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Norms and Standards of Municipal Basic Services in India

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Abstract

The present level of urban infrastructure and services in urban centres has lagged behind the pace of urbanisation. However, the literature available on this topic shows that there is an improvement in the level of basic services such as water supply, sanitation and solid waste management but the quality and quantity of these services are still below the norms. A number of agencies and expert groups committees have provided a range of options for physical as well as financial standards of basic infrastructure and services in India. The present paper is an attempt to review the norms and standards for five basic services namely water supply, sewerage, solid waste management, primary education and preventive health care both in physical and in financial terms and examines their implications on municipal bodies of the country. The paper also assesses the resource gaps and suggests the measures to bridge the gap and improve the level of basic services in the country. The paper is based on the secondary data/information obtained from the various published documents such as reports of State Finance Commission, City Development Plans prepared under JNNURM etc. The resource gaps have been worked out by updating the O & M norms and Per Capita Resource Generation at the 2004-05 prices. The paper suggests that a fresh study may be undertaken to suggest new norms and standards keeping in view the prevailing financial, legal and institutional constraints of the municipalities. A revolving fund would be created to meet the O & M requirements of assets created, over the planning horizon. It may also be suggested that the services should be maintained on regularly basis. If the maintenance of services is contracted out to a private sector, the local body should strictly monitor the maintenance part.

Keywords: Norms and Standards, Urban Infrastructure and Services, Urban Poverty, O & M requirements, Resource Gaps,

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Introduction

Urban centres in India present a grim picture with regard to availability of basic services. At the aggregate level although nearly 91 percent of the urban population is reported to have access to safe drinking water supply, there are severe deficiencies with regard to quantity of water available to urban residents (CSO, 2004). A recent survey conducted by the NIPFP show that in a sizeable number of urban centres, the availability of water is even less than 100 liters per capita per day, as only 2.7 per cent of sample municipalities are reported to supply over 100 liters of water per capita per day (NIPFP 2000). Approximately 28 per cent of the municipalities provided less than 50 liters per capita per day, which is less than half of the norms recommended by the Zakaria Committee for towns less than 20,000 persons. Even supply between locations is also known to be highly skewed, being very little per head in slums and concentration of the poor (Mathur, 2001).

In case of sanitation, although nearly 50 percent of the urban population is covered with sanitation services, only 28 percent of the urban households are connected to the public sewerage system. Further, where as approximately 300 urban centres have a sewerage system, only 70 of them have sewage treatment facilities. The position with respect to the collection and disposal of garbage is worse. The coverage is low as nearly 30-40 percent of garbage is left on the city streets uncollected daily (IIR 2001). There is, thus, a major deficiency in the provision of urban infrastructure and services despite major efforts in the past. The problems are not only of the shortage of services but also inequitable distribution of the services among the different sections of society. Some areas of Delhi are better served. For instance, South Delhi is better equipped with services and infrastructure facilities as compared to the other areas of the city. Besides, there is also inequitable distribution of services to various sections of population. Moreover, it is observed that services provided to the poor are below the norms in terms of quantity and quality.

The aforesaid services have been put to further strain as a result of an increase in economic and industrial activities in the country following the liberalisation and globalisation measures introduced in the early 1990's, as a large proportion of new investments are in town and cities. Consequently, infrastructure bottlenecks are emerging as the greatest challenge affecting urban productivity and quality of life- the implications are grave in view of the fact that more than 60 percent of the gross national domestic product is from urban centres. Any attempt to rectify the situation at the local level is frustrating as most municipal bodies in the country are already under considerable financial strain to cope up with even the operation and maintenance requirements of the existing services. While the responsibility to meet the growing demand to augment existing services is increasing rapidly there is not much commensurate increase in their revenue base.

Any attempt to deal with the situation calls for a systematic review of norms and standards for provision, operation and maintenance of municipal services, as suggested by different committees and expert groups. The present paper is an attempt to review these norms and standards both in physical and in financial terms, and examine their implications on the municipal bodies of the country.

Research Objectives

The objectives of the Paper are:

(i) to review the norms and standards for five basic (core) services, namely, water supply, sewerage, solid waste management, primary education and preventive health care;

(ii) to assess the resource gaps; and

(iii) to suggest the measures to bridge the resource gap and improve the level of basic municipal services in the country.

Research Methodology and Data Base

The paper is based on the secondary data/information obtained from the various published documents such as Reports of the State Finance Commissions, City Development Plans (CDP's) prepared under the Jawaharlal Nehru National Urban Renewal Mission (JNNURM), Planning Commission, Zakaria Committee, NIPFP, CPHEEO, HUDCO etc. The resource gaps have been worked out by updating the O & M norms, and Per Capita Resource Generation at the 2004-05 prices.

Review of the Norms and Standards for the Provision of Basic Services

Various national and state level agencies as well as hosts of expert groups or committees, such as Central Public Health and Environmental Engineering Organisation (CPHEEO), Zakaria Committee on Augmentation of Financial Resources of Urban Local Bodies, Town and Country Planning Organisation (TCPO), Planning Commission, National Master Plan- India on International Drinking Water Supply and Sanitation Decade, Committee on Plan Projects for Industrial Townships (COPP), the Five year Plans of Government of India, Operations Research Group (ORG) and National Institute of Urban Affairs (NIUA) have suggested requirements of various basic infrastructure and services either with reference to unit of population or quantum of services or both. Some of these committees and technical agencies have also computed unit cost for provision and maintenance of basic services on the basis of physical specifications and standards of services. The unit cost for provision and 0peration and Maintenance (O & M) of different services, varies considerably with the physical standards of services and levels of development. The cost estimates proposed by various committees and agencies**,** for different services**,** have been updated for the year 2004-05, using the All India Consumer Price Index for non-manual urban employees as inflator. A brief summary of suggested norms for the following five basic urban services is presented in Appendix Tables I to V.

1. Water supply
2. Sewerage/sanitation
3. Solid waste disposal
4. Primary education
5. Primary health

Appendix Tables I to V provide a comparative picture of the norms and standards for the aforesaid five services as lay down by different technical committees and expert groups. These standards vary considerably from one agency to another and also from one category of cities to another. As different agencies have adopted different methods as also technological options for estimation of urban infrastructure needs, norms and standards are bound to be different in different size of cities. For instance, the physical standards recommended in case of water supply for small urban areas, vary from as little as 45 lpcd (Zakaria Committee, 1963) to as high as 100 lpcd, (Government of Gujarat, 1989) or to a even higher 95-125 lpcd (NIUA, 1987). For

industrial townships where the water requirement is likely to be more compared to other urban areas, NIUA (1987) recommends a water supply standard of 150-210 lpcd and the COPP (Committee on Plan Projects, 1973) 180-225 lpcd. In case of physical standards, suggested cost estimates for provision of urban infrastructure also differ widely from one category of cities to another, and from one agency to another agency. Zakaria Committee for instance, had suggested approximately Rs 1502 per capita (at 2004-05 prices) as an investment cost to supply nearly 270-lpcd high quality of treated water to the citizens of metropolitan cities. As against this, the recommended cost estimates for smaller urban centres with, on an average, supply of 45 lpcd of water was worked out to be only Rs 415, which is roughly four times less than the former. The technology recommended by the Committee for smaller towns was ground water supply from tube wells or infiltration galleries or wells without treatment plants. On the other hand, ORG, another agency who worked out standards for water supply, suggested approximately Rs 198 per capita as an investment requirement to supply only 180 lpcd water to the citizens of class 1 municipalities (above 1 lakh population including metropolitan cities). The per capita investment cost for smaller cities/towns in this regard was suggested to be roughly Rs 1105 for an average supply of 80 litres per capita per day.

Besides, adopting different technological options, methods and the differential requirements for different category of urban centers, most of the technical agencies / study groups or committees have used different sources of data and reference years for developing standards and norms for various urban services. Zakaria Committee, for example, worked out physical and financial standards for urban basic services in the 60' on the basis of actual data collected from the selected cities of different sizes, civic status and locations across the country on various physical and financial aspects of urban services including exiting level of urban basic services, demand for services, cost for provision as well as on maintenance of services and finances of municipalities. Whereas, Government of Gujarat made an attempt in 1987 to derive a new set of norms for these services, based on the data collected by NIUA and Gujarat Municipal Finance Board from all the municipalities of the state. Different agencies thus had used different data sources, scale and reference period, besides technologies and methods for evolving norms and standards of Urban basic services**.** Hence, these led to large variations in the service standards both in physical and financial terms.

The question as to what levels of services ought to be provided and maintained in the urban areas of various sizes, dimensions and economic activities has been debated at various forums. According to the Zakaria Committee "… *in evolving the standards for various grades of townships the important consideration has been the means of the local body to finance and maintain a particular standard of service. The financial position of many local bodies to undertake capital projects are limited and under these circumstances it will become an unworkable proposition if a standard is recommended which will involve subsidies. But the standard suggested here take into account the minimum needs for various purposes to maintain environmental hygiene to a desirable level. For instance in small town with a population of say about 10,000 it may not be necessary to provide a higher per capita of water supply since it would be possible to meet certain water uses such as gardening, washing of clothes etc. from local sources such as wells, rivers etc., which in the case of bigger towns will have to be provided from the piped water supply. In a bigger city, more water is required for public uses such as road washing, maintenance of public open spaces, needs of public institutions and hotels, and for fire fighting etc. In a small town such needs are very much limited. So the differences in standards of services in the hierarchy of towns are based on the actual essential needs. Besides the economic implications of the use of urban land whose value is very high in the case of bigger cities have been taken into account in prescribing standards for certain elements of development. For instance, in the case of metropolitan cities where land value are very high and where the availability of land is scarce, mechanical treatment of sewerage has been suggested whereas in the case of small towns land treatment of sewerage has been*

suggested, whereas, in the case of small towns land treatment has been prescribed since plenty of land would be available there at cheaper rates. In addition, there is an economic size of population for recommending mechanical treatment plants and it may be beyond the means of small local bodies to maintain such plants, which will require staff with higher technical expertise. Similarly in the case of storm water drainage, covered drains have been recommended for bigger cities to restrict the size of the drain as compared to small towns where open drains could suffice" (Zakaria Committee, 1963).

Minimum Level for Provision of Basic Services

Discussions in the preceding sections outline the variations, both in the accessibility of urban basic services to the urban community as also the norms and standards lay down by the various agencies and technical groups/committees on the provision of these services. Some of the committees or agencies have proposed norms which represent the most desirable levels of services – a kind of optima, rather than the levels that would be within the means of the local bodies or service delivery agencies. Very few local bodies would be able to attain the standards of services as suggested by the Zakaria Committee or the COPP. This requires for development of a new set of norms for the urban basic services that could be used as a minimum level of services, which should be maintained by all urban local bodies in the country. The **Working Group on Expenditure Norms**[1], (1995) made an attempt to suggest minimum physical standards of services, which ought to be attained by each local body in near future. These have been derived from the existing norms for service provisions suggested by the various agencies; research studies undertaken by the NIUA/NIPFP and such other institutions; and discussions with the members of first generation Finance Commission of various states, municipal officials and experts in the field (Table 1).

