	386.68
Shimla	Himachal Pradesh	392.65
Thane	Maharashtra	458.56
Bhiwandi	Maharashtra	507.26
Nasik	Maharashtra	544.39
Desirable Expenditure Norm (Average)	-	360.03

REVENUE GAPS IN 1986-87

The existing revenue gaps worked out by different methods are given in Table 5.2.

Table 5.2

Additional Financial Requirements (Revenue Gaps) of Sampled Municipal Bodies for the Upgradation of Services, 1986-87

Method	Total sampled municipal bodies	Municipal bodies having revenue gaps	Amount needed (million Rs.)	% to revenue income
I. Zakaria Committee	157	124	3543.6	116.90
II. Better-off cities	157	151	8950.5	170.52
III. State average	157	87	950.4	45.80
IV. City size averages	157	98	1458.5	61.97

It may be seen that against the Zakaria Committee recommendation of a minimum requirement of Rs.3543.6 million per annum for maintaining essential services at existing levels (1986-87); the revenue gap worked out on the basis of the better-off cities approach works out to be about Rs.8950.5 million, which is almost 2.5 times higher than the former figure. In other words, while the computed revenue gap worked out on the basis of Zakaria Committee expenditure norms indicates that the resources of municipal bodies need to be almost doubled for improvement in the level of their services; in case of the better-off cities approach, the amount needed for the purpose would be more than two and a half times higher than the existing incomes of municipal bodies.

Table 5.2 suggests that more than half of the sample municipal bodies need on an average, an additional 46 per cent of their existing total revenues according to the state average approach and 62 per cent according to city size averages method to improve the level and quality of services existing in 1986-87. But these estimates are only indicative and suggest that the finances of municipal bodies need substantial improvement. The resource gap worked out by different methods for each municipal body is given in Annex X (1 to 4).

It is important to note that the level of resource gap is significantly high in most of the sampled urban centres, as can be seen from Table 5.3.

Table 5.3

Level of Resource Gap, 1986-87

Method	Total cities having revenue gap	(% to revenue income)			
		< 10	10-30	30-50	50 +
I. Zakaria Committee	124 (100.0)	3 (2.4)	9 (7.3)	10 (8.1)	102 (82.2)
II. Better-off Cities	151 (100.0)	1 (0.7)	9 (6.0)	7 (4.6)	134 (88.7)
III. State Average	87 (100.0)	13 (14.9)	17 (19.5)	11 (12.6)	46 (53.0)
IV. City Size Averages	98 (100.0)	12 (12.2)	18 (18.4)	11 (11.2)	57 (58.2)

* Figures in brackets refer to percentages

Table 5.3 shows that on an average, in more than 50 per cent of the urban centres - ranging from approximately 89 per cent in the case of the better-off cities approach to almost 53 per cent in the state average approach, the existing revenue gap between the actual and desired levels of services is even more than 50 per cent of their existing revenue incomes, and only in few cases the extent of the gap is below 10 per cent of their respective incomes. These comparatively better placed cities in each case are given in Table 5.4.

Table 5.4

Cities with Less than 10 Per Cent Revenue Gap as Proportion to Their Annual Revenue Incomes, 1986-87

Zakaria committee approach	Better-off cities approach	State average approach	City size averages approach
Agartala (Tripura);	Kolhapur (Maha-rashtra)	Tirupati (Andhra Pradesh);	Anantpur (Andhra Pradesh);
Vijayawada (Andhra Pradesh);		Bharuch (Gujarat);	Tirupati (Andhra Pradesh);
Jalna (Maharashtra);		Karnal (Haryana);	Ambala (Haryana);
		Panipat (Haryana);	Yamuna Nagar (Haryana);
		Mysore (Karnataka);	Burhampur (Orissa);
		Jalgaon(Maharashtra);	Pathankot (Punjab);
		Burhampur (Orissa);	Ganganagar (Rajasthan);
		Tiruppur(Tamil Nadu);	Tiruppur(Tamil Nadu);
		Aligarh (Uttar Pradesh);	Akola (Maharashtra);
		Amroha (Uttar Pradesh);	Patiala (Punjab);
		Bareilly (Uttar Pradesh);	Gorakhpur
		Mirzapur (Uttar Pradesh);	(Uttar Pradesh)
		Siliguri (West Bengal);	Bhavnagar(Gujarat);

The most striking feature of this resource gap analysis is that a majority of the sampled municipal bodies which have not shown any fiscal gap between the actual and desired levels of services by any of the methods belong to the states of Maharashtra and Gujarat. On the other hand, in most of the sampled municipal bodies of the states of Assam, Bihar, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh and West Bengal, the level of revenue gap as proportion to their existing incomes is significant.

It may be noted that even to carry out normal maintenance operations of services at par with the state average level, which

is the lowest norm, it is estimated that the municipal bodies which are in crisis will require an additional amount of Rs. 950.4 million per annum at the level of service existing in 1986-87 to fill the gap. Although this would not raise the services to a reasonable or optimum level in these urban centres, it would bring about a certain uniformity within each state as far as maintenance, delivery and accessibility of services are concerned.

PROJECTED REVENUE GAPS FOR 1990-95 PERIOD[3]

The preceding financial estimates are made only for the current year (1986-87). For the Ninth Finance Commission period from 1990-91 to 1994-95 the sampled municipal bodies will require an amount of approximately Rs.26814 million in order to be able to operate and maintain the services at levels proposed by the Zakaria Committee. This amount is over and above the financial resources that the municipal bodies will mobilise during this period through their own resource-raising efforts and resource transfers from States at existing levels of taxation and efficiency. The amount of financial need will, however, increase to Rs.62,926 million if the municipal bodies choose to raise their spending levels to levels that are currently being

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3. The resource gap for 1990-95 has been worked out on the basis of following factors/assumptions:

   a) The prices will remain constant at 1986-87 level;

   b) Projected population of sampled cities has been computed on the basis of average annual compound growth rate of 1971-81 census period; and

   c) The financial health of the sampled municipal bodies will be maintained at least at the existing levels, and will not be allowed to deteriorate further.

maintained by the "better-off" municipal bodies. On the other hand, their financial needs will dip to Rs.9,207 million if they decide to upgrade the levels to the average spending levels of States to which they belong (Table 5.5).

Table 5.5

Additional Financial Requirements (Revenue Gaps) of Sampled Municipal Bodies for the Upgradation of Services at 1986-87 Prices, 1990-91 to 1994-95

Years	Amount Needed by Different Methods (million Rs.)			
	Zakaria committee	Better-off cities	State average	City size averages
1990-91	4644.00 (137)	11216.80 (152)	1463.40 (106)	2127.80 (108)
1991-92	4977.00 (137)	11864.90 (152)	1626.10 (112)	2323.50 (109)
1992-93	5336.70 (139)	12547.90 (153)	1818.60 (116)	2531.20 (110)
1993-94	5722.70 (140)	13268.70 (153)	2033.80 (120)	2759.30 (116)
1994-95	6133.50 (140)	14028.00 (153)	2265.30 (121)	3007.60 (117)
Total	26813.90	62926.30	9207.20	12749.40

Note : Figures in brackets refer to number of municipal bodies which have revenue gaps at their existing income levels of 1986-87.

EFFORTS TO BRIDGE THE GAP

The gap between the existing municipal incomes and expenditure requirements worked out by different methods underlines the financial constraints of the sampled municipal bodies and explains why the civic bodies were not able to provide services at levels services expected of them. It is observed that in many cases the municipal bodies are not undertaking proper and regular maintenance of the water supply,

sewerage and drainage systems and other essential services such as roads, medical relief, street lighting, and so on, resulting in the widening of the gaps between the actual and desired levels of services year after year. These shortcomings are mainly due to shortage of funds, though some of the deficiencies can be traced to indifference or inefficiency of the executive and other service personnel engaged in carrying out civic functions.

What is, therefore, urgently needed is to balance the gap by matching of the obligations of municipal bodies with the resources available to them. This gap can be bridged successfully by :

i. Better utilisation of internal municipal sources;

ii. Re-structuring the transfer of funds mechanism from state to municipal level; and

iii. Identifying new sources of revenues.

i. Better Utilisation of Internal Municipal Sources

As discussed, the two main sources of internal municipal revenues are :

a) Taxes and b) Non-tax sources.

These two sources share more than two-thirds of the total municipal incomes. However, the municipal bodies are not exploiting their internal sources to their fullest extent, leading to considerable loss of revenues which are due to them. Hence, for effective utilisation of the two main sources of domestic municipal revenues, the following steps may be taken :

a) Taxes

It is evident from the preceding analysis that tax revenues form the major source of municipal incomes in most states. Among various components of municipal taxes, tax on land and buildings, commonly known as the `property tax', is an important source of municipal revenue - and the most important in states where octroi is not levied.

The Property Tax :

Property tax includes a number of specific service taxes, such as water tax, scavenging tax, fire tax, education cess, and so on, which use the same tax base for assessment purposes. Therefore, an improvement in property tax valuation automatically raises the prospects for revenue mobilisation in respect of the entire group of property taxes.

The revenues from this most important tax source are affected adversely by unrealistic progression of rates and its structure, various exemptions, and poor collection levels. To overcome these problems, it is suggested that :

- The rates and structure of property taxes should be revised periodically - once in three or five years to augment the revenue of municipal bodies from this source in tune with the urban and economic development of the local area.
- The restrictive influence of rent control legislation on property tax valuation may be removed with a view to decide the tax on the basis of economic and prevailing rent in the market;
- It is noticed that at present, nominal service charges are paid in respect of the properties of Government of India. To widen the base of property tax, the properties of central and other governmental

establishments may also be taxed accordingly; and

- It is found that on an average, only 50 per cent of the total demand in the property tax sector is collected and a huge amount of arrears are either locked up in court disputes or remain uncollected owing to various reasons. To raise efficiency in recovery of property taxes, incentives may be given to good tax payers and penal provisions incorportated for defaulters. The allowance of rebates for self-occupied properties, with the condition of paying up-to-date tax dues may be provided for. Further, incentive schemes for the collecting staff may be introduced so that the personnel factor can be exploited to the maximum benefit.

The Octroi :

It is important to note that level of services are generally poor in those states where octroi is not levied. This shows that municipal bodies of non-octroi states are not getting adequate grants-in-aid from their respective states in lieu of octroi. The Task Force on Housing and Urban Development had mentioned that the growth of municipal taxes is particularly slow in those states where octroi is not levied or has been abolished. Keeping in view the importance of octroi in the economics of municipal finances, the concerned State governments should provide the adequate alternatives to octroi and evolve a system in which the municipal bodies would be able to boost their domestic tax base.

Other Taxes :

The study reveals that `other taxes' do not make any significant contribution to the domestic municipal incomes. This shows that despite the provisions in the respective State Municipal Acts, many of the municipal bodies have not been levying certain taxes which if levied, could greatly improve the resource base of municipal bodies and enable them to provide

services at a satisfactory level. Some of these untapped taxes are Professional tax and Betterment levy.

b) Non-Tax Sources

Keeping in view the legal constraints of the municipal tax structure, income expansion can be realised to a substantial extent from the non-tax sector. This sector includes incomes from municipal enterprises, municipal investments and regulatory fees and such other types of incomes. However, it is unfortunate that in a majority of the municipal bodies non-tax receipts do not form an important part of domestic municipal revenues (Chapter IV). Furthermore, a maximum proportion of non-tax income has been derived from municipal properties and very marginally from any of their activities such as water supply. Every encouragement should, therefore, be given to municipal bodies to develop and widen the non-tax sector of their revenues, not only by utilising sale proceeds of municipal properties and produce of such properties (market charges, etc.) at their fullest level, but by way of proper pricing of existing infrastructure and also by undertaking additional revenue generating financially viable public activities such as distribution of cooking gas, milk supply, local transport services, and so on. However, for further widening the scope of this sector, the municipal bodies need capital funds for investment in these projects.

If a Municipal Finance Corporation or Board is set up by the State Government to meet the capital requirements of remunerative undertakings, there is considerable scope to strengthen the

domestic revenue base of municipal governments to finance the various civic services at an adequate level. Both Gujarat and Kerala, for example, have set up statutory financial institutions in their states and the Gujarat Municipal Finance Board could be quoted as a model in this regard.

ii. Re-Structuring the Transfer of Funds Mechanism from State to Municipal Level

The analysis of transfer of funds from state to municipal bodies has revealed that the transfer of funds in the form of shared taxes has been playing a much smaller role than grants-in-aid in the overall finances of municipal bodies. Whereas the grant component of municipal income shared more than 16 per cent of their income in 1986-87, the state contribution by way of share of taxes was only 6 per cent in the year in reference.

It is observed that the nature and scale of shared taxes differ from state to state and in many cases municipal bodies have not been receiving adequate share in certain revenues which have a local character and base. Some of these revenues are, entertainment tax, motor vehicle tax and real property registration stamp duties. It may be noted that motor vehicle tax was originally a domestic municipal tax, but since 1939 it has been provincialised and the municipal bodies receive compensation on the basis of revenue foregone, calculated on the basis of averages of the receipts for the three years prior to encroachment. Although the original fixed compensation or share has not been given up, generally a fixed percentage of the total receipts is distributed among the municipal bodies which has no

relationship to population growth, road length, traffic intensity, and such other factors.[4] As a general principle, the share of each municipal body in different tax sectors should be almost equal to the sum it would have raised itself at allowable rates of levy. Further, there should be uniformity in the tax sharing components at state level, of course, with due weightage to local factors.

Likewise in the case of sharing in taxes, the grants-in-aid system is most states is confusing and largely on an ad hoc basis. This has resulted in budgetary suspense, lack of capital formation and neglect of maintenance of essential civic services. Considering the defective grants-in-aid code in most states, the National Commission on Urbanisation (1988) has mentioned in its report that if the former Finance Commissions (7th & 8th) had laid down principles relating to grants-in-aid to the states out of the consolidated fund of India under Article 280 (b), and stated what portion of such grants should be passed on to the local bodies and on what principles, perhaps this problem could have been overcome.[5]

To plug the loopholes in the grants-in-aid code and for effective utilisation of this source to enable municipal bodies to perform their functions satisfactorily, it is suggested that :

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4. The Task Forces on Housing and Urban Development - Financing of Urban Development, Planning Commission, Government of India, 1983.

