

Development of Municipal Bond Market in India
Municipal Bond Assessment Studies
Visakhapatnam, Bhopal and Dehradun

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Preface

The traditional system of funding based on plan and budgetary allocations has not been sufficient to meet the requirements of financing infrastructure and services in urban areas in the country. In view of the huge requirements of funds to augment urban infrastructure several urban reforms are being advocated in the central and state level urban policies. As per these reform measures, soft options of funding urban development that were available in the past will have to give way to new fiscal instruments which envisage reduction in subsidies, better targeting of the subsidies, reduction in plan allocation, and improved pricing and cost recovery mechanisms. In recent years, the Government of India has provided several fiscal incentives and support for adoption of innovative strategies by the municipal bodies to mobilise resources for financing urban infrastructure and services. One of such instruments is directed towards encouraging the urban local bodies to raise resources through issuance of tax-free municipal bonds. To facilitate the issuance of the bonds, the Ministry of Urban Development and Poverty Alleviation has issued guidelines to be followed by the local bodies.

However, the finances of municipal bodies are presently too fragile to meet the prerequisite of such innovative instruments. In most municipal bodies, the collection of taxes and rates is highly inefficient. Property Tax, the major source of revenue, has lost its buoyancy and elasticity and the user charges are not worked out on a rational basis. Raising resources through accessing the capital market and attracting the private sector in the financing of urban services require that urban projects developed by the local bodies are commercially viable and the municipal management is amenable to fairly good credit rating.

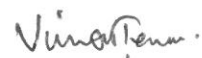
Use of Municipal Bond as an instrument to finance urban infrastructure in India started in the mid 1990s when some of the municipal corporations including Ahmedabad, Bangalore, Nasik, Indore, and Madurai, successfully raised resources through the bonds. Some of these efforts were supported by an Indo-USAID collaborative programme on Financial Institutions Reform and Expansion. The programme through policy advocacy in the states, technical assistance to the cities as also putting in place a series of mechanisms and processes, including the credit rating of city governments, enabled the demonstration cities to access the capital market by issuing the municipal bond.

In order to promote the adoption of Municipal Bond as an instrument of raising financial resources for funding urban infrastructure by middle level municipal corporations, the Canadian International Development Agency (CIDA) supported an initiative of Government of India to develop municipal bond market in India. The initiative envisaged a comprehensive study of the municipal finance systems of three municipal corporations, viz., Visakhapatnam, Bhopal and Dehradun, by looking at the municipal legislative framework, decentralisation, situational analysis of basic services, including an overview of capital expenditure financing pattern, review of revenue and capital accounts and an evaluation of credit absorption capacities of the project cities.

This report presents the finding of the assessment studies conducted in the three cities to gain insights into their financial strength and capabilities for accessing the capital market by issuing municipal bonds. The studies were ably coordinated by Dr Gangadhar Jha, Professor at the Institute. He was supported by Dr Rajesh Chandra, Research Officer, and Mr Anirban Kundu, Project Associate at the Institute.

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Vinod Tewari

Municipal Bond Assessment Studies: Vishakhapatanam, Bhopal and Dehradun

Introduction

Municipal bond as an instrument to finance urban infrastructure in India is still in a nascent stage. The initiative for accessing the capital market on the strength of commercially viable projects started in 1994 largely due to four important developments. First was the advent of the New Economic Policy (NEP) in early '90s for ensuring an effective - macroeconomic management. The New Economic Policy introduced liberalization, structural adjustment processes and expressed concern about unsustainable fiscal deficits. As it required reduction in subsidies and even public expenditures, alternative system of financing urban infrastructure needed to be developed that could supplement and even replace the traditional system of financing urban infrastructure through plan allocations and subsidies. Second was the decentralization initiative flowing from the Constitution (Seventy-fourth Amendment) Act, 1992 for empowerment of the institutions of urban local self-government. New functions were added to the local functional domain along with altogether new constitutional provisions for ensuring a vibrant local political process. The urban local self-government institutions therefore needed to adopt newer ways of raising the much-needed financial resources without dependence on public subventions. Third was the concern for promoting an efficient use of resources, which the traditional method of financing based on subsidies and flow of soft funds does not permit. Such a system of financing does not make the municipal managers to be pro-active for rationalising the tariffs (user charges) and to put in place an effective system of cost recovery. Fourth was, of course, the concern of governments at all levels for the constraints on the availability of funds at a scale that is required to provide even a modicum of urban infrastructure and services.

These considerations led to the advent of an Indo-USAID collaborative programme known as the Financial Institutions Reform and Expansion – especially its debt market development component (FIRE-D). The programme through policy advocacy in the states, technical assistance to the cities as also putting in place a series of mechanisms and processes

including the credit rating of city governments enabled the demonstration cities to access the capital market by issuing the municipal bond. Till date, the cities of Ahmedabad (twice), Nagpur, Nasik, Indore, Ludhiana, Bangalore, Madurai and Hyderabad have accessed the capital market.

Accessing the capital market by the cities has brought about a perceptible change in the mindset of policy makers as also the city managers. There now exists a consensus on the need for structuring commercially viable/bankable projects that could become an instrument for developing a long-term debt market in India. As an incentive for development of municipal bond market in India the central government has agreed to give fiscal concessions to the investors for investing in municipal bonds. For regulating the fiscal incentives to the investors, Guidelines have been formulated by the central government for tax-free municipal bonds. Accordingly, the income from rate of interest upto 10.5 per cent is exempted from income tax under Section 10(15) (vii) of the Income Tax Act. In the fiscal 2001-2002 the central government agreed to issue tax-free municipal bonds up to Rs. 2 billions. For the fiscal 2002-2003, the Finance Minister has raised this to Rs. 5 billions in his budget speech.

Though the initiatives to develop a municipal bond market has been in the offing since 1994, the success, however, is inevitably contingent on the innate financial strength and capabilities of the urban local governments. It is the internal financial robustness, which will enable them to obtain an investment grade credit rating, to access the capital market and service the debts thus raised.

The cities of Visakhapatnam, Bhopal and Dehradun were selected for the Canadian International Development Agency (CIDA) initiative to develop municipal bond market in India. Municipal bond assessment studies were therefore conducted in these three cities to gain insights into their financial strength and capabilities for accessing the capital market by issuing municipal bonds. The financial wherewithal of the three cities is therefore analyzed in this report.

Visakhapatnam

Located on the East Coast in the state of Andhra Pradesh, Visakhapatnam is a large city of economic importance. Its economic importance is due to a host of factors. It is a major railhead on the East Coast; a major port and the headquarter of the Eastern Naval Command and has a major public sector steel plant. In 1981 it had a population of about half a million. This in 2001 increased to almost a million as is shown the Table given below.

Population and Area of the Municipal Corporation of Visakhapatnam

Year	Population	% variation	Area (in sq. kms.)
1981	565,321	--	76.33
1991	752,037	33.03	76.33
2001	969,608*	28.93	111.60

Source: Census Of India, Visakhapatnam District Handbook, Vol.II. Part XII-A&B, 1911.

*Downloaded from Internet www.censusofindia.com

As is seen in the Table given above, the rate of growth in population within the jurisdiction of the Visakhapatnam Municipal Corporation (VMC) has declined in the last decade. The physical areas within its jurisdiction were steady at about 76 sq. kms. in 1981 and 1991. However, another 35.27 sq. kms. of new areas were added to its jurisdiction in the last decade. The total area of the VMC consequently increased to 111.60 sq. kms.

The Municipal Legislative Framework

The Vishakhapatnam Municipal Corporation (VMC) is governed by the Visakhapatnam Municipal Corporation Act, 1979. Through this Act, the state legislature extended the provisions of the Hyderabad Municipal Corporation Act, 1955. Hence the Hyderabad Municipal Corporation Act as amended from time to time happens to be the enabling legislation for VMC as well.

The municipal authorities of VMC consist of the following.

1. The Corporation
2. The Standing Committee
3. The Commissioner
4. The Wards Committee

Corporation Council

The municipal corporation council is constituted of the Councillors elected at large from the various local electoral wards that constitute the jurisdiction of VMC. Following provisions of the 74th Constitution Amendment Act for providing opportunities to the weaker sections of society and women in urban governance and decision making process, seats have been reserved for them in the Corporation Council. One-third of the total number of seats is reserved for women.

Executive System

Even though municipal corporations happen to be the most autonomous form of government amongst the three types of urban local government, the Municipal Commissioner, an appointed bureaucrat, happens to be the Chief executive of VMC. The elected Mayor is a mere ceremonial and figurative head. S/he merely presides over the council meetings. The entire executive powers and functions, for the purpose of carrying out the provisions of the aforesaid Act and of any other law vests with the Commissioner. S/he performs all the duties and exercises all the powers imposed or conferred on him/her by the Act. In case of emergency s/he can take immediate action for provision of services or for public safety or for protecting the Corporation properties. S/he has powers to execute contracts on behalf of VMC, can invite tenders for contracts involving an expenditure upto Rs. half a million. In case of works costing more than Rs. half a millions, the Commissioner prepares detailed project report for presenting the same to the Standing Committee which happens to be the principal policy planning committee. The money payable against the Municipal Fund is received by the Commissioner and is credited into an account that constitutes the Municipal Fund.

The Standing Committee

Standing Committee (SC) is the main business transacting committee of VMC. It meets periodically to take decisions on the matters placed before it and forwards major policy matters to the Corporation Council (CC). In case the SC rejects the proposal, the Commissioner places the same before the CC. SC is also the competent authority to sanction works and contracts involving an expenditure of more than Rs. 2 millions but not exceeding Rs. 5 millions, the Commissioner is required to prepare detailed report and it is placed before CC by the SC. The SC also prepares the estimates of income and expenditure of VMC for the CC. It ensures the security of municipal accounts and for this it can requisition any document and information.

Powers and Functions of VMC

The enabling Act vests the VMC with a long list of mandatory and discretionary functions in the spheres of public health, medical relief, public works, and other miscellaneous functions. These are mentioned below.

(a) Obligatory Functions:

1. Public Health

- i. Collection, removal, treatment and disposal of sewage, offensive matters and rubbish and preparation of compost manure.
- ii. Maintenance and cleansing of drains, drainage works, public latrines, water closets and urinals.
- iii. The reclamation of unhealthy localities, the removal of noxious vegetation and generally the abatement of all nuisances.
- iv. The management and maintenance of all municipal water works.
- v. Preventing the spread of infectious disease.
- vi. The watering, scavenging and cleaning of public streets and places in the city.

2. *Medical Relief:*

- i. Public vaccinations in accordance with the provisions.

3. *Public Works*

- i. The lighting of public buildings, public streets and municipal markets.
- ii. The naming or numbering of streets and of public places.
- iii. The construction, maintenance, allocation and improvement of streets, bridges, sub-ways and culverts.
- iv. The removal of obstructions and projections in or upon streets, bridges etc.
- v. The provision of public parks, gardens, playgrounds and recreation grounds.

4. *Others*

- i. The maintenance of all public monuments, open spaces, municipal spaces.
- ii. The regulation of offensive and dangerous trades and practices.
- iii. The maintenance, charge and regulation of places for the disposal of dead and disposing of unclaimed dead bodies.
- iv. The construction and maintenance of public markets and slaughter house.
- v. The construction or acquisition and maintenance of cattle ponds.
- vi. The registration of births and deaths.
- vii. The securing and removal of dangerous buildings and places.
- viii. The improvement of city.

(b) Discretionary Functions:

Discretionary functions as well are to be performed by VMC if its resources permit it to discharge these functions. These functions as well relate to public health, medical relief, public works, education, transport and others as detailed out below.

1. Public Health:

- i. The organization, maintenance or management of laboratories for the examination or the analysis of water, food or drugs for the detection of diseases.
- ii. The provisions of milk to expectant or nursing mothers or infants or school children.
- iii. Swimming pools, public wash houses. Bathing places etc.
- iv. The destruction of vermin's, birds or animals causing a danger or nuisance and the confinement or destruction of stray dogs.
- v. Contribution towards the fund for the relief of human suffering without the city.
- vi. The organization, maintenance or management of maternity and infant welfare centers.
- vii. The maintenance of ambulance service.

2. Medical Relief

- i. Organizing, maintaining or managing maternity and infant welfare homes/centers.
- ii. The maintenance, organization and management of institutions for persons who are sick or incurable, blind, deaf, mute, disabled, or handicapped persons.

3. Public Works

- i. The construction and maintenance of public streets, places of drinking fountains and troughs for animals.
- ii. The planting and maintenance of trees on roadsides and elsewhere.
- iii. The construction, establishment and maintenance of places of entertainment, rest houses and other public buildings.
- iv. The regulation of lodging houses, camping grounds and rest houses.
- v. Providing for entertainment in public places or places of public resorts.
- vi. The holding of exhibitions, athletics or games.
- vii. The building or purchases and maintenance of dwelling units for municipal officers and servants and for the poor and working classes.
- viii. The provision of shelter to destitute or homeless persons.

4. Education

- i. Maintaining and aiding schools for primary education.
- ii. The establishment and maintenance or aiding of libraries, museums, art galleries, etc.
- iii. The furtherance of educational objects and grants to educational institutions.

5. Transport Facilities

- i. The organization, maintenance or management of transport facilities.
- ii. The construction, purchase, organization, maintenance, extension and management of tramways, trackless trams, mechanically propelled transport.
- iii. Providing parking places, halting places for vehicles and levy fee for their use.

6. Others

- i. The organization or maintenance in terms of security of shops or stalls for the sale of necessities of life.
- ii. Dairies or farms for the supply, distribution and processing of milk products;
- iii. Grant and loan to the municipal officers for the purchase of houses and vehicles.
- iv. The granting rewards for information on vital statistics.
- v. Acquisition and maintenance of grazing grounds and stud farms.
- vi. The building or purchase and maintenance of sanitary stables or byres for horses, ponies etc.
- vii. The surveying of building or lands; taking measures to meet any calamity, making contribution towards public ceremonies or entertainment.
- viii. Social and economical measures for the inhabitants of the city.
- ix. Preparation and presentation of address to persons of distinction.

Functions Devolved as per the XII Schedule of the Indian Constitution

The Constitution of India through the 74th Amendment Act, 1992 contains an illustrative list of 18 functions listed in the XII Schedule of the Indian Constitution. These

functions are to be devolved by the state governments to the municipal governments. The functions devolved so far to the VMC out of the XII schedule are mentioned below. As is evident from this Table, only nine functions out of the XII Schedule are devolved to the VMC. Important functions not yet devolved include regulation of land use and construction of buildings, planning for economic and social development, fire service, urban forestry, protection of environment and promotion of ecological aspects, safeguarding the interests of weaker sections of society, including the handicapped and the mentally retarded, slum improvement and upgradation, urban poverty alleviation (presently it performs this as an agency function), and promotion of cultural, educational and aesthetic aspects. The functions apparently are still fragmented in the city.

Budgeting and Accounting

VMC still follows the traditional line item budget, which at most ensures the regularity of expenditure and financial control. As is typical of the line item budgeting, it is not concerned with the value of money achieved through local expenditures or the performance standards. It, however, has separate revenue and capital budgets.

Municipal accounting is done on cash basis. The existing traditional cash based accounting system does not throw light inter alia on two important aspects of (a) internal financial strength of VMC and (b) its financial performance. These constitute vital management information for credit rating as also for accessing the capital market through issuance of municipal bonds. The enabling legislation, however, prohibits preparing a deficit budget. The surplus money, if any, in the Municipal Fund or any loans raised by VMC are required, by law, to be invested in public securities or are to be deposited in the State Bank of Hyderabad.

**Functions Devolved to the Visakhapatnam Municipal Corporation
out of the XII Shchedule**

Sl. No.	Functions as per Twelfth Schedule	Functions Devolved	
		Obligatory	Discretionary
1	Urban planning including town planning.	@	-
2.	Regulation of land –use and construction of buildings.	-	-
3	Planning for economic and social development.	-	*
4	Roads and bridges.	*	-
5	Water supply for domestic, industrial and commercial purpose.	*	-
6.	Public health, sanitation, conservancy and solid waste management.	*	-
7.	Fire service.	-	-
8.	Urban forestry, protection of environment and promotion of ecological aspects,	-	*
9.	Safeguarding the interest of weaker sections of society, including the handicapped and mentally retarded.	-	*
10.	Slum improvement and up gradation.	-	*
11.	Urban poverty alleviation.	-	*
12.	Provision of urban amenities and facilities such as parks, garden, and playgrounds.	*	-
13.	Promotion of cultural, educational and aesthetic aspects.	-	*
14.	Burials and burial grounds and electric crematorium.	*	-
15.	Cattle pounds, prevention of cruelty to animals.	*	-
16	Vital statistics including registration of births and deaths.	*	-
17	Public amenities including street lighting, parking lots bus stops and public conveniences.	*	#
18.	Regulation of slaughterhouses and tanneries.	*	-

@ City improvement: # Parking Place. * Functions Devolved

Tax Authority

The Act devolves the following taxes to VMC.

- (i) A tax on land and buildings, popularly known as Property Tax.
- (ii) Octroi (a levy on goods and commodities entering the local area for sale, use or consumption).
- (iii) Tax on vehicles.
- (iv) Tax on advertisements other than advertisements published in the newspapers,
- (v) Tax on transfer of immovable properties.

Of these mandatory taxes, Octroi has been abolished in VMC as also in the entire state of Andhra Pradesh. Besides these mandatory taxes, VMC has been given the discretion to levy (i) tax on entertainment, and (ii) any other tax subject to the previous sanction of the state government.

The non-tax sources devolved to VMC include the following:

- i. Levy and collection of pipeline service charges from every owner or occupier of premises to which the water connection has been given. The rates are prescribed for different categories.
- ii. Levy of stallages, rents and fees in municipal markets and slaughter houses;
- iii. Penalty for breach of bye- laws, or standing orders.
- iv. Fees to be chargeable for licenses and written permission. The rates are fixed by the Commissioner with the sanction of the Corporation.

Municipal Borrowings

All borrowings or re-borrowings by VMC from the central government, the state government or from any other lending agency require prior permission of the state government. The terms and conditions of borrowings (the period and the manner of repayment, security and the rate of interest) as well need prior approval of the state government. The Act provides for the purposes for which the funds have to be borrowed. These are:

- i. to defray the cost or charges or expenses;
- ii. to discharge any loan or debt for repayment;
- iii. to make good any deficit in the budget estimates; and
- iv. to carry out the purposes of the Act.

The Act provides for borrowings or re-borrowings from any lending agency other than the central or the state government on the security of any immovable property or of taxes devolved to VMC. With a view to securing the repayment of the funds borrowed, the VMC may mortgage the immovable property.

Provisions Relating to Limitations on Borrowings

The Act, however, provides for a number of limitations on borrowings. These include the following:

- a) The borrowing powers conferred by the Act are subject to the following provisions.
 - i. The money is not to be borrowed for any work other than a permanent work;
 - ii. With the sanction of the government, the Corporation may borrow the money for such time, not exceeding sixty years;

- iii. The Corporation is required to pay off the borrowed money with interest by equal installments or by setting apart in a sinking fund every year the required amount and accumulate in this way compound interest by investing the same in purchasing the public securities;
- iv. The Corporation may apply the whole or part of sinking fund towards the discharge of money for repayment;
- v. The investment every year of the amount set apart (of a sinking fund) is to be made within fifteen days after the day on which the second half yearly payment of interest is due by the Corporation, in respect of the loan for the repayment of which the sinking fund was established;
- vi. If the money is borrowed for the purpose of discharging a previous loan, the time of repayment of money so borrowed is not to extend beyond the unexpired portion of the period for which the original loan was sanctioned and this is not to extend in any way a period of sixty years.

Wards Committee

The concept of Wards Committees has been put forth by the 74th Constitution Amendment primarily to further decentralize municipal administration in cities of more than 300 thousand population. More than one municipal electoral wards are required to be pooled together to create the Wards Committees. The Wards Committees thus created are presided over by one of the municipal Councillors elected from the Wards that are pooled together. The Act provides that not less than ten wards can be pooled together to create a Wards Committee. The chairpersons of the Wards Committees are elected by the Councillors elected from the wards constituting the Wards Committees, for a period of one year. The term of office of the chairpersons of the Wards Committees and the Councillors are co-terminus with that of the Corporation Council. This presently is a period of five years.

A conspicuous drawback in the Wards Committees in Visakhapatnam is that these have not yet been devolved with any explicit function nor they have been allocated a budget to play a meaningful role. The Wards Committees, in order to promote participatory good

governance would need to have representation of various stakeholders on it. This presently is conspicuous by its absence.

External Sources of Revenue

The VMC, like any other municipal government in the state, receives grants-in-aid from the state government. With a view to rationalize the ad-hoc grants system that was prevalent before the seventy-fourth Amendment, the fiscal transfers now made to the municipal governments on the basis of recommendations of the State Finance Commissions (SFC). It is now a constitutional mandate for the state governments to constitute SFCs at an interval of five years to suggest:

- (i) the distribution between the state and the municipal governments, the net proceeds of taxes, duties, tolls and fees leviable by the state government which may be divided between them and the allocation between the municipal governments of their respective shares of such proceeds;
- (ii) the determination of taxes, tolls and fees which may be assigned to them or to be appropriated by them;
- (iii) the grants-in-aid to them from the Consolidated Fund of the state government;
- (iv) the measures needed to improve the financial position of municipal governments;
- (v) any other matter related to sound finances of the municipal governments as may be referred to the SFC by the state government.

The first SFC was already created and it gave a set of suggestions except the assignment of new taxes. The second SFC is presently engaged in an exercise to suggest a system of transfers.

Advent of such a mechanism of transfers notwithstanding, the fiscal stress experienced by the state governments themselves has been a constraining factor in accepting the suggestions of the SFCs in its totality. The State of Andhra Pradesh is not an exception to this general trend.

One of the redeeming features of the 74th Constitution Amendment is the constitutional mandate given to the Central Finance Commission (created by the President of India for suggesting transfers from the central government to the state governments) to suggest the transfers from the central government to the local governments as well. The Eleventh Finance Commission has offered incentive-based transfers for strengthening the decentralisation initiatives.

District Planning Committee

The Constitution of India as also the enabling legislation provide for creation of District Planning Committees (DPC) in non-metropolitan cities and towns and the Metropolitan Committees in metropolitan areas. The DPC is required to consolidate the local plans prepared by the local governments both rural and urban. No headway has as yet been made to create the DPC. Hence planning process still continues to be apolitical.

Central and State Government Policy for Improving Municipal Finances

The role of the central government within the Indian federal structure is at most advisory in nature. Urban development and administration, under the Indian Constitution appears in the List II of the Indian Constitution. All the functions mentioned in List II pertain to the exclusive functional domain of the state governments. The Central Government nevertheless has been offering suggestions and guidelines. In recent years, the central government has issued Guidelines for Urban Development Plans Formulation and Implementation (UDPFI) for the state governments. The UDPFI contains a chapter on resource mobilization through innovative land based non-property taxes. Another Guidelines issued by the central government is on reforming the Property Tax (PT). Andhra Pradesh, however, reformed its PT system much before this by amending its municipal laws. The annual rental value (ARV) – the base of PT – is assessed in relation to location, quality of construction, age of buildings, land use and the constructed area.

The central government has proposed three valuable initiatives for pursuing the much-needed urban sector reform agenda. These are contained in the Budget proposals for the fiscal 2002-03

- (i) **Urban Reform Incentive Fund (URIF)** is to be set up in the new fiscal with an initial allocation of Rs. 5 billion. The fund is to be used to provide reform-linked assistance to states.
- (ii) **City Challenge Fund** is being set up as an incentive based facility that will support cities to fund transitional costs of moving towards sustainable and creditworthy institutional systems of municipal management and service delivery.
- (iii) **Pool Finance Development Scheme** is also being set up to provide credit enhancement of municipal governments in the small and medium towns so that they could access the market borrowing on a creditworthy basis. The allocation for the issue of tax-free municipal bonds has been increased to Rs. 5 billion in 2002-03 from Rs. 2 billion in 2001-2002.

The state government, as mentioned earlier, took a major initiative to reform PT and has constituted two SFCs to look at the transfer system. VMC has been devolved with powers to levy Impact Fee which was introduced for the first time in this state, user charges for meeting the maintenance expenditure of parks, and a cess on the consumers of petroleum products within city limits. The state government has also given the directive to contribute 50 per cent of the revenue receipts to the capital budget. The state government has created a City Managers' Association in the state to promote professionalism amongst the municipal staff.

Basic Services

Water supply in Visakhapatnam is accessible to 90 per cent of the total population. It supplies 37 mgd of water of which 21.10 mgd is supplied for domestic use and the remaining 15.90 mgd for industrial and commercial uses. The average per capita availability of water thus comes to about 98 litres per capita daily (lpcd). The Central

Public Health Engineering Organisation (CPHEO) norm for the cities without a sewerage system is 70 lpcd. Accordingly, the existing level of water supply is above this norm. The sewerage system, however, is not in a happy situation. Only 30 per cent of the city is presently covered with sewerage system. Almost 100 per cent of the city is covered with street lighting the maintenance of which recently has been contracted out to private sector. VMC is presently in a position to collect the entire solid waste generated on a daily basis. VMC has recently introduced day and night collection. It is interesting to note that VMC has involved private agencies, the unions of the retrenched sanitation workers and other groups in managing about 50 per cent of the garbage. VMC, however, is constrained by lack of space for garbage disposal and sub-soil water pollution due to land based disposal system. VMC has recently approved a project of using garbage to generate electricity at a cost of Rs. 10 millions by a private company.

Municipal Finance

Development of Municipal Bond market is ineluctably dependent on the fiscal capabilities of municipal governments. They need to generate additional revenues from both tax and non-tax sources (user charges) for timely repayment of loans and for generating revenue surplus that could be leveraged for raising of funds from the debt market. It also requires an effective financial management system for obtaining good credit rating that is required by the Security and Exchange Board of India regulation for accessing the capital market. It will be therefore desirable to look at the trends and status of municipal finances of VMC.