Table 1: Minimum Physical Standards of Services

Service	Population/Area Target	Service Level Target
Water supply	• 100% population to be covered	• Piped water supply with sewerage: 150/135* lpcd. • Piped water supply without sewerage: 70 lpcd. • Public stand posts in the low-income settlements with a minimum supply of 40 lpcd.
Sanitation/Sewerage	• 100% city area to be covered by sewerage system with treatment facilities in large urban centres • Low cost sanitation methods for other urban areas.	• Large city: Full coverage by sewerage with treatment. • Medium towns: Public sewers with partial coverage by septic tanks. • Small town: Low cost sanitation methods. • In low-income areas of large cities, community latrines may be provided.
Solid Waste Collection Disposal	• All the solid waste generated should be collected and disposed	• 100% collection of generated waste, with its proper disposal. • Hazardous wastes such as hospital wastes must be incinerated in all cases. Whereas mechanised composing and incineration is recommended for large urban centres, sanitary landfill method of disposal may be used in small and medium towns.
Primary	• Fulfilment of national goal of	- Provision of primary school in all areas of country as

[1] In 1995, the Union Ministries of Rural Areas and Employment and Urban Affairs and Employment, and the Planning Commission had constituted a Resource Group on State Finance Commission under the Chairmanship of Dr. Raja J Chelliah, the then Fiscal Adviser to the Ministry of Finance, Government of India. National Institute of Urban Affairs (NIUA), National Institute of Pubic Finance and Policy (NIPFP) and the National Institute of Rural Development (NIRD) have been identified as the key institutions to support the activities of this Resource Group. With a view to provide the Guide lines to the State Finance Commissions on various matters pertaining to sound financial health of local bodies, the Group had set six working Groups on different aspects. The Working Group on Expenditure Norms was constituted to: (i) evolve guidelines for setting out the minimum norms of expenditure, (ii) suggest methods of adjusting the norms to specific state or regional situations and (iii) propose methodologies for undertaking studies on establishing expenditure norms.

Service	Population/Area Target	Service Level Target
Education	universalisation of elementary education for children up to 14 years of age.	per the following guidelines: - At least three reasonably large all weather rooms with teaching material. - At least one teacher per class room/section. - One primary school for every 3000-4000 population. Area: 3 acres; seats/school; 300-400. - In order to improve enrolments at the upper primary stage especially for girls, the walking distance of school should normally be 2 Kms. In case of primary schools this standard is 1 Km.
Primary Health Care	• Health for All	• Basic Health and family welfare services within 1-2 km. distance of residents. • One Health Center for 20,000 population

* Tenth Five Year Plan, Planning Commission, New Delhi, para 6.2.9
Source: NIUA (1995); GOI (1999) and COPP (1973).

Financial Norms for Provision of Municipal Services

Financial norms and standards have been suggested by the Zakaria Committee and Planning Commission for providing the urban infrastructure and services. These norms and standards have been updated at 2004-05 prices (Table 2). It may be seen from the table that the Zakaria Committee has suggested the unit cost for provision of water supply in different classes of municipal bodies on the basis of the requirements of water for various purposes, sources of supply, type of treatment to be provided and such other factors.

Table 2: Suggested Financial Norms for Provision of Core Municipal Services (at 2004-05 prices)

(Rs./capita)

Core Services	Planning Commission		Zakaria Committee (w. average)
	Low	High	
Water Supply	1260.24	1890.36	907.88
Sewerage	1260.24	1418.36	1234.92
Solid Waste Disposal	158.12	252.52	n.a.
Storm Water Drains	473.18	630.12	621.43
Roads	1260.24	1890.36	1063.74
Street Lighting	377.60	377.60	527.57

Source: Zakaria Committee (1963) Financial Resources of Urban Local Bodies, (wt avg. of class wise norms)
Planning Commission (1983) Task Force on Housing and Urban Development.
Note: N.A.- Not Available

In this context, some of the Organisations/Committees, viz. HUDCO, Rakesh Mohan Committee and CPHEEO have suggested financial requirements for the provision of urban services.

As per the HUDCO estimates worked out at 2004-05 prices, the cost of surface water supply was estimated from Rs.1.04 crores per mld to Rs.2.61 crores per mld. While the cost of ground water supply was estimated from Rs.26 lakhs to Rs. 79 lakhs mld. However, the HUDCO estimates the per capita investment for sanitation were as follow:
Sewerage augmentation: Rs. 2,089.80

Conventional Treatment: Rs.208.98
Septic tank with soak pit: Rs.5224.50
Twin-pit without: Rs.486.98 (15 users)
Superstructure to Rs.835.92 (5 users)

The India Infrastructure Report submitted by Rakesh Mohan Committee (1996) has estimated the aggregate levels of total annual investment requirements for urban infrastructure including water supply and sanitation and other infrastructure would be in the region of Rs.28,297 crores over the period of 1996-2001 and it would be Rs.27,773 crores for the period of 2001-2006.

The CPHEEO has estimated the requirement of funds for achieving 100 coverage for the 36.3 crores by the end of the Tenth Five Year (i.e. 2007). In regard of sewerage and sanitation, the CPHEEO has assessed that 57 per cent of the urban population was likely to be covered by end of Ninth Five Year Plan. The estimates were based on the proposed coverage of two-third of the urban population (Tenth Five Year Plan).

On the basis of above-mentioned assumptions of requirements to be met, the CPHEEO has estimated the requirements during the Tenth Plan, which are as follow:

Water Supply	Rs.28,240 crores
Sanitation	Rs.23,157 crores
Solid Waste Management	Rs.2, 322.60 crores
Total	Rs.53,719.80 crores

Source: Tenth Five-Year Plan, Planning Commission, New Delhi.

Recommendations Given by the State Finance Commissions (SFCs) for Urban Basic Services

The Constitution (74th) Amendment Act, 1992 (CAA) made an attempt to strengthen the municipal institutions. The Act provides a constitutional form to the structure and mandate of municipalities to enable them to function as an effective democratic institution of local self-government. Assignment of appropriate functions to the municipalities through Twelfth Schedule of the Constitution and mandatory provision for Constitution of Finance Commission by every state, once in five years to review the financial health of the municipalities in the state and make recommendations to strength the finances of the municipalities are some of the salient features of the Act. Twelfth Schedule not only provides the conventional civic functions in the list of eighteen functions like water supply, sanitation; but also has added the development functions such as planning for social development, social justice and urban poverty alleviation programmes in the list of municipal functions. Considering the present institutional arrangements for services like water supply and sanitation, the state level agencies, and parastatal organisations may continue to plan and implement capital works, the responsibility of operations and maintenance may have to be progressively decentralized to municipal bodies and where feasible to private sector.

Although the proposed standards are labelled as “minimum”, it is quite that in some cities, many settlements especially low-income clusters may be far below this level. In that case, the State Finance Commissions, constituted as per the provisions of the Constitution (74th) Amendment Act of 1992 has looked into the matter and suggested a time frame within which each settlement should achieve the target and make the necessary recommendations to enable the local bodies/service delivery agencies concerned to reach the target and introduce the concept of equity in the delivery of basic urban services to their residents (see details in Appendix 6).

CDPs' Norms vis-a-vis Zakaria Committee's Norms

As the investment norms suggested by the Zakaria Committee are very old and seems to be outdated for the existing financial requirements for the maintaining the minimum level of municipal services, it becomes imperative to examine whether the investment norms suggested by the NURM cities have been worked out keeping in view the Zakaria Committee norms. For this purpose, five metro cities namely Madurai, Pune, Vijayawada, Jabalpur and Coimbatore were selected randomly and compared the Zakaria Committee's norms with the norms worked out from the CDPs of the cities. It may be observed from Table 3 that cities like Pune, Jabalpur and Coimbatore (except street lights) are below the Zakaria Committee's norms.

Table 3: CDPs' Financial Norms for Some Metros Compared with Zakaria Committee's Financial Norms

Cities	**Class**	**Core Services**	**Service Norms (Rs/ capita) at 2004-05 price)**		**Remarks**		
			Zakaria Committee	CDPs (Avg. of 5 years)	(as compared to zakaria committee)		Percentage
Madurai	Metro	Water Supply	244.02	518.83	-274.81	Above	112.62
		Sewerage and Sanitation	280.04	327.48	-47.44	Above	16.94
		Street Lights	68.09	18.65	49.44	Below	-72.61
Pune	Metro	Water Supply	244.02	115.05	128.97	Below	-52.85
		Sewerage and Sanitation	280.04	220.69	59.35	Below	-21.19
		Street Lights	68.09	57.66	10.43	Below	-15.32
Vijayawada	Metro	Water Supply	244.02	853.09	-609.07	Above	249.60
		Sewerage and Sanitation	280.04	1026.74	-746.70	Above	266.64
		Street Lights	68.09	n.a			
Jabalpur	Metro	Water Supply	244.02	236.42	7.60	Below	-3.11
		Sewerage and Sanitation	280.04	277.15	2.89	Below	-1.03
		Street Lights	68.09	n.a			
Coimbatore	Metro	Water Supply	244.02	131.61	112.41	Below	46.07
		Sewerage and Sanitation	280.04	370.91	-90.87	Above	32.45
		Street Lights	68.09	21.35	46.74	Below	-68.64
Source: Zakaria Committee and City Development Plans							

Infrastructure Norms and Urban Poverty

Studies show that poor suffers the most with the lack of an adequate infrastructure and services in the urban settlements. This requires specific programmes that improve the living and working conditions of the poor by improving access to basic services. Poverty is an unacceptable human condition, and its eradication is one of the major objectives of the national development policies in India. In the past, Planning Commission and other institutions of Govt. of India as also the international organizations relied heavily on income levels as the key indicator to access the poverty. In recent years however, there in a common agreement between various experts and organizations that poverty cannot be assessed by using the traditional method of income alone, but it require a multi dimensional approach which includes social backwardness, gender in-equalities and the most important among them is the access to basic services.

The Ninth plan of Govt. of India accepted this fact and has stated clearly " high growth of incomes is by itself not enough to improve the quality of life of the poor. Un less all the citizens of the country, and particularly the poor, have certain basic minimum services, their living conditions cannot improve. The basic services include among others primary health, potable water supply and sanitation" (GOI 1999). In ADB's view, poverty is a deprivation of essential assets and opportunities to which human in entitled. " Every body should have access to basic services. Poverty is thus better measured in terms of basic education, health care, nutrition, water and sanitation, as well as income, employment and wages" (ADB 1999).

The poverty in urban areas leads to proliferation of slums, fast growth of informal sectors and increasing pressure on city infrastructure and services. Poverty alleviation has been one of the major goals of Indian urban policy, which was addressed through its five-year national plans. Initially poverty reduction focused on social and economic equity and later as distortion in income distribution. The Fifth Five Year Plan identified Environmental Improvement in Urban Slums (EIUS) as a basic need of the poor. The Seventh Plan made an attempt to address urban poverty issues directly instead of treating them as more adjunct of rural poverty. The Urban Basic Services for the poor (UBSP) took a participatory approach in tackling physical and social needs of urban poor.

Although a series of programmes have been launched to raise living standards among the urban poor, it is only ELUS, which has laid down certain physical standards of basic to improve the quality of life of urban poor. This scheme was began in 1972 as Integrated Urban Development Programme (IUDP) in cities with a population of three lakh and above with the provision that in sates where there was no city of the size, at least one city would be covered. In 1974, the scope of the EIUS was enlarged and the scheme was made applicable to all urban centres in country. Further, the scheme was made an integrated part of the Minimum Needs Programme and was transferred to the state sector as a central scheme with a special assistance @ 150/- per slum dweller. This amount has been raised to Rs.800/- w.e.f. 01.04.1995. The EIUS programme envisages the provision of a package of urban basic services/amenities as per the following Table 4.