5. The Report of National Commission on Urbanisation, Vol.II, 1988.

- Every state should constitute a Finance Board on the lines of the Gujarat Municipal Finance Board which will lay down the mechanism for devolution of funds to municipal bodies from the state sector;

- There should be a periodic review, say after five years, of the grants-in-aid code and its application by the high level expert committee to take stock of inflation, population growth and other local and regional factors;

- Grants should be linked to the resource mobilisation efforts of the municipal body;

- Equalisation on the expenditure side; and

- There should be a regular flow of grant money to avoid any level of confusion for effective functioning of municipal bodies.

iii. Identifying New Sources of Revenues

Besides the above resource promotion approaches, the municipal bodies may also identify certain new sources of funding specially in their domestic tax sector which will help them in generating additional revenues for various developmental projects, not only to meet the existing needs but also for future expectations. However, for any additions in the revenue base of municipal bodies, specific permission is required from the respective state governments.

Some of the new taxes which the municipal governments can levy in their areas of jurisdiction are special conservancy tax on factories and large business establishments, tax an floating population, urban land tax or vacant land tax and so on.

Besides the above resource mobilisation efforts for attaining minimum standards of services to narrow down or bridge the gap between needs and existing resources, what is more important is that municipal bodies should economize on their administrative spendings and train their officers adequately in order to enrich their knowledge and equip them with the latest techniques in different fields of urban management.

Regarding administrative expenditures, it is observed that most of the municipal bodies are finding it difficult to curb their expenditure on establishment and staff. In a number of states, municipal bodies have not had the benefit of revision of property taxes for the last ten years or even more with the result that the income from this component which is the most important source of domestic municipal revenue has remained more or less static over the years. On the other hand, the expenditure of municipal bodies has gone up considerably owing to revision of scales of pay, revised dearness allowances and other related factors. As can be seen from the preceding analysis of municipal spendings, on an average, almost half of the revenue is being spent on salaries of staff and other administrative obligations which affects seriously the productive part of municipal services, that is, operations and maintenance.

Thus for improving the productivity of municipal revenues there should be some method to ensure economy in administration. One such method could be that state governments may put a ceiling on the per capita expenditure on establishments under various heads, taking into account the functional roles of

municipal bodies and their scale. For effective compilation of such norms, they may link the grants-in-aid code with the level of efficiency in expenditure.

ANNEXURES

ANNEX-X

X(1). Estimated Resource Gap at 1986-87 Prices, Using the Expenditure Norms laid down by the Zakaria Committee (Method I)

(Rs.)

State/ Town	Revenue Expenditure Norms (Per Capita Per Annum)	Revenue Gap											
		1986-87		1990-91		1991-92		1992-93		1993-94		1994-95	
		Amount	Percent to Revenue Income	Amount	Percent to Revenue Income	Amount	Percent to Revenue Income	Amount	Percent to Revenue Income	Amount	Percent to Revenue Income	Amount	Percent to Revenue Income
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
ANDHRA PRADESH													
ANANTPUR	204.74	13079888	72.49	18490143	102.47	19983721	110.75	21538517	119.37	23156782	128.34	24840973	137.67
ADONI	204.74	15451246	148.90	18104881	174.48	18809800	181.27	19532123	188.23	20272258	195.36	21030820	202.67
BHIMAVARAM	204.74	22217267	409.88	27917434	515.05	29517477	544.56	31194297	575.50	32951376	607.92	34793012	641.89
CUDDAPAH	204.74	11222101	68.74	16567248	101.48	18058165	110.61	19616851	120.16	21246172	130.14	22949404	140.57
GUNTUR	204.74	22791656	33.61	34707524	51.18	37923785	55.92	41240982	60.81	44662188	65.85	48190677	71.06
KAKINADA	204.74	0	0.00	7296678	12.89	9383388	16.57	11538277	20.38	13763391	24.31	16061393	28.37
KURNOOL	204.74	28759722	113.53	38444743	151.76	41125813	162.35	43919490	173.38	46830483	184.87	49863911	196.84
MACHILIPATNAM	204.74	0	0.00	354500	1.03	1084603	3.14	1830266	5.30	2591285	7.50	3368478	9.75
NELLORE	204.74	24324819	55.10	41982416	95.09	47067134	106.61	52451796	118.81	58154419	131.72	64193635	145.40
NIZAMABAD	204.74	39810320	416.31	49768873	520.45	52557637	549.61	55477639	580.14	58534816	612.11	61735926	645.59
PRODDATUR	204.74	10037848	55.65	15074247	83.56	16468526	91.29	17921771	99.35	19436028	107.74	21013959	116.49
TENALI	204.74	21604525	426.45	23221562	458.37	23640869	466.65	24066524	475.05	24498321	483.57	24936669	492.22
TIRUPATI	204.74	14786087	81.02	23083380	126.49	25464916	139.54	27983628	153.34	30647500	167.94	33464927	183.38
VISHAKHAPATNAM	239.25	49627455	38.19	86970074	66.93	97461186	75.01	108459748	83.47	119990402	92.34	132078508	101.65
VIJAYAWADA	204.74	10390675	9.89	28258949	26.89	33142408	31.54	38204604	36.35	43452295	41.35	48892032	46.52
VIZIANAGRAM	204.74	0	0.00	1145271	3.82	2036094	6.78	2952101	9.84	3894519	12.98	4863759	16.21
WARANGAL	204.74	67785529	286.02	87121379	367.61	92562959	390.57	98271724	414.66	104260779	439.93	110544044	466.45
TOTAL		351889138	70.79	518509302	83.86	566288481	91.59	616200338	99.66	668343014	108.10	722822127	116.91
AVERAGE		25134938		30500547		33311087		36247078		39314294		42518948	

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
ASSAM													
DIBRUGARH	204.74	21892114	985.81	24311117	1094.74	24952772	1123.63	25610192	1153.23	26283172	1183.54	26972737	1214.59
JORHAT	204.74	54042711	2543.87	95348187	4488.17	109750417	5166.11	126280715	5944.21	145253357	6837.28	167029503	7862.31
TINSUKIA	204.74	30901911	1727.80	40899979	2286.81	43844755	2451.46	46993042	2627.49	50358148	2815.64	53955635	3016.78
TOTAL		106836736	1741.81	160559283	2617.67	178547944	2910.94	198883949	3242.49	221894677	3617.65	247957875	4042.56
AVERAGE		35612245		53519761		59515981		66294649		73964892		82652625	
BIHAR													
BIHAR	204.74	35511602	843.59	42663785	1013.49	44644644	1060.54	46709243	1109.59	48861265	1160.71	51103987	1213.99
DHANBAD	204.74	28035976	817.35	33633977	980.55	35182630	1025.70	36795981	1072.74	38476692	1121.74	40227628	1172.78
KATIHAR	204.74	24737570	746.49	30229106	912.20	31762404	958.47	33365723	1006.85	35042339	1057.45	36795732	1110.36
MUNGER	204.74	28984788	2018.02	31945942	2224.18	32730301	2278.79	33532882	2334.67	34354504	2391.88	35195371	2450.42
TOTAL		117269936	946.50	138472810	1117.63	144319979	1164.82	150403829	1213.93	156734800	1265.03	163322718	1318.20
AVERAGE		29317484		34618202		36079994		37600957		39183700		40830679	
GUJARAT													
BHAVNAGAR	204.74	24841466	48.83	34821517	68.45	37515691	73.75	40294627	79.21	43160782	84.84	46117023	90.65
JUNAGADH	204.74	6246457	29.15	8757798	40.88	9420542	43.97	10097822	47.13	10789843	50.36	11497219	53.66
NADIAD	204.74	0	0.00	3225166	9.14	4302713	12.20	5410561	15.34	6549325	18.57	7720028	21.88
NAVSARI	204.74	0	0.00	2253048	7.58	3494592	11.75	4784454	16.09	6124272	20.59	7516095	25.27
PORBANDAR	204.74	6582183	33.62	8457192	43.19	8946521	45.69	9444244	48.23	9950975	50.82	10466306	53.45
VADODARA	239.25	0	0.00	0	0.00	0	0.00	8662235	2.94	22709560	7.72	37408841	12.72
TOTAL		37670106	41.00	57514721	36.66	63680059	40.59	78693943	17.45	99284757	22.01	120725512	26.77
AVERAGE		12556702		11502944		12736011		13115657		16547459		20120918	

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
HARYANA													
AMBALA	204.74	11102064	82.99	13389828	100.10	13994630	104.62	14612740	109.24	15244978	113.97	15891546	118.80
BHIWANI	204.74	4553057	22.03	8068033	39.04	9020893	43.65	10005283	48.42	11022431	53.34	12073157	58.42
HISSAR	204.74	16801872	98.55	22422190	131.52	23967362	140.58	25573138	150.00	27241769	159.79	28975508	169.96
KARNAL	204.74	17131156	105.08	22206866	136.21	23591932	144.70	25026750	153.50	26513367	162.62	28053217	172.07
PANIPAT	204.74	19343356	109.66	26630053	150.96	28665987	162.51	30795488	174.58	33022855	187.20	35352591	200.41
ROHTAK	204.74	16518135	68.48	21520957	89.22	22865075	94.79	24248913	100.53	25673493	106.44	27139841	112.52
YAMUNANAGAR	204.74	11886253	71.08	16974246	101.51	18381834	109.93	19846387	118.70	21375952	127.84	22967396	137.35
TOTAL		97335893	77.33	131212173	104.24	140487713	111.61	150110699	119.25	160094845	127.18	170453256	135.41
AVERAGE		13905127		18744596		20069673		21444385		22870692		24350465	
JAMMU & KASHMIR													
JAMMU	204.74	15889154	46.56	21881893	64.13	23488898	68.84	25142378	73.68	26842948	78.66	28592656	83.79
SRINAGAR	239.25	77988630	108.52	95412250	132.76	100075950	139.25	104869563	145.92	109796917	152.78	114861600	159.82
TOTAL		93877784	88.57	117294143	110.66	123564848	116.58	130011941	122.66	136639865	128.92	143454256	135.35
AVERAGE		46938892		58647071		61782424		65005970		68319932		71727128	
KARNATAKA													
BELGAUM	204.74	7596119	12.27	18203084	29.39	21098722	34.07	24098982	38.91	27207549	43.93	30428519	49.14
BELLARY	204.74	25373489	85.86	36904241	124.87	40146913	135.84	43547850	147.35	47114830	159.42	50855839	172.08
BIJAPUR	204.74	21132592	131.67	26700292	166.36	28217825	175.81	29739204	185.60	31416478	195.74	33101488	206.24
DAVANGERE	204.74	30082785	126.63	41598591	175.10	44843516	188.76	48249570	203.10	51824945	218.15	55577624	233.94
GULBARGA	204.74	42006744	258.44	52633160	323.82	55579778	341.95	58652516	360.85	61856492	380.56	65197644	401.12
GADAG BETGERI	204.74	13726489	101.82	16074652	119.24	16692762	123.83	17323566	128.51	17967883	133.29	18625508	138.17
HUBLI DHARWAD	239.25	58156333	60.89	79800802	83.55	85672475	89.70	91740812	96.05	98012273	102.61	104493794	109.40
MYSORE	204.74	35287244	52.11	44614380	65.88	47075150	69.52	49589971	73.23	52159867	77.03	54785863	80.91
MANDYA	204.74	14332790	134.10	17858004	167.08	18814140	176.03	19802624	185.28	20824072	194.83	21879712	204.71
RAICHUR	204.74	26701042	399.12	33230405	496.72	35053206	523.96	36959335	552.46	38952274	582.25	41036527	613.40
SHIMOGA	204.74	18600649	89.94	25242619	122.05	27071562	130.90	28973596	140.10	30951180	149.66	33007589	159.60
TUMKUR	204.74	19486634	208.11	24942955	266.38	26461307	282.59	28046814	299.53	29702341	317.21	31431371	335.67
TOTAL		312482910	84.07	417803185	112.41	446727356	120.19	476774840	128.28	507990184	136.68	540421478	145.40
AVERAGE		26040242		34816932		37227279		39731236		42332515		45035123	