Revenue Receipts

Revenue from own sources happens to be a critically import factor in expenditure planning and management. It is also instrumental in enhancing the fiscal capabilities for leveraging budgetary surplus on revenue account for borrowings. The ratio of income from own sources also reflects the extent of autonomy enjoyed by municipal government. VMC stands in a very happy situation on this score. More than 80 per cent of its total

revenue is derived from the sources on which it has legal authority and control (Table V-1). Its dependence on the external sources (grants-in-aid) is limited to about 17 per cent.

However, the proportion of tax sources in the total revenue from internal sources has been declining during the last ten years. This declined from the peak of more the two-thirds of the total internal revenue in 1992-93 to 46 per cent in 1998-99 and then to about 37.5 per cent in 2000-01. The role of PT, which is the prime source of internal revenue, has been fluctuating a great deal. Moreover, its contribution to the total internal revenue has been varying between 28 to 17 per cent which is rather on a lower side. It is only the non-tax sources that have been contributing increasingly a larger proportion of the total internal revenue on a continuous basis. It has been contributing around 58 to 62 per cent of the total own revenues.

Trends in revenue receipts both from internal and external sources in nominal terms are presented in Table V-2. The trend in the rate of growth in the total revenue income, however, does not present as happy a situation. Negative growth rates are discerned in several years. The trend presents periodical spurts in revenue receipts after the negative growth rate in certain years (2000-2001). The same trend is seen in the annual growth rate in revenue from own sources as also in the income from tax sources. The annual growth rate in the total revenue in real terms depicts that the severity of the negative growth rate has increased both with respect to total revenue and revenue from own sources (Table V-3). The growth in revenue from tax sources even in nominal terms during the last ten years has been erratic; it has registered negative growth rate as well. Growth in tax revenues in real terms depicts a serious situation; a great deal of fluctuation apart, the negative growth rates have been quite high. This with respect to PT revenue is not better either. It has been showing negative growth rates since 1998-99. The revenue from non-tax sources, which have been contributing an increasing proportion of the total internal revenue, has not demonstrated a systematic increase in the annual growth rate in real terms. It has as well been negative in recent years.

A meaningful indicator of fiscal capabilities is said to be the growth rate in per capita revenue, in real terms. The per capita revenue at current and constant prices as also the rate of growth per annum are presented in Tables V-4 to V-7. The total revenue as also the revenue from own sources when adjusted for price change and population depicts negative growth rates in several years. In fact the per capita revenue in real terms declined from Rs.404 in 1997-98 to Rs. 335 in 1999-2000. It then increased to Rs. 519 in 2000-2001, which is marginally lower than the per capita revenue of Rs. 529 in 1991-92 (Table V-5). Almost the same trend is visible in the per capita revenue from own sources. Fluctuations are found in the per capita revenue from tax sources in real terms as well; though lately it has increased from about Rs.114 per capita in 1999-00 to Rs. 161 in 2000-01.

The analysis thus does not give a systematic trend of increase in revenue. Several disruptions are discernible in the revenue from own sources in real terms as the trend in revenue over the years is characterised by fluctuations.

Revenue Expenditure

The revenue expenditure of VMC has increased by four times since 1991-92 (Table V-8). The increase in the revenue receipts during the same period has been to the extent of only about 2.5 times. The largest proportion of the total expenditure (36.5 per cent in 2000-01) is spent on wages and salaries. Yet its expenditures on wages and salaries is less as compared to many municipal corporations which is around 60 to 70 per cent. Water supply accounts for about 18 per cent of the total expenditure. Public health, public works, general administration and collection of revenue each account for about 4 per cent of the total revenue expenditure. Interest paid on loan constitutes a low proportion (2.30 per cent) of the total revenue expenditure.

The revenue expenditure at current prices, however, does not reveal any systematic and uniform trend in growth rates over the years. The percentage variation in the total revenue expenditure even at current prices has been fluctuating a great deal (Table V9). It registered a negative growth rate in 1992-93, 1997-98 (0.75 per cent) and an impressive

growth rate (33.37 per cent) the very next year, i.e. 1998-99. This declined to about 24 per cent in 2000-01.

When adjusted for price change, the revenue expenditure of VMC shows negative growth rate twice during 1991-2001 (Table V-10). The proportion of revenue expenditure on almost all the heads of expenditure has been fluctuating to a very large extent (Table V-10). It shows negative percentage variation in several years. This indicates lack of financial planning and control.

Per capita expenditures in nominal and real terms are presented in Tables V-11 and V-12. The per capita expenditure in real terms shows negative rate of growth on several heads of expenditure and a great deal of fluctuation over the years (Table V-14).

Revenue Account Closing Balances: Fluctuations in revenue receipts and expenditures notwithstanding, VMC has had closing balances on the revenue account on a continuous basis, which is substantial. In the year 2000-01, the year for which the data could be available for the most recent years, the total closing balance on the revenue account was Rs. 286.17 million (Table V-15). Except for the years 1993-94 and 1999-2000, the closing balances on the revenue account has been quite large. VMC thus seemingly can leverage the surplus closing balances for borrowings from the capital market through municipal bond.

Capital Receipts

VMC has been financing capital improvements in two ways. First is the financing of capital works out of the revenue receipts. Even though VMC has separate revenue and capital budgets, there exists a head of expenditure in the revenue budget which finances expenditures that are in the nature of creation of lasting and durable capital assets. "Public Works" in the revenue budget are, by and large, involve capital expenditures made out of the revenue budget. The capital expenditures incurred in the revenue budget are substantial. In the year 1999-00, for example, the total expenditure on Public Works was

Rs. 98.76 million at current prices (Table V-9). This, however, declined to Rs.32.5 millions in 2000-01.

The incurring of capital expenditure in the revenue budget apart, VMC has a separate capital budget as well.

The second source of financing the capital budget is the surplus on the revenue account, which has been dealt with earlier. The revenue surplus is used to (i) meet excess expenditures on capital account, and (ii) as an opening balance each year on the revenue account for supplementing the revenue receipts. Third source of financing the capital budget is the capital grant from the state government. The capital grants received by VMC are, in fact dominated by loans that the state government and other public financial institutions lend to VMC (Table V-16). The loans advanced by the state government and other agencies come to VMC as capital grant as the VMC is not required to pay back the principal. It pays only the interest on it. The burden of debt servicing on VMC is thus nominal. It is limited to payment of only the interest on loans.

Capital Expenditure

Augmentation of urban services provided by the city governments is contingent on the level of capital expenditures and how the expenditures have behaved over the years. A look at Table V-17 does not show any trend in capital investments. The capital expenditures was the highest in the year 1999-00 (Rs. 571.75 millions). This declined to Rs. 189.98 millions in the next year. Wide fluctuations in capital expenditure are driven by the constraints on the availability of capital funds. It may be recalled that there is a directive from the state government to use 50 per cent of the revenue receipts for capital budget. VMC ends up in each year with substantial revenue surplus that could be used for financing capital improvement projects.

Credit Absorption Capacity

As mentioned earlier, VMC has not yet taken recourse to borrowings that are required to be serviced by it. The state government gives loan to VMC, which is not servicing the loan by paying back the principal. VMC pays only the interest on loan. Hence the credit absorption capacity as reflected in debt service coverage ratio (DSCR) as presented in Table V-18 is not relevant in the case of VMC. Its substantial surpluses on the revenue account itself indicate the extent of credit absorption capacity. The closing balance on the revenue account, as mentioned earlier, was to Rs. 286.17 millions in 2000-01. This could be leveraged to borrow from the market. This, however, is contingent on the continuance of the existing practice of borrowing by the VMC from the state government and only the nominal servicing of debt by the VMC. However, VMC's existing practice of accessing the capital fund by proxy does not seem to be a sound financial practice. It leads to lack of financial accountability as also is against the tenets of decentralization (especially fiscal decentralization) and local government autonomy. If, however, the state government has the requisite resources to continue with this practice of financing capital investments, this coupled with VMC's own revenue surpluses will substantially contribute to credit enhancement of VMC and credit absorption capacity. In case, the existing practice is discontinued, the closing balances of VMC on revenue account would get depleted to that extent and VMC would need a credit enhancement mechanism.

The possibilities of VMC's accessing the capital market in the context of lessons learned from a relatively shorter period of development of municipal bond market are discussed towards the end of this report. This is discussed after a section that presents a synthesis of the fiscal capabilities of the three cities viz. Visakhapatnam, Bhopal and Dehradun.

Bhopal

Bhopal is the capital of the state of Madhya Pradesh. The population of the city of Bhopal increased at a very fast rate in the decade 1981-1991. The total population increased from 671, 018 in 1981 to about a million in 1991. The population thus grew at an average rate of growth of about 5.8 per cent per annum during the decade 1981-1991 as is shown in the Table given below. The rate of growth in population, however, declined to an average growth rate of about 3.5 per cent in the last decade.

Population and Area of the Municipal Corporation of Bhopal

Year	Population	% variation	Area (in sq.kms.)
1981	671,018	-	284.90
1991	1,062,771	58.38	284.90
2001	1,433,875 *	34.92	285.88**

Source: NIUA, Urban Statistical Handbook 2000, New Delhi.

*Down loaded from the Internet www.censusofindia.com

** Supplied by the Municipal Corporation of Bhopal

As of 2001, the Municipal Corporation of Bhopal (MCB) has under its jurisdiction a physical are of about 286 sq. kms. The physical area under the jurisdiction of MCB has almost been static for the last three decades.

The city of Bhopal has a Municipal Corporation of Bhopal (MCB) which is governed by the Madhya Pradesh Municipal Corporation Act, 1956 as amended from time to time. Following the practice of a strong Mayor System (political executive system) in the entire state, the MCB has a political executive system called the Mayor-in-Council. The Mayor happens to be the head of the Mayor-in Council which is a mini municipal cabinet. The municipal authorities charged with carrying out the provisions of the enabling municipal corporation Act are the following.

1. The Corporation
2. The Mayor-in-Council
3. The Municipal Commissioner
4. The Wards Committees

As in Visakhapatnam and in any other cities in the country, the Corporation is constituted of the Councillors elected from the different local electoral wards into which the local jurisdiction is divided. Besides the elected local representatives, the Council also has a few nominated Aldermen who do not enjoy the right to vote.

Unlike VMC, the Mayor in the state of Madhya Pradesh is elected directly by the people at large for a term of five years, which is coterminous with the term of the Corporation. The Mayor then constitutes the Mayor-in-council from amongst the elected Councillors. The Act provides a cap on the number of members of the Mayor-in-Council. All the members of the Mayor-in-Council as also the Mayor have allocated portfolios.

Direct election of the Mayor and the legal obligation to select the Members from amongst the elected Councillors seems to be an aberration as the entirely two different forms of government – the Presidential form and the Parliamentary form – have been messed up together. This betrays the built-in conflicts in the system of governance and municipal management. The Municipal Commissioner is appointed by the state government generally from the Indian Administrative Service.

Executive System

The Mayor is the chief executive having overriding executive powers. The Mayor and the Mayor-in-Council together constitute the executive system. The Municipal Commissioner functions under the overall direction and control of the Mayor and the Mayor-in-Council. S/he is accountable to the Mayor and the Mayor-in-Council. S/he

assists the Mayor-in-Council in formulation of policies and is responsible for implementing the policies and decisions of the Corporation Council and the Mayor-in-Council.

The Wards Committees

Wards Committees, as in Visakhapatnam, are created for intra-city decentralization of municipal administration. These Committees, also called the *Mohalla Committees* in Madhya Pradesh, are created by pooling more than one ward together. One of the Councillors is elected as the Chairperson of these Committees.

Powers and Functions of the Mayor

The Mayor enjoys administrative control over the officers and the staff of his office including the office of the Mayor-in-Council and the Appeals Committee. S/he exercises powers and performs functions as devolved to him/her by the Act and the rules made thereunder. In case of epidemic, natural or unforeseen calamity, the Mayor has the powers to direct to stop the execution of any work for focused intervention and for mitigating the calamities. S/he happens to be the ex-officio chairman of the Mayor-in-Council and presides over its meetings.

Powers and Functions of the Mayor-in-Council

The Mayor-in-Council and the Mayor exercise powers and perform such functions as are prescribed by the Act and the rules. The Mayor-in-Council has powers to appoint one or more sub-committees from amongst its members and may refer any matter to it for enquiry and for submission of report to the Mayor-in-Council.

Powers of the Commissioner

S/he is the principal executive officer of the Corporation and has the right to speak at and participate in the deliberations of the Corporation or any Committee but does not have the right to vote or move any proposition. Subject to the approval of Mayor or the

Corporation, the entire executive function vests in the Commissioner. In case of any disaster or calamity, the Commissioner, takes immediate action and reports this to the Corporation or the Mayor-in-Council. S/he is required to produce any record, correspondence, plan, documents, return, estimates, statements etc. to the Corporation.

Powers and Functions of the Municipal Corporation

The functions of the MCB includes the usual obligatory municipal functions in the spheres of public health, medical relief, public works, primary education and other miscellaneous functions. These are mentioned below.

1. Public Health:

- i. Cleaning public streets, places, sewers and removing noxious vegetation, and abating all public nuisances.
- ii. Disposing of night soil and rubbish and preparation of compost manure if desirable.
- iii. The management and maintenance of all municipal water works and providing of suitable water for public and private purposes.
- iv. Constructing, altering and maintaining public streets, culverts, Corporation boundary, markets, latrines, urinals, drains, sewers and providing facilities for drinking water, watering public streets and places.
- v. The erection of water closets, closet accommodation, urinals and other conveniences and the maintenance and cleaning of the same.

2. Medical Relief:

- i. Public vaccination
- ii. The maintenance of an ambulance service.
- iii. Taking measures to prevent the outbreak, spread or recurrence of infectious diseases.

3. Public Works

- i. Lighting public streets, places and buildings.
- ii. Naming streets and numbering of houses.
- iii. Removing obstructions and projections in public streets and places etc.
- iv. Securing or removing dangerous buildings or places.
- v. Maintenance of public parks, gardens, recreation grounds, public places and open spaces.
- vi. Provision of traffic signals.
- vii. Construction and maintenance of public markets and slaughterhouses and the regulation of the same.

4. Education

- i. Establishing and maintaining primary Schools.

5. Others

- i. Maintenance of municipal offices and all public monuments and other properties.
- ii. Maintenance of fire brigade for extinguishing fire and protection of properties from fire.
- iii. Regulating or abating dangerous and offensive trades or practices.
- iv. Establishing and managing cattle ponds.
- v. Acquiring and maintaining, changing and regulating places for the disposal of dead bodies.
- vi. Registering births, marriages and deaths.
- vii. Construction and maintenance of Veterinary dispensaries.
- viii. Printing and publishing of annual reports and returns

Discretionary functions to be performed by the MCB are mentioned below.

1. Public Health:

- i. Construction, maintenance and cleansing of washing and bathing places.
- ii. The destruction or detention of ownerless dogs or stray pigs or detention of animals causing nuisance.
- iii. Constructing, maintaining and supplying pipe and other fittings for the supply of water to private premises from water works.
- iv. Supplying, constructing and maintaining pipe and fittings for the use of private premises for receiving and conducting the sewage thereof into sewers.
- v. Organization and management of chemical/ bacteriological laboratories for the examination and analysis of water, food or drugs, for the detection of diseases or researches in regard of public health.
- vi. The construction and maintenance of drinking fountains for human beings and water troughs for animals, in the public streets.
- vii. Swimming pools, public washhouses, bathing places and other institutions designed for the improvement of public health.
- viii. Dairies or farms for the supply, distribution and processing of milk or milk products.
- ix. Any other matters likely to promote the public health, safety or convenience of the Public.
- x. Establishment and maintenance of farms or factory for the disposal of sewage.
- xi. Construction and maintenance of sanitary stables for animals or vehicles or garages.

2. Medical Relief:

- i. Organization and maintenance of maternity homes and infant welfare centers.
- ii. Establishing and maintaining of public hospitals and dispensaries and other means for necessary public medical relief.
- iii. Organization, maintenance or management of institutions for care and training of blind, deaf, dumb or disabled persons.

3. Public Works:

- i. Construction, establishment or maintenance of parks/gardens,
- ii. Museums, stadiums, libraries, halls, theaters, rest houses, offices, public buildings etc.
- iii. Planting and maintaining roadside and other trees.
- iv. Reclaiming health localities, layout, new public streets and acquiring land for building to abut on such street.
- v. Constructing and maintaining of such roads and buildings and other Government works as the government may transfer to the Corporation
- vi. Prevention of vagrancy, establishing and maintaining poor houses.
- vii. Establishing and controlling Gawala colonies and cattle pans within or without the city.
- viii. Regulation of land –use and construction of buildings.
- ix. Urban forestry, protection of the environment and promotion of ecological aspects.

4. Education:

- i. Establishing and maintaining pre-primary schools.

5. Transport:

- i. Construction, purchase, organization maintenance/management of motor transport or tramways.

6. Others.

- i. Urban planning including town planning.
- ii. Planning for economic and social development.
- iii. Safe guarding the interest of weaker section including the handicapped and mentally retarded persons.
- iv. Urban poverty alleviation.

- v. Raising of public funds for the relief of human sufferings and public welfare.
- vi. Granting loans for building or purchase of conveyance to municipal officers and servants.
- vii. Regulation of lodging and boarding houses.
- viii. Measures to meet any calamity.
- ix. Acquisition and maintenance of grazing grounds within or without the city.
- x. Preparation and presentation of address to person of distinction.
- xi. Playing of music in gardens squares and places of public resort.
- xii. Prevention of cruelty to animals.

As mentioned earlier, the 74th Constitution Amendment has introduced a list of illustrative functions to be performed by the municipal governments. Out of the 18 such functions listed in XII Schedule of the Indian Constitution, MCB has been devolved with a few functions as mentioned below:

Functions Devolved to the Municipal Governments as per the Twelfth Schedule of the Constitution (Seventy Fourth) Amendment Act:

Sl. No.	Functions as per Twelfth Schedule	Functions Devolved	
		Obligatory	Discretionary
1.	Urban planning including town planning.	-	*
2.	Regulation of land –use and construction of buildings.	-	*
3.	Planning for economic and social development.	-	*
4.	Roads and bridges.	-	-
5.	Water supply for domestic, industrial and commercial purpose.	*	-
6.	Public health, sanitation, conservancy and solid waste management.	*	-
7.	Fire service.	*	-
8.	Urban forestry, protection of environment and promotion of ecological aspects,	-	*
9.	Safeguarding the interest of weaker sections of society, including the handicapped and mentally retarded.	-	*
10.	Slum improvement and up gradation.	-	-
11.	Urban poverty alleviation.	-	*
12.	Provision of urban amenities and facilities such as parks, garden, and playgrounds.	*	-
13.	Promotion of cultural, educational and aesthetic aspects.	-	-
14.	Burials and burial grounds and electric crematorium.	@ #	-
15.	Cattle pounds, prevention of cruelty to animals.	*	^
16.	Vital statistics including registration of births and deaths.	*	-
17.	Public amenities including street lighting, parking lots bus stops and public conveniences.	*	-
18.	Regulation of slaughterhouses and tanneries.	*	-

@ Acquiring, maintaining and regulating places for the disposal of dead bodies.

*Functions Devolved, # Cattle pounds, ^ Prevention of cruelty to animals.

Important omissions from the functional domain are urban planning, planning and regulation of land use, planning for economic and social development, protection of

environment and promotion of ecological aspects. Urban poverty alleviation is presently being performed by it as an agency function.

Functional Shifts from the Domain of the State Government

The state of Madhya Pradesh has embarked on devolving of powers and authority to local self-government for decentralization of planning and development. It has already made strides in putting in place a District Government in every district so that the people need not come all the way to the state government located that is located in the capital city of Bhopal. It has plans to put in place urban government also in all the cities and towns that will have proper relationship with the District Government.

To this end in view, there have been functional shifts from the states' functional domain to the units of urban local self-government. The state level Slum Improvement and Clearance Board has been abolished and the improvement of slum devolved to the municipal governments. A cabinet decision has been taken to abolish the urban planning and development authorities in the entire state and merge them with the municipal governments wherever they are. Supervision and control of civil supply shops, higher schools, state health centers, dispensaries and hospitals have been entrusted to the municipal governments. Appointment of teachers of higher secondary schools, issuing of ration cards have as well been transferred to local functional domain.

These interesting functional shifts notwithstanding, the schools, civil supply shops, health centres, dispensaries and hospitals still continue to be controlled by the various state government departments. The respective state government departments are still financing them. Functional shifts have not been accompanied by financial shifts as well.

Budgeting and Accounting

The annual budget of the MCB is prepared by the Municipal Commissioner. The budget thus prepared is considered first by the Mayor-in-Council. The Mayor-in-Council has the authority of modification, additions and alterations in the budget estimates. The budget estimates approved by the Mayor-in-Council are finally placed by it before the Corporation.

As in VMC, the budget is the traditional line item budget concerned primarily with ensuring that the actual expenditure on different heads of expenditure is not irregular and that there is financial control so that actual expenditures do not exceed the budgeted ones.

The state government prescribes the forms in which the municipal accounts have to be kept. As in VMC, the accounts of MCB as well are prepared on cash basis with all the limitations of a cash accounting system. The state government has, however, decided to switch over from the existing cash accounting system in Bhopal to double entry accrual based new accounting system from the next financial year.

Tax Authority

The MCB has the authority to levy the following taxes, and cess:

- (i) Property Tax
- (ii) Water Tax
- (iii) Sanitary Cess
- (iv) Lighting Tax
- (v) Fire Tax
- (vi) Tax on the entry of goods

Sanitary Cess, Lighting Tax and Fire Tax are levied as a consolidated rate even on lands and buildings which are exempt from PT. The maximum and the minimum rates are prescribed by the state government. The MCB decides its own PT rates. Hence the

Corporation has the autonomy to set its own PT rate; it is not decided and approved by the state government.

Water Tax as well are charged on lands and buildings that are exempted from PT; the maximum and the minimum rates are, however, decided by the state government. The MCB has the autonomy to maneuver the rates within these two limits set out by the state government. The rates of Water Tax for lands and buildings that are within the PT tax net, are decided by the Corporation, not by the state government. Thus MCB has the autonomy to set its own rates except on lands and buildings that are exempt from PT.

The rates for entry tax are capped by the Act at 4 per cent ad valorem. However, as Madhya Pradesh was the first to abolish Octroi in the late seventies, the re-imposition of this new tax has become politically sensitive

In addition to the above mentioned taxes and cess, MCB may levy any of the following taxes subject to the relevant directions of the state government.

- i. Latrine or Conservancy tax
- ii. Drainage tax
- iii. Tax on persons exercising any professional or art or carrying out any trade or calling.
- iv. Tax payable by the owners on all or any vehicles or animals used for riding, driving etc.
- v. Toll on vehicles and animals used as aforesaid entering the city.
- vi. Fees on the registration of cattle sold within the city.
- vii. Market dues on persons exposing goods for sale in any market.
- viii. Betterment tax on properties whose value may have improved due to the town-planning scheme undertaken by the Corporation.
- ix. Tax on pilgrims.
- x. Tax on persons occupying houses, buildings, lands within the limits of the Corporation according to their circumstances and property.

- xi. Toll on new bridges
- xii. Tax on advertisements other than advertisements published in newspapers.
- xiii. Tax on theaters and other shows for public amusements.
- xiv. Terminal tax on goods or animals exported from the limits of the Corporation.

Municipal Borrowing

As in Visakhapatnam, state approval is required by the MCB as well for taking recourse to borrowings. The approval of the state government is required for the amount of loan, the period of repayment, and the terms and the method of raising the loan. The Act prohibits the MCB from using the borrowed money for payment of salaries. The method of borrowing prescribed in the Act includes issue of debentures. Loans can be raised on the security of immovable properties, security of any of the taxes, duties, tolls, cesses, fees etc. The purpose for using the borrowed funds as well is prescribed in the Act. These include construction works, acquisition of land, and loan refinancing.

The law puts a cap on the borrowings of MCB. Accordingly, the loan liabilities are not to exceed an amount, that is twice the annual value of lands and buildings that are within the PT net of the MCB.

The law provides also the ways in which the loans raised could be serviced. These include payment out of the sinking fund by equal payments of principal and interest. If the repayment of loan from sinking fund is approved by the state government, the MCB is obliged to create this fund in a manner so that the amount in the sinking fund along with the compound interest is sufficient for repayment of the entire loan amount (after paying all expenses). The law makes it mandatory for the MCB to invest the whole amount lying in the sinking fund, in government securities or the securities guaranteed by the government or in municipal debentures.

Municipal Initiatives at Higher Levels of Government for Improving Municipal Finance

The state government has not taken any major policy initiative to improve the state of municipal finance in the state. It has, of course, been following the mandatory provisions of the Indian Constitution to constitute the SFC. The second SFC has been constituted by the state government, which is presently looking into the fiscal transfer mechanisms for the urban local self-governments. The state government has been thinking for quite some time to bring back Octroi as the state finances are not in a position to bear the burden of compensating the municipal governments for the loss of revenue after the abolition of Octroi. The compensation given by the state government has already been slashed to a very large extent. The state government is in the process of putting in place a system of intercepting of fiscal transfers to the municipal governments in case of default in repayment of loan advanced to them by it. The state government of Madhya Pradesh has as well created a City Managers' Association in the state.

Basic Services

Water Supply: Water supply in Bhopal, before the Seventy-fourth Constitution Amendment, was maintained by a multiple agencies like MCB, State Public Health Engineering Department, Military Engineering Services, Bharat Heavy Electricals and the Railways. In November 1995, following the 74th Amendment, Water Supply was transferred to MCB, which includes both augmentation and maintenance of water supply. The MCB makes available about 64 mgd of potable water daily for a population of about 1.6 millions. However, due to scanty rains, the supply has been curtailed to 51 mgd. Thus about 143 litres of water per capita is made available by the MCB supply daily. This is more than the CPHEO norm of 70 lpcd for the cities without any sewerage system.