Table 4: Physical Norms and Standards as per Govt. Sponsored EIUS Programme

Service Components	Level/Norms
1. Water supply	One tap for 150 persons
2. Sewerage	Sewer open drains with normal outflow avoiding accumulation of stagnant waste water
3. Strom water drains	To drain out storm water quickly
4. Community baths	One bath room for 20-50 persons
5. Community latrines	One latrines for 20-50 persons
6. Footpaths/lanes	Widening and paving of existing lanes to make room for easy flow of pedestrian, bicycles and handcarts, lane on paved paths to avoid mud and slush.
7. Street lighting	Poles 30 meters apart
8. Additional activities	Community facilities such as community centres, crèche, dispensaries, non-formal centres, parks, common work sheds-cum-raw materials depot for poor, common retail outlay for beneficiaries, municipal service centres for garbage disposal and maintenance have been added to the charter of activities of the EIUS programme.

Source: GOI (1996); A compendium of Central Schemes for Urban Development, Urban Transport and Public Health Engineering, Ministry of Urban Affairs & Employment, Government of India, 1996.

It is to be noted that as per the Planning Commission, Govt. Of India, the EIUS Programme has been subsumed under JNNURM and no further funding will be providing to this scheme beyond 2006-07.

Following Table 5 presents the physical norms and standards adopted for the World Bank funded slum upgradation projects in Mumbai and Chennai, and also the norms as suggested under the Kerala Urban Development Project (KUDP), for the proposed slum improvement and up gradation project in Trivandrum, Cochin and Calicut (NIUA 1993).

Table 5: Service Norms for Slum Up gradation Programme, as Suggested under the World Bank Funded Projects, as also by other Agencies

Service Component	World Bank Funded Proiect		KUDP
	Bombay	Madras	
Pathways	Pathway Access to Every Plot	Pathway Access to Every Plot	1.5m to 3m Wide Pathways @ 660m Length for the Subject to Availability of Land
Drainage	For Every Plot	For Every Plot	660m Length for 1 ha. (For Every Plot Subject to Over all Nature of Slum, (Land Position and Gradient)
Water Supply Posts	1 for 15 HHs.(75 Persons) @ 45 Ipcd	1 for 10 HHs. (50 Persons)	1 Tap for 75 Persons
Community Latrine Seats	1 for 10HHs.(50 Persons)	1 for 10 HHs. (50 Persons	1 for 50 Persons
Street Lighting Posts	On Major Roads	-	20 Posts for 1 ha.
Garbage Collection Points	1 for 15 HHs. (75 Persons)	-	1 Point for 75 Persons

Source: NIUA (1993): Slum Improvement and Up gradation Project for Trivendrum, Cochin and Calicut, National Institute of Urban Affairs, Research Studies No. 51, (Main Report)

Some other important programmes targeting the urban poor are: Minimum Needs Programme, Low cost sanitation, accelerated urban water supply scheme and National Slum Development Programme (NSDP) of Govt. of India. The Minimum Needs Programme (MNP) for example, suggested to ensure a basic minimum standard of life for all sections of people living in the country irrespective of their social, economic, civic and gender status. The programme recommended for 100 percent coverage by safe drinking water supply, primary health care services, primary education, etc. for the entire population of the country including slums. The Ninth Five Year Plan of the Govt. of India primarily concerned with the universal coverage by drinking water supply in the Urban India both in terms of its quality and quantity. The plan has talked about the minimum per capita consumption norms, besides other regularity and operational mechanism.

There is a wide variation in the availability of infrastructure and services among cities and within the cities. The bigger cities have better institutional arrangements and quality of service. Within the cities, capital cities get more attention followed by other cities with greater economic activity while the very small towns with extremely limited resources rarely see any improvement. The Tenth Five Year Plan felt that the Planning and financial support will need to be targeted at reducing the notable disparities of urban centres with significant limitations in resources and glaring lack of civic amenities.

Estimated Additional Investment Needs for Provision of Basic services as suggested by the Zakaria Committee and Planning Commission

For estimating the additional investment needs for the provision of core urban services for various states by using different norms and standards, the following procedure was adopted: the suggested norms at 2004-05 prices multiplied by the projected additional population to be served (population of 2010 minus the population of base year 2000) multiplied by (30% of the 2000 population multiplied by the norms).

Table 6 gives the estimated additional investment needs for the core municipal services at the 2004-2005 prices for the year 2010. For the urban areas of the country, the Planning Commission estimates a low investment requirement of Rs.82, 732 crore and a high requirement of Rs.111574 crores for the elimination of deficiencies in the existing level of services. The average investment required per annum is thus worked out at Rs.9193 (low) and Rs. 12397 (high). On the other hand, the estimates provided by the Zakaria Committee register a requirement of Rs.75235 crores. The average per capita investment required in this case is Rs. 8359.

The state-wise additional investment requirements for the provision of core services shows that the additional financial requirements vary significantly from one state to another, depending upon the population size of the state. States with a larger population such as Maharashtra, Uttar Pradesh, Haryana,Andhra Pradesh, Madhya Pradesh, West Bengal, Tamil Nadu etc would require a larger amount for the provision of services whereas states with a small population such as Goa, Tripura, Manipur, Himachal Pradesh etc. would require a smaller amount for expansion and provision of services. Further, as the norms vary with the method used, the financial needs for the provision of services also vary from one option to another among various states. This provides flexibility in choosing the various investment options keeping in view the affordability of the concerned local government and the consumers, the socio-economic and physical conditions of the city or town and other non-economic factors. It may be mentioned that on an average, every year 15 per cent of the estimated investment required by the local governments would be used up for debt servicing.

Table 6: Estimated Additional Investment Needs for Provision of Core Municipal Services (at 2004-05 prices)

(Rs. In Crores)

States	Planning Commission 1.				Zakaria Committee 2.	
	2010		Average per annum (2010)		2010	Avg Per Annum
	Low	High	Low	High		
Andhra Pradesh	4323.21	5830.32	480.36	647.81	3931.41	436.82
Assam	1042.62	1406.08	115.85	156.23	948.13	105.35
Bihar	4052.00	5464.56	450.22	607.17	3684.78	409.42
Gujarat	5514.30	7436.63	612.70	826.29	5014.55	557.17
Goa	215.13	290.12	23.90	32.24	195.63	21.74
Haryana	2270.68	3062.25	252.30	340.25	2064.89	229.43
Himachal Pradesh	172.96	233.25	19.22	25.92	157.28	17.48
Jammu Kashmir	770.23	1038.73	85.58	115.41	700.42	77.82
Karnataka	4924.44	6641.14	547.16	737.90	4478.15	497.57
Kerala	1479.51	1995.28	164.39	221.70	1345.43	149.49
Madhya Pradesh	5874.77	7922.76	652.75	880.31	5342.35	593.59
Maharashtra	12267.26	16543.72	1363.03	1838.19	11155.50	1239.50
Manipur	115.55	155.84	12.84	17.32	105.08	11.68
Orissa	1533.32	2067.85	170.37	229.76	1394.36	154.93
Punjab	2585.19	3486.41	287.24	387.38	2350.90	261.21
Rajasthan	3765.62	5078.35	418.40	564.26	3424.35	380.48
Tamil Nadu	9165.46	12360.62	1018.38	1373.40	8334.82	926.09
Tripura	149.08	201.05	16.56	22.34	135.57	15.06
Uttar Pradesh	10738.27	14481.71	1193.14	1609.08	9765.08	1085.01
West Bengal	5308.03	7158.45	589.78	795.38	4826.98	536.33
Total selected states	**76267.64**	**102855.15**	**8474.18**	**11428.35**	**69355.68**	**7706.19**
All India	**82732.66**	**111573.94**	**9192.52**	**12397.10**	**75234.79**	**8359.42**

1. Services Covered: - Water Supply, Sewerage, Solid Waste Disposal, Drainage, Roads and St. Lights.

2. Services Covered: - Water Supply, Sewerage, Drainage, Roads and Street Lights.

It may be mentioned that the Zakaria Committee has suggested the desirable levels of expenditure on operation and maintenance (O&M) of critical municipal services, keeping in view the population size of a city and the physical standard of services. The Planning Commission, however, has not suggested any norms and standard for operation and maintenance of services, which could be used by urban local governments to work out service specific fiscal resource gaps.

Operation and Maintenance Requirements for Maintaining Urban Basic Services

For computing fiscal requirements for the upkeep and maintenance of core urban services at the barest minimum level, the following expenditure norms are available at the national level:

i) Zakaria Committee Norms: The Zakaria Committee had laid down the desirable levels of expenditure on the operation and maintenance of core urban services at 1960; and

ii) NIPFP Study Norms: National Institute of Public Finance and Policy (NIPFP) has done extensive work for the Twelfth Finance Commission on the financial health of the municipality in India. The study on 'India's Municipal Sector: A study for the Twelfth Finance Commission has been taken into consideration for computing of resource generation. Projections of resource generation at different levels (municipality/state) have been worked by using the average per capita revenue generated in a municipality through its own sources (tax and non-tax).

It is estimated that municipal bodies of India will require an amount of approximately Rs.115257 crores (at 2004-05 prices) over a period of six years i.e. 2005 to 2010 in order to be able to operate and maintain the core municipal services at the levels proposed by the Zakaria Committee. The average annual requirements in this regard are roughly Rs.23051 crores (Table 8). These estimates have been worked out by multiplying the operation and maintenance expenditure norms with the projected population of each state in the reference year.

Estimation of Resource Gap

In order to compute the fiscal resource gap in the various states as well as for Urban India as a whole, the estimates of resource generation from the own sources of municipalities at the state level have been worked out by using the NIPEP study on 'India's Municipal Sector: A study for the Twelfth Finance Commission' (2004). The average per capita revenue generated in each state by the sampled municipalities of that state from their own sources (tax + non tax) has been used as the desirable level of resource generation in that particular state. This level is expected to be achievable by a municipality of the concerned state and is, therefore, realistic for computing resource generation. As the NIPFP study data related to the year 2001-02, it has been updated to 2004-05 prices. Resources generation in various states is estimated by multiplying the average per capita revenue from own sources in a state with the projected population of the state in the reference year.

Data presented in Table 8 shows that at the present rate of municipal taxation, user charges and efficiency, it is expected that nearly three-fourth of the total operation and maintenance requirements will be generated by the municipal bodies themselves, leaving a recurrent resource gap of approximately Rs.6429 crores per annum for the country as a whole.

Following method has been used for computing the resource gap at various state levels by using different norms and standards: -

RGr=(Pr * N)-Plr
Where:
RGr is the revenue or resource gap in the reference year at 2004-05 prices;
Pr is the projected population of the reference year;
N is the suggested O & M expenditure norms, adjusted at 2004-05 prices; and
Plr is the projected resource generation (own sources) in the reference year at 2004-05 prices.