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
KERALA													
ALLEPPEY	204.74	30743257	579.08	31607669	595.36	31826945	599.49	32047655	603.65	32269593	607.83	32492760	612.03
COCHIN	239.25	91020313	207.66	99709634	227.48	101968154	232.63	104262083	237.87	106592139	243.18	108958800	248.58
CALICUT	204.74	69828590	359.76	75970585	391.40	77571243	399.65	79198516	408.03	80853225	416.55	82535573	425.22
PALGHAT	204.74	7627220	44.12	9163589	53.01	9562217	55.31	9966988	57.65	10377697	60.03	10794752	62.44
QUILON	204.74	22409715	292.29	23698349	309.10	24029208	313.41	24363344	317.77	24700960	322.17	25042262	326.62
TRIVANDRUM	204.74	72046798	193.94	79494420	213.98	81434331	219.21	83406592	224.52	85411611	229.91	87450002	235.40
TOTAL		293675893	224.77	319644246	244.65	326392098	249.81	333245178	255.06	340205225	260.38	347274149	265.79
AVERAGE		48945982		53274041		54398683		55540863		56700870		57879024	
MADHYA PRADESH													
BURHANPUR	204.74	15296285	80.07	19563885	102.41	20711044	108.41	21892393	114.60	23108549	120.96	24360944	127.52
KHANDWA	204.74	5972236	26.85	9640767	43.34	10630275	47.79	11650290	52.38	12702039	57.11	13786342	61.98
RAIPUR	204.74	59958355	139.28	91173425	211.79	100356014	233.12	110166745	255.91	120648614	280.26	131847688	306.27
RATLAM	204.74	10379144	42.78	14614601	60.23	15752136	64.92	16922839	69.75	18127734	74.71	19368049	79.83
UJJAIN	204.74	42925499	165.53	52161934	201.15	54658534	210.77	57234777	220.71	59893531	230.96	62637252	241.54
TOTAL		134531519	99.96	187154612	139.05	202108003	150.16	217867044	161.87	234480467	174.22	252000275	187.23
AVERAGE		26906303		37430922		40421600		43573408		46896093		50400055	
MAHARASHTRA													
AMRAVATI	204.74	0	0.00	0	0.00	0	0.00	502148	0.66	2830247	3.72	5228981	6.87
AKOLA	204.74	9173349	20.03	15967646	34.87	17793517	38.86	19673440	42.96	21609052	47.19	23601786	51.54
BHUSAVAL	204.74	8351991	40.20	11294514	54.37	12075392	58.13	12875516	61.98	13694886	65.92	14534320	69.96
CHANDRAPUR	204.74	12401055	67.68	18202567	99.34	19816533	108.14	21501952	117.34	23261693	126.95	25099439	136.98
DHULE	204.74	19417592	53.31	29892910	82.06	32805541	90.06	35845930	98.40	39020014	107.12	42333321	116.21
GONDIYA	204.74	0	0.00	788187	3.07	1465877	5.71	2160969	8.41	2973874	11.19	3605000	14.04
JALNA	204.74	1514540	5.34	5246541	18.50	6250381	22.04	7284113	25.69	8348557	29.44	9444939	33.31
LATUR	204.74	5691015	23.07	11934971	48.39	13687136	55.50	15523244	62.94	17447391	70.74	19463465	78.92
NANDED	204.74	0	0.00	4379390	7.99	6875990	12.54	9478030	17.29	12189812	22.24	15016043	27.39
PARBHANI	204.74	17150937	118.64	25316582	175.13	27668431	191.40	30159298	208.63	32797577	226.88	35591869	246.21
SOLAPUR	239.25	0	0.00	12597082	8.73	16556191	11.47	20615067	14.29	24776342	17.17	29042648	20.13
ULHASNAGAR	204.74	0	0.00	2638542	2.98	7165138	8.11	11916744	13.48	16904825	19.12	22140641	25.05
TOTAL		73700479	39.04	138258932	27.54	162160127	32.30	187536451	32.44	215754270	37.32	245102452	42.40
AVERAGE		10528639		12568993		14741829		15628037		17979522		20425204	

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
MANIPUR													
IMPHAL	204.74	40736479	3559.90	48895982	4272.94	51173305	4471.96	53554022	4680.00	56043046	4897.51	58645496	5124.94
TOTAL		40736479	3559.90	48895982	4272.94	51173305	4471.96	53554022	4680.00	56043046	4897.51	58645496	5124.94
AVERAGE		40736479		48895982		51173305		53554022		56043046		58645496	
MEGHALAYA													
SHILLONG	204.74	15857863	164.05	18207459	188.35	18827821	194.77	19461901	201.33	20110313	208.04	20773056	214.89
TOTAL		15857863	164.05	18207459	188.35	18827821	194.77	19461901	201.33	20110313	208.04	20773056	214.89
AVERAGE		15857863		18207459		18827821		19461901		20110313		20773056	
ORISSA													
BHUBNESWAR	204.74	30671121	78.77	54327600	139.53	61404643	157.71	69018719	177.26	77210571	198.30	86024014	220.94
BRAHMAPUR	204.74	16452699	68.70	22027974	91.98	23538137	98.29	25097846	104.80	26708740	111.52	28372662	118.47
CUTTACK	204.74	0	0.00	5693790	8.00	8273309	11.62	10939434	15.37	13695234	19.24	16543167	23.24
PURI	204.74	3295371	15.06	6830616	31.23	7789414	35.61	8780355	40.14	9804260	44.82	10862356	49.66
SAMBALPUR	204.74	10480106	50.82	17880843	86.71	19991303	96.95	22217645	107.75	24565809	119.13	27042753	131.15
TOTAL		60899297	57.79	106760823	60.46	120996806	68.53	136053999	77.06	151984614	86.08	168844952	95.63
AVERAGE		15224824		21352164		24199361		27210799		30396922		33768990	
PUNJAB													
AMRITSAR	239.25	90664030	103.17	119802527	136.33	127801850	145.43	136109328	154.89	144736922	164.70	153696596	174.90
BHATINDA	204.74	0	0.00	2804095	4.98	7983403	14.19	13617029	24.21	19744488	35.10	26409389	46.95
JALANDHAR	204.74	0	0.00	0	0.00	0	0.00	0	0.00	358337	0.28	4496951	3.55
LUDHIANA	239.25	0	0.00	3888226	1.79	13452723	6.18	23429927	10.76	33837780	15.54	44694945	20.53
PATIALA	204.74	9844972	23.95	16845237	40.98	18740720	45.60	20698240	50.36	22719638	55.28	24807167	60.35
PATHANKOT	204.74	13007655	86.46	17423078	115.81	18631658	123.84	19885077	132.17	21185176	140.81	22533593	149.77
TOTAL		113516657	78.82	160763163	38.46	186610354	44.64	213739601	51.13	242582341	44.55	276638641	50.81
AVERAGE		37838885		32152632		37322070		42747920		40430390		46106440	

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
RAJASTHAN													
AJMER	204.74	69642116	271.82	84261371	328.88	88254005	344.46	92391801	360.61	96680080	377.35	101123962	394.69
ALWAR	204.74	26529034	245.33	32542248	300.94	34191019	316.18	35902645	332.01	37679379	348.44	39523677	365.50
BIKANER	204.74	44426939	254.74	52172253	299.15	54255483	311.09	56401158	323.39	58611121	336.07	60887011	349.12
BHILWARA	204.74	16053331	101.14	21600762	136.09	23132217	145.73	24726118	155.78	26385126	166.23	28112108	177.11
BHARATPUR	204.74	17854791	175.86	23198095	228.49	24686146	243.15	26240736	258.46	27864529	274.46	29560800	291.16
GANGANAGAR	204.74	13369445	77.41	17518910	101.44	18641295	107.94	19799714	114.65	20995805	121.57	22230182	128.72
JODHPUR	239.25	119578931	293.93	152446856	374.73	161667551	397.39	171328466	421.14	181450655	446.02	192056129	472.09
KOTA	204.74	38228394	61.69	61393701	99.07	67977935	109.69	74913502	120.88	82219035	132.67	89914802	145.09
SIKAR	204.74	16300935	162.16	20528201	204.22	21687030	215.74	22989877	227.71	24138177	240.13	25433772	253.02
UDAIPUR	204.74	26181900	79.01	35538108	107.24	38099201	114.97	40755702	122.99	43511298	131.31	46369878	139.93
TOTAL		388165816	159.73	501200505	206.24	532591882	219.16	565349719	232.64	599535205	246.71	635212321	261.39
AVERAGE		38816581		50120050		53259188		56534971		59953520		63521232	
TAMIL NADU													
CUDDALORE	204.74	18901803	170.19	21802354	196.30	22570334	203.22	23356126	210.29	24160345	217.53	24983195	224.94
DINDIGUL	204.74	24792110	175.47	28801738	203.84	29867000	211.38	30958674	219.11	32077578	227.03	33224327	235.14
ERODE	204.74	24611962	238.71	29105186	282.29	30316223	294.03	31564114	306.13	32850700	318.61	34176596	331.47
KANCHIPURAM	204.74	16847343	131.57	18910918	147.69	19448974	151.89	19996040	156.16	20552318	160.51	21118220	164.93
KUMBAKONAM	204.74	27292309	1028.43	29278492	1103.27	29795255	1122.75	30320413	1142.54	30853966	1162.64	31396322	1183.08
NAGERCOIL	204.74	24118054	156.83	27316092	177.62	28155322	183.08	29010930	188.65	29883532	194.32	30773127	200.10
RAJAPALAYAM	204.74	16238902	245.53	17711187	267.79	18093846	273.58	18482443	279.45	18877181	285.42	19278267	291.49
SALEM	204.74	31732559	63.98	37022631	74.65	38398074	77.42	39795425	80.24	41214887	83.10	42656871	86.01
TIRUCHIRAPALLI	204.74	30445903	59.32	35976545	70.10	37416891	72.90	38880782	75.75	40368832	78.65	41881451	81.60
TIRUNELVELI	204.74	11091687	61.09	13173688	72.56	13717068	75.55	14269661	78.60	14831877	81.69	15403920	84.84
TUTICORIN	204.74	29800151	196.08	33880414	222.93	34957142	230.02	36057415	237.26	37181847	244.66	38330848	252.22
TIRUPPUR	204.74	19599457	85.88	26508613	116.16	28405120	124.47	30374514	133.10	32419662	142.06	34543225	151.37
VELLORE	204.74	24936353	156.78	28789765	181.01	29808756	187.41	30850883	193.97	31916759	200.67	33007000	207.52
TOTAL		300408593	122.12	348277623	141.58	360950005	146.73	373917420	152.00	387189484	157.40	400773369	162.92
AVERAGE		23108353		26790586		27765385		28762878		29783806		30828720	
TRIPURA													
AGARTALA	204.74	999582	3.23	4734244	15.30	5734194	18.53	6762194	21.85	7819062	25.27	8905412	28.78
TOTAL		999582	3.23	4734244	15.30	5734194	18.53	6762194	21.85	7819062	25.27	8905412	28.78
AVERAGE		999582		4734244		5734194		6762194		7819062		8905412	

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
UTTAR PRADESH													
AGRA	239.25	159813391	696.71	171843599	749.15	174972989	762.79	178152382	776.65	181383214	790.74	184665724	805.05
ALLAHABAD	239.25	87024422	106.21	103132885	125.87	107394406	131.07	111754020	136.39	116214118	141.83	120777094	147.40
ALIGARH	204.74	42991228	130.71	50648300	153.98	52680344	160.16	54761936	166.49	56893893	172.97	59078060	179.61
AMROHA	204.74	16126722	138.44	19785016	169.85	20772682	178.33	21791263	187.07	22841784	196.09	23925268	205.39
BAREILLY	204.74	54216468	140.11	64669673	167.13	67461713	174.34	70329301	181.75	73274281	189.36	76298905	197.18
BULANDSHAHAR	204.74	15953718	117.70	23257613	171.58	25350260	187.02	27561862	203.34	29899173	220.58	32369361	238.81
DEHRADUN	204.74	20569752	69.82	25641776	87.03	26988147	91.60	28367275	96.29	29780391	101.08	31227903	105.99
FIROZABAD	204.74	22817756	75.40	32355569	106.92	34996510	115.64	37749035	124.74	40617442	134.22	43607056	144.10
FARRUKHABAD	204.74	30547388	487.12	36075368	575.27	37582664	599.31	39143397	624.20	40759614	649.97	42433364	676.66
FAIZABAD	204.74	6818222	48.97	6740216	48.41	6720970	48.28	6701520	48.14	6682069	48.00	6662824	47.86
GORAKHPUR	204.74	13916547	25.55	20525555	37.69	22275263	40.90	24065714	44.19	25897932	47.55	27773146	51.00
GHAZIABAD	204.74	55010424	151.25	90842176	249.77	101810917	279.93	113725352	312.69	126666967	348.27	140724416	386.92
HARIDWAR	204.74	7126983	31.98	11993858	53.82	13331629	59.82	14721609	66.06	16165845	72.54	17666384	79.27
HAPUR	204.74	16542884	170.65	20688255	213.41	21823129	225.12	23000384	237.27	24221453	249.86	25488384	262.93
JHANSI	204.74	49705067	397.23	59085025	472.19	61643047	492.63	64292587	513.81	67036717	535.74	69879123	558.45
JAUNPUR	204.74	10155231	67.40	12965492	86.05	13715864	91.03	14486096	96.14	15277006	101.39	16089005	106.78
MEERUT	204.74	83110824	300.81	103996351	376.41	109806463	397.44	115872909	419.39	122206951	442.32	128820872	466.26
MUZAFFARNAGAR	204.74	23716277	112.43	31562528	149.63	33729906	159.90	35986755	170.60	38336351	181.74	40782584	193.34
MATHURA	204.74	20441780	172.78	21903829	185.14	22279526	188.32	22659524	191.53	23043616	194.77	23432213	198.06
MIRZAPUR-VINDYACHAL	204.74	16871276	135.98	19151465	154.36	19748896	159.17	20357384	164.08	20977541	169.08	21609369	174.17
RAMPUR	204.74	36233694	300.37	41038532	340.21	42312834	350.77	43617437	361.59	44953570	372.66	46321643	384.00
SHAHJAHANPUR	204.74	33452325	271.07	39554805	320.52	41203577	333.89	42904761	347.67	44659792	361.89	46470718	376.57
SAMBHAL	204.74	21066665	488.39	23469903	544.10	24105416	558.83	24755670	573.91	25420666	589.33	26100812	605.09
TOTAL		844229044	158.20	1030927789	193.18	1082707152	202.89	1136758173	213.01	1193210386	223.59	1252204228	234.65
AVERAGE		36705610		44822947		47074224		49424268		51878712		54443662	

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
WEST BENGAL													
BARDHAMAN	204.74	18070632	92.49	20477760	104.81	21103241	108.01	21738549	111.27	22383685	114.57	23039057	117.92
BALURGHAT	204.74	22097374	375.95	27542025	468.59	29061196	494.43	30649568	521.46	32310215	549.71	34046205	579.25
KHARAGPUR	204.74	45377311	632.10	67855716	945.22	74841445	1042.53	82477428	1148.90	90824473	1265.17	99948506	1392.27
NABADWIP	204.74	16928420	217.47	18649874	239.58	19098459	245.35	19554824	251.21	20018970	257.17	20490896	263.23
SILIGURI	204.74	57076166	514.23	102712917	925.39	118269472	1065.55	135952251	1224.86	156051986	1405.95	178899128	1611.79
TOTAL		159549903	309.94	237238292	460.86	262373813	509.68	290372620	564.08	321589329	624.72	356423792	692.39
AVERAGE		31909980		47447658		52474762		58074524		64317865		71284758	
GCA													
PANAJI	204.74	0	0.00	538263	5.19	771052	7.43	1008755	9.72	1251577	12.06	1499517	14.45
TOTAL		0	0.00	538263	5.19	771052	7.43	1008755	9.72	1251577	12.06	1499517	14.45
AVERAGE		0		538263		771052		1008755		1251577		1499517	
INDIA		3543633628	116.94	4643967550	119.53	4977012992	128.10	5336706616	125.40	5722737461	130.59	6133454882	139.97
AVERAGE		28577690		33897573		36328561		38393572		40876696		43810392	

ANNEX-X

X(2). Estimated Resource Gap at 1986-87 Prices, Using the Average of Expenditures Incurred by 15 Municipal Bodies Which Topped in Expenditures on Municipal Services (Method II)

(Rs.)