Sewerage: At present, the city does not have any organized sewerage network and facilities in the old Bhopal city and other areas falling within the catchment area of lakes which are

many in the city. Sewage and sullage from these are discharged into the lakes through open drains.

MCB has, therefore, started a project for construction of systems of sewerage network and treatment plant. About 62 kms of sewer mains are being laid in 23 municipal wards.

Roads and Drains: There exists a network of road of about 1020 kms in length throughout the city of which only about 54 per cent is asphalt road. The rest are WBM roads, and Kutchra roads.

Drainage system consists of 508 kms of drain length of which about 53 per cent is pucca drain.

Solid Waste: The Municipal Corporation area generates about 600-680 metric tons/day of solid waste. However, it is able to collect only about 80 per cent of the solid waste generated on the daily basis. The rest are left littered on the streets. This has its own adverse impact on the urban environment.

Municipal Finance

The revenue structure of MCB does not compare with the revenue structure of VMC. It depicts dependence of MCB on state transfers to a very large extent. The own sources of revenue of MCB account for a little over 40 per cent of the total revenue receipts in the year 2000-2001. This indicates its dependence on the sources external to it (the subventions). In 1998-99, it generated a little over 50 per cent of its total revenue receipts from its own sources. This declined to about 45 per cent in 1999-00. This further declined to 41 per cent in 2000-01. The share of external sources correspondingly increased from 47.76 per cent in 1998-99 to about 59 per cent in 2000-01 (Table B-1). Increasing dependence as also a very large share of external sources besides adversely affecting the autonomy of MCB, also constrains any rudiment of financial planning. The flow of external sources is generally

characterised by uncertainties in its actual flow, besides the conditions, which are generally attached to the external funds.

Another disturbing trend in the finances of MCB is the declining role of tax sources in general and the PT in particular. Whereas the share of tax sources, by and large, has been stationary around 30-33 per cent of the total own source revenue receipts, the share of PT has declined gradually since 1993-94 (Table B-1). The non-tax sources present relatively a better situation. Its share has been around 66-69 per cent of the total revenue from own sources. Lately, however, its revenue productivity role has declined.

Revenue Receipts:

Taking the simple annual percentage variation in revenue from own sources as a proxy for buoyancy of its tax and non-tax sources, the own sources of revenue do not seem to be as buoyant in the last couple of years as they were during 1997-99. The annual percentage rate of growth in own sources of revenue at current prices has declined from about 46 per cent in 1997-98 to about 14.5 per cent in 2000-01 (Table B-2). The subdued role of its prime source – the PT – is reflected in a nominal rate of growth in PT revenue. The rate of growth in own sources revenues at constant price (1991-92 price) has as well been on a decline. Moreover, there does not exist any trend towards improvement in it. The spurts in the growth rate is discernible in Bhopal as in the case of Visakhapatnam (Table B-3). The growth rate in revenue from PT at constant price registered a negative rate of growth in 2000-01.

The uncertainties in the flow of funds from external sources referred to earlier is corroborated by negative growth rates in it in several years (Table B-3).

The per capita revenue from own and external sources as also the total per capita revenue receipts in nominal and real terms are presented in Table B-4 and B-5. Tables B-6 and B-7 contain percentage variation in per capita revenue in nominal and real terms. Table B-7 reveals the status of MCB's total revenue receipts when adjusted for price and

population changes. The Table shows that the total revenue receipts have not kept pace with price and population changes. The annual percentage variation in per capita total receipts shows negative growth rate in several years. This applies equally to the revenue from PT. Even the revenue productivity of non-tax sources has been declining in recent years. This indicates not-so-effective-administration of user charges, which happen to be an important source of direct cost recovery.

Thus both in terms of revenue structure and the trends in it in real terms, the finances of MCB do not present a happy situation.

Revenue Expenditure:

Revenue expenditure of MCB at current prices is contained in Table B-8. It shows that the largest proportion of the total revenue expenditure is spent on wages and salaries, which accounts for about 43 per cent of the total revenue expenditure in the year 2002-2001 (Table B-8). Water supply and public works together account for a little over 41 per cent of the total revenue expenditure. Thus little is left over for an effective operations and maintenance of other services rendered by MCB. A redeeming feature of MCB's revenue expenditure is that the proportion of expenditures on wages and salaries has declined from 63.63 per cent in 1991-92 to about 43 per cent in 2000-01. As in Visakhapatnam, the MCB as well has public works component in the revenue budget, which are in nature of capital works.

Trends in revenue expenditure over the years are not found to be stable. Variations in terms of increase and sudden decline are found during the period 1991-01 (Table B-9). Annual percentage variation in revenue expenditure at constant price shows negative growth rates in 1995-96 and 1998-99. Such trend in real terms as well is visible with respect to several heads of expenditure (Table B-10). Such a trend in real terms indicates the budgetary constraints of MCB as also not-an-effective-maintenance of services. This is corroborated also by the trends in per capita expenditure on various heads of expenditure in real terms

Percentage variation in the total per capita revenue expenditure as also in per capita expenditure on various heads of expenditure in nominal and real terms are contained in Tables B-11 to B-14. Table B-14 indicates several lags in the per capita expenditure in real terms. Such lags are found in almost all the heads of expenditure. The per capita expenditure in real terms has registered negative growth rates in almost all the years and in all the heads of expenditure. MCB is apparently constrained in expenditure planning and in enhancing the effectiveness of service provision.

Capital Receipts

The MCB has a separate capital account budget as well. It finances capital improvements in two ways. First is the grants-in-aid given to it by the state government for financing the capital projects. Second being the borrowings. The MCB has not taken recourse to borrowings since 1994-95 (Table B-15). Due to its limited borrowings, the revenue expenditure does not depict any servicing of loan since 1998-99 (Table B-9). Grants-in-aid have continued to be the major source of financing the capital projects. The revenue budget does not contribute anything to the capital budget for augmenting the much-needed capital funds even though the revenue budget ends up with surplus cash balances. After a deficit of about Rs. 25.60 millions on the revenue account in 1997-98, its surplus has been increasing in the successive years (Table B-17). This increased from about Rs. 10 million in 1998-99 to Rs. 143.58 millions in 2000-01. The surplus on the revenue account is used as opening balances in the revenue account in the successive years. In other words, the revenue surplus is utilized to supplement the revenue receipts on its revenue account. Such a system of using revenue surplus for operations and maintenance of municipal services again indicates the fiscal stress of the MCB.

Capital Expenditure

Analysis of capital expenditure during the last ten years does not show any trend towards systematic increase. This as well is characterized by spurts and a great deal of fluctuation. As an illustration, it declined from Rs. 21.33 million in 1996-97 to a low

expenditure of Rs. 8.29 million in the next year. Having increased to Rs. 52.07 million in 1999-00, it again declined to Rs. 26.83 million in 2000-01 (Table-16). Such fluctuations in capital investments are explained by the constraints on the availability of funds as also the dependence of MCB on state government support.

Credit Absorption Capacity

As mentioned before, MCB has not taken recourse to borrowings since 1994-95 (Table B-8). Hence its revenue expenditure does not show servicing of debt by it since 1998-99. The DSCR is therefore relevant only upto 1997-98 when it has had to repay the loans – both principal and the interest. Table B-18 contains DSCR for MCB for the relevant years. However, it does not help acquire any insight into the credit absorption capacity of MCB. As the revenue surpluses are driven by the opening balances and the availability of internal and external revenues, the DSCR is highly dependent on these. In certain years, DSCR is much lower than 1.25 to 1.50, which is generally, accepted level of DSCR in this country.

A favorable DSCR is largely determined by (i) the extent of surplus on the revenue account and its contribution from the revenue budget to the capital budget; and (ii) the internal fiscal strength to raise loans which gets reflected in the rate of growth in revenue receipts in real terms. Table B-17 shows negative closing balances on revenue account in 1994-95, 1995-96 and in 1997-98. Since 1998-99, even though the Corporation has been having a revenue surplus (Rs. 78.86 million in 1999-00 and Rs. 143.58 million in 2000-01), the fiscal stress of MCB has perhaps not permitted it to contribute the surplus to the capital budget. The capacity to raise funds from the market thus seems to be constrained a great deal.

In sum, the finances of the MCB do not indicate any robust fiscal situation. It is constrained in generating sufficient financial resources from its internal resources. Its fiscal strength and hence the capacity to access the municipal bond market is also constrained by its revenue structure that is dominated by subventions. Such a fiscal situation is unlikely to fetch it an investment grade credit rating, which is an imperative for accessing the capital market.

Dehradun

The city of Dehradun is the capital of the newly created state of Uttarakhand which consists largely of hills. The state was created on 9th November 2000 as the 27th state of the Indian Union. The city of Dehradun is a valley surrounded by beautiful Shivalik hills. Before the creation of the new state of Uttarakhand, the Dehradun Nagar Nigam (DNN) was part of the State of Uttar Pradesh. It was a municipal council, which was converted into a municipal corporation on 9th December 1998 just a few years before the creation of the new state. After creation of the new state of Uttarakhand, the Corporation was dissolved and an Administrator was appointed to carry on local administration. As the new law for the corporation is still in the process of being drafted, DNN is still governed by the provisions of the Uttar Pradesh Nagar Nigam Act, 1959 as amended from time to time.

DNN consisted of an area of 31.08 sq. kms in 1981 and 32 sq. kms in 1991. Its jurisdiction was, however, increased in 1999, just before the new state was carved out of the sprawling state of Uttar Pradesh. As many as 32 new revenue villages were added to its jurisdiction. These new revenue villages had a population of about 119 hundred thousands, and an area of about 20 sq., kms. The jurisdiction of DNN thus increased to about 52 sq. kms. At the time of annexation of new areas, the Uttar Pradesh (U.P.) Nagar Nigam Act was amended and a new clause was inserted in the Act that no Property Tax shall be levied on the owner occupied houses for a period of ten years. As the revenue villages seldom have any let out properties, this came as a major setback for the finances of DNN. It added to the financial liability by way of provision of services in the newly annexed villages but hardly any revenue from these areas.

The population of the city according to the Census conducted in 2001 is 447,808 as indicated in the Table given below.

Population and Area of the Dehradun Municipal Corporation

Year	Population	% increase over the last Decade	Area (in sq.kms.)
1971	166,073	—	N.A.
1981	211,416	27.30	31.08
1991	270,159	27.79	32.00
2001	447,808	65.76	52.00

Source: Census of India

The city has suddenly experienced a dramatic increase in the growth rate of population. The decennial growth rates during the decades 1971-81 and 1981-91 were stationary at about 27 per cent. This increased to 65.76 per cent in the last decade due to carving out of the new state and designating Dehradun as its capital city as also due to annexation of new areas.

Municipal Legislative Framework

As mentioned earlier, the Corporation Council is dissolved and has not yet been reconstituted. An Administrator appointed by the state government of Uttaranchal presently carries out the administration of DNN. Unless the local elections are held for constituting of a new Council according to the provisions of the Seventy-fourth Constitution Amendment Act, 1992, the constitutional provisions do not apply to any municipal body. Therefore the provisions of the 74th Constitution Amendment Act are not yet applicable to DNN. Also as a new legislation is being drafted for regulating the constitution, powers and functions of DNN, and for putting in place the instrumentalities of local governance, the legislative framework of DNN is still in a flux. Because of this, several provisions of the Uttar Pradesh Nagar Nigam Act, which are presently extended to DNN, are not relevant. As the council does not exist, the position of Mayor, the authorities of the Municipal Corporation, the statutory Committees, Wards Committees, DPC and similar other provisions of the UP Nagar Nigam Act are not relevant in the case of DNN. Presently, the Administrator enjoys all the powers of the corporation council, the various statutory committees and the Municipal Commissioner.

Municipal Functions

Functions of DNN include almost all the municipal functions as performed by VCM with certain deviations. The UP Nagar Nigam Act does not devolve water supply – both augmentation and maintenance – to the Municipal Corporations. Hence DNN is not involved in potable water supply. Augmentation of water supply, construction of treatment plants and providing for sewerage system is entrusted to a parastatal known as Jal Nigam. Operations and maintenance of water supply as also billing and collection is vested to Jal Sansthan. Urban Planning and development is entrusted to the Dehradun-Mussoorie Development Authority.

Clarity about the functional domain of DNN could be had only after a new legislation is finally enacted by the state legislature. Presently, however, municipal functions are fragmented in Dehradun. Also some of the functions mentioned in the XII Schedule of the Indian Constitution is not with DNN.

Level of Services

Water and sewerage, as mentioned before, are the domain of the state level parastatal. Against a requirement of about 127.20 mld in 2001, the Nigam is making available only about 95.39 mld out of which only about 66.77 mld is actually available due to leakages (28.62 mld). The water supplied is not equitably distributed. The revenue villages annexed to DNN have a much lower level of water supply. Only 40 per cent of the DNN areas are covered by sewerage system. In terms of population, only 2.24 hundred thousand people are covered by sewerage system. This is just 50 per cent of the total population.

Drainage system in this city used to follow the natural gradients. However, the coming up of several new colonies, most of them without an approved layout plan, has brought obstructions to the natural drainage system. The problem is acute in the newly annexed revenue villages. The city has 450 kms of roads and streets. Against this, the city has only about 20 kms of broad drains and about 25 kms of narrow drains. Estimate of

requirement worked out by DNN showed that an additional length of 100 kms of drains and 500 kms of narrow drain are required to alleviate the situation. About 200 metric tons of solid waste per day is generated in the city. DNN, however, had the capacity to collect merely 60 metric tons of garbage till the last year. Now it has acquired a capacity to collect about 100 metric tons a day. Thus only 50 per cent of the garbage generated is collected at present. In order to manage hospital wastes, the city has invited management tenders on BOO basis from private operators. The expenditure will be financed through charges to be imposed on nursing homes by the DNN and paid to the BOO operator.

Policy Initiatives at the State Level

The newly created state government is still in the process of grappling with the process of appropriate policy initiatives. It has constituted the first SFC, which is presently engaged in suggesting the transfer system as also the ways to strengthen and improve the municipal management capabilities. With the initiative of the on-going Indo-USAID collaborative FIRE (D) programme, the state government has just created a state level City Managers' Association that is expected to bring about professionalism in municipal management. What is important to note is that the state government has given a free hand to DNN to put in place the needed mechanisms and the tools for enhancing its institutional capacity.

The state government has approved to raise Rs. 30 million from HUDCO and the Ministry of Environment, Government of India for increasing the capacity to effectively manage the solid waste generated in the city. Sweeping and collection of garbage in the newer localities is being entrusted to an NGO called Pramukh that will collect service charges from the residents. Bharat Heavy Electricals Ltd. is examining a proposal for using the garbage to produce energy. A project report on modern slaughter house and carcass utilization plan is presently being proposed. Institutional capacity building as also the strategy for enhancing the fiscal capabilities is being addressed to by engaging a consultant. A Netherlands based company – DHV - has been engaged to work out the mechanisms for strengthening institutional capacity and resource mobilization. The prime objective is to

increase the locally raised resources through good financial management, better HRD, community development, asset management, GIS and accounting reforms.

DNN has “rationalized” the PT system for making it “transparent and objective”. Lands and buildings have been categorized into residential, commercial and vacant land. Residential properties are again classified on the basis of quality of construction into three categories viz. A, B and C. The rental values are Re. 1, 0.75 and 0.50 per square feet of carpet area respectively. A depreciation of 10 per cent is provided for properties of more than 20 years and 20 per cent for those more than 30 years old. The rates for commercial properties are Rs. 3, 2 and 1.50 per sq. ft. for ground floor, first floor and second floor and above respectively. Vacant plots are assessed at Re. 0.25 per sq. feet; if used for commercial use, it is assessed at twice this amount.

Financial Devolution

The tax authority of DNN is still governed by the U.P. Nagar Nigam Act. DNN has, accordingly, been devolved with certain tax and non-tax sources. The tax sources include:

- i. House tax;
- ii. Tax on Professions, Trade and callings;
- iii. Tax on dogs;
- iv. Tax on Advertisement other than in News papers
- v. Tax on Theaters;
- vi. Tax on Projections;

The non-tax sources consist of an array of sources like rent, fee and fines, sale of lands, etc. The prime source of own revenue, however, is the House Tax (Property Tax), which is a tax on land and buildings.

Municipal Finance

The revenues of the DNN are dominated by grants-in-aid from the state government. Financial dependence of DNN on state government's financial support is therefore very high as compared to MCB. It raises only a little over one-fourth of its total revenue receipts from its own sources (Table D-1). During the last ten years for which the data are available, DNN has hardly raised more than 30 to 48 per cent of its total income on revenue account. It is thus dependent on the state government for more than 70 per cent of its revenue receipts. It hardly has any fiscal strength of its own which could come handy for getting an investment grade credit rating and raising of loans from the market.

Revenue Receipts

A weak fiscal capability of DNN is reflected also in the trends in its revenue receipts. Revenues from own sources have registered negative annual growth rate even at current prices (Table D-2). Its dependence on grants and the unreliability such dependence is associated with, is depicted by the negative annual growth rates in revenues from external sources as well (1995-96, 1999-00).

Absence of sound tax administration is revealed by low rate of growth per annum in revenues from tax sources and also by negative growth rate in tax revenues. The same applies to the revenue from Property Tax.. Revenue from non-tax sources though depict impressive rate of growth per annum, the growth rate is marked by too much of fluctuations. The revenue has increased in certain years by more than 100 per cent but it has also shown negative growth rates in quite a few years (1992-93,1995-96,1998-99)

Table D-3 reveals DNN's grim financial situation. Revenue receipts as also the receipts from its own sources in real terms have registered negative growth rates in several years. The increase in revenues from own sources has not kept pace with population increase even in nominal terms (Table D-4). Even at current prices, the per capita revenue from its own sources has not even doubled in the last ten years (Table D-4). The total revenue

receipts, when adjusted for price and population changes, show a great deal of fluctuation (Table D-5 and Table D-6). Table D-7 demonstrates that the per capita revenue in real terms has registered negative growth rates in certain years, both in respect to the total revenue and the revenue from own source. Revenue from PT, the prime source of own revenue, has decreased in real term almost on a regular basis in the last ten-year period (Table D-7). The per capita revenue from PT in real terms has declined from Rs. 16.86 in 1991-92 to Rs. 7.50 in 2000-01. Similarly, the per capita revenue from all sources (both internal and external) has declined from Rs. 51 in 1991-92 to Rs.41 in 2000-01.

Trends in revenue receipts of DNN thus indicate a grave fiscal stress that has been afflicting it for quite some time. The revenues, instead of increasing with population and price changes, have declined.

Revenue Expenditure

Not-so-well financial status of DNN gets compounded if one looks at its revenue expenditure. Lions share of the total revenue expenditure goes to pay wages and salaries. About 84 to 89 per cent of the total revenue is spent on wages and salaries (Table D-8). Such a high proportion of total revenue on payment of salaries hardly leaves any amount, which could have a dent on operations and maintenance of municipal services. It must be noted that water supply and sewerage is not part of DNN's functional domain. And yet, the expenditure on other heads of municipal expenditure is nominal. Public health gets just about 3 to 5 per cent of the total revenue expenditure. Safety and conveniences get still a lower proportion of the total expenditure (Table D-8).

Trends in revenue expenditure in the last ten years in nominal and real terms are presented in Tables D-9 and D-10. The constraints on the availability of financial resources are reflected in the trends in revenue expenditure as well. The percentage variation in the total revenue expenditure at constant price is found negative especially up to 1995-96. It has fluctuated a great deal thereafter (Table D-10). Negative growth rates are observed in certain years with respect to almost all the heads of expenditure.

Per capita expenditure in real terms as also the percentage variation in it is said to be a relatively better indicator of the level of services as well. The per capita expenditure at current and constant prices is presented in Tables D-11 and D-12. Variations in it in nominal and real terms are contained in Tables D-13 and D-14. Fluctuations, in certain years to a very large extent, are observed in the total per capita expenditure and the per capita expenditure on various heads of expenditure. In a ten-year period, the per capita expenditure in real terms has only marginally increased from Rs. 119 in 1991-92 to Rs. 121 in 2000-01.

The analysis of trends in revenue receipts and expenditure indicates a great deal of fluctuation and even negative growth rates. The DNN would need to address the fluctuation first by making its tax administration effective. Its fiscal stress also seems to be emanating from the annexation of large new areas where it has to provide services, but does not get revenue from the newly annexed areas. Now since the revenue villages are part of DNN's jurisdiction, the DNN needs to bring at least the let-out properties within the tax net. It would also need to devise the required intervention for improving the administration of non-tax sources (user charges) to enhance cost recovery with respect to such services that are not in the nature of public goods. The National Institute of Urban Affairs has supported the SFC, in Uttaranchal by funding a study on PT in the state in general and in Dehradun in particular. Hopefully, this study as also the scope of work given to the Dutch consulting company would help it come out of the present state of its fiscal stress.

Capital Receipts

Capital improvement projects in Dehradun are funded largely through capital grants. As in the case of Visakhapatnam and Bhopal, the revenue budget of DNN as well contains expenditure on public works. Thus, small capital works are financed through revenue receipts out of the revenue account budget itself. DNN has not raised loans in the last ten years except in 2000-01 when it borrowed about Rs. 20 million (Table D-15). The amount spent on repayment of loans (Table D-8) is towards the loan raised before 1991-92. DNN has raised a major loan of Rs.20 million in 2000-01 from the state level revolving fund.

Capital financing by DNN is firstly to a very small extent; up to 1997-98, the total capital funds available to it were less than Rs. 10 million. Secondly, the availability of funds through capital grants depends on the state government's will as also its own resource endowments. These get manifested in a great deal of fluctuations in capital funds (Table D-15) available with DNN.

Funding through capital grants are generally characterized by conditions and caveats attached with it. Table D-16 corroborates this. DNN gets capital grants for specific purposes that are to be spent according to the conditions attached with them. It hardly gets any general-purpose grant (Table D-6). The capital expenditure driven, as it is, by state subvention is, as well, characterized by fluctuations to a large extent.

Capital Expenditure

Capital expenditure incurred by DNN is contained in Table D-16. The compulsions of paucity of funds for capital investments can be seen from this Table. The amount of expenditure per annum varies a great deal. In a ten-year period, the capital expenditure seems to have just doubled. This modest increase in capital expenditure notwithstanding, fluctuations in the total amount spent on development of capital assets is seen to a very large extent in the Table. The capital expenditure has not been consistent during the reference period. Having spent an amount of Rs. 14.25 millions in 1994-95, its total capital expenditure declined to Rs.6.40 millions in the next year. This further declined to Rs. 4.47 millions in 1996-97. There is a sudden increase in it in the year 1999-00.

Credit Absorption Capacity

The analysis of income of both on revenue and capital accounts as also of the expenditures incurred by it has earlier revealed a weak fiscal strength of DNN. In such a state of its finances it is hardly in a position to bear the burden of borrowings. The already precarious financial situation has been a compelling reason to postpone a number of

mandatory payments in almost all the years in a period of the last ten years. In the year 2000-01, for example it postponed payments to the extent of Rs.148.46 millions (Table D-17). The postponed expenditures include the repayment of loans, contributions to pension and gratuity funds, payment of electricity bills, audit fee, etc. If these financial obligations are honored, the closing balance on the revenue account will be negative to a large extent. The closing balances of DNN on revenue and capital accounts as presented in Table D-18 therefore, is at most artificial. Even without honoring the payment obligations mentioned above, the revenue surplus of DNN has been negative in several years (Table D18).

In such a fiscal state of DNN, the DSCR (Table D-19) which is negative in as many as five years during the last ten-year period, does not carry any meaning. Unless the fiscal capabilities of DNN are strengthened, DNN does not have the capacity to go for borrowings much less from the capital market. It does not have a rudiment of fiscal strength to get an investment grade credit rating.

Synthesis of Findings of the Three Cities

The legal and institutional framework of the three cities is as diverse as their fiscal capabilities. Only the Municipal Corporation of Bhopal happens to be the unit of self-government in true sense of the term largely due to its strong Mayor system with a cabinet form of local government. Even though not all the functions have been devolved to MCB, there have been important functional shifts from the states' functional domain to the functional domain of the municipal governments. However, some of the functional shifts have not been accompanied by the transfer of funds as well which earlier used to finance functions shifted to the local functional domain. The city of Visakhapatnam represents a system of local "self-government" where the executive functions and powers are vested in an appointed civil servant; Mayor being a ceremonial head only (belonging to the weak Mayor system). Functions are fragmented in Visakhapatnam as well. Dehradun represents another extreme in the system of urban governance. The Council continues to be dissolved and the Administrator represents everything – the Council, the Statutory Committees, Wards Committees and the Commissioner. Enabling piece of legislation for DNN is still in the

process of being drafted. The local self-governance and the processes are still in state of a flux.

Governance

The study explains that governance structures vary among the three cities. In VCM Councillors are elected at large but an appointed bureaucrat acts as the chief executive. Bhopal elects its Councillors by electoral district and the mayor is elected at large. The mayor is the chief executive but it is the state, not the municipality that appoints the municipal commissioner. In DNN, a municipal council does not presently exist. The administrator appointed by the state enjoys all the powers of the council, committees, and municipal commissioner.

From a financial perspective, the main factor related to governance is that it provides accountability and transparency. This means that elected officials take responsibility for the affairs of the municipality including the appointment of senior staff. Financial accountability is achieved through adherence to central government regulations (e.g. not budgeting for a deficit, prescribed accounting standards, and effective tax collection procedures), budget approval by elected officials, periodic reporting, and independent audits. Transparency involves making decisions in public and full disclosure of information used in making decisions. Good governance provides investors with a positive level of comfort.

Accountability and transparency are part of the governance structure adhered to by municipalities in Canada. Provincial governments set minimum standards and professional associations develop and circulate best practices.

