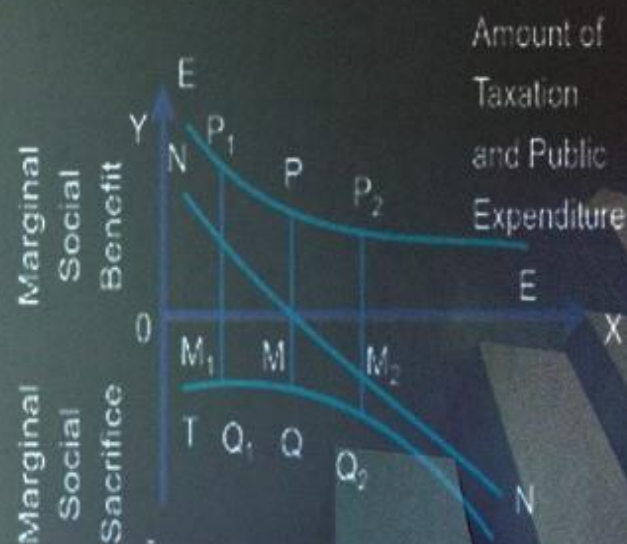


# FINANCE OF NAVI MUMBAI MUNICIPAL CORPORATION

Dr. Balasaheb Murlidhar Mundhe



# **FINANCE OF NAVI MUMBAI MUNICIPAL CORPORATION**

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Radhabai Kale Mahila Mahavidyalaya

Ahmednagar.

**Price: 300/-**

**“FINANCE OF NAVI MUMBAI MUNICIPAL CORPORATION”  
Dr. Balasaheb Murlidhar Mundhe**

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**Dr. B.M. Mundhe**

## **Abbreviations**

AIDS	Acquired Immune Deficiency of Syndromes
ASIDE	Assistance to States for Developing Export Infrastructure and other allied activities.
BSUP	Basic Services to Urban Poor
CAGR	Compound Annual Growth Rate
CBD	The Central Business District of Belapur
CIDC	City and Industrial Development Corporation
CPCB	Central Pollution Control Board
CV	Coefficient of Variation
ESR	Environment Status Report
ETC	Education, Training and Service Centre
FICCI	Federation of Indian Chambers of Commerce and Industry
FSI	Floor Space Index
GHG	Green House Gas
GOM	Government of Maharashtra
GPRS	General Packet Radio Service
JNNRUM	Jawaharlal Nehru National Renewal Urban Mission
LBT	Local Body Tax
MIDC	Maharashtra Industrial Development Corporation
MJP	Maharashtra Jeevanv Pradhikaran
MLA	Member of Legislative Assembly
MLD	Million Litters per Day
MMR	Mumbai Metropolitan Region
MMRDA	Mumbai Metropolitan Regional Development Authority
MOEF	Ministry Of environment and Forest
MP	Member of Parliament
MPCB	Maharashtra Pollution Control Board
NMMC	Navi Mumbai Municipal Corporation
NMMT	Navi Mumbai Municipal Transport

NUHM	National Urban Health Mission
OCED	Organisation of Economic Cooperation and Development Countries
OPD	Outpatient Department
PM10	Particulate Matter below 10 M. diameter
R/M	Repair and Maintenance
SCADA	Supervisory Control and Data Acquisition
SD	Standard Deviation
SLB	Service Level Benchmarks
SRA	Slum Rehabilitation Scheme
SWM	Solid Waste Management
Tco2e	Tons Co2 Equivalent
tCo2e	Tons of Carbon Dioxide Equivalent
TERI	The Energy and Resources Institute
TPO	Town Planning Officer
TTC	Trans-Thane creek
ULB	Urban Local Body
WHO	World Health Organisation
WISI TEX	World Expo Convention Management Ltd. (Foundation)

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# Chapter 1

## Introduction, Objectives and Research Methodology

### 1.0 Introduction

India is the largest democratic country in the world. In democratic set up, the role of Governments at various levels is important. In this set up, for administrative convenience, the territory of the nation classified as a Central Government at national level, State Government for each of the state (regional level), each state is further divided into administrative divisions containing a group of districts under the region. Zilla Parishads, Panchayat Samiti and Village Panchayats are working for rural area at district, taluka/block and village level respectively in rural areas. Municipal Corporation, Municipal Councils, Nagar Panchayats and Cantonment boards are working for urban areas. Such as the entire administration of the Government of a country is classified in three levels. According to Indian constitution, roles and responsibilities of each government is determined. All these three governments are important in citizen's point of view but third level/ local Government is comparatively close to them as they are directly and frequently approachable to them. Since the area of operations of these bodies is limited to a particular locality. They can easily understand and solve the local problems promptly.

Economically sustainable position. India's population growth rate is decreasing since last two decades but it was more than China, which is one of the most populous countries of the world. Because of job opportunities, industrialization, new economic reforms, helplessness of agriculture sector and attraction of urban life style etc. urbanization ratio is increasing in India. It puts more pressure on urban local governments particularly on Municipal Corporations. Generally, on all types of local government, pressure is more, but intensity of problems of large cities is comparatively more, including water supply, roads, drainage system, transport, environmental degradations, dwelling problems etc. In terms of urbanization, Maharashtra is second largest state in India. (2011 Census, 45.2 percent). Mumbai is the highest populous city in India, which is facing multifarious problems and pressure of population on infrastructure. To reduce that pressure, the sister city, one of the planned cities in Asia, Navi Mumbai, is settled at the east of Brihanmumbai (earlier Mumbai) where Navi Mumbai Municipal Corporation is an Administrative local body. It is one of the unique urban local bodies that directly converted from Village Panchayat to Municipal Corporation on January 1<sup>st</sup>, 1992. This Corporation received more than 15 awards for rendering services like 24 × 7 water supply, implementation of Sarva Shiksha Abhiyan etc. Therefore, the people prefer to live in the jurisdiction of N.M.M.C. But, on other hand, there are some problems like environmental degradation, high cost of living, increasing pressure on infrastructure etc. These things attract the attention of researcher for the study. Therefore, I am eager to study that how N.M.M.C. raises the fund from various sources and spends it on different items in order to justify equality and to pave the way for development. People who paying various taxes are also not well aware about how revenue is being collected and spent by the Corporation.

The study undertaken on the topic “A Study of Revenue and Expenditure of Navi Mumbai Municipal Corporation – 2000-01 to 2012-13” (even though it was approved by S.R.T.M.U. until 2009-10) will help common person to understand the business and weights assigned while spending the fund on various heads by the N.M.M.C. Local Self-Government becomes an important and inseparable part of the Government not only in India but also in other advanced countries of the world. U.K. (United Kingdom) is the originator of local self-bodies, where it known as ‘Local Authorities’. In U.S.A. same is called ‘Municipal Administration’ and in France they are known as ‘Local Administration’. There is no uniformity in nature, powers, administration and functions of local self-government bodies across the nations. It becomes important politically in recent period.

## **1.1 Definitions of Local Government**

The local government in India is known as local self-government. This term gained currency during the British period when the people were not associated with the administration at centre or state levels. When they decided to associate the Indians with the administration of local affairs, it described as ‘self-government’ for the people. However, after independence when people got the authority to govern them both at centre and state levels, the term self-government has lost its significance and fell in disuse. People’s participation in the administration at the local level designated as local government, constitution also preferred this term. The term ‘local government’ literally means management of the local affairs by the people of the locality. The Local government is an integral part of the three tier governments in India. It works at a bottom of a pyramid of governmental institutions and operates in both rural and urban areas, therefore designated as Rural Local Government and Urban Local government respectively. s

Local government defined in numerous ways by different authors, which is explained as following:

**1.1.1 Encyclopaedia Britannic**, “An authority to determine and execute measures within a restricted area inside and smaller than a whole state. The variant local government is important for its emphasis on freedom to decide and act”<sup>1</sup>

**1.1.2. P. Stones**, “Local government is that part of the government of a country which deals with those matters which concern the people in a particular locality.”<sup>2</sup>

**1.1.3. V. Vankatarao Rao**, “Local government is that part of the government which deal mainly with local affairs, administered by authorities subordinate to the state government but elected independently of the state authority by the qualified residents.”<sup>3</sup>

**1.1.4. John J. Clarke**, “Local government appears to be that part of the government of a nation or state which deals mainly with such matters as concerned the inhabitants of particular district or place.”<sup>4</sup>

**1.1.5. G. Montagu Harrish**, “Local government as government by the people themselves through freely elected representatives.”<sup>5</sup>

**1.1.6. K. Venkatarangaiya,** “Local government is the administration of a locality – a village, a city or any other area smaller than state- by a body representing the local inhabitants, possessing a fairly large amount of autonomy, rising at least part of its revenue through local taxation and spending its income on services which are regarded as local and, therefore, distinct from state and central services.”<sup>6</sup>

**1.1.7. B.K. Gokhale,** “Local self-government is the government of a specified locality by the local people through the representatives elected by them.”<sup>7</sup>

**1.1.8. Prof. W. A. Robson,** “Local government may be said to involve the conception of a territorial, non-sovereign community possessing the legal right and the necessary organization to regulate its own affairs, this in turn presupposes the existence of local authority with power to act independently of external control as well as the participation of local community in the administration of its own affairs.”<sup>8</sup>

**1.1.9. G. M. Harish,** “Government by local bodies, freely elected, while subject to the supremacy of the national government; is endowed in some respect power, discretions and responsibility, which it can exercise without control over its decisions by the higher authority. The extent of power, discretion and responsibility which the local bodies possess is a matter of degree, which varies considerably in the various countries.”<sup>9</sup>

**1.1.10. Prof. Gilchrist** is of the view that it is easy to understand the meaning of local government by examining, “what local government is not than what it is.”<sup>10</sup>

**1.1.11. Prof. Sidgwick:** “Local Government is that part of the government of a nation or state which deals mainly with such matters as concerns the inhabitants of the particular district or place.”<sup>11</sup>

Various definitions of local government given above reveal that the local government is a combination of various aspects and there is no single definition which includes all of them. These aspects are a local body, local inhabitants electing and ultimately controlling that body, autonomy of that body in a limited sphere, local taxation, and distinction between local and non- local services. In simple language, we can derive meaning of local government as an elected body of local people, which is working for local people that undertake work of local nature, managed by elected people and has a limited autonomy.

## **1.2 Characteristics of Local Government**

Above given definitions of local government make it clear that local governments having some certain characteristics which are as followings:

**1.2.1 Local Area:** The jurisdiction of local government is well defined and fixed by state governments subject to changes from time to time through legislation.

**1.2.2 Local Authority:** Elected representatives run the administration of the particular locality from the same area, which are responsible to management of local affairs in the same area.

**1.2.3 Provides Civic Amenities:** Local governments providing civic amenities to people of their jurisdiction at their door- steps.

**1.2.4 Local Finance:** Local bodies have an authority to tax the residents of their area and State; Central Governments also render them financial aid through a system of grants-in-aid. They can also raise loans to perform the tasks assigned to them.

**1.2.5 Local Autonomy:** Without any external control, they can perform their day-to-day activities. Within the framework, citizens are at liberty to elect representatives of their choice and elected representatives grant sanction to the budgetary expenditure on proposed work.

**1.2.6 Local participation:** For grand success of any scheme, people's participation is very necessary and important. Local government provides opportunities to the local people to participate in administration.

**1.2.7 Local Accountability:** The residents of the local area keep a watch on local authorities to ensure effective performance of their functions. If these fail to do the same, they face severe criticism of local residents.

**1.2.8 Local development:** Every activity aims at all over development of the people living within its area.

**1.2.9 Legal entity:** Since all the local governments, bodies are created under the law so their existence is legally accepted

### **1.3 Distinction between Local Government and Local Self Government**

The Local government and local self-government are interchangeably used. The distinction between them is a legacy of the alien rule. The term local self- governments have been used by countries which were under the colonial rule.

In India, this term was originated when the country was ruled by the Britishers and we had not any self-government at Central and State level. After the British Government decision to associate us in administrating local affairs, it meant slice of self - government for the people. Hence, the term local self- government was important at that time.

However, now the word self has become redundant as the country enjoys self-rule at all levels. In our constitution also, instead of 'local self- government' the term 'local Government' is used in entry five of list second of the seventh schedule.

### **1.4 Constitutional Safeguard**

Since 73<sup>rd</sup> and 74<sup>th</sup> Constitutional Amendments, local government assigned constitutional status in India. As local government is the matter of State Governments, in case, at local level and state level ruling Parries are different then there is Possibility of Presudice

treatment for the local bodies which is governed by another Political Party. However the State Government in India could not dismiss any local government body at their will. In case, because of any reason, if the State Government, because of any valid reason, dismisses local body, it is obligatory for the concerned government to conduct elections and reinstate the local body within six months. Furthermore, dismissed local body can approach in the court for their protection and justice.

### **1.5 Significance of Local Government**

Local government institutions provide an opportunity to the people to participate freely and actively in the Government that they formulate for their respective areas. Pandit Jawaharlal Nehru, Former Prime Minister of India, while inaugurating the first Local Self – Government Ministers’ conference in 1948, had said, “Local Self- Government is and must be the basis of any true system of the democracy. We have got rather into the habit of thinking democracy at the top and not so much at bottom. Democracy at the top may not be successful unless you build on its foundation from bottom.”<sup>12</sup>

The local assemblies of citizens, says De Tocqueville, “add to the strength of nations.” Town meetings are to liberty what primary schools are to science; they bring it within the people’s reach, they teach men how to use and how to enjoy it. A nation may establish a free government, but without municipal institutions it cannot have the spirit of liberty.”<sup>13</sup>

**W. A. Robson**, “Democracy on the national scale can function in a healthy manner only if it is supported and nourished by democratic local government.”<sup>14</sup>

**Prof. Laski**, “Local Self- Government offers the best opportunity to people to bring local knowledge, interest and enthusiasm to bear on the solution of their problems.”<sup>15</sup>

Such as, various eminent authors spoken and written on local government. The significance of local government is as following.

#### **1.5.1 Local Governments are Instruments of Political and Popular Education**

Prof. Lasky said, the institution of local government is educative in perhaps a higher degree at least contingently, than any other part of Government. It must be remembered that there is no way of bringing the mass of citizens into intimate contact with persons responsible for decisions.”<sup>16</sup> People learn many things with participation in local government and realize about their responsibilities towards the society.

#### **1.5.2 School of Democracy**

Pandit Jawaharlal Nehru and W. A. Robson rightly state the relationship between local government and democracy. It imparts training to the politician in the art of Government, which makes them fit to assume greater responsibilities at the State and National level. Local Governments are really training grounds for emerging leaders. Leadership is not developing suddenly and within short period. In India, local Governments have produced many leaders of national eminence and stature like Ferozeshah Mehta, Motilal Nehru,

Jawaharlal Nehru, Subhash Chandra Bose, Vallabh Bhai Patel, Lala Lajpat Roy etc. who were shining examples of sober and healthy local politics and resorted to these local institutions, the authority and dignity they deserved. It also proved in U.S.A. and Switzerland.

### **1.5.3 Solution for Local Problems in Effective Manner**

Not all problems are supposed to be solved by State and Central Governments. In fact, there are some problems, which occur at local level and need to be solved by Local Governments in accordance with local needs. These governments are well aware about the problems and have the direct contacts with people, it helps to solve the local problems in effective manner

### **1.5.4 Provision of Civic Amenities**

Local government perform functions like garbage collection, cleaning of streets, drainage, water supply, fire service, health service etc. though appears to be minor, in fact these are considerably significant. J. H. Warren said, "If these services were suddenly to cease, we would relapse into chaos."<sup>17</sup>

### **1.5.6 Economical Management of Local Services**

The performance of the any government is largely depends upon the availability of finances at its disposals. For the local governments, most of the functions being financed by locally raised funds in the form of taxes levied by them.

Local government makes people aware about their financial managements. People realize that it is our money, we should careful while using it, avoid wastages, and make services more economical in order to achieve maximum social welfare.

### **1.5.7 Reduction in the Burden of Central Government**

A large number of functions are performed by local governments which otherwise would have been performed by Centre/State Governments. In case of absence of local government, burden on State /Centre government will increase and it will lead to incompetent, incapable and inefficient to perform the duties. Local government is an invaluable socio-political laboratory for trying and testing new schemes and preserver of local colour in the national life.

### **1.5.8 Efficient and Effective management of Local Affairs**

Local governments being concerned with the welfare of the people & deals with those functions, which contribute socio-economic development of the country. As people from the territory are observing closely the activities of the local government, they try to manage effectively affairs.



### **1.5.9 Channel of Communication between the State Government and Community**

The demands made by the local community are on one hand transmitted to the State Government, and on the other hand, people living in far-flung areas come to know about the Government policies. In this way, local Government become channel of communication between State Governments' and community.

### **1.5.10 Check against Bureaucracy**

A. Venkatarao has rightly remarked, "One of the virtues of local government is the easy intimacy and ready access to local government officials"<sup>18</sup>

### **1.5.11 Develop the Spirit of Self-Help and self-Dependence**

As local people are well aware about their problems and how these problems to be solved independently without seeking outside help. It develops the spirit of self- help and self-dependence. Local Governments are working separately for rural area and urban areas. In rural area, Village Panchyats, Panchayat Samities and Zilla Parishads are working at Village, Block/ Taluka and District level. On the other hand, Municipal Corporations, Municipal Councils and Nagar Panchayats are working in the urban areas.

## **1.6 Evolution of Urban Local Government in India**

The evolution of Municipal Government in India since pre- historic times to present day presents a chequered but a fascinating history. It has emerged through many stages and phases which can be broadly divided chronological order and time sequence. It is as following.

### **1.6.1 Phase- I Ancient Period and Medieval Period**

Ancient period and medieval period include Indus Valley Civilisation period, Post Mauryan period and Mughal period. It is explained as following:

#### **1.6.1.1 Indus Valley Civilization- (2300 to 1700 BC)**

Municipal Government is deeply rooted in Indian history. The excavation in Mohenjo-Daro and Harappa of Indus Valley civilization (3000 BC) speaks volumes of the organized urban life in ancient times and reveal that they were amongst some of the oldest planned cities of the world.

They were laid out w-ith wide streets, market places, public offices, community baths, drainages and sewerage system. It proves the existence of a vigilant and effective Municipal Government. The references of Municipal Government found in Vedas, in the epics of Ramayana and Mahabharata. It is also found in the Upanishads and in Koutilya's Arthashastra. The Mahabharat mentions that an officer assisted by a team of sub-ordinates administered every town. Koutilya envisaged a regular plan of town administration which was specially designed to deal with the typical urban problems. That time the mayor of the

city was called 'Nagarka' who used to perform various functions of day-to-day administration of the city.

#### **1.6.1.2 Post Mauryan Period**

In Post Mauryan period, like Koutilyan Nagarka, there used to be a Chief Executive Officer in the city. He used to look for maintenance of the drainage system and cleanliness of roads. In those times, the village was the basic unit of Local Government and there was no clear dividing line between a village and town. City culture reached its high water- mark in Mauryan and Gupta's empires in their famous cities of Patil Putra, Ujjain and Takshashila.

#### **1.6.1.3 (320 to 540 AD)**

During this period, a council called Parishad administered the towns and there was a provision of having elected administrative officers who used to play a crucial role in the city administration. "The administrative council of the city says, "Havel" was modelled upon that of village communities and it may be assumed that like the latter it was an elected body though certain matters were reserved for the control of imperial officials.

#### **1.6.1.4 Mughal Period- (1526 to 1707 AD)**

During Mughal period municipal administration was vested in the 'Kotwal'. He was the city governor combining in him official powers and duties of the chief of the municipal administration, city police, magistrate of the municipal administration. That time, society structure was feudal therefore; the vast powers and various functions of the state were in hands of an individual or institution. During this period, democratic administration was totally denied. As such, at a concluding part, during Medieval and Mughal India, municipal government were not enjoying powers of self- government and the Municipal Self- Government traditions of ancient India had simply withered away under the military despotism of the Sultanate of Delhi and Mughal Empire.

### **1.6.2 Phase- II British Period**

The development of Municipal Government since the advent of British rule in India can be divided into four periods based on introduction and acceleration of democratization process and transfer of power to urban local Government.

#### **1.6.2.1 First Period 1687 to 1881**

Sir Josia Child obtains charter from James II, the British Monarch with view to transfer the financial burden of local administration to the local city council. The first Municipal Corporation of India was set up at Madras on September 28, 1687 under the same charter. The directors, with the consent of Crown had observed, "The people would more willingly and liberally disburse five shillings towards the public good being taxed by themselves, than six pence imposed by our despotically powers"

In 1720, the Royal Charter established a mayor's court at Madras, Bombay and Calcutta. These courts were more judicial than administrative bodies. Until 1793, statutory base was not provided to urban local bodies. Governor general was in council and empowered to appoint justice of peace for the presidency towns.

They were vested with the authority to impose taxes on houses and lands to provide for the sanitation of the towns. Afterwards, town committees were set up for sanitary purpose according to Bengal Act. 1842. In 1850, an act had passed to permit formation of local committees for public health and convenience. Act provided for the levy of indirect taxes to which the people were accustomed.

In 1863, Royal Army Sanitation Commission point out the fast-deteriorating sanitary conditions of towns all over the country. Accordingly, Government of India passed several municipal acts for the formation of municipality in any urban area of the province. That time, municipal committees were empowered to administer municipal funds but were obliged to expend the proceeds of taxes for maintenance of police and sanitary improvements of the town. Next step was forwarded by Lord Mayo, Viceroy of the country, he got the scheme of economic decentralization of authority approved through the Law Boards on December 1870 with vide resolution No.3454 which provides decentralization of the power from centre to provinces. Municipal Bodies were completely under control of District Magistrate and the town people were associated only for raising funds for maintenance of police, conservancy and road repairs. It emphasized the idea of increased association of Indians in the administration. The principle of election had introduced wholly or partially. The local bodies should have participation of local people was accepted in principle, that made the way of further progress easy. Therefore, Lord Mayo is considered as a founder of Local Self- Government in India. At the concluding part of this period, the development of Municipal Government was introduced primarily to serve the British interest rather than promote self- governing bodies in the country; the British dominated local governments and most of the Indian population remained deprived of participation in their functioning.

#### **1.6.2.2 Second Period-1882 to 1919**

Lord Ripon's resolution has come on May 18<sup>th</sup>, 1882 which was a landmark in the development of local government. It became foundation of local government and earned title as 'Father of Local Self- Government in India'. Lord Ripon has implemented the principle of people's participation in local government, which had proposed by Lord Mayo earlier. This resolution was known as 'Magna Charta' of Indian local democracy. Ripon advocated establishment of a network of Local Self- Government, reduction of the official element to not more than one third of the local membership, a large measure of financial decentralization, adoption of election as a means of constituting local bodies.

Afterwards, the functioning of local government since several years had some positive results. Presidency town attain a responsible government. Under the Bombay Municipal Corporation Act. 1888 city council of Bombay was constituted of majority elected and nominated members. A standing committee of the council, which had an elected chairperson, was formed to undertake the major portion of the work of the council.

#### **1.6.2.2.1 Royal Commission 1907**

This commission was set up in 1907 for decentralization under the chair of Charles Edwin Henry Hobhouse to enquire into the financial and administrative relations of the provincial governments and Government of India. This Commission examined all subjects of the local bodies and attributes its failure to excessive official control, meagre resources, lack of education and training, shortage of capable and committed persons and inadequate control of local bodies over services. In order to overcome on these issues, **Royal Commission** made following principal recommendations:

1. The chairperson should be elected non – official.
2. Majority of the members should be elected and non-official.
3. Municipalities should have more power and control on budget.
4. Large municipalities should be endowed with greater power and required to appoint health officers along with executive officer.
5. The village should be regarded as the basic unit of local self- government Institutions and every village should have a Panchayat. Municipalities should be constituted in urban areas.
6. Outside control over the local bodies should be restricted to advice and suggestions.
7. The responsibility of primary education should be rested with the municipality and, if resources permit and municipality desire, they can spend some amount on secondary schools.

Royal commission recognized importance of the local government and recommended to made more efforts to constitute and develop village panchayats for the administrations of villages affairs.

Punjab was the first province to incorporate the recommendations of Royal Commission in 1911. Later on, other provinces also follow the same. Government of India's resolution of April 28<sup>th</sup>, 1915 suggested the gradual implementation of recommendations of Royal Commission, which was replica of Lord Ripon's proposal. However, as the elective system remained at a rudimentary stage, no real progress could be made in this direction. Earlier in 1910, the Muslim League had demanded that municipalities should be constituted on the basis of communal representation. As a result, some municipalities constituted on that basis. However, it damaged the spirit of communal harmony. In this period, movement of national independence was gaining momentum causing great concern to the government in India and Britain. British government felt that it is necessary to solicit support and co-operation from the people of India. Consequently, British government come out with historic declaration on 20<sup>th</sup> August, 1917 to seek increasing association from people of India for every branch of the administration and gradual development of self-governing institutions with a view of the progressive realization of responsible government in India. In 1918, Government of India passed resolution and it contained that local Self- Governments are essential for political education of the people and unnecessary restrictions on them should remove, number of elected members should increase i.e., three-fourth, franchise should extend, village panchayat should promote and president of the same should be elected, establishment of department of local –Self Government in each state government etc. In 1918, there were 70 Municipalities, 200 District Boards, 540 Sub-District Boards in British India.

#### **1.6.2.2.2 Government of India Act 1919**

The Government of India Act- 1919 is a transformation of recommendations of Montague-Chelmsford Committee on Constitutional Reforms -1918. (Edwin Samuel Montague, Secretary of state for India during latter part of first world War and Lord Chelmsford, the Viceroy of India 1916 to 1921). This act brought 'Diarchy' in the government administration of India. Its main feature is that the subjects of provincial governments classified in to two categories. Subjects were divided into two lists: 'reserved' and 'transferred'. The reserved list, under which the subjects were to be administered by the governor through his executive council of bureaucrats. It includes law and order, finance, land revenue, irrigation etc. The transferred subjects were to be administered by ministers nominated from among the elected members of the legislative council. It included subjects such as education, health, local government, industry, agriculture, excise etc. Thus, this act inaugurated an era of new interest and activity in the field of local government. However, the departments that made up the "Steel Frame" of British rule i.e., finance, revenue and home affairs was retained by executive councils who were nominated by the government. They were often, but not always, British who were responsible to the governor. In this period, local governments got freedom for budgets, executive direction passed into the hands of the elected members of the public. Men like Jawaharlal Nehru, Sardar Vallabhbhai Patel and Purushottam Das Tondan entered the municipal councils and gained into the functioning of democratic institutions. At the same time, exceptionally in few cases, the local bodies worked well. However, in many urban centres lust of power among the inexperienced minister and his followers, works of public interests neglected. Instead, the politics of classism, religious conflicts, and tendency of protect the interest of particular group, misuse of power for self-interest. It becomes obstacle in the progress of local self - government. For this, only political leaders are not responsible, a system in which local bodies were working it was also responsible for the deterioration of the local Self Governments. These elements were highly criticized by Simon Commission too. This has resulted into repeal of the Government of India Act. 1919.

At the concluding part of this period of development of local urban government, the roots of democracy having their grip on the Indian mind and some progress was registered in widening the elected element in the constitution of urban local bodies, enlargement of functions and increase in powers, financial responsibility and financial resources. Nevertheless, as remarked by Simon Commission, no substantial progress was made in political and popular education in the art of Self-Government.

#### **1.6.2.3 Third Period-1920 to 1937**

In this period, with view to remove deficiencies in the Government of India Act. 1919, the new Government of India Act 1935 passed. It is as following:

##### **1.6.2.3.1 Government of India Act 1935**

This act had implemented from 1936 and offered freedom to the provinces and repeal the diarchy system, which government of India Act. 1919 had introduced. By this act, plan was prepared for federal India, Federal List, Provincial List and Concurrent lists were included

and the subject of local Governments had been placed into provincial list. Really, it was a real beginning of Local-Self Government, because it brought the principle of democracy into them. These governments were composed of elected representatives. Some sources of revenue were traditionally available to local bodies were also empowered to raise their revenues. Area of operation was also expanded that led to decrease in surpluses of these bodies. Balances remaining unspent were transferred to regional government and in turn to union government. The boundaries about taxation between Union Government and Provincial Government have ended. Since this act brought democratic principle, abolished diarchy, expanded area etc. It was a significant step towards making local self-government strong. However, the starting of Second World War in 1939 becomes obstacle in the development of Local Self- Governments in all over the country. There was not any progress in this situation until independence of the India -1947.

#### **1.6.2.4 Fourth Period-1938 to 1947**

The Government of India Act 1935 gave provincial autonomy, its impetus to the development of municipal government in India. This act also abolished the diarchy system but no taxes were earmarked for local bodies under the same Act. It proved rather unfavourable for local authorities. Municipal Institutions were proposed to be revitalized with the installation of popular ministries in the provinces but no headway could be made due to the outbreak of Second World War 1939. Popular ministries in all the congress dominated provinces resigned. In other provinces, it was continued but entire energy was diverted primarily to defence activities. Then British left in 1947 without firmly establishing a self- reliant, virile, healthy and efficient system of Municipal Government in India.

#### **1.6.3 Phase- III Post Independence Period (1947 to present day)**

After independence, Government of India appointed Local Finance Enquiry Committee in 1949, which made a number of recommendations for improving and stabilization of local finance. The phase of economic reforms, social reforms have been started in India. Ideologies for the same were included in the Indian Constitution, which was adopted on 26 January 1950. India adopted the ideology of welfare state and Political, Social and Economic opportunities made equally available to all citizens of the country. Under section 38 of the directive principles of State Policy of the Constitution of India, Government is bound to work in pure public interest where system shall operate to maintain social order, as much efficiently as could be in which, each individual shall be given equal social, economic and political justice. However, constitution directs the State Vide its article 40 to organize Panchayat and to empower them adequately so that they can become viable units of Self-Government. However, it does not contain counterpart provision for urban settlements. Regarding urban local bodies, only reference is entry 5<sup>th</sup> of List II of the Seventh Schedule (the state list) and entry 20<sup>th</sup> of List III (concurrent list). Entry 5 reads “Local Government that is to say, the constitution and powers of municipal corporations, Improvement Trusts, District Boards, Mining Settlement Authorities and other local authorities for the purpose of Local Self-Government or village administration”. Entry 20<sup>th</sup> reads, “Economic and Social Planning and Urban Planning would fall within the ambit of both entries i.e., 5 and 20. Thus, the constitution places local government including urban local government within the legislative competence of the states, and the role of the central government will necessarily have to be advisory and catalytic rather than one of dominance.

After the Indian Constitution was put to operation in 1950, a new era of Local Self-Government has begun.