Statewise comparison of the estimated resource generation as a percentage of operation and maintenance expenditure needs has been used as an indicator to assess the level of the resource gap. It shows that resource gap is the highest in Bihar, followed by Tripura, Manipur, Jammu & Kashmir, Uttar Pradesh, Rajasthan, Assam etc. The resource gaps in the most of the states are much higher than the national average i.e. 27.89 (Table 8). As compared to table 7, it may be noted that the resource gaps at the national level has been decreased from 31.64 per cent in 1996-97 to 27.89 in 2004-05. This decrease may be attributed to the municipal reforms implemented in some of the state during a period of last ten years. For example, the resource gaps in the states of Andhra Pradesh, Assam, Kerala, Tamil Nadu and West Bengal have been decreased during the said period. However, it may also be seen from Tables 7 & 8 that the resource gaps in most of the states have increased instead of decreasing. This suggests that these states have to generate much more resources to bridge the gap.

Table 7 : Estimated Financial Needs for Operation and Maintenance of Core Municipal Services in Urban India from 2000 to 2005 as per Zakaria Committee Norms

(Rs. crores at 1996-97 prices)

State	O&M Requirements ©	O&M Average Per Annum	Resource Generation ©	Resource Generation as % of O&M Require-ments	Resource Gap ©	Resource Gap as % of Resource Generation	Resource Gap as % of Require-ments	Average Resource Gap Per Annum
Andhra Pradesh	5838.75	973.12	2683.77	45.96	3154.98	117.56	54.04	525.83
Assam	671.28	111.88	46.71	6.96	624.56	1337.07	93.04	104.09
Bihar	3318.06	553.0 1	209.13	6.30	3108.93	1486.58	93.70	518.15
Gujarat	4318.24	719.71	5702.10	132.05	-1383.86	-24.27	-32.05	-230.64
Goa	163.46	27.24	101.96	62.38	61.50	60.31	37.62	10.25
Haryana	1325.38	220.90	740.09	55.84	585.29	79.08	44.16	97.55
Himachal Pradesh	140.19	23.37	265.71	. 189.53	-125.52	-47.24	-89.53	-20.92
Karnataka	4043.43	673.90	2553.86	63.16	1489.57	58.33	36.84	248.26
Kerala	2871.16	478.53	1086.77	37.85	1784.38	164.19	62.15	297.40
Madhya Pradesh	5074.00	845.67	2009.97	39.61	3064.03	152.44	60.39	510.67
Maharashtra	9617.20	1602.87	14807.60	153.97	-5190.39	-35.05	-53.97	-865.07
Meghalaya	102.10	17.02	22.15	21.70	79.95	360.87	78.30	13.32
Orissa	1303.48	217.25	893.96	68.58	409.52	45.81	31.42	68.25
Punjab	1731.97	288.66	2073.00	119.69	-341.04	-16.45	-19.69	-56.84
Rajasthan	3189.92	531.65	1536.80	48.18	1653.12	107.57	51.82	275.52
Tamil Nadu	5053.41	842.24	2195.69	43.45	2857.73	130.15	56.55	476.29
Tripura	187.72	31.29	13.03	6.94	174.69	1341.13	93.06	29.12
Uttar Pradesh	8682.89	1447.15	3033.78	34.94	5649.11	186.21	65.06	941.52
West Bengal	5432.72	905.45	684.83	12.61	4747.89	693.29	87.39	791.31
Total Selected States	**63065.36**	**10510.89**	**43110.00**	**68.36**	**19955.36**	**46.29**	**31.64**	**3325.89**
All India	**66797.00**	**11132.83**	**45660.86**	**68.36**	**21136.14**	**46.29**	**31.64**	**3522.69**

Note: © refers to Cumulative amount from 2000-2005
Source: worked out as per Zakaria Committee norms

Table 8 : Estimated Financial Needs for Operation and Maintenance (O & M) of Core Municipal Services in Urban India from 2005 to 2010 at 2004-05 prices as per Zakaria Committee norms

(Rs. In crores)

States	O & M Requirements	Average O & M per annum	Resource Generation as a % to O & M rqmt.	Resource Gap	Resource gap as a % to resource generation	Resource gap as a % to O&M requirement	Average resource gap per annum
ASSAM	1396.09	279.22	17.61	1150.31	468.02	82.39	230.06
BIHAR	5832.90	1166.58	5.44	5515.42	1737.28	94.56	1103.08
GUJARAT	7649.35	1529.87	122.11	-1691.32	-18.11	-22.11	-338.26
GOA	279.73	55.95	42.55	160.70	135.02	57.45	32.14
HARYANA	2692.94	538.59	28.48	1926.09	251.17	71.52	385.22
HIMACHAL PRADESH	240.50	48.10	53.07	112.85	88.41	46.93	22.57
JAMMU KASHMIR	1031.74	206.35	7.47	954.70	1239.38	92.53	190.94
KARNATAKA	7114.97	1422.99	51.28	3466.12	94.99	48.72	693.22
KERALA	2917.81	583.56	51.10	1426.76	95.69	48.90	285.35
MADHYA PRADESH	8188.40	1637.68	33.09	5479.16	202.24	66.91	1095.83
MAHARASHTRA	16737.54	3347.51	225.78	-21053.27	-55.71	-125.78	-4210.65
MANIPUR	207.58	41.52	7.12	192.79	1303.86	92.88	38.56
ORISSA	2192.69	438.54	30.02	1534.39	233.08	69.98	306.88
PUNJAB	3418.31	683.66	141.48	-1417.77	-29.32	-41.48	-283.55
RAJASTHAN	5305.21	1061.04	12.59	4637.38	694.39	87.41	927.48
TAMIL NADU	11573.85	2314.77	50.74	5701.45	97.09	49.26	1140.29
TRIPURA	215.56	43.11	6.54	201.46	1429.01	93.46	40.29
UTTAR PRADESH	14863.02	2972.60	12.52	13001.65	698.50	87.48	2600.33
WEST BENGAL	8530.12	1706.02	32.36	5770.00	209.05	67.64	1154.00
Total (Selected)	**107928.24**	**21585.65**	**72.47**	**29746.16**	**37.98**	**27.53**	**5949.23**
All India	**115256.78**	**23051.36**	**72.11**	**32143.69**	**38.67**	**27.89**	**6428.74**

Source: Worked out as per Zakaria Committee wt. Average norms adjusted at 2004-05 prices.

Note: O & M need worked out for the Fiscal Years such as 2005. For computation purposes in case of 2000-01 the year 2000 is deleted so as in the case of 2004-05 the fiscal 2005 has been added.

Ways and Means to Bridge the Resource Gap

The State Finance Commissions constituted as per the provisions of the Constitution (74th) Amendment Act have recommended a series of action areas for strengthening the finances of urban local bodies. This includes refurbishing property tax, increasing the use of non-tax resources including land, proper pricing of services and user charges, privatisation of services and easy access to institutional finance. They have also suggested a new system of tax sharing between the state and local taxes, levies etc. will be pooled together and a proportion thereof

devolved to the local bodies of the state. In this system, adhocism will be minimised and the local bodies would be able to know in the beginning of each fiscal year of their share in the net proceeds of state taxes. As a result, they would be in a position to plan their expenditure accordingly. This will also make them realise that it is possible for them to meet their expenditure from their own sources of revenue by using various tools of resource mobilisation/generation. In the proposed system, local bodies will also benefit from the buoyancy of state taxes. As state taxes grow with the growth in the state economy, the benefits of economic growth in the state will be automatically transferred to the local bodies. In addition to tax sharing, State Finance Commissions have also suggested the criteria for the distribution of grants-in-aid to the local bodies of the state. In some states, it is to be based on the population while in others it is to be based on the performance of the concerned local body. The Tenth Finance Commission has also recommended certain grants (plan) for the local bodies over and above the devolution recommended by the State Finance Commissions. Thus the recommendations of the State Finance Commissions, if implemented properly, may go a long way to strength municipal finances in India.

Municipal Reforms in Urban Governance

Jawaharlal Nehru National Urban Renewal Mission (JNNURM)

JNNURM is perhaps the biggest reform programme in urban sector in India aims to make cities self-sustaining, efficient and responsive to the needs of their residents. The Mission consists of two sub-missions: (i) the Urban Infrastructure and Governance and (ii) the Basic Services to the Urban Poor.

The main thrust of the mission is to:

- Improve and augment the economic and social infrastructure of cities;
- Ensure basic services to the urban poor including security of tenure at affordable prices;
- Initiate wide-ranging urban sector reforms to eliminate legal, institutional and financial constraints that have impeded investment in urban infrastructure and services;
- Strengthen municipal governments and their functioning in accordance with the provisions of the Constitution (seventy-fourth) Amendment Act, 1992.

“The Mission has three basic elements:

(a) *Integrated development of infrastructure* services by providing adequate funds to meet the deficiencies in urban infrastructure services. This includes funding infrastructure projects relating to water supply and sanitation, sewerage, solid waste management, road network, urban transport, and redevelopment of old city areas. The programme lays special emphasis on urban renewal programme for the old city areas to reduce congestion. It also attempts to ensure planned development of cities including peri-urban areas, outgrowths and urban corridors leading to dispersed urbanization.

(b) *Provision of Basic services to the urban poor* by up scaling the delivery of civic amenities and provision of utilities. The emphasis is on universal access and includes security of tenure at affordable prices, improved housing, water supply and sanitation, and delivery of other existing services of the government for education, health and social security.

(c) Adoption of *wide ranging urban sector reforms,* which will facilitate establishment of linkages between asset-creation and asset management and ensure long-term project sustainability. The thrust is to ensure improvement in urban governance and service delivery so that ULBs become financially sound and sustainable for undertaking new programmes. A set of *thirteen mandatory reforms* at State and Central level and *ten optional reforms* at the level of State, ULB and Parastatal Agency is listed in the *Toolkit*. All the twenty-three reforms need to be implemented in the mission period. Cities have the freedom to opt for any two reforms from the optional category in each year of implementation of JNNURM" (Paramita, Raghupathi, Thakur and Gupta, 2006).

The mission covers 63 cities accounting to 42 per cent of India's urban population, including metropolitan cities with more than one million population, state capitals, important pilgrimage and tourist centers, etc.

A.	Cities/UAs with 4 million plus population as per 2001 census	07
B.	Cities/UAs with 1 million plus but less than 4 million population as per 2001 census	28
C.	Selected Cities/UAs (State Capitals and other Cities/UA of religious/historic and tourist Importance)	28
	Total	**63**

Each city has to prepare the City Development Plans (CDPs), Detailed Projects Reports (DPRs) for the projects being proposed, sign a Memorandum of Agreement (MoA) with the Ministry of Urban Development for a timeline for urban reforms. As of now, only 56 cities have been submitted CDPs out of which 40 have been appraised by National Institute of Public Finance and Policy (NIPFP), National Institute of Urban Affairs (NIUA), School of Planning, Ahmedabad, Indian Institute of Management (IIM), Ahmedabad, Administrative Staff College, Hyderabad etc. An overview of the city developments indicates that in many cases, involvement of the elected local bodies has been formal rather than substantive. Appraisal by expert agencies indicate that there are many gaps in the CDPs such as the geographical coverage of the city, economic functions, problems of the urban poor in assessing the services etc. (Nagarpalika Update, 2006).