Fiscal Capabilities

The analysis of finances of the three cities has revealed that their fiscal capabilities are quite varied. Of the three cities, only Visakhapatnam emerges to have some rudiment of better fiscal health. However, the present practice of repayment of only the rate of interest on

loans by the VMC does not indicate a sound financial practice nor does it help in getting an objective picture of its over-all financial status. If VMC is called upon to fully service the debt, there will be dilutions in its present fiscal health. The major findings of the analysis are given below.

The city of Visakhapatnam has a better revenue structure amongst the three cities (Table S-1). It generates revenues to the extent of more than 82 per cent from the sources on which it has a legal authority. The Municipal Corporation of Bhopal derives only 41 per cent of the total revenue receipts from its own sources. This is the lowest in case of Dehradun (28.25 per cent). The dependency of the cities of Bhopal and Dehradun on state subventions is very large. Such a large dependency syndrome will hardly be amenable for getting an investment grade credit rating; nor will it enable to bear the burden of borrowings on its own. In both the cities (Bhopal and Dehradun) the dependency syndrome is on an increase.

How has the internal financial resource generation behaved over a period of time? Table S-2 depicts that even though VMC stands out amongst the three cities on the basis of revenue structure, resource generation has not been consistent. This is reflected in annual percentage variation during the last ten years even in real terms. The growth rate in per capita revenue in nominal terms has been negative in several years. The same applies to Dehradun (Table S-2). In the case of Bhopal as well several lags are observed in the annual growth rate during the period.

Per capita revenue in real terms is said to be a better indicator of financial status. VMC is seen to have faltered on the basis of this indicator as well. This suggests that even though it has a better revenue structure, the revenues generated from its own sources has not kept pace with increase in population and inflation. Same is the situation with respect to Bhopal and Dehradun which do not have as sound a revenue structure as Visakhapatnam (Table S-3).

Expenditure on wages and salaries is yet another indicator that throws light on the expenditure actually going towards operations and maintenance of services as also on

contribution to the capital budget through surplus on the revenue account. VMC spends the least proportion (36.54 per cent) of its total revenue receipts on wages and salaries (Table S-4). Dehradun spends the largest proportion (84.13 per cent) of its total revenues on wages and salaries. Bhopal spends relatively higher (42.87 per cent) than Visakhapatnam.

Expenditures are driven by the resources at the command of the city governments. Even though VMC has the best revenue structure, the lags in its revenues generated which is reflected in Tables S0-2 and S-3, has its manifestations in the level of revenue expenditure. The per capita revenue expenditure has registered negative growth in certain years (Table S-5). Also no any trend towards systematic increase in revenue expenditure is observed in the three cities. If the three cities try to address this fluctuation, it will require generating additional revenues from own sources that could be leveraged for borrowings.

What is the status with respect to the closing balances on the revenue account in the three cities? Table S-6 shows that only VMC has had substantial closing balances on its revenue account. In 2000-01, it was to the tune of Rs. 286.17 million. Bhopal had just half this amount as a revenue surplus in the same year. In case of Dehradun, the closing balances as presented in Table S-6 do not connote anything. It is at most an artificially created balance as a large amount of expenditures have been postponed throughout the reference period due to constraints on the availability of financial resources.

The Municipal Corporations of Bhopal and Dehradun do not have credit absorption capacity. This is reflected in the DSCR which in the case of these two cities does not seem to be relevant largely due to too much fluctuations in the rate of growth in per capita revenue in real terms in these two cities, their high dependency on external funds, and the borrowings as well as the debt servicing practices. The credit absorption capacity of even Visakhapatnam seems to be in doubt largely due to the existing practice of meeting only the interest liabilities in servicing of debts.

In sum, revenues are insufficient to cover the cost of providing all residents with the services delegated to local governments under the Twelfth Schedule. All the three cities

generate operating budget surpluses but one of them (DNN) does this by deferring accrued liabilities. The municipal revenue challenge is a common and universal one. The best solution from the municipal perspective is to encourage central governments to provide municipalities with the legislative authority to raise most of their own revenues through direct access to local taxes, user fees and other own source revenues. If central governments prefer to distribute a share of state or national revenues instead, it should be done in a consistent, non-arbitrary way that enables municipalities to maintain a solid revenue base, with no significant fluctuations, and undertake long term financial planning. Although investors generally prefer the former approach, a well administered, adequately funded grant system can also generate confidence.

The practice in Canada is for municipalities to generate most of their own revenues. These are supplemented by provincial, and to a lesser extent, federal transfers.

Capital Project Expenditures, Planning and Sources of Financing

The study indicates that capital infrastructure projects in the three cities are financed through operating budget expenditures; i.e. capital out of revenue, year-end surpluses, state capital grants and loans, and loans from other sources (e.g. MCB). There are wide fluctuations in annual capital expenditure amounts in VCM and MCB, which reflect constraints on the availability of capital funds.

The preferable system is to engage in long term capital planning and budgeting and develop an affordable solution that provides consistency in the annual work program. It should also utilize a number of revenue sources to finance the various components of the capital program. The standard sources of capital financing are the ones identified in the previous paragraph plus reserve funds and capital borrowings (bank loans or bonds) financed either through general revenues or user fees.

In Canada, municipalities prepare capital budgets and engage in capital planning. Capital projects are financed through a combination of the sources listed above. Mature municipalities with infrastructure already in place, tend toward a 'pay as you go' approach

using capital out of revenue and monies set-aside in reserve funds. Growing and under-served communities rely more heavily on capital borrowing. Canadian provinces provide technical assistance in the areas of capital planning and budgeting. Best practices are developed by professional associations; e.g. the Government Finance Officers Association of the United States and Canada. Some provinces share in capital project development costs.

Municipal Bond Market: The Lessons Learnt

The initiative to finance urban infrastructure and services by raising the funds from the capital market through municipal bonds began in India only in 1994. The driving forces for the launching of this initiative have been alluded to in the very beginning of this report. The traditional system of funding through plan and budgetary allocations as also the guaranteed regime of funding did not enable an effective use of resources. Since the funds through these methods come to the municipal governments as assured funds, the municipal governments hardly are worried about rationalizing the pricing system and effective billing and collection for cost recovery. The cost recovery was hardly strived at by them.

Raising of funds from the debt market was thought to be a compelling reason for impelling the municipal managers to strive seriously for cost recovery so that the debts raised from the market could be serviced. Making municipal managers pro-active is built into this new financing method itself. Moreover, accessing the capital market is predicated on structuring of commercially viable/bankable projects for which the investors could have an appetite that could provide a high level of comfort to them. Accessing the capital market on the strength of well-structured project could be instrumental in developing a market based urban infrastructure finance system as also a long-term debt market in India's capital market. Another important spin-off of such a finance system is said to promote an effective system of urban management in general and financial management in particular.

After the advent of this new system of financing urban infrastructure, so far eight city governments have issued municipal bonds of varying amounts as is presented in the Table given below except the city of Hyderabad for which data are not available.

Municipal Bonds Issued by the City Governments

Government	Year	Size of the Issue (Rs in billion)	Government Guarantee	Credit Rating
Ahmedabad Municipal Corporation	1998	1.00	No	AA (SO)
Bangalore Mahapalika	1997	1.00	NO	A (SO)
Ludhiana Municipal Corporation	1999	0.20	NO	AA- (SO)
Nasik Municipal Corporation	1999	1.00	NO	AA (SO)
Nagpur Municipal Corporation	2000	0.50	NO	AA- (SO)
Madurai Municipal Corporation		0.30	NO	A+ (SO)
Indore Municipal Corporation	2001	0.50	Yes	N.A
Ahmedabad Municipal Corpn.	2002	1.00	No	AA (SO)

Of the seven city governments shown in the above Table, the Municipal Corporation of Ahmedabad has gone twice to the capital market. The second bond issue by Ahmedabad was on the strength of a Tax Free Municipal Bond. Ahmedabad which became the first city in Asia to have raised municipal bonds for financing urban infrastructure, also became the first city in India to have availed of the Tax Free Municipal Bond. The seven cities mentioned in the Table given above, have in all, raised an amount of Rs. 5.5 billions.

There have been many rewarding experiences of developing a municipal bond market in India. It has as, nevertheless, also led to realisation of certain problems and constraints encountered in the process. The rewarding experiences as also the problems and constraints encountered are dealt with below.

Rewarding Experiences.

1. Before the advent of the new financing method, urban infrastructure was treated as a social welfare measure to be provided free or at most on the basis of subsidies. There exists now a consensus amongst the policy makers, planners and administrators at all the three levels of government that provision of urban infrastructure and services entails costs that need to be paid by some one. The state governments could no longer bear the increasing burden of meting this cost through subsidies. Moreover, subsidy if given across the board to every body and if it is not targeted and transparent, leads to a low equilibrium trap. After the system of municipal credit rating was evolved by supporting the credit rating agencies for developing a methodology of credit rating of municipalities, it led to remarkable motivation on part of municipal managers to go for credit rating. Many of them went for credit rating not of any specific debt instrument, but for rating of the organization itself as an exercise in self-introspection. However, the number of such cities is not very large in view of the total number of cities and towns of different size categories.
2. The motivation to go for issuance of municipal bonds has led to a serious realization that accessing the capital market is contingent on a strong and effective urban management and financial management systems. Getting an investment grade credit rating by the municipal governments is critically dependent on these.
3. With a view to give fillip to the process for development of a municipal bond market, the Union Finance Ministry finally agreed to give incentive to the investors if they invested in municipal bonds. Detailed Guidelines were formulated to regulate the issuance of tax-free municipal bonds. Besides Ahmedabad, the city of Hyderabad has been allowed to issue tax-free municipal bonds. Hyderabad has raised funds from the capital market recently.
4. It was realized that the new system of financing through credit rating calls for reforms in the existing cash based accounting system. Municipal Accounting system has to be such

that it throws light on the basic parameters of financial strength and performance. Besides the state of Tamil Nadu which has already switched over to a new accrual based double entry accounting system for the municipal governments in the entire state, increasing number of cities are going to switch over to the new accounting system including the Municipal Corporation of Bhopal.

Besides the above-mentioned some of the most important rewarding experiences, new constraints and problems as well have been confronted. These are mentioned below.

Problem Areas

1. **Credit Worthiness**: By far, the most endemic problem happens to be the lack of credit worthiness of municipal governments. This is evident from the analysis of finances of the three cities included in the CIDA initiative. The number of cities that can access the market is limited amongst India's very large number of cities and towns. Lack of capacity to absorb credit does not enable them to obtain an investment credit rating. Municipal bond market in order to be developed, widened and sustained requires internal financial wherewithal. The new initiative to develop a market based urban infrastructure finance system is critically predicated on a robust fiscal strength of municipal governments. This has been lacking in most of the municipal governments.
2. **Credit Enhancement**: Lack of credit worthiness calls for credit enhancement mechanisms. The very fact that even though initiative to develop a municipal bond market in India was launched in 1994, it took 4 years for the first city in this country to access the capital market by floating municipal bonds. Enhancing the credit worthiness of municipal governments is a complex task.

There could be several ways for credit enhancement. The first and the most important mechanism is to strengthen the financial management system which could lead to a financial turn around in the presently resource starved municipal governments.

Therefore tax administration machinery of municipal governments would need to be strengthened so that the revenue generation capabilities are enhanced.

- 3. Technical Assistance:** Credit enhancement by strengthening municipal finances requires focused technical assistance. Except the cities of Bangalore and Hyderabad, all the other cities that have accessed the capital market were given some kind of technical assistance to enhance their fiscal and institutional capabilities. The technical assistance included tax reforms, effective tax administration, rationalisation of user charges, effective billing and collection, professionalisation of municipal staff, asset management and HRD.

The analysis of the three cities in this report has not yielded any rosy picture about their finances. They, especially the cities of Bhopal and Dehradun, badly need technical assistance. Some initiative in this regard has already been taken in Dehradun by engaging consultants. What is important is to put in place systems to be suggested by the Consultants.

- 4. State Guarantee:** State guarantee is another mechanism for credit enhancement. Guarantee given by the state government gives a level of comfort to the investors to put their savings in the municipal bond. State guarantee also enhances credit rating. However, this is not to be encouraged as it also encourages profligacy. Of the eight bond issues mentioned above only one has had a government guarantee.

There are several ways of credit enhancement like pooled financing, intercepting of government grant for repayment of loans in case of default, state level debt service reserve fund to take care of any default in loan repayment. Some stride has recently been made to put in place a pooled financing mechanism under the Indo- USAID collaborative programme - FIRE (D). The Tamil Nadu Urban Development Fund is being involved as an institutional option to institutionalize pooled financing mechanism in the state of Tamil Nadu. The cities and towns that do not have credit worthiness individually could collectively raise funds from the market on their collective financial strength.

- 4 **Project Structuring**: Another problem obstructing the development of municipal bond market is the lack of well-structured projects, that could be attractive for the investors. Structuring commercially viable projects requires project development skills. Projects could be developed and structured by availing of the skills of Consultants. However, this becomes expensive. It therefore requires project development fund at the state level to support project development.

At the national level, HUDCO has created such a fund that can be used for project development and structuring. Some of the state governments have as well taken the initiative to create similar fund to finance project development initiatives. Andhra Pradesh Urban Infrastructure Finance Development Corporation in the state of Andhra Pradesh, Gujarat Urban Development Corporation and also the Gujarat Municipal Finance Board in Gujarat, Kerala Urban Development Finance Corporation in Kerala, Urban Development Fund in the state of Madhya Pradesh created as a debt service reserve fund by intercepting the transfers to the municipal governments for debt, Urban Development Fund in Punjab are some the initiatives so far taken by some of the state governments. Urban project development could be supported by these financial institutional mechanisms.

Capital Market Development

Experiences of developing a municipal bond market in India have been discussed in this report before. They include supporting credit rating agencies in developing a methodology for rating municipalities, encouraging strong municipal financial management, providing incentives to investors by permitting tax free bonds, and encouraging cities to adopt accrual accounting methods.

The report also suggests a number of ways the general lack of municipal credit worthiness in India can be mitigated. Examples are credit enhancement through strengthened financial management systems, state guarantees, pooled financing, and grant intercept mechanisms. The need for technical assistance with financial management and project structuring is also identified.

Since 1997, eight cities have financed urban infrastructure through issuing bonds in the domestic capital market. This indicates there is a market for investment grade municipal bonds in India as the eight issuers all had credit ratings of A or higher. India also has the advantage of already having a developed capital market for issuing commercial securities

There are two conditions that must be satisfied for the successful development of a municipal credit market. The first is that local governments must demonstrate they are financially and operationally stable and have the ability to repay capital purpose loans. The second is the availability of lenders who are satisfied with the local government's ability to service loans and the legal recourse available to them in case of loan default.

In some European and South American countries, the local government credit markets have been developed in stages beginning with a central government financed loan fund that applies commercial standards and practices. The next stage is loans provided by commercial banks; the third is bond issuance in the domestic capital market. Central governments can encourage this transition by channeling funds to commercial banks and promoting credit enhancement measures through pooled funds, grant intercept mechanisms, guaranteeing loans, and passing legislation that permits local government assets and revenues to be used as loan collateral. They can also assist municipalities with project structuring and strengthen financial management through a combination of regulations and technical assistance.

In Canada the municipal credit market is focused on issuing bonds in the domestic capital market. A few of the larger cities also issue bonds in international markets. Six of ten Canadian provinces have established municipal finance authorities which pool the borrowing requirements of the municipalities within their jurisdictions and issue debentures. These authorities have access to the municipal tax base in the case of default and five of the six receive additional credit enhancement through a provincial guarantee of their debentures. Other provinces either directly assist municipalities in accessing capital markets, create large municipalities with strong economic bases, or provide direct loans to municipalities. All

provinces set limits on municipal borrowing levels and debt service costs, prescribe and monitor accounting and financial management standards, and provide technical assistance to local governments. Municipal credits are rated by domestic and/or international rating agencies. Loans are underwritten using either the negotiated or tendered method with frequent issuers favoring the negotiated method of debt issuance. The Canadian capital market has the capacity to meet local government borrowing requirements on investment grade securities and the sophistication to price credit risk into its rates. Defaults on loans are not a problem.

Municipalities in countries with mature municipal credit markets tend to either issue bonds (e.g. Canada, United States) or borrow from commercial banks, e.g. Germany. Countries with developing municipal credit markets, such as the Czech Republic and Columbia, are more likely to utilize more than one method of issuing debt, although issuing bonds tends to be the preferred source of financing capital infrastructure in larger cities. Regardless of the method of financing utilized, municipalities must develop credit worthiness and demonstrate it to the lender or investor.

Some of the important problems encountered in developing a municipal bond market in India have been discussed above. But the most important problem is the lack of credit worthiness of municipal bodies. If the municipal governments have a strong fiscal health, they could address much of the problems mentioned above on their own.

Policy Issues in Improving Municipal Finance and Credit Worthiness

Three valuable urban sector initiatives have been proposed by the central government. It has established an urban reform incentive fund to provide reform linked assistance to states; a city challenge fund to support cities in developing sustainable and credit worthy institutional systems of municipal management and service delivery; and a pooled finance development scheme to provide credit enhancement to municipal governments that want to borrow. Tax-free bonds are permitted up to a maximum aggregate amount for all municipalities.

This report provides an overview of devolution of financial and functional powers in the three states where the study cities are located. The state government in Andhra Pradesh has reformed the property tax (PT) system and given VCM authority to levy an impact fee and selected user charges. It has also given a directive to contribute fifty percent of the revenue receipts to the capital budget. The state of Madhya Pradesh has begun a process of devolving powers and authority to local self-government for decentralisation of planning and development. The state has given MCB the authority to levy a property tax, water tax, sanitary cess, lighting tax, fire tax, and tax on the entry of goods. With the exception of the PT, the state government prescribes maximum and minimum rates. MCB must obtain approval prior to borrowing. All the three states where the three cities are located, have created city managers association for bringing about professionalism in municipal government. The state government has allowed DNN to develop the mechanisms and tools for enhancing its institutional capacity. One of DNN's initiatives has been a rationalization of the property tax system to make it transparent and objective. DNN has the legislative authority to tax buildings and land, professions, trades, and levy other minor taxes.

From a global perspective, the main sources of local government own source revenue are property taxes, sales taxes, income taxes and user fees. In English speaking and Commonwealth countries there is a reliance on property taxes and user fees. The salient factor is that municipalities have access to revenues sufficient to finance the operating and capital costs associated with the services they are required to provide.

In Canada each province determines the public service responsibilities of its municipalities and the revenue sources available to them. PT and user fees are the main sources of local government revenue. During the past decade, many provinces have reviewed and revised provincial - municipal roles and responsibilities.

The quality of municipal management is an important factor in the credit rating decision. Credit rating agencies recognize the importance of solid financial management policies and have increased their emphasis in this area when determining municipal credits. Good financial management can compensate to some extent for weakness in the local

economy. The American based credit agency Fitch, IBCA, Duff & Phelps promote a number of financial management best practices for local governments. They are as follows.

1. Fund balance reserve policy / working capital reserves
2. Multi year financial forecasting
3. Quarterly financial reporting & monitoring
4. Contingency planning policies
5. Policies regarding non-recurring revenue
6. Depreciation of general fixed assets
7. Debt affordability reviews and policies
8. Pay-as-you-go capital funding policies
9. Rapid debt retirement policies
10. Five year capital improvement programs integrating operating costs
11. Financial reporting award
12. Budgeting award

It is time that these financial management best practices are examined and replicated in this country as part of strategy to enhance the capacity of city governments to raise funds from the capital market.

The analysis of the finances of the three cities in the context of experiences and lessons learned from India's nascent municipal bond market suggests that the Municipal Corporation of Visakhapatnam have the requisite fiscal strength to raise funds from the municipal bond market. It would need support from the state level financial institution mentioned above for project development. It would also, however, need to discipline the servicing of loan. If the state government is unable to treat the loans given to VCM as capital grant in future, the financial status of VMC will alter substantially. The other two cities of Bhopal and Dehradun would need to spruce up their tax administration machinery for strengthening their revenues from the internal sources. These two cities, in particular, would need technical support for strengthening of their resource generation capabilities.

The next step in the bond issuance process for the three cities involved in this initiative is to encourage the cities and their respective states to take the necessary action to ensure that these cities get an investment grade credit rating for bond issuance. It is also important that the bonds provide a financial return that is comparable to investments with similar levels of risk.

This will require cooperation between cities and their states. It requires that the states provide the cities with the capacity to raise revenues sufficient to meet both their service delivery requirements and debt service charges associated with capital project borrowing. It also requires that, where necessary, the appropriate actions are taken by the states in prescribing appropriate municipal accounting and financial management standards. The three cities may benefit from state provided technical assistance and project structuring advice and from state facilitated credit enhancements arrangements. The cities must develop sound financial management practices and demonstrate accountability, transparency, and the adoption of best practices.

A number of these initiatives are identified in the study and some are already under consideration or in the process of being implemented by the appropriate level of government. In order to complete the process, it is important that individuals in each of the three cities and their respective states are designated to follow through with the legislative, financial, and management reforms required to enable VMC, MCB, and DNN to arrange financing for capital infrastructure through the sale on municipal bonds.

Component	Table V 1 : Revenue Structure of the Visakhapatnam Municipal Corporation, from 1991-92 to 2000-2001.										(Rs.' 000)	
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001		
(A) Internal Sources												
(i) Total Tax Source	940.24	1756.89	900.87	1371.45	2216.26	1694.69	2018.95	2517.92	2068.62	3191.74		
Percentage to Sub-total	25.70	67.93	41.19	42.03	46.41	39.28	41.42	46.16	41.20	37.56		
(ii) Property Tax	197.36	481.91	483	486.71	860.23	1132.73	1344.38	1454.57	1438.87	1450.9		
Percentage to Sub-total	5.39	18.63	22.08	14.92	18.01	26.26	27.58	26.67	28.66	17.07		
(iii) Non-Tax source	2718.01	829.43	1286.2	1891.5	2559.3	2619.18	2855.23	2936.73	2951.83	5306.07		
Percentage to Sub-total	74.30	32.07	58.81	57.97	53.59	60.72	58.58	53.84	58.80	62.44		
(iv) Sub-total (i+iii)	3658.25	2586.32	2187.07	3262.95	4775.56	4313.87	4874.18	5454.65	5020.45	8497.81		
Percentage to Grand Total	89.66	81.90	78.86	84.57	87.73	83.90	81.84	84.94	82.32	82.69		
(B) External Sources												
(v) Grant- in-Aid	421.78	571.75	586.35	595.37	667.78	827.67	1081.29	966.96	1078.6	1779.41		
Percentage to Grand Total	10.34	18.10	21.14	15.43	12.27	16.10	18.16	15.06	17.68	17.31		
(vi) Long Term Borrowings	0	0	0	0	0	0	0	0	0	0		
Percentage to Grand Total	0	0	0	0	0	0	0	0	0	0		
Grand Total (iv+v +vi)	4080.03	3158.07	2773.42	3858.32	5443.34	5141.54	5955.47	6421.61	6099.05	10277.22		

Source: Computed from the data provided by the Visakhapatnam Municipal Corporation.

Table V 2 : Trends in Revenue Receipts of Visakhapatnam Municipal Corporation at Current Prices												(Rs.' 000)	
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001			
(A) Internal Sources													
(i) Total Tax Source	940.24	1756.89	900.87	1371.45	2216.26	1694.69	2018.95	2517.92	2068.62	3191.74			
Percentage Variation		86.86	-48.72	52.24	61.60	-23.53	19.13	24.71	-17.84	54.29			
(ii) Property Tax	197.36	481.91	483	486.71	860.23	1132.73	1344.38	1454.57	1438.87	1450.9			
Percentage Variation		144.18	0.23	0.77	76.74	31.68	18.68	8.20	-1.08	0.84			
(iii) Non-Tax source	2718.01	829.43	1286.2	1891.5	2559.3	2619.18	2855.23	2936.73	2951.83	5306.07			
Percentage Variation		-69.48	55.07	47.06	35.31	2.34	9.01	2.85	0.51	79.76			
(iv) Sub-total (i+iii)	3658.25	2586.32	2187.07	3262.95	4775.56	4313.87	4874.18	5454.65	5020.45	8497.81			
Percentage Variation		-29.30	-15.44	49.19	46.36	-9.67	12.99	11.91	-7.96	69.26			
(B) External Sources													
(v) Grant- in-Aid	421.78	571.75	586.35	595.37	667.78	827.67	1081.29	966.96	1078.6	1779.41			
Percentage Variation		35.56	2.55	1.54	12.16	23.94	30.64	-10.57	11.55	64.97			
(vi) Long Term Borrowings	0	0	0	0	0	0	0	0	0	0			
Percentage Variation		0	0	0	0	0	0	0	0	0			
Grand Total (iv+v +vi)	4080.03	3158.07	2773.42	3858.32	5443.34	5141.54	5955.47	6421.61	6099.05	10277.22			
Percentage Variation		-22.60	-12.18	39.12	41.08	-5.54	15.83	7.83	-5.02	68.51			

Source: Computed from the data provided by the Visakhapatnam Municipal Corporation.