State/ Town	Revenue Expenditure Norms (Per Capita Per Annum)	Revenue Gap											
		1986-87		1990-91		1991-92		1992-93		1993-94		1994-95	
		Amount	Percent to Revenue Income	Amount	Percent to Revenue Income	Amount	Percent to Revenue Income	Amount	Percent to Revenue Income	Amount	Percent to Revenue Income	Amount	Percent to Revenue Income
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
ANDHRA PRADESH													
ANANTPUR	360.025	36685739	203.31	46199407	256.04	48825792	270.59	51559824	285.75	54405464	301.52	57367032	317.93
ADONI	360.025	35040486	337.68	39706774	382.65	40946341	394.60	42216510	406.84	43518002	419.38	44851896	432.24
BHIMAVARAM	360.025	43179075	796.61	53202539	981.53	56016137	1033.44	58964744	1087.83	62054481	1144.84	65292909	1204.58
CUDDAPAH	360.025	32115894	196.72	41515074	254.29	44136778	270.35	46877651	287.14	49742732	304.69	52737783	323.03
GUNTUR	360.025	91515651	134.94	112469123	165.84	118124761	174.18	123957890	182.78	129973913	191.65	136178589	200.80
KAKINADA	360.025	42221062	74.57	55774575	98.51	59443953	104.99	63233219	111.68	67145974	118.59	71186898	125.73
KURNOOL	360.025	69785477	275.49	86816114	342.72	91530645	361.33	96443190	380.72	101562030	400.93	106896165	421.98
MACHILIPATNAM	360.025	21938431	63.52	26817134	77.65	28100984	81.37	29412196	85.16	30750410	89.04	32117066	93.00
NELLORE	360.025	76259056	172.73	107309078	243.06	116250306	263.31	125718972	284.76	135746756	307.47	146366423	331.53
NIZAMABAD	360.025	77257370	807.90	94769000	991.02	99672905	1042.31	104807586	1096.00	110183484	1152.22	115812479	1211.08
PRODDATUR	360.025	31332742	173.69	40189004	222.79	42640777	236.38	45196236	250.55	47858983	265.31	50633698	280.69
RAJAHMUNDRY	360.025	26923733	48.25	33939546	60.83	35784675	64.13	37667608	67.51	39589063	70.95	41550121	74.46
TENALI	360.025	41832920	825.74	44676400	881.86	45413732	896.42	46162225	911.19	46921518	926.18	47692332	941.39
TIRUPATI	360.025	39841526	218.32	54431911	298.27	58619725	321.22	63048757	345.49	67733046	371.16	72687354	398.31
VISHAKHAPATNAM	360.025	140274028	107.95	196467497	151.20	212254607	163.35	228805330	176.09	246156749	189.44	264347028	203.44
VIJAYAWADA	360.025	97980591	93.23	129401079	123.13	137988403	131.30	146890028	139.77	156117837	148.55	165683349	157.65
VIZIANAGRAM	360.025	18935798	63.09	24777209	82.56	26343679	87.77	27954432	93.14	29611629	98.66	31315988	104.34
WARANGAL	360.025	137172281	578.80	171173430	722.27	180742182	762.65	190780768	805.01	201312228	849.45	212361044	896.07
TOTAL		1060291860	157.29	1359634894	201.70	1442836382	214.04	1529697166	226.93	1620384299	240.38	1715078154	254.43
AVERAGE		58905103		75535271		80157576		84983175		90021349		95282119	

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
ASSAM													
DIBRUGARH	360.025	40180529	1809.34	44434228	2000.88	45562547	2051.69	46718589	2103.75	47901992	2157.04	49114557	2211.64
JORHAT	360.025	96642748	4549.11	169276413	7968.08	194602032	9160.19	22366975	510528.45	25703221	912098.87	29532451	013901.34
TINSUKIA	360.025	55696004	3114.09	73277120	4097.09	78455364	4386.62	83991473	4696.16	89908848	5027.01	96234853	5380.71
TOTAL		192519281	3138.73	286987761	4678.89	318619943	5194.60	354379817	5777.61	394843059	6437.30	440673920	7184.50
AVERAGE		64173093		95662587		106206647		118126605		131614353		146891306	
BIHAR													
BIHAR	360.025	65638193	1559.25	78214957	1858.02	81698202	1940.76	85328697	2027.00	89112923	2116.90	93056640	2210.58
DHANBAD	360.025	51901463	1513.12	61745275	1800.10	64468506	1879.49	67305505	1962.20	70260953	2048.36	73339889	2138.12
KATIHAR	360.025	46013209	1388.51	55669808	1679.91	58366037	1761.27	61185395	1846.35	64133642	1935.32	67216899	2028.36
MUNGER	360.025	52057699	3624.43	57264745	3986.96	58644002	4082.99	60055301	4181.25	61500082	4281.84	62978706	4384.79
TOTAL		215610564	1740.22	252894785	2041.14	263176747	2124.13	273874898	2210.48	285007600	2300.33	296592134	2393.83
AVERAGE		53902641		63223696		65794186		68468724		71251900		74148033	
GUJARAT													
BHAVNAGAR	360.025	82266436	161.71	99815869	196.21	104553442	205.52	109440065	215.13	114480059	225.04	119678465	235.25
BHARUCH	360.025	14941460	50.98	18317417	62.50	19200559	65.52	20100623	68.59	21017247	71.71	21950793	74.90
JAMNAGAR	360.025	21912574	21.94	39062739	39.11	43715346	43.77	48523484	48.58	53492913	53.56	58628674	58.70
JUNAGADH	360.025	27234508	127.11	31650578	147.72	32815980	153.16	34006944	158.72	35223829	164.40	36467717	170.20
NADIAD	360.025	25348985	71.86	32426722	91.92	34321535	97.29	36269632	102.82	38272093	108.49	40330718	114.33
NAVSARI	360.025	18572545	62.44	26520103	89.17	28703297	96.51	30971456	104.13	33327462	112.05	35774914	120.28
PORBANDAR	360.025	26424849	134.96	29721961	151.80	30582422	156.19	31457643	160.66	32348706	165.21	33254889	169.84
RAJKOT	360.025	32048370	18.77	66512872	38.96	76008179	44.52	85883313	50.30	96153394	56.32	106834985	62.58
VADODARA	360.025	52976129	18.01	122011340	41.48	141317337	48.04	161518716	54.91	182657242	62.10	204776836	69.62
TOTAL		301725856	40.18	466039601	62.06	511218097	68.08	558171876	74.33	606972945	80.83	657697991	87.58
AVERAGE		33525095		51782177		56802010		62019097		67441438		73077554	

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
HARYANA													
AMBALA	360.025	29668129	221.79	33691052	251.86	34754567	259.81	35841483	267.94	36953241	276.25	38090201	284.75
BHIWANI	360.025	23680013	114.59	29860927	144.50	31536485	152.61	33267487	160.98	35056092	169.64	36903742	178.58
HISSAR	360.025	42475656	249.15	52358711	307.12	55075822	323.06	57899500	339.62	60833707	356.83	63882401	374.71
KARNAL	360.025	42489867	260.61	51415254	315.36	53850826	330.30	56373883	345.77	58988027	361.81	61695777	378.42
PANIPAT	360.025	47393472	268.67	60206772	341.31	63786864	361.60	67531487	382.83	71448202	405.03	75544930	428.26
ROHTAK	360.025	47340869	196.26	56138088	232.74	58501654	242.54	60935065	252.62	63440121	263.01	66018622	273.70
YAMUNANAGAR	360.025	33583647	200.84	42530635	254.35	45005809	269.15	47584671	284.58	50270819	300.64	53069296	317.38
TOTAL		266631653	211.82	326201439	259.14	342512027	272.10	359433576	285.54	376990209	299.49	395204969	313.96
AVERAGE		38090236		46600205		48930289		51347653		53855744		56457852	
JAMMU & KASHMIR													
JAMMU	360.025	53821160	157.73	64359100	188.61	67184939	196.89	70092503	205.41	73082873	214.17	76159650	223.19
SRINAGAR	360.025	153637447	213.78	179856649	250.26	186874622	260.02	194088089	270.06	201502810	280.38	209124186	290.98
TOTAL		207458607	195.73	244215749	230.41	254059561	239.70	264180592	249.25	274585683	259.06	285283836	269.16
AVERAGE		103729303		122107874		127029780		132090296		137292841		142641918	
KARNATAKA													
BELGAUM	360.025	60326504	97.41	78978335	127.53	84070172	135.76	89345983	144.27	94812247	153.10	100476165	162.25
BELLARY	360.025	67033119	226.82	87309384	295.43	93011465	314.72	98991845	334.96	105264206	356.18	111842588	378.44
BIJAPUR	360.025	49333800	307.38	59124328	368.38	61792836	385.00	64556030	402.22	67417511	420.05	70380519	438.51
DAVANGERE	360.025	70917540	298.51	91167523	383.75	96873564	407.77	102862945	432.98	109150066	459.45	115748970	487.22
GULBARGA	360.025	86194574	530.30	104880607	645.27	110062091	677.14	115465351	710.39	121099387	745.05	126974640	781.20
GADAG BETGERI	360.025	34361732	254.90	38490862	285.53	39577778	293.59	40687016	301.82	41820016	310.22	42976417	318.80
HUBLI DHARWAD	360.025	135730912	142.10	168301681	176.20	177137422	185.45	186269104	195.02	195706447	204.90	205459892	215.11
MYSORE	360.025	113410347	167.48	129811660	191.70	134138804	198.09	138560994	204.62	143080032	211.29	147697716	218.11
MANGALORE	360.025	13747259	27.58	14823734	29.74	15095553	30.28	15368813	30.83	15642792	31.38	15918211	31.93
MANDYA	360.025	33309896	311.65	39508812	369.65	41190130	385.38	42928332	401.65	44724499	418.45	46580789	435.82
RAICHUR	360.025	52026522	777.68	63508089	949.30	66713394	997.21	70065229	1047.31	73569716	1099.70	77234773	1154.48
SHIMOGA	360.025	48394153	234.00	60073733	290.47	63289839	306.02	66634475	322.20	70111959	339.01	73728053	356.49
TUMKUR	360.025	41368197	441.79	50962871	544.26	53632819	572.77	56420854	602.55	59332019	633.64	62372433	666.11
TOTAL		806154555	191.25	986941619	234.14	1036585867	245.91	1088156971	258.15	1141730897	270.86	1197391166	284.06
AVERAGE		62011888		75918586		79737374		83704382		87825453		92107012	

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
KERALA													
ALLEPPEY	360.025	58087135	1094.13	59607161	1122.76	59992749	1130.02	60380856	1137.33	60771123	1144.68	61163551	1152.07
COCHIN	360.025	159094828	362.97	172170587	392.80	175569226	400.55	179021148	408.43	182527435	416.43	186088805	424.55
CALICUT	360.025	137511707	708.46	148312106	764.10	151126784	778.60	153988265	793.35	156897989	808.34	159856317	823.58
PALGHAT	360.025	26524198	153.43	29225828	169.05	29926797	173.11	30638567	177.22	31360778	181.40	32094150	185.64
QUILON	360.025	45221436	589.82	47487435	619.37	48069236	626.96	48656798	634.63	49250479	642.37	49850641	650.20
TRIVANDRUM	360.025	154866970	416.87	167963251	452.13	171374490	461.31	174842614	470.64	178368342	480.13	181952754	489.78
TOTAL		581306274	444.91	624766368	478.18	636059282	486.82	647528248	495.60	659176146	504.51	671006218	513.57
AVERAGE		96884379		104127728		106009880		107921374		109862691		111834369	
MADHYA PRADESH													
BURHAMPUR	360.025	41387010	216.64	48891378	255.93	50908600	266.49	52985946	277.36	55124496	288.55	57326771	300.08
KHANDWA	360.025	27372258	123.06	33823192	152.06	35563194	159.88	37356840	167.95	39206290	176.26	41112984	184.83
RAIPUR	360.025	138084408	320.76	192974586	448.27	209121721	485.78	226373413	525.85	244805268	568.67	264498292	614.41
RATLAM	360.025	36653572	151.07	44101416	181.76	46101716	190.01	48160341	198.49	50279090	207.22	52460123	216.21
UJJAIN	360.025	95150740	366.92	111392562	429.55	115782710	446.48	120312909	463.95	124988197	481.98	129812896	500.58
TOTAL		338647988	251.61	431183134	320.36	457477941	339.90	485189449	360.49	514403341	382.20	545211066	405.09
AVERAGE		67729597		86236626		91495588		97037889		102880668		109042213	
MAHARASHTRA													
AURANGABAD	360.025	0	0.00	10624258	5.80	23375634	12.76	36966589	20.18	51451487	28.09	66889372	36.52
AMRAVATI	360.025	36481550	47.91	50801916	66.72	54657787	71.79	58631026	77.00	62724874	82.38	66942930	87.92
AKOLA	360.025	50863104	111.07	62810544	137.16	66021249	144.17	69327001	151.39	72730681	158.82	76234807	166.47
AHMEDNAGAR	360.025	8346354	10.99	24044537	31.66	28406244	37.40	32956403	43.40	37708937	49.65	42666486	56.18
BHUSAVAL	360.025	30442412	146.54	35616695	171.45	36989832	178.06	38396811	184.83	39837632	191.77	41313736	198.88
CHANDRAPUR	360.025	35704564	194.85	45906241	250.52	48744321	266.01	51708049	282.19	54802466	299.07	58034053	316.71
DHULE	360.025	61773055	169.58	80193390	220.15	85315110	234.21	90661486	248.88	96242958	264.21	102069247	280.20
GONDIYA	360.025	16390438	63.81	20867353	81.24	22059037	85.88	23281323	90.64	24534931	95.52	25820581	100.53
ICHALKARANJI	360.025	0	0.00	0	0.00	0	0.00	1552818	1.98	4993219	6.38	8581591	10.96
JALGAON	360.025	14096822	28.84	22379924	45.78	24616042	50.36	26921644	55.07	29299971	59.94	31752823	64.96
JALNA	360.025	24169734	85.24	30732275	108.38	32497479	114.61	34315247	121.02	36187018	127.62	38114954	134.42
KOLHAPUR	360.025	10855621	8.12	27580956	20.63	32056071	23.98	36655754	27.42	41383246	30.96	46241428	34.59
LATUR	360.025	28713459	116.42	39693150	160.94	42774247	173.43	46002954	186.52	49386471	200.24	52931640	214.62
MALEGAON	360.025	15019926	17.12	25741120	29.35	28592160	32.60	31514485	35.93	34510256	39.34	37581272	42.84
NANDED	360.025	33419235	60.97	49274389	89.89	53664538	97.90	58240099	106.25	63008634	114.95	67978424	124.02
PARBHANI	360.025	41123105	284.47	55481994	383.80	59617605	412.41	63997673	442.71	68636959	474.81	73550584	508.80
SANGLI	360.025	8707226	15.49	16408887	29.19	18473272	32.87	20595982	36.64	22779535	40.53	25024653	44.52
SOLAPUR	360.025	69396392	48.09	91795726	63.62	97753425	67.75	103861254	71.98	110123174	76.32	116543145	80.77
ULHASNAGAR	360.025	43440761	49.14	71683666	81.09	79643465	90.10	87998932	99.55	96770229	109.47	105977156	119.89
TOTAL		528943758	53.94	761637021	65.45	835257518	71.78	913587530	73.56	997112678	80.28	1084248882	87.30
AVERAGE		31114338		42313167		46403195		48093554		52479614		5706730	