#### **1.6.3.1 Tax Enquiry Committee 1953-54**

In 1953-54, government of India appointed a Tax Enquiry Committee under the Chair of Johan Mathai, had observed that growth of municipal revenue was inadequate in relation to the growth of expenditure on important civic services, and had recommended the segregation of certain taxes for exclusive utilization by local government.

#### **1.6.3.2 Balwant Rai Mehta Committee 1957**

In January 1957, to examine the working and suggest measures for better performance of “Community Development Program (1952) and National Extension Services (1953)” a study group had appointed by the Government of India under the chair of Mr. Balwant Rai Mehta. The committee submitted its recommendations in January 1957, which were accepted by the Government of India in January 1958. It emphasizes the ‘Democratic Decentralization’, which finally came to known as Panchayat Raj. It mainly aims at settle the local problem locally and made people politically conscious. The other recommendations of the committee are narrated as following:

1. Three-tier Government as Grampanchyat, Panchayat Samiti and Zilla Parishad at Village/ Bottom level, Block / Taluka level and District level respectively
2. Grampanchyat should be constituted by directly elected representatives and Panchayat Samiti and Zilla Parishad should constituted by indirectly elected representatives.
3. All developmental and planning activities should be entrusted to the local bodies.
4. The Zilla Parishad should be worked as supervisory and advisory body under the chairmanship of District Collector and Panchayat Samiti as an executive body.
5. There should be genuine transfer of responsibilities and power to the local bodies.
6. A system should be evolved to effect further devolution of authorities in future.

#### **1.6.3.3 Committee on the Training of Municipal Employees 1963**

In 1963, the Committee on the Training of Municipal Employees had laid emphasis on the need for imparting training to municipal personnel and recommended the setting up training institutes at the central and state level. Accordingly Central Government had set up centre for training at the All-India Institute of Public Administration New Delhi. Regional training centres for Municipal Administration at Lucknow, Lucknow, Osmania University Hyderabad. Indian Institute of Social Welfare and Business Management, Calcutta and All India Institute of Local Self- Government Bombay were established.

#### **1.6.3.4 The Rural Urban Relationship Committee 1963-66**

In its three-volume report, committee made comprehensive enquiry into the urban government set up. It observed that, in independence India, we think very much on local government and made some changes and amendments especially in rural area.

### **1.6.3.5 The Committee of Ministers on Augmentation of Financial Resources of Urban Local Bodies 1963**

This Committee was set up by Central Council of Local Self Government. It lamented the reluctance of Local Bodies to step up taxation even in the field earmarked for it and exhorted them to evince courage and enthusiasm in the levy and collection of taxes put at their command. It also suggested setting up Statutory Urban Development Board to undertake town development.

### **1.6.3.6 The Committee on Service Conditions of Municipal Employees 1965-68**

This committee recommended the constitution of state wide cadres of municipal employees to ensure that the personnel available for municipal employment would have the desired competence and prestige enjoying appropriate conditions of service. Basically, it was expected that urban local bodies were supposed to work at grass root level for social and economic development with democratic principles, but unfortunately in broad sense it was not happening in our country. The problems which were increasing with urbanisation, urban bodies were not able to solve them during early 1980's. In order to find out solution, Government of India appointed a "National Commission on Urbanisation" in 1985.

### **1.6.3.7 National Commission on Urbanisation 1985**

Government of India appointed this commission under chair of Shri C.R. Correa and Shri M.N. Buch as Vice- Chairman. Sarv- Shri P.M. Ashish Bose, Nilay Choudary, B.G. Fernandes, Cyrees Guzder, V.K. Pathak, Amiat Joyti Sen, Kirtee Shah as a members and Shri Naresh Narda as member secretary. This commission made a comprehensive and in-depth study of all conceivable aspects of urbanisation like urban planning, structure, development, power of local bodies, finances, state supervision, control, slum and poverty alleviation etc. This commission considers the experts opinions from different fields and took help of various working groups, study teams, research institutes, institutions engaged in urban studies such as National Institute of Human Settlement, Bhopal. Officials of urban ministry of urban development, State Governments, Union Territories administration etc. The commission prepared the report in seven volumes. Interim report has come in January 1987 and final report in August 1988. Really this report is appreciated very much by the Government of India and did not allow gathering in dust like others. Numerous recommendations were accepted and implemented to enable urban local government to develop and grow as healthy institutions. It reflects in the 74<sup>th</sup> constitutional amendment and local bodies become democratic institutions and got provision of regular elections, decentralisation, devolution of powers and financial viability.

### **1.6.3.8 73<sup>rd</sup> and 74<sup>th</sup> Constitutional Amendment**

With considering significance of urban local bodies late Prime Minister Rajiv Gandhi brought 65<sup>th</sup> Constitutional Amendment Bill on August 7, 1989 (64<sup>th</sup> amendment bill on May 7<sup>th</sup>, 1989) to strengthen the Urban Municipal Bodies. It proposed some changes in the area of Local Self Government. The Municipality Bill proposed three types of Urban Local Bodies.



1. Nagar Panchayat: For 10,000 to 20,000 population.
2. Municipal Council: For 20,000 to 3, 00, 000 population.
3. Municipal Corporation: For 3,00,000 or above population.

But it was not sanctioned in Rajya Sabha in October 1989 even though it was passed in Lok Sabha. Again, revised Amendment Bill, incorporating the provisions relating to Panchayats as well as Municipalities, was introduced in the Lok Sabha in September 1990. This bill was also lapsed on account of dissolution of the then Lok Sabha. Afterwards, the Narasimha Rao government took charge in 1991; it introduced a Constitutional Amendment Bill pertaining to municipalities in the Lok Sabha on 16<sup>th</sup> September 1991. With a few modifications, it was based on 65<sup>th</sup> amendment bill. It was passed by both the house in December 1992. It received assent of the president of India on 20<sup>th</sup> April 1993 and was published in the Gazette on the same day as the Constitutional 74<sup>th</sup> Amendment Act. 1992. This act introduces new part in the constitution namely IX A (Nine A) in which articles 243 P to 243 Z are included which deal with issues relating municipalities like structure and composition, reservation of seats, elections, powers and functions, finances and some miscellaneous provisions. This amendment was come into force with effect from June 1<sup>st</sup>, 1993.<sup>20</sup>

73<sup>rd</sup> Amendment is related to Panchayats. It added chapter IX (Nine) in the constitution in which articles 243 to 243 O are included (total 16). This amendment came in to force from April 24, 1993. Here, we focused on only 74<sup>th</sup> amendment which is related to Urban Local Bodies; Nagar Panchayats, Municipal Councils and Municipal Corporations. Its main provisions are as followings: <sup>21</sup>

1. **Three Categories of Nagarpalikas: (243 Q)** Nagar Panchayats for transitional area from rural to urban having population range between 10,000 to 25,000; Municipal councils for having population 25,000 to 3,00,000 (population range between 25,000 to 40,000 “C” Class Municipal Council, population range between 40,000 to 1,00,000 “B” Class Municipal Council and population Range between 1,00,000 to 3,00,000 “A” Class municipal Council). Municipal Corporation is working for having population 3, 00, 000 and above. While deciding upon types of municipal council, population as well as some other factors like density, revenue of the local body, the proportion of worker who work in non-agriculture field, economically important factors and Governor’s view also taken into account.
2. **Ward Committees: (243R)** to ensure the people’s participation at grass root level and in order to link between citizens and local bodies or representatives ward committees are established. The number of ward committees depends up on the size of local body. If population is more than 3,00,000 under the jurisdiction of urban local body, ward committees are compulsory.
3. **Reservation:** To ensure adequate representativeness of all among local bodies, 74<sup>th</sup> amendment made provisions of reservation for Schedule Cast, Schedule Tribe and Other Backward Class in proportion of their population and 30 percent reservation for women.
4. **Tenure of Urban Local Bodies:** According to article 243 P, tenure of Urban Local Body shall be five years, normally it will not extend more than five years. In case of dissolve holding of election within six month is mandatory.

- 5. State Finance Commission:** Under article 243 I, Governor of the State shall appoint State Finance Commission to take the review of financial position of the urban local bodies. (No separate finance commission is for rural and urban local bodies.). Subject matters for the consideration of the finance commission are as followings:
  - A.** The distribution between the State, Panchayats and the Municipalities of the net proceeds of the taxes, duties, tolls and fees leviable by the state which may be divided amongst them under part IX – A of the constitution and allocation between the Panchayats and the Municipalities at all levels of their respective shares of such proceeds.
  - B.** The determination of the taxes, duties, tools and fees, which may be assigned to, or appropriated by the Panchayats or, as the case may be, the Municipalities.
  - C.** The principles which should govern the grants-in- aid to the Panchayats or, as the case may be, the municipalities from the consolidated fund of the state.
  - D.** To recommend measures for improving the financial position of urban Local Bodies.
  - E.** Any other matter referred to the finance commission by the Governor in the interest of sound finance of the Panchayats.
- 6. State Election Commission:** Under article 243 K Governor of the State shall establish State Election Commission under election commissioner. All elections related responsibilities are assigned to him includes list of voters, arrangement of election, conduct and control on election process etc.
- 7. Metropolitan Planning Committee (243ZE):** For the consolidation of development planning of urban area, metropolitan committees and for rural area district planning committees are established.

Along with these provisions, the principle of great French Philosopher Montesquieu, that is ‘Division of Power’ which was suggested in his Political Theory and the principle of ‘Division of Labour’ which was propounded by Adam Smith who is the father of Economics are applied in this act.

#### **1.6.3.9 Efforts made by Maharashtra State to strengthen the Urban Local Self Government<sup>22</sup>**

In response to recommendations made from time to time about setting up Municipal Finance Commission, Government of Maharashtra appointed a commission on February 1973 under the chairmanship of Shri B.P. Patel. The Commission observed that there are harmful effects of the Rent Control Act on property valuations. Commission recommended a share of tax to the urban bodies from entertainment tax, motor vehicle tax, land revenue and N.A. tax, multi point turnover tax in lieu of octroi. It also suggested that grants should not be based on only population it should be an incentive.

In Maharashtra, from British period separate acts have been existed for the administration of Municipal Councils and Corporations. It includes The Bombay Provincial Municipal Corporation Act 1888, Nagpur Municipal Corporation Act 1948 and the Bombay Provincial Municipal Corporation Act 1949 for other corporations in the state. Earlier all the Acts, concerning Municipalities, District Municipality Act 1901, Bombay Borough Municipality Act 1925, Central Province and Berar Municipality Act, 1922, Hyderabad District Municipality Act 1956 have been abolished after the formation of Maharashtra State. In their place a single Maharashtra Municipality Act 1965 has come into force for

administration of Municipalities in the State. Now, the title has been changed to Maharashtra Municipal Councils, Nagar Panchayats and Industrial Township Act 1965. According to this act there are two types of functions to Municipal Councils and Municipal Corporations one is Obligatory and another is Discretionary. In order to fulfil their duties and responsibilities they are given some powers to levy taxes in their jurisdiction. These taxes are Property Tax, Taxes on Vehicles and Cattles, Taxes on Cinema and Theatre, Circus, Fun-Fare, Plays, Exhibitions, Octroi, Education Cess, Road Tax (Toll), Taxes on advertisement (excluding advertise appearing in newspaper), Fire Brigade Tax, Water Benefit Tax, Sewerage Tax, Sewerage Benefit Tax, Street Light Tax, Special Sanitation Tax. Besides this these bodies are given powers to collect revenue other than taxes especially from user charges and licence fees.

### **1.7 Functions of Municipal Councils / Municipal Corporations**

Till 73<sup>rd</sup> and 74<sup>th</sup> amendments in 1993, our constitution provided for only two-level Governments at the centre and at the state level with provision of port trusts and cantonment areas. The remaining forms of local authorities, though of great variety, were created by the states on their own volition (Choice or Decision) and were assigned functions and resources to them out of the state list. But 73<sup>rd</sup> and 74<sup>th</sup> amendments of Indian constitution make it obligatory for each state to legislate for specified varieties of local bodies corresponding to the classification of local areas into villages, rural areas, areas in transition from rural to urban ones and urban areas.

As these amendments added XI<sup>th</sup> and XII<sup>th</sup> schedule and contain a subject list of 29 entries for rural bodies, while XII<sup>th</sup> schedule contains a subject list of 18 entries for urban bodies. These are related to economic and social reconstruction and upliftment of society including planning at local level

Regarding functions of local bodies, H. Finer says, “Local Bodies are supervising, guide and controls our life then only we can sleep, work and play...they provide minimum health, education, welfare services, roads, silence, environment facilities etc. to the citizens. It is difficult to describe their work, its scope... their turnover is large ...their structure is also complicated but they are committed to social welfare.... they are nurtured by citizens’ power.”<sup>24</sup>

The functions of Local bodies are classified into two categories as obligatory functions and discretionary/voluntary functions. These are explained under various acts. For ex. under section 49(2) of the Maharashtra Municipal Councils, Nagar Panchayats and Industrial Town Act, 1965 and the discretionary duties and responsibilities are prescribed under Section 49(3) of the said Act.

Under Bombay Municipal Corporation Act 1888, section 61 and 63 respectively. Under Nagpur Municipal Corporation Act, 1948 section 57 and 58. Under Bombay Provincial Municipal Corporation Act 1949 section 63 and 66 respectively.

### **1.7.1 Obligatory Functions**

1. Provision of health and sanitation.
2. Lighting the Public Street and places.
3. Drainage and sewerage.
4. Construction of drains.
5. Public latrines.
6. Fire Brigade.
7. Hospitals and dispensaries.
8. Regulating dangerous trades, which affect public safety.
9. Regulation of places of occupations
10. Disposal of dead bodies
11. Public Vaccinations.
12. Reclamation of unhealthy localities.
13. Taking measures for preventing and checking the spread of dangerous diseases.
14. Construction and maintaining public streets and bridges.
15. Running and maintaining water supply schemes.
16. Running Schools for primary education.
17. Registration of births and deaths.
18. Providing relief to destitute people in times of famine and scarcity.

### **1.7.2 Discretionary functions**

1. To establish institutions for taking care for the disabled and handicapped persons.
2. To provide milk to the expectant or nursing mothers and school going children.
3. To provide machinery propelled transport facilities or trams in their respective jurisdiction.
4. To provide facilities like libraries, swimming pools etc.
5. To provide facilities like theatres, public gardens, exhibition for promotion of sports, ambulance services, marriage registration etc.
6. To open libraries, museums, art galleries, botanical gardens, zoos.
7. To set-up farm or factory for disposal of wastes.
8. To supply electricity and domestic gas.
9. To provide grants/ donations to the private primary/secondary schools and hostels.
10. Slum improvement
11. To open and run maternity homes and infant welfare home.
12. To set-up and run chemical or bacteriological in the interest of public health.
13. To provide services of ambulance.
14. Swimming pools and public bathrooms.
15. To destroy harmful animals and birds.
16. Calamity relief.
17. To open/ run shops/ stalls of essential commodities during the period of scarcity.
18. To promote the welfare of municipal servants and the persons dependent on them.

### **1.7.3 Functions of Municipal Corporation As per 74<sup>th</sup> constitutional amendment <sup>25</sup>**

These amendments lay down that municipality would go beyond the mere provisions of civic amenities. They are expected to play crucial role in planning and implementation of development projects and programmes. Following functions that have been laid down in the 12<sup>th</sup> schedule of constitution for the Municipal Corporation

1. Urban planning, including town planning.
2. Regulation of land use and construction of building.
3. Planning for economic and social development.
4. Roads and bridges.
5. Water supply for domestic, industrial and commercial purposes.
6. Public health, sanitation, conservancy and solid waste management.
7. Fire services.
8. Urban Forestry, protection of the environment and promotion of ecological aspects.
9. Safeguarding the interests of weaker sections of the society including the handicapped and the mentally retarded.
10. Slum improvement and up gradation.
11. Urban poverty alleviation.
12. Provision of urban amenities and facilities such as parks, gardens, and playgrounds.
13. Promotion of cultural, educational and aesthetic aspects.
14. Burials and burial grounds, cremations, cremation grounds and electric crematoriums.
15. Cattle ponds, 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 slaughter houses and tanneries.

However, the revenue sources of the local bodies and assigned functions are always being a matter of discussion and worry for local bodies. On this front, how N.M.M.C. faces the challenges, which is the inspiration behind.

### **1.8 Controls over Urban Local Bodies <sup>26</sup>**

In 21<sup>st</sup> century, the functions of the state government are not limited only to maintaining the law and order. They are supposed to perform various welfare-oriented functions such as providing civic amenities and social services to the community. Only State Government can't perform all these functions efficiently. In this case the decentralisation of the work is essential. As local government is state's subject, State can assign some power and responsibilities to the local bodies, supervise and control. It is not only for bossing and dominate them but also for development of them, which improves the quality in administration, increase efficiency and make them able to take decision on their own, for this, State Government is supposed to take efforts. Ultimately, local bodies should contribute to achieve the goals of overall welfare of the society. Even though, elected representatives with democratic principle are taking decisions in local bodies, control on them is required for following reasons:

1. Whether the local bodies perform well or not in the areas of services assigned to them.
2. Whether the local bodies are using grants and subsidies for which it has been given by the State Government.
3. Whether the development works are appropriately dispersed over in different parts of the jurisdiction of local body.
4. Whether quality of work is attained or not? Transparency, justice to all is attained or not.

For these reasons control on local bodies is essential. State Government is a controlling local body by two methods: One is direct control and the another is indirect control through Board of Law, Judiciary system and executive mechanism.

### **1.8.1 Direct Control**

Following authorities directly control on the urban local bodies:

- a. An Implementing Authority
- b. The District Collector
- c. The Divisional Commissioner
- d. The Director, Municipal Administration Directorate: State Government required such an organisation which will help to implement our policies effectively. That will also advice and supervise the local bodies. The Panjab Urban Local Bodies Enquiry Committee, Zakeria Committee which was appointed to improve the sources of local bodies, Rural Urban Relationship Committee, Administrative Reforms Commission, Report of Central Services to Local Authorities 1963 recommended that there should be Municipal Administration Directorate among the State. Accordingly, that was established in various states.
- e. Auditor
- f. Maharashtra Municipal Councils, Nagar Panchayats and Industrial Town Act, 1965.
- g. Acts related to Municipal Corporations. Bombay, Nagpur and Bombay Provincial Municipal Corporation Act 1949.

These authorities can control the local bodies through calling various reports, inspections, auditing etc. In case, local body fails to fulfil assigned functions and responsibilities, frequently committing mistakes, State Government can dissolve that particular local body. But it will be maximum up to six months.

### **1.8.2 Indirect Control:**

Following institutions are indirectly control urban local bodies:

- a. **Law Board:** Local bodies are not making laws. These are working according to law made by state assembly. Therefore, they are obliged to follow the rules and regulations made by the concerned authority/ State Governments. Law board can increase or decrease the powers and responsibilities of local governments. In this way, law board indirectly controls urban local bodies.

- b. **Judiciary:** Judiciary system protects the control of law board with the interpretation of the same. If citizens felt that, the particular decision of local body is not correct and is against the law, they can appeal to the court for justice. It is supposed to assess by the court and give verdict. May be, it can go against or in favor of the local body. In this way, judiciary system controls indirectly the urban local bodies.
- c. **Ombudsman (Lok-Ayukt):** Maharashtra State is the first state in India to pass the ombudsman act in 1971. The Governor of the state appoints ombudsman. He investigates the complaints against administration. Citizens have rights to complaints against local bodies. After investigating complaints, ombudsman can send report to the competent authority. In case, the authority does not take right action, ombudsman directly reports to the Governor of the State.
- d. **Right to Information Act 2005-** This act is basically for empowerment of the people and make administration efficient and transparent. Any information, which is related to public interest, cannot be confidential. Local bodies are obliged to provide information to the citizens. In case, they failed because of any reasonable reason, there is provision of fine of Rs. 225 per day or to maximum Rs. 25,000. The concerned person / officer should pay it from their own pocket.

## **1.9 The Position of Urban Local Bodies in India<sup>27</sup>**

As India's Urbanization ratio is increasing since inception of the census in 1872. In 1901, urbanization ratio was 11 percent, in 1951 it was 17.3 percent, in 2001 it was 28 percent and in 2011, it was 31.16 percent, further more urban population of the country is projected to touch 549 million by 2021. (41 percent of the total population of the country.) Urbanization itself offers challenges to town planners and calls for finding solutions for various problems. In urban area, the Local bodies including Municipal Corporation, Municipal Councils and Nagar-Panchayats are working respectively for large cities (having population more than 3 lakh), medium and transforming towns.

In Modern India, the first Municipal Corporation was established in the former presidency town of Madras in 1668. Then Calcutta Municipal Corporation and Bombay Municipal Corporations were established in 1876 and 1888 respectively. According to 2001 census, there were 107 Municipal Corporations in India, out of these 19 Municipal Corporation were in Maharashtra. Later on, Jalgaon Municipal Corporation on 21<sup>st</sup> March 2002, Dhule and Ahmednagar on 30<sup>th</sup> July 2003 and Wasai Virar Municipal Corporation on 3<sup>rd</sup> July, 2009 were come into existence. Such as till 2009, Maharashtra had 23 Municipal Corporations, recently there are 26 Municipal Corporation in Maharashtra. Followed by M.P. having 14 Municipal Corporation, U.P. 11, A.P. 7, Chattisgad, Gujrat, Karnataka, Tamil Nādu and West Bengal have 6 Municipal Corporations in each state. Assam, Haryana, Himachal Pradesh, Jharkhand, Uttaranchal, Delhi and Chandigad having 1 Municipal Corporation in each state. Bihar and Kerala 5 Municipal Corporations in each. In Punjab-4, Rajasthan-3, Orisa-2, Municipal Corporation were operating. Notable thing is that seven sister states of Eastern India and Goa don't have a single Municipal Corporation in their respective territory. As increasing urbanization various problems like creates, environment degradation, lack of infrastructure, unemployment, poverty, economic disparity, inadequate water supply etc. In other hand, an expectations of people from Government (Municipal Corporation) is also increasing. At the same time people are reluctant to accept the increasing tax rates and tax base too.

In this critical situation, corporation have to find way out and promote the standard of city and satisfaction of the citizens. Majority of the corporations are facing problems on this front. Navi Mumbai Municipal Corporation is one of them. Author analysed that what are the revenue sources? changes in revenue sources, expenditure structure, changes in that and how N.M.M.C. meets the social obligations and satisfy the citizens.

### **1.10 The present position of Local Self-Government Institutions in Maharashtra<sup>28</sup>**

The Maharashtra State is one of the aggressive and progressive states in India. Once, the former vice president of planning commission mentioned that Maharashtra State is the 'Jewel in the Crown'. Regarding local bodies too state having significant status in the country. The highest number of Municipal Corporations (26) is located in the state. Table no 1.1 shows the local Self-Governments in Maharashtra.

<b>Table No. 1.1: Local Self-Government Institutions in Maharashtra</b>								
<b>Sr. No.</b>	<b>Types of Institutions</b>	<b>1960-61</b>	<b>1970-71</b>	<b>1980-81</b>	<b>1990-91</b>	<b>2000-01</b>	<b>2010-11</b>	<b>2013-14</b>
1	Zilla Parishads	25	25	25	29	33	33	34
2	Gram Panchayats	21636	22300	24281	25827	27735	27913	27873
3	Panchayat Simitis	295	296	296	298	321	351	351
4	Municipal Councils	219	221	220	228	228	222	226
5	Municipal Corporations	3	4	5	11	15	23	26
6	Nagar Panchayats	--	--	--	--	3	4	13
7	Cantonment Boards	7	7	7	7	7	7	7

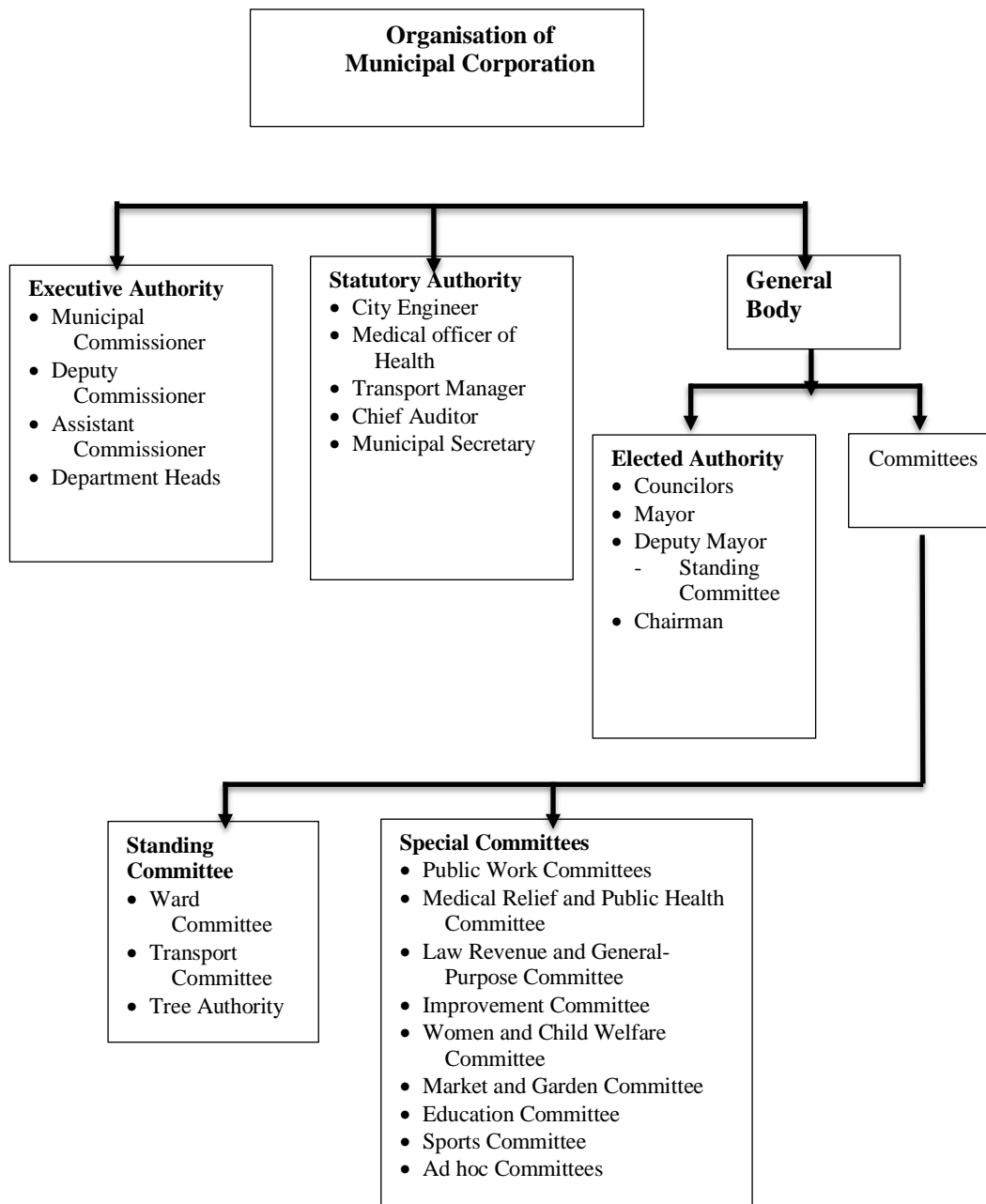
Source: Economic Survey, GOM, 2013-14.

### **1.11 Organization of the Municipal Corporation<sup>29</sup>**

In India, the Government for the urban area is known as urban Government. Presently five types of Municipal authorities exist in different cities and towns. These are Municipal Corporations, Municipal Councils, and Notified area committees, Town area Committees and Cantonment Boards. Municipal Corporations and Municipal Councils are fully representative bodies, while the notified area and town area committees are either fully or partially nominated bodies. The cantonment boards are operated under a central legislation consists of partially elected authorities supervised by the Union Ministry of Defence. The term corporation refers to the entire administrative machinery consisting of deliberative and executive authorities.



The general body, the standing committees and other committees constitute deliberative authority. The deliberative authority has the task of policy formulation and better functioning of the corporation. On the other hand, an executive authority has the responsibility of implementing the resolution passed by the deliberative wing. Its flow chart is shown as following



**Figure 1.1: Chart of Organisation Municipal**

### **1.12 Navi Mumbai Municipal Corporation**

In 1992, the State Government established N.M.M.C. as a local authority, whose jurisdiction is confined to the developed parts of Navi Mumbai. The transfer of powers and responsibilities has always been an issue of dispute between CIDCO and NMMC, particularly regarding revenue sharing and maintenance functions. The present arrangement is that CIDCO has the responsibility for capital costs of infrastructure development in the entire city and granting development permission while collecting taxes and maintaining services is NMMC's responsibility. However, the area under NMMC is a little over one third of Navi Mumbai. For the rest of the new town; CIDCO continues to play the main role including that of planning authority, until they reach a stage of development.

### **1.13 Objectives:**

1. To study the sources of revenue of N.M.M.C.
2. To study the trends in revenue sources of N.M.M.C.
3. To study the heads on which expenditure is incurred by the N.M.M.C.
4. To study the trends in expenditure of NMMC.
5. To study the per capita tax collection and per capita expenditure of NMMC.
6. To study the economic operations of N.M.M.C.
7. To study the challenges and opportunities of N.M.M.C.
8. To analyze that whether citizens residing under the jurisdiction of NMMC are satisfied or not on various services provided by NMMC.
9. To make suitable suggestions for further development based on conclusions.

### **1.14 Research Methodology**

The type of research is analytical and empirical through the survey of service seekers. It is based on both type of data primary and secondary. Annual budgets of Navi Mumbai Municipal Corporation during 2000-01 to 2012-13. Other reference books, magazines, periodicals, articles from various journals and daily newspapers etc. are used. Collected data was tabulated item wise, edited and then Average, Standard Deviation, Coefficient of Variation, Correlation Coefficient, ratio, Compound Annual Growth Rate etc. are used in this study.

The primary data is collected through questionnaire. Stratified random sampling method is used to obtain the feedback from the citizens. In the questionnaire, total 26 questions asked to the respondents. Five-scale response method has been used in this study. Total 216 respondents inquired to collect responses from various nodes of the NMMC. Mainly percentage method is used in this analysis. Descriptive and analytical approaches were adopted for interpreting data in line with the set objectives.

### **1.15 Hypothesis**

Followings are the hypothesis of this study:

1. The revenue and expenditure of N.M.M.C both are increasing continuously, but expenditure is more than revenue.
2. The revenue composition of the N.M.M.C. is changed during the analysis period.
3. The revenue sources of N.M.M.C. are not sufficient.
4. N.M.M.C.'s provision on education, health and social heads is not sufficient.
5. N.M.M.C. is continuously trying to meet the challenges/ need of the citizens but it is not fully successful in that.