Table V 3 : Trends in Revenue Receipts of Visakhapatnam Municipal Corporation at Constant Prices* (Rs.' 000)										
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001
(A) Internal Sources										
(i) Total Tax Source	940.24	1598.77	765.74	1083.45	1573.54	1101.55	1231.56	1359.68	1075.68	1563.95
Percentage Variation		70.04	-52.10	41.49	45.24	-30.00	11.80	10.40	-20.89	45.39
(ii) Property Tax	197.36	438.54	410.55	384.50	610.76	736.27	820.07	785.47	748.21	710.94
Percentage Variation		122.20	-6.38	-6.34	58.85	20.55	11.38	-4.22	-4.74	-4.98
(iii) Non-Tax source	2718.01	754.78	1093.27	1494.29	1817.10	1702.47	1741.69	1585.83	1534.95	2599.97
Percentage Variation		-72.23	44.85	36.68	21.60	-6.31	2.30	-8.95	-3.21	69.38
(iv) Sub-total (i+iii)	3658.25	2353.5512	1859.0095	2577.7305	3390.6476	2804.0155	2973.2498	2945.511	2610.634	4163.9269
Percentage Variation		-35.66	-21.01	38.66	31.54	-17.30	6.04	-0.93	-11.37	59.50
(B) External Sources										
(v) Grant- in-Aid	421.78	520.2925	498.3975	470.3423	474.1238	537.9855	659.5869	522.1584	560.872	871.9109
Percentage Variation		23.36	-4.21	-5.63	0.80	13.47	22.60	-20.84	7.41	55.46
(vi) Long Term Borrowings	0	0	0	0	0	0	0	0	0	0
Percentage Variation		0	0	0	0	0	0	0	0	0
Grand Total (iv+v +vi)	4080.03	2873.8437	2357.407	3048.0728	3864.7714	3342.001	3632.8367	3467.6694	3171.506	5035.8378
Percentage Variation		-29.56	-17.97	29.30	26.79	-13.53	8.70	-4.55	-8.54	58.78

Source: Computed from the data provided by the Visakhapatnam Municipal Corporation.
*Worked out using Urban Non-manual Employees General Index (at 1991-92 price).

Table V 4 : Per capita Revenue of Visakhapatnam Municipal Corporation at Current Prices												(Rs.' 000)	
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001			
(A) Internal Sources													
(i) Total Tax Source Per Capita (In Rs.)	940.24	1756.89	900.87	1371.45	2216.26	1694.69	2018.95	2517.92	2068.62	3191.74			
	121.95	222.11	110.94	164.84	259.52	193.46	224.83	273.09	218.90	329.05			
(ii) Property Tax Per Capita (In Rs.)	197.36	481.91	483	486.71	860.23	1132.73	1344.38	1454.57	1438.87	1450.9			
	25.60	60.92	59.48	58.50	100.73	129.31	149.71	157.76	152.26	149.58			
(iii) Non-Tax source Per Capita (In Rs.)	2718.01	829.43	1286.2	1891.5	2559.3	2619.18	2855.23	2936.73	2951.83	5306.07			
	352.53	104.86	158.40	227.34	299.68	298.99	317.95	318.52	312.36	547.02			
(iv) Sub-total (i+iii) Per Capita (In Rs.)	3658.25	2586.32	2187.07	3262.95	4775.56	4313.87	4874.18	5454.65	5020.45	8497.81			
	474.48	326.97	269.34	392.18	559.20	492.45	542.78	591.61	531.26	876.06			
(B) External Sources													
(v) Grant- in-Aid Per Capita (In Rs.)	421.78	571.75	586.35	595.37	667.78	827.67	1081.29	966.96	1078.6	1779.41			
	54.71	72.28	72.21	71.56	78.19	94.48	120.41	104.88	114.14	183.44			
(vi) Long Term Borrowings Per Capita (In Rs.)	0	0	0	0	0	0	0	0	0	0			
	0	0	0	0	0	0	0	0	0	0			
Grand Total (iv+v +vi) Per Capita (In Rs.)	4080.03	3158.07	2773.42	3858.32	5443.34	5141.54	5955.47	6421.61	6099.05	10277.22			
	529.19	399.25	341.55	463.74	637.39	586.93	663.19	696.49	645.40	1059.51			

Source: Computed from the data provided by the Visakhapatnam Municipal Corporation.

Table V 5 : Per capita Revenue of Visakhapatnam Municipal Corporation at Constant Prices *												(Rs.' 000)	
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001			
(A) Internal Sources													
(i) Total Tax Source	940.24	1598.77	765.74	1083.45	1573.54	1101.55	1231.56	1359.68	1075.68	1563.95			
Per Capita (In Rs.)	121.95	202.12	94.30	130.22	184.26	125.75	137.14	147.47	113.83	161.23			
(ii) Property Tax	197.36	438.54	410.55	384.50	610.76	736.27	820.07	785.47	748.21	710.94			
Per Capita (In Rs.)	25.60	55.44	50.56	46.21	71.52	84.05	91.32	85.19	79.18	73.29			
(iii) Non-Tax source	2718.01	754.78	1093.27	1494.29	1817.10	1702.47	1741.69	1585.83	1534.95	2599.97			
Per Capita (In Rs.)	352.53	95.42	134.64	179.60	212.78	194.35	193.95	172.00	162.43	268.04			
(iv) Sub-total (i+iii)	3658.25	2353.5512	1859.0095	2577.7305	3390.6476	2804.0155	2973.2498	2945.511	2610.634	4163.9269			
Per Capita (In Rs.)	474.48	297.54	228.94	309.82	397.03	320.09	331.10	319.47	276.26	429.27			
(B) External Sources													
(v) Grant- in-Aid	421.78	520.2925	498.3975	470.3423	474.1238	537.9855	659.5869	522.1584	560.872	871.9109			
Per Capita (In Rs.)	54.71	65.78	61.38	56.53	55.52	61.41	73.45	56.63	59.35	89.89			
(vi) Long Term Borrowings	0	0	0	0	0	0	0	0	0	0			
Per Capita (In Rs.)	0	0	0	0	0	0	0	0	0	0			
Grand Total (iv+v +vi)	4080.03	2873.8437	2357.407	3048.0728	3864.7714	3342.001	3632.8367	3467.6694	3171.506	5035.8378			
Per Capita (In Rs.)	529.19	363.32	290.32	366.35	452.55	381.51	404.55	376.10	335.61	519.16			

Source: Computed from the data provided by the Visakhapatnam Municipal Corporation.

*Worked out using Urban Non-manual Employees General Index (at 1991-92 price).

Table V 6 : Percentage Variation in Per capita Revenue of Visakhapatnam Municipal Corporation at Current Prices (In Rs.)											
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001	
(A) Internal Sources											
(i) Total Tax Source	121.95	222.11	110.94	164.84	259.52	193.46	224.83	273.09	218.90	329.05	
Percentage Variation		82.13	-50.05	48.58	57.44	-25.45	16.22	21.47	-19.84	50.32	
(ii) Property Tax	25.60	60.92	59.48	58.50	100.73	129.31	149.71	157.76	152.26	149.58	
Percentage Variation		138.00	-2.37	-1.65	72.19	28.37	15.78	5.38	-3.49	-1.76	
(iii) Non-Tax source	352.53	104.86	158.40	227.34	299.68	298.99	317.95	318.52	312.36	547.02	
Percentage Variation		-70.26	51.06	43.53	31.82	-0.23	6.34	0.18	-1.93	75.12	
(iv) Sub-total (i+ii)	474.48	326.97	269.34	392.18	559.20	492.45	542.78	591.61	531.26	876.06	
Percentage Variation		-31.09	-17.62	45.61	42.59	-11.94	10.22	9.00	-10.20	64.90	
(B) External Sources											
(v) Grant- in-Aid	54.71	72.28	72.21	71.56	78.19	94.48	120.41	104.88	114.14	183.44	
Percentage Variation		32.13	-0.10	-0.90	9.27	20.83	27.44	-12.90	8.83	60.72	
(vi) Long Term Borrowings	0	0	0	0	0	0	0	0	0	0	
Percentage Variation		0	0	0	0	0	0	0	0	0	
Grand Total (iv+v +vi)	529.19	399.25	341.55	463.74	637.39	586.93	663.19	696.49	645.40	1059.51	
Percentage Variation		-24.55	-14.45	35.77	37.45	-7.92	12.99	5.02	-7.33	64.16	

Source: Computed from the data provided by the Visakhapatnam Municipal Corporation.

Table V 7 : Percentage Variation in Per capita Revenue of Visakhapatnam Municipal Corporation at Constant Prices * (In Rs.)											
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001	
(A) Internal Sources											
(i) Total Tax Source	121.95	202.12	94.30	130.22	184.26	125.75	137.14	147.47	113.83	161.23	
Percentage Variation		65.74	-53.34	38.09	41.49	-31.75	9.06	7.53	-22.81	41.64	
(ii) Property Tax	25.60	55.44	50.56	46.21	71.52	84.05	91.32	85.19	79.18	73.29	
Percentage Variation		116.58	-8.80	-8.60	54.75	17.52	8.65	-6.71	-7.06	-7.43	
(iii) Non-Tax source	352.53	95.42	134.64	179.60	212.78	194.35	193.95	172.00	162.43	268.04	
Percentage Variation		-72.93	41.10	33.39	18.47	-8.66	-0.20	-11.32	-5.56	65.02	
(iv) Sub-total (i+iii)	474.48	297.54	228.94	309.82	397.03	320.09	331.10	319.47	276.26	429.27	
Percentage Variation		-37.29	-23.06	35.33	28.15	-19.38	3.44	-3.51	-13.53	55.39	
(B) External Sources											
(v) Grant- in-Aid	54.71	65.78	61.38	56.53	55.52	61.41	73.45	56.63	59.35	89.89	
Percentage Variation		20.24	-6.69	-7.90	-1.79	10.62	19.60	-22.90	4.80	51.45	
(vi) Long Term Borrowings	0	0	0	0	0	0	0	0	0	0	
Percentage Variation		0	0	0	0	0	0	0	0	0	
Grand Total (iv+v +vi)	529.19	363.32	290.32	366.35	452.55	381.51	404.55	376.10	335.61	519.16	
Percentage Variation		-31.34	-20.09	26.19	23.53	-15.70	6.04	-7.03	-10.77	54.69	

Source: Computed from the data provided by the Visakhapatnam Municipal Corporation.

*Worked out using Urban Non-manual Employees General Index (at 1991-92 price)

Table V 8 : Revenue Expenditure Structure of the Visakhapatnam Municipal Corporation, from 1991-92 to 2000-2001.

Component	(Rs.' 000)									
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001
1.General Admn.&Collection of Revenue	132.78	123.19	134.45	154.02	193.56	232.81	295.58	303.5	395.27	349.95
.Percentage to total	7.03	6.63	6.50	6.67	6.27	6.41	8.07	6.22	6.61	4.72
2.Public health	110.05	468.78	425.11	530.79	562.99	696.25	894.84	1005.80	1163.57	320.52
.Percentage to total	5.83	25.23	20.56	22.98	18.25	19.16	24.44	20.60	19.45	4.32
3.Safety & convenience	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
.Percentage to total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.Public works	118.67	118.61	167.57	98.93	220.88	403.93	408.34	734.45	987.64	325.13
.Percentage to total	6.28	6.38	8.11	4.28	7.16	11.11	11.15	15.04	16.51	4.38
5.Miscellaneous	478.52	147.63	152.63	144.81	484.35	587.23	328.56	622.01	691.61	1981.80
.Percentage to total	25.33	7.94	7.38	6.27	15.70	16.16	8.97	12.74	11.56	26.72
6.Re-payment of loan	0	0	0	0	0	0	0	0	0	0
.Percentage to total	0	0	0	0	0	0	0	0	0	0
7.Interest paid on loan	0.00	59.44	74.86	121.26	128.06	124.58	156.32	183.72	216.24	170.89
.Percentage to total	0.00	3.20	3.62	5.25	4.15	3.43	4.27	3.76	3.61	2.30
8.Wages & salary to all employees	682.71	609.97	742.25	887.16	941.54	892.93	836.62	925.82	1226.09	2709.50
.Percentage to total	36.14	32.83	35.90	38.41	30.52	24.57	22.85	18.96	20.49	36.54
9.Water supply	366.45	330.61	370.51	372.97	553.25	696.41	741.21	1058.28	1103.20	1365.80
.Percentage to total	19.40	17.79	17.92	16.15	17.94	19.16	20.24	21.67	18.44	18.42
Total	1889.18	1858.23	2067.38	2309.94	3084.63	3634.14	3661.47	4883.32	5982.58	7415.54
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Computed from the data provided by the Visakhapatnam Municipal Corporation.

Table V 9 : Trends in Revenue Expenditure of Visakhapatnam Municipal Corporation at Current Prices											(Rs.' 000)	
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001		
1.General Admn.&Collection of Revenue	132.78	123.19	134.45	154.02	193.56	232.81	295.58	303.5	395.27	349.95		
.Percentage Variation		-7.22	9.14	14.56	25.67	20.28	26.96	2.68	30.24	-11.47		
2.Public health	110.05	468.78	425.11	530.79	562.99	696.25	894.84	1005.80	1163.57	320.52		
.Percentage Variation		325.97	-9.32	24.86	6.07	23.67	28.52	12.40	15.69	-72.45		
3.Safety & convenience	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
.Percentage Variation		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
4.Public works	118.67	118.61	167.57	98.93	220.88	403.93	408.34	734.45	987.64	325.13		
.Percentage Variation		-0.05	41.28	-40.96	123.27	82.87	1.09	79.86	34.47	-67.08		
5.Miscellaneous	478.52	147.63	152.63	144.81	484.35	587.23	328.56	622.01	691.61	1981.80		
.Percentage Variation		-69.15	3.39	-5.12	234.47	21.24	-44.05	89.31	11.19	186.55		
6.Re-payment of loan	0	0	0	0	0	0	0	49.74	198.96	191.95		
.Percentage Variation		0	0	0	0	0	0	0.00	300.00	-3.52		
7.Interest paid on loan	0.00	59.44	74.86	121.26	128.06	124.58	156.32	183.72	216.24	170.89		
.Percentage Variation			25.94	61.98	5.61	-2.72	25.48	17.53	17.70	-20.97		
8.Wages & salary to all employees	682.71	609.97	742.25	887.16	941.54	892.93	836.62	925.82	1226.09	2709.50		
.Percentage Variation		-10.65	21.69	19.52	6.13	-5.16	-6.31	10.66	32.43	120.99		
9.Water supply	366.45	330.61	370.51	372.97	553.25	696.41	741.21	1058.28	1103.20	1365.80		
.Percentage Variation		-9.78	12.07	0.66	48.34	25.88	6.43	42.78	4.24	23.80		
Total	1889.18	1858.23	2067.38	2309.94	3084.63	3634.14	3661.47	4883.32	5982.58	7415.54		
.Percentage Variation		-1.64	11.26	11.73	33.54	17.81	0.75	33.37	22.51	23.95		

Source: Computed from the data provided by the Visakhapatnam Municipal Corporation.

Table V10 : Trends in Revenue Expenditure of Visakhapatnam Municipal Corporation at Constant Prices *											(Rs.' 000)	
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001		
1.General Admn.&Collection of Revenue	132.78	112.10	114.28	121.68	137.43	151.33	180.30	163.89	205.54	171.48		
.Percentage Variation		-15.57	1.94	6.47	12.95	10.11	19.15	-9.10	25.41	-16.57		
2.Public health	110.05	426.59	361.34	419.32	399.72	452.56	545.85	543.13	605.06	157.05		
.Percentage Variation		287.63	-15.29	16.05	-4.67	13.22	20.61	-0.50	11.40	-74.04		
3.Safety & convenience	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
.Percentage Variation		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
4.Public works	118.67	107.94	142.43	78.15	156.82	262.55	249.09	396.60	513.57	159.31		
.Percentage Variation		-9.05	31.96	-45.13	100.66	67.42	-5.13	59.22	29.49	-68.98		
5.Miscellaneous	478.52	134.34	129.74	114.40	343.89	381.70	200.42	335.89	359.64	971.08		
.Percentage Variation		-71.93	-3.43	-11.82	200.60	11.00	-47.49	67.59	7.07	170.02		
6.Re-ayment of loan	0	0	0	0	0	0	0	26.86	103.46	94.06		
.Percentage Variation		0	0	0	0	0	0	0.00	285.19	-9.09		
7.Interest paid on loan	0.00	54.09	63.63	95.80	90.92	80.98	95.36	99.21	112.44	83.74		
.Percentage Variation		0.00	17.64	50.55	-5.09	-10.94	17.76	4.04	13.34	-25.53		
8.Wages & salary to all employees	682.71	555.07	630.91	700.86	668.49	580.40	510.34	499.94	637.57	1327.66		
.Percentage Variation		-18.70	13.66	11.09	-4.62	-13.18	-12.07	-2.04	27.53	108.24		
9.Water supply	366.45	300.86	314.93	294.65	392.81	452.67	452.14	571.47	573.66	669.24		
.Percentage Variation		-17.90	4.68	-6.44	33.31	15.24	-0.12	26.39	0.38	16.66		
Total	1889.18	1690.99	1757.27	1824.85	2190.09	2362.19	2233.50	2636.99	3110.94	3633.61		
.Percentage Variation		-10.49	3.92	3.85	20.01	7.86	-5.45	18.07	17.97	16.80		

Source: Computed from the data provided by the Visakhapatnam Municipal Corporation.
*Worked out using Urban Non-manual Employees General Index (at 1991-92 price).

Table V 11 : Per capita Revenue Expenditure of Visakhapatnam Municipal Corporation at Current Prices													(Rs.' 000)	
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001				
1.General Admn.&Collection of Revenue														
Per Capita (In Rs.)	132.78	123.19	134.45	154.02	193.56	232.81	295.58	303.5	395.27	349.95				
	17.22	15.57	16.56	18.51	22.67	26.58	32.92	32.92	41.83	36.08				
2.Public health														
Per Capita (In Rs.)	110.05	468.78	425.11	530.79	562.99	696.25	894.84	1005.80	1163.57	320.52				
	14.27	59.26	52.35	63.80	65.92	79.48	99.65	109.09	123.13	33.04				
3.Safety & convenience														
Per Capita (In Rs.)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
4.Public works														
Per Capita (In Rs.)	118.67	118.61	167.57	98.93	220.88	403.93	408.34	734.45	987.64	325.13				
	15.39	14.99	20.64	11.89	25.86	46.11	45.47	79.66	104.51	33.52				
5.Miscellaneous														
Per Capita (In Rs.)	478.52	147.63	152.63	144.81	484.35	587.23	328.56	622.01	691.61	1981.80				
	62.06	18.66	18.80	17.41	56.72	67.04	36.59	67.46	73.19	204.31				
6.Re-payment of loan														
Per Capita (In Rs.)	0	0	0	0	0	0	0	49.74	198.96	191.95				
	0	0	0	0	0	0	0	5.39	21.05	19.79				
7.Interest paid on loan														
Per Capita (In Rs.)	0.00	59.44	74.86	121.26	128.06	124.58	156.32	183.72	216.24	170.89				
	0.00	7.51	9.22	14.57	15.00	14.22	17.41	19.93	22.88	17.62				
8.Wages & salary to all employees														
Per Capita (In Rs.)	682.71	609.97	742.25	887.16	941.54	892.93	836.62	925.82	1226.09	2709.50				
	88.55	77.11	91.41	106.63	110.25	101.93	93.16	100.41	129.74	279.33				
9.Water supply														
Per Capita (In Rs.)	366.45	330.61	370.51	372.97	553.25	696.41	741.21	1058.28	1103.20	1365.80				
	47.53	41.80	45.63	44.83	64.78	79.50	82.54	114.78	116.74	140.80				
Total	1889.18	1858.23	2067.38	2309.94	3084.63	3634.14	3661.47	4883.32	5982.58	7415.54				
Per Capita (In Rs.)	245.03	234.92	254.60	277.64	361.20	414.86	407.74	529.64	633.08	764.49				

Source: Computed from the data provided by the Visakhapatnam Municipal Corporation.

Table V13 : Percentage Variation in Per capita Revenue Expenditure of Visakhapatnam Municipal Corporation at Current Prices												(In Rs.)	
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001			
1.General Admn.&Collection of Revenue													
Percentage Variation	17.22	15.57	16.56	18.51	22.67	26.58	32.92	32.92	41.83	36.08			
		-9.57	6.32	11.80	22.43	17.26	23.85	0.01	27.07	-13.75			
2.Public health													
Percentage Variation	14.27	59.26	52.35	63.80	65.92	79.48	99.65	109.09	123.13	33.04			
		315.20	-11.66	21.86	3.33	20.56	25.37	9.47	12.87	-73.16			
3.Safety & convenience													
Percentage Variation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
4.Public works													
Percentage Variation	15.39	14.99	20.64	11.89	25.86	46.11	45.47	79.66	104.51	33.52			
		-2.58	37.62	-42.38	117.52	78.28	-1.38	75.18	31.20	-67.93			
5.Miscellaneous													
Percentage Variation	62.06	18.66	18.80	17.41	56.72	67.04	36.59	67.46	73.19	204.31			
		-69.93	0.71	-7.40	225.86	18.20	-45.42	84.39	8.48	179.16			
6.Re-payment of loan													
Percentage Variation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
7.Interest paid on loan													
Percentage Variation	0.00	7.51	9.22	14.57	15.00	14.22	17.41	19.93	22.88	17.62			
		0.00	22.69	58.09	2.89	-5.16	22.40	14.47	14.84	-23.01			
8.Wages & salary to all employees													
Percentage Variation	88.55	77.11	91.41	106.63	110.25	101.93	93.16	100.41	129.74	279.33			
		-12.91	18.54	16.65	3.40	-7.54	-8.60	7.78	29.21	115.29			
9.Water supply													
Percentage Variation	47.53	41.80	45.63	44.83	64.78	79.50	82.54	114.78	116.74	140.80			
		-12.06	9.17	-1.76	44.52	22.71	3.83	39.06	1.71	20.61			
Total													
Percentage Variation	245.03	234.92	254.60	277.64	361.20	414.86	407.74	529.64	633.08	764.49			
		-4.13	8.38	9.05	30.10	14.86	-1.72	29.90	19.53	20.76			

Source: Computed from the data provided by the Visakhapatnam Municipal Corporation.

Component	Percentage Variation in Per capita Revenue Expenditure of Visakhapatnam Municipal Corporation at Constant Prices *										(In Rs.)	
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001		
1.General Admn.&Collection of Revenue	17.22	14.17	14.07	14.62	16.09	17.27	20.08	17.78	21.75	17.68		
Percentage Variation		-17.71	-0.69	3.91	10.04	7.35	16.23	-11.47	22.36	-18.72		
2.Public health	14.27	53.93	44.50	50.40	46.81	51.66	60.79	58.91	64.03			
Percentage Variation		277.83	-17.49	13.26	-7.13	10.38	17.66	-3.09	8.69	-100.00		
3.Safety & convenience	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Percentage Variation		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
4.Public works	15.39	13.65	17.54	9.39	18.36	29.97	27.74	43.02	54.35	16.42		
Percentage Variation		-11.35	28.55	-46.45	95.49	63.21	-7.45	55.08	26.34	-69.78		
5.Miscellaneous	62.06	16.98	15.98	13.75	40.27	43.57	22.32	36.43	38.06	100.11		
Percentage Variation		-72.64	-5.93	-13.94	192.86	8.21	-48.78	63.23	4.47	163.06		
6.Re-payment of loan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.91	10.95	9.70		
Percentage Variation		0.00	0.00	0.00	0.00	0.00	0.00	0.00	275.81	-11.43		
7.Interest paid on loan	0.00	6.84	7.84	11.51	10.65	9.24	10.62	10.76	11.90	8.63		
Percentage Variation		0.00	14.60	46.93	-7.53	-13.18	14.87	1.33	10.58	-27.45		
8.Wages & salary to all employees	88.55	70.17	77.70	84.24	78.28	66.26	56.83	54.22	67.47	136.87		
Percentage Variation		-20.75	10.72	8.42	-7.07	-15.36	-14.23	-4.59	24.42	102.87		
9.Water supply	47.53	38.03	38.78	35.41	46.00	51.67	50.35	61.98	60.71	68.99		
Percentage Variation		-19.98	1.97	-8.69	29.88	12.34	-2.56	23.10	-2.06	13.65		
Total	245.03	213.78	216.41	219.33	256.45	269.66	248.72	286.01	329.20	374.60		
Percentage Variation		-12.75	1.23	1.35	16.92	5.15	-7.76	14.99	15.10	13.79		

Source: Computed from the data provided by the Visakhapatnam Municipal Corporation.
*Worked out using Urban Non-manual Employees General Index (at 1991-92 price).

Table V 15 : Closing Balance of the Visakhapatnam Municipal Corporation			(Rs.' 000)
on the Revenue Account at Current Prices.			
Year	Revenue Receipts	Revenue Expenditure	Closing Balance
1991-92	4080.03	1889.18	2190.85
1992-93	3158.07	1858.23	1899.84
1993-94	2773.42	2067.38	706.04
1994-95	3858.32	2309.94	1548.38
1995-96	5443.34	3084.63	2358.71
1996-97	5141.54	3634.14	1507.4
1997-98	5955.47	3661.47	2294
1998-99	6421.61	4883.32	1538.29
1999-2000	6099.05	5982.5	116.47
2000-2001	10277.22	7415.54	2861.68

Source: Computed by the Data Supplied by the Visakhapatnam Municipal Corporation

TableV16 : Trends in Capital Income of Visakhapatnam Municipal Corporation				
Years	Capital Income (Rs.' 000)			Percentage Variations
	Grant-in-aid (Capital)	Long-term Borrowings	Total	
1991-92	0	0	0	
1992-93	528.58	0	528.58	0.00
1993-94	510.77	0	510.77	-3.37
1994-95	573	0	573	12.18
1995-96	50	0	50	-91.27
1996-97	25	0	25	-50.00
1997-98	0	0	0	-100.00
1998-99	87.68	0	87.68	0.00
1999-2000	0	0	0	0.00
2000-2001	0	0	0	0.00

Source: Computed from the data provided by the Visakhapatnam Municipal Corporation.