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
MANIPUR													
IMPHAL	360.025	72501019	6335.75	86849107	7589.61	90853669	7939.56	95040043	8305.40	99416870	8687.89	103993152	9087.80
TOTAL		72501019	6335.75	86849107	7589.61	90853669	7939.56	95040043	8305.40	99416870	8687.89	103993152	9087.80
AVERAGE		72501019		86849107		90853669		95040043		99416870		103993152	
MEGHALAYA													
SHILLONG	360.025	35216971	364.31	39348621	407.05	40439498	418.34	41554496	429.87	42694696	441.67	43860098	453.73
TOTAL		35216971	364.31	39348621	407.05	40439498	418.34	41554496	429.87	42694696	441.67	43860098	453.73
AVERAGE		35216971		39348621		40439498		41554496		42694696		43860098	
ORISSA													
BHUBNESWAR	360.025	83464552	214.36	125063315	321.20	137507950	353.17	150896931	387.55	165301903	424.55	180799912	464.35
BRAHMAPUR	360.025	47095303	196.65	56899152	237.59	59554699	248.67	62297371	260.13	65130050	271.95	68055976	284.17
CUTTACK	360.025	47284876	66.42	64003731	89.91	68539690	96.28	73227939	102.87	78073880	109.68	83081832	116.71
PURI	360.025	22385935	102.34	28602392	130.75	30288390	138.46	32030913	146.43	33831399	154.66	35692010	163.16
SAMBALPUR	360.025	34068254	165.22	47082088	228.33	50793229	246.33	54708144	265.31	58837274	285.34	63192860	306.46
TOTAL		234298820	132.70	321650678	182.17	346683958	196.35	373161298	211.34	401174506	227.21	430822590	244.00
AVERAGE		46859764		64330135		69336791		74632259		80234901		86164518	
PUNJAB													
AMRITSAR	360.025	180792960	205.73	224640801	255.63	236678247	269.33	249179406	283.55	262162278	298.33	275644866	313.67
BHATINDA	360.025	17941894	31.89	47597538	84.61	56705098	100.80	66611554	118.41	77386391	137.56	89106295	158.40
JALANDHAR	360.025	51677961	40.85	76092356	60.15	82701701	65.38	89526701	70.77	96574196	76.34	103851747	82.10
LUDHIANA	360.025	63900350	29.35	115757314	53.17	130150046	59.78	145163821	66.67	160825641	73.87	177163589	81.37
PATIALA	360.025	48486166	117.96	60795791	147.91	64128906	156.02	67571107	164.40	71125637	173.04	74796455	181.98
PATHANKOT	360.025	34284226	227.88	42048532	279.49	44173761	293.61	46377836	308.26	48663997	323.46	51035123	339.22
TOTAL		397083557	72.93	566932332	104.12	614537759	112.86	664430425	122.03	716738140	131.63	771598075	141.71
AVERAGE		66180592		94488722		102422959		110738404		119456356		128599679	

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
RAJASTHAN													
AJMER	360.025	141894502	553.82	167601749	654.16	174622602	681.56	181898714	709.96	189439444	739.39	197253793	769.89
ALWAR	360.025	54851675	507.24	65425618	605.03	68324902	631.84	71334713	659.67	74459013	688.56	77702121	718.55
BIKANER	360.025	91350275	523.79	104970032	601.88	108633289	622.88	112406354	644.52	116292467	666.80	120294509	689.75
BHILWARA	360.025	40267745	253.69	50022630	315.15	52715619	332.11	55518416	349.77	58435701	368.15	61472515	387.28
BHARATPUR	360.025	39097043	385.09	48492984	477.64	51109648	503.41	53843320	530.34	56698680	558.46	59681490	587.84
GANGANAGAR	360.025	36607890	211.98	43904522	254.23	45878181	265.65	47915204	277.45	50018472	289.63	52189065	302.20
JODHPUR	360.025	200480024	492.80	249939940	614.37	263815315	648.48	278353136	684.21	293585087	721.65	309544288	760.88
KOTA	360.025	114224864	184.32	154959927	250.05	166537981	268.73	178733838	288.41	191580261	309.14	205112892	330.98
SIKAR	360.025	36288482	361.00	43721924	434.95	45759668	455.22	47874816	476.26	50069891	498.10	52348131	520.76
UDAIPUR	360.025	71172710	214.78	87625146	264.43	92128702	278.02	96800031	292.12	101645611	306.74	106672284	321.91
TOTAL		826235210	340.00	1016664472	418.36	1069525907	440.11	1124678542	462.81	1182224627	486.49	1242271088	511.19
AVERAGE		82623521		101666447		106952590		112467854		118222462		124227108	
TAMIL NADU													
CUDDALORE	360.025	41661659	375.11	46762137	421.03	48112592	433.19	49494369	445.63	50908549	458.37	52355490	471.39
DINDIGUL	360.025	54312156	384.39	61362892	434.29	63236103	447.55	65155758	461.14	67123296	475.06	69139798	489.33
ERODE	360.025	51098976	495.60	59000091	572.23	61129641	592.89	63323995	614.17	65586394	636.11	67917918	658.72
KANCHIPURAM	360.025	39337003	307.21	42965698	335.55	43911844	342.93	44873832	350.45	45852021	358.09	46847130	365.86
KUMBAKONAM	360.025	50004958	1884.29	53497563	2015.90	54406267	2050.14	55329732	2084.94	56267958	2120.29	57221665	2156.23
NAGERCOIL	360.025	54074296	351.62	59697891	388.19	61173635	397.79	62678181	407.57	64212609	417.55	65776919	427.72
RAJAPALAYAM	360.025	33571536	507.60	36160478	546.75	36833366	556.92	37516694	567.25	38210822	577.75	38916112	588.41
SALEM	360.025	93415296	188.36	102717630	207.11	105136280	211.99	107593453	216.95	110089508	221.98	112625166	227.09
TIRUCHIRAPALLI	360.025	92465299	180.16	102190663	199.10	104723441	204.04	107297622	209.05	109914285	214.15	112574152	219.34
TIRUNELVELI	360.025	33274192	183.27	36935289	203.44	37890796	208.70	38862504	214.05	39851134	219.50	40857045	225.04
TUTICORIN	360.025	63928754	420.65	71103698	467.86	72997071	480.32	74931847	493.05	76909106	506.06	78929568	519.36
TIRUPPUR	360.025	51773018	226.87	63922432	280.11	67257347	294.72	70720430	309.90	74316723	325.66	78050905	342.02
THANJAVUR	360.025	18921292	32.09	27784755	47.13	30154082	51.15	32587853	55.28	35088228	59.52	37657009	63.87
VELLORE	360.025	55912820	351.53	62688857	394.14	64480703	405.40	66313231	416.92	68187523	428.71	70104658	440.76
TOTAL		733751255	240.61	826790074	271.12	851443168	279.21	876679501	287.48	902518156	295.96	928973535	304.63
AVERAGE		52410803		59056433		60817369		62619964		64465582		66355252	

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
TRIPURA													
AGARTALA	360.025	25228747	81.53	31795969	102.75	33554332	108.43	35362019	114.27	37220470	120.28	39130764	126.45
TOTAL		25228747	81.53	31795969	102.75	33554332	108.43	35362019	114.27	37220470	120.28	39130764	126.45
AVERAGE		25228747		31795969		33554332		35362019		37220470		39130764	
UTTAR PRADESH													
AGRA	360.025	252067966	1098.89	270171118	1177.81	274880249	1198.34	279664626	1219.20	284526407	1240.39	289465954	1261.93
ALLAHABAD	360.025	172317992	210.30	196558136	239.89	202970906	247.71	209531287	255.72	216242879	263.91	223109281	272.29
ALIGARH	360.025	100544775	305.68	114009361	346.62	117582612	357.48	121242989	368.61	124991933	380.01	128832683	391.69
AMROHA	360.025	37192881	319.29	43625813	374.52	45362575	389.43	47153701	404.80	49000991	420.66	50906244	437.02
BAREILLY	360.025	124685248	322.23	143066700	369.73	147976365	382.42	153018879	395.45	158197483	408.83	163516137	422.58
BULANDSHAHAR	360.025	38334367	282.81	51177910	377.57	54857728	404.72	58746721	433.41	62856770	463.73	67200475	495.77
DEHRADUN	360.025	58516200	198.62	67435107	228.89	69802633	236.93	72227764	245.16	74712658	253.59	77258037	262.23
FIROZABAD	360.025	63076247	208.43	79848025	263.85	84491992	279.20	89332172	295.19	94376126	311.86	99633216	329.23
FARRUKHABAD	360.025	58472343	932.42	68193026	1087.43	70843533	1129.70	73588006	1173.46	76430045	1218.78	79373252	1265.72
FAIZABAD	360.025	22548622	161.96	22411453	160.98	22377610	160.74	22343408	160.49	22309206	160.24	22275363	160.00
GORAKHPUR	360.025	65778266	120.78	77399883	142.12	80476659	147.77	83625080	153.55	86846947	159.46	90144419	165.52
GHAZIABAD	360.025	124318136	341.81	187326524	515.06	206614519	568.09	227565471	625.69	250322671	688.26	275042008	756.23
HARIDWAR	360.025	29435580	132.08	37993742	170.48	40346147	181.04	42790359	192.00	45329977	203.40	47968603	215.24
HAPUR	360.025	36442230	375.93	43731662	451.12	45727282	471.71	47797428	493.07	49944619	515.22	52172455	538.20
JHANSI	360.025	96894406	774.35	113388605	906.17	117886761	942.12	122545849	979.35	127371268	1017.91	132369499	1057.86
JAUNPUR	360.025	29285137	194.36	34226845	227.16	35546337	235.92	36900752	244.91	38291530	254.14	39719391	263.62
MEERUT	360.025	167101382	604.81	203827563	737.74	214044361	774.72	224711910	813.33	235850013	853.64	247480270	895.73
MUZAFFARNAGAR	360.025	57702639	273.55	71499888	338.96	75311116	357.03	79279675	375.84	83411325	395.43	87712908	415.82
MATHURA	360.025	44919092	379.67	47490032	401.40	48150679	406.99	48818886	412.64	49494293	418.34	50177621	424.12
MIRZAPUR-VINDYACHAL	360.025	39077540	314.96	43087141	347.28	44137695	355.74	45207690	364.37	46298207	373.16	47409245	382.11
RAMPUR	360.025	72864254	604.04	81313327	674.08	83554125	692.66	85848206	711.68	88197731	731.15	90603420	751.10
SHAHJAHANPUR	360.025	68184056	552.52	78914970	639.47	81814254	662.97	84805704	687.21	87891841	712.21	91076265	738.02
SAMBHAL	360.025	40316297	934.65	44542274	1032.62	45659792	1058.53	46803233	1085.04	47972595	1112.15	49168599	1139.87
TOTAL		1800075656	337.31	2121239105	397.49	2210415930	414.20	2303549796	431.66	2400867515	449.89	2502615345	468.96
AVERAGE		78264158		92227787		96105040		100154338		104385544		108809362	

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
WEST BENGAL													
BARDHAMAN	360.025	46594523	238.49	50827340	260.15	51927219	265.78	53044376	271.50	54178816	277.31	55331257	283.21
BALURGHAT	360.025	43315091	736.94	52889244	899.83	55560632	945.28	58353708	992.80	61273874	1042.48	64326528	1094.42
KHARAGPUR	360.025	85238582	1187.36	124765760	1737.97	137049823	1909.08	150477327	2096.13	165155198	2300.59	181199366	2524.08
NABADWIP	360.025	35671821	458.25	38698914	497.14	39487729	507.27	40290226	517.58	41106403	528.07	41936262	538.73
SILIGURI	360.025	108783997	980.09	189033997	1703.10	216389439	1949.56	247483744	2229.71	282828148	2548.14	323003731	2910.10
TOTAL		319604014	620.86	456215255	886.24	500414841	972.10	549649381	1067.74	604542439	1174.38	665797144	1293.37
AVERAGE		63920802		91243051		100082968		109929876		120908487		133159428	
GOA													
PANAJI	360.025	7262392	69.99	8815901	84.97	9225250	88.91	9643239	92.94	10070229	97.06	10506220	101.26
TOTAL		7262392	69.99	8815901	84.97	9225250	88.91	9643239	92.94	10070229	97.06	10506220	101.26
AVERAGE		7262392		8815901		9225250		9643239		10070229		10506220	
INDIA		8950548037	170.52	11216803885	206.49	11864897677	218.42	12547948863	227.71	13268674505	240.79	14027956347	254.57
AVERAGE		59275152		73794762		78058537		82012737		86723362		91685989	

ANNEX-X

X(3). Estimated Resource Gap at 1986-87 Prices, Using the State Averages of Expenditures (Method III)

(Rs.)