### **1.16 Importance of the Study**

This study will make enable to the citizens, policy makers, students and others who have keen interest in this area to know properly how NMMC acquiring total receipts and spending it on various heads. It will also analyse & let know that whether social heads like education, health, slum improvements etc. are getting due significance in the annual budget of NMMC or not. It will useful to compare N.M.M.C.'s economic operations with other corporations' operations. The findings, conclusions and suggestions will useful for policy makers which can bring more efficiency in the economic administration of the local bodies of the state as well as country.

### **1.17 Limitations of the Study**

This is analytical study. It assessed the structure of receipts of N.M.M.C., trends, weightage of each head while spending etc. However, there is no exact tool / method to measure the efficiency of expenditure incurred by the N.M.M.C. during reference period. Regarding assessment of the efficiency of expenditure the parameter of citizens' satisfaction about various services provided by the NMMC is considered which depends on respondents' interest in the concerned matter. If respondents are not taking seriously, reflection will not be accurate.

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## Chapter 2

# Socio Economic Profile of The Navi Mumbai Municipal Corporation

### 2.0 Introduction

Navi Mumbai is settled as twin city of Mumbai. It is one of the first planned new towns of development built for diverse middle-class population in India. This city is called as the city of 21<sup>st</sup> Century. Its basic objective was curbing further growth of Megacity of Mumbai. This city came into exists as a result of congestion of Mumbai. Since growth of Mumbai was constrained by sea at south, east and west. It put the restriction to horizontal expansion of the city. It was resulted into congestion and started deteriorate (in the sense increasing density, pressure on infrastructure, parking, unaffordable homes etc.) of the historical city. To overcome on these issues, first time Mr. Charles Coria, Shirish Patel and Pravin Mehata had suggested Navi Mumbai as an alternative city to the Mumbai.

In 1958, the Government of Bombay appointed a study group under the leadership of Shri. S. G. Bhawe, Secretary of Government of Maharashtra, Public works department to study the problems of traffic, shortage of housing and open spaces, over concentration of industry in the metropolitan and suburban areas of Mumbai. It had assigned to study group that make recommendation to deal with above-mentioned issues. This study group submitted its report in February 1959 after systematic enquiry on the assigned matters. One of the important recommendations was that a rail-cum road bridge to be built across the Thane Creek. It was necessary to relive the pressure on the city's railways and roadways and draw away industrial and residential concentration of Mumbai.

In the same year (1958), Bombay Municipal Corporation decided to prepare the development plan for Greater Mumbai as required by the Bombay Town Planning Act, 1954. This development plan was published in 1964 by Bombay Municipal Corporation. This densely worked and detailed land use plan stopped abruptly at the boundaries of the city, while this might have seemed natural on the west, south and east, where the sea provides a seemingly incontestable boundary, to the north the boundary was an arbitrary line cutting across land on the Mumbai peninsula to stop planning abruptly at that boundary, deliberately ignoring, whatever might happen, because that lay technically outside one's jurisdictions, showed extraordinary lack of imagination or a lack of understanding of what planning is all about. Indeed, to the east, the project of constructing a bridge across Thane Creek was already under way, the major new port at Nhava Sheva was being planned and many industries had already started functioning in the Thane-Belapur belt.

The Government of Maharashtra accepted the recommendation of Brave group. This brought out the need to examine metropolitan problems in regional context. For this, the Government appointed a committee under the leadership of Prof. D. R. Gadgil, Director, Gokhale Institute of Politics and Economics, Poona.

This committee submitted its report in March 1966 and recommended that regional planning Act be pass by the Government to provide for the creation of Regional Planning Boards for notified regions and that to start with such Boards should be set up for the Bombay and Poona regions. Accordingly, Maharashtra Regional and Town planning Act had passed in 1966.

This act had come in to force from 1967. The regional planning Board was constituted under the chair of Shri. L. G. Rajwade. This board proposed the development of twin cities across the harbour on the mainland to the east, as a counter magnet to the east, as a counter magnet to the office concentration-taking place at the southern tip of Mumbai. Government of Maharashtra accepted this recommendation and accordingly the CIDCO was incorporated on 17<sup>th</sup> March, 1970 under Indian Company Act 1956.

The CIDCO is an authority for Navi Mumbai project from October 1971. It had given the mandate of converting about 344 sq. km area of marshy land lying between village Digha in Thane District and Kalundre village of Raigad district into a new city. It consisted of 150 km creek line of the total 720 km of the Konkan coast. CIDCO undertook to prepare and publish a development plan as required by town planning Act 1966. CIDCO carved out 14 nodes- small townships- of the land with a view to facilitate comprehensive development and to give it an identity of new city. These nodes are:

1. Airoli
2. Ghansoli
3. Kopar Khairane
4. Vashi
5. Sanpada
6. Nerul
7. CBD Belapur
8. Kharghar
9. Kalamboli
10. Jui Kamothe
11. New Panvel
12. Ulwe
13. Pushpak
14. Dronagiri

The CIDCO planned and constructed all the railway stations in Navi Mumbai and used the space for commercial purpose as well.

## **2.1 Geographical Features of Navi Mumbai**

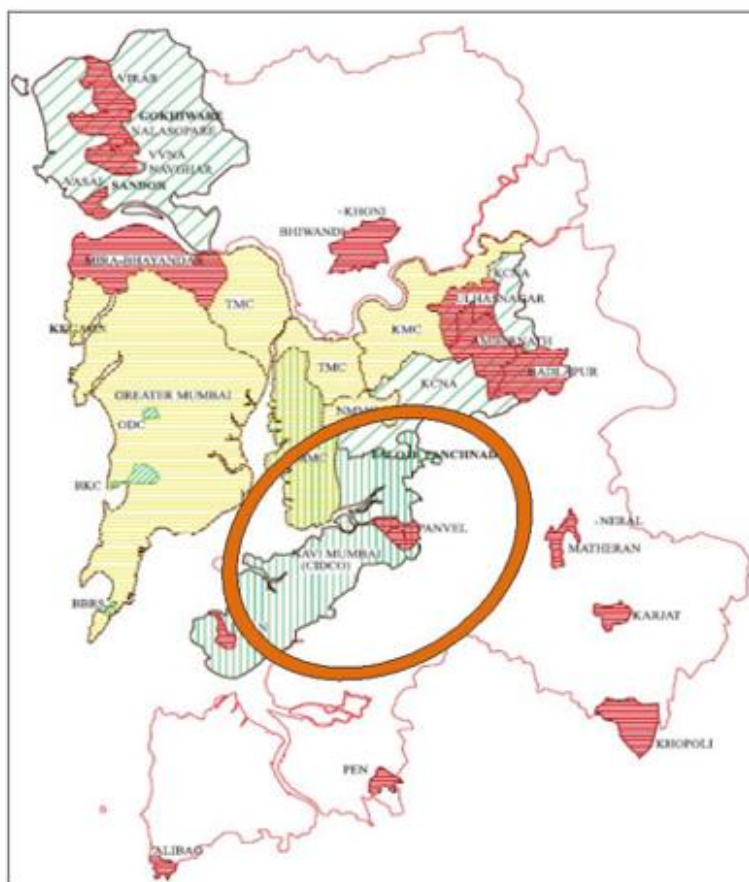
Navi Mumbai is bound on the eastern side by hillocks of the hight of 50 to 200 metre and on the western side by Thane Creek. The city is located in coastal strip of Konkan. The rock formation in the region is derived mainly from Deccan Basalt and also form granitise, gneisses and laterite. The mean-annual temperature of this area ranges between 25<sup>0</sup> to 28<sup>0</sup> C. In the months of April- May ranges between 30<sup>0</sup> to 33<sup>0</sup> and in the coldest months it varies from 16<sup>0</sup> to 20<sup>0</sup>C. Extremes like 38<sup>0</sup>-39<sup>0</sup> and 14<sup>0</sup>C in winter may be experienced for a day

or two days in respective season. This city is receiving 2500 to 3500 mm rainfall. Rainy season, mostly confined to south-west monsoon and around 80 percent rainfall received during June to October (60 to 70 days). This is humid and it varies between 41 to 97 percent. Driest days being in winter and wettest ones are experienced in the month of July. The soil of this area is highly saline in and around creek and non- saline at the other places. They are calcareous to alkaline, in reaction (pH7.5 to 8.5) clayey and have water holding capacity (200-250 mm/m).

## 2.2 Location of the Navi Mumbai

India accounted 2.4 percent (3.28 Lakh sq. km) of the total surface area of the world, Maharashtra accounted 9.3 percent surface area of India, and Navi Mumbai accounted 0.11 percent (344 sq. km.) of total surface area of Maharashtra and 0.01 percent of the country. The geographical location of Navi Mumbai is 19<sup>0</sup> 12' N to 110 36' latitude and 72058' East to 73<sup>0</sup> 03 East longitude. The elevation of the city is 3.25 meters above mean sea level.

**Map No. 01: Location Map of NMMC area**



Source: Detailed Project Report NMMC

## **2.3 Area of Navi Mumbai**

Navi Mumbai, a satellite township of Mumbai, the financial hub of India, is only around 45 years old and is one of the largest planned townships in the world. The total area of Navi Mumbai is 343.70 sq. km. which was interspersed with 95 villages, and 2 municipal towns, which housed 1.56 lakh people as per census 1971. It is a series of 14 self- contained townships called ‘nodes’; each developed at a different point of time and with independent physical and social infrastructure system, but linked by mass transport rail system and trunk roads. Navi Mumbai lies on the mainland on the eastern seaboard of Thane Creek.

## **2.4 Land Use Pattern of Navi Mumbai**

Out of total available land (343.70 sq. km), 50.80 percent land is available for urban development, 21.02 percent land is for Regional Park, 9.95 percent area is low lying as unsuitable for development, 8.18 percent area is occupied by MIDC and remaining area is used for defence area at Uran, Port at Nhava Sheva, Sewage farming and fisheries. Table no. 2.1 shows the land use pattern of Navi Mumbai.

<b>Table No. 2.1: Navi Mumbai Land use pattern</b>			
<b>Sr. No.</b>	<b>Description</b>	<b>Area in sq. km.</b>	<b>Percent</b>
1	Low lying area unsuitable for development	34.20	9.95
2	MIDC Industrial area	28.10	8.18
3	Defence area at Uran	4.56	1.33
4	Port at Nhava Sheva	12.00	3.49
5	Regional Park	72.25	21.02
6	Sewage Farming	9.00	2.62
7	Fisheries	9.00	2.62
8	Net area available for urban development	174.59	50.80
	Total	343.70	100

Source: Secured Techno-Economic Growth of Navi Mumbai- A National Perspective, Micro-Tech Global Foundation, By Dr. P. Sekhar, Page no.06

## **2.5 Rainfall in the Navi Mumbai**

Rainfall in the Navi Mumbai ranges between 1650 mm to 3400 mm in 12 years during 2002 to 2013. It was the lowest in 2009 (1650 mm) and the highest in 2013 (3400 mm). Generally, the maximum rainfall had received in the month of July in these 12 years.



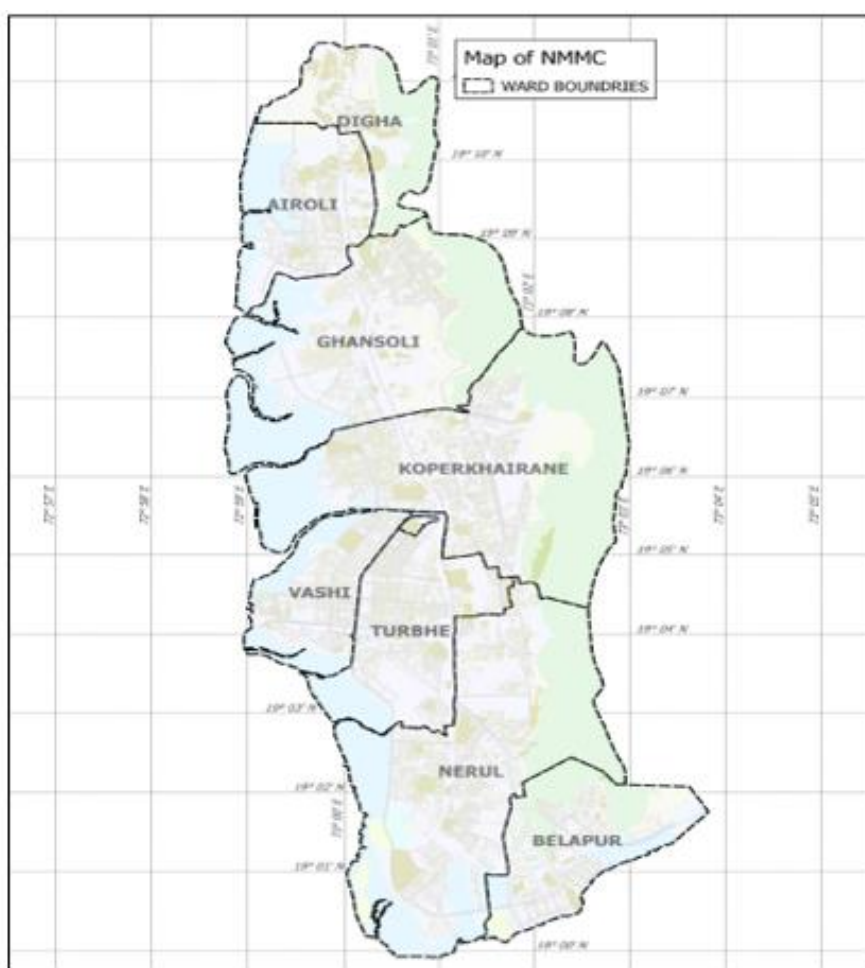
## 2.6 Air Quality

According to the WHO's estimation of 2012, outdoor air pollution was responsible for the deaths of around 3.7 million people under the age of 60 years. According to CPCB, annual permissible line of SO<sub>2</sub> is 50, NO<sub>2</sub> is 40 and PM<sub>10</sub> is 60 (Annual Average ug/m<sup>3</sup>). However, these were 20 (lowest), 39 (moderate) and 113 (critical) respectively for Navi Mumbai in 2010. Dust free, stench free and unpolluted air is required for humans, animals and plants.

## 2.7 Area of Navi Mumbai Municipal Corporation

The area under Navi Mumbai Municipal Corporation is a little over one third of Navi Mumbai (108.63 sq. km). There are eight zones under the jurisdiction of NMMC viz. CBD Belapur, Nerul, Turbhe, Vashi, Koparkhairane, Ghansoli, Airoli and Digha

**Map No. 2: Ward Boundaries of NMMC**



Source: Environment Status Report of NMMC, 2013-14.

## 2.8 Population

Vital statistics of population for any area is essential in order to plan and meet the needs of the people. The change in population scenario of Navi Mumbai has been dramatic since the birth of the city. People are transporting there from rural area of fishing and agricultural to the planned city of 21<sup>st</sup> Century. This city has witnessed unprecedented population growth particularly in the last decade.

## 2.9 Total Population

Navi Mumbai experienced unprecedented population growth rate particularly in last decade. It was due to affordable housing and upcoming jobs in service sector. Besides the present population, which experiences natural growth, the population increases because of overflow of people from Mumbai as well as fresh migration from the hinterland. However, population proportion of NMMC area to total population of Navi Mumbai had decreased from 74.89 percent to 60 percent during 40 years from 1971 to 2011. It implies that as compare to population increase of NMMC area, population of other area of the Navi Mumbai has increased more during the same period. In 2010, female proportion was 46 percent. Table no. 2.2 shows the total population in NMMC area.

Table No. 2.2: Population of NMMC area and Navi Mumbai				
Year	Population of NMMC area		Population of Navi Mumbai	Proportion of Population of NMMC to NM
1971	116789	Census	156000	74.86
1981	198290	Census	250000	79.31
1991	387206	Census	535000	72.37
2001	703947	Census	1103000	63.82
2011	> 12 Lakh	Site of NMMC	2000000	60.00

Source of Population of Navi Mumbai, CIDCO, Survey, 2010.

Note: 1. Figures are rounded.

2. Source for population of NMMC area is mentioned in separate column.

## 2.10 Population Projection for NMMC Area

Based on some assumptions like current population growth and immigration, projected population of NMMC area will be more than 29 Lakh in 2042. With considering these facts corporation need to plan. Its detail account is shown in table no. 2.3.

<b>Table No. 2.3: Projected Population of NMMC area</b>		
<b>Year</b>	<b>Total Population</b>	<b>Source</b>
2006	925346	UHP Projection
2011	1293987	Projected
2021	1879274	Projected
2031	2388082	Projected
2042	2911032	Projected

Source: Detailed Project Report, NMMC.

## **2.11 Population Growth**

If we compare the last decade population growth rate of Navi Mumbai with the Mumbai, Mumbai suburban, Maharashtra, and India, then we realized that population growth rate was very high and unprecedented in Navi Mumbai. Its comparative account is given in table no. 2.4.

<b>Table No. 2.4: Comparative Population Growth Rate During 2001 to 2011</b>		
<b>Sr. No.</b>	<b>Category</b>	<b>Decadal Growth Rate. (%)</b>
1	Navi Mumbai	86.6
2	Mumbai	-5.75
3	Mumbai Suburban	8.01
4	Maharashtra	15.99
5	India	17.6

Source: Socio-Economic Profile of Households in Planned Nodes in Navi Mumbai-2010.

## **2.12 Population Density**

As per census 2011, the population density of Navi Mumbai was 5819; it was 382 for the country and 365 for the Maharashtra. Obviously, it was comparatively high in the region of Navi Mumbai. The density of the State / Country or region influences the planning and performance of the activities undertaken by the administering authority.

## **2.13 Disabled Population**

In Navi Mumbai, 0.2 percent population was disabled in 2010. Out of which maximum was sight disability (37.3 percent), followed by movement related (30.5 percent), hearing (15.3 percent), mental and speech (8.5 percent each)

## 2.14 Religion of Households

India, known as the land of spirituality and philosophy and was the birthplace of some religions, which even exist today in the world. Around 80 percent Indians are Hindus. According to Sample Household Study 2010, majority of the residents of Navi Mumbai were Hindu (89.8 percent), followed by Muslims (4.3 percent), Christian (2.0 percent), Neo-Buddhist (1.9 percent) and Sikh, Jains and others 2 percent. Table no 2.5 shows the religion wise break up of household of Navi Mumbai.

Table 2.5: Religion of Households in Navi Mumbai		
Sr. No.	Religion	Percent of Households
1	Hindu	89.8
2	Muslim	4.3
3	Christian	2.0
4	Neo- Buddhist	1.9
5	Sikh, Jain and others	2.0
	Total	100

Source: Socio Economic Survey of CIDCO, 2010.

## 2.15 Family Size

Generally, as compared to rural area, family size is small in urban area. Educated people prefer to nuclear family. In Navi Mumbai, average family size was 4.0 in the years of 1995 and 2000, but thereafter, it was lowered at 3.8 in the year of 2005 and 3.7 in the year of 2010. Its detail is given in table no. 2.6.

Table No. 2.6: Family Size in Navi Mumbai			
Sr. No.	Family Size	2005	2010
1	1	1.8	0.9
2	2-3	36.7	42.1
3	4-5	54.9	50.8
4	6-7	5.7	5.1
5	8-10	0.6	0.9
6	11 and above	0.1	0.1
7	Not reported	0.2	0.1
Average Family Size		3.83	3.71

Source: Socio Economic Survey of CIDCO, 2010.

## 2.16 Caste /Category Wise Households

Caste system in India has originated two thousand years ago, people had been categorized by their occupations. However, nowadays classifying people based on their caste is tedious and irrelevant to the present context as people are educated and we are walking towards removing boundaries of caste system. However, According to CIDCO's Survey of 2010, caste wise break- up of the city is given in table no. 2.6. It reveals that in the year of 2010, maximum residents of the city (73.2 percent) were from General/Open category, followed by Other Backward Class (14.8 percent), Schedule Caste (7.2 percent). Notably 0.4 percent citizens did not believe in any caste. Table no. 2.7 shows the caste wise break- up of the Navi Mumbai

<b>Table no. 2.7: Caste wise population percentage of households in Navi Mumbai</b>			
<b>Sr. No.</b>	<b>Caste</b>	<b>Survey -2005</b>	<b>Survey -2010</b>
1	General	70.3	73.2
2	Other Backward Class	17.0	14.8
3	Scheduled Castes	7.1	7.2
4	Scheduled Tribe	1.8	1.1
5	Neo- Buddhist	2.0	1.0
6	Other (VJNT/DTNT)	1.6	2.2
7	Not mentioned	0.2	0.4

Source: Socio Economic Survey of CIDCO, 2010.

## 2.17 Mother Tongue wise Households

Mother tongue is a person's native language; it is called language learned from birth. In Navi Mumbai, majority households were speaking Marathi (66.6 percent) in 2010, followed by Hindi (14.3 percent), South Indian languages (7.2 percent), North Indian languages (3.0 percent), Gujarati (3.3 percent). Notably as compared to 2005, the proportion of Marathi speaking households increased in 2010. English was mother tongue for only 0.6 percent households. Its detailed account is given in table no. 2.8.

<b>Table 2.8: Households of Navi Mumbai by mother tongue (%)</b>			
<b>Sr. No.</b>	<b>Mother Tongue</b>	<b>Survey -2005</b>	<b>Survey -2010</b>
1	Marathi	62.3	66.6
2	Hindi	13.1	14.3
3	South Indian Languages	10.4	7.2
4	North Indian Languages	6.4	3.0
5	Gujrati	4.0	3.3
6	East Indian Languages	2.0	2.3
7	English	1.0	0.6
8	Others	0.8	2.2

Source: Socio Economic Survey of CIDCO, 2010

## 2.18 Medium of Education

According to the survey conducted by CIDCO in 2010, more than 70 percent students in Navi Mumbai preferred to learn in English Medium irrespective of their mother tongue. Table no. 2.9 shows the medium of education by mother tongue.

Table no. 2.9: Medium of education by mother tongue in Navi Mumbai (%)							
Sr. No.	Mother Tongue	Medium of Education					
		Marathi	Hindi	Gujrati	Urdu	English	Not Reported
1	Marathi	27.44	0.71	0.00	0.03	71.62	0.09
2	Hindi	8.44	8.57	0.00	1.24	81.89	0.19
3	South Indian Languages	5.60	1.21	0.00	0.15	92.13	0.45
4	North Indian Languages	5.46	0.68	0.00	0.00	91.13	0.34
5	Gujrati	6.98	0.32	1.90	0.00	90.16	0.00
6	East Indian Languages	2.63	1.97	0.00	0.00	88.16	0.00
7	English	0.00	0.00	0.00	0.00	100.00	0.00

Source: Socio Economic Survey of CIDCO, 2010.

Households who were belonging the to south Indian languages and north Indian languages, preferred English medium (92.13 percent and 91.13 percent respectively). They also prefer (5 percent) to learn from Marathi medium but households who belong to English medium they preferred only for English medium for learning.

## 2.19 Gender Ratio

The overall trend of gender ratio in India in last century shows a continuous decline (1901-972 and 2001 – 933) barring a marginal improvement in 1981. (1971-930 and 1981-934). Furthermore, some states like Haryana- 877, Panjab- 893 had low sex ratio as per census 2001. As far as Navi Mumbai is concerned, situation was worst. Since last decade, sex ratio was declining very fast and it came down to 838 in 2010. One of the causes of concern is that child sex ratio (0- 5 years) was decreased from 745 to 697 during 2005 to 2010. It was not befitted to the city. Its detail account is given in table no. 2.10.

Table No 2.10: Gender Ratio in Navi Mumbai	
Year	Gender Ratio
2000	883
2005	851
2010	838

Source: Socio Economic Survey of CIDCO, 2010.

## **2.20 Age Composition**

Age composition of the population influences on economic activities of the region or State. If more population is belonged to productive age group, it helps to increase the production of region/state. As India has a population dividend, similarly population of Navi Mumbai is also quite young. This city has nearly 70 percent of its population between the ages 15 to 59 years. Only 4.8 percent population was 60 plus in 2010. Its detail account given in table no. 2.11.

<b>Table No.2.11: Age wise Distribution of Population</b>	
<b>Age Group (Years)</b>	<b>Percent</b>
1 to 3	3.6
4 to 5	2.5
6 to 9	4.9
10 to 15	11.5
16 to 24	16.1
25 to 44	41.9
45 to 59	14.7
60 or 60 +	4.8

Source: Socio Economic Survey of CIDCO, 2010.

## **2.21 Marital Status**

In Navi Mumbai, 57.8 percent people were married, 40.3 percent were unmarried, 0.2 percent were divorced or separated and 1.7 percent was widow/widowers in 2010. Out of total married population, 78 percent population is of 25 years or above. Out of total unmarried population, 90 percent population was below 25 years of age. Notably, the proportion of married people below 18 years was negligible.

## **2.22 Literacy Status**

Being a city of 21<sup>st</sup> century, literacy rate of Navi Mumbai was good (98 percent) in 2010. It was 99 percent for male and 97 percent women. However, node wise literacy was different. Illiteracy rate was high in Koparkhairane and Airoli nodes (Four percent in both the nodes).

## **2.23 Economic Profile of Navi Mumbai**

It includes working population ratio, occupational status, place of work, location of work place, income of households, monthly expenditure of households, monthly savings of households, assets of households, transport profile, vehicle ownership, reasons for stay in Navi Mumbai, water supply, roads, electricity, sewerage system, storm water drainage, solid waste management, schools and colleges etc.

## **2.24 Working Population**

In 2010, the working population of Navi Mumbai was 34.86 percent. Out of which 86 percent were male and 14 percent were females. The gender wise percentage of the working population was 55 percent for the males and 11 percent for the females in 2010. It was 53 percent and 7.5 percent respectively in 2005.

The CIDCO's Survey of 2010 reveals that, because of following reasons female working proportion was lower:

- I. Out of total women, 58 percent women had given priority to look after their children as a first preference as compare to job.
- II. Around 20 percent women did not had any financial need to work.
- III. Out of all respondents, 18 percent had opinion that the lack of job opportunities in Navi Mumbai.
- IV. Around 14 percent had lack of confidence or not qualified and for the 9 percent women, their family members were not in favors to send them for to work. However, highest proportion of working women was in Christian (18.3 percent), followed by Sikh (15.7 percent), neo-Buddhist (13.3 percent) and in Hindu it was comparatively lower (10.2 percent).

## **2.25 Number of Earners per Households**

In Navi Mumbai, 74.8 percent households were single earners, in 19.3 percent households 2 earners and 0.7 percent households had three or more than three earners. However, the ratio of single earner households was slightly decreased from 77 percent (2005) to 74.8 in 2010.

## **2.26 Occupational Status**

In 2010, out of total working population of Navi Mumbai, maximum was working as a managers /supervisor (29.5 percent), followed by lower cadre like clerks in public/ private sector offices (15 percent), professionals like engineers, doctors, lawyers and administrators (11 percent), businessman (15.1 percent), industrial and non-industrial skilled workers (13 percent), service sector (7 percent), teachers (2.8 percent), industrialist (2 percent) and unskilled labour (1.3 percent).

## **2.27 Place of Work**

A place of work implies the type of office or work unit, where the person is engaged for work or self -employment. Out of total work force, 53 percent workers were working at private offices / organizations in Navi Mumbai or elsewhere. The next important work place was government offices within or outside of Navi Mumbai, where 12.1 percent workers were working. At Schools and Colleges 7 percent, coaching centres 7 percent, Banks 5 percent and industrial units accommodate 5 percent workers of Navi Mumbai.



## **2.28 Location of Work Place**

As twin city was established to remove the pressure of Mumbai City, really, it was reflected in survey of 2010. In 2005, 36 percent working population had been going to Mumbai, but in 2010, this ratio decreased to 20 percent. On the other hand, 68 percent work force had their jobs located within Navi Mumbai itself, 7.9 percent workers in MMR suburbs and 4.3 percent in Thane and Kalyan. It implies that around 32 percent work force had their jobs in Mumbai and suburban region.

## **2.29 Income of Households**

In 2010, the average monthly household income was Rs. 24686/-. It was Rs. 12691 in 2005, it means between the five years; the average monthly income became almost double. Across the nodes, residents of Nerul node had highest mean of income (Rs. 32415) per month followed by Vashi node (Rs. 29,672) and Jui Kamothe (Rs. 27958). The lowest income was reported by households of Ghansoli node (Rs. 15,598). Occupation wise, the highest monthly income was of Industry owners (Rs. 44731) Followed by reality sector (Rs. 23678) and Managerial & Supervisory Cadre (Rs. 22896). The lowest income was of house cleaners i.e., Rs. 8423 only.

## **2.30 Monthly Expenditure of Households**

The average monthly expenditure of households was Rs. 16496 in 2010. The proportion of monthly expenditure of households was marginally increased (keeping inflation into account) as compared to study conducted in 2005 (Rs. 8357). As far as expenditure pattern is concerned, a large proportion of their expenditure was spent on grocery (29 percent). It was followed by instalment of houses (11 percent), maintenance of buildings (10 percent), education (9 percent) transport (8 percent), telephone and house tax (6 percent), clothing, entertainment and medical expenses [ 5 percent on each (5× 3=15 percent)] and remaining 12 percent on other things. The households from Jui Kamothe spent Maximum (Rs. 19,761), followed by Nerul (Rs. 19301) and from Ghansoli spending was comparatively less (Rs. 11,900) per month in 2010.

## **2.31 Savings of Households**

An average monthly saving per household in Navi Mumbai was Rs. 7261, which was accounted 29 percent of their monthly earnings. Nevertheless, notable thing is that it was 34 percent in 2005. There was significant variation in saving rates of different nodes of Navi Mumbai. Households from Vashi had highest saving per month (Rs. 10815) and lowest in Ghansoli (Rs. 3528).

## **2.32 Households Assets**

Household assets like Computer, Internet facilities, Washing Machines, Mobile Phones, Refrigerators, Telephone, Air Conditioner, Televisions etc. shows the improvement in the living standard and status of the citizens. Its detail is shown in table no.2.12.

<b>Table No. 2.12: Household Assets in Navi Mumbai</b>			
<b>Sr. No.</b>	<b>Assets</b>	<b>Percentage of Households Owning the Assets</b>	
		<b>2005</b>	<b>2010</b>
1	Mobile Phone	50.2	98.8
2	Television	95.6	98.1
3	Refrigerator	74.2	88.8
4	Washing Machine	35.1	44.5
5	Computer	13.1	42.8
6	Telephone	57.5	33.7
7	Internet Facility	7.2	26.8
8	Air Conditioner	7.3	13.6
9	Business Unit/ shop	12.2	4.9
10	Other Dwelling Unit	--	1.2

Source: Socio Economic Survey of CIDCO, 2010.