Table V17 : Capital Expenditure of Visakhapatnam Municipal Corporation From 1991-92 to 2000-01											
Component	(Rs.' 000)										2000-2001
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001	
1.Const. Of Shops/Complex/Building	210.10	218.76	257.50	139.51	48.66	111.19	172.13	175.16	277.19		231.58
2.Purchase of Fire Fighter Machines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.Const. Of Flush Toilets	0.00	0.00	0.00	0.00	3.35	2.04	19.70	15.52	39.12		120.16
4.Purchase of Vehicle	17.74	8.36	39.66	0.00	0.00	35.70	90.23	139.00	123.06		32.96
5.Water Supply(Kolar Project)	1903.15	46.20	188.55	492.97	291.39	420.91	389.96	468.45	355.68		803.86
6.Fixing of Poly Grass at Aish-Bagh Stadium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
7.MP/MLA and Others	319.96	2552.05	2858.57	1664.34	2606.69	2806.44	2828.06	4038.16	4922.45		711.25
Total	2450.95	2825.37	3344.28	2296.82	2950.09	3376.28	3500.08	4836.29	5717.50		1899.81

Source: Computed from the data provided by the Visakhapatnam Municipal Corporation.

Table V 18 : Debt Service Coverage Ratio (DSCR) of Visakhapatnam Municipal Corporation							(Rs.' 000)
Year	Revenue Receipts	Revenue Expenditure#	Debt Servicing	Surplus(Rrev.Rechts.- Rev. Expd.)	D	S	C R
1991-92	4080.03	1889.18		2190.85	0		0
1992-93	3158.07	1798.79		1359.28	59.44		22.86810229
1993-94	2773.42	1992.52		780.9	74.86		10.43147208
1994-95	3858.32	2188.68		1669.64	121.26		13.76909121
1995-96	5443.34	2956.57		2486.77	128.06		19.41878807
1996-97	5141.54	3509.56		1631.98	124.58		13.09985551
1997-98	5955.47	3505.15		2450.32	156.32		15.67502559
1998-99	6421.61	4649.86		1771.75	233.46		7.589094492
1999-2000	6099.06	5567.38		531.68	415.2		1.280539499
2000-2001	10277.22	7052.7		3224.52	362.84		8.886892294

Source: Computed from the data provided by the Visakhapatnam Municipal Corporation.

Excluding Debt Servicing

Table B1 : Revenue Structure of the Bhopal Municipal Corporation, from 1991-92 to 2000-2001.										
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001
(A) Internal Sources										
(i) Total Tax Source	330.04	485.35	542.25	545.42	467.88	486.79	622.51	797.62	929.82	1157.79
Percentage to Sub-total	42.05	58.20	59.40	57.49	42.30	37.87	33.18	31.11	30.88	33.56
(ii) Property Tax	265.9	353.61	357.61	370.05	400.56	450.54	498.71	717.2	745.16	752.92
Percentage to Sub-total	33.88	42.40	39.18	39.01	36.21	35.05	26.58	27.97	24.74	21.82
(iii) Non-Tax source	454.9	348.55	370.57	403.24	638.27	798.77	1253.82	1766.33	2081.63	2292.17
Percentage to Sub-total	57.95	41.80	40.60	42.51	57.70	62.13	66.82	68.89	69.12	66.44
(iv) Sub-total (i+ii)	784.94	833.9	912.82	948.66	1106.15	1285.56	1876.33	2563.95	3011.45	3449.96
Percentage to Grand Total	37.63	36.42	45.45	38.96	40.42	31.54	42.60	52.24	45.25	41.05
(B) External Sources										
(v) Grant- in-Aid	1123.54	1201.37	1063.04	1486.61	1630.27	2790.53	2527.71	2344.43	3642.97	4954.54
Percentage to Grand Total	53.86	52.46	52.93	61.04	59.58	68.46	57.40	47.76	54.75	58.95
(vi) Long Term Borrowings	177.44	254.70	32.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Percentage to Grand Total	8.51	11.12	1.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grand Total (iv+v +vi)	2085.92	2289.97	2008.31	2435.27	2736.42	4076.09	4404.04	4908.38	6654.42	8404.50

Source: Computed from the data provided by the Bhopal Municipal Corporation.

Table B 2: Trends in Revenue Receipts of Bhopal Municipal Corporation at Current Prices											(Rs.' 000)	
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001		
(A) Internal Sources												
(i) Total Tax Source	330.04	485.35	542.25	545.42	467.88	486.79	622.51	797.62	929.82	1157.79		
Percentage Variation		47.06	11.72	0.58	-14.22	4.04	27.88	28.13	16.57	24.52		
(ii) Property Tax	265.9	353.61	357.61	370.05	400.56	450.54	498.71	717.2	745.16	752.92		
Percentage Variation		32.99	1.13	3.48	8.24	12.48	10.69	43.81	3.90	1.04		
(iii) Non- Tax source	454.9	348.55	370.57	403.24	638.27	798.77	1253.82	1766.33	2081.63	2292.17		
Percentage Variation		-23.38	6.32	8.82	58.29	25.15	56.97	40.88	17.85	10.11		
(iv) Sub-total (i+iii)	784.94	833.9	912.82	948.66	1106.15	1285.56	1876.33	2563.95	3011.45	3449.96		
Percentage Variation		6.24	9.46	3.93	16.60	16.22	45.95	36.65	17.45	14.56		
(B) External Sources												
(v) Grant- in-Aid	1123.54	1201.37	1063.04	1486.61	1630.27	2790.53	2527.71	2344.43	3642.97	4954.54		
Percentage Variation		6.93	-11.51	39.85	9.66	71.17	-9.42	-7.25	55.39	36.00		
(vi) Long Term Borrowings	177.44	254.70	32.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Percentage Variation		43.54	-87.26	-100.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grand Total (iv+v +vi)	2085.92	2289.97	2008.31	2435.27	2736.42	4076.09	4404.04	4908.38	6654.42	8404.50		
Percentage Variation		9.78	-12.30	21.26	12.37	48.96	8.05	11.45	35.57	26.30		

Source: Computed from the data provided by the Bhopal Municipal Corporation.

Table B 3 : Trends in Revenue Receipts of Bhopal Municipal Corporation at Constant Prices *											(Rs.' 000)
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001	
(A) Internal Sources											
(i) Total Tax Source	330.04	441.67	460.91	430.88	332.19	316.41	379.73	430.71	483.51	567.32	
Percentage Variation		33.82	4.36	-6.52	-22.90	-4.75	20.01	13.43	12.26	17.33	
(ii) Property Tax	265.9	321.7851	303.9685	292.3395	284.3976	292.851	304.2131	387.288	387.4832	368.9308	
Percentage Variation		21.02	-5.54	-3.83	-2.72	2.97	3.88	27.31	0.05	-4.79	
(iii) Non-Tax source	454.9	317.1805	314.9845	318.5596	453.1717	519.2005	764.8302	953.8182	1082.4476	1123.1633	
Percentage Variation		-30.27	-0.69	1.14	42.26	14.57	47.31	24.71	13.49	3.76	
(iv) Sub-total (i+iii)	784.94	758.849	775.897	749.4414	785.3665	835.614	1144.5613	1384.533	1565.954	1690.4804	
Percentage Variation		-3.32	2.25	-3.41	4.79	6.40	36.97	20.97	13.10	7.95	
(B) External Sources											
(v) Grant- in-Aid	1123.54	1093.2467	903.584	1174.4219	1157.4917	1813.8445	1541.9031	1265.9922	1894.3444	2427.7246	
Percentage Variation		-2.70	-17.35	29.97	-1.44	56.70	-14.99	-17.89	49.63	28.16	
(vi) Long Term Borrowings	177.44	231.78	27.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Percentage Variation		30.62	-88.10	-100.00	0.00	0.00	0.00	0.00	0.00	0.00	
Grand Total (iv+vi +vi)	2085.92	2083.87	1707.06	1923.86	1942.86	2649.46	2686.46	2650.53	3460.30	4118.21	
Percentage Variation		-0.10	-18.08	12.70	0.99	36.37	1.40	-1.34	30.55	19.01	

Source: Computed from the data provided by the Bhopal Municipal Corporation.

*Worked out using Urban Non-manual Employees General Index (at 1991-92 price)

Table B 4 : Per capita Revenue of Bhopal Municipal Corporation at Current Prices											(Rs.' 000)	
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001		
(A) Internal Sources												
(i) Total Tax Source	330.04	485.35	542.25	545.42	467.88	486.79	622.51	797.62	929.82	1157.79		
Per Capita (In Rs.)	30.14	43.03	46.63	45.53	37.92	38.27	47.48	59.04	66.80	80.74		
(ii) Property Tax	265.9	353.61	357.61	370.05	400.56	450.54	498.71	717.2	745.16	752.92		
Per Capita (In Rs.)	24.28	31.35	30.75	30.89	32.46	35.42	38.04	53.09	53.53	52.50		
(iii) Non-Tax source	454.9	348.55	370.57	403.24	638.27	798.77	1253.82	1766.33	2081.63	2292.17		
Per Capita (In Rs.)	41.54	30.90	31.86	33.66	51.72	62.80	95.64	130.74	149.54	159.84		
(iv) Sub-total (i+iii)	784.94	833.9	912.82	948.66	1106.15	1285.56	1876.33	2563.95	3011.45	3449.96		
Per Capita (In Rs.)	71.68	73.93	78.49	79.19	89.64	101.07	143.12	189.78	216.34	240.58		
(B) External Sources												
(v) Grant- in-Aid	1123.54	1201.37	1063.04	1486.61	1630.27	2790.53	2527.71	2344.43	3642.97	4954.54		
Per Capita (In Rs.)	102.61	106.50	91.40	124.09	132.11	219.38	192.81	173.53	261.71	345.50		
(vi) Long Term Borrowings	177.44	254.70	32.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Per Capita (In Rs.)	16.20	22.58	2.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grand Total (iv+v +vi)	2085.92	2289.97	2008.31	2435.27	2736.42	4076.09	4404.04	4908.38	6654.42	8404.50		
Per Capita (In Rs.)	190.49	203.01	172.68	203.28	221.75	320.45	335.93	363.31	478.05	586.09		

Source: Computed from the data provided by the Bhopal Municipal Corporation.

Table B 5 : Per capita Revenue of Bhopal Municipal Corporation at Constant Prices *											(Rs.' 000)
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001	
(A) Internal Sources											
(i) Total Tax Source	330.04	441.67	460.91	430.88	332.19	316.41	379.73	430.71	483.51	567.32	
Per Capita (In Rs.)	30.14	39.16	40.86	38.20	29.45	28.05	33.66	38.18	42.86	50.29	
(ii) Property Tax	265.9	321.7851	303.9685	292.3395	284.3976	292.851	304.2131	387.288	387.4832	368.9308	
Per Capita (In Rs.)	24.28	28.53	26.14	24.40	23.05	23.02	23.20	28.67	27.84	25.73	
(iii) Non-Tax source	454.9	317.1805	314.9845	318.5596	453.1717	519.2005	764.8302	953.8182	1082.4476	1123.1633	
Per Capita (In Rs.)	41.54	28.12	27.08	26.59	36.72	40.82	58.34	70.60	77.76	78.32	
(iv) Sub-total (i+iii)	784.94	758.849	775.897	749.4414	785.3665	835.614	1144.5613	1384.533	1565.954	1690.4804	
Per Capita (In Rs.)	71.68	67.27	66.72	62.56	63.64	65.69	87.30	102.48	112.50	117.89	
(B) External Sources											
(v) Grant- in-Aid	1123.54	1093.2467	903.584	1174.4219	1157.4917	1813.8445	1541.9031	1265.9922	1894.3444	2427.7246	
Per Capita (In Rs.)	102.61	96.92	77.69	98.03	93.80	142.60	117.61	93.71	136.09	169.30	
(vi) Long Term Borrowings	177.44	231.78	27.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Per Capita (In Rs.)	16.20	20.55	2.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Grand Total (iv+v +vi)	2085.92	2083.87	1707.06	1923.86	1942.86	2649.46	2686.46	2650.53	3460.30	4118.21	
Per Capita (In Rs.)	190.49	184.74	146.78	160.59	157.44	208.29	204.92	196.19	248.58	287.18	

Source: Computed from the data provided by the Bhopal Municipal Corporation.
*Worked out using Urban Non-manual Employees General Index (at 1991-92 price).

Table B 6 : Percentage Variation in Per capita Revenue of Bhopal Municipal Corporation at Current Prices											(In Rs.)	
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001		
(A) Internal Sources												
(i) Total Tax Source	30.14	43.03	46.63	45.53	37.92	38.27	47.48	59.04	66.80	80.74		
Percentage Variation		42.76	8.36	-2.35	-16.72	0.93	24.08	24.34	13.14	20.87		
(ii) Property Tax	24.28	31.35	30.75	30.89	32.46	35.42	38.04	53.09	53.53	52.50		
Percentage Variation		29.10	-1.91	0.46	5.09	9.12	7.40	39.55	0.84	-1.92		
(iii) Non-Tax source	41.54	30.90	31.86	33.66	51.72	62.80	95.64	130.74	149.54	159.84		
Percentage Variation		-25.62	3.12	5.64	53.67	21.41	52.30	36.70	14.38	6.89		
(iv) Sub-total (i+iii)	71.68	73.93	78.49	79.19	89.64	101.07	143.12	189.78	216.34	240.58		
Percentage Variation		3.13	6.17	0.89	13.20	12.75	41.61	32.60	13.99	11.21		
(B) External Sources												
(v) Grant- in-Aid	102.61	106.50	91.40	124.09	132.11	219.38	192.81	173.53	261.71	345.50		
Percentage Variation		3.80	-14.18	35.76	6.46	66.06	-12.11	-10.00	50.81	32.02		
(vi) Long Term Borrowings	16.20	22.58	2.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Percentage Variation		39.34	-87.64	-100.00	0.00	0.00	0.00	0.00	0.00	0.00		
Grand Total (iv+v +vi)	187.58	196.56	164.62	190.70	204.67	291.15	300.41	319.76	413.83	499.38		
Percentage Variation	190.49	203.01	172.68	203.28	221.75	320.45	335.93	363.31	478.05	586.09		

Source: Computed from the data provided by the Bhopal Municipal Corporation.

Table B 7 : Percentage Variation in Per capita Revenue of Bhopal Municipal Corporation at Constant Prices *												(In Rs.)	
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001			
(A) Internal Sources													
(i) Total Tax Source	30.14	39.16	40.86	38.20	29.45	28.05	33.66	38.18	42.86	50.29			
Percentage Variation		29.91	4.36	-6.52	-22.90	-4.75	20.01	13.43	12.26	17.33			
(ii) Property Tax	24.28	28.53	26.14	24.40	23.05	23.02	23.20	28.67	27.84	25.73			
Percentage Variation		17.48	-8.38	-6.64	-5.55	-0.10	0.79	23.54	-2.90	-7.58			
(iii) Non-Tax source	41.54	28.12	27.08	26.59	36.72	40.82	58.34	70.60	77.76	78.32			
Percentage Variation		-32.31	-3.68	-1.82	38.11	11.15	42.93	21.02	10.14	0.72			
(iv) Sub-total (i+ii)	71.68	67.27	66.72	62.56	63.64	65.69	87.30	102.48	112.50	117.89			
Percentage Variation		-6.15	-0.83	-6.23	1.74	3.22	32.90	17.38	9.77	4.79			
(B) External Sources													
(v) Grant- in-Aid	102.61	96.92	77.69	98.03	93.80	142.60	117.61	93.71	136.09	169.30			
Percentage Variation		-5.54	-19.84	26.18	-4.32	52.02	-17.52	-20.33	45.23	24.40			
(vi) Long Term Borrowings	16.20	20.55	2.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Percentage Variation		26.80	-88.46	-100.00	0.00	0.00	0.00	0.00	0.00	0.00			
Grand Total (iv+v +vi)	190.49	184.74	146.78	160.59	157.44	208.29	204.92	196.19	248.58	287.18			
Percentage Variation		-3.02	-20.55	9.41	-1.96	32.30	-1.62	-4.26	26.71	15.53			

Source: Computed from the data provided by the Bhopal Municipal Corporation.
*Worked out using Urban Non-manual Employees General Index (1991-92 price).

Component	Table B 8 : Revenue Expenditure Structure of the Bhopal Municipal Corporation, from 1991-92 to 2000-2001.										(Rs. '000)	
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001		
1.General Admn.&Collection of Revenue	79.78	59.12	58.62	80.64	83.03	93.13	86.1	139.14	201.49	171.56		
.Percentage to total	4.94	3.30	2.92	3.14	2.98	2.57	1.85	2.89	3.43	2.46		
2.Public health	94.85	146.32	162.07	222.47	211.99	255.27	371.08	290.13	535.06	609.27		
.Percentage to total	5.88	8.17	8.08	8.66	7.60	7.04	7.96	6.03	9.12	8.74		
3.Safety & convenience	67.48	56.95	82.23	113.27	146.32	125.48	135.04	144.78	235.86	241.25		
.Percentage to total	4.18	3.18	4.10	4.41	5.24	3.46	2.90	3.01	4.02	3.46		
4.Public works	191.40	116.77	231.10	347.15	168.28	137.96	918.76	957.49	1270.62	1410.00		
.Percentage to total	11.86	6.52	11.51	13.51	6.03	3.80	19.72	19.92	21.66	20.23		
5.Miscellaneous	6.37	16.91	4.36	11.54	37.31	14.83	48.38	51.08	82.79	87.33		
.Percentage to total	0.39	0.94	0.22	0.45	1.34	0.41	1.04	1.06	1.41	1.25		
6.Re-payment of loan	12.97	15.96	17.21	114.67	114.67	19.85	15	0	0	0		
.Percentage to total	0.80	0.89	0.86	4.46	4.11	0.55	0.32	0.00	0.00	0.00		
7.Interest paid on loan	5.97	3.66	3.20	16.91	16.91	1.70	0.69	0.00	0.00	0.00		
.Percentage to total	0.37	0.20	0.16	0.66	0.61	0.05	0.01	0.00	0.00	0.00		
8.Wages & salary to all employees	1026.96	1101.58	1205.00	1314.69	1553.63	1827.17	1959.04	2045.89	2445.65	2987.43		
.Percentage to total	63.63	61.53	60.04	51.15	55.67	50.38	42.04	42.56	41.69	42.87		
9.Water supply	128.25	273.04	243.24	348.63	458.50	1151.64	1125.94	1179.01	1094.37	1461.90		
.Percentage to total	7.95	15.25	12.12	13.56	16.43	31.75	24.16	24.52	18.66	20.98		
Total	1614.00	1790.31	2007.00	2570.17	2790.74	3627.04	4660.03	4807.52	5865.84	6968.74		
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00		

Source: Computed from the data provided by the Bhopal Municipal Corporation.

Component	Trends in Revenue Expenditure of Bhopal Municipal Corporation at Current Prices										(Rs.'000)	
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001		
1.General Admn.&Collection of Revenue	79.78	59.12	58.62	80.64	83.03	93.13	86.1	139.14	201.49	171.56		
.Percentage Variation		-25.90	-0.85	37.56	2.96	12.16	-7.55	61.60	44.81	-14.85		
2.Public health	94.85	146.32	162.07	222.47	211.99	255.27	371.08	290.13	535.06	609.27		
.Percentage Variation		54.26	10.76	37.27	-4.71	20.42	45.37	-21.81	84.42	13.87		
3.Safety & convenience	67.48	56.95	82.23	113.27	146.32	125.48	135.04	144.78	235.86	241.25		
.Percentage Variation		-15.60	44.39	37.75	29.18	-14.24	7.62	7.21	62.91	2.29		
4.Public works	191.40	116.77	231.10	347.15	168.28	137.96	918.76	957.49	1270.62	1410.00		
.Percentage Variation		-38.99	97.91	50.22	-51.53	-18.02	565.96	4.22	32.70	10.97		
5.Miscellaneous	6.37	16.91	4.36	11.54	37.31	14.83	48.38	51.08	82.79	87.33		
.Percentage Variation		165.46	-74.22	164.68	223.31	-60.25	226.23	5.58	62.08	5.48		
6.Re-payment of loan	12.97	15.96	17.21	114.67	114.67	19.85	15	0	0	0		
.Percentage Variation		23.05	7.83	566.30	0.00	-82.69	-24.43	-100.00	0.00	0.00		
7.Interest paid on loan	5.97	3.66	3.20	16.91	16.91	1.70	0.69	0.00	0.00	0.00		
.Percentage Variation		-38.69	-12.57	428.44	0.00	-89.95	-59.41	-100.00	0.00	0.00		
8.Wages & salary to all employees	1026.96	1101.58	1205.00	1314.69	1553.63	1827.17	1959.04	2045.89	2445.65	2987.43		
.Percentage Variation		7.27	9.39	9.10	18.17	17.61	7.22	4.43	19.54	22.15		
9.Water supply	128.25	273.04	243.24	348.63	458.50	1151.64	1125.94	1179.01	1094.37	1461.90		
.Percentage Variation		112.90	-10.91	43.33	31.51	151.18	-2.23	4.71	-7.18	33.58		
Total	1614.00	1790.31	2007.00	2570.17	2790.74	3627.04	4660.03	4807.52	5865.84	6968.74		
.Percentage Variation		10.92	12.10	28.06	8.58	29.97	28.48	3.17	22.01	18.80		

Source: Computed from the data provided by the Bhopal Municipal Corporation.

Component	Trends in Revenue Expenditure of Bhopal Municipal Corporation at Constant Prices *											(Rs.' 000)	
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001			
1.General Admn.&Collection of Revenue													
.Percentage Variation	79.78	53.80	49.83	63.71	58.95	60.53	52.52	75.14	104.77	84.06			
		-32.57	-7.38	27.85	-7.46	2.69	-13.24	43.06	39.45	-19.77			
2.Public health													
.Percentage Variation	94.85	133.15	137.76	175.75	150.51	165.93	226.36	156.67	278.23	298.54			
		40.38	3.46	27.58	-14.36	10.24	36.42	-30.79	77.59	7.30			
3.Safety & convenience													
.Percentage Variation	67.48	51.82	69.90	89.48	103.89	81.56	82.37	78.18	122.65	118.21			
		-23.20	34.87	28.02	16.10	-21.49	1.00	-5.09	56.88	-3.62			
4.Public works													
.Percentage Variation	191.40	106.26	196.44	274.25	119.48	89.67	560.44	517.04	660.72	690.90			
		-44.48	84.86	39.61	-56.43	-24.95	524.98	-7.74	27.79	4.57			
5.Miscellaneous													
.Percentage Variation	6.37	15.39	3.71	9.12	26.49	9.64	29.51	27.58	43.05	42.79			
		141.57	-75.92	146.00	190.57	-63.61	206.15	-6.54	56.08	-0.60			
6.Re-payment of loan													
.Percentage Variation	12.97	14.5236	14.6285	90.5893	81.4157	12.9025	9.15	0	0	0			
		11.98	0.72	519.27	-10.13	-84.15	-29.08	-100.00	0.00	0.00			
7.Interest paid on loan													
.Percentage Variation	5.97	3.33	2.72	13.36	12.01	1.11	0.42	0.00	0.00	0.00			
		-44.21	-18.33	391.14	-10.13	-90.80	-61.91	-100.00	0.00	0.00			
8.Wages & salary to all employees													
.Percentage Variation	1026.96	1002.44	1024.25	1038.61	1103.08	1187.66	1195.01	1104.78	1271.74	1463.84			
		-2.39	2.18	1.40	6.21	7.67	0.62	-7.55	15.11	15.11			
9.Water supply													
.Percentage Variation	128.25	248.47	206.75	275.42	325.54	748.57	686.82	636.67	569.07	716.33			
		93.74	-16.79	33.21	18.20	129.95	-8.25	-7.30	-10.62	25.88			
Total													
.Percentage Variation	1614.00	1629.18	1705.95	2030.43	1981.43	2357.58	2842.62	2596.06	3050.24	3414.68			
		0.94	4.71	19.02	-2.41	18.98	20.57	-8.67	17.49	11.95			

Source: Computed from the data provided by the Bhopal Municipal Corporation.

*Worked out using Urban Non-manual Employees General Index (at 1991-92 price).

Component	Bhopal Municipal Corporation at Current Prices											(Rs.' 000)		
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001				
1.General Admn.&Collection of Revenue														
Per Capita (In Rs.)	79.78	59.12	58.62	80.64	83.03	93.13	86.1	139.14	201.49	171.56				
	7.29	5.24	5.04	6.73	6.73	7.32	6.57	10.30	14.47	11.96				
2.Public health														
Per Capita (In Rs.)	94.85	146.32	162.07	222.47	211.99	255.27	371.08	290.13	535.06	609.27				
	8.66	12.97	13.94	18.57	17.18	20.07	28.31	21.48	38.44	42.49				
3.Safety & convenience														
Per Capita (In Rs.)	67.48	56.95	82.23	113.27	146.32	125.48	135.04	144.78	235.86	241.25				
	6.16	5.05	7.07	9.45	11.86	9.86	10.30	10.72	16.94	16.82				
4.Public works														
Per Capita (In Rs.)	191.40	116.77	231.10	347.15	168.28	137.96	918.76	957.49	1270.62	1410.00				
	17.48	10.35	19.87	28.98	13.64	10.85	70.08	70.87	91.28	98.33				
5.Miscellaneous														
Per Capita (In Rs.)	6.37	16.91	4.36	11.54	37.31	14.83	48.38	51.08	82.79	87.33				
	0.58	1.50	0.37	0.96	3.02	1.17	3.69	3.78	5.95	6.09				
6.Re-payment of loan														
Per Capita (In Rs.)	12.97	15.96	17.21	114.67	114.67	19.85	15	0	0	0				
	1.18	1.41	1.48	9.57	9.29	1.56	1.14	0.00	0.00	0.00				
7.Interest paid on loan														
Per Capita (In Rs.)	5.97	3.66	3.20	16.91	16.91	1.70	0.69	0.00	0.00	0.00				
	0.55	0.32	0.28	1.41	1.37	0.13	0.05	0.00	0.00	0.00				
8.Wages & salary to all employees														
Per Capita (In Rs.)	1026.96	1101.58	1205.00	1314.69	1553.63	1827.17	1959.04	2045.89	2445.65	2987.43				
	93.79	97.66	103.61	109.74	125.90	143.65	149.43	151.44	175.69	208.33				
9.Water supply														
Per Capita (In Rs.)	128.25	273.04	243.24	348.63	458.50	1151.64	1125.94	1179.01	1094.37	1461.90				
	11.71	24.21	20.91	29.10	37.16	90.54	85.88	87.27	78.62	101.95				
Total	1614.00	1790.31	2007.00	2570.17	2790.74	3627.04	4660.03	4807.52	5865.84	6968.74				
Per Capita (In Rs.)	147.40	158.72	172.57	214.54	226.15	285.14	355.46	355.85	421.40	485.97				

Source: Computed from the data provided by the Bhopal Municipal Corporation.