State/ Town	Revenue Expenditure Norms (Per Capita Per Annum)	Revenue Gap											
		1986-87		1990-91		1991-92		1992-93		1993-94		1994-95	
		Amount	Percent to Revenue Income	Amount	Percent to Revenue Income	Amount	Percent to Revenue Income	Amount	Percent to Revenue Income	Amount	Percent to Revenue Income	Amount	Percent to Revenue Income
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
ANDHRA PRADESH													
ANANTPUR	116.66	0	0.00	2773060	15.37	3624094	20.08	4510010	24.99	5432091	30.10	6391736	35.42
ADONI	116.66	4339954	41.82	5851984	56.40	6253644	60.27	6665221	64.23	7086947	68.30	7519172	72.46
BHIMAVARAM	116.66	10327436	190.53	13575367	250.45	14487065	267.27	15442511	284.90	16443687	303.37	17493043	322.73
CUDDAPAH	116.66	0	0.00	2416492	14.80	3266010	20.01	4154142	25.45	5082523	31.13	6053017	37.08
KURNOOL	116.66	5489338	21.67	11007823	43.45	12535485	49.49	14127311	55.77	15785983	62.32	17514417	69.14
NELLORE	116.66	0	0.00	4928217	11.16	7825468	17.73	10893626	24.67	14142957	32.03	17584077	39.83
NIZAMABAD	116.66	18569828	194.19	24244170	253.53	25833196	270.14	27497001	287.54	29238968	305.76	31062947	324.83
PRODDATUR	116.66	0	0.00	828804	4.59	1623259	9.00	2451312	13.59	3314129	18.37	4213228	23.36
TENALI	116.66	10130696	199.97	11052077	218.16	11290996	222.87	11533533	227.66	11779569	232.52	12029338	237.45
TIRUPATI	116.66	574291	3.15	5302054	29.05	6659043	36.49	8094195	44.35	9612058	52.67	11217416	61.47
WARANGAL	116.66	28428390	119.95	39445877	166.44	42546466	179.53	45799297	193.25	49211836	207.65	52792014	222.76
TOTAL		77859935	79.69	121425929	62.51	135944732	69.98	151168162	77.82	167130750	86.03	183870410	94.65
AVERAGE		11122847		11038720		16715491		13742560		15193704		16715491	
ASSAM													
JORHAT	15.31	2075621	97.70	5164352	243.09	6241319	293.79	7477418	351.97	8896149	418.75	10524521	495.40
TINSUKIA	15.31	656002	36.68	1403635	78.48	1623839	90.79	1859260	103.96	2110896	118.03	2379908	133.07
TOTAL		2731623	69.81	6567988	167.85	7865158	201.00	9336679	238.61	11007046	281.30	12904429	329.79
AVERAGE		1365811		3283994		6452214		4668339		5503523		6452214	

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
BIHAR													
BIHAR	34.04	2394437	56.88	3583556	85.13	3912893	92.95	4256153	101.11	4613947	109.61	4986821	118.46
DHANBAD	34.04	1801434	52.52	2732156	79.65	2989634	87.16	3257869	94.98	3537304	103.13	3828414	111.61
KATIHAR	34.04	1349963	40.74	2262984	68.29	2517909	75.98	2784477	84.03	3063230	92.44	3354749	101.23
MUNGER	34.04	3621499	252.14	4113819	286.42	4244227	295.50	4377663	304.79	4514266	314.30	4654068	324.03
TOTAL		9167334	73.99	12692517	102.44	13664665	110.29	14676163	118.45	15728748	126.95	16824053	135.79
AVERAGE		2291833		3173129		4206013		3669040		3932187		4206013	
GUJARAT													
BHAVNAGAR	246.87	40421266	79.46	52454944	103.11	55703507	109.50	59054273	116.08	62510206	122.88	66074762	129.88
BHARUCH	246.87	1034334	3.53	3349234	11.43	3954806	13.49	4571981	15.60	5200512	17.75	5840646	19.93
JAMNAGAR	246.87	0	0.00	0	0.00	0	0.00	1882114	1.88	5289661	5.30	8811261	8.82
JUNAGADH	246.87	11940664	55.73	14968771	69.86	15767890	73.59	16584536	77.40	17418956	81.30	18271892	85.28
NADIAD	246.87	6294538	17.84	11147755	31.60	12447032	35.28	13782845	39.07	15155936	42.96	16567539	46.96
NAVSARI	246.87	3387217	11.39	8836872	29.71	10333892	34.74	11889173	39.97	13504690	45.41	15182912	51.05
PORBANDAR	246.87	11965639	61.11	14226474	72.66	14816494	75.67	15416635	78.74	16027638	81.86	16649010	85.03
RAJKOT	246.87	0	0.00	0	0.00	0	0.00	5229949	3.06	12272162	7.19	19596548	11.48
VADODARA	246.87	0	0.00	0	0.00	4454190	1.51	18306313	6.22	32801038	11.15	47968484	16.31
TOTAL		75043660	40.30	104984053	56.38	117477813	24.46	146717822	19.54	180180804	23.99	214963058	28.63
AVERAGE		12507276		17497342		23884784		16301980		20020089		23884784	
HARYANA													
AMBALA	100.52	0	0.00	0	0.00	61563	0.46	365033	2.73	675438	5.05	992881	7.42
HISSAR	100.52	0	0.00	2330241	13.67	3088866	18.12	3877244	22.74	4696482	27.55	5547685	32.54
KARNAL	100.52	111614	0.68	2603605	15.97	3283623	20.14	3988067	24.46	4717943	28.94	5473954	33.57
PANIPAT	100.52	517472	2.93	4094979	23.21	5094550	28.88	6140058	34.81	7233616	41.01	8377433	47.49
ROHTAK	100.52	0	0.00	0	0.00	0	0.00	0	0.00	326356	1.35	1046280	4.34
YAMUNANAGAR	100.52	0	0.00	0	0.00	513107	3.07	1233131	7.37	1983111	11.86	2764453	16.53
TOTAL		629086	1.85	9028826	17.71	12041710	14.85	15603535	19.24	19632948	18.66	24202687	23.00
AVERAGE		314543		3009608		4033781		3120707		3272158		4033781	
HIMACHAL PRADESH													
SHIMLA	392.65	0	0.00	0	0.00	0	0.00	277274	0.75	1190577	3.23	2126262	5.77
TOTAL		0	0.00	0	0.00	0	0.00	277274	0.75	1190577	3.23	2126262	5.77
AVERAGE		0		0		2126262		277274		1190577		2126262	

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
KARNATAKA													
BELGAUM	141.45	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1879033	3.03
BELLARY	141.45	8394175	28.40	16360497	55.36	18600782	62.94	20950408	70.89	23414750	79.23	25999324	87.97
BIJAPUR	141.45	9638559	60.05	13485150	84.02	14533577	90.55	15619206	97.32	16743451	104.32	17907584	111.57
DAVANGERE	141.45	13439667	56.57	21395664	90.06	23637505	99.50	25990667	109.40	28460808	119.80	31053446	130.71
GULBARGA	141.45	23997005	147.64	31338543	192.81	33374291	205.33	35497173	218.39	37710724	232.01	40019047	246.21
GADAG BETGERI	141.45	5316134	39.44	6938424	51.47	7365462	54.64	7801269	57.87	8246412	61.17	8700750	64.54
HUBLI DHARWAD	141.45	0	0.00	8135602	8.52	11607068	12.15	15194806	15.91	18902635	19.79	22734657	23.80
MYSORE	141.45	3446425	5.09	9890321	14.61	11590409	17.12	13327839	19.68	15103319	22.30	16917557	24.98
MANDYA	141.45	6598246	61.73	9033732	84.52	9694304	90.70	10377224	97.09	11082918	103.69	11812235	110.52
RAICHUR	141.45	16379076	244.83	20890058	312.26	22149387	331.08	23466287	350.77	24843161	371.35	26283122	392.87
SHIMOGA	141.45	6457640	31.22	11046419	53.41	12309992	59.52	13624063	65.88	14990328	72.48	16411052	79.35
TUMKUR	141.45	10568314	112.86	14337956	153.12	15386950	164.33	16482338	176.02	17626103	188.24	18820648	201.00
TOTAL		104235245	48.65	162852372	52.58	180249732	58.19	198331286	64.03	217124616	70.10	238538460	64.18
AVERAGE		10423524		14804761		19878205		18030116		19738601		19878205	
KERALA													
ALLEPPEY	86.47	9917329	186.80	10282405	193.68	10375015	195.42	10468229	197.18	10561963	198.94	10656215	200.72
COCHIN	86.47	4906477	11.19	8046981	18.36	8863258	20.22	9692332	22.11	10534464	24.03	11389825	25.99
CALICUT	86.47	18279073	94.17	20873087	107.54	21549109	111.02	22236373	114.56	22935223	118.16	23645747	121.82
QUILON	86.47	5035615	65.68	5579858	72.78	5719593	74.60	5860712	76.44	6003301	78.30	6147447	80.18
TRIVANDRUM	86.47	8968439	24.14	12113872	32.61	12933175	34.81	13766141	37.06	14612941	39.34	15473837	41.65
TOTAL		47106936	41.55	56896204	50.19	59440152	52.43	62023789	54.71	64647894	57.03	67313072	59.38
AVERAGE		9421387		11379240		13462614		12404757		12929578		13462614	
MADHYA PRADESH													
BURHAMPUR	133.43	3314921	17.35	6096136	31.91	6843744	35.82	7613636	39.85	8406210	44.00	9222401	48.28
KHANDWA	133.43	0	0.00	0	0.00	0	0.00	0	0.00	530777	2.39	1237423	5.56
RAIPUR	133.43	24081367	55.94	44424372	103.19	50408707	117.10	56802406	131.95	63633488	147.82	70931976	164.77
RATLAM	133.43	0	0.00	1073687	4.43	1815024	7.48	2577977	10.63	3363213	13.86	4171532	17.19
UJJAIN	133.43	18942662	73.05	24962090	96.26	26589135	102.53	28268085	109.01	30000807	115.69	31788902	122.58
TOTAL		46338952	52.61	76556287	68.14	85656613	76.24	95262105	84.79	105934497	78.71	117352236	87.19
AVERAGE		15446317		19139071		23470447		23815526		21186899		23470447	

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
MAHARASHTRA													
AURANGABAD	294.12	0	0.00	0	0.00	0	0.00	0	0.00	8502651	4.64	21114516	11.53
AMRAVATI	294.12	15865449	20.84	27564366	36.20	30714392	40.34	33960300	44.60	37304738	49.00	40750648	53.52
AKOLA	294.12	33169376	72.43	42929748	93.75	45552711	99.47	48253320	105.37	51033931	111.44	53896601	117.69
AHMEDNAGAR	294.12	0	0.00	5741053	7.56	9304317	12.25	13023170	17.15	16904084	22.26	20954116	27.59
BHUSAVAL	294.12	21066921	101.41	25294014	121.76	26415788	127.16	27565209	132.69	28742277	138.36	29948169	144.16
CHANDRAPUR	294.12	25814222	140.88	34148406	186.36	36466954	199.01	39888150	212.22	41416111	226.02	44056132	240.43
DHULE	294.12	43796792	120.23	58845147	161.54	63029298	173.03	67396980	185.02	71956723	197.54	76716467	210.60
GONDIYA	294.12	8688086	33.82	12345468	48.06	13319005	51.85	14317543	55.74	15341669	59.73	16391971	63.82
JALGAON	294.12	2567942	5.25	9334761	19.10	11161540	22.83	13045085	26.69	14988042	30.66	16991881	34.76
JALNA	294.12	14554546	51.33	19915765	70.24	21357836	75.32	22842847	80.56	24371977	85.95	25946990	91.51
KOLHAPUR	294.12	0	0.00	0	0.00	1718675	1.29	5476352	4.10	9338442	6.99	13307297	9.96
LATUR	294.12	18942405	76.80	27912182	113.17	30429261	123.38	33066929	134.07	35831069	145.28	38727269	157.02
MALEGAON	294.12	0	0.00	4971855	5.67	7300991	8.32	9688363	11.05	12135736	13.84	14644580	16.70
NANDED	294.12	17267559	31.50	30220310	55.13	33806809	61.68	37544780	68.50	41440400	75.60	45500432	83.01
PARBHANI	294.12	30948975	214.09	42679362	295.24	46057919	318.61	49636183	343.37	53426213	369.58	57440363	397.35
SANGLI	294.12	0	0.00	3116381	5.54	4802866	8.55	6536997	11.63	8320835	14.80	10154967	18.07
SOLAPUR	294.12	30279224	20.98	48578194	33.67	53445292	37.04	58435037	40.50	63550666	44.04	68795414	47.68
ULHASNAGAR	294.12	19307097	21.84	42379929	47.94	48882628	55.30	55708565	63.02	62874210	71.13	70395741	79.64
TOTAL		282268599	45.02	435976951	51.48	483766289	49.34	535385819	54.60	597479781	51.34	665733563	57.21
AVERAGE		21712969		27248559		36985197		31493283		33193321		36985197	
MEGHALAYA													
SHILLONG	76.81	0	0.00	790557	8.18	1023291	10.59	1261172	13.05	1504429	15.56	1753063	18.14
TOTAL		0	0.00	790557	8.18	1023291	10.59	1261172	13.05	1504429	15.56	1753063	18.14
AVERAGE		0		790557		1753063		1261172		1504429		1753063	
ORISSA													
BHUBNESWAR	130.96	5587618	14.35	20719261	53.21	25246024	64.84	30116295	77.35	35356136	90.81	40993571	105.29
BRAHMAPUR	130.96	1893618	7.91	5459790	22.80	6425751	26.83	7423404	31.00	8453798	35.30	9518109	39.74
SAMBALPUR	130.96	0	0.00	4006588	19.43	5356523	25.98	6780582	32.88	8282563	40.17	9866917	47.85
TOTAL		7481237	11.90	30185639	36.15	37028299	44.34	44320283	53.08	52092497	62.38	60378598	72.31
AVERAGE		3740618		10061879		20126199		14773427		17364165		20126199	