Reforms in Municipal Accounting System in India

The 74th CAA, which delegated power to local bodies, has spurred municipal accounting reforms on India. The Accounting Standards Board of the Institute of Chartered Accountants of India (ICAI), India's premier accounting bodies that establishes accounting standards for all business entities in India, formed a subcommittee in 1999 to issue accounting standards for government, including urban local bodies. As the first step, the Accounting Standards Board issued a technical guide on Accounting and Financial Reporting By Urban Local Bodies. Its recommendations are:

- Financial reporting should be based on the accrual basis of accounting;
- Financial accounting and reporting must conform to accept accounting standards and policies; and
- ULBs should use the standard and model financial reporting formats in the Guide**.**

The recommendations in the Technical Guide have received positive response from the Ministry of Urban Development and Poverty Alleviation, Comptroller & Audit General of India, as well as State Governments and ULBs that are implementing municipal accounting reforms.

In pursuance of the recommendations of the Eleventh Finance Commission and Guidelines for the Utilization of Local Bodies Grants issued by Ministry of Finance, Department of Expenditure, Government of India, the Comptroller and Auditor General of India (CAG) was to prescribe the Accounting and Budget Formats for Urban Local Bodies (ULB). Accordingly, CAG constituted a Task Force, which submitted its report on Accounting and Budget Formats for Urban Local Bodies to the Ministry of Urban Development (MoUD). The Government accepted the report of the Task Force of India and forwarded to State Governments for implementation, keeping in view the local requirements.

In this context, MoUD organized a “National Workshop on Municipal Accounting Reforms”, wherein it was agreed that the CAG, with USAID FIRE-D support, would Prepare model national municipal accounts manual and a companion model-training Manual and common software for computerization of budget and accounts and these will be provided by the MoUD to the State Governments. Based on these, the State Governments can prepare state-level accounting manual, state-level training manual and adopt the software according to their requirements. Pursuant to these decisions, the CAG constituted a committee under the Chairmanship of the Deputy Comptroller & Auditor General (Local Bodies), to monitor and provide guidance for the development of the model-accounting manual, model-training manual and development of the accounting software.

Since the development of model training manual and the development of the accounting software were to be based on the model accounting manual, the aforesaid Committee decided to proceed with the development of the model accounting manual on a priority basis. Now that the National Municipal Accounts Manual (NMAM) has been prepared and launched, the MoUD has decided to proceed with the development of a companion-training manual and accounting software.

A.F. Ferguson & Co. (AFF) has been appointed by the National Institute of Urban Affairs (NIUA), New Delhi under the Indo-USAID Project on Financial Institutions’ Reform and Expansion (FIRE–D), to carry out the task of “Development of a Model Nation Municipal Accounting Training Manual” and “Selection of Municipal Accounting Software Based on National Municipal Accounts Manual”.

The main objective, as per our understanding, is to develop model NMATRAM on the NMAM to enable strengthening of capacity of local governments through introduction of improved financial management, budgeting, accounting and auditing practices.

National Strategy for Urban Poor

The project entitled **'National Strategy for Urban Poor'** is sponsored by the Government of India with the support of United Nation Development Programme (UNDP). The one of the objectives of the project is to support adoption of a new national strategy for urban poverty reduction and to empower the urban poor so that they can contribute effectively to decisions in the public domain that impact their lives. National Institute of Urban Affairs (NIUA) is undertaken the two components (i) target support to NGOs in the National Capital Region (NCR) to promote urban poor concerns and (ii) Urban Poverty Reduction Strategies for the selected cities.

Six resettlement colonies in Delhi have been selected for NCR component, namely Bawana, Dakshinpuri, Jahangirpuri, Kalyanpuri, Madipur and Nandnagri. Twenty one Non-Government Organisations (NGOs)/Consultative firms have been engaged to work in the fields of solid waste management, health and disability, livelihood, employment, training and informal sector, micro credit, women and children, urban upgradation.

Conclusions and Suggestions

A variety of norms and standards are available for basic infrastructure and services for urban settlements including slums. Whereas national level committees such as Zakaria Committee or COPP have suggested norms, which represent the most desirable levels of services, the poverty elimination programmes such as EIUS has proposed service standards at the community level, set down decades ago and has no relevance in the present socio-economic environment. Infect, the quantum of community facilities / services /amenities to be provided in an urban settlement contingent upon a number of factors, including demand and supply forces. On the demand side, it is population factor, the number and the rate of increase, its composition by age, sex, occupation and activities; the income levels and so on. Any change in either the number or its composition can effectively alter the demand for a given service. The supply side is represented by the availability of funds, technical expertise and such other factors. Apart from these, there are local factors such as topography, type of region, past history of infrastructure development and so on which may also influence the determination and eventual selection of a particular standard for a service for a particular group of population.

The slum-networking scheme implemented in the selected cities of the country namely Indore, Vadodara and Ahmedabad is another innovative approach to improve the quality of life of urban community. It is a holistic approach to urban improvement in which the slums are seen an integrated part of the city. Due to their contiguity on the water sources of the city, the slums forms a network which present an opportunity for change, rather than a problem for the city. The slum networking approach, which emphasizes land management, landscaping**,** individual services with simplified technologies, community participation in the infrastructure development process does not aim to find solutions for the slum areas of the city alone but rather to integrate the low-income settlements and other high-middle income areas of the city, and provide a better infrastructure and quality of life for both.

Keeping in view the aforesaid analysis of the norms and standards of the core municipal services for urban settlements including slums, existing additional investments needs, O & M requirements for the provision of maintaining of urban basic services, and estimation of resource gaps, following suggestions may given in this context to improve the coverage and quality of the core municipal services:

1. As mentioned above, the norms and standards suggested by various organisations and agencies have become outdated in view of the prevailing situation scenario. The Norms and standards should be revised periodically or at a fixed interval of time to improve and upgrade the services. However, the existing level of basic services is good but it is not good enough. Therefore, a fresh study should be undertaken to suggest new norms and standards keeping in view the prevailing financial, legal and institutional constraints of the municipalities.

2. In order to have a good financial cushion, our efforts should be made to eliminate the financial constraints and to generate the municipal resources. In this context, many State Finance Commissions of the states of India have suggested various ways and means to achieve this goal. Jawaharlal Nehru National Urban Renewal Mission (JNNURM), initiated by the Ministry of Urban Development, Government of India, has one of the missions to ensure the basic services to urban poor, and initiating the wide ranging urban sector reforms to eliminate financial, institutional and legal constraints. Further, a revolving fund would be created to meet the O & M requirements of assets created, over the planning horizon.

3. It is imperative to give momentum to cost recovery mechanisms. It is to be mentioned that some of the municipalities have initiated innovative cost recovery mechanism, i.e. advance registration charges, connection charges, betterment charges, water tax and application of general revenues and other receipts to meet some part of cost of capital works. As suggested by Tenth plan some measures viz. access market fund, instruments such as City Challenges Fund and the Pooled Finance Development Fund, may reduce the resource gaps.

4. It may be suggested to examine the distribution of core municipal services amongst the various sections of the society so that the urban poor may get good quality of life. It is important to keep a track on the Implementing agencies whether they are implementing the programme / scheme as per norms and standards or not. For this purpose a review Committee may be constituted having the representation of Chief Town Planner, Mayor and Commissioners of the civic authorities concerned. This review Committee may meet at least once in three months and try to suggest/coordinate corrective actions in case of lapses in the implementation of the scheme.

5. A study conducted by NIUA on " An Evaluative Study on Environmental Improvement in Urban Slums: A Case of Delhi", 2004, indicated that the basic minimum services in slums of Delhi are inadequate as per suggested norms and standards. Moreover, the services provided under any scheme are not maintained properly. It may be suggested that the services should be maintained on regularly basis. If the maintenance of services is contracted out to a private sector, the local body should strictly monitor the maintenance part.

Appendix Table I : Norms and Standards of Water Supply

Agency	Physical Standard	Cost of provision (Rs.per capita at 2004-05 prices)	Cost of 0 & M (Rs.per Capita/ annum, at 2004-05 prices)
a. Manual on water supply and Urban Development, Govt. of India, 1991	Small: 70-100 lpcd" Large: 150-200 lpcd Public stand Posts: 40 lpcd (PSP)	Not suggested	Not suggested
b. National Master Plan (NMP), India, International Water Supply and Sanitation Decade, 1981-90, Ministry of Urban Development, 1983	House connections: 70-250 lpcd with average of 140 lpcd Public stand Posts: 25-70 lpcd with average 40 lpcd	Not suggested	Not suggested
c. Basic Minimum Services Under Minimum Needs Programme, 9th Five Year Plan, Government of India, 1997-2002 (1999)	100% coverage by safe drinking water in urban areas. With Sewerage: 125 lpcd Without Sewerage: 70 lpcd With spot sources & Public stand posts: 40 lpcd. Remark: One source for 20 family within a maximum walking distance 100 metres.	Not Suggested	Not Suggested
d. Report on Norms and Space Standards for Planning Public Sector Project Towns, TCPO, Ministry of Works & Housing, Government of India, 1974	180 lpcd	Not suggested	Not suggested
e. Committee on Plan Projects for Industrial Townships (COPP), 1973	180-225 lpcd	Not suggested	Not suggested
f. Zakaria C.ommittee (ZC on Augmentation of Financial Resources of Urban Local Bodies, 1963.	Small: 45 lpcd Medium: 67.5 - 112.5 lpcd Large : 157.5-202.0 lpcd Super metropolitan: 270 lpcd	Small: 416.03 Medium: 508.48-693.39 Large: 901.40-1086.31 Super metropolitan: 1502.34	Small: 171.49 Medium: 174.73-199.69 Large: 226.50-235.76 Super metropolitan: 249.61
g. Operations Research Group (ORG), Delivery and Financing of Urban Services, 1989	Small: 80 lpcd Medium: 80-150 lped Large: 180 lped	Small: 1103.76 Medium: 583.82-1244.91 Large: 1471.80-2027.80	Not suggested
h. NIUA; Maintaining Gujarat Municipal Services - A Long Range Perspective, 1987	Small: 95-125lpcd Medium: with Industrial base - 150 lpcd Problem areas: 90 lpcd; Average: 80-150 lpcd Large: With Industrial base 170-210 lpcd Problem Areas: 120-125 lpcd Average: 115-210 lpcd	Problem Areas: 2295-2677 Average: 1147-1338.65	Small: 42.07 Medium: 45.90 Large: 84.14-110.92

Agency	Physical Standard	Cost of provision (Rs.per capita at 2004-05 prices)	Cost of 0 & M (Rs.per Capita/ annum, at 2004-05 prices)
i. NIUA; Costs of Urban Infrastructure, 1995 (based on DWSSDU, HUDCO & CIDCO Estimates)	Urban: Not suggested Rural: Not suggested	Small: 888.94 Medium: 714-739.27 Large: 1043.06 Metropolitan: 372.37	Small: 258.47 Medium: 198.41-218.78 Large: 315.93 Metro: 139.83
j. Government of Gujarat (GOG); Gujarat 2005 (papers on Perspective Plan), 1989.	Small: 100 lpcd Medium & Large: 140 lpcd Scarcity Season: 13 lpcd	House Connections: 1509.75 Problem areas: 1962.68 Augmentation/Extension: 754.88	Not suggested
K.Planning Commission (pc), Task Force on Housing and Urban Development (Financing l!rban Development), 1983.	Not suggested	Surface system: Low – 1555.77 High – 2222.54 Ground water: Low: 1270.02 High- 1906.86	Not suggested

* Litres per capita per day.