Component	Bhopal Municipal Corporation at Constant Prices *										(Rs. '000)	
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001		
1.General Admn.&Collection of Revenue												
Per Capita (In Rs.)	79.78	53.80	49.83	63.71	58.95	60.53	52.52	75.14	104.77	84.06		
	7.29	4.77	4.28	5.32	4.78	4.76	4.01	5.56	7.53	5.86		
2.Public health												
Per Capita (In Rs.)	94.85	133.15	137.76	175.75	150.51	165.93	226.36	156.67	278.23	298.54		
	8.66	11.80	11.85	14.67	12.20	13.04	17.27	11.60	19.99	20.82		
3.Safety & convenience												
Per Capita (In Rs.)	67.48	51.82	69.90	89.48	103.89	81.56	82.37	78.18	122.65	118.21		
	6.16	4.59	6.01	7.47	8.42	6.41	6.28	5.79	8.81	8.24		
4.Public works												
Per Capita (In Rs.)	191.40	106.26	196.44	274.25	119.48	89.67	560.44	517.04	660.72	690.90		
	17.48	9.42	16.89	22.89	9.68	7.05	42.75	38.27	47.47	48.18		
5.Miscellaneous												
Per Capita (In Rs.)	6.37	15.39	3.71	9.12	26.49	9.64	29.51	27.58	43.05	42.79		
	0.05	0.13	0.03	0.08	0.22	0.08	0.24	0.23	0.36	0.35		
6.Re-payment of loan												
Per Capita (In Rs.)	12.97	14.5236	14.6285	90.5893	81.4157	12.9025	9.15	0	0	0		
	1.18	1.29	1.26	7.56	6.60	1.01	0.70	0.00	0.00	0.00		
7.Interest paid on loan												
Per Capita (In Rs.)	5.97	3.33	2.72	13.36	12.01	1.11	0.42	0.00	0.00	0.00		
	0.55	0.30	0.23	1.12	0.97	0.09	0.03	0.00	0.00	0.00		
8.Wages & salary to all employees												
Per Capita (In Rs.)	1026.96	1002.44	1024.25	1038.61	1103.08	1187.66	1195.01	1104.78	1271.74	1463.84		
	93.79	88.87	88.07	86.69	89.39	93.37	91.15	81.78	91.36	102.08		
9.Water supply												
Per Capita (In Rs.)	128.25	248.47	206.75	275.42	325.54	748.57	686.82	636.67	569.07	716.33		
	11.71	22.03	17.78	22.99	26.38	58.85	52.39	47.13	40.88	49.95		
Total												
Per Capita (In Rs.)	1614.00	1629.18	1705.95	2030.43	1981.43	2357.58	2842.62	2596.06	3050.24	3414.68		
	147.40	144.43	146.69	169.49	160.57	185.34	216.83	192.16	219.13	238.12		

Source: Computed from the data provided by the Bhopal Municipal Corporation.
*Worked out using Urban Non-manual Employees General Index (at 1991-92 price).

Component	Expenditure of Bhopal Municipal Corporation at Current Prices										(In Rs.)	
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001		
1.General Admn.&Collection of Revenue	7.29	5.24	5.04	6.73	6.73	7.32	6.57	10.30	14.47	11.96		
Percentage Variation		-28.06	-3.83	33.54	-0.04	8.81	-10.30	56.82	40.55	-17.35		
2.Public health	8.66	12.97	13.94	18.57	17.18	20.07	28.31	21.48	38.44	42.49		
Percentage Variation		49.75	7.43	33.26	-7.49	16.82	41.04	-24.13	78.99	10.53		
3.Safety & convenience	6.16	5.05	7.07	9.45	11.86	9.86	10.30	10.72	16.94	16.82		
Percentage Variation		-18.07	40.04	33.72	25.41	-16.80	4.42	4.04	58.11	-0.71		
4.Public works	17.48	10.35	19.87	28.98	13.64	10.85	70.08	70.87	91.28	98.33		
Percentage Variation		-40.78	91.95	45.83	-52.94	-20.47	546.15	1.13	28.79	7.72		
5.Miscellaneous	0.58	1.50	0.37	0.96	3.02	1.17	3.69	3.78	5.95	6.09		
Percentage Variation		157.70	-74.99	156.95	213.88	-61.44	216.53	2.45	57.31	2.39		
6.Re-payment of loan	1.18	1.41	1.48	9.57	9.29	1.56	1.14	0.00	0.00	0.00		
Percentage Variation		19.45	4.59	546.83	-2.92	-83.21	-26.68	-100.00	0.00	0.00		
7.Interest paid on loan	0.55	0.32	0.28	1.41	1.37	0.13	0.05	0.00	0.00	0.00		
Percentage Variation		-40.49	-15.20	413.00	-2.92	-90.25	-60.62	-100.00	0.00	0.00		
8.Wages & salary to all employees	93.79	97.66	103.61	109.74	125.90	143.65	149.43	151.44	175.69	208.33		
Percentage Variation		4.13	6.10	5.92	14.73	14.09	4.03	1.34	16.02	18.58		
9.Water supply	11.71	24.21	20.91	29.10	37.16	90.54	85.88	87.27	78.62	101.95		
Percentage Variation		106.67	-13.60	39.14	27.68	143.67	-5.14	1.61	-9.91	29.67		
Total	147.40	158.72	172.57	214.54	226.15	285.14	355.46	355.85	421.40	485.97		
Percentage Variation		7.68	8.73	24.32	5.41	26.08	24.66	0.11	18.42	15.32		

Source: Computed from the data provided by the Bhopal Municipal Corporation.

Component	Bhopal Municipal Corporation at Constant Prices *										(In Rs.)
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001	
1.General Admn.&Collection of Revenue	7.29	4.77	4.28	5.32	4.78	4.76	4.01	5.56	7.53	5.86	
Percentage Variation		-34.54	-10.17	24.12	-10.16	-0.38	-15.82	38.82	35.34	-22.12	
2.Public health	8.66	11.80	11.85	14.67	12.20	13.04	17.27	11.60	19.99	20.82	
Percentage Variation		36.27	0.35	23.85	-16.86	6.95	32.36	-32.84	72.36	4.16	
3.Safety & convenience	6.16	4.59	6.01	7.47	8.42	6.41	6.28	5.79	8.81	8.24	
Percentage Variation		-25.45	30.81	24.28	12.71	-23.84	-2.01	-7.90	52.25	-6.44	
4.Public works	17.48	9.42	16.89	22.89	9.68	7.05	42.75	38.27	47.47	48.18	
Percentage Variation		-46.11	79.30	35.53	-57.71	-27.19	506.39	-10.48	24.02	1.50	
5.Miscellaneous	0.05	0.13	0.03	0.08	0.22	0.08	0.24	0.23	0.36	0.35	
Percentage Variation		141.57	-75.92	146.00	190.57	-63.61	206.15	-6.54	56.08	-0.60	
6.Re-payment of loan	1.18	1.29	1.26	7.56	6.60	1.01	0.70	0.00	0.00	0.00	
Percentage Variation		8.70	-2.31	501.17	-12.75	-84.63	-31.19	-100.00	0.00	0.00	
7.Interest paid on loan	0.55	0.30	0.23	1.12	0.97	0.09	0.03	0.00	0.00	0.00	
Percentage Variation		-45.84	-20.79	376.79	-12.75	-91.07	-63.04	-100.00	0.00	0.00	
8.Wages & salary to all employees	93.79	88.87	88.07	86.69	89.39	93.37	91.15	81.78	91.36	102.08	
Percentage Variation		-5.24	-0.90	-1.56	3.11	4.45	-2.37	-10.29	11.72	11.73	
9.Water supply	11.71	22.03	17.78	22.99	26.38	58.85	52.39	47.13	40.88	49.95	
Percentage Variation		88.07	-19.29	29.32	14.75	123.08	-10.98	-10.05	-13.25	22.19	
Total	147.40	144.43	146.69	169.49	160.57	185.34	216.83	192.16	219.13	238.12	
Percentage Variation		-2.01	1.56	15.54	-5.26	15.43	16.99	-11.38	14.03	8.67	

Source: Computed from the data provided by the Bhopal Municipal Corporation.
*Worked out using Urban Non-manual Employees General Index (at 1991-92 price).

Table B15 : Trends in Capital Income of Bhopal Municipal Corporation				
Years	Capital Income (Rs.' 000)			Percentage Variations
	Grant-in-aid (Capital)	Loan from Revl.Fund	Total	
1991-92	69.24	177.44	246.68	
1992-93	99.05	254.7	353.75	43.40
1993-94	82.05	32.45	114.5	-67.63
1994-95	0	0	0	-100.00
1995-96	46.52	0	46.52	0.00
1996-97	10.52	0	10.52	-77.39
1997-98	3	0	3	-71.48
1998-99	52.03	0	52.03	1634.33
1999-2000	150.58	0	150.58	189.41
2000-2001	143	0	143	-5.03

Source: Computed from the data provided by the Dehradun Municipal Corporation.

Table B 16 : Capital Expenditure of Bhopal Municipal Corporation From 1991-92 to 2000-01										
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	(Rs.' 000) 2000-2001
1. Const. Of Shops/Complex/Building	90.59	152.33	72.70	35.19	5.66	10.07	31.16	43.34	42.88	29.68
2. Purchase of Fire Fighter Machines	3.76	10.76	24.80	7.82	1.14	0.00	1.49	0.00	0.00	0.00
3. Const. Of Flush Toilets	0.00	64.61	0.00	80.36	0.00	45.42	0.00	0.00	0.00	0.00
4. Purchase of Vehicle	20.61	4.26	37.54	50.80	10.70	28.16	7.88	6.95	13.95	0.00
5. Water Supply(Kolar Project)	190.44	328.75	52.45	0.00	0.00	0.00	0.00	0.00	124.78	0.00
6. Fixing of Poly Grass at Aish-Bagh Stadium	94.10	20.28	18.56	8.73	0.00	0.00	0.00	0.00	0.00	0.00
7. MP/MLA and Others	2.63	0.00	17.43	0.35	71.88	129.66	42.36	93.81	339.05	Pro.238.65
Total	402.13	580.99	223.48	183.25	89.38	213.31	82.89	144.10	520.66	268.33

Source: Computed from the data provided by the Bhopal Municipal Corporation.

Table B 17 : Closing Balance of the Bhopal Municipal Corporation on the Revenue Account 'at Current Prices												(Rs. ' 000)
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001		
1.Revenue Receipts	2085.92	2289.97	2008.31	2435.27	2736.42	4076.09	4404.04	4908.38	6654.42	8404.50		
2.Revenue Expenditure	1614.00	1790.31	2007.00	2570.17	2790.74	3627.04	4660.03	4807.52	5865.84	6968.74		
Revenue Balance	471.92	499.66	1.31	-134.90	-54.32	449.05	-255.99	100.86	788.58	1435.76		
3.Capital Receipts	246.68	353.75	114.50	0.00	46.52	10.52	3.00	52.03	150.58	143.00		
4.Capital Expenditure	402.13	580.99	223.48	183.25	89.38	213.31	82.89	144.10	520.66	268.33		
5.Total Receipts	2332.60	2643.72	2122.81	2435.27	2782.94	4086.61	4407.04	4960.41	6805.00	8547.50		
6.Total Expenditure	2016.13	2371.30	2230.48	2753.42	2880.12	3840.35	4742.92	4951.62	6386.50	7237.07		
Closing Balance	316.47	272.42	-107.67	-318.15	-97.18	246.26	-335.88	8.79	418.50	1310.43		

Source: Computed from the data provided by the Bhopal Municipal Corporation.

Table B 18 : Debt Service Coverage Ratio (DSCR) of Bhopal Municipal Corporation							(Rs.' 000)
Year	Revenue Receipts	Revenue Expenditur	Debt Servicing	Surplus(Rrev.Rects.-Rev. Expd.)	D S C R		
1991-92	2085.92	1595.06	18.94	490.86	25.91657867		
1992-93	2289.97	1770.69	19.62	519.28	26.46687054		
1993-94	2008.31	1986.62	20.41	21.69	1.062714356		
1994-95	2435.27	2438.59	131.58	-3.32	-0.025231798		
1995-96	2736.42	2659.16	131.58	77.26	0.587171303		
1996-97	4076.09	3605.49	21.55	470.6	21.83758701		
1997-98	4404.04	4644.34	15.69	-240.3	-15.31548757		
1998-99	4908.38	4807.52	0	100.86	0		
1999-2000	6654.42	5865.84	0	788.58	0		
2000-2001	8404.5	6968.74	0	1435.76	0		

Source: Computed from the data provided by the Bhopal Municipal Corporation.

Excluding Debt Servicing

Table D1 : Revenue Structure of the Dehradun Municipal Corporation, from 1991-92 to 2000-2001.										
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001
(A) Internal Sources										
(i) Total Tax Source	108.16	110.82	113.55	137.8	142.11	161.4	140.21	166.04	219.06	247.67
Percentage to Sub-total	82.48	84.92	74.08	63.13	83.68	74.43	60.61	79.75	76.84	68.07
(ii) Property Tax	106.16	109.12	111.31	136.08	140.08	159.11	137.66	158.8	209.3	235.38
Percentage to Sub-total	80.95	83.62	72.62	62.34	82.49	73.37	59.51	76.27	73.41	64.69
(iii) Non-Tax source	22.98	19.68	39.73	80.49	27.71	55.45	91.11	42.17	66.04	116.19
Percentage to Sub-total	17.52	15.08	25.92	36.87	16.32	25.57	39.39	20.25	23.16	31.93
(iv) Sub-total (i+iii)	131.14	130.5	153.28	218.29	169.82	216.85	231.32	208.21	285.1	363.86
Percentage to Grand Total	40.30	37.82	38.20	48.23	39.12	40.83	41.43	22.21	32.06	28.25
(B) External Sources										
(v) Grant- in-Aid	194.25	214.59	247.93	234.34	264.23	314.24	327.08	729.29	604.05	924.35
Percentage to Grand Total	59.70	62.18	61.80	51.77	60.88	59.17	58.57	77.79	67.94	71.75
Grand Total (iv+v)	325.39	345.09	401.21	452.63	434.05	531.09	558.4	937.5	889.15	1288.21

Source: Computed from the data provided by the Dehradun Municipal Corporation.

Table D 2 : Trends in Revenue Receipts of Dehradun Municipal Corporation at Current Prices											(Rs.' 000)	
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001		
(A) Internal Sources												
(i) Total Tax Source	108.16	110.82	113.55	137.8	142.11	161.4	140.21	166.04	219.06	247.67		
Percentage Variation		2.46	2.46	21.36	3.13	13.57	-13.13	18.42	31.93	13.06		
(ii) Property Tax	106.16	109.12	111.31	136.08	140.08	159.11	137.66	158.8	209.3	235.38		
Percentage Variation		2.79	2.01	22.25	2.94	13.59	-13.48	15.36	31.80	12.46		
(iii) Non-Tax source	22.98	19.68	39.73	80.49	27.71	55.45	91.11	42.17	66.04	116.19		
Percentage Variation		-14.36	101.88	102.59	-65.57	100.11	64.31	-53.72	56.60	75.94		
(iv) Sub-total (i+iii)	131.14	130.5	153.28	218.29	169.82	216.85	231.32	208.21	285.1	363.86		
Percentage Variation		-0.49	17.46	42.41	-22.20	27.69	6.67	-9.99	36.93	27.63		
(B) External Sources												
(v) Grant-in-aid	194.25	214.59	247.93	234.34	264.23	314.24	327.08	729.29	604.05	924.35		
Percentage Variation		10.47	15.54	-5.48	12.75	18.93	4.09	122.97	-17.17	53.03		
Grand Total (iv+v)	325.39	345.09	401.21	452.63	434.05	531.09	558.4	937.5	889.15	1288.21		
Percentage Variation		6.05	16.26	12.82	-4.10	22.36	5.14	67.89	-5.16	44.88		

Source: Computed from the data provided by the Dehradun Municipal Corporation.

Component	Trends in Revenue Receipts of Dehradun Municipal Corporation at Constant Prices											(Rs.' 000)				
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001						
(A) Internal Sources																
(i) Total Tax Source	108.16	100.85	96.52	108.86	100.9	104.91	85.53	89.66	113.91	121.36						
Percentage Variation		-6.76	-4.30	12.79	-7.32	3.98	-18.48	4.83	27.05	6.54						
(ii) Property Tax	106.16	99.3	94.61	107.5	99.46	103.42	83.97	85.75	108.84	115.33						
Percentage Variation		-6.46	-4.72	13.62	-7.48	3.98	-18.80	2.12	26.92	5.97						
(iii) Non-Tax source	22.98	17.91	33.77	63.58	19.67	36.04	55.58	22.77	34.34	57						
Percentage Variation		-22.06	88.61	88.26	-69.06	83.21	54.20	-59.03	50.80	65.81						
(iv) Sub_total (i+iii)	131.14	118.76	130.29	172.44	120.57	140.95	141.11	112.43	148.25	178.29						
Percentage Variation		-9.44	9.71	32.35	-30.08	16.90	0.11	-20.32	31.86	20.26						
(B) External Sources																
(v) Grant-in-aid	194.25	195.28	210.74	185.13	187.6	204.25	199.52	393.82	314.11	452.94						
Percentage Variation		0.53	7.92	-12.15	1.34	8.88	-2.32	97.38	-20.24	44.20						
Grand Total(iv+v)	325.39	314.04	341.03	357.57	308.17	345.2	340.63	506.25	462.36	631.23						
Percentage Variation		-3.49	8.59	4.85	-13.82	12.02	-1.32	48.62	-8.67	36.52						

Source: Computed from the data provided by the Dehradun Municipal Corporation .
*Worked out using Urban Non-manual Employees General Index (at 1991-92 price).

Table D 4 : Per capita Revenue of Dehradun Municipal Corporation at Current Prices											(Rs.' 000)	
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001		
(A) Internal Sources												
(i) Total Tax Source	108.16	110.82	113.55	137.8	142.11	161.4	140.21	166.04	219.06	247.67		
Per Capita(In Rs.)	38.22	37.44	36.63	42.53	41.92	45.46	37.79	42.68	53.82	58.14		
(ii) Property Tax	106.16	109.12	111.31	136.08	140.08	159.11	137.66	158.8	209.3	235.38		
Per Capita(In Rs.)	37.51	36.86	35.91	42.00	41.32	44.82	37.11	40.82	51.43	55.25		
(iii) Non-Tax source	22.98	19.68	39.73	80.49	27.71	55.45	91.11	42.17	66.04	116.19		
Per Capita(In Rs.)	8.12	6.65	12.82	24.84	8.17	15.62	24.56	10.84	16.23	27.27		
(iv) Sub-total (i+iii)	131.14	130.5	153.28	218.29	169.82	216.85	231.32	208.21	285.1	363.86		
Per Capita(In Rs.)	46.34	44.09	49.45	67.37	50.09	61.08	62.35	53.52	70.05	85.41		
(B) External Sources												
(v) Grant-in-aid	194.25	214.59	247.93	234.34	264.23	314.24	327.08	729.29	604.05	924.35		
Per Capita(In Rs.)	68.64	72.50	79.98	72.33	77.94	88.52	88.16	187.48	148.42	216.98		
Grand Total (iv+v)	325	345	401	453	434	531	558	938	889	1288		
Per Capita(In Rs.)	114.98	116.58	129.42	139.70	128.04	149.60	150.51	241.00	218.46	302.40		

Source: Computed from the data provided by the Dehradun Municipal Corporation .

Table D 5 : Per capita Revenue of Dehradun Municipal Corporation at Constant Prices * (Rs.' 000)										
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001
(A) Internal Sources										
(i) Total Tax Source	108.16	100.85	96.52	108.86	100.9	104.91	85.53	89.66	113.91	121.36
Per Capita(In Rs.)	38.22	34.07	31.14	33.60	29.76	29.55	23.05	23.05	27.99	28.49
(ii) Property Tax	106.16	99.3	94.61	107.5	99.46	103.42	83.97	85.75	108.84	115.33
Per Capita(In Rs.)	37.51	33.55	30.52	33.18	29.34	29.13	22.63	22.04	26.74	27.07
(iii) Non-Tax source	22.98	17.91	33.77	63.58	19.67	36.04	55.58	22.77	34.34	57
Per Capita(In Rs.)	8.12	6.05	10.89	19.62	5.80	10.15	14.98	5.85	8.44	13.36
(iv) Sub- total (i+iii)	131.14	118.76	130.29	172.44	120.57	140.95	141.11	112.43	148.25	178.29
Per Capita(In Rs.)	46.34	40.12	42.03	53.22	35.57	39.70	38.04	28.90	36.43	41.85
(B) External Sources										
Grant-in-aid	194.25	195.28	210.74	185.13	187.6	204.25	199.52	393.82	314.11	452.94
Per Capita(In Rs.)	68.64	65.97	67.98	57.14	55.34	57.54	53.78	101.24	77.18	106.32
Grand Total (iv+v)	325.39	314.04	341.03	357.57	308.17	345.2	340.63	506.25	462.36	631.23
Per Capita(In Rs.)	114.98	106.09	110.01	110.36	90.91	97.24	91.81	130.14	113.60	148.18

Source: Computed from the data provided by the Dehradun Municipal Corporation .
*Worked out using Urban Non-manual Employees General Index (at 1991-92 price).

Table D 6 : Percentage Variation in Per capita Revenue of Dehradun Municipal Corporation at Current Prices											(in Rs.)	
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001		
(A) Internal Sources												
(i) Total Tax Source	17.17	15.95	14.79	16.25	15.18	15.61	12.27	13.17	15.74	16.10		
Percentage Variation		-7.12	-7.28	9.91	-6.57	2.81	-21.39	7.31	19.52	2.33		
(ii) Property Tax	16.85	15.70	14.49	16.05	14.97	15.39	12.05	12.59	15.04	15.30		
Percentage Variation		-6.83	-7.69	10.72	-6.74	2.82	-21.71	4.53	19.40	1.78		
(iii) Non-Tax source	3.65	2.83	5.17	9.49	2.96	5.36	7.97	3.34	4.74	7.55		
Percentage Variation		-22.37	82.69	83.48	-68.81	81.14	48.68	-58.06	41.87	59.24		
(iv) Sub-total (i+iii)	20.82	18.78	19.96	25.74	18.14	20.97	20.24	16.51	20.48	23.66		
Percentage Variation		-9.79	6.29	28.98	-29.52	15.59	-3.47	-18.43	24.04	15.51		
(B) External Sources												
(v) Grant-in-aid	30.83	30.88	32.28	27.63	28.23	30.39	28.62	57.83	43.39	60.10		
Percentage Variation		0.14	4.55	-14.40	2.15	7.66	-5.82	102.05	-24.97	38.50		
Grand Total (iv+v)	51.65	49.65	52.24	53.38	46.37	51.36	48.87	74.35	63.88	83.76		
Percentage Variation		-3.86	5.21	2.17	-13.12	10.76	-4.86	52.14	-14.08	31.13		

Source: Computed from the data provided by the Dehradun Municipal Corporation .

Table D 7 : Percentage Variation in Per capita Revenue of Dehradun Municipal Corporation at Constant Prices* (in Rs.)										
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001
(A) Internal Sources										
(i) Total Tax Source	17.18	14.50	12.57	12.84	10.78	10.15	7.49	7.11	8.18	7.89
Percentage Variation		-15.56	-13.33	2.13	-16.07	-5.84	-26.18	-5.07	15.05	-3.52
(ii) Property Tax	16.86	14.28	12.32	12.68	10.62	10.00	7.35	6.80	7.82	7.50
Percentage Variation		-15.29	-13.72	2.89	-16.22	-5.84	-26.47	-7.53	14.93	-4.04
(iii) Non-Tax source	3.65	2.58	4.40	7.50	2.10	3.49	4.87	1.81	2.47	3.70
Percentage Variation		-29.43	70.80	70.48	-71.98	65.91	39.63	-62.90	36.56	50.15
(iv) Sub- total (i+ii+iii)	20.83	17.08	16.97	20.34	12.88	13.63	12.36	8.92	10.65	11.60
Percentage Variation		-17.99	-0.65	19.85	-36.69	5.87	-9.35	-27.85	19.40	8.91
(B) External Sources										
(v) Grant-in-aid	30.85	28.09	27.45	21.83	20.04	19.75	17.47	31.23	22.56	29.46
Percentage Variation		-8.97	-2.27	-20.45	-8.23	-1.41	-11.54	78.74	-27.77	30.58
Grand Total (iv+v)	51.68	45.17	44.42	42.17	32.91	33.39	29.83	40.15	33.21	41.05
Percentage Variation		-12.60	-1.66	-5.05	-21.95	1.44	-10.65	34.59	-17.30	23.63

Source: Computed from the data provided by the Dehradun Municipal Corporation .
*Worked out using Urban Non-manual Employees General Index (at 1991-92 price).

Table D 8 : Revenue Expenditure Structure of the Dehradun Municipal Corporation, from 1991-92 to 2000-2001.