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
PUNJAB													
AMRITSAR	186.05	50963370	57.99	73622586	83.78	79843167	90.86	86303382	98.21	93012531	105.84	99979917	113.77
BHATINDA	186.05	0	0.00	0	0.00	2119303	3.77	7238655	12.87	12806760	22.77	18863245	33.53
PATIALA	186.05	5194153	12.64	11555388	28.11	13277839	32.30	15056663	36.63	16893535	41.10	18790500	45.72
PATHANKOT	186.05	10446826	69.44	14459181	96.11	15557434	103.41	16696432	110.98	17877849	118.83	19103175	126.97
TOTAL		66604350	46.25	99637155	69.18	110797745	55.32	125295133	62.56	140590676	70.20	156736839	78.26
AVERAGE		22201450		33212385		39184209		31323783		35147669		39184209	
RAJASTHAN													
AJMER	71.72	7749506	30.25	12870601	50.23	14269212	55.69	15718674	61.35	17220849	67.21	18777532	73.29
ALWAR	71.72	2267383	20.97	4373799	40.45	4951361	45.79	5550940	51.33	6173326	57.09	6819380	63.06
BIKANER	71.72	4231621	24.26	6944788	39.82	7674539	44.00	8426165	48.31	9200310	52.75	9997550	57.32
BHARATPUR	71.72	0	0.00	1530068	15.07	2051329	20.20	2595899	25.57	3164711	31.17	3758911	37.02
JODHPUR	71.72	7359295	18.09	17212117	42.31	19976206	49.10	22872259	56.22	25906589	63.68	29085793	71.50
SIKAR	71.72	0	0.00	660068	6.57	1066003	10.60	1487358	14.80	1924635	19.15	2378479	23.66
TOTAL		21607806	22.85	43591444	37.98	49988653	43.56	56651298	49.36	63590423	55.41	70817647	61.71
AVERAGE		5401951		7265240		11802941		9441883		10598403		11802941	
TAMIL NADU													
CUDDALORE	119.61	6424469	57.84	8118984	73.10	8567641	77.14	9026704	81.27	9496532	85.50	9977245	89.83
DINDIGUL	119.61	8608727	60.93	10951169	77.51	11573500	81.91	12211260	86.42	12864929	91.05	13534865	95.79
ERODE	119.61	10091338	97.87	12716299	123.33	13423792	130.19	14152815	137.27	14904445	144.56	15679039	152.07
KANCHIPURAM	119.61	4518136	35.28	5723685	44.70	6038020	47.15	6357618	49.65	6682598	52.19	7013200	54.77
KUMBAKONAM	119.61	14840855	559.23	16001191	602.96	16303087	614.33	16609886	625.89	16921590	637.64	17238437	649.58
NAGERCOIL	119.61	7695540	50.04	9563848	62.19	10054130	65.38	10553980	68.63	11063758	71.94	11583463	75.32
RAJAPALAYAM	119.61	6736861	101.86	7596977	114.87	7820528	118.25	8047548	121.68	8278156	125.17	8512472	128.71
SALEM	119.61	0	0.00	1007533	2.03	1811073	3.65	2627411	5.30	3456667	6.97	4299081	8.67
TIRUCHIRAPALLI	119.61	0	0.00	0	0.00	518314	1.01	1373525	2.68	2242851	4.37	3126529	6.09
TIRUNELVELI	119.61	0	0.00	147180	0.81	464625	2.56	787452	4.34	1115901	6.15	1450092	7.99
TUTICORIN	119.61	11090279	72.97	13473987	88.66	14103016	92.80	14745800	97.03	15402698	101.35	16073950	105.77
TIRUPPUR	119.61	1961372	8.59	5997731	26.28	7105679	31.14	8256207	36.18	9450992	41.41	10691587	46.85
VELLORE	119.61	7954536	50.01	10205716	64.17	10801015	67.91	11409830	71.74	12032519	75.65	12669443	79.66
TOTAL		79922118	62.97	101504306	52.14	108584425	44.14	116160044	47.22	123913643	50.37	131849407	53.60
AVERAGE		7992211		8458692		10142262		8935388		9531818		10142262	

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
TRIPURA													
AGARTALA	178.22	0	0.00	112577	0.36	983004	3.18	1877846	6.07	2797818	9.04	3743453	12.10
TOTAL		0	0.00	112577	0.36	983004	3.18	1877846	6.07	2797818	9.04	3743453	12.10
AVERAGE		0		112577		3743453		1877846		2797818		3743453	
UTTAR PRADESH													
AGRA	90.09	45877077	200.00	50407073	219.75	51585450	224.89	52782656	230.11	53999231	235.41	55235266	240.80
ALIGARH	90.09	498384	1.52	3867660	11.76	4761803	14.48	5677748	17.26	6615856	20.11	7576936	23.04
AMROHA	90.09	573188	4.92	2182916	18.74	2617510	22.47	3065708	26.32	3527960	30.29	4004716	34.38
BAREILLY	90.09	2188069	5.65	6787704	17.54	8016261	20.72	9278062	23.98	10573916	27.33	11904816	30.77
BULANDSHAHAR	90.09	0	0.00	2643543	19.50	3564352	26.30	4537505	33.48	5565972	41.06	6652908	49.08
FIROZABAD	90.09	0	0.00	0	0.00	0	0.00	0	0.00	926415	3.06	2241909	7.41
FARRUKHABAD	90.09	9929878	158.35	12362308	197.13	13025551	207.71	13712307	218.66	14423477	230.00	15159963	241.75
GHAZIABAD	90.09	3839263	10.56	19606004	53.91	24432485	67.18	29675093	81.59	35369682	97.25	41555261	114.26
HAPUR	90.09	1850831	19.09	3674883	37.91	4174252	43.06	4692269	48.40	5229566	53.95	5787043	59.70
JHANSI	90.09	14864307	118.79	18991691	151.78	20117275	160.77	21283130	170.09	22490606	179.74	23741326	189.73
MEERUT	90.09	21099047	76.37	30289128	109.63	32845702	118.88	35515068	128.54	38302183	138.63	41212450	149.17
MUZAFFARNAGAR	90.09	0	0.00	2076038	9.84	3029731	14.36	4022793	19.07	5056666	23.97	6133061	29.07
MATHURA	90.09	2369730	20.03	3013063	25.47	3178373	26.86	3345585	28.28	3514594	29.71	3685585	31.15
MIRZAPUR-VINDYACHAL	90.09	475982	3.84	1479314	11.92	1742197	14.04	2009944	16.20	2282827	18.40	2560845	20.64
RAMPUR	90.09	9188676	76.17	11302908	93.70	11863628	98.35	12437682	103.11	13025609	107.98	13627590	112.97
SHAHJAHANPUR	90.09	7809247	63.28	10494470	85.04	11219965	90.92	11968522	96.98	12740774	103.24	13537620	109.70
SAMBHAL	90.09	6854307	158.90	7911784	183.42	8191423	189.90	8477549	196.53	8770161	203.32	9069440	210.26
TOTAL		127417992	50.64	187090492	65.36	204365971	71.39	222481628	77.72	242415502	76.59	263686742	83.31
AVERAGE		9101285		11693155		15510984		13905101		14259735		15510984	
WEST BENGAL													
BALURGHAT	34.41	0	0.00	0	0.00	0	0.00	261334	4.45	540433	9.19	832196	14.16
KHARAGPUR	34.41	1654111	23.04	5431985	75.67	6606054	92.02	7889410	109.90	9292271	129.44	10825718	150.80
SILIGURI	34.41	358661	3.23	8028684	72.33	10643225	95.89	13615113	122.67	16993212	153.10	20833058	187.70
TOTAL		2012773	11.01	13460670	73.64	17249280	94.37	21765858	90.11	26825917	111.05	32490973	134.51
AVERAGE		1006386		6730335		10830324		7255286		8941972		10830324	
INDIA		950427653	45.80	1463353976	53.95	1626127538	49.61	1818595904	50.64	2033788573	52.81	2265284963	57.90
AVERAGE		10924455		13805226		14518995		15677550		16948238		18721363	

ANNEX-X

X(4). Estimated Resource Gap at 1986-87 Prices, Using the City Size Class Averages of Expenditures (Method-IV)

(Rs.)

City Size/ Town	Revenue Expenditure Norms (Per Capita Per Annum)	Revenue Gap											
		1986-87		1990-91		1991-92		1992-93		1993-94		1994-95	
		Amount	Percent to Revenue Income	Amount	Percent to Revenue Income	Amount	Percent to Revenue Income	Amount	Percent to Revenue Income	Amount	Percent to Revenue Income	Amount	Percent to Revenue Income
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
CITY SIZE I													
ANANTPUR	120.61	290782	1.61	3477902	19.27	4357751	24.15	5273664	29.23	6226965	34.51	7219103	40.01
ADONI	120.61	4838246	46.63	6401472	61.69	6816732	65.69	7242245	69.79	7678250	74.00	8125110	78.30
BHIMAVARAM	120.61	10860643	200.37	14218546	262.32	15161113	279.71	16148909	297.93	17183984	317.03	18268871	337.04
CUDDAPAH	120.61	0	0.00	3051091	18.69	3929373	24.07	4847577	29.69	5807391	35.57	6810746	41.72
NIZAMABAD	120.61	19522370	204.15	25388840	265.50	27031669	282.68	28751809	300.67	30552758	319.50	32438495	339.22
PRODDATUR	120.61	0	0.00	1467650	8.14	2289004	12.69	3145094	17.44	4037125	22.38	4966666	27.53
TENALI	120.61	10645247	210.13	11597825	228.93	11844834	233.80	12095582	238.75	12349949	243.77	12608175	248.87
TIRUPATI	120.61	1211628	6.64	6099468	33.42	7502404	41.11	8986148	49.24	10555405	57.84	12215119	66.94
DIBRUGARH	120.61	11983871	539.64	13408878	603.80	13786870	620.83	14174149	638.27	14570594	656.12	14976808	674.41
JORHAT	120.61	30962991	1457.47	55295576	2602.84	63779766	3002.20	73517576	3460.58	84694143	3986.67	97522223	4590.51
TINSUKIA	120.61	17469042	976.73	23358790	1306.04	25093524	1403.04	26948144	1506.73	28930490	1617.57	31049728	1736.06
BIHAR	120.61	19189709	455.86	23402979	555.94	24569880	583.66	25786112	612.56	27053843	642.67	28375005	674.06
DHANBAD	120.61	15106204	440.40	18403923	536.54	19316217	563.14	20266624	590.85	21256711	619.71	22288168	649.78
KATIHAR	120.61	13210919	398.66	16445920	496.28	17349168	523.53	18293665	552.04	19281341	581.84	20314245	613.01
MUNGER	120.61	16484416	1147.70	18228798	1269.15	18690855	1301.32	19163646	1334.24	19647654	1367.94	20142999	1402.42

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
AMBALA	120.61	1043397	7.80	2391093	17.87	2747375	20.54	3111496	23.26	3483940	26.04	3864826	28.89
HISSAR	120.61	2892407	16.97	6203272	36.39	7113515	41.73	8059460	47.27	9042431	53.04	10063757	59.03
KARNAL	120.61	3392391	20.81	6382433	39.15	7198360	44.15	8043595	49.34	8919344	54.71	9826452	60.27
PANIPAT	120.61	4146449	23.51	8438959	47.84	9638305	54.64	10892770	61.75	12204886	69.19	13577307	76.97
ROHTAK	120.61	0	0.00	2766192	11.47	3557997	14.75	4373200	18.13	5212404	21.61	6076213	25.19
YAMUNANAGAR	120.61	131104	0.78	3128383	18.71	3957577	23.67	4821507	28.83	5721378	34.22	6658879	39.82
BIJAPUR	120.61	5853827	36.47	9133695	56.91	10027657	62.48	10953338	68.24	11911947	74.22	12904567	80.40
DAVANGERE	120.61	7959456	33.50	14743286	62.06	16654834	70.11	18661302	78.55	20767514	87.42	22978175	96.72
GADAG BETGERI	120.61	2546790	18.89	3930066	29.15	4294188	31.85	4665787	34.61	5045347	37.43	5432746	40.30
MANDYA	120.61	4051431	37.91	6128094	57.34	6691343	62.61	7273648	68.05	7875371	73.68	8497237	79.50
RAICHUR	120.61	12980280	194.03	16826654	251.52	17900445	267.57	19023324	284.35	20197342	301.90	21425151	320.26
SHIMOGA	120.61	2459215	11.89	6371924	30.81	7449333	36.02	8569800	41.44	9734772	47.07	10946179	52.93
TUMKUR	120.61	7631708	81.50	10845964	115.83	11740408	125.38	12674412	135.36	13649664	145.77	14668216	156.65
ALLEPPEY	120.61	15928973	300.04	16438189	309.63	16567362	312.06	16697379	314.51	16828121	316.97	16959586	319.45
QUILON	120.61	10050850	131.09	10809969	140.99	11004875	143.54	11201710	146.10	11400596	148.70	11601653	151.32
BURHAMPUR	120.61	1160930	6.08	3674925	19.24	4350703	22.77	5046623	26.42	5763046	30.17	6500818	34.03
RATLAM	120.61	0	0.00	0	0.00	0	0.00	0	0.00	708870	2.92	1439526	5.93
BHUSAVAL	120.61	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	25849	0.12
CHANDRAPUR	120.61	0	0.00	3193355	17.43	4144123	22.62	5136985	28.03	6173628	33.69	7256223	39.60
LATUR	120.61	0	0.00	0	0.00	0	0.00	0	0.00	143532	0.58	1331179	5.40
PARBHANI	120.61	4163368	28.80	8973657	62.08	10359104	71.66	11826445	81.81	13380626	92.56	15026711	103.95
IMPHAL	120.61	23527183	2056.00	28333853	2476.05	29675398	2593.29	31077851	2715.85	32544107	2843.98	34077181	2977.95
SHILLONG	120.61	5369544	55.55	6753664	69.87	7119113	73.65	7492642	77.51	7874614	81.46	8265028	85.50
BRAHMAPUR	120.61	0	0.00	3135573	13.09	4025193	16.81	4944000	20.64	5892959	24.61	6873157	28.70
SAMBALPUR	120.61	0	0.00	2060280	9.99	3303528	16.02	4615041	22.38	5998318	29.09	7457457	36.17
PATHANKOT	120.61	1480499	9.84	4081575	27.13	4793535	31.86	5531910	36.77	6297783	41.86	7092121	47.14
ALWAR	120.61	11184479	103.43	14726795	136.19	15698067	145.17	16706367	154.49	17753020	164.17	18839475	174.22
BHILWARA	120.61	2934520	18.49	6202448	39.08	7104611	44.76	8043559	50.68	9020862	56.83	10038208	63.24
BHARATPUR	120.61	6346227	62.51	9493907	93.51	10370501	102.15	11286292	111.17	12242850	120.59	13242104	130.43
GANGANAGAR	120.61	779390	4.51	3223793	18.67	3884977	22.50	4567388	26.45	5271992	30.53	5999150	34.74
SIKAR	120.61	5472142	54.44	7962376	79.21	8645029	86.00	9353613	93.05	10088972	100.37	10852192	107.96