### 2.33 Transport Profile of Navi Mumbai

Developed transport system is a base for economic development. The transport system of the Navi Mumbai is designed in such a way that it provides easy and quicker access to the neighbouring cities. This city is served by bus transport agencies like NMMT, BEST, MSRTC, KDMT and KMCT. This city also has a good connectivity by railway to the cities like Thane, Kalyan- Dombivli, Mumbai, Andheri and other surrounding cities. The city has excellent connection with Mumbai, Thane, Kalyan-Dombivli and other surrounding areas. Railway system in city consists of commuter rail network, railway stations cum commercial complex, inter-city railway terminals and railway lines for goods traffic. Indian railways had invested 33 percent and CIDCO has invested 67 percent for the development of 79 K.M. rail route in Navi Mumbai, there are six corridors consisting of 15 stations, connecting all nodes and neighbouring towns.

### 2.34 Mode of Transport for Working

The bus services had utilized by 18.8 percent of the total workforce in 2010. (BEST- 12.5 percent, NMMT-3.8 percent, MSRTC-0.2 percent, AC Buses-0.3 percent and school Buses and official Buses – 2 percent). Average travel time to work was about 37.9 minutes in 2010. About mode of transport, detail is given in table no. 2.13.

<b>Table No 2.13: Mode of Transport in Navi Mumbai</b>		
<b>Sr. No.</b>	<b>Mode of transport</b>	<b>Percent</b>
1	Train	36.5
2	Bus	18.8
3	Bike and Scooters	20.5
4	Car	8.1
5	Auto rickshaw	6.1
6	Pedestrian	8.5
7	Taxi	1.0
8	Bicycle	0.5

Source: Socio- Economic Survey of CIDCO, 2010.

### **2.35 Vehicle Ownership**

As Navi Mumbai grew, the residents became prosperous and both public and private transport system was improved. As Navi Mumbaikar adopted new life style, the vehicle owners were increasing in the city. Vehicle ownership in 2005 and 2010 is given in table no. 2.14.

<b>Table No. 2.14: Household Assets in Navi Mumbai</b>			
<b>Sr. No.</b>	<b>Assets</b>	<b>Percentage of Households Owning the Vehicle</b>	
		<b>2005</b>	<b>2010</b>
1	No Vehicle	51	35.7
2	Four-Wheeler- Car/ Jeep	10.3	18.0
3	Two-Wheeler- Bike/ Scooter/ Moped	26.3	49.0
4	Auto Rickshaw	2.0	2.0
5	Truck / Tempo/Bus/ Mini Bus	2.0	1.1
6	Bicycle	14.1	17.5

Source: Socio Economic Survey of CIDCO, 2010

### **2.36 Reasons for Stay in Navi Mumbai**

As this city is settled to curb the congestion of Mumbai, it is attracting population of Mumbai. Out of total population, 35 percent population is immigrated from Mumbai to Navi Mumbai. In 2010, the reasons for staying in Navi Mumbai were as following:

- I. Easily available Houses: 54.3 percent
- II. Availability of Houses at reasonable rate and better place to stay: 46 percent.

### **2.37 Roads**

In Navi Mumbai, roads are designed in such a way that they provided easy and quick access in nodes and across nodes. It consists of city scale roads, arterial roads and local roads. Navi Mumbai has the network of 650 KM. roads between and within the nodes of Navi Mumbai

### **2.38 Electricity**

Maharashtra State Electricity Board from the receiving centres of Kalwa and Apta are providing electricity to the Navi Mumbai. The plots for the purpose to construct sub-stations are earmarked by CIDCO in each node. A new receiving centre has built at Kharghar node, CIDCO operates SCADA from there.

### **2.39 Water Supply**

The ground water in Navi Mumbai is saline therefore, it is not potable. River sources are the major source of the water supply. It is supplied from the river sources of Barvi, Ransai, Patalganga, Hetawane. The MIDC and Maharashtra Jeevan Pradhikaran provided network of water supply in the city. In 2010, 79.4 percent citizens were satisfied with water supply service in Navi Mumbai. NMMC has its own Morbe Dam that is one of unique projects of the Corporation.

### **2.40 Sewerage System**

It is seen that 348 MLD sewage would be generated each day. The sewage system in Navi Mumbai is underground and runs on gravity and pumping mechanism.

### **2.41 Storm-water Drainage**

During rainy season, issue of storm water is a critical issue in Navi Mumbai. Because, 20 percent area of the Navi Mumbai project is low lying and prone to tidal submergence. However, NMMC has their unique (separate) system for sewage and storm water.

### **2.42 Solid Waste Management**

Every day around 325 mt. solid waste generated in the Navi Mumbai. Two dumping sites are served by 14 compacts and six dumping places. The waste is being collected daily in the city.

### **2.43 Schools and Colleges in Navi Mumbai**

The CIDCO, since its inception has given considerable importance to quality of social life. In each node, plots are earmarked for schools, colleges, hospitals, religious places, community centres, sports etc. In 2010, there were 431 schools, in Navi Mumbai affiliated to state board, central board and international standard. In the same year 124 colleges, were having 168 types of course streams.

## **2.44 Summing-Up**

Navi Mumbai is a one of the largest planned cities of 21<sup>st</sup> century in the world. CIDCO played heroic role in the creation of this city. Mainly, in order to accommodate increasing population of Mumbai, Navi Mumbai is settled. In 2010, 35 percent population of Navi Mumbai (2 million) moved from Greater Mumbai to Navi Mumbai. It is 4/5<sup>th</sup> the size of Greater Mumbai and an industrial area of 3/4<sup>th</sup> of Greater Mumbai. This city is planned for the population of 2.0 million; however, it can hold a maximum population of 4.0 million. National Geographic Channel described it is a “Mega City”. The area under Navi Mumbai Municipal Corporation is a little over one third of Navi Mumbai (108.63 sq. km). The CIDCO is an authority for Navi Mumbai project from October 1971. It had created infrastructure and handed over little more than one-third area to NMMC since January 1<sup>st</sup>, 1992. The responsibility of maintenance went to the NMMC even though it was created by CIDCO. Transport system, water supply, drainage, solid waste management are the good practices of the NMMC. However, environmental degradation, reclamation, slum, cutting of mangroves, parking, pollution, removal of hills, etc. are the critical issues in the city

## **2.45 References**

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## Chapter 3

### The Concerned Studies

#### 3.0 Introduction

The economic development of the nation is associated with the urbanisation. Some writers assert that acid (Atomicity, consistency, isolation and durability) test of the development lies in the shift of population from the rural to the urban areas. In 1901, urban population of India accounted 11 percent of the total population. It was lazily reached up to 14 percent in 1941 and 17.6 percent in 1951, even though with liberal definition. In 1961, as strict definition had adopted, urbanisation ratio was 18.3 percent. The same approach had continued in 1971 too. It was as following:

- All places with a municipality, corporation, cantonment board or notified town area or committee.
- All other places which satisfy the criteria- (I) a minimum population of 5000 (II) at least 75 percent of male working population engaged in non- agricultural pursuits (III) a density of population of at least 400 persons per sq. km<sup>-1</sup>

Even though as compare to earlier definition it was strict, with international comparison, it was liberal. For Instance, in Japan if place having population 30,000 or more inhabitants is classified as urban. The relative growth of rural and urban India is shown in table no.3.1

Table No. 3.1: Relative Growth of Urban and Rural Population in India							
Year	Population in Million			Percentage of total population		Increase (%) in urban population during decade	Urban Rural Ratio
	Total	Rural	Urban	Rural	Urban		
1901	232.9	207.3	25.6	89.0	11.0	--	1:8.1
1911	246.0	220.4	25.6	89.6	10.4	0.0	1:8.6
1921	244.3	216.6	27.7	88.7	11.3	+8.25	1:7.8
1931	270.8	237.8	33.0	87.8	12.2	+19.1	1:7.2
1941	309.0	265.5	43.5	85.9	14.1	+32.1	1:6.1
1951	361.1	298.7	62.4	82.7	17.3	+43.2	1:4.7
1961	439.2	360.3	78.9	82.0	18.0	+25.3	1:4.5
1971	548.2	439.1	109.1	80.1	19.9	+38.0	1:3.7
1981*	685.2	525.7	159.5	76.7	23.3	+46.8	1:3.3
1991**	844.3	627.1	217.2	74.3	25.7	+35.6	1:2.9
2001	1027	742.0	258.0	72.2	27.8	+31.2	1:2.6
2011	1210.2	833.3	377.1	68.8	31.2	31.8	1:2.2

Source: Datt & Sundaram, 70<sup>th</sup> revised edition (2015), Indian Economy, S. Chand & company Pvt. Ltd. New Delhi

Note: \*Includes projected population of Assam. \*\*Includes Population projection for Jammu and Kashmir.

Table no. 3.1 reveals that during 1901 to 1951, urban population was not increased significantly. But, after 1951, in three decades urban populations was increased from 62.4 million to 159.5 million in 1981, it indicates that programmes of industrialisation did make an impact in terms of population absorption in urban areas, though this impact is not very discernible. Next decade also indicates a growing trend towards urbanisation. Nevertheless, India was far behind the high-income countries. For instance, in 2001, urbanisation ratio in Australia was 91 percent, 89 percent in United Kingdom, 79 percent in Japan, 77 percent in USA, and 73 percent in Russia.

### 3.1 Trend of Urbanization in India

According to census 2011, there were 53 cities with more than 1 million populations which were 35 in 2001. Indian cities classified based on population as class I to class VI (Class- I Population 100000 & above, Class- II Population 50,000 to 99,999, Class- III Population 20,000 to 49,999, Class- IV Population 10,000 to 19,999, Class- V Population 5,000 to 9,999, Class-VI Population Less than 5,000). In 1951, India had 76 class I cities which accommodate 44.4 percent of urban population. It had increased up to 468 in 2011 and accommodates 70.0 percent of total urban population. Its detail is given in the table no. 3.2

Table no. 3.2: Trend of Urbanization in India							
Year	Class- I	Class- II	Class- III	Class- IV	Class- V	Class-VI	All classes
Number of Urban Agglomeration/ Towns							
1951	76	91	327	608	1124	569	2795
1961	102	129	437	719	711	172	2270
1971	148	173	558	827	623	147	2476
1981	216	270	738	1053	739	229	3245
1991	296	341	927	1135	725	185	3609
2001	394	NA	NA	NA	NA	NA	NA
2011	468	NA	NA	NA	NA	NA	NA
Percentage distribution of Urban population							
1951	44.4	9.8	15.6	13.5	12.9	3.1	100
1961	51.7	11.1	16.9	12.6	6.9	0.8	100
1971	57.2	11.2	15.8	11.0	4.4	0.5	100
1981	61.3	11.6	13.8	10.9	3.5	0.5	100
1991	64.9	10.9	13.3	7.8	2.6	0.3	100
2001	62.3	12.0	14.8	7.9	2.7	0.3	100
2011	70.0	NA	NA	NA	NA	NA	NA

Source: Datt & Sundaram, 70<sup>th</sup> revised edition (2015), Indian Economy, S. Chand & company Pvt. Ltd. New Delhi

Note: Excludes Assam and Jammu & Kashmir; N.A.: Not available

From table no. 3.2, it has concluded:

1. Urban population residing in class I cities, increasing significantly (1951- 44.4 percent & in 2011- 70.0 percent)
2. The relative proportion of urban population in class II and III towns taken together remained constant. (25 to 27 percent during 1951 to 2001)
3. The population share of Class IV, V and VI towns has come down sharply from 29.5 percent to 10.9 percent during 1951 to 2001.

### **3.2 Urbanisation and Economic Development**

Economic development aims at rise in per capita income, reduction in the rate and magnitude in the unemployment and reduction of population below the poverty line. The study found that co-efficient of correlation between the urban ratio and per capita income was +0.75 which was significant. However, there is near absence of a correlation between urbanisation and unemployment (Co- efficient of correlation -0.11, negative though very mild) and urbanisation and reduction of population below poverty line (Co- efficient of correlation -0.39, negative but mild)<sup>2</sup>.

ULBs are governing urban area are Municipal Corporations for large cities having population more than 3,00,000, Municipal Councils to cities having population between 20,000 to 2,99,999 and Nagarpanchyats for the cities having population less than 20,000. Cantonment Boards are working for the township that is belong to defence department of GOI. However, there are various issues related to ULBs in our country like, devolution of resources from state government, vertical imbalance, increasing pressure on infrastructure, solid waste management, water supply, economic inequality, environmental degradation, slum, poverty, housing problems, use of agricultural land, accounting system etc. State to State, there is variation about ULBs. In these area researchers, professors, institutions, have undertaken various studies, out of which some studies have been briefly reviewed from various books, articles and dissertations. In order to precede further study in the selected area, taking review of earlier study is essential.

### **3.3 Concerned Studies**

**P.K. Mahanti and Bijoyini (1998)<sup>3</sup>:** in his research article entitled “Non- Tax Revenue generation by local Government: Ideology and prospect after the constitution provision” concluded that the share of NTR in the total revenue is dissatisfactory and collecting process is not good in our country. It was also found that state governments have not devolved clearly resources to the local governments. Authors suggested that local governments could raise the funds as a loan from banks, LIC and other financial institutions. ‘Grant’ is a factor, which can be used to overcome regional disparities among local governments.

**Dr. Seeta Prabhu, Dr. Suraj Kumar, Ms. Elena Borssati, Mr. Srinivasan, Mr. Aparna Pande, Dr. Sundharam under the leadership of Dr. Brenda Goel Me Sweeney (2000)<sup>4</sup>,** UNDP combinedly prepared Discussion Paper Series-1, ‘Decentralisation in India



Challenges and Opportunities'. They conclude that the local governments must help to become vehicle for social transformation. Strengthening local bodies could be beneficial to deprived section of the society. As local bodies are roots of democracy, human development and strong local democracy can go hand in hand. Authors focused on decentralisation from below not from above which will be helpful to make grand success of democracy.

**H. K. Pradhan** in his book entitled "Local Government Finance and Bond Market Financing India" (October 2002) <sup>5</sup>, concluded that the expenditure function cannot be looked at in isolation from the revenue assignment. In order to maintain the balance between revenue and expenditure, increasing functions of local bodies has to be linked with revenue generation capacities. Further, for the decentralisation, transparency in expenditure assignments and tax devolution is prerequisite for the local government's progress. In India, the potential for the development of local bond is large due to urbanisation and trusts given on urban infrastructure in policies. Nevertheless, there is urgently of creation institutional and supporting mechanism for the same. Significant capacity building efforts are needed to augments the fiscal capability of municipalities to access the municipal bond market.

**Ajit Karnik, Abhay Pethe and A. Karmarkar (2002)**<sup>6</sup>, in their article entitled: "Developing a quantitative framework for determining of funds from State Governments to Local Bodies" opined that the state must transfer the funds to local bodies as per suggestions of finance commission. States should have permanent data collection machinery that will provide continuous inputs for the operationalization of the proposed procedure.

**Abhay Pethe, Ajit Karnik and Dilip Karmarkar, (2003)**<sup>7</sup>, in their article entitled "Assessment of Revenue and Expenditure pattern in ULBs of Maharashtra" focused on different aspects of revenue and expenditure and concluded that there is need to devolve resources state to local governments. They also suggest that ULBs should come out with innovative ideas to increase resources with transparency, efficiency, accountability and improvement in the accounting system.

**Soumen Bagchi (2003)**<sup>8</sup>, in his research article entitled "Pricing and cost recovery of urban services" found that in developing countries there is no pricing policy for urban basic amenities like water supply, sanitation, SWM etc. it is supposed to provide free of cost. He argued that, as major responsibility is devolved to local governments (74<sup>th</sup> constitutional amendment), it is necessary to local bodies to look for alternative resources. In this context, price policy for amenities is necessary.

**Om Prakash Mathur and Sanjukta Ray (2003)**<sup>9</sup>, in their research article entitled "Financing Municipal Services- Reaching out to Capital Markets" had opined that in urban areas services are not at satisfactory level. So, authors emphasize on improve the functioning of institutions, simplification of existing water pricing and tariff structure and regulation mechanism. This study provides a framework for municipalities to assess the creditworthiness for tapping the nascent but expanding capital market for financing urban infrastructure.

**Rumi Aijaz (2004)**<sup>10</sup>, in his working paper no. 19, entitled "Challenges for Urban Local Government in India" focuses on six urban centres from the Haryana, Rajasthan and

Uttaranchal. Its main objectives were to describe the major issues at the local level, light the recent urban sector reforms and identify some important challenges of ULBs in India.

The author found that in decision making all members are not contributing as per their capabilities. Dominant members ignore opinions of some members. Minutes of meetings not recorded properly and consent of all members not being considered. Many times, tenders were biased. To overcome these problems, education is one of the best tools; it must be the criteria, which can bring fresh necessary thinking on all these issues.

**Abhay Pethe and Mala Lalwani (Feb. 2006)<sup>11</sup>** in their research paper published in Economic and Political Weekly under the title “Towards Economic Empowerment of Urban Local Bodies in Maharashtra” concluded that urban infrastructures need more resources in developing countries. Prudent mandate of macroeconomics management has led to a reduction in hand-down from higher Government. In this situation, the sub- national governments should look for other alternatives with a sense of urgency. It is possible to the local Governments to accessing the financial market in general and debt market in particular.

**Anita Rath (2006)<sup>12</sup>**, in her research entitled “Urban Local Finance: Issues and Alternatives”, found that the fiscal reforms of local bodies assume significance now. Great perspicuity needed in addressing these aspects. Abolition of octroi has meant serious fiscal crisis in many cities, as their substitutes have not been equally productive as octroi. At the same time property tax reforms in many Indian cities have their own loopholes.

**Infrastructure Professionals Enterprises (p) Ltd. New Delhi, Synthesis report (2006)<sup>13</sup>**, submitted to Financial Management Unit-I of World Bank, New Delhi. entitled “Public Financial Management and Accountability in Urban Local Bodies in India” shown that there were some key issues like the area of ULBs audit remains weak, gap in operationalizing budgeting, no benchmarks and capacity building plans in most of the ULBs.

They are using external consulting to implement Public Finance Management and Accountability reforms. Ensuring compliance is another weak link in the public finance management and accountability. To overcome these various issues report suggests. 1. Backlog of audit must be clear, imparting training to the audit staff with reference to new changes. 2. Double entry accrual account system and modern techniques. 3. Budgeting manual must be considered for evolving budgeting into an efficient planning, review and management through output budgeting, multiyear rolling plans, scientific forecasting and zero-base budgeting. 3. Taking review of current availability of staff and training requirements.

**Manjushree N. Ghodke, (April, 2007)<sup>14</sup>**, entitled “Financing of Urban Infrastructure” submitted to University of Mumbai find that issue of financial autonomy of the local bodies is yet to be operationalised. As it exists today, the local governments still depend on devolution from the higher level of Government. Given the resource crunch at the national and state level, it has become imperative for the local bodies to find their own resources. One important source with substantial spin-off benefits would be accessing options, which could be useful for urban local bodies to access market funds. However, majority of the

ULBs in India may not be able to meet the conditions like accounting standard and rating. However, the Government recognised this issue and introduced the scheme of 'Pooled Finance'.

**Asha Kishor Khilare, (August 2007)<sup>15</sup>**, entitled "Finances of Pimpri- Chinchwad Municipal corporation" Submitted to Dr. Babasaheb Ambedkar Marathwada University Aurangabad, she has analysed the fiscal performance of the Corporation through various indicators such as own tax efforts, fiscal discipline, cost of collection, cost effectiveness of water supply, quality of expenditure, per-capita revenue and expenditure. She concluded that Octroi constitutes the most important sources of PCMC. It had contributed on an average (78.73 percent) to the revenue receipts and 89.96 percent to total tax revenue during 1990-91 to 2002-03, followed by property tax (6.49 percent). These both taxes were important sources of the revenue.

The contribution of tax revenue to the total revenue of PCMC was on an average 87.43 percent, which is relatively higher than other sources of the revenue. Among non- tax revenue (11.33 percent to total revenue receipts), Administration was the significant source (65.37 percent), followed by civil engineering (11.03 percent), education (8.44 percent), medical and public health (5.85 percent) and entertainment (4.46 percent).

The contribution of revenue receipts (tax+ non-tax) of PCMC was on an average (98.76 percent) during the analysis period. The capital receipts contribution was very small. Regarding expenditure, the share of revenue expenditure was on an average 49.94 percent, capital expenditure 45.37 percent and reserve fund 4.69 percent. The growth rate for revenue expenditure was faster than growth rate of capital expenditure. Out of total revenue expenditure the highest amount spent on medical and public health (25.37 percent), followed by administration (24.76 percent), public utilities (21.51 percent), education (17.46 percent) and lowest amount (0.71 percent) on social services. As far as capital account is concerned, the highest amount spent on public utility services (26.49 percent), slum and backward class improvement (8.10 percent) and for education 4.13 percent. Finally, author concluded that revenue account of PCMC was persistently surplus. However, capital account was in deficit position.

**P.K. Mohanty, B.M. Misra, Rajan Goyal and P. D. Jeromi (December, 2007)<sup>16</sup>**, in their study no. 26 entitled Municipal Finances in India: An Assessment, used data of 35 municipal corporations of India. They analysed differentiation in performances and provisions on civic amenities. They compared findings with international experience and made 33 suggestions to improve the performance of the Indian Municipal systems. Authors found that aggregate revenue of all ULBs in India was around 0.75 percent to GDP. But it was 6 percent in South Africa, 5 percent in Brazil and 4.5 percent in Poland. They also found that expenditure of the Indian municipal corporations was lower than that required for providing a minimum level of civic amenities. Specially, in Bihar and U.P. there was less spending and Maharashtra and Gujrat were belonging to best performers. It attributed to endogenous and exogenous reasons. Authors concluded that lower decentralisation and higher dependency leads to higher under- spending. Therefore, there is need lines of reforms to restructure the financial system of municipals by revisiting expenditure assignments and revenue assignments. It includes, alternative to octroi, more efforts to increase local revenue, reforming property tax, use of urban land (adopting user pay, beneficiaries pay,

polluters pay approach), easing borrowing restrictions of ULBs Municipal Banks, Bonds, developing PPP model, addressing poverty alleviation through linkage to buoyant redistributive taxes etc. Authors also suggest that there is need of uniformity in accounting system of the ULBs.

**Ramakrishna Nallathiga (2008)**<sup>17</sup>, in his research paper entitled ‘Trends and perspectives of urban public finance in selected countries and India found that there is a heterogeneity in the financial system of the ULBs in the world. In spite, few lessons can be learnt regarding evolving local governments’ finance of countries like India. According to him, there was a stable level of spending on public services, recreation, amenities and culture and the expenditure on energy, agriculture had been almost negligent in most of the countries. They show the array of deviations in the areas like housing, education and transport which was a priority sector in developed countries. Author found that municipal revenue and expenditure are very small in India (0.5 percent) as compared to western countries.

**Prasad Ashok Purekar, (March 2009)**<sup>18</sup>, in his Ph. D. Research entitled “Finances of Nagpur Municipal Corporation” submitted to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad which was carried out totally based on secondary data. Researcher found that the Octroi, Property tax, Water tax and Government grants were the main contributor of the revenue receipts. The suspended income comprises advances and deposits as well as investments. Its share to total receipts was on an average 7.78 percentage during the analysis period. The average share of Government Grants in total receipts turned out to 13.24 percent during the period under consideration in this study. On the other hand, the proportion of capital expenditure was 25.04 percent to the total expenditure with growth rate of 16.53 percent. As far as revenue expenditure is concerned, establishment expenditure (30.71 percent, contingency expenditure (18.95 percent) and pension expenditure (7.80 percent) were the main contributors.

**Jyoti P. Patil, (Oct. 2009)**<sup>19</sup>, in his research article published in southern economist entitled ‘Urban Solid Waste Management: A Micro Study’ found that economic development is an important factor affecting the solid waste generation. Industrialisation, urbanisation and the consequent depletion of natural resources are leading to an exhaustion of non- renewable capital assets. Over population is a major cause of environmental imbalance. Changing consumption pattern also effects on solid waste.<sup>16</sup>

**Dr. S. Manohaaran, (Sep. 2009)**<sup>20</sup>, in his research paper entitled ‘Environmental Degradation and Urbanisation: Focus on Chennai’, published in southern economist concluded that each environmental and social parameter of the Indian metropolitan cities is very much deprived. In case adequate steps are not taken to prevent pollution and to improve the quality of life by providing more social amenities, the life of the urban dwellers may become more miserable which may be the cause of health hazards and worst devastation.

**N. S. Channappa and Prof. M. Devraj, (Nov. 2009)**<sup>21</sup>, in their research paper entitled ‘Role of Municipalities in Urban Poverty Alleviation’ argued that ULBs can identify the problems, set priorities and formulate the policies for urban poverty alleviation in a specific local situation in addition to effectively implementing the central as well as state governments programmes. Really, municipalities can play a big role in urban poverty

alleviation through mobilizing resources and working with local communities in a participatory manner.

**Govinda Rao and Richard M. Brid, (April, 2010)<sup>22</sup>**, in their working paper no 2010-68, entitled Urban Governance and Finance in India, found that cities are central drivers of the growth; it is depended on that up to what extent cities are promoting competition, accelerating growth and galvanising growth, nature and adequacy of urban governance and finance. Authors found that clarity in expenditure assignment determines the efficiency of services.

But, existing system-having ambiguities in the assignment. Further, in urban area, there is not only large deficit of infrastructure but also it is growing. On other hand, resources are scant. Its result is present poor infrastructure and significant under- provision of municipal services. In order to bridge this gap, reforms in property tax system, adequate recovery of fees and services charges, private sectors participation and development of the municipal bond market is necessary.

**Ms. Jay Narella, (April, 2010)<sup>23</sup>**, in his research paper entitled Analysis of Revenue Sources of Tipture and Kunigal Corporation: A Micro Study concluded that ultimate goal of all responsible governments has been establishment of the welfare society. However, rapid growing population and urbanisation, the functional responsibilities of ULBs have increased tremendously. However, efficiencies with which these local bodies would operate is determined to a large extent on how their finances are organised in relation to their functional responsibilities. Provision of civic amenities and welfare services require adequate financial resources.

**Gundegowda, (Oct. 2010)<sup>24</sup>**, in his research work published in southern economist entitled 'Women Participation in the Local Institutions: An Analytical Study of Karnataka' found that womens' participation is just pertinence. Because of reservation, women are elected but they lack power. Women were passive partner in a sense that decisions taken by the male members of the panchayats and they are just informed. Most of the time women were dummies and their relatives like husband of sons took part in the meetings.

**Rajendra Adhikari, (2011)<sup>25</sup>**, study submitted to North South University, Bangladesh, entitled Citizens' Satisfaction with Municipal Services: A Case of Bharatpur Municipality, Chitwan Nepal. Author has done this research keeping two questions in his view. First, evaluate the status and analyse the factors affecting citizens' satisfaction against the services provided by Bharatpur municipality. He concluded that socio- demographic factor and length of inhabitation demonstrated a significant relationship with citizens' satisfaction. However, institutional performance was more significant variable than socio- demographic variable as there was lack of information dissemination, unavailability of staff, costly services, less effective mechanism for grievance handling etc.

**M. Abdul and Abdus Shukur, (June 2011)<sup>26</sup>**, in their research paper entitled 'Increasing Urban Residential Land Values of Chennai City', published southern economist found that boom in the real estate market has been witnessed in the most of the metropolitan cities in the early eighties, The land value have risen abnormally which resulted in speculation and

concentration of land in fewer hands. Increasing pressure of population owing to industrialisation, migration and housing leads to intense competition for this scarce resource. so, value of it increasing fast.

**D.T. Shinde, G. H. Barhate and N.Y. Raje Shirke (July, 2011)<sup>27</sup>**, in their research paper on “Urban Public Transport: A Study on Service Quality”, found that there was absence of good quality public transport, of which people reject the use and take the alternative mode of transport. It affected on revenue of Navi Mumbai Municipal Transport and result in traffic congestion.

**Ramkrishana Nallathiga, (July – Dec. 2011)<sup>28</sup>**, in his research paper entitled ‘Core Urban Services, O & M cost and their Recovery through user charges: A study of select urban areas in Andhra Pradesh. Concluded that in current system, operation and maintenance cost recovery was not contemplated. However, JNNURM reform agenda calls for achieve the cost recovery in a time bound manner by all ULBs. He suggested restructuring of the service staffing, outsourcing of peripheral services (like solid waste collection), and involvement of non- profit-making organisations. In this way, costs can be minimised. On other hand, it can ensure the better service delivery. He also suggests that user charge levy cannot be based on principle one-size fits all. ULBs can invent the ways and means of using different varieties of levy and tariffs methods of recover the operation and maintenance cost.

**Poornachandra S. And Venkatesh S. (Dec. 2011)<sup>29</sup>**, in their research article entitled Urban Infrastructure Projects, published in southern economist, argued that urban infrastructure requires massive investment. It may be justified only when services are realised by the citizens. Creation of user base is an important step towards making the projects sustainable. Service improvement and adopting policy, there by every citizen to realize the services are main reasons for creation of user base.

**Anand Sahasranaman, (Jan. 2012)<sup>30</sup>**, in his research entitled ‘Panchayat Finances and need for Devolutions from the State Governments’, found that judicious increase in village panchayat’s tax and fee regimes will make them financially strong and they will be in a position to self- finance a substantial portion of their infrastructure and service needs. Their dependence on state government could end. This fundamental change will be the signal of transition towards the 73<sup>rd</sup> Constitutional Amendment in India.

**Ramakrisna Nallathiga (March, 2012)<sup>31</sup>**, in his research publication entitled ‘Analysing the Finances of Urban Local Bodies in India: A Cross Sectional Study, found that most of the ULBs are generating small revenue surplus with low resource gaps, more than that, they were spending lower than that required for providing a minimum level of civic amenities. It attributed to the dependency of ULBs regarding raising revenue, expenditure accessing debt etc. Author also found that there were regional disparities in performance of ULBs. For instance, in U.P and Bihar situation was fare worse as compare to Maharashtra and Gujrat. He also found that ULBs have scope to improve the performance of tax collection, user charges and go for PPP and market fund.

**Ms. Sujata Khadilkar (March, 2012)<sup>32</sup>**, in her article entitled ‘Analysis of Pro-Environments Expenditure patterns of Navi Mumbai Municipal Corporation- An Urban

Local Body in Maharashtra, India, concluded that revenue expenditure on environmental monitoring is declining. Capital expenditure on solid waste management and cattle pond has declined to zero. According to her, capital expenditure on garden has highest rise but green area per thousand persons has declined.