Appendix Table II : Norms and Standards of Sewerage/Sanitation System

Agency	Physical Standard	Cost of Provision (Rs/ Capita at 2004-05 prices)	Cost of 0 & M (Rs./capita/annum at 2004-05 prices)
a. The Manual on Sewerage and Sewage Treatment, CPHEEO, 1980	Not suggested in terms of population/ Area coverage, type of system, etc. However, it said that sewers should be For a minimum of 150 lpcd water Supply level.	Not suggested	Not suggested
b. National Master Plan, India, 1983	100 % population coverage by sewerage system with treatment facilities in class I cities and LCS for other urban centres	Not suggested	Not suggested
c. Zakaria Committee, 1963	Small: Low cost sanitation methods Medium: Public sewers with partial coverage by septic tanks and partial treatment to sewage. Large: Full coverage by sewerage with proper treatment facilities. Super Metro: Same as above	Small: 647.16 Medium: 785.84-1040.08 Large: 1271.21-1502.34 Super Metro: 1733.47	Small: 189.17 Medium: 201.08-214.95 Large: 249.61-275.05 Super Metro: 281.98
d. ORG,1989	100 % population coverage by Sanitation services by using different technological options.	Small: 1711.03 Medium: 701.64-1569.48 Large: 1105.81 Metro: 1075.03	Not suggested
e. Ninth Plan, Govt of India, 1997-2002	Small: Conversion of all dry latrines in to water seal toilets during the plan period for liberation of scavengers Community public toilets to discharge open defection particularly in slums and fringe areas of urban centers. Medium: As above Large & Metro cities: Full coverage by sewerage with proper treatment facilities. All the state capitals and cities in the population range of 3-40 lakhs should have this system. However, keeping in view the resource constraints, the plan has suggested for covering at least 100 cities with the system during the plan period. Proper drainage system should also be in these cities. Fringe areas of large cities should be served by low cost sanitation as suggested in small and medium towns.	Small: Centrally sponsored scheme @ Rs.4000 per unit share of state and centre 50:50. Medium: As above Large & Metro Cities: Rs.18008 crores earmarked for the purpose as per the pattern suggested in the report of National Mission on Environmental Health & Sanitation. Share of Central, State and local bodies in this regard will be as follows: 40:40:20	Not suggested Not Suggested Not suggested

Agency	Physical Standard	Cost of Provision (Rs/ Capita at 2004-05 prices)	Cost of 0 & M (Rs./capita/annum at 2004-05 prices)
f. Planning Commissions, Task Force on Housing and Urban Development, 1983	Not suggested	Water borne system with treatment Low 2222.54 High – 3175.05 Septic tank: Low – 1270.02 High – 1428.77 Pit latrines: Low – 762.01 High – 952.52	Not suggested
g. Govt. of Gujarat, 1989	Urban: 100 % coverage by sewerage with treatment facilities in class I cities, and cities already having Sewerage system. LCS methods For other urban centres	Average: 1509.75 Problem areas: 1811.70-2113.65 For extension of service: 905.85-1056.83 LCS as per design standard UNDP/World Bank 8152.65	Not suggested
h. NIUA (1987)	100% coverage by sewerage excluding slums in class I urban centers and cities already have sewerage system. Low cost sanitation methods for other urban centers.	Sewerage: 1529.88-1721.12 Low Cost Sanitation: 1147.41-1338.65	Medium: 22.95-38.25 Large: 68.84-72.67
i. NIUA (1995)	Not suggested	Small: 274.46 Medium: 380..31-809..50 Large: 214.77 Metro: 228.73	Small: 47.49 Medium: 64.73-138.81 Large: 36.82 Metro: 39.22

Appendix Table III : Norms and Standards of Solid Waste Collection and Disposal

Agency	Physical Standard	Cost of Provision (Rs/capita, at 2004-05 prices)	Cost of O&M (Rs/capital annum at 2004-05 prices
a. NIUA (1986 and 1992)	- Suggested waste generation level in the range of 250 - 450 grams/ capita per day, depending upon the size of cities, their functions etc. - Recommended, 100% collection of generated waste in a city. - Staff norms: i. 62 - 78 scavengers per 10,000 population as per UP health manual ii. 2.8 sanitary workers per 1000 population as per report of the committee on 'urban wastes', 1973	Not suggested	Not suggested. However report mentioned that on an average, 80 % of the total revenue expenditure spent on account of salaries and wages of sanitation staff.
b. TCPO, 1974	Suggested basic guidelines for provision of dustbins, collection centers, disposal of solid waste etc.	Not suggested	Not suggested
c. ORG, 1989	Suggested average waste generation level - 380 grams/ capita per day	- For waste collection: Rs.60 -183, depending upon the quantity of waste collected - For transportation, Rs165	Not suggested
d. Planning Commission, 1983	Not suggested	Rs.159-254,depending upon the standards and size of cities	Not suggested
e. Ninth Plan, Govt. of India, 1997-2002	The high-powered committee was set up by the Planning Commission in 1994 to look in to the various aspects of solid waste management, especially in the cities having the population size of more than 1 million. The Committee has suggested various measures including privatization, recycling of waste, public awareness programmes, change in legal framework and setting up of neighbourhood committees to tackle the problems in a decentralized manner by the community itself.	For covering 100% population with solid waste management facilities by the year 2002, the Planning Commission has recommended Rs.2242 crores. However, due to resource constraints, it is suggested that only Rs.850 crores should be made available for the purpose as suggested by the National Mission on Environmental Health and Sanitation. The suggested financing pattern will be as follows: Central assistance: 40% State plan fund: 40% Local body contribution: 20%	Not suggested

Appendix Table IV : Norms and Standards of Primary Education

Agency	Physical Standard	Cost of provision (Rs. at 2004-05 prices)	Cost of O&M (Rs/annum at 2004-05 prices)
a. National Policy on Education, 1986 (Operation Black Board Scheme)	- Universal access and enrolment; - Universal retention of children up - A substantial improvement in the quality of education to enable all children to achieve essential levels of learning. The following are the norms of primary schools as per Operation Black Board Scheme: - At least three large all-weather rooms per school should be provided with teaching material; - At least three teachers should be provided in every school. The target is one teacher per class/section; - At least 50 per cent of teachers recruited should be women. For upper primary schools, the norms are as follows: - at least one room for each class/section - a head master-cum office room - Separate toilet facilities for girls/boys - Essential teaching learning equipments including library; and - At least one teacher per class/section - Walking distance at primary level: 1 km. - Distance of upper primary level: 2 kms.	Primary School (Class I - V); Construction Costs: @ Rs.91,500 per class room Teaching Learning Equipments: @ Rs. 18,300 per school Upper Primary School (VI -VIII) Construction costs: @ Rs. 91,500 per class room Teaching Learning Equipments: - @ Rs. 91,500 per school	Average salary per teacher; Rs. 54,900
b. NIEPA, 1982	Not available	Construction costs (Aver.) Govt. share of contribution on an average, Rs. 21,228 *for* each class room	Average salary per teacher: - Primary level: Rs.42493 - Upper primary level: Rs. 50991

Agency	Physical Standard	Cost of provision (Rs. at 2004-05 prices)	Cost of O&M (Rs/annum at 2004-05 prices)
		Teacher's Quarters (Aver.) Rs. 27,450 per quarter Teachers training (Average) - Pre-service: Rs. 2125 per teacher - In-service: Rs. 1416 per teacher Equipments (Average) Rs. 160/per student	Non Teaching costs: 10% of teaching costs in non-tribal areas, and 25% in the case of tribal areas. Incentives: On an average Rs. 141 per student
c. COPP	One primary school *for* 3500 populations. Area: '3 acres Seats: 400-500 per school	Not suggested	Not suggested
d. Bureau of Public Enterprises	One primary school *for* 3000-4000 population Area: 3 acres Seats: 300-400 per school	Not suggested	Not suggested
e. TCPO	- One nursery school *for* 1250-1500 population Area: 0.25 acres Seats: 75-90 per school - One primary school *for* 4000 populations. Area: 2-2.5 acres Seats: 450-500 per school	Not suggested	Not suggested
f. Basic Minimum Services (BMS), 1996 (Ninth Plan, Govt. of India)	Universalisation of primary education	Not suggested	Not suggested

Appendix Table V : Norms and Standards of Primary Health Care

Agency	**Physical Standard**	**Cost of provision (Rs./centre at 2004-05 prices)**	**Cost of** 0 & M **(Rs./annum at 2004-05 prices)**
a. Basic Minimum Services (BMS) 1996 (Ninth Plan, Govt. of India)	- 100 per cent coverage by health care services. It should consist of health and family welfare post to cover 10,000-15,000 population manned by ANM and one male multi purpose worker with ahelper - Urban health & family welfare center for 1-1.5 lakh population. These centers should be provided with two medical officers and other required supporting staff. : Distance: basic health and family welfare services within 1 - 2 km.distance of residents.	Not suggested	Not suggested
b. COPP	One Health Centre for 20,000 population Area: 1-1.5 acre	Not suggested	Not suggested
c. TCPO	One health centre for 36,000 population Area: 1-1.5 acre One Health Clinic for 12,000 population Area: 1-0.5 acre	Not suggested	Not suggested
d. Planning Commission	Not suggested	Construction cost: - Sub Centre: Rs.3,82,470 - Public Health Centre (PHC): Rs. 19,12,350 to Rs. 22,94,820 - Community Health Centre (CHC): Rs. 57,37,050 to Rs.76,49,400 Other costs: - SC: Not available - PHC: Rs. 5,73,705 - CHC: Rs. 19,12,350	- SC: Not available - PHC: 1,91,235 - CHC: 7,64,940 (Excluding Sponsored Schemes & Programmes)

Annexure 1 : Criteria Adopted by State Finance Commissions on Norms and Standards

First State Finance Commissions

The First State Finance Commissions indicated that the main functions of the urban local bodies are to provide basic services to the citizens within their respective areas. Most states identified water supply, sanitation, streetlights and municipal roads as the core civic services. Some of them included education and public health also. The Commissions also discussed various studies like those by Zakaria Committee (1963), Planning Commission Task Force (1983), TCPO study (1987) and so on for fixing the standards of the basic services. Some of the states like Rajasthan and Karnataka adopted a combination of these norms. But most of them came to the conclusion that if the norms given by those studies were to be followed the expenditure incurred would be huge and thus would be outside the meagre capacity of the local bodies. Thus different states followed different approaches/ sources in order to suggest norms and standards for the basic urban services. Examples are presented in Annexure Table 1. While Andhra Pradesh has suggested the norms based on per capita requirements of the municipalities, in Madhya Pradesh, the urban local body with the highest per capita expenditure on basic services has been taken in principle as the standard one in that category. The First SFC of Maharashtra thought that assessment of requirements on an unrealistic basis that is not achievable is only an academic exercise. The commission therefore looked into some specific problem areas and worked out the deficiencies. It is to be noted that First SFC for Tamil Nadu pointed out that some states might have crossed the level of services that have been fixed as a National Minimum by some studies. In those cases the norms thus set should not act as a disincentive in further improving the services. Some of the states spelt out the norms followed while some others did not. We discuss the different criteria followed and explained by some of the State Finance Commissions.

The First SFC of Andhra Pradesh worked out the per capita requirements of the Municipal Councils grade-wise from the data about anticipated expenditure and anticipated receipts for five years furnished by the Municipal Commissioners. Per capita requirements of the Municipal Councils grade wise have been given as Rs. 62/-, Rs. 92/-, Rs.111/-, Rs. 125/-, Rs.130/- for Selection grade, Special grade, First grade, Second grade and Third grade respectively.