Component	(Rs.' 000)									
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001
1.General Admn.&Collection of Revenue										
Percentage to total	1.81	2.47	3.6	3.9	3.02	6.58	5.27	10.11	2.97	3.99
	0.54	0.67	0.94	0.98	0.69	1.31	0.86	1.27	0.33	0.38
2.Public health										
Percentage to total	8.81	15.92	12.12	14.22	15.14	16.13	48.14	43.33	30.84	38.84
	2.61	4.34	3.15	3.58	3.48	3.21	7.89	5.46	3.44	3.69
3.Safety & convenience										
Percentage to total	3	6.3	12.11	13.27	13.47	14.44	10.48	42.02	26.6	59.69
	0.89	1.72	3.15	3.34	3.09	2.87	1.72	5.30	2.97	5.67
4.Public works										
Percentage to total	1.92	0.26	0.19	0.86	1.24	1.83	4.57	14.87	13.84	9.97
	0.57	0.07	0.05	0.22	0.28	0.36	0.75	1.87	1.54	0.95
5.Miscellaneous										
Percentage to total	22.32	36.07	26.1	21.26	15.92	28.97	59.32	95	16.83	34.31
	6.62	9.83	6.79	5.36	3.66	5.76	9.72	11.97	1.88	3.26
6.Re-payment of loan										
Percentage to total	0.15	0.07	0.07	0.36	0.76	0.12	0.44	5.57	6.97	20.38
	0.04	0.02	0.02	0.09	0.17	0.02	0.07	0.70	0.78	1.93
7.Wages & salary to all employees										
Percentage to total	299.34	304.89	330.28	342.89	384.88	434.65	481.95	582.58	798.58	886.15
	88.73	83.08	85.91	86.38	88.40	86.43	78.99	73.42	89.02	84.13
8.Contractors' security										
Percentage to total	0.02	0	0	0.2	0.94	0.19	0.01	0	0.49	0
	0.01	0.00	0.00	0.05	0.22	0.04	0.00	0.00	0.05	0.00
Total	337.37	366.99	384.46	396.95	435.36	502.89	610.17	793.49	897.1	1053.33
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Computed from the data provided by the Dehradun Municipal Corporation.

Component	Trends in Revenue Expenditure of Dehradun Municipal Corporation at Current Prices										(Rs.' 000)	
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001		
1.General Admn.&Collection of Revenue	1.81	2.47	3.6	3.9	3.02	6.58	5.27	10.11	2.97	3.99		
.Percentage Variation		36.46	45.75	8.33	-22.56	117.88	-19.91	91.84	-70.62	34.34		
2.Public health	8.81	15.92	12.12	14.22	15.14	16.13	48.14	43.33	30.84	38.84		
.Percentage Variation		80.70	-23.87	17.33	6.47	6.54	198.45	-9.99	-28.83	25.94		
3.Safety & convenience	3	6.3	12.11	13.27	13.47	14.44	10.48	42.02	26.6	59.69		
.Percentage Variation		110.00	92.22	9.58	1.51	7.20	-27.42	300.95	-36.70	124.40		
4.Public works	1.92	0.26	0.19	0.86	1.24	1.83	4.57	14.87	13.84	9.97		
.Percentage Variation		-86.46	-26.92	352.63	44.19	47.58	149.73	225.38	-6.93	-27.96		
5.Miscellaneous	22.32	36.07	26.1	21.26	15.92	28.97	59.32	95	16.83	34.31		
.Percentage Variation		61.60	-27.64	-18.54	-25.12	81.97	104.76	60.15	-82.28	103.86		
6.Re-payment of loan	0.15	0.07	0.07	0.36	0.76	0.12	0.44	5.57	6.97	20.38		
.Percentage Variation		-53.33	0.00	414.29	111.11	-84.21	266.67	1165.91	25.13	192.40		
7.Wages & salary to all employees	299.34	304.89	330.28	342.89	384.88	434.65	481.95	582.58	798.58	886.15		
.Percentage Variation		1.85	8.33	3.82	12.25	12.93	10.88	20.88	37.08	10.97		
8.Contractors' security	0.02	0	0	0.2	0.94	0.19	0.01	0	0.49	0		
.Percentage Variation		-100.00	0.00	0.00	370.00	-79.79	-94.74	-100.00	0.00	-100.00		
Total	337.37	366.99	384.46	396.95	435.36	502.89	610.17	793.49	897.1	1053.33		
.Percentage Variation		8.78	4.76	3.25	9.68	15.51	21.33	30.04	13.06	17.42		

Source: Computed from the data provided by the Dehradun Municipal Corporation.

Component	Trends in Revenue Expenditure of Dehradun Municipal Corporation at Constant Prices *													(Rs.' 000)	
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001					
1.General Admn.&Collection of Revenue	1.81	2.25	3.06	3.08	2.14	4.28	3.21	5.46	1.54	1.96					
.Percentage Variation		24.18	36.14	0.69	-30.41	99.47	-24.84	69.83	-71.71	26.59					
2.Public health	8.81	14.49	10.30	11.23	10.75	10.48	29.37	23.40	16.04	19.03					
.Percentage Variation		64.44	-28.89	9.04	-4.31	-2.46	180.08	-20.32	-31.46	18.67					
3.Safety & convenience	3	5.73	10.29	10.48	9.56	9.39	6.39	22.69	13.83	29.25					
.Percentage Variation		91.10	79.55	1.84	-8.77	-1.86	-31.89	254.94	-39.04	111.45					
4.Public works	1.92	0.24	0.16	0.68	0.88	1.19	2.79	8.03	7.20	4.89					
.Percentage Variation		-87.68	-31.74	320.68	29.58	35.11	134.36	188.04	-10.37	-32.12					
5.Miscellaneous	22.32	32.82	22.19	16.80	11.30	18.83	36.19	51.30	8.75	16.81					
.Percentage Variation		47.06	-32.41	-24.29	-32.70	66.59	92.16	41.77	-82.94	92.10					
6.Re-payment of loan	0.15	0.06	0.06	0.28	0.54	0.08	0.27	3.01	3.62	9.99					
.Percentage Variation		-57.53	-6.59	377.98	89.73	-85.54	244.10	1020.64	20.50	175.53					
7.Wages & salary to all employees	299.34	277.45	280.74	270.88	273.26	282.52	293.99	314.59	415.26	434.21					
.Percentage Variation		-7.31	1.19	-3.51	0.88	3.39	4.06	7.01	32.00	4.56					
8.Contractors' security	0.02	0.00	0.00	0.16	0.67	0.12	0.01	0.00	0.25	0.00					
.Percentage Variation		-100.00	0.00	0.00	322.41	-81.50	-95.06	-100.00	0.00	-100.00					
Total	337.37	333.96	326.79	313.59	309.11	326.88	372.20	428.48	466.49	516.13					
.Percentage Variation		-1.01	-2.15	-4.04	-1.43	5.75	13.87	15.12	8.87	10.64					

Source: Computed from the data provided by the Dehradun Municipal Corporation.

*Worked out using Urban Non-manual Employees General Index (at 1991-92 price).

Component	Dehradun Municipal Corporation at Current Prices											(Rs.' 000)			
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001					
1.General Admn.&Collection of Revenue															
Per Capita (In Rs.)	1.81	2.47	3.6	3.9	3.02	6.58	5.27	10.11	2.97	3.99					
	0.64	0.83	1.16	1.20	0.89	1.85	1.42	2.60	0.73	0.94					
2.Public health															
Per Capita (In Rs.)	8.81	15.92	12.12	14.22	15.14	16.13	48.14	43.33	30.84	38.84					
	3.11	5.38	3.91	4.39	4.47	4.54	12.98	11.14	7.58	9.12					
3.Safety & convenience															
Per Capita (In Rs.)	3	6.3	12.11	13.27	13.47	14.44	10.48	42.02	26.6	59.69					
	1.06	2.13	3.91	4.10	3.97	4.07	2.82	10.80	6.54	14.01					
4.Public works															
Per Capita (In Rs.)	1.92	0.26	0.19	0.86	1.24	1.83	4.57	14.87	13.84	9.97					
	0.68	0.09	0.06	0.27	0.37	0.52	1.23	3.82	3.40	2.34					
5.Miscellaneous															
Per Capita (In Rs.)	22.32	36.07	26.1	21.26	15.92	28.97	59.32	95	16.83	34.31					
	7.89	12.19	8.42	6.56	4.70	8.16	15.99	24.42	4.14	8.05					
6.Re-payment of loan															
Per Capita (In Rs.)	0.15	0.07	0.07	0.36	0.76	0.12	0.44	5.57	6.97	20.38					
	0.05	0.02	0.02	0.11	0.22	0.03	0.12	1.43	1.71	4.78					
7.Wages & salary to all employees															
Per Capita (In Rs.)	299.34	304.89	330.28	342.89	384.88	434.65	481.95	582.58	798.58	886.15					
	105.77	103.00	106.54	105.83	113.53	122.44	129.91	149.76	196.21	208.02					
8.Contractors' security															
Per Capita (In Rs.)	0.02	0	0	0.2	0.94	0.19	0.01	0	0.49	0					
	0.01	0.00	0.00	0.06	0.28	0.05	0.00	0.00	0.12	0.00					
Total	337.37	366.99	384.46	396.95	435.36	502.89	610.17	793.49	897.1	1053.33					
Per Capita (In Rs.)	119.21	123.98	124.02	122.52	128.42	141.66	164.47	203.98	220.42	247.26					

Source: Computed from the data provided by the Dehradun Municipal Corporation.

Table D12 : Per capita Revenue Expenditure of Dehradun Municipal Corporation at Constant Prices *											(Rs.' 000)	
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001		
1.General Admn.&Collection of Revenue												
Per Capita (In Rs.)	1.81	2.25	3.06	3.08	2.14	4.28	3.21	5.46	1.54	1.96		
	0.64	0.76	0.99	0.95	0.63	1.20	0.87	1.40	0.38	0.46		
2.Public health												
Per Capita (In Rs.)	8.81	14.49	10.30	11.23	10.75	10.48	29.37	23.40	16.04	19.03		
	3.11	4.89	3.32	3.47	3.17	2.95	7.92	6.01	3.94	4.47		
3.Safety & convenience												
Per Capita (In Rs.)	3	5.73	10.29	10.48	9.56	9.39	6.39	22.69	13.83	29.25		
	1.06	1.94	3.32	3.24	2.82	2.64	1.72	5.83	3.40	6.87		
4.Public works												
Per Capita (In Rs.)	1.92	0.24	0.16	0.68	0.88	1.19	2.79	8.03	7.20	4.89		
	0.68	0.08	0.05	0.21	0.26	0.34	0.75	2.06	1.77	1.15		
5.Miscellaneous												
Per Capita (In Rs.)	22.32	32.82	22.19	16.80	11.30	18.83	36.19	51.30	8.75	16.81		
	7.89	11.09	7.16	5.18	3.33	5.30	9.75	13.19	2.15	3.95		
6.Re-payment of loan												
Per Capita (In Rs.)	0.15	0.06	0.06	0.28	0.54	0.08	0.27	3.01	3.62	9.99		
	0.05	0.02	0.02	0.09	0.16	0.02	0.07	0.77	0.89	2.34		
7.Wages & salary to all employees												
Per Capita (In Rs.)	299.34	277.45	280.74	270.88	273.26	282.52	293.99	314.59	415.26	434.21		
	105.77	93.73	90.56	83.61	80.61	79.58	79.24	80.87	102.03	101.93		
8.Contractors' security												
Per Capita (In Rs.)	0.02	0.00	0.00	0.16	0.67	0.12	0.01	0.00	0.25	0.00		
	0.01	0.00	0.00	0.05	0.20	0.03	0.00	0.00	0.06	0.00		
Total												
Per Capita (In Rs.)	337.37	333.96	326.79	313.59	309.11	326.88	372.20	428.48	466.49	516.13		
	119.21	112.82	105.42	96.79	91.18	92.08	100.32	110.15	114.62	121.16		

Source: Computed from the data provided by the Dehradun Municipal Corporation.
*Worked out using Urban Non-manual Employees General Index (at 1991-92 price).

Component	Dehradun Municipal Corporation at Current Prices										(In Rs.)	
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001		
1.General Admn.&Collection of Revenue												
Percentage Variation	0.64	0.83	1.16	1.20	0.89	1.85	1.42	2.60	0.73	0.94		
		30.47	39.17	3.65	-25.99	108.06	-23.36	82.96	-71.92	28.35		
2.Public health												
Percentage Variation	3.11	5.38	3.91	4.39	4.47	4.54	12.98	11.14	7.58	9.12		
		72.77	-27.31	12.26	1.76	1.74	185.58	-14.16	-31.97	20.32		
3.Safety & convenience												
Percentage Variation	1.06	2.13	3.91	4.10	3.97	4.07	2.82	10.80	6.54	14.01		
		100.78	83.54	4.84	-2.98	2.37	-30.55	282.40	-39.50	114.39		
4.Public works												
Percentage Variation	0.68	0.09	0.06	0.27	0.37	0.52	1.23	3.82	3.40	2.34		
		-87.05	-30.22	333.07	37.81	40.93	138.96	210.33	-11.04	-31.18		
5.Miscellaneous												
Percentage Variation	7.89	12.19	8.42	6.56	4.70	8.16	15.99	24.42	4.14	8.05		
		54.51	-30.91	-22.06	-28.43	73.77	95.93	52.74	-83.07	94.77		
6.Re-payment of loan												
Percentage Variation	0.05	0.02	0.02	0.11	0.22	0.03	0.12	1.43	1.71	4.78		
		-55.38	-4.52	392.06	101.77	-84.92	250.85	1107.33	19.60	179.35		
7.Wages & salary to all employees												
Percentage Variation	105.77	103.00	106.54	105.83	113.53	122.44	129.91	149.76	196.21	208.02		
		-2.62	3.44	-0.67	7.28	7.84	6.10	15.29	31.01	6.02		
8.Contractors' security												
Percentage Variation	0.01	0.00	0.00	0.06	0.28	0.05	0.00	0.00	0.12	0.00		
		-100.00	0.00	0.00	349.20	-80.70	-94.96	-100.00	0.00	-100.00		
Total												
Percentage Variation	119.21	123.98	124.02	122.52	128.42	141.66	164.47	203.98	220.42	247.26		
		4.00	0.03	-1.21	4.82	10.31	16.10	24.03	8.06	12.18		

Source: Computed from the data provided by the Dehradun Municipal Corporation.

Component	Expenditure of Dehradun Municipal Corporation at Constant Prices *										(In Rs.)	
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001		
1.General Admn.&Collection of Revenue	0.64	0.76	0.99	0.95	0.63	1.20	0.87	1.40	0.38	0.46		
Percentage Variation		18.73	29.99	-3.66	-33.49	90.48	-28.08	61.97	-72.96	20.95		
2.Public health	3.11	4.89	3.32	3.47	3.17	2.95	7.92	6.01	3.94	4.47		
Percentage Variation		57.22	-32.10	4.33	-8.55	-6.86	168.00	-24.01	-34.49	13.38		
3.Safety & convenience	1.06	1.94	3.32	3.24	2.82	2.64	1.72	5.83	3.40	6.87		
Percentage Variation		82.71	71.44	-2.56	-12.81	-6.28	-34.83	238.52	-41.74	102.02		
4.Public works	0.68	0.08	0.05	0.21	0.26	0.34	0.75	2.06	1.77	1.15		
Percentage Variation		-88.22	-34.82	302.50	23.85	29.02	124.25	174.72	-14.34	-35.15		
5.Miscellaneous	7.89	11.09	7.16	5.18	3.33	5.30	9.75	13.19	2.15	3.95		
Percentage Variation		40.60	-35.46	-27.57	-35.68	59.09	83.88	35.21	-83.69	83.53		
6.Re-payment of loan	0.05	0.02	0.02	0.09	0.16	0.02	0.07	0.77	0.89	2.34		
Percentage Variation		-59.40	-10.81	357.33	81.34	-86.20	229.26	968.79	15.17	163.24		
7.Wages & salary to all employees	105.77	93.73	90.56	83.61	80.61	79.58	79.24	80.87	102.03	101.93		
Percentage Variation		-11.38	-3.38	-7.68	-3.58	-1.27	-0.43	2.06	26.16	-0.10		
8.Contractors' security	0.01	0.00	0.00	0.05	0.20	0.03	0.00	0.00	0.06	0.00		
Percentage Variation		-100.00	0.00	0.00	303.71	-82.33	-95.27	-100.00	0.00	-100.00		
Total	119.21	112.82	105.42	96.79	91.18	92.08	100.32	110.15	114.62	121.16		
Percentage Variation		-5.36	-6.57	-8.19	-5.79	0.98	8.96	9.79	4.06	5.71		

Source: Computed from the data provided by the Dehradun Municipal Corporation.

*Worked out using Urban Non-manual Employees General Index (at 1991-92 price).

Table D15 : Trends in Capital Income of Dehradun Municipal Corporation				
Years	Capital Income (Rs.' 000)			Percentage Variations
	Grant-in-aid (Capital)	Loan from Revolving Funds	Total	
1991-92	85.41	0	85.41	
1992-93	91.65	0	91.65	7.31
1993-94	62.85	0	62.85	-31.42
1994-95	56.25	0	56.25	-10.50
1995-96	34.48	0	34.48	-38.70
1996-97	65.04	0	65.04	88.63
1997-98	73.15	0	73.15	12.47
1998-99	106.3	0	106.3	45.32
1999-2000	167.39	0	167.39	57.47
2000-2001	50.18	200.65	250.83	49.85

Source: Computed from the data provided by the Dehradun Municipal Corporation.

Table D16 : Capital Expenditure of Dehradun Municipal Corporation From 1991-92 to 2000-01											(Rs.' 000)
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001	
1.Tenth Finance Commission Grant	0.00		0.00	0.00	0.00	0.00	0.00	44.11	49.96	103.04	
2. Beautification Grant	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99.93	46.85	
3.Road Grant	50.92	60.34	62.35	130.13	27.81	37.01	31.12	56.18	91.71	29.75	
4.Establishment Fund	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.87	
5.Sulabh Saushalaya	4.75	4.52	1.92	0.43	0.00	2.31	2.50	0.00	0.00	0.00	
6.Slum Improvement	25.31	10.30	2.29	12.02	9.02	5.33	18.76	0.00	0.00	0.00	
7.General Purpose Grant	0.00	0.00	0.00	0.00	3.22	0.00	4.41	0.00	0.00	0.00	
8.M Ps Constituency Fund	0.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00	0.00	0.00	
9.Nehru Rozgar Yojana	20.51	16.31	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total	101.49	91.47	67.27	142.57	67.06	44.65	56.79	100.29	241.59	216.50	

Source: Computed from the data provided by the Dehradun Municipal Corporation.

Table D17 : Expenditures Of Dehradun Municipal Corporation Postponed Due to Financial Constraints											(Rs.' 000)	
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001		
1.State Grant	67.78	75.24	74.00	39.33	19.86	52.26	59.67	53.23	82.90	12.33		
2.Aprayucta Grant	0.00	0.02	0.00	0.00	0.00	0.24	0.24	0.00	0.00	200.65		
3.Payment of State Debts	8.76	12.67	19.00	30.15	41.30	59.94	75.26	86.69	106.29	0.00		
4.Workers' Gratuity	52.39	55.70	59.86	83.18	90.90	96.58	99.04	105.19	104.19	104.21		
5.Workers' Pentions	159.43	162.88	258.47	288.07	319.20	355.62	355.82	355.62	358.41	351.79		
6.Electricity Bills	85.37	110.13	146.62	234.00	303.15	392.89	521.94	280.22	252.92	181.19		
7.Audit Fee	4.54	4.54	5.85	6.73	7.75	9.28	11.07	0.78	2.12	4.43		
8.Bank Debts	24.29	24.29	18.63	8.79	9.00	6.84	26.00	27.60	24.07	0.00		
9.Balance Salary	0.00	0.00	0.00	0.00	0.00	0.00	0.00	190.00	0.00	0.00		
Total	402.55	445.47	582.44	690.25	791.15	973.64	1149.03	1099.32	930.90	1484.59		

Source: Computed from the data provided by the Dehradun Municipal Corporation.

Table D18 : Closing Balance of the Dehradun Municipal Corporation on the Revenue Account, at Current Prices										
Component	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001
1.Revenue Receipts	325.39	345.09	401.21	452.63	434.05	531.09	558.4	937.5	889.15	1288.21
2.Revenue Expenditure	337.37	366.99	384.46	396.95	435.36	502.89	610.17	793.49	897.10	1053.33
Revenue Balance	-11.98	-21.90	16.75	55.68	-1.31	28.20	-51.77	144.01	-7.95	234.88
3.Capital Receipts	85.41	91.65	62.85	56.25	34.48	65.04	73.15	106.30	167.39	250.83
4.Capital Expenditure	101.49	91.47	67.27	142.57	67.06	44.65	56.79	100.29	241.59	216.50
5.Total Receipts	410.80	436.74	464.06	508.88	468.53	596.13	631.55	1043.80	1056.54	1539.04
6.Total Expenditure	438.86	458.46	451.73	539.52	502.42	547.54	666.96	893.78	1138.69	1269.83
Closing Balance	-28.06	-21.72	12.33	-30.64	-33.89	48.59	-35.41	150.02	-82.15	269.21

Source: Computed from the data provided by the Dehradun Municipal Corporation.

Table D19 : Debt Service Coverage Ratio (DSCR) of Dehradun Municipal Corporation

Year	Revenue		Debt Servicing	Surplus(Rrev.Rects.-	D S C R
	Receipts	Expenditure#			
1991-92	325.39	337.22	0.15	-11.83	-78.87
1992-93	345.09	366.92	0.07	-21.83	-311.86
1993-94	401.21	384.39	0.07	16.82	240.29
1994-95	452.63	396.59	0.36	56.04	155.67
1995-96	434.05	434.6	0.76	-0.55	-0.72
1996-97	531.09	502.78	0.12	28.31	235.92
1997-98	558.4	609.73	0.44	-51.33	-116.66
1998-99	937.5	787.92	5.57	149.58	26.85
1999-2000	889.15	890.13	6.97	-0.98	-0.14
2000-2001	1288.21	1032.95	20.38	255.26	12.53

Source: Computed from the data provided by the Dehradun Municipal Corporation.
Excluding Debt Servicing

Table S 1 : Proportion of Revenue Receipts from Own Sources

Cities	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001
1. Visakhapatnam	89.66	81.90	78.86	84.57	87.73	83.90	81.84	84.94	82.32	82.69
2. Bhopal	37.63	36.42	45.45	38.96	40.42	31.54	42.60	52.24	45.25	41.05
3. Dehradoon	40.30	37.82	38.20	48.23	39.12	40.83	41.43	22.21	32.06	28.25

Source: Computed by the Data Supplied by the VMC, BMC and DMC.

Table S 2 : Percentage Variation in Per Capita Revenue From Own Sources

Cities	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001
1. Visakhapatnam		-31.09	-17.62	45.61	42.59	-11.94	10.22	9.00	-10.20	64.90
2. Bhopal		3.13	6.17	0.89	13.20	12.75	41.61	32.60	13.99	11.21
3. Dehradoon		-9.79	6.29	28.98	-29.52	15.59	-3.47	-18.43	24.04	15.51

Source: Computed by the Data Supplied by the VMC, BMC and DMC.

Table S 3 : Percentage Variation in Per Capita Revenue From Own Sources, at Constant Prices (1991-92=100)

Cities	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001
1. Visakhapatnam		-37.29	-23.06	35.33	28.15	-19.38	3.44	-3.51	-13.53	55.39
2. Bhopal		-6.15	-0.83	-6.23	1.74	3.22	32.90	17.38	9.77	4.79
3. Dehradioon		-17.99	-0.65	19.85	-36.69	5.87	-9.35	-27.85	19.40	8.91

Source: Computed by the Data Supplied by the VMC, BMC and DMC.

Table S 4 : Percentage of Total Revenue Expenditure on Wages & Salaries

Cities	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001
1. Visakhapatnam	36.14	32.83	35.90	38.41	30.52	24.57	22.85	18.96	20.49	36.54
2. Bhopal	63.63	61.53	60.04	51.15	55.67	50.38	42.04	42.56	41.69	42.87
3. Dehradioon	88.73	83.08	85.91	86.38	88.40	86.43	78.99	73.42	89.02	84.13

Source: Computed by the Data Supplied by the VMC, BMC and DMC.

Table S 5 : Percentage Variation in Per Capita Revenue Expenditure From Own Sources, at Constant Prices (1991-92=100)

Cities	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001
1. Visakhapatnam		-12.75	1.23	1.35	16.92	5.15	-7.76	14.99	15.10	13.79
2. Bhopal		-2.01	1.56	15.54	-5.26	15.43	16.99	-11.38	14.03	8.67
3. Dehradun		-5.36	-6.57	-8.19	-5.79	0.98	8.96	9.79	4.06	5.71

Source: Computed by the Data Supplied by the VMC, BMC and DMC.

Table S 6 : Closing Balances on Revenue Account

Cities	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001
1. Visakhapatnam	2190.85	1299.84	706.04	1548.38	2355.72	1507.40	2294.00	1538.29	116.47	2861.68
2. Bhopal	471.92	499.66	1.31	-134.90	-54.32	449.05	-255.99	100.86	788.58	1435.76
3. Dehradun	-11.98	-21.90	16.75	55.68	-1.31	28.20	-51.77	144.01	-7.95	234.88

Source: Computed by the Data Supplied by the VMC, BMC and DMC.

Table S 7 : Debt Service Coverage Ratios of the Sample Municipal Corporations

Cities	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001
1. Visakhapatnam	0.00	22.87	10.43	13.77	19.42	13.10	15.68	7.59	1.28	8.89
2. Bhopal	25.92	26.47	1.06	-0.03	0.59	21.84	-15.32	0.00	0.00	0.00
3. Dehradun	-78.87	-311.86	240.29	155.67	-0.72	235.92	-116.66	26.85	-0.14	12.53

Source: Computed by the Data Supplied by the VMC, BMC and DMC.