**Naresh Kumar (April, 2012)<sup>33</sup>**, in his article entitled 'Revenue and Expenditure pattern of Municipal Corporations of Panjab, concluded that establishment expenditure was more (40 to 60 percent) for all the corporations during 2002- 3 to 2009- 10. All corporations had mostly surplus budgets. It appeared a strange, but it was safety game of the corporations. Because, they were uncertain about grants and loans which they were receiving from the concerned governments. Furthermore, it was concluded that collected revenue was not depend on size of the city and population, it was depended on industry as corporations were getting VAT share in lieu of octroi which was major source of the revenue to corporations.

**Sidhakam Bhattacharyya and Gautam Bandopadhyay, (Jan. 2013)<sup>34</sup>**, in their research article entitled 'Urban Local Bodies in India: Financial Control for Better Financial Performance' argued that ULBs having more responsibilities and comparatively less resources, most of the times these are depended on upper level governments. Therefore, particularly of small and medium ULBs performance is not satisfactory. Less devolutions and inability to mobilize own revenue sources, make them necessary to follow effective expenditure management for better financial performance.

**S. Dharmaraj and R. Karthikeyan (Jan. 2013)<sup>35</sup>**, in their research article entitled Sustainable Solution of Urban Infrastructural Development argued that India is a part of the global trend towards increasing urbanisation in which more than half of population is living in cities and towns. Urbanisation is the unstoppable process. GOI is also supporting to urbanisation and governing bodies of the same in order to making them efficient and enable too long-time plan, investment in infrastructure to face the problems like poverty. Even though, there are some limitations, cities are considered an important engine of economic growth.

**R. Karthikeyan and S. Dharmaraj, (Feb. 2013)<sup>36</sup>**, in their research paper entitled 'Urban Slums in India: Problems and Challenges' published in southern economist concluded that majority of slum dwellers identify themselves with the city rather than with their native place and plan to settle permanently. In spite of poor conditions in slums, second generation residents who are not nostalgic about their rural background felt that life in slum is reasonably tolerable and city life is probably better than rural life. Authors suggested that the local and upper tier government, NGOs, etc. must collaborate with urban poor in upgrading slums and providing alternative to slum formation.

**Abhay M. Patil (Feb. 2013)<sup>37</sup>**, his research paper entitled 'Diagnosis of Municipal Solid Waste Management' concluded that present system of MSWM in Belgaum city was satisfactory. He argued that residents should be sensitizing towards the importance of segregation of waste at source. Because, after collecting it, that was not only tedious but also wasteful. It should be recognised as resource material for the production of energy, compost and fuel depending on the technological viability, local condition and sustainability of the project on long-term basis.

**B. Laksmi Bhavani and E. Nagabhushan Rao (Feb. 2013)<sup>38</sup>**, in their research article entitled 'Expenditure in Greater Visakhapatnam Municipal Corporation: An Analysis' observed that the expenditure has increased to 16.50 percent in GVMC during 1994- 95 to 2008-09. The expenditure pattern before up gradation of Visakhapatnam Municipality into greater status (GVMC) was within the budgetary balance and could able to render service to the public in a satisfactory mode. However, situation has become beyond control after the upgrading V.M. as GVMC. Therefore, the policy makers while upgrading the municipalities, they have to take into consideration another parameter also to make it healthy.

**Amitabh Knundy, (April, 2013)<sup>39</sup>**, in his research paper entitled as 'Making Indian Cities Slum-Free' published in Economic and political Weekly concluded that the plan of making urban India slum-free faced serious difficulties in eleventh five-year plan period and it looks like these will persist in the twelve five-year plan as well. He found that the schemes in operation lack a reliable framework for identifying non-tenable slums and legitimate slum households that are entitled to get dwelling units. Further, the design of Rajiv Awas Yojana betrays a big – city bias to attract global capital and there is no clear road map for its time bound implementation.

**Satish K. And P.A. Rego, (Sep., 2013)<sup>40</sup>**, in their research paper entitled 'Impact of Urbanisation on Agriculture in Dakshin Kannada District' observed that concerned district was highly urbanised in Karnataka State. However, at block/ taluka level there was a large variation. The share of agriculture in GDP of the district was decreasing as urbanisation was increasing. Author also found that there was a decline in the utilisation of land for agriculture but cash crop area was increasing.

**Kandimuthu, (Sep., 2013)<sup>41</sup>**, in his research paper entitled 'Role of Grant - in – Aid in empowering Panchayats found that the grant –in- aid consists of the total estimated expenditure of the PRI is 98 percent. It was the main source to PRI. However, Author suggests that Panchayat Pradhan should be given more powers to assess his own requirements and financial planning. It will help to make them self-sufficient and strengthen the grassroots of the democracy.

**Vikash Bhubaneswar, (2013)<sup>42</sup>**, in his book entitled 'Status of Urban Local Bodies: A Study of Odisha' found that nominated and ex-office members are generally not attending the regular meetings but interfere in the decision-making process in different ways. He also found that, even though there is provision of one- third reservation for women still this group is unable to make substantial contribution in decision. Mainly it is because of male dominance. He also found that small ULBs were financially weak and depends on State Government. There was overlapping of work between ULBs and State Government. For instance, ULBs assigned work of town planning at the same time housing board is exists. Sectoral programmes were creating confusion to the local governments. Insufficient staff, less awareness among elected members about roles and responsibilities, lack of proper grievances and redress cell etc. were the major issues about ULBs. Therefore, reforms are necessary to improve the performance of the ULBs in Odisha.



**Dinesh Mohan, (Nov. 2013)<sup>43</sup>**, in his research article entitled 'Moving around Indian Cities' published in economic and politic Weekly explained that seven years after the national urban transport policy was announced by GOI, the problems identified in it remain the same or have worsened. Land use planning has not enabled the lower- income groups to live close to work, road use is more dominated by private vehicles and there is little money to improve facilities for pedestrians and bicyclists. Author also concluded that data on urban transport in India is unreliable; it is challenge to keep the share of non-personal transport at 70 percent as income increase in our cities. Therefore, for walking and bicycling have to be made safer and public transport more attractive by making it readily available.

**T. Ramesh, (Jan. 2014)<sup>44</sup>**, in his research paper entitled 'Local Self- Government and Its Role in Women empowerment' found that 73<sup>rd</sup> constitutional amendment has positive impact on panchayat administration. Women's status is improved. PRIs have played relatively positive role in providing infrastructure, employment opportunities, promoted Self Help Groups. Therefore, there is a change in attitude of rural women and becoming conscious of employment and education.

**Suman Paul, (2014)<sup>45</sup>**, research article entitled, 'Finances and Governances of Urban Local Bodies: An Approach of Urban Development Perspective from a developing country (India). In this research cross sectional analysis of the finances of 24 ULBs in North Parbanas District of West Bengal has studied. Author has developed Urban Governance Index and concluded that per capita income of ULB is the significant parameter of municipal finance. Based on it, he found the significance variations in performances of concerned municipalities. Municipalities were facing range of challenges arising from urbanisation, increased demand for infrastructure, rehabilitations, poverty etc. Recession of 2007-08 make dull growth rate of revenue of Municipalities. Good Governance can help in this situation.

**Dr. Hitesh Katyal and Rajkumari (March, 2014)<sup>46</sup>**, in their research article entitled 'Financial Analysis of Urban local Bodies of India: A Study of selected Municipal Corporation of Panjab, found that since past couple of decades, India has seen the implementation and framing of efforts to modernise local governments and also revealed in the course of the efforts a commitment to local government. This research shows that, state and centre governments made sincere efforts to strengthen the local bodies by allocating various revenue sources to them. On the basis of income and expenditure of the ULBs in Panjab, Ludhiana Municipal corporation stood at first rank, it was followed by Amritsar, Jalandhar and Patiala. In this research paper the difference between revenue and expenditure treated as profit to the ULBs.

**D. Ravindra Prasad and V. Srinivas Chary, (April- June, 2014)<sup>47</sup>**, in their research paper entitled 'The Fourteenth Finance Commission and Urban Services' argued that ad-hoc nature of grants-in-aid to ULBs from SFCs and FCs is unable to meet the growing urban infrastructural and service delivery need. It attributed to weak SFCs, absence of benchmarks and database on services, weak municipal capacities etc. With benchmark in place for core services, data availability from census and SLB notification, ad- hoc approach should give way to need and formula-based approach. This paradigm shift is necessary to address the upcoming demographic challenges.

Therefore, fourteenth finance commission need to develop formula to grant -in-aid based on cost of services. SFCs also adopt the performance-based approach in spite of ad hoc approach while allocating the grants. These measures will help to improve their performances, strengthen governance and deepen the democratic decentralisation.

**R. Venkatesh, (June, 2014)<sup>48</sup>**, in his research article entitled ‘Challenges and Futuristic Perspectives of Urbanisation’ found that traditionally, urbanisation policies were negative in India. No sincere efforts have made to implement uniform urban policy to get proper urban management. However, nowadays we have changed our view as increased urbanisation has been posing severe threats on the development of the country. Now it considered as positive and supportive force for the social and economic development. Accordingly, we must identify the sustainable ways to accelerate it in the interest of the citizens and governments.

**Simanti Bandyopdhyay, (July, 2014)<sup>49</sup>**, in her research article entitled ‘Critical Issues in Municipal Finance: A summary for India found that there is a wide diversity in the functions and thus revenue handlings of cities. Furthermore, the extent of decentralisation is not uniform across the state, diverse composition of revenues, differing trends in the growth pattern of reforms, less expenditure, unusual potential of revenue generation unequal assignments of revenue etc. It is because of size of the city, development stage etc. Author argued that good performance of the city attracts more educated people and it helps to increases revenue.

**V. Srinivas and D. Ravindra Prasad, (2014)<sup>50</sup>**, in their book entitled Municipal Finances and Service Delivery in India, summarised as following:

1. Governing cities is becoming complex, as finances are inadequate, gap in services, weak institutional framework etc. To overcome on these problems, making clear list of municipal finance, reforms in the property tax like periodic revision, strengthening assessment, levy and collection procedures, improving billing and collection efficiency, identifying un- assessed and under assessed properties etc. should prioritized by ULBs.
2. The service charges should be revised by linking them with service improvements.
3. ULBs should exploit all the untapped sources which municipal acts empower them.
4. As per recommended by 13<sup>th</sup> finance commission, property tax board should be constituted and make it operational for correcting the ills and inadequacies in property tax administration.
5. Concerned state governments should remove the restriction about borrowing powers of ULBs.
6. The audit reports of CAG and the director of local fund audit should place before legislature to ensure transparency and financial accountability of ULBs.

**Dr. Lina R. Thatte and Ms. H. A. Chande, (2014)<sup>51</sup>**, in their research paper Evolution of the Role of the Municipal Corporation in City’s Sustainable Development: Perspective of Industry. Authors concluded that governance of Thane Municipal Corporation was good one. Industries wishes to contribute for betterment of infrastructure. It implies that there is a huge potential for levy of environmental tax and high level of participation in environment activities by the industrial units. At the same time, they are expecting good transport

facilities, more parking space, public toilets, traffic control, cleanliness, beautification of the city, improvement in green space etc.

**K. Manoharan Nair and R. Ratheesh, (Feb. 2015)<sup>52</sup>**, in their research paper entitled ‘Gram Panchyat and Resource Mobilisation: A Study on Karakulam Gram Panchayat, concluded that as 73<sup>rd</sup> and 74<sup>th</sup> constitutional amendments of 1992 have added a new dimension of fiscal federalism in India, full implications of which still remain to be recognised. The question of rationalising the flow of funds from the state to the sub-state level assumes new significance as responsibilities of local governments increased.

**Bhanu Joshi and Shahana Sheikh, (Feb. 2015)<sup>53</sup>**, in their research paper entitled ‘State Versus Municipal Funds, Rethinking urban finance in Delhi. Municipal Corporation of Delhi was and trifurcated into North Delhi, South Delhi and East Delhi Municipal Corporations in 2011 by Government of Delhi. It had expressed that smaller corporations would translate better service delivery. However, distribution of asset and liabilities among them was severely criticised. Because, smallest East Delhi M.C. received highest share of debt while its revenue share remained smallest. Furthermore, according to 2011 census, out of total population (1, 66, 45, 937), 24 percent population was living under East Delhi M.C., 31 percent under NDMC and 45 percent under SDMC. However, these corporations did not received governments grants according to their population ratio. (EDMC- 24.60 percent, NDMC-40.40 percent and SDMC 34.90 percent). Obviously, NDMC was receiving more grants. Therefore, government and Municipal valuation committee must rethink about it.

**Charan Singh, (May, 2016)<sup>54</sup>**, working paper no. 493 entitled Financing of Urban Local Bodies in India. The Indian economy is poised for high economic growth in future mainly because of population dividend and urbanisation. However, infrastructure in the country is not adequate to support such a potential high growth. Purchasing power of the people can be tapped for the investment. In this research paper, author also found that, devolution of resources not happened yet. Therefore, till ULBs are depends on upper tier governments to meet their regular expenditure. Charan Singh suggested alternative source of financial resource in terms of municipal bonds, which have floated by select ULBs since 1997. However, municipal bond market was not well developed yet. There is need of national body that will be work for municipal bond market in our country.

**D. Jeevan Kumar, (Jan. 2016)<sup>55</sup>**, in his research article entitled Bridging the Urban Divide: Case for Inclusive urbanisation. Author had opinion after study that cities are generally more unequal than the countries they are found. In order to avoid it, inclusive urbanisation, which would provide sustainable development, is need of time. Well-managed, inclusive cities can promote a model that upholds the rights of every inhabitant.

**Shodhaganga, ‘Finances of Urban Local Government’<sup>56</sup>**, Kautilya, a great Indian Philosopher remarked about urban local bodies that all undertakings depend upon finance, hence foremost attention should be paid to the treasury.

### **3.4 Conclusions**

Recently, urbanisation ratio is increasing in India. However, India is much behind as compared to other advanced countries of the world. In earlier period, urbanisation was not emphasised by the planner. Now, it is recognised by the planner and decision makers, urban area is an engine of growth. Therefore, planners have given due respect to this area. But this area is facing multifarious problems like more pressure on infrastructure, issues related to solid waste management, water supply, transportation, sanitation, environment degradation, lack of funds to ULBs, less devolution, more responsibilities (vertical imbalance), slums, poverty etc. In this critical situation, good governance of ULBs, more devolution of resources from state governments, efficient tax collection, developing municipal bond market, improving accounting system, zero budgeting, outcome budget, use of ICT, citizens' participation and qualified and responsible elected representatives is need of the time to improve the performance of ULBs in India.

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## Chapter 4

# Revenue of Navi-Mumbai Municipal Corporation

### 4.0 Introduction

This chapter deals with the total receipts of N.M.M.C. The structure of total receipts comprises of tax revenue, non-tax revenue includes fees and income from various services, taxes collected on behalf of Maharashtra Government, various grants, capital revenue from internal sources and loan. In its composition, trend is analysed in this chapter. However, more focus is on own sources of revenue i.e., tax revenue and non-tax revenue. There are fluctuations in the different sources of revenue because of different reasons during the analysis period.

### 4.1 Total Receipts and Total Expenditure of NMMC

The income of the Government / Local Government from own sources is called public income or public revenue. It includes different taxes, fees and service charges. In addition to that, different grants from State Government, Central Government etc., loans also included in total receipts of the corporation. Table no 4.1 shows the trend in the total receipts and total expenditure of N.M.M.C. during 2000-01 to 2012-13.

Table no.4.1 reveals that the total receipts including Education Tax and Employment Guarantee Tax is increased from Rs. 19727.89 lacks to Rs. 122978.52 Lacks during the assessment period. Total Expenditure has increased from Rs. 19973.66 lacks to Rs. 119758.02 lacks during the same period. The budgets of NMMC shows deficit for the years 2000-01, 2001-02, 2003-04, 2004-05, 2006-07, 2009-10, 2010-11 and it was in surplus position in the remaining years of consideration. An average growth rate for receipt was 17.20 percent and that was 17.98 percent for total expenditure. Growth rate of receipts and expenditure was negative (-1.89 percent and -11.90 percent respectively for receipts and expenditure) in 2002-03. Again, it was negative for expenditure in 2007-08 and 2011-12. The total receipts' growth rate was highest in 2005-06 (41.27 percent) and lowest in 2011-12 (0.64 percent). For total the expenditure, it was highest in 2006-07 (56.36 percent).

Notably, Coefficient of Variation reveals that fluctuations are more in the total expenditure than total receipts. CAGR for total receipt and total expenditure is same i.e., 15 percent.

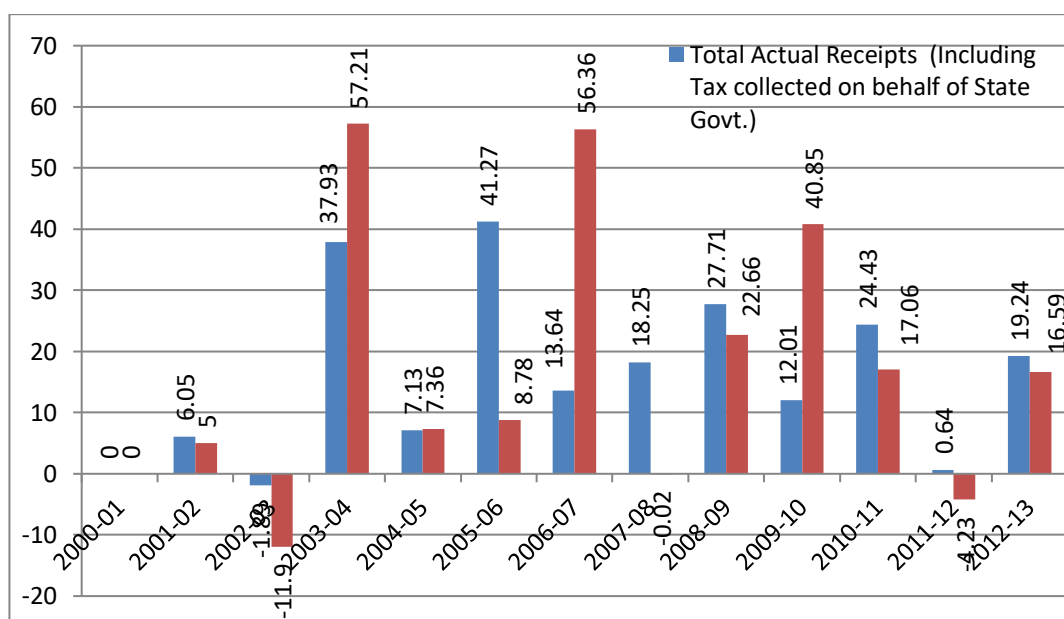
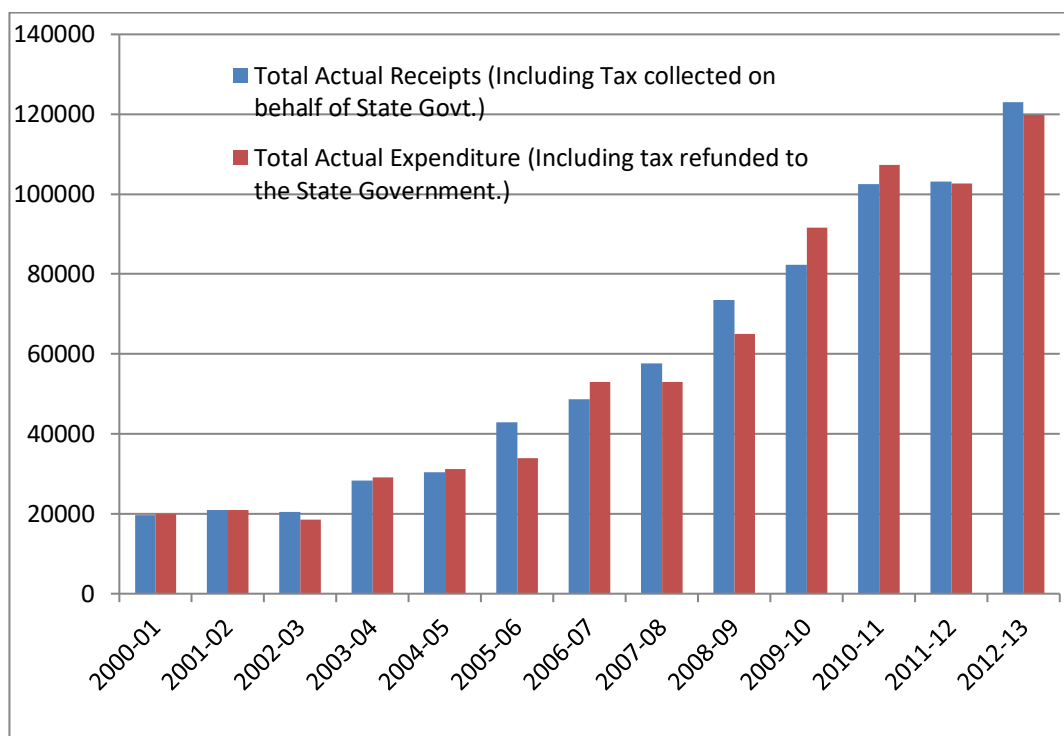


Table no. 4.1 shows its detail.

<b>Table No. 4.1: NMMC's Total Actual Receipts and Expenditure (Rs. In Lakh)</b>					
<b>Year</b>	<b>Total Actual Receipts (Including Tax collected on behalf of State Govt.)</b>	<b>Total Actual Expenditure (Including tax refunded to the State Government.)</b>	<b>Surplus/ Deficit (+/-)</b>	<b>Growth Rate of Column-1</b>	<b>Growth Rate of Column-2</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
2000-01	19727.89	19973.66	-245.77	--	--
2001-02	20920.98	20972.92	-51.94	6.05	5.00
2002-03	20526.59	18478.03	2048.56	-1.89	-11.90
2003-04	28312.52	29049.35	-736.83	37.93	57.21
2004-05	30331.00	31186.35	-855.35	7.13	7.36
2005-06	42849.77	33924.70	8925.07	41.27	8.78
2006-07	48692.80	53046.18	-4353.38	13.64	56.36
2007-08	57576.84	53035.04	4541.80	18.25	-0.02
2008-09	73532.19	65054.19	8478.00	27.71	22.66
2009-10	82363.18	91627.18	-9264.00	12.01	40.85
2010-11	102485.66	107256.01	-4770.35	24.43	17.06
2011-12	103138.11	102718.89	419.22	0.64	-4.23
2012-13	122978.52	119758.02	3220.50	19.24	16.59
Total	753616.05	746080.52	7535.53	206.40	215.72
Average	57956.62	57390.81	565.81	17.20	17.98
S.D.	35684.42	36492.72	--	--	--
C.V.	61.57	63.59	--	--	--
CAGR	0.15	0.15	--	--	--
Correlation Coefficient	0.99	--	--	--	--

**Graph No. 4.1**

**NMMC's Total Actual Receipts and Expenditure (Rs. In Lakh)**



## 4.2 Composition of Total Receipts of NMMC

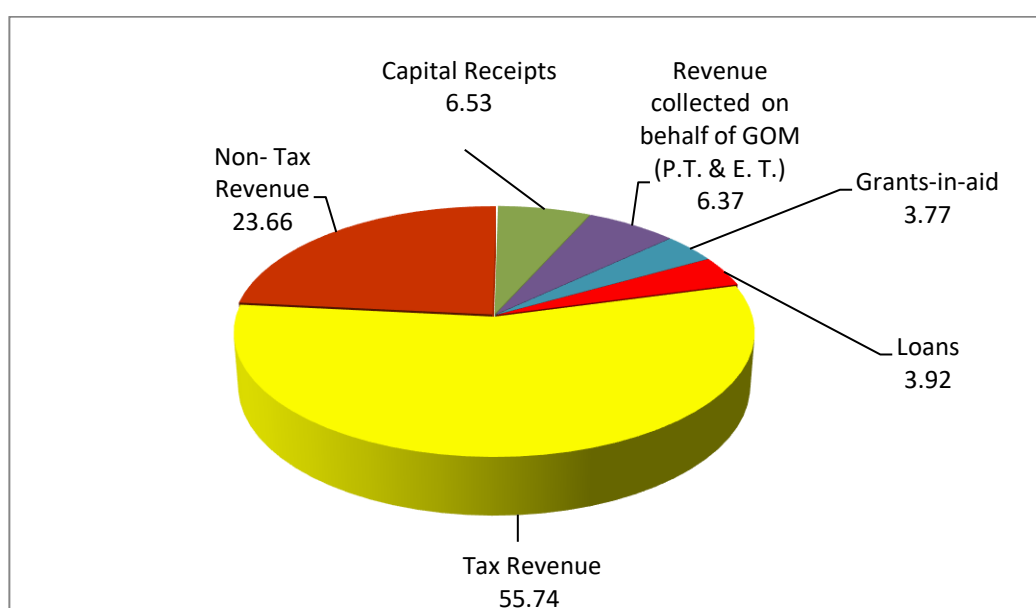
Total receipts comprise of tax revenue, non-tax revenue, internal capital account receipts, grants and loan. Tax and non-tax revenue sources are significant from NMMC's point of view as these are belonging to their own rights. Its composition is shown in table no. 4.2

Table No.4.2: NMMC's Receipts (Rs. In Lakh.)							
Year	Tax Revenue	Non- Tax Revenue	Capital Receipts	Receipts on behalf of State Govt. (State Education and Employment Guarantee Tax.)	Grants-in-aid-	Loans	Total Receipts
	1	2	3	4	5	6	7
2000-01	11399.71	4305.71	634.2	2076.35	92.92	1219.00	19727.89
2001-02	12719.44	4728.87	1182.64	2017.27	70.76	202.00	20920.98
2002-03	11585.01	5642.15	987.60	2264.00	47.83	0	20526.59
2003-04	14757.79	10172.93	832.36	2236.00	120.84	192.60	28312.52
2004-05	16608.96	8779.79	2586.67	2203.29	53.39	98.90	30331.00
2005-06	20572.74	10999.24	8349.74	2845.16	82.89	0	42849.77
2006-07	26018.6	11986.9	6325.93	2205.92	2155.45	0	48692.80
2007-08	33900.78	13147.77	5971.7	2625.40	2111.19	0	57756.84
2008-09	41373.76	16533.36	2661.43	2618.75	10344.89	0	73532.19
2009-10	46236.37	14389.68	3668.27	3377.72	2852.23	11838.91	82363.18
2010-11	54625.04	17745.74	3493.98	4152.89	5964.89	16503.12	102485.66
2011-12	63129.1	19509.23	3029.20	4606.24	10272.34	2592.00	103138.11
2012-13	68525.1	26499.68	3139.61	5638.05	7097.08	12079.00	122978.52
Total	421452.4	164441.05	42863.33	38867.04	41266.70	44725.53	753616.05
Average	32419.42	12649.31	3297.18	2989.77	3174.36	3440.43	57970.47
S.D.	20453.78	6383.21	2345.37	1137.58	3923.96	5865.38	35684.30
C.V.	63.09	50.46	71.13	38.05	123.61	170.48	61.56
CAGR	0.15	0.15	0.13	0.08	0.40	0.19	0.15

<b>Table No.4.3: NMMC's Receipts (Rs. In Lakh.)</b>							
	<b>Tax Revenue</b>	<b>Non- Tax Revenue</b>	<b>Capital Receipts</b>	<b>Receipts on behalf of State Govt. (State Education and Employment Guarantee Tax.)</b>	<b>Grants-in-aid-</b>	<b>Loans</b>	<b>Total Receipts</b>
<b>Year</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
2000-01	57.78	21.83	3.21	10.52	0.47	6.18	100
2001-02	60.8	22.6	5.65	9.64	0.34	0.97	100
2002-03	56.44	27.49	4.81	11.03	0.23	0	100
2003-04	52.12	35.93	2.94	7.9	0.43	0.68	100
2004-05	54.76	28.95	8.53	7.26	0.18	0.33	100
2005-06	48.01	25.67	19.49	6.64	0.19	0	100
2006-07	53.43	24.62	12.99	4.53	4.43	0	100
2007-08	58.70	22.76	10.34	4.55	3.66	0	100
2008-09	56.27	22.48	3.62	3.56	14.07	0	100
2009-10	56.14	17.47	4.45	4.1	3.46	14.37	100
2010-11	53.3	17.32	3.41	4.05	5.82	16.1	100
2011-12	61.21	18.92	2.94	4.47	9.96	2.51	100
2012-13	55.72	21.55	2.55	4.58	5.77	9.82	100
Average	55.74	23.66	6.53	6.37	3.77	3.92	99.99
Max.	61.21	35.93	19.49	11.03	14.07	16.1	--
Min.	48.01	17.32	2.55	3.56	0.18	0	--

**Graph No.4.2**

**NMMC's Receipts during 2000-01 to 2012-13 (In percent)**



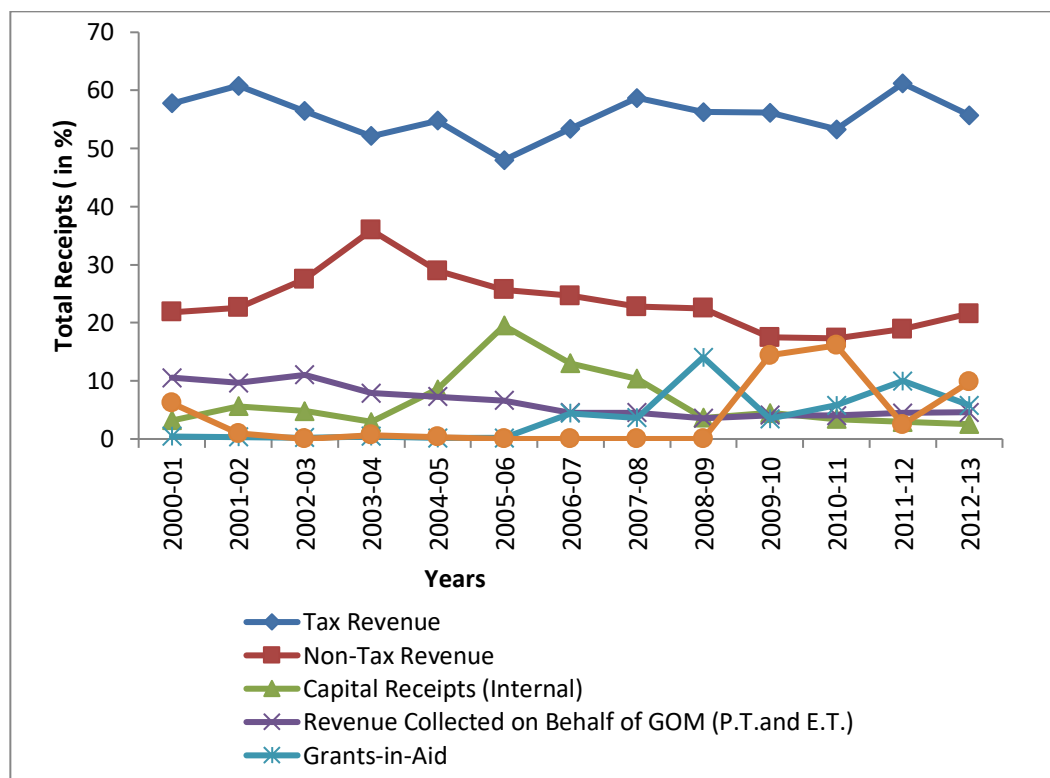


Table no 4.2 and 4.3 shows the receipts collected by NMMC in terms of absolute amount and in terms of percentage respectively. Tax and non-tax revenue are the important sources of revenue. Its contribution was an average 55.74 percent and 23.66 percent to the total receipts respectively during the analysis period. But the fluctuations are more in tax revenue (c.v. 63.09) as compared to non- tax revenue (c.v.50.46).