The First Finance Commission of Kerala has given estimated unit costs for street taps, street lighting, covering open drains and roads. With one street tap to be laid at intervals of 200 metres, the estimated cost of pipeline was 3 lakhs per km. The additional cost of providing an additional streetlight has been set at Rs. 2200/-excluding cost of lamps. The cost of covering the open drains by concrete slabs was estimated at Rs. 375- per metre. The estimated cost of covering the existing metalled roads to a black topped one with a 3 metre carriage way including cross drainage work was Rs. 2,75,000 per km.(1995 price). The cost of upgrading the existing gravelled road to black topped one with a 3 m. carriage way was estimated at Rs. 4,30,000 per km. The First SFC of Himachal Pradesh also presented estimated unit costs for roads, streets, public toilets etc. The Commission for Delhi gave per capita expenditure of MCD and NDMC on obligatory functions but did not mention them separately.

In Rajasthan the First SFC adopted a combination of norms. For Roads, Street lighting, Drains, Zakaria Committee norms (B to E category towns) have been followed. For Solid Waste Disposal, Planning Commission norm has been adopted (high for Corporation and low for Municipalities). Water supply and sewerage are with Public Health Engineering Department in Rajasthan. Per capita funds requirement for core services for Roads, Street lighting, Solid waste disposal, Drains for Corporations are Rs. 351, Rs. 189, Rs. 93 and Rs. 223 respectively. Per capita requirements for councils, class II, class III, class IV towns can be seen in Annexure Table 1. The First SFC of Karnataka has adopted reasonable norms for the purpose of upgradation of services based on financial feasibility. Except for water supply, they have used

the norms recommended by the Task Force on Housing and Urban Development appointed by the Union Ministry of Urban Affairs. The Commission found that norms for water supply are ambitious but others are realistic. For water supply they have adopted reasonable norms as can be seen in Annexure Table 1.

The First SFC of Punjab recommended that per capita grant in aid to be given to weak Municipalities to bring to a level of the average per capita income of the size class to which they belong. It is to be estimated by multiplying the difference between the average per capita income and the actual per capita income for each class with the population. The estimated per capita financial requirements are not mentioned. Estimated expenditure of the municipalities for New Projects and Maintenance of existing assets for 1997-98 was Rs. 590.15.

After considering various studies on basic services the Commission for Madhya Pradesh came to the conclusion that it would not be possible to arrange such huge amounts from their limited resources. Thus they adopted an alternate methodology. They classified the urban local bodies in 5 groups. The urban local body with the highest per capita expenditure on basic services has been taken in principle as the standard one in that category. Accordingly, for 1992-93, after classifying the local bodies of the State into groups on the basis of available data, the per capita expenditure on basic services of different groups has been modified.[1] The Commission recommended per capita expenditure on Public health, Public safety and Public works in 1992-93 as Rs. 229.87 for Municipal Corporations and Councils with population above 1 lakh, Rs. 190.58 for Municipal Councils with population between 50,000 and 1 lakh, Rs.170.44 for Municipal Councils with population between 20,000 and 50,000 and Rs.160.35 for Nagar Panchayats with population between 10,000 and 20,000, Rs.146.63 for Nagar Panchayats with population between 5,000 and 10,000.

According to First SFC of Maharashtra, estimation of expenditure needs on the basis of simple projections does not take into account the needs and requirements of the future and also assumes that existing deficiencies will continue. The Commission further notes that assessment of requirements on an unrealistic basis that is not achievable is only an academic exercise. The commission therefore looked into some specific problem areas and has worked out the deficiencies. The Commission accepted that it is not a comprehensive exercise and has its limitations but is a good starting point. The expenditure needs of services can be worked out on this basis. The difference between the projected income and projected expenditure thus obtained may be taken as gap. The commission also noted that this approach has difficulty because different wards in a municipality (e.g. CBD and outer areas) are provided with different level of services and it is difficult to equal them. However, the commission worked out gap between expected income and expected expenditure but has given the norm for maintenance and repairs of roads only.[2]

The Commission for Tamil Nadu made detailed analysis of the existing situation through sample survey and based the recommendations on that. The First SFC of Tamil Nadu, after discussing the desirable level of services by various studies pointed out that some states might have crossed the level of services that have been fixed as a National Minimum by some studies. In those cases the norms thus set should not act as a disincentive in further improving the services. It further said that any effort to arrive at the norm should take into account the existing level of services. Accordingly the SFC analysed the existing situation as have emerged from the sample study through questionnaire and the in-depth study made by them. In some cases the universal data pertaining to the existing service level were available. In those cases those

[1] See Madhya Pradesh State Finance Commission (1996). *Report for Urban Local Bodies (April 1996 to March 2001) pp.59*

[2] See State Finance Commission, Government of Maharashtra, Mumbai (1997). *Report of the First Maharashtra Finance Commission.* pp. 182 –184.

have been utilized to find service gaps and investments. In others the sample data have been universalised. Norms have been fixed for 2002 keeping in mind the existing service levels that are achievable within the limit of resources and technology used and the desirable levels as set by the various studies. Based on the norms and forecast of population by 2002, the quantum of service required has been estimated. Next after comparing with existing level, the service gap has been estimated. The unit costs have been multiplied with the service gaps and investment requirements have been assessed.

The Commission estimated Manpower–cost and operation and maintenance cost on a normative basis. The norms for staff required for water supply has been set by considering CPHEEO norms, for public health by using Norms Committee of Government of Tamil Nadu's criteria and for Roads on the basis of norms of Highways and Rural Works department. For sewerage and sanitation, the staff requirements in terms of numbers have been clubbed with O&M and for storm water- drains manpower has been suggested on a temporary basis only for the period before and after monsoons. The norms for manpower have been finalized after detailed discussion with the line department officials. For normative establishment expenditure, the proposed staff strength has been adopted except for Corporations where the levels were reasonable and have been left the same. The normative O&M costs have been derived from the universal figures except for water supply, where the norms were fixed after due deliberations with TWAD/METRO Water officials.[3] The per capita O&M expenditures on water supply, solid waste management, sewerage and sanitation, roads, storm water drains, street lighting in 1996-97 in Chennai Corporation, Other Corporations, Municipalities, Town Panchayats can be found from Annexure Table 1 below.

Annexure Table 1 : Criteria adopted by the First State Finance Commissions of Some States

States	Criteria for Services
Andhra Pradesh	Per capita requirements of the Municipal Councils grade wise have given as Rs. 62/-, Rs. 92/-, Rs.111/-, Rs. 125/-, Rs.130/- for Selection grade, Special grade, First grade, Second grade and Third grade respectively. The Commission recommended Rs. 8 crores each to Municipal Corporations of Hyderabad, Visakhapatnam and Vijaywada and an amount of Rs. 5 crores to each of the remaining four Municipal Corporations as a Block grant to be utilized for their felt needs.
Assam	No criteria.
Delhi	On obligatory functions, per capita expenditure of MCD was Rs. 278.8 in 1984-85 and it increased to Rs. 897.6 in 1995-96. Per capita aggregate expenditure on education increased from Rs. 63.8 in 1984-85 to Rs.164.8 in 1995-96, on conservancy it increased from Rs. 35.1 in 1984-85 to Rs. 163.6 in 1995-96 and on roads and bridges it increased from Rs. 58 in 1984-85 to Rs.146.6 in 1995-96.Per capita expenditure of NDMC was Rs. 2156 in 1984-85 which increased to Rs. 12,666 in 1995-96.
Goa	No criteria.

[3] See State Finance Commission for Local Bodies, Government of Tamil Nadu (1996). State Finance Commission for Local Bodies, The Report. pp.236,255

States	Criteria for Services
Himachal Pradesh	For roads the Commission decided to provide for maintenance of roads @ Rs. 15,000 per kilometer. For the streets it recommended a norm of Rs. 5000 per km. For public toilets the Commission decided to provide Rs. 1,000 per unit per annum based on the information collected. The Commission decided to keep water supply and sewerage out of these recommendations in view of extremely capital-intensive nature of maintaining these services.
Karnataka	The Commission has identified services like water supply, sanitation including garbage removal and underground sewerage, streetlight and norms for the purpose of upgradation of services based on financial feasibility. For *roads* using Task Force (T.F.) norms Rs. 2.50 lakh per km. road as cost for constructing good quality road with black topping has been adopted. As for *streetlights*, T.F. norm of 20 streetlights per km. of road length has been used. For *sanitation*, Govt. of Karnataka 's norm pourakarmika (sweeper) for every 500 population in the City Corporation, one pourakarmika for 700 population in other municipal cities and towns have been adopted. Though there is no norm for vehicles to be provided recommendation has been made for purchase of transport like lorry, truck, trailer etc. after discussions with the representatives of the local bodies. A total of around Rs. 2 Crores has been estimated for sanitation. No per capita estimate. Per capita availability of water supply to urban people in Karnataka is far lower than the norms fixed by the T.F. The T. F. has fixed 180 lpcd for Class-I cities, 120 lpcd for Class –II cities, 90 lpcd for Class III and Class IV cities. Per capita availability in Bangalore city is around 90 lpcd, in some City Corporations it is more, in majority of City Municipal Council and Town Municipal Councils it is far lower. Thus taking into account the existing level, the Commission have fixed a reasonable level and recommended 100 lpcd for City Corporations, 80 lpcd for City Municipal Councils, and 70 lpcd for Town Municipal Councils and Town Panchayat. Accordingly, they have estimated the additional expenditure required. A total of around Rs. 105 crores has been estimated for raising the per capita availability of water supply. Per capita estimate is not given.
Kerala	With one street tap to be laid at intervals of 200 metres, the current estimated cost of pipeline is 3 lakhs per km. The additional cost of providing an additional streetlight has been set at Rs. 2200/-excluding cost of lamps. Corporation of Cochin's estimate of capital cost of solid waste management at 400 cubic m. per day at Rs.81 lakhs has been referred by the Commission but has not set any estimate. The cost of covering the open drains by concrete slabs was estimated at Rs. 375 per metre.