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
CUDDALORE	120.61	6571037	59.16	8279719	74.55	8732127	78.62	9195028	82.79	9668784	87.05	10153516	91.42
DINDIGUL	120.61	8798829	62.27	11160855	78.99	11788389	83.43	12431481	87.98	13090615	92.65	13766152	97.43
ERODE	120.61	10261908	99.53	12908815	125.20	13622223	132.12	14357341	139.25	15115255	146.60	15896325	154.18
KANCHIPURAM	120.61	4662964	36.42	5878592	45.91	6195555	48.38	6517825	50.90	6845522	53.46	7178888	56.06
KUMBAKONAM	120.61	14987119	564.75	16157156	608.84	16461576	620.31	16770940	631.96	17085250	643.81	17404746	655.85
NAGERCOIL	120.61	7888451	51.30	9772379	63.55	10266760	66.76	10770789	70.04	11284829	73.38	11808879	76.79
RAJAPALAYAM	120.61	6848479	103.55	7715786	116.66	7941206	120.07	8170124	123.53	8402660	127.05	8638935	130.62
TIRUNELVELI	120.61	0	0.00	300199	1.65	620298	3.42	945824	5.21	1277019	7.03	1614004	8.89
TUTICORIN	120.61	11310059	74.42	13713696	90.24	14347984	94.41	14996142	98.67	15658532	103.03	16335396	107.49
TIRUPPUR	120.61	2168562	9.50	6238667	27.34	7355878	32.23	8516025	37.32	9720799	42.60	10971766	48.08
VELLORE	120.61	8154017	51.27	10424018	65.54	11024294	69.31	11638199	73.17	12266094	77.12	12908343	81.16
AMROHA	120.61	4713562	40.46	6866621	58.97	7450444	63.96	8050479	69.11	8669328	74.42	9307597	79.90
BULANDSHAHAR	120.61	3828397	28.24	8131039	59.99	9363793	69.08	10666623	78.69	12043506	88.85	13498666	99.59
FARRUKHABAD	120.61	15418290	245.87	18674760	297.80	19562691	311.95	20482101	326.62	21434196	341.80	22420183	357.52
HARIDWAR	120.61	0	0.00	0	0.00	0	0.00	0	0.00	365390	1.64	1249340	5.61
HAPUR	120.61	5761877	59.44	8203868	84.63	8872409	91.53	9565917	98.68	10285235	106.10	11031569	113.80
JAUNPUR	120.61	0	0.00	1446580	9.60	1888616	12.53	2342351	15.55	2808267	18.64	3286607	21.81
MUZAFFARNAGAR	120.61	5303249	25.14	9925386	47.05	11202163	53.11	12531647	59.41	13915767	65.97	15356816	72.80
MATHURA	120.61	7180537	60.69	8041813	67.97	8263132	69.84	8486984	71.74	8713248	73.65	8942166	75.58
MIRZAPUR-VINDYACHAL	120.61	4840433	39.01	6183667	49.84	6535607	52.68	6894060	55.57	7259387	58.51	7631590	61.51
SHAHJAHANPUR	120.61	14635473	118.60	18230374	147.73	19201647	155.60	20203795	163.72	21237664	172.10	22304459	180.74
SAMBHAL	120.61	10637658	246.61	12053378	279.43	12427752	288.11	12810809	296.99	13202550	306.07	13603217	315.36
BARDHAMAN	120.61	2617045	13.40	4035056	20.65	4403520	22.54	4777773	24.45	5157815	26.40	5543887	28.38
BALURGHAT	120.61	10602103	180.38	13809485	234.95	14704411	250.17	15640103	266.09	16618371	282.74	17641023	300.14
KHARAGPUR	120.61	23781393	331.27	37023165	515.73	41138378	573.05	45636648	635.71	50553797	704.21	55928661	779.08
NABADWIP	120.61	6773676	87.02	7787765	100.04	8052022	103.44	8320861	106.89	8594284	110.41	8872290	113.98
SILIGURI	120.61	29062054	261.83	55946144	504.05	65110333	586.61	75527056	680.46	87367581	787.14	100826572	908.40
TOTAL		542069829	79.12	785513050	93.54	858069855	102.18	935539346	111.41	1019618622	111.93	1111240409	119.27
AVERAGE		8886390		11384247		12435795		13558541		14161369		15222471	

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
CITY SIZE II													
KAKINADA	173.29	0	0.00	0	0.00	0	0.00	1068477	1.89	2951793	5.21	4896800	8.65
KURNOOL	173.29	20450757	80.73	28648068	113.09	30917300	122.05	33281842	131.38	35745679	141.11	38313144	151.25
NELLORE	173.29	13806555	31.27	28751778	65.12	33055435	74.87	37612962	85.20	42439609	96.13	47551144	107.71
JAMMU	173.29	8206768	24.05	13278966	38.91	14639119	42.90	16038609	47.00	17477956	51.22	18958892	55.56
BELGAUM	173.29	0	0.00	5894246	9.52	8345087	13.48	10884478	17.58	13515540	21.82	16241739	26.23
BELLARY	173.29	16936146	57.31	26695666	90.33	29440233	99.62	32318753	109.36	35337811	119.57	38504166	130.29
GULBARGA	173.29	33057364	203.38	42051461	258.72	44545451	274.06	47146187	290.06	49858002	306.75	52685922	324.14
UJJAIN	173.29	32348298	124.74	40165929	154.89	42279028	163.04	44459536	171.44	46709880	180.12	49032139	189.08
AKOLA	173.29	729904	1.59	6480533	14.15	8025933	17.53	9617082	21.00	11255366	24.58	12941997	28.26
DHULE	173.29	10839322	29.76	19705531	54.10	22170755	60.86	24744111	67.93	27430626	75.30	30234978	83.00
ULHASNAGAR	173.29	0	0.00	0	0.00	0	0.00	0	0.00	729650	0.83	5161195	5.84
BHUBNESWAR	173.29	19978845	51.31	40001465	102.74	45991407	118.12	52435689	134.67	59369395	152.48	66829009	171.64
CUTTACK	173.29	0	0.00	0	0.00	0	0.00	0	0.00	656599	0.92	3067062	4.31
PATIALA	173.29	2018954	4.91	7943912	19.33	9548231	23.23	11205057	27.26	12915949	31.42	14682814	35.72
BIKANER	173.29	34923535	200.25	41479096	237.83	43242322	247.94	45058401	258.36	46928893	269.08	48855185	280.13
UDAIPUR	173.29	17069891	51.51	24988898	75.41	27156582	81.95	29405020	88.74	31737330	95.77	34156805	103.08
DEHRADUN	173.29	12884442	43.73	17177355	58.30	18316910	62.17	19484191	66.13	20680239	70.19	21905399	74.35
FIROZABAD	173.29	14664186	48.46	22736901	75.13	24972169	82.52	27301880	90.22	29729672	98.24	32260053	106.60
GORAKHPUR	173.29	3412971	6.27	9006772	16.54	10487708	19.26	12003129	22.04	13553902	24.89	15141065	27.80
GHAZIABAD	173.29	40973503	112.66	71301159	196.04	80584997	221.57	90669262	249.30	101622923	279.41	113521015	312.13
JHANSI	173.29	40147789	320.85	48086897	384.30	50251982	401.60	52494528	419.52	54817134	438.08	57222919	457.31
RAMPUR	173.29	28814890	238.87	32881660	272.59	33960217	281.53	35064421	290.68	36195311	300.06	37353235	309.66
TOTAL		351264128	62.36	527276302	84.33	577930875	92.43	632293826	92.73	691659270	82.20	759516688	90.26
AVERAGE		19514673		27751384		30417414		31614691		31439057		34523485	

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
CITY SIZE III													
GUNTUR	146.98	0	0.00	5783280	8.53	8092189	11.93	10473559	15.44	12929595	19.06	15462648	22.80
WARANGAL	146.98	41976397	177.12	55857335	235.69	59763769	252.18	63862013	269.47	68161472	287.61	72672141	306.64
BHAVNAGAR	146.98	3481644	6.84	10646185	20.93	12580294	24.73	14575254	28.65	16632827	32.70	18755071	36.87
CALICUT	146.98	44653143	230.05	49062396	252.77	50211486	258.69	51379683	264.71	52567575	270.83	53775310	277.05
RAIPUR	146.98	30898548	71.78	53307413	123.83	59899466	139.14	66942454	155.50	74467242	172.98	82506901	191.66
AJMER	146.98	42767081	166.92	53262041	207.88	56128298	219.07	59098763	230.67	62177260	242.68	65367460	255.13
KOTA	146.98	9960708	16.07	26590760	42.91	31317489	50.54	36296437	58.57	41540977	67.03	47065662	75.95
SALEM	146.98	8789016	17.72	12586685	25.38	13574097	27.37	14577235	29.39	15596248	31.45	16631428	33.53
TIRUCHIRAPALLI	146.98	7377137	14.37	11347507	22.11	12381512	24.12	13432419	26.17	14500669	28.25	15586558	30.37
ALIGARH	146.98	21583582	65.62	27080487	82.33	28539263	86.77	30033609	91.31	31564112	95.96	33132094	100.73
BAREILLY	146.98	28004864	72.37	35509075	91.77	37513442	96.95	39572043	102.27	41686204	107.73	43857539	113.34
TOTAL		239492125	60.31	341033169	73.35	370001310	79.58	400243474	86.08	431824185	92.88	464812817	99.97
AVERAGE		23949212		31003015		33636482		36385770		39256744		42255710	
CITY SIZE IV													
TRIVANDRUM	112.20	22691329	61.08	26772716	72.07	27835811	74.93	28916634	77.84	30015408	80.80	31132472	83.80
MEERUT	112.20	33057881	119.65	44503403	161.08	47687415	172.60	51011901	184.63	54483032	197.20	58107541	210.32
TOTAL		55749211	86.06	71276120	110.03	75523227	116.59	79928535	123.39	84498441	130.44	89240013	137.76
AVERAGE		27874605		35638060		37761613		39964267		42249220		44620006	

CONTD ....

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
CITY SIZE V													
VISHAKHAPATNAM	129.75	0	0.00	0	0.00	0	0.00	0	0.00	5602650	4.31	12158269	9.36
SRINAGAR	129.75	9402210	13.08	18851383	26.23	21380600	29.75	23980271	33.37	26652472	37.09	29399150	40.91
HUBLI DHARWAD	129.75	0	0.00	0	0.00	2746483	2.88	6037462	6.32	9438599	9.88	12953656	13.56
COCHIN	129.75	29301076	66.85	34013466	77.60	35238306	80.39	36482349	83.23	37745985	86.12	39029472	89.04
AMRITSAR	129.75	8949326	10.18	24751709	28.17	29089900	33.10	33595209	38.23	38274124	43.55	43133132	49.08
JODHPUR	129.75	46230575	113.64	64055500	157.45	69056065	169.75	74295370	182.62	79784833	196.12	85536391	210.26
TOTAL		93883188	38.44	141672059	58.00	157511355	46.36	174390663	51.33	197498664	42.05	222210071	47.31
AVERAGE		23470797		35418014		31502271		34878132		32916444		37035011	
CITY SIZE VI													
AGRA	168.42	105709683	460.84	114178346	497.76	116381279	507.36	118619413	517.12	120893756	527.04	123204479	537.11
ALLAHABAD	168.42	37003072	45.16	48342622	59.00	51342519	62.66	54411468	66.41	57551154	70.24	60763260	74.16
TOTAL		142712755	136.08	162520968	154.96	167723799	159.93	173030881	164.99	178444911	170.15	183967739	175.41
AVERAGE		71356377		81260484		83861899		86515440		89222455		91983869	
CITY SIZE VII													
VADODARA	339.68	33360390	11.34	98494370	33.49	116709370	39.68	135769155	46.16	155713126	52.94	176582726	60.03
TOTAL		33360390	11.34	98494370	33.49	116709370	39.68	135769155	46.16	155713126	52.94	176582726	60.03
AVERAGE		33360390		98494370		116709370		135769155		155713126		176582726	
INDIA		1458531629	61.97	2127786040	80.66	2323469794	85.00	2531195883	90.72	2759257222	87.57	3007570466	94.83
AVERAGE		14882975		19701722		21316236		23010871		23786700		25705730	