Capital Receipts (internal) are mainly in form of deposits. It includes Administrative Services, Town Planning, Road, Fire Brigade, Vishnudas Bhawe Auditorium, Disaster Management Cell, Water Supply, Basic Services to Urban Poor Project, Public Health Engineering, and Security Deposit etc. Initially its contribution was increasing then decreasing. Its average contribution to the total revenue was 6.53 percent during the analysis period. The Employment Guarantee Scheme tax and Education tax collected by NMMC is supposed to refund to the State Government. So, it is not fully available to the NMMC for dispose. The grants received by corporation contributed on an average 3.77 percent to the total receipts during the period considered for analysis. Its ratio was highest (14.07 percent) in 2008-09 and lowest (0.18 percent) in 2004-05. The loan taken by NMMC contributed on an average 3.92 percent to the total receipts. It was highest i.e., 16.1 percent in 2010-11. Out of 13 years of consideration, in five years corporation has not taken loan.

NMMC is levying Cess, Property Tax, Water Benefit Tax, Sewerage Tax, Sewerage Benefit Tax, Street Cess, Tree Cess, Municipal Education Tax and Fire Tax. Cess and Property Tax are important sources of revenue. Both contributed on an average about 90 percent to the total tax revenue of NMMC. It is followed by sewerage tax i.e., 3.04 percent. Other taxes' contribution was merely around 1 to 2 percent. Non tax revenue comprises of fees and

services. For Town Planning, License, Encroachment, Art and Social Welfare Centre, Pay and Park fees are charged by NMMC.

Mainly services of water supply, Administrative Services, Road, Hospital and Public Health, Public Health Engineering services are provided by the corporation and charged. Non tax revenue accounted on an average 23.66 percent to the total receipts. Among services, water supply, administrative services and road services are important. Among total proceeds from fees, town planning is significant. It contributed on an average 94.72 percent to the total revenue from fees.

The receipts of Navi Mumbai Municipal Corporation can be written in a form of equation with an average value as follows:

$$TR = F (Tr + NTr + Cr + TCs + G + L)$$

Here,

TR = Total Receipts

F= Shows the functional relationship

Tr = Tax Revenue : 55.74 Percent

NTr = Non-Tax Revenue : 23.66 Percent

Cr = Capital receipts. (Internal) : 6.53 Percent

TCs = Tax collected on behalf of Government of Maharashtra. : 6.37 Percent

G = Grants : 3.77 Percent

L = Loans : 3.92 Percent

Among these sources, fluctuations are more in loan and less in tax collected on behalf of State Government. Both had not much significance as source of revenue to the NMMC. The source of non- tax revenue has less fluctuations than tax revenue. However, tax revenue is one of the dominant sources of revenue of the NMMC.

### **4.3 Tax Revenue**

NMMC has right to levy cess /octroi/ local body tax, property tax, water benefit tax, sewerage tax, sewerage benefit tax, street cess, tree cess, municipal education tax and fire tax. NMMC's revenue from all taxes during the analysis period is shown in table no 4.4.

Revenue of Navi-Mumbai Municipal Corporation

Table No. 4.4: NMMC's Tax Revenue (Rs. In Lakh)										
Year	Cess	Property Tax	Water Benefit Tax	Sewerage Tax	Sewerage Benefit Tax	Street Cess	Tree Cess	Municipal Education Tax	Fire Tax	Total
	1	2	3	4	5	6	7	8	9	10
2000-01	6677.28	3507.39	197.78	343.09	197.78	188.56	99.27	188.56	0	11399.71
2001-02	7449.56	4055.6	189.28	369.68	189.28	185.47	95.1	185.47	0	12719.44
2002-03	6922.98	3183.03	185	555	185	185	92	185	92	11585.01
2003-04	8681.58	4582.91	162	485	162	228	114	228	114	14757.49
2004-05	9448.32	5278.2	190.08	741	191.08	252.11	128.03	252.11	128.03	16608.96
2005-06	12637.19	5721.68	239.76	718.29	239.76	335.31	174.37	335.31	171.07	20572.74
2006-07	16188.09	7361.73	267.37	801	267.37	373.91	194.45	373.91	190.77	26018.6
2007-08	20954.48	7361.73	322.82	967.11	322.82	471.46	234.78	431.46	230.33	31296.99
2008-09	26158.48	7361.73	379.94	1138.25	379.94	554.89	276.32	507.81	271.08	37028.44
2009-10	29954.47	7361.73	414.33	1241.31	414.33	605.12	301.32	553.76	295.6	41141.97
2010-11	34537.56	15474.14	499.62	1496.85	499.62	729.68	363.36	667.76	356.45	54625.04
2011-12	40582.18	17500.02	546.58	1637.51	546.58	798.26	397.5	730.52	389.95	63129.1
2012-13	42062.88	20495.84	646.15	1935.86	646.15	943.7	469.91	863.61	461	68525.1
Total	262255.05	109245.73	4240.71	12429.95	4241.71	5851.47	2940.41	5503.28	2700.28	409408.59
Average	20173.47	8403.52	326.21	956.15	326.29	450.11	226.19	423.33	207.71	31492.97
S.D.	13144.96	5664.16	158.97	505.03	158.90	257.34	126.82	227.00	143.81	20071.62
C.V.	65.16	67.40	48.73	52.82	48.70	57.17	56.07	53.62	69.24	63.73
CAGR	0.15	0.15	0.10	0.14	0.10	0.13	0.13	0.12	0.13	0.15

Table No. 4.5: NMMC's Tax Revenue (In percent)										
Year	Cess	Property Tax	Water Benefit Tax	Sewerage Tax	Sewerage Benefit Tax	Street Cess	Tree Cess	Municipal Education Tax	Fire Tax	Total
	1	2	3	4	5	6	7	8	9	10
2000-01	58.6	30.8	1.7	3.0	1.7	1.7	0.9	1.7	0.0	100.0
2001-02	58.6	31.9	1.5	2.9	1.5	1.5	0.8	1.5	0.0	100.0
2002-03	59.8	27.5	1.6	4.8	1.6	1.6	0.8	1.6	0.8	100.0
2003-04	58.8	31.1	1.1	3.3	1.1	1.5	0.8	1.5	0.8	100.0
2004-05	56.9	31.8	1.1	4.5	1.2	1.5	0.8	1.5	0.8	100.0
2005-06	61.4	27.8	1.2	3.5	1.2	1.6	0.9	1.6	0.8	100.0
2006-07	62.2	28.3	1.0	3.1	1.0	1.4	0.8	1.4	0.7	100.0
2007-08	67.0	23.5	1.0	3.1	1.0	1.5	0.8	1.4	0.7	100.0
2008-09	70.6	19.9	1.0	3.1	1.0	1.5	0.7	1.4	0.7	100.0
2009-10	72.8	17.9	1.0	3.0	1.0	1.5	0.7	1.4	0.7	100.0
2010-11	63.2	28.3	0.9	2.7	0.9	1.3	0.7	1.2	0.7	100.0
2011-12	64.3	27.7	0.9	2.6	0.9	1.3	0.6	1.2	0.6	100.0
2012-13	61.4	29.9	0.9	2.8	0.9	1.4	0.7	1.3	0.7	100.0
Average	62.7	27.4	1.2	3.3	1.2	1.5	0.8	1.4	0.6	100.0
Max.	72.8	31.9	1.7	4.8	1.7	1.7	0.9	1.7	0.8	--
Min.	56.9	17.9	0.9	2.6	0.9	1.3	0.6	1.2	0.0	--

Graph No.4.3

NMMC's Tax Revenue during 2000-01 to 201-13 (In percent)

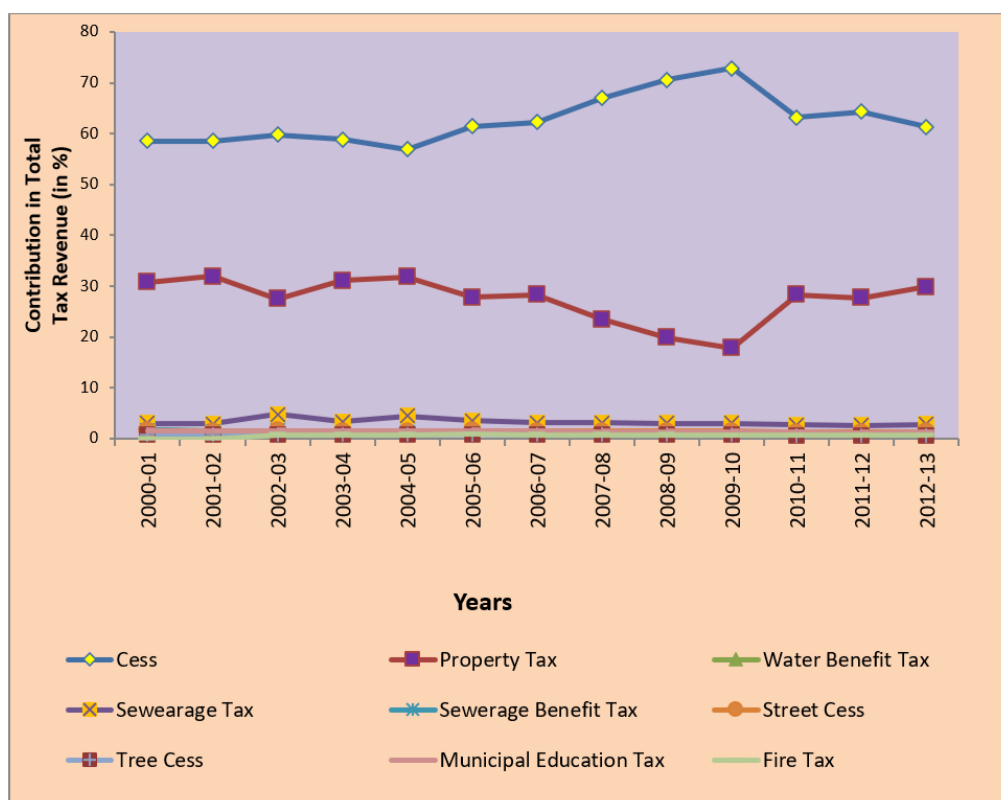
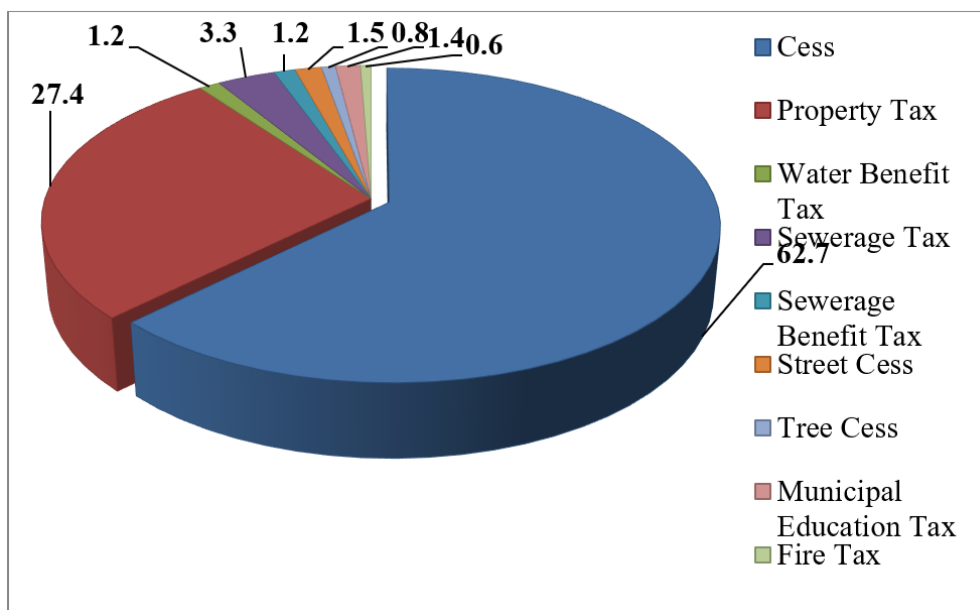




Table no 4.4 and 4.5 shown the revenue from various taxes and their proportion respectively to the total tax proceeds of NMMC. Among all taxes levied by the Corporation, cess is significant. The revenue from cess was Rs. 6677.28 lakh in the year 2000-01. It has been increased up to Rs. 42062.88 lakh in 2012-13. It's average contribution to the total tax revenue was 62.7 percent with CAGR of 15 percent. The property tax was second most important source among taxes. Its average contribution was 27.4 percent during the analysis period.

It was followed by sewerage tax with an average 3.3 percent contribution to the total tax revenue. Notably, cess is replaced by Local Body Tax (LBT) on April 1<sup>st</sup>, 2013, recently, Local Body Tax also scrapped by Government of Maharashtra. Therefore, how to compensate fully this source is main question before of not only NMMC, but also for other Corporations of Maharashtra. Government of Maharashtra is also thinking about it.

However, State Government is giving packages and followed wait and watch policy till commencement of Goods and Service Tax by Government of India. (As GOM has given Rs. 2092 crore for August to November 2015 and Rs. 2016 crore for December 2015 to March 2016 to Corporations in the State). It shows that Corporations' financial dependency on upper-level Governments will be increase in future. The water benefit tax, sewerage benefit tax, street cess, tree cess, municipal education cess and fire tax contribution was comparatively less in total tax proceeds of NMMC (around only one percent) during the analysis period.

#### 4.4 Non-Tax Revenue

Non tax revenue comprises of service charges and fees. NMMC provides various services to the citizens. It includes water supply, administrative services, road, hospital services and public health, public health engineering and other services. Among fees includes license fees, town planning fees, encroachment fees, pay and park fees and fees for art and social welfare centre. Non tax revenue of NMMC is shown in table no 4.6. It reveals that the contribution of revenue from services is decreasing from 89.11 percent to 39.22 percent in total non-tax revenue during 2000-01 to 2012-13.

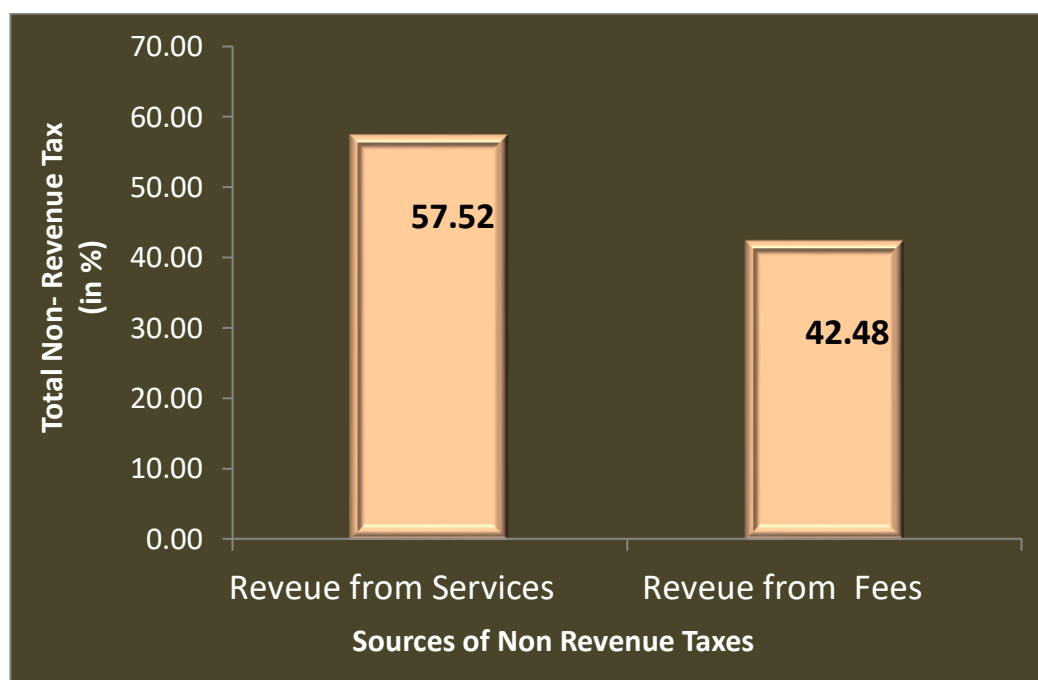
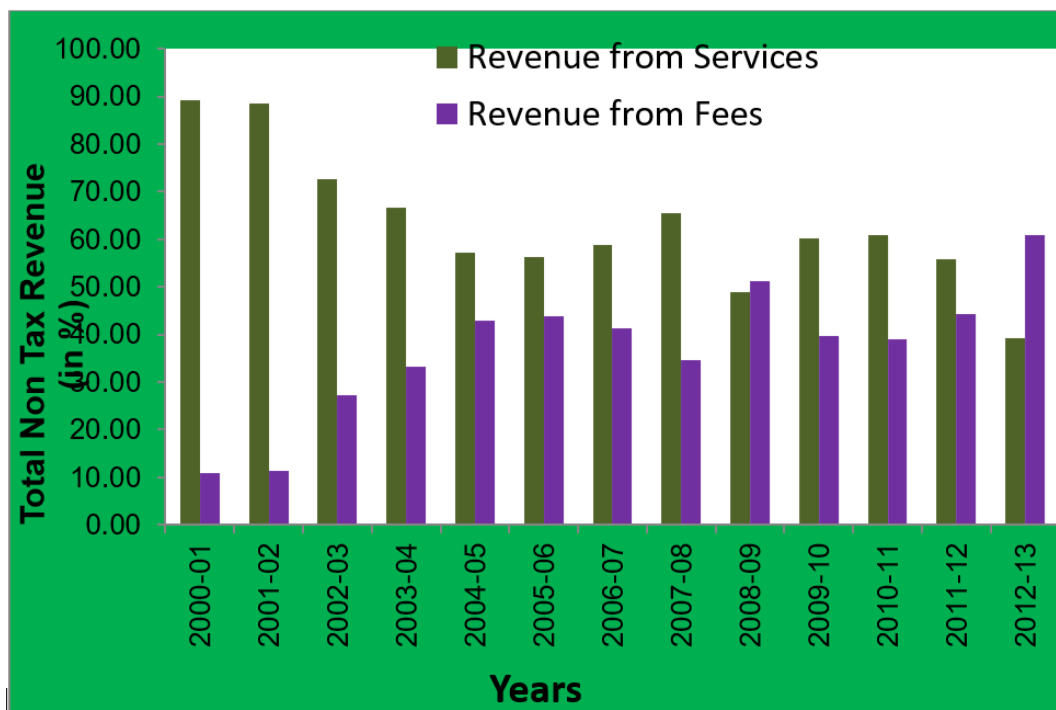
On the other hand, contribution of fees has increased from 10.89 percent to 60.78 percent during the same period. The coefficient of variations of fees (77.41 percent) was more than coefficient of variations of revenue from services (34.96 percent). On an average revenue from services was contributed 57.52 percent to the total non-tax revenue and revenue from fees had contributed 42.48 percent to the same. Its detail account is shown in table no.4.6

Table No.4.6: NMMC's Non- Tax Revenue (Rs. In lakh)			
Year	Revenue from Services	Revenue from Fees	Total Non-Tax Revenue
	1	2	3
2000-01	3837.01	468.7	4305.71
%	89.11	10.89	100.00
2001-02	4189.52	539.35	4728.87

Table No.4.6: NMMC's Non- Tax Revenue (Rs. In lakh)			
Year	Revenue from Services	Revenue from Fees	Total Non-Tax Revenue
	1	2	3
%	88.59	11.41	100.00
2002-03	4100.59	1541.56	5642.15
%	72.68	27.32	100.00
2003-04	6790	3382.93	10172.93
%	66.75	33.25	100.00
2004-05	5013.99	3765.8	8779.79
%	57.11	42.89	100.00
2005-06	6181.69	4817.55	10999.24
%	56.20	43.80	100.00
2006-07	7036.96	4949.94	11986.9
%	58.71	41.29	100.00
2007-08	8601.54	4546.23	13147.77
%	65.42	34.58	100.00
2008-09	8070.39	8462.97	16533.36
%	48.81	51.19	100.00
2009-10	8667.19	5722.49	14389.68
%	60.23	39.77	100.00
2010-11	10806.18	6939.56	17745.74
%	60.89	39.11	100.00
2011-12	10890.91	8618.97	19509.88
%	55.82	44.18	100.00
2012-13	10394.68	16107.12	26501.8
%	39.22	60.78	100.00
Total	94580.65	69863.17	164443.82
Average	7275.43	5374.09	12649.52
%	57.52	42.48	100.00
S.D.	2543.34	4160.25	6383.65
C.V.	34.96	77.41	50.47

**Graph No.4.4**

**NMMC's Non- Tax Revenue during 2000-01 to 2012-13 (Rs. percent)**



## 4.5 Revenue from Various Services

Providing various services efficiently is the prime objective of the NMMC. The service of water supply 24 × 7 is one of the unique not only in Maharashtra but also in India. It was commended by Government of India too. Providing services to citizen is an end and to collect revenue from it is a means. However, it brings some revenue to the corporation which is shown in detail in table no 4.7. As far as the revenue from services is concerned, service of water supply is significant. On an average, its contribution was 62.90 percent to the total revenue from services during the analysis period. Its coefficient of variation is also comparatively less i.e., 32.98 percent. It was followed by service of road with average contribution of 15.41 percent, administrative services accounted 9.78 percent, hospital services and public health contributed 3.19 percent, public health engineering 3.86 percent, Morbe Dam 0.45 percent and other services contributed 4.40 percent during the analysis period.

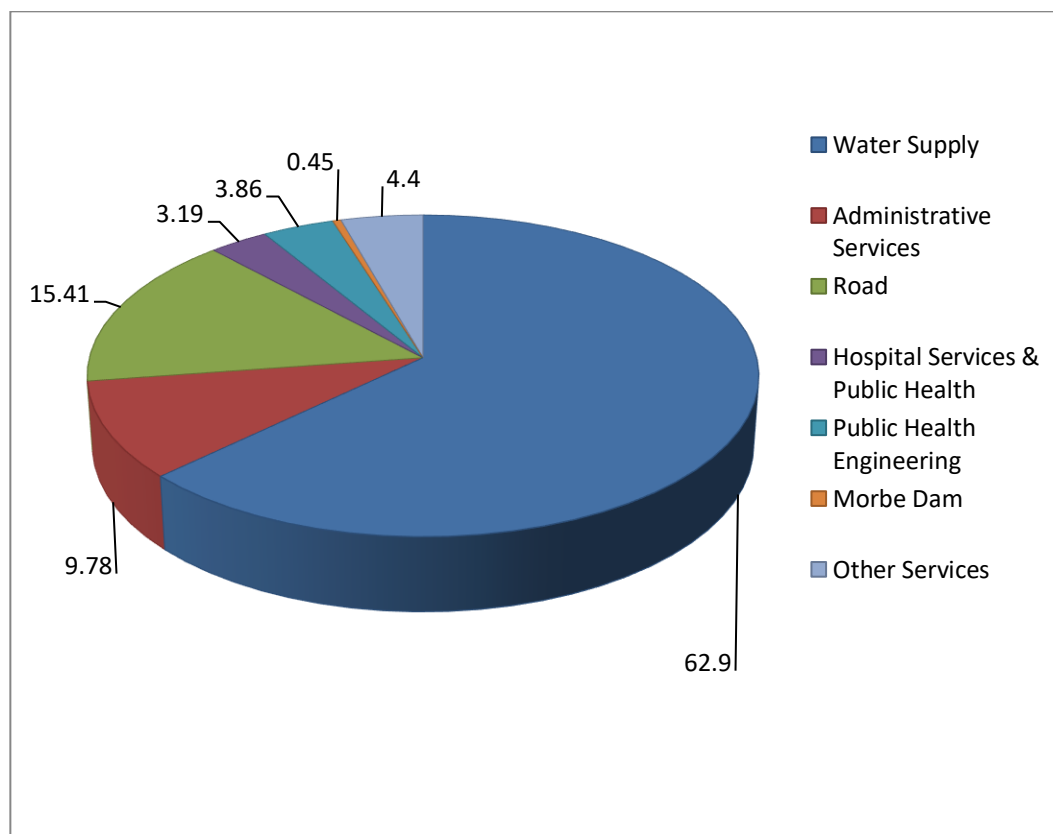
Other services include municipal estate, cess registration charge, town planning, street lighting, lakes and pond, veterinary services, solid waste management, dumping ground, public toilets, malaria eradication, fire brigade, Vishnudas Bhave Auditorium, welfare schemes for Schedule Caste, Scheduled Tribe, Other Backward Class, handicapped, public toilets in residential area/slum area, primary education, engineering works in urban poor areas, providing civic amenities in condominium and secondary education.

<b>Table No.4.7: NMMC's Revenue from various services (Rs. In Lakh)</b>								
<b>Year</b>	<b>Water Supply</b>	<b>Administrative Services</b>	<b>Road</b>	<b>Hospital Services &amp; Public Health</b>	<b>Public Health Engineering</b>	<b>Morbe Dam</b>	<b>Other Services</b>	<b>Total</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
2000-01	2661.39	652.19	289.41	69.53	69.38	0	95.11	3837.01
%	69.36	17.00	7.54	1.81	1.81	0	2.48	100.00
2001-02	2726.76	737.14	420.98	75.81	108.59	0	120.24	4189.52
%	65.09	17.59	10.05	1.81	2.59	0	2.87	100.00
2002-03	2658.90	537.78	388.49	141.76	231.15	0	142.51	4100.59
%	64.84	13.11	9.47	3.46	5.64	0	3.48	100.00
2003-04	4380.77	586.64	783.6	181	356.99	0	501	6790
%	64.52	8.64	11.54	2.67	5.26	0	7.38	100.00
2004-05	3628	111.63	306.1	230.12	435.59	0	302.55	5013.99
%	72.36	2.23	6.10	4.59	8.69	0	6.03	100.00
2005-06	3960.66	720.92	358.98	275.89	409.58	0	455.66	6181.69
%	64.07	11.66	5.81	4.46	6.63	0	7.37	100.00
2006-07	4458.67	1049.28	551.09	244.84	494.16	0	238.92	7036.96
%	63.36	14.91	7.83	3.48	7.02	0	3.40	100.00
2007-08	5189.65	488.96	1885.63	243.82	398.28	0	395.2	8601.54
%	60.33	5.68	21.92	2.83	4.63	0	4.59	100.00
2008-09	4382.52	358.32	2418.46	322.92	233.48	0	354.69	8070.39
%	54.30	4.44	29.97	4.00	2.89	0	4.39	100.00
2009-10	5357.83	1562.64	946.78	300.45	162.19	0	337.3	8667.19
%	61.82	18.03	10.92	3.47	1.87	0	3.89	100.00
2010-11	6124.05	771.23	2782.82	297.79	317.87	81.43	430.99	10806.18
%	56.67	7.14	25.75	2.76	2.94	0.75	3.99	100.00

<b>Table No.4.7: NMMC's Revenue from various services (Rs. In Lakh)</b>								
<b>Year</b>	<b>Water Supply</b>	<b>Administrative Services</b>	<b>Road</b>	<b>Hospital Services &amp; Public Health</b>	<b>Public Health Engineering</b>	<b>Morbe Dam</b>	<b>Other Services</b>	<b>Total</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
2011-12	6605.67	693.88	2485.86	297.39	226.59	286.76	294.76	10890.91
%	60.65	6.37	22.83	2.73	2.08	2.63	2.71	100.00
2012-13	7351.63	983.49	960.93	337.37	210.21	59.88	491.17	10394.68
%	70.72	9.46	9.24	3.25	2.02	0.58	4.73	100.00
Total	59486.50	9254.10	14579.13	3018.69	3654.06	428.07	4160.10	94580.65
%	62.90	9.78	15.41	3.19	3.86	0.45	4.40	100.00
Average	4575.88	711.85	1121.47	232.21	281.08	32.93	320.01	7275.43
%	62.90	9.78	15.41	3.19	3.86	0.45	4.40	100.00
S.D.	1509.29	353.62	928.71	89.64	131.69	80.80	138.27	2543.34
C.V.	32.98	49.68	82.81	38.60	46.85	245.39	43.21	34.96
Mini. of %	54.30	2.23	5.81	1.81	1.81	0.58	2.48	--
Maxi. of %	72.36	18.03	29.97	4.59	8.69	2.63	7.38	--

**Graph No.4.5**

**NMMC's Average Revenue from various services during 2000-01 to 2012-13**



#### 4.6 Revenue from Water Supply

Providing water for domestic use is one of the prime objectives of the Corporation. The Corporation has purchased Morbe Dam to meet the thirst of the city of Navi Mumbai. The table no. 4.8 shown the detail of revenue from water supply during 2000-01 to 2012-13.