States	Criteria for Services
	The estimated cost of covering the existing metalled roads to a black topped one with a 3 metre carriage way including cross drainage work is Rs. 2,75,000 per km (1995 price). The cost of upgrading the existing gravelled road to black topped one with a 3 m. carriage way is estimated at Rs. 4,30,000 per km.
Madhya Pradesh	Average per capita expenditure on Public health, Public safety and Public works in 1992-93 was Rs. 162.11 for Municipal Corporations and Councils with population above 1 lakh, was Rs. 127.67 for Municipal Councils with population between 20,000 and 1 lakh and was Rs. 91.51 for Nagar Panchayats with population between 5,000 and 20,000.
Maharashtra	Estimated expenditures on roads as per the norms fixed by the Ministry of Surface Transport of Govt. of India New Delhi for the year 1996-97 were Rs. 5476.92 lakhs for Municipal Corporations, Rs. 2150.20 lakhs for Municipal Councils (A class), Rs. 673.23 lakhs for Municipal Councils (B class) and Rs 788.38 lakhs for Municipal Councils (C class). The estimates for other core services are not shown separately. Estimates of Revenue and Capital expenditure for the year 1996-97 for the Municipal Corporations were Rs. 2,88,723 lakhs and 1,43,831 lakhs respectively. The Corresponding figures for A-Class Municipal Councils were 30,918 lakhs and 7,584 lakhs. The corresponding figures for B-Class Municipal Councils were 14, 952 lakhs and 5, 234 lakhs. The corresponding figures for C-Class Municipal Councils were 14,302 lakhs and 2,874 lakhs. These estimates were provided by the municipal bodies.
Manipur	No criteria.
Punjab	The Commission recommended that per capita grant in aid to be given to weak Municipalities to bring to a level of the average per capita income of the size class to which they belong. It is to be estimated by multiplying the difference between the average per capita income and the actual per capita income for each class with the population. The Commission also decided that in estimating the financial requirements of the Municipalities, only the essential /obligatory functions comprising the core services i.e. Water supply, Sewerage, Sanitation/ Solid Waste, Roads and Bridges, Street Lights would be taken into account. The estimated per capita financial requirements are not mentioned. Estimated expenditure of the Municipalities for New Projects and Maintenance of existing assets for 1997-98 was Rs. 590.15. The report is for the period 1996-97 – 2000-01.
Rajasthan	Per capita funds requirement for core services for Roads, Street lighting, Solid waste disposal, Drains are as follows. For Corporations, these are Rs. 351, Rs. 189, Rs. 93 and Rs. 223 respectively. For Councils these are Rs. 249, Rs. 171, Rs. 58, and Rs. 189 respectively. For Class II towns these are Rs. 180, Rs 163, Rs. 58, and Rs. 171 respectively. For Class III towns these are Rs. 137, Rs.124, Rs.58, Rs. 146 respectively. For Class IV towns these are Rs.104, Rs. 87, Rs. 58, and Rs 125 respectively. For Roads, Street lighting, Drains, Zakaria Committee norms (B to E category towns) have been followed. For Solid Waste Disposal, Planning Commission norm has been adopted (high for Corporation and low for Municipalities). Water supply and sewerage are with Public Health

States	Criteria for Services
	Engineering Department in Rajas than. The year of calculation is not mentioned. The Report is for 1995-2000.
Skim	No Criteria
Tamil Nadir	The per capita O&M expenditure on water supply in 1996-97 were 72/- ,64/-, 42/- for Chennai Corporation, Other Corporations, Municipalities respectively. The corresponding per capita O&M figures for solid waste management were 80/-, 98/-, 77/- and those for sewerage and sanitation were 103/-, 62/-, 31/-.The corresponding per capita O&M figures for roads were 48/-, 47/-, 48/- and those for storm water drains were 2/-, 1/-, 2/- while those for street lighting were 22/-, 19/-, 17/-.
Uttaranchal	No Criteria
Uttar Pradesh	No Criteria
West Bengal	No Criteria

Second State Finance Commissions

The Second Finance Commissions of the states have discussed the norms and standards of core civic services suggested by the different committees and experts groups such as Zakaria Committee, MoUD, Projection of the Ninth Plan on requirement of Urban Water Supply for the period 1997-2002 and so on. After considering the financial requirement by these approaches they have come to the conclusion that it would not be possible for the urban local bodies to meet the norms, as the expenditures would be huge. Thus considering weak financial strength of the urban local bodies they have followed different approaches some of which are presented in Annexure Table 2. Some have decided to take the revenue gap method as for example Delhi, Rajasthan. Some have based the estimates on the requirements of the local bodies. The Commission for Andhra Pradesh has estimated the requirements for 2000-01 to 2004-05 based on the average per capita expenditure of 13 best Municipalities (Rs.704.72) and two best Municipal Corporations (Rs. 1,125.24) on the core functions like Water supply, Public Health, Sanitation, Street lighting and Roads Grade wise (selection grade, special grade, first grade, second grade and third grade). Similarly the Commission for Madhya Pradesh has based its norms on average per capita revenue expenditure of three best Municipalities in a size class for three years 1997-98 to 1999-2000 for all municipalities in that class. In Uttar Pradesh the Commission based its estimates on actual reported per capita per annum expenditure on O&M of ULBs for the year 1999-2000 which came to around Rs. 40. Considering rise in prices the Commission took it as Rs. 50 per capita which is low estimate and Rs. 75 and Rs. 100 per capita per annum expenditure on O&M for middle and high level norms respectively. The Commission for Punjab has estimated funds required by ULBs for O&M of existing services at a satisfactory level as well as their extension to un-served areas as per targets for the years 2002-03 to 2005-06 after collecting data from ULBs and PWSSB. They have considered the services like water supply and underground sewerage, roads and streets, surface drains, storm water drainage, sanitation works, solid waste management, street lighting, and others like urban forestry, parks, gardens, bus stands, parking lots etc. as it can be seen in Annexure Table1 above. In Karnataka, the Commission considered the financial requirements furnished by Urban Development Department for meeting the normative standards in respect of five

core/civic services (water supply, underground drainage, roads, street lighting, solid waste management) for the year 2000-01 to 2004-05. The Commission for Himachal Pradesh decided to provide for maintenance of roads @ Rs. 24150 p. km., for the streets @Rs. 8050 p. km., for street light @Rs. 240, for public toilets @ Rs. 1600 per unit p.a. and for drainage it decided the norm of Rs. 6000 p. km. Kerala has set detailed norms for roads as can be seen in the Annexure Table 2. The Commission for Tamil Nadu preferred to go by the felt needs of the people. In this case the Commission's philosophy has been that if the available funds are judiciously invested to fulfil the felt needs of the people after preparing participatory budgets with full transparency, ensuring distributive equity the feel good factor will be ensured. Thus being unable to meet the high expenditure levels required to follow the norms set by Zakaria Committee or MOUD or Planning Commission the State Finance commissions have taken recourse to different approaches as found suitable for them.

Annexure Table 2: Criteria adopted by Second State Finance Commissions of Some States

States	Criteria for Services
Andhra Pradesh	The Commission decided to work out requirements of Municipalities with reference to the average per-capita expenditure incurred by the 13 good municipalities on the core functions like Water supply, Public Health, Sanitation, Street lighting and Roads Grade wise (selection grade special grade, first grade, second grade and third grade). The average per capita expenditure for the thirteen good Municipalities worked out to be Rs. 704.72. The average per-capita expenditure of Municipal Corporations of Hyderabad and Visakhapatnam (adjudged as good) worked out to be Rs. 1,125.24 (for 2000-01 to 2004-05).
Bihar	No Criteria
Delhi	The Commission estimated the likely revenue gaps for MCD and NDMC for 2001-02 to 2005-06 utilizing buoyancy and elasticity coefficients for revenue receipts and revenue expenditure with normative assumptions adopted by the Commission.
Himachal Pradesh	The Commission decided to provide for maintenance of roads @ Rs. 24150 p. km., for the streets @Rs. 8050 p. km., for streetlight @Rs. 240 based on the need for replacing lighting fixtures. For public toilets it decided a maintenance provision @ Rs. 1600 per unit p.a. For drainage it decided the norm of Rs. 6000 p. km. The aggregate maintenance provision for these services came to Rs. 383.64 lakh in 2002-03. With assumed 10% mark up of the norms every year as provided by the Commission the total provision for the period 2002-03 to 2006-07 came to Rs. 2342.18 lakhs.
Karnataka	The Commission considered the financial requirements furnished by Urban Development Department for meeting the normative standards in respect of five core/civic services (water supply, underground drainage, roads, street lighting, solid waste management) for the year 2000-01 to 2004-05. The total cost for the period has been shown as Rs. 8735.62 Crores (7726.52 as capital cost and 1009.10 as O&M).
Kerala	The Commission has specified norms for roads. These are, 1) Frequency of Re-topping of surfaced roads- once in five years 2) Repair expenditure B-T Roads Annually-Rs. 25090 / km. 3) Repair expenditure of WBM Roads Annually- Rs. 23140 /km. 4) Repair expenditure of Un-Surface Roads Annually- Rs. 2000/km. 5) Cost of Re-topping B-T Roads-(3.8 m. Width)-Rs.1.65 lakhs/km 6) Cost of Re-Topping WBM Roads (3.8 width) – 1.84 lakhs/km. The Commission used 2001 prices and suggests that the figures to be updated from time to time for inflation.

States	Criteria for Services
Madhya Pradesh	Average per capita revenue expenditure of three best Municipalities in a size class for three years 1997-98 to 1999-2000 is set as the norm for all municipalities in that class. The per capita expenditure needs have been estimated at Rs 167.60 in 1999-2000 for sampled municipalities. No services are specified.
Punjab	The Commission assessed the requirements for O&M of existing services and extension of them from the data of ULBs and PWSSB. It fixed target of coverage of 85% and 70% of urban population by water supply and sewerage respectively by 2005-06. The Commission estimated Rs. 726 crores including escalation @ 7% p.a. for *Water Supply and Underground Sewerage* facility on the basis of norms of capital cost of water supply and sewerage projects (Rs. 1200/- per capita for water supply and Rs. 2500/- per capita for sewerage). Annual cost of O&M is Rs.71 crores for existing water supply and Rs.35 Crores for existing sewerage system. Estimated cost of new works has been spread over 4 years starting with Rs. 100 crores in 2002-03. (O&M has been increased by 7% p.a.). Annual expenditure of maintenance of existing *Roads and Streets* and *Surface Drains* requires annual outlay of Rs. 65.74 crores and Rs. 21.95 crores respectively whereas new construction has been projected as Rs. 323.49 crores and Rs. 100.01crores respectively. Rs. 291.50 crores is required for construction of storm water drain in 4 Corporation towns spread equally over 4 years. An annual expenditure of Rs. 121.32 crores is required for existing *Sanitation Works* whereas Rs. 60.82 crores are required for uncovered areas. For Solid Waste Management, Rs. 11.61 crores has been estimated for existing arrangements p.a. and additional funds for 100% lifting of solid waste daily and its disposal have been estimated at Rs. 22.91 crores annually. For S.W. Treatment Plants in 4 Corporations and in some Class I and II towns, total requirements are Rs. 87.85 crores, spread over 4 years. For other services like urban forestry etc. the expenditure of 2000-01 has been adopted for 2002-03to 2005-06. Escalation of 7% p.a. has been given to the estimated outlays from 2002-03 to 2005-06.
Rajasthan	The Commission has adopted revenue gap method and has determined the requirements of funds of urban local bodies on the basis of trend growth rate in providing the basic civic services. The Commission has done this exercise based on the average growth in own income and expenditure of six years period 1994-95 to 1999-2000 of these bodies and projected gap for the next five years period 2000-2001 to 2004-05 based on average trend of last six years. Per capita expenditure is not mentioned.
Tamil Nadu	The Commission's philosophy is that if the available funds are Judiciously invested to fulfil the felt needs of the people after preparing Participatory budgets with full transparency, ensuring distributive equity, the feel good factor will be ensured. No norms.
Uttar Pradesh	Actual reported per capita per annum expenditure on O&M of ULBs for the 1999-2000 came to around Rs. 40. Considering rise in prices commission took it as Rs. 50 per capita, which is low estimate. The Commission has taken Rs. 75 and Rs. 100 per capita per annum expenditure on O&M for middle and high level norms respectively. Multiplying this with the projected 2001-06 median urban population of 3.66 crores they came to the annual requirement of O&M expenditure on core services. Added to this was the investment required for provision of additional core services.
West Bengal	No Criteria

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