Table No. 4.8: NMMC's Revenue from water Supply (Rs. In Lakh)				
Year	Revenue from Water Services	Water Tanker rent, transfer fees, Advertise on Municipal Properties (Pipeline)	Revenue from other sources	Total
	1	2	3	4
2000-01	2597.16	3.56	60.67	2661.39
2001-02	2686.34	1.27	39.15	2726.76
2002-03	2534.24	3.03	121.63	2658.9
2003-04	4052.69	0.31	327.77	4380.77
2004-05	3615.14	2.2	10.66	3628.00
2005-06	3947.43	2.95	10.28	3960.66
2006-07	4444.93	0	13.74	4458.67
2007-08	5137.00	0	52.65	5189.65
2008-09	4363.98	0	18.54	4382.52
2009-10	5342.89	0	14.94	5357.83
2010-11	6112.84	0	11.21	6124.05
2011-12	6590.61	0	15.06	6605.67
2012-13	7303.73	0	47.9	7351.63
Total	58729.00	13.32	744.2	59486.50
Average	4517.61	1.02	57.25	4575.88
%	98.73	0.02	1.25	100.00
S.D.	1528.32	1.40	87.19	1509.29
C.V.	33.83	136.46	152.31	32.98
CAGR	0.08	-0.03	-0.02	0.08

Table no 4.8 reveals that income from water services was significant contributor in total revenue from water supply services. It accounted 98.73 percent to the total revenue from water supply service during the analysis period. Revenue from water services includes water charges- domestic metered, domestic unmetered, institutional water charges, commercial metered, sale of water to tankers, sale of bulk water, regulation of illegal water connection, penalty for misuse of water. Its CAGR was comparatively more (8 percent) and coefficient of variation was less. On the other hand, others included water connection security fees, water tanker rent and transfer fees. Its contribution was negligible and CAGR was negative.

<b>Table No. 4.9: NMMC's Revenue from Administrative Service (Rs. In Lakh)</b>											
<b>Year</b>	<b>Continuous interaction monthly subscription</b>	<b>Sale of Diary</b>	<b>Sale of old papers</b>	<b>Penalty</b>	<b>Scrap Sale - Vehicle Insurance</b>	<b>Right to Information</b>	<b>Rebate for recovery of Govt. Taxes 7</b>	<b>Sant Gadge Baba Award</b>	<b>Interest Income from fix deposit</b>	<b>Sale of election Information Book</b>	<b>Total</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>
2000-01	0	0	0	0	6.02	0	0	0	646.17	0	652.19
2001-02	0.36	0	0	13	0	0	0	0	723.78	0	737.14
2002-03	0.3	0.06	0.01	0.14	0	0	0	0	537.27	0	537.78
2003-04	0.1	0.14	2.05	0.03	0.23	0	48.97	0	535.12	0	586.64
2004-05	0.05	0.50	0.01	0.68	15.31	0	47.69	0	47.39	0	111.63
2005-06	0.01	0.26	0.14	0.88	0	0.41	58.52	0	660.70	0	720.92
2006-07	00	00	0.46	20.52	0	0.43	46.77	0	981.10	0	1049.28
2007-08	0.01	0	0.87	60.28	0	0.38	42.29	0	385.13	0	488.96
2008-09	0.01	0	0.23	94.2	0	0.44	60.59	0	202.85	0	358.32
2009-10	0.31	0	2.06	109.46	0	0.76	67.46	0	1372.34	10.25	1562.64
2010-11	0.05	0	0.27	96.74	1.66	1	84.07	3	577.73	6.71	771.23
2011-12	0.29	0	1.76	68.70	0.01	1.08	89.9	5	527.14	0	693.88
2012-13	0.03	0	0.24	0	0	1.25	129.49	14	838.47	0.01	983.49
Total	1.52	0.96	8.10	464.63	23.23	5.75	675.75	22	8035.19	16.97	9254.10
Average	0.12	0.07	0.62	35.74	1.79	0.44	51.98	1.69	618.09	1.31	711.85
%	0.02	0.01	0.09	5.02	0.25	0.06	7.30	0.24	86.83	0.18	100.00

#### 4.7 Revenue from General Administrative Services

It includes continuous interaction monthly subscription/sale of diary/housing form fees, sale of old papers/scrap sale, scrap sale (computers), penalty, right to information fees, rebate for recovery of Government (Education Cess, Employment Guarantee Tax, labour cess), sale of election information book, amount of Sant Gadge Maharaj Award, interest income from fix deposits.

Table no 4.9 shows the detail about it during the analysis period. Among these various services, as a source of revenue, income from fix deposit is significant. Its average contribution was 86.83 percent during the analysis period, followed by rebate for recovery of government taxes (average 7.30 percent), penalty (5.02 percent) during the same period. Remaining sources have contributed less than one percent of average.

#### 4.8 Revenue from Road Services

Road is one of the important parts of the infrastructure, which determines the speed, cost of transportation and safety of the citizens. Even though, the railway is available in the city, more pressure is on road transportation system under the jurisdiction of the Corporation. Table 4.10 shows the detail of revenue earned by NMMC from the road services.

<b>Table No. 4.10: NMMC's Revenue from Road Services (Rs. In Lakh)</b>					
<b>Year</b>	<b>Road and Gutter Cutting</b>	<b>Water Connection Road cutting charges</b>	<b>Penalty</b>	<b>Tender fees/E-Tendering Sale</b>	<b>Total</b>
	1	2	3	4	5
2000-01	0	247.89	0	41.52	289.41
2001-02	351.21	27.38	0	42.39	420.98
2002-03	353.85	0	1.52	33.12	388.49
2003-04	114.49	587.52		81.59	783.60
2004-05	181.92	58.72	0	65.46	306.10
2005-06	288.07	30.41	0	40.50	358.98
2006-07	482.81	0	0	68.28	551.09
2007-08	1853.04	0	0	32.59	1885.63
2008-09	2333.53	0	0	84.93	2418.46
2009-10	831.82	0	0	114.96	946.78
2010-11	2713.63	0	0	69.19	2782.82
2011-12	2378.64	0	0	107.22	2485.86
2012-13	856.79	0	0	104.14	960.93
Total	12739.80	951.92	1.52	885.89	14579.13
Average	979.98	73.22	0.13	68.15	1121.47
%	87.38	6.53	0.01	6.08	100.00
S.D.	972.93	167.60	0.46	29.15	934.20
C.V.	99.28	228.89	361.81	42.77	83.30
CAGR	0.08	-0.30	NA	0.07	0.10

Table no. 4.10 reveals that road and gutter cutting brings 87.38 percent revenue of total revenue from road services during the analysis period. But it is not a creditable. Once we cut the road or gutter, its quality deteriorates, which should not happen. So, with proper planning, considering all possibilities in future, work should be undertaken. Tender fees contributed 6.08 percent to the total revenue from road services during the same period.

#### 4.9 Revenue from Hospital Services & Public Health

Actually, income from hospital services and public health could not be considered as a revenue source of the Corporation. It is part of social obligation of the NMMC. Providing health facilities to the citizen is one of the obligatory and constitutional functions of the Corporation. It includes OPD charges, IPD charges, registration fees for private hospitals, training fees, certificates, selling of scrap, ambulance fees, pathology testing charges, operation charges, X- ray, super speciality service charges, canteen rent, medical store rent, Birth and Death registration fees, royalty and gate pass etc.



OPD and IPD charges combinedly contributed more than 50 percent of total revenue from Hospital Services and Health during the analysis period. Its detail account is shown in table no. 4.11

**Table No. 4.11: NMMC's Revenue from Public Health and Hospital Services (Rs. In Lakh)**

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2000-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	69.53
2001-02	75.81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75.81
2002-03	43.6	86.15	0.03	0	4.45	0.53	2.05	0	0	0	0	3.5	0.74	0	0.71	0	141.76
2003-04	68	46.95	0.34	0	13.45	0.6	2.44	41.14	4.75	2.31	0	0.41	0.61	0	0	0	181
2004-05	15.08	133.72	0	7.13	1.42	0.41	0	24.6	6.45	30.38	0	10.23	0.63	0	0	0	230.05
2005-06	39.42	74	0.1	43.82	2.24	0.42	2.3	43.94	5.04	49.66	0	13	1.95	0	0	0	275.89
2006-07	40.19	103.02	0	37.66	1.68	0.48	1.89	21.52	5.25	33.44	13.64	16.77	1.52	7.97	0	0	285.03
2007-08	21.3	111.14	0	30.49	6.47	0.16	0.68	29.35	3.55	37.69	0	0	2.99	0	0	0	243.82
2008-09	49.88	53.64	0	7.19	1.5	8.01	0.36	39.03	0.02	40.09	63.13	8.19	4.12	3.78	0	43.98	322.92
2009-10	103.03	34.67	0	36.78	1.05	0	1.8	6.19	0	5.65	77.37	25.87	4.03	3.25	0	0.76	300.45
2010-11	118.65	20.43	1.37	31.45	1.2	0.01	1.8	5.79	0.02	3.51	62.86	20.25	5.39	7.74	0	17.32	297.79
2011-12	112.68	18.78	0.19	36.99	2.18	0	7.22	13.92	2.78	7.5	64.09	21.11	3.26	5.16	0	1.53	297.39
2012-13	143.01	18.33	0	37	2.68	0.01	7.69	19.4	4.95	8.64	65.4	20.79	8.19	0	0	1.28	337.37
Total	830.65	700.83	2.03	268.51	38.32	10.63	28.23	244.88	32.81	218.87	346.49	140.12	33.43	27.9	0.71	64.87	2989.28
Average	69.22	58.40	0.17	22.38	3.19	0.89	2.35	20.41	2.73	18.24	28.87	11.68	2.79	2.33	0.06	5.41	249.11
%	27.79	23.44	0.07	8.98	1.28	0.36	0.94	8.19	1.10	7.32	11.59	4.69	1.12	0.93	0.02	2.17	100.00

#### 4.10 Revenue from Public Health Engineering

It includes drainage connection charges, suction unit fees jetting machine rent, raw sewage sale, scrap material sale and penalty for unauthorized sewage. Drainage connection charges contributed significantly i. e. 96.19 percent during the analysis period. Table no. 4.12 shows the detail account of revenue from this source during the analysis period.

**Table No. 4.12: NMMC's Revenue from Public Health Engineering (Rs. in Lakh)**

Year	Drainage Conne-ction Charges	Suction Unit Fees	Jetting Machine Rent	Raw Sewages Sale	Scrap Material Sale	Penalty Unauthorised Sewage	Total
	1	2	3	4	5	6	7
2000-01	68.25	1.13	0	0	0	0	69.38
2001-02	107.59	1	0	0	0	0	108.59
2002-03	229.24	1.59	0	0	0	0.32	231.15
2003-04	356.01	0.43	0.1	0	0	0.45	356.99
2004-05	432.93	0.64	2.02	0	0	0	435.59
2005-06	404.83	0.36	0.84	0	3.55	0	409.58
2006-07	380.51	0.56	0.16	0	0	112.93	494.16
2007-08	397.64	0.59	0	0	0	0.05	398.28
2008-09	230.06	0.81	0.1	0	0	2.51	233.48
2009-10	159.23	0.71	0	2.25	0	0	162.19
2010-11	316.13	0.64	0	0	0	1.1	317.87
2011-12	225.91	0.68	0	0	0	0	226.59
2012-13	206.47	3.74	0	0	0	0	210.21
Total	3514.8	12.88	3.22	2.25	3.55	117.36	3654.06
Average	270.37	0.99	0.25	0.17	0.27	9.03	281.08
%	96.19	0.35	0.09	0.06	0.10	3.21	100.00

#### 4.11 Revenue from Morbe Dam

NMMC earned Rs. 81.43 Lakh in 2010-11, Rs.286.76 lakh in 2011-12 and Rs. 59.88 Lakh in 2012-13 from sell of water/royalty of Morbe Dam. Prior to that, NMMC did not earn revenue from this source. (Table no.4.7)

#### 4.12 Revenue from Fees

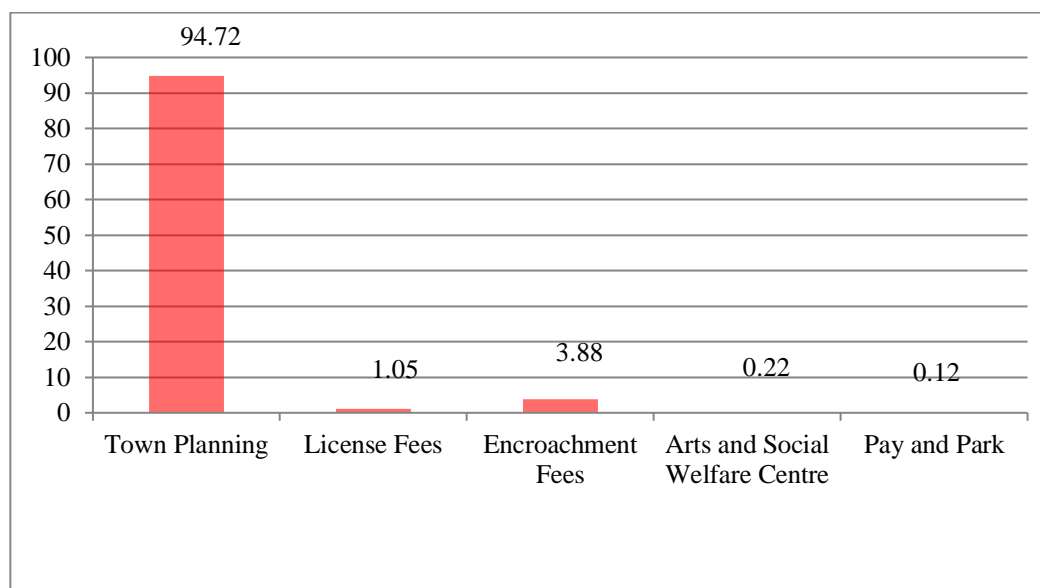
Town planning fees is one of the significant revenue sources of the Corporation among fees. Its contribution in total revenue from fees was 94.72 percent during the analysis period. It includes development charge (building permission charges, penalty, additional development charges), compounding fees (Additional development permission, additional transfer in G.E.S., change of use, expansion and penalty). As the population of the city is increasing, demand of land and home is increasing, it led to increase in value/ prices of land; it goes out of reach of the common man. Therefore, citizen prefers to extend the existing area and paid the town planning fees to the NMMC. But ultimately corporation allowed it, however it spreads wrong message among the citizens about approach of the government. It was followed by encroachment fees (3.88 percent).

Remaining sources of revenue under this head were minor. However, fluctuations are more in the source of pay and park (c. v. 149.11) and less in license fees (c.v. 37.47). Its detail account is shown in table no 4.13

Table No. 4.13: NMMC's Revenue from Various Fees (Rs. In Lakh)						
Year	Town Planning	License Fees	Encroachment Fees	Arts and Social Welfare Centre	Pay and Park	Total
	1	2	3	4	5	6
2000-01	429.43	21	14.51	3.76	0	468.7
2001-02	472.15	20.61	39.9	6.69	0	539.35
2002-03	1442.24	31.38	63.82	4.12	0	1541.56
2003-04	3132.57	66.71	169.03	14.62	0	3382.93
2004-05	3564.72	60.17	116.98	21.28	2.65	3765.8
2005-06	4620.93	50.98	129.64	15.28	0.72	4817.55
2006-07	4627.01	49.99	225.54	45.62	1.78	4949.94
2007-08	4161.01	56	320.8	2.23	6.19	4546.23
2008-09	8094.26	80.34	274.16	6.31	7.9	8462.97
2009-10	5369.36	81.23	257.72	2.99	11.19	5722.49
2010-11	6512.80	70.62	346.1	2.29	7.75	6939.56
2011-12	8178.69	79.74	316.22	8.5	35.82	8618.97
2012-13	15570.48	66.35	436.09	22.95	11.25	16107.12
Total	66175.65	735.12	2710.51	156.64	85.25	69863.17
Average	5090.43	56.55	208.50	12.05	6.56	5374.09
%	94.72	1.05	3.88	0.22	0.12	100
S.D.	4024.05	21.19	130.74	12.34	9.78	4160.25
C. V.	79.05	37.47	62.70	102.42	149.11	77.41
CAGR	0.32	0.09	0.30	0.15	0.17	0.31

**Graph No.4.6**

**NMMC's Revenue from Various Fees (Average Percent)**



### 4.13 Internal Capital Receipts

Internal capital receipts have mainly comprised of security deposits from contractors, town planning ( Building permission deposit, tree planting security deposit, mosquito eradication deposit, stack of material deposit and lease premium), administrative services ( staff loan recovery), water supply ( water connection security deposit, capital contribution), public health engineering ( drainage security deposit), administrative building and market ( sale of quarters, privatization of corporation's property, sale of office space , upfront receipts, differed payments), fire brigade ( capitation fees- buildings and special building capitation fees), Vishnudas Bhave Auditorium deposits, Road ( depreciation from reserve fund transferred for expenditure) , sports and cultural program ( ground rent, open stage fare) , sports training centre entry fare and amount received under BSUP project ( Basic services to Urban Poor) of GOI.

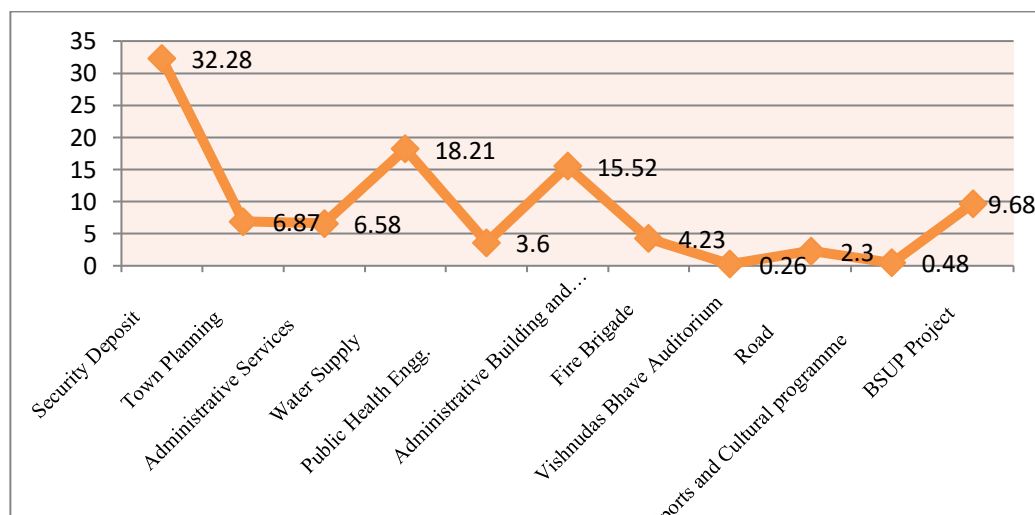
Among these sources, security deposits mainly from contractors were a major source (average 32.28 percent), followed by water supply (18.21 percent) during the analysis period. The CAGR were comparatively more for both (15 and 29 percent respectively).

However, receipts collected from internal sources of capital account were available to the Corporation for disposal on determined heads of expenditure. But it supposed to pay back to concerned entity or institution. Therefore, it is not belonging to corporation's own right/ source of revenue. Its detail account is shown in table no. 4.14

Table No. 4.14: NMMC's Receipts from Internal Sources of Capital Account (Rs. In Lakh)												
Year	Security Deposit	Town Planning	Administrative Services	Water Supply	Public Health Engg.	Administrative Building and Market	Fire Brigade	Vishnudas Bhawe Auditorium	Road	Sports and Cultural programme	BSUP Project	Total
	1	2	3	4	5	6	7	8	9	10	11	12
2000-01	278.03	245.12	93.42	10.23	6.52	0.88	0	0	0	0	0	634.2
2001-02	514.62	265.08	196.15	189.53	9.3	0.8	0	7.16	0	0	0	1182.64
2002-03	612.27	0	1.68	366.36	6.76	0.53	0	0	0	0	0	987.6
2003-04	496.59	75.26	151.17	61.12	0	6.2	31.46	11.06	0	0	0	832.86
2004-05	595.16	438.24	186.8	1091.77	6.66	4.97	243.93	19.14	0	0	0	2586.67
2005-06	311.45	0	214.88	1051.84	5.9	6638.92	107.61	19.14	0	0	0	8349.74
2006-07	655.12	495.09	272.82	2181.22	1497.93	0	152.71	7.04	0	0	1064	6325.93
2007-08	1129.36	227.67	271.43	177.26	0	0	90.12	6.03	984	0	3085.83	5971.7
2008-09	872.93	180	256.12	1194.85	5.09	0	131.61	5.04	0	15.79	0	2661.43
2009-10	2460.8	232.59	256.55	465.86	2.82	0	191.41	8.82	0	49.42	0	3668.27
2010-11	2352.32	285.77	278.68	406.4	2.25	0	106.42	7.68	0	54.46	0	3493.98
2011-12	1898.03	271.05	290	341.43	0.71	0	178.88	10.13	0	38.97	0	3029.2
2012-13	1657.86	228.88	349.48	267.85	0	0	580.71	8.4	0	46.43	0	3139.61
Total	13834.54	2944.75	2819.18	7805.72	1543.94	6652.3	1814.86	109.64	984	205.07	4149.83	42863.83
Average	1064.20	226.52	216.86	600.44	118.76	511.72	139.60	8.43	75.69	15.77	319.22	3297.22
%	32.28	6.87	6.58	18.21	3.60	15.52	4.23	0.26	2.30	0.48	9.68	100.00
S.D.	769.13	144.91	92.73	617.30	414.40	1841.00	154.02	5.79	272.91	22.54	881.75	2345.33
C. V.	72.27	63.97	42.76	102.81	348.92	359.77	110.32	68.70	360.56	142.89	276.22	71.13
CAGR	0.15	-0.01	0.11	0.29	-1.00	-1.00	0.34	0.01	NA	0.24	NA	0.13

Graph No.4.7

#### NMMC's Receipts from Internal Sources of Capital Account (Average Percent)



#### 4.14 Tax Collected by NMMC on behalf of Government of Maharashtra

NMMC is collecting State Education Tax and Employment Guarantee Tax on behalf of Government of Maharashtra. Its proceeds are supposed to transfer to the Government of Maharashtra. In total receipts from this source, an average proportion of State Education Tax is comparatively more (85.80 percent) than Employment Guarantee Tax (average 14.20 percent) during the analysis period. Comparatively variations are more for State Education

Tax, as coefficient of variation was 239.02 and less for Employment Guarantee Tax proceeds with 30.66 coefficient of variation. But as we mentioned earlier, it is not available to NMMC to dispose as its own revenue. Its detail is shown in table no. 4.15 and 4.16

<b>Table No. 4.15: Tax Collected by NMMC on behalf of Maharashtra Government (Rs. In Lakh)</b>			
<b>Year</b>	<b>State Education Tax</b>	<b>State Employment Guarantee Tax</b>	<b>Total</b>
	<b>1</b>	<b>2</b>	<b>3</b>
2000-01	1749.48	326.87	2076.35
2001-02	1703.5	313.77	2017.27
2002-03	1879.00	385.00	2264.00
2003-04	1795.00	441.00	2236.00
2004-05	1865.06	338.23	2203.29
2005-06	2410.04	435.12	2845.16
2006-07	1919.15	286.77	2205.92
2007-08	2284.49	340.91	2625.40
2008-09	2278.31	340.44	2618.75
2009-10	2938.61	439.11	3377.72
2010-11	3613.02	539.87	4152.89
2011-12	4007.13	599.11	4606.24
2012-13	4905.11	732.94	5638.05
Total	33347.9	5519.14	38867.04
Average	2565.22	424.55	2989.77
%	85.80	14.20	100.00
S.D.	1014.74	130.18	1137.58
C.V.	239.02	30.66	38.05

<b>Table No. 4.16: Tax Collected by NMMC on behalf of Maharashtra Government (In percent)</b>			
<b>Year</b>	<b>State Education Tax</b>	<b>State Employment Guarantee Tax</b>	<b>Total</b>
	<b>1</b>	<b>2</b>	<b>3</b>
2000-01	84.26	15.74	100
2001-02	84.45	15.55	100
2002-03	82.99	17.01	100
2003-04	80.28	19.72	100
2004-05	84.65	15.35	100
2005-06	84.71	15.29	100
2006-07	87	13	100
2007-08	87.01	12.99	100
2008-09	87	13	100
2009-10	87	13	100
2010-11	87	13	100
2011-12	86.99	13.01	100
2012-13	87	13	100
Average	85.41	14.59	100.00

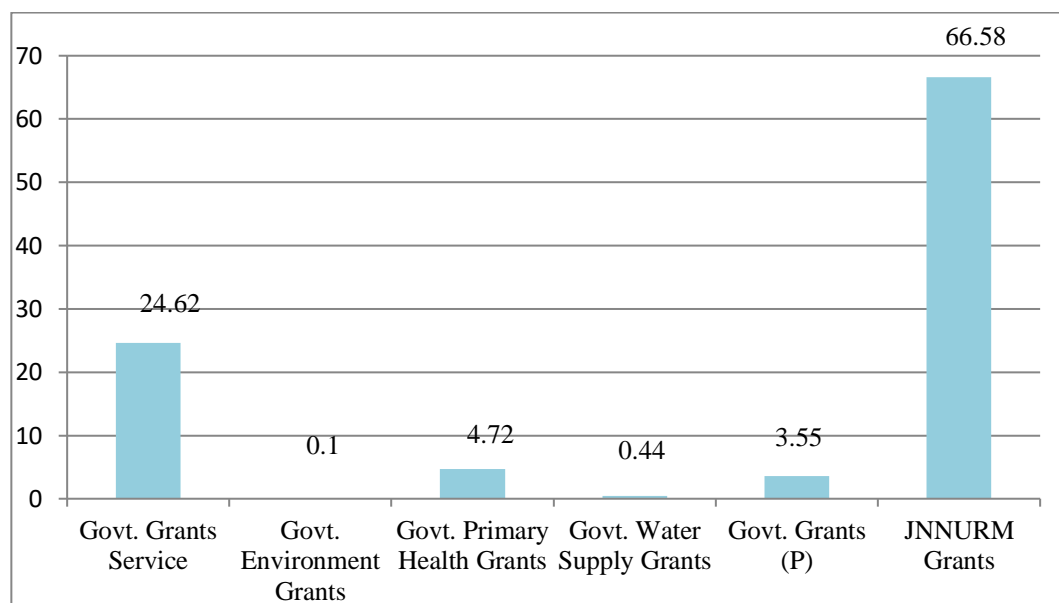
#### 4.15 Various Grants Received by NMMC

The Corporation receives various grants like governments grant for various services, primary health grants, water supply grants, government (P) grants and grants under Jawaharlal Nehru National Urban Renewal Mission. Out of which, service grants were regular and significant. It accounted (24.62 percent) to the total grants. Since 2008-09, NMMC has received substantial grants under JNNRUM. Primary health grant is also regular, but accounted only 4.72 percent to the total grants. Environment grant was received only in 2003-04 i.e., Rs. 39.42 Lakh, water supply grant was not regular during the analysis period. The flagship scheme of Central Government entitled Jawaharlal Nehru National Urban Renewal Mission -2005 under which Corporation has been receiving handsome amount of grant from 2008-09, it accounted on an average 66.58 percent to total grants during the analysis period. The detail account of grant received by NMMC is shown in table no. 4.17.

<b>Table No.4.17: Grants received by NMMC from various sources (Rs. In Lakh)</b>							
<b>Year</b>	<b>Govt. Grants Service</b>	<b>Govt. Environment Grants</b>	<b>Govt. Primary Health Grants</b>	<b>Govt. Water Supply Grants</b>	<b>Govt. Grants (P)</b>	<b>JNNURM Grants</b>	<b>Total</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
2000-01	81.19	0	11.73	0	0	0	92.92
2001-02	61.34	0	9.42	0	0	0	70.76
2002-03	21.18	0	26.65	0	0	0	47.83
2003-04	66.20	39.42	15.22	0	0	0	120.84
2004-05	18.31	0	35.08	0	0	0	53.39
2005-06	56.34	0	26.55	0	0	0	82.89
2006-07	1742.19	0	35.44	64.50	313.32	0	2155.45
2007-08	1789.40	0	56.02	115.20	150.57	0	2111.19
2008-09	2151.23	0	367.37	0	523.98	7302.31	10344.89
2009-10	1771.21	0	464.42	0	180.25	436.35	2852.23
2010-11	884.49	0	379.81	0	147.80	4552.79	5964.89
2011-12	933.99	0	271.92	0	47.51	9018.92	10272.34
2012-13	581.87	0	249.49	0	100.35	6165.37	7097.08
Total	10158.94	39.42	1949.12	179.70	1463.78	27475.74	41266.70
Average	781.46	3.03	149.93	13.82	112.60	2113.52	3174.36
%	24.62	0.10	4.72	0.44	3.55	66.58	100.00

**Graph No.4.8**

**Grants received by NMMC from various sources (Average Percent)**



#### 4.16 Service Grants Received by NMMC

Table no. 4.18 reveals that total service grant from government was Rs. 81.19 lakh in 2000-01; it was increased by 7.10 times and reached up to Rs. 581.87 lakh in 2012-13. Among these, grants received from Urban Development Department and signal grant was a regular and contributed on an average 21 percent during the period under consideration of this study. The grants received under Assistance to States for Developing Export Infrastructure and other allied activities (ASIDE) was started from 2006-07. It accounted an average 64 percent to the total service grants. Member of Legislative Assembly, and Member of Parliament grants were not regular and MLA grant was more than MP grants having an average contribution 8.89 percent and 0.85 percent respectively. Census grant was received in six years out of 13 years of analysis. It accounted an average 2.32 percent to total service grant. From remaining, court grant, Rajiv Gandhi Abhiyan, sport and cultural grant, animal husbandry/education/library, slum development, Adhar Card grant, malaria eradication, disaster management, ETC grants were less than one percent to the total service grant received by NMMC.

#### 4.17 Government Public Health Grants Received by NMMC

Table no 4.19 reveals that primary health grant was increased by 21.26 times from Rs. 11.73 lakh to Rs. 249.49 lakh during 2001-02 to 2012-13. Among various grants, an AIDS alleviation grant was continuous and accounted 2.37 percent to the total primary health grants. Among others, family planning program, pulse-polio immunization and RCH/NUH grants were significant. Its detail account is shown in table no. 4.19.

**Table No. 4.18: Service Government Grants Received by NMMC (Rs. In Lakh)**

Table No.4.18: Service Government Grants Received by NMMC (Rs. In Lakh)																
Year	Census Grant	Govt. Grants/Grants from Urban Development Dept. And Signal Grant	ASIDE Centre Govt. s Grant	Court Grant	Rajiv Gandhi Abhiyan	Sports, Cultural Grant (Suvarna Jayanti)	Animal Husbandry/ Education / Library	MLA Grant	MP Grant	Slum Development Grant	Adhar Card Grant	Malaria Eradication Grants	Grant for Economic Census	Disaster Management Grant	ETC Grant ( Swamitwa Grant)	Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2000-01	12.55	57.4	0	1.24	0	0	0	0	0	0	0	10	0	0	0	81.19
2001-02	18.31	27.53	0	0	0	0	0	0	0	0	0	15.5	0	0	0	61.34
2002-03	0.13	0.04	0	0.51	0.5	0	0	0	0	20	0	0	0	0	0	21.18
2003-04	0	65.41	0	0.79	0	0	0	0	0	0	0	0	0	0	0	66.2
2004-05	0	1.22	0	0	0	0	0	17.09	0	0	0	0	0	0	0	18.31
2005-06	1.6	53.14	0	1.6	0	0	0	0	0	0	0	0	0	0	0	56.34
2006-07	0	9.22	1712.3	0.44	0	0	0.06	13.81	0	0	0	0	6.36	0	0	1742.19
2007-08	0	30.77	1708.3	0	0	0	0	50.31	0	0	0	0	0	0	0	1789.4
2008-09	0	451.3	1663.8	0	0	0	0	24.1	0	0	0	0	0	12	0	2151.23
2009-10	0	697.12	941.49	0	0	0	0	131.66	0	0	0	0	0	0.85	0.09	1771.21
2010-11	102.17	482.92	206.17	0	0	9.82	0	33.41	0	0	0	0	50	0	0	884.49
2011-12	0	257.11	270.07	33.83	0	11.85	0	225.68	86.45	0	45	0	4	0	0	933.99
2012-13	100.92	0	0	36.04	0	0	35.29	406.62	0	0	3	0	0	0	0	581.87
Total	235.68	2133.18	6502.2	74.45	0.5	21.67	35.35	902.68	86.45	20	48	25.5	60.36	12.85	0.09	10158.9
Average	18.129	164.091	500.168	5.727	0.038	1.667	2.719	69.437	6.650	1.538	3.692	1.962	4.643	0.988	0.007	781.457
%	2.32	21.00	64.00	0.73	0.00	0.21	0.35	8.89	0.85	0.20	0.47	0.25	0.59	0.13	0.00	100.00



**Table No. 4.19: Grants received by NMMC for primary health (Rs. In Lakh)**

Year	Family Planning Program	Pulse Polio Immunization	AIDS Alleviation Grants	School Health Checking Grants	RCH/NUHM (Other National Program)	Janani Suraksha Program-	Regular Immunization and Strengthen	TB Eradication Program	Pre-Delivery Sex Determination preventive programme	Suar start program	STD Program	Maternity Grant Scheme	Environment Control Grant	Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2000-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2001-02	1.63	9.88	0.15	0.07	0	0	0	0	0	0	0	0		11.73
2002-03	4.15	4.1	0.4	0.33	0	0	0	0	0	0	0	0	0.44	9.42
2003-04	8.93	16.54	1.18	0	0	0	0	0	0	0	0	0	0	26.65
2004-05	7.79	25.99	0.42	0.78	0.1	0	0	0	0	0	0	0	0	35.08
2005-06	1.94	23.79	0.51	0.09	0.22	0	0	0	0	0	0	0	0	26.55
2006-07	3.09	26.5	0	0	5.6	0	0.25	0	0	0	0	0	0	35.44
2007-08	0	52.29	2.98	0	0.75	0	0	0	0	0	0	0	0	56.02
2008-09	15.76	75.98	9.64	0.07	193.15	13.68	3.36	0	0	55.43	0.3	0	0	367.37
2009-10	102.11	15.93	17.2	0	159.31	18.78	5.79	37.4	0	105.02	0.2	2.68	0	464.42
2010-11	15.21	107.35	7.76	0	107.72	13.08	3.61	45.4	0	79.68	0	0	0	379.81
2011-12	19.7	110.32	3.14	0	52.41	15.5	4.95	52.91	1.93	11.06	0	0	0	271.92
2012-13	18.81	74.37	2.5	0	68.08	11.25	15.6	58.88	0	0	0	0	0	249.49
Total	199.12	543.04	45.88	1.34	587.34	72.29	33.56	194.59	1.93	251.19	0.5	2.68	0.44	1933.9
Average	16.59	45.25	3.82	0.11	48.95	6.02	2.80	16.22	0.16	20.93	0.04	0.22	0.04	161.16
%	10.30	28.08	2.37	0.07	30.37	3.74	1.74	10.06	0.10	12.99	0.03	0.14	0.02	100.00

#### 4.18 Loan

In 2002-03 and 2005-06 to 2008-09 Corporation did not take loan from any source. Development loan and loan under the Jawaharlal Nehru Urban Renewal Mission has been taken from 2009-10 to 2012-13. Its average contribution was 43.69 percent and 52.49 percent respectively during the analysis period. The loan borrowed from MMRDA was only in four years and it was accounted 3.83 percent to the total loan. Notably, NMMC had not taken any institutional loan during the analysis period. Table no 4.20 shown details about Loan of the NMMC.

Table No. 4.20: NMMC's loan during (Rs. In Lakh)					
Year	Loan From MMRDA	Loan From Institution	Development Loan	JNNURM Project Loan	Total
	1	2	3	4	5
2000-01	1219	0	0	0	1219
2001-02	202	0	0	0	202
2002-03	0	0	0	0	0
2003-04	192.6	0	0	0	192.6
2004-05	98.9	0	0	0	98.9
2005-06	0	0	0	0	0
2006-07	0	0	0	0	0
2007-08	0	0	0	0	0
2008-09	0	0	0	0	0
2009-10	0	0	7937.91	3901	11838.9
2010-11	0	0	4577.58	11925.54	16503.1
2011-12	0	0	0	2592	2592
2012-13	0	0	7023	5056	12079
Total	1712.50	0.00	19538.49	23474.54	44725.53
Average	131.73	0.00	1502.96	1805.73	3440.43
%	3.83	0.00	43.69	52.49	100.00

#### 4.19 Summing-Up

Among total receipts of the NMMC, tax revenue was a significant contributor (55.74 percent), particularly cess and property tax. But, as cess was altered by Local body Tax by NMMC from August 1<sup>st</sup> 2013 and recently from August 1<sup>st</sup> 2015, Local Body Tax is totally scrapped by the Government of Maharashtra; The NMMC had totally missed this source of revenue. (In the annual budget of 2015-16, Corporation's budgetary receipts were Rs. 1, 74,899.63 Lakh in which Rs. 8, 50,002 Lakh was expected from Local Body Tax. But, as it was no more, it was becoming a major problem for the Corporation. It was followed by non-tax revenue (23.66 percent) in which proportion of revenue from services was decreased and on the other hand proportion of revenue from fees was increased particularly from fees of town planning. On behalf of the Government of Maharashtra, Employment Guarantee Tax and Education Tax were collected by NMMC. It accounted an average 6.37 percent but its proceeds are supposed to transfer to the Government of Maharashtra. It is shown in fifth chapter of this book which is fully devoted for the expenditure of NMMC. Total grants accounted on an average 3.77 percent to the total receipts. It includes service grants from government, environment grants, primary health grant and grants under JNNURM have been received by NMMC. Notably, out of 13 years of analysis, in five years, loan had not taken by the Corporation. Furthermore, there was not institutional loan taken by the Corporation. Particularly, there was developmental loan and project loan from MMRDA and Jawaharlal Nehru National Urban Renewal Mission, a flagship programme of Government of India.

## Chapter 5

# Expenditure of Navi-Mumbai Municipal Corporation

### 5.0 Introduction

This chapter deals with the N.M.M.C.'s total expenditure, its classification and trend. It is observed that there is vertical imbalance of resources and responsibilities among Governments in India. It implies that, responsibilities of local governments are more as compared to resources allotted to them. The urbanization in our country is also increasing and we accepted the concept of welfare state since independence, citizens' expectations are also increasing. Therefore, Government's expenditure is increasing. It is also mentioned by renowned German economist Adolph Wagner (1835- 1917) in his law of increasing states' spending, he observed upward trend of expenditure of his own country; he concluded "As development of an industrial economy will be accompanied by an increased share of public expenditure in Gross National Product". Prof. Richard Musgrave and Prof. Hume Dalton had explained the manner and extent of public expenditure in which it should be incurred and collected to achieve the 'Principle of Maximum Social Advantage'. According to them, "Public expenditure in every direction should be carried just so far, that the advantage to community of a further small increase in any direction is just counter-balanced by the disadvantage of a corresponding small increase in taxation or in receipts from any other source of public income."<sup>1</sup> It shows the ideal total of both i.e., public expenditure and public income.

Public expenditure is the expenditure incurred by public authorities-Central, State and Local governments- either for the satisfaction of collective needs of the citizens or promoting their economic and social welfare. In economics, different economists classified expenditure on the basis of its use, which enables us to distinguish between the nature and effects of different kinds of public expenditure. It includes functional classification, departmental classification, and transfer and non- transfer expenditure, grants and purchase prices, capital and revenue expenditures, classification according to the benefits, productive and unproductive expenditure etc. Eventually, these classifications do not present different kinds of public expenditure instead they present the same thing in different way. In this explanations of total expenditure, revenue expenditure and capital expenditure have been used.

### 5.1 Revenue and Capital Account Expenditure of N.M.M.C

Total expenditure of the corporation comprises of revenue expenditure and capital expenditure. Table no. 5.1 shows the expenditure structure of N.M.M.C. as revenue account and capital account expenditure.

Table No. 5.1: NMMC's Expenditure (Rs. in lakh)						
Year	Revenue Account	Capital Account	Tax refunded to the GOM	Total (1+2+3)	Growth Rate of Column-1	Growth Rate of Column-2
	1	2	3	4	5	6
2000-01	11545.16	8428.50	0.00	19973.66	--	--
2001-02	11465.68	9507.24	0.00	20972.92	-0.69	12.80
2002-03	10420.29	8057.74	0.00	18478.03	-9.12	-15.25
2003-04	13536.36	15512.99	0.00	29049.35	29.90	92.52
2004-05	15815.85	15370.50	0.00	31186.35	16.84	-0.92
2005-06	17798.84	16125.86	0.00	33924.70	12.54	4.91
2006-07	19329.20	31378.20	2338.78	53046.18	8.60	94.58
2007-08	20997.57	29976.40	2061.07	53035.04	8.63	-4.47
2008-09	25626.30	36398.14	3029.75	65054.19	22.04	21.42
2009-10	28874.48	59379.67	3373.03	91627.18	12.68	63.14
2010-11	33722.71	69329.77	4203.53	107256.01	16.79	16.76
2011-12	39130.93	59112.34	4475.62	102718.89	16.04	-14.74
2012-13	55710.55	58821.98	5225.49	119758.02	42.37	-0.49
Total	303973.92	417399.33	24707.27	746080.52	176.62	270.28
Average	23382.61	32107.64	3529.61	57390.81	14.72	22.52
S.D.	13206.31	22465.63	1160.04	36492.72	--	--
C.V.	56.48	69.97	32.87	63.59	--	--
CAGR	0.13	0.16	0.12	0.15	--	--

Table no 5.1 reveals that both CAGR (16 percent) and average growth rate (22.52 percent) of capital account expenditure were comparatively more than revenue accounts (respectively 13 and 14.72 percent) during the analysis period. The growth rate of revenue account was negative in 2001-02 ( -0.69 percent) -9.12 percent in 2002-03. But, for capital account expenditure, negative growth rate was registered in 2002-03 (-15.25 percent), 2004-05 (-0.92 percent), 2007-08(-4.47 percent), 2011-12 (-14.74 percent) and in 2012-13 (-0.49 percent). Notably, tax refunded to the Government of Maharashtra had included in capital account expenditure till 2005-06, but, later on, it was mentioned separately. Corporation's expenditure in terms of percentage is shown in table no 5.2.

Table No. 5.2: NMMC's Expenditure in percent				
Year	Revenue Account	Capital Account	Tax refund to the Govt.	Total (1+2+3)
	1	2	3	4
2000-01	57.80	42.20	0	100.00
2001-02	54.67	45.33	0	100.00
2002-03	56.39	43.61	0	100.00
2003-04	46.60	53.40	0	100.00
2004-05	50.71	49.29	0	100.00
2005-06	52.47	47.53	0	100.00
2006-07	36.44	59.15	4.41	100.00

Table No. 5.2: NMMC's Expenditure in percent				
	Revenue Account	Capital Account	Tax refund to the Govt.	Total (1+2+3)
Year	1	2	3	4
2007-08	39.59	56.52	3.89	100.00
2008-09	39.39	55.95	4.66	100.00
2009-10	31.51	64.81	3.68	100.00
2010-11	31.44	64.64	3.92	100.00
2011-12	38.10	57.54	4.36	100.00
2012-13	46.52	49.12	4.36	100.00
Average	44.74	53.01	4.18	--
Min.	31.44	42.20	3.68	--
Max.	57.80	64.80	4.66	--

Graph No. 5.1

NMMC's Expenditure during in terms of percentage

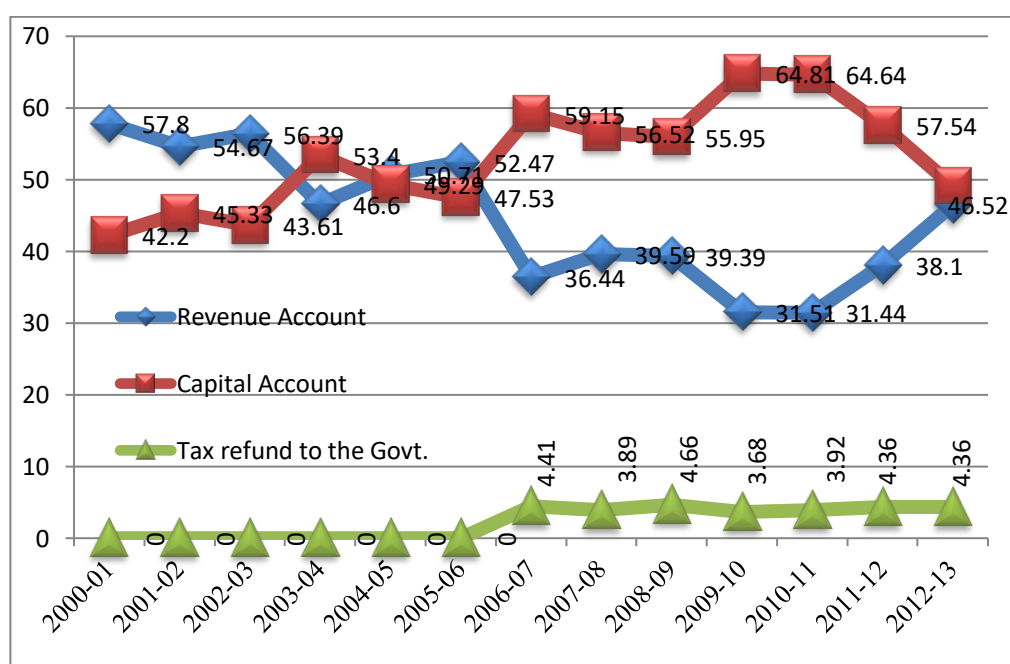


Table no 5.2 reveals that the proportion of revenue account expenditure is decreasing in total expenditure of the NMMC. It was decreased from 57.80 percent to 31.44 percent during 2000-01 to 2010-11. But again, it was slightly increased up to 38.10 percent and 46.52 percent in 2011-12 and 2012-13 respectively. On the other hand, capital account expenditure proportion has raised from 42.20 percent to 64.64 percent during 2000-01 to 2010-11. But, in next two years, again it was declined to 57.54 percent and 49.12 percent. Education tax and Employment Guarantee Tax refunded to Government of Maharashtra accounted on an average 4.18 percent to the total expenditure during 2006- 07 to 2012-13.

## 5.2 Revenue Account Expenditure of N.M.M.C

Revenue expenditure is an expenditure that neither creates assets nor reduces a liability of the government is categorized as revenue expenditure. It is recurring in nature and incurred on normal running of the Governments departments and maintenance of services. N.M.M.C.'s cost incurred on administrative services (salary / allowances, administrative expenditure), water supply, public health engineering, solid waste management, road, street lighting, primary education, malaria eradication, primary health, public health and hospital services, welfare schemes / social services and other services are considered under the revenue account expenditure of NMMC.

Table No. 5.3 and 5.4 show the revenue account expenditure in absolute term and in proportion respectively. The CAGR of total revenue account expenditure was 13 percent during the analysis period. The CAGR of the expenditure of Morbe dam was comparatively highest i.e., 98 percent. The CAGR of expenditure on solid waste management, primary education, health services were 17 percent.

On other hand, it was negative of water supply i.e., -0.01 percent, public health engineering 09 percent, street lighting 10 percent and 11 percent for welfare schemes and social services, which were comparatively less to total expenditure from revenue account during the analysis period.

The fluctuations are comparatively less for expenditure on water supply (c.v. 21.46) and more for Morbe Dam (c.v. 105.98) and road services (c.v.105.97) during period considered for this study.

### Revenue Account Expenditure

$$RAE = F (AS + WS + PHE + SWM + R + SL + PE + HS + SS + MD + O)$$

Here,

RAE= Revenue Account Expenditure

F= Shows functional relationship

AS= Administrative services : 19.68 percent.

WS= Water supply : 28.99 percent.

PHE= Public Health Engineering : 04.58 percent.

SWM = Solid Waste Management : 11.99 percent.

R= Road : 10.92 percent.

SL= Street Light : 04.13 percent.

PE= Primary Education : 05.89 percent.

HS= Health Services : 05.06 percent.

SS= Social Services : 0.57 percent.

MD= Morbe Dam : 01.59 percent.

O= Others. : 06.61 percent.

Table No. 5.3: NMMC's Expenditure from Revenue Account (Rs. In Lakh)

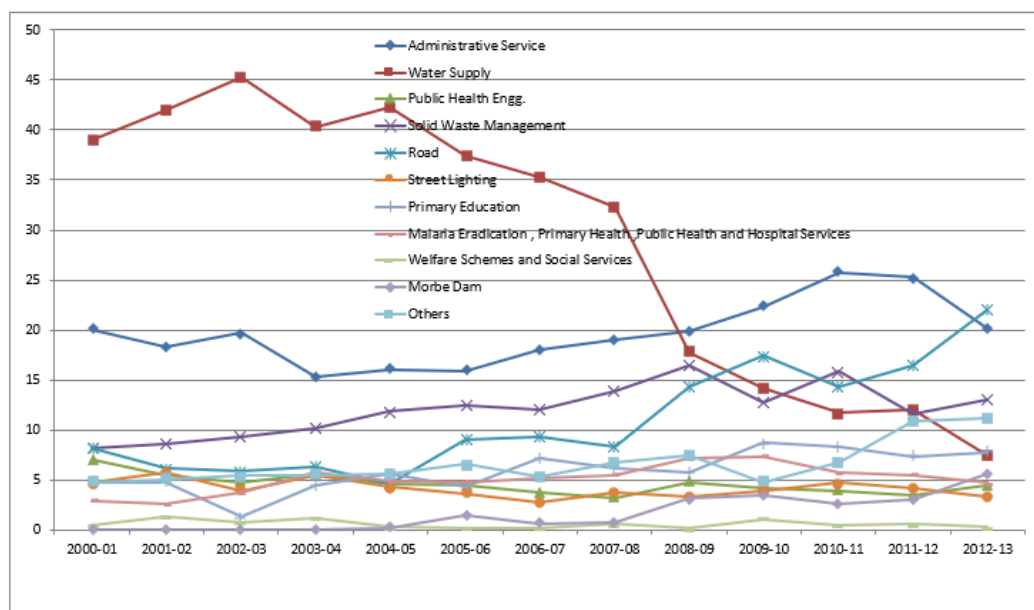
Year	Administrative Service	Water Supply	Public Health Engineering-	Solid Waste Management	Road	Street Lighting	Primary Education	Malaria Eradication, Primary Health, Public Health and Hospital Services	Welfare Schemes and Social Services	Morbe Dam	Others	Total -12 (1 to 11)
	1	2	3	4	5	6	7	8	9	10	11	12
2000-01	2316.67	4497.40	811.93	947.83	943.13	540.99	552.28	336.07	46.95	0	551.91	11545.16
2001-02	2102.53	4820.55	621.90	978.39	698.19	664.84	550.00	291.5	158.56	0	579.22	11465.68
2002-03	2056.89	4722.58	499.59	962.09	610.04	400.03	130.98	395.96	79.48	0	562.65	10420.29
2003-04	2073.88	5462.16	750.52	1373.84	849.98	737.52	604.51	771.64	163.91	3.38	745.02	13536.36
2004-05	2543.38	6675.69	724.42	1868.98	727.36	670.20	886.33	766.69	39.39	30.46	882.95	15815.85
2005-06	2823.87	6658.02	790.25	2222.10	1594.58	640.15	772.05	854.38	26.99	246.40	1170.05	17798.84
2006-07	3485.50	6824.89	730.44	2333.98	1793.09	540.41	1397.50	1010.82	44.69	128.10	1038.38	19327.80
2007-08	3976.60	6779.61	675.63	2899.77	1743.38	795.02	1297.86	1148.08	124.66	144.58	1412.38	20997.57
2008-09	5102.57	4534.55	1229.32	4203.70	3656.48	845.19	1484.43	1839.96	25.49	793.40	1911.21	25626.30
2009-10	6443.08	4103.75	1192.41	3660.04	5028.87	1135.67	2502.46	2118.65	308.15	999.90	1381.50	28874.48
2010-11	8696.35	3936.61	1301.96	5333.10	4843.24	1581.29	2822.49	1950.32	143.09	856.65	2257.61	33722.71
2011-12	9882.95	4684.56	1332.73	4543.2	6416.64	1650.96	2865.11	2135.33	223.97	1155.70	4239.78	39130.93
2012-13	11209.81	4119.83	2498.46	7268.77	12266.49	1853.24	4320.56	2616.91	183.16	3145.92	6227.40	55710.55
Total	62714.08	67820.20	13159.56	38595.79	41171.47	12055.51	20186.56	16236.31	1568.49	7504.49	22960.06	303972.52
Average	4824.16	5216.94	1012.27	2968.91	3167.04	927.35	1552.81	1248.95	120.65	833.46	1766.16	23382.50
S.D.	3223.48	1119.62	526.29	1944.07	3356.12	474.94	1223.78	786.09	87.03	883.29	1673.24	13206.35
C.V.	66.82	21.46	51.99	65.48	105.97	51.21	78.81	62.94	72.13	105.98	94.74	56.48
CAGR	0.13	-0.01	0.09	0.17	0.22	0.10	0.17	0.17	0.11	0.98	0.20	0.13

Table No. 5.4: NMMC's Expenditure from Revenue Account (In percent)												
Year	Administrative Service	Water Supply	Public Health Engg.	Solid Waste Management	Road	Street Lighting	Primary Education	Malaria Eradication, Primary Health, Public Health and Hospital Services	Welfare Schemes and Social Services	Morbe Dam	Others	Total (1 to 11)
	1	2	3	4	5	6	7	8	9	10	11	12
2000-01	20.07	38.95	7.03	8.21	8.17	4.69	4.78	2.91	0.41	0.00	4.78	100.00
2001-02	18.34	42.04	5.42	8.53	6.09	5.80	4.80	2.54	1.38	0.00	5.05	100.00
2002-03	19.74	45.32	4.79	9.23	5.85	3.84	1.26	3.80	0.76	0.00	5.40	100.00
2003-04	15.32	40.35	5.54	10.15	6.28	5.45	4.47	5.70	1.21	0.02	5.50	100.00
2004-05	16.08	42.21	4.58	11.82	4.60	4.24	5.60	4.85	0.25	0.19	5.58	100.00
2005-06	15.87	37.41	4.44	12.48	8.96	3.60	4.34	4.80	0.15	1.38	6.57	100.00
2006-07	18.03	35.31	3.78	12.08	9.28	2.80	7.23	5.23	0.23	0.66	5.37	100.00
2007-08	18.94	32.29	3.22	13.81	8.30	3.79	6.18	5.47	0.59	0.69	6.73	100.00
2008-09	19.91	17.69	4.80	16.40	14.27	3.30	5.79	7.18	0.10	3.10	7.46	100.00
2009-10	22.31	14.21	4.13	12.68	17.42	3.93	8.67	7.34	1.07	3.46	4.78	100.00
2010-11	25.79	11.67	3.86	15.81	14.36	4.69	8.37	5.78	0.42	2.54	6.69	100.00
2011-12	25.26	11.97	3.41	11.61	16.40	4.22	7.32	5.46	0.57	2.95	10.83	100.00
2012-13	20.12	7.40	4.49	13.05	22.02	3.33	7.76	4.70	0.33	5.65	11.18	100.00
Average	19.68	28.99	4.58	11.99	10.92	4.13	5.89	5.06	0.57	1.59	6.61	100.00
Min,	15.32	7.40	3.22	8.21	4.60	2.80	1.26	2.54	0.10	0.00	4.78	100.00
Max.	25.79	45.32	7.03	16.40	22.02	5.80	8.67	7.34	1.38	5.65	11.18	100.00

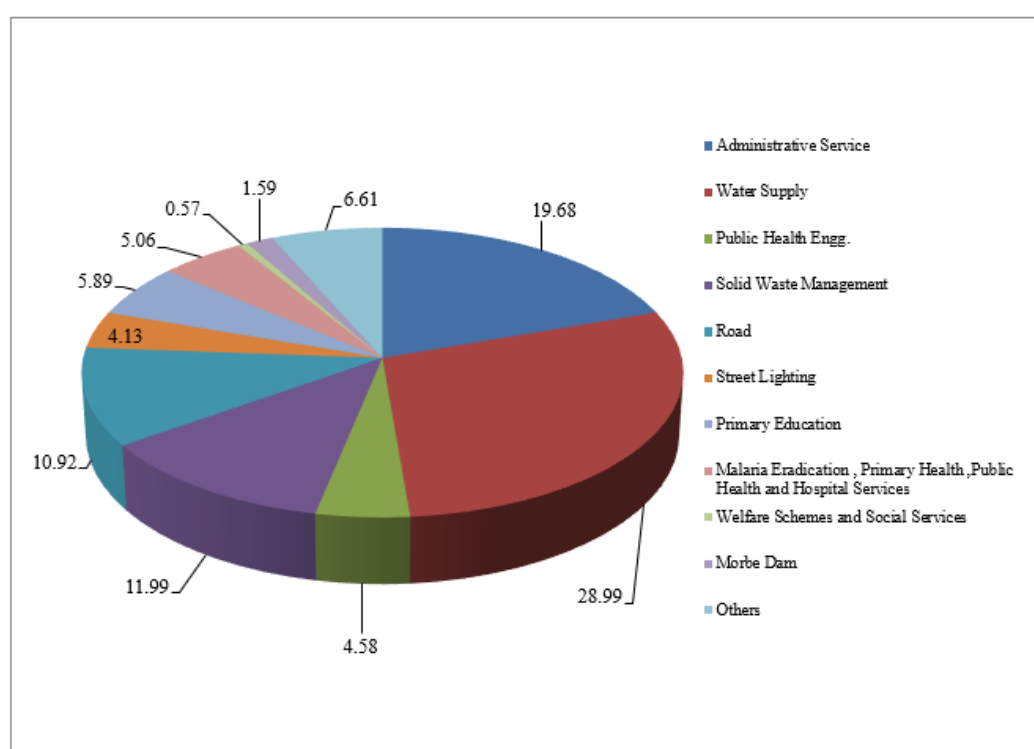


**Graph No. 5.2**

**NMMC's Expenditure from Revenue Account (In percent)**



**Graph No. 5.3 NMMC's Expenditure from Revenue Account (Average percent)**



### 5.2.1 NMMCs Administrative Expenditure from Revenue Account

For administrative services, NMMC spent on an average 19.68 percent from revenue account. In which, establishment expenditure was a major component. Its proportion was 81.60 percent in total expenditure on administrative services. Its detail account is shown in table no. 5.5.

<b>Table No. 5.5: NMMC's Expenditure for Administrative Services from Revenue Account (Rs. In Lakh)</b>				
<b>Year</b>	<b>Establishment Expenditure Salary &amp; Allowances)</b>	<b>Administrative Expenditure</b>	<b>Continuous Interaction Monthly Subscription</b>	<b>Total</b>
	1	2	3	4
2000-01	1989.24	327.43	0	2316.67
2001-02	1700.63	401.9	0	2102.53
2002-03	1601.56	455.33	0	2056.89
2003-04	1519.35	554.53	0	2073.88
2004-05	1899.96	643.42	0	2543.38
2005-06	2088.04	735.78	0.05	2823.87
2006-07	2586.33	899.17	0	3485.5
2007-08	3136.11	840.49	0	3976.6
2008-09	3985.88	1116.69	0	5102.57
2009-10	5431.53	1011.55	0	6443.08
2010-11	7318.67	1377.68	0	8696.35
2011-12	8361.43	1521.52	0	9882.95
2012-13	9557.14	1652.67	0	11209.81
Total	51175.87	11538.16	0.05	62714.08
Average	3936.61	887.55	0.00	4824.16
Percentage	81.60	18.40	0.00	100.00
S.D.	2813.09	430.86	0.01	3223.48
C.V.	71.46	48.55	360.56	66.82
CAGR	0.13	0.13	NA	0.13

Table no 5.5 reveals that, even though CAGR is same for establishment expenditure and administrative expenditure (13 percent) coefficient of variation was comparatively more for the establishment expenditure (71.46 percent).

### 5.2.2 NMMC's Expenditure on water supply from Revenue Account

This expenditure incurred for purchasing water, electricity charges, communication, operation, repairs, borewells, general administration and fuel. On an average 73.03 percent expenditure was incurred for purchasing water, followed by maintenance and distribution (13.19 percent) and electricity charges (11.94 percent). The coefficient of variation was highest for repair works (96.81 percent) followed by operational cost (58.07 percent) and repair and maintenance of borewells and construction of open wells. The CAGR was also not equal for all sub- heads of this expenditure. It was highest for repair and maintenance of bore wells and construction of open wells. Its detail account is shown in table no 5.6

**Table No. 5.6: NMMC's Expenditure for Water Supply from Revenue Account (Rs. In Lakh)**

Year	Purchase of Water	Electric Charges-	Communication-	Operational (Distribution and Maintenance)	Repair Works (Water Pump)	Repair Works ESR/ GSR & New Pumping	R/M Bore wells and Construction of Open	General Administration Expenditure	Water Supply Tanker Oil and Fuel	Total
	1	2	3	4	5	6	7	8	9	10
2000-01	3745.62	362.45	0	366.03	12.46	9.3	1.39	0	0.15	4497.40
2001-02	3758.24	587.45	10.44	330	0.13	35.22	24.49	70.1	4.48	4820.55
2002-03	4039.32	449.94	0	158.6	13.23	0	0.85	59.67	0.97	4722.58
2003-04	4381.65	694.22	0	120.46	126.73	63.14	11.15	61.82	2.99	5462.16
2004-05	5571.83	524.43	0	503.29	0.35	1.66	5.05	66.28	2.8	6675.69
2005-06	5507.29	522.88	0	520.69	3.1	20.71	2.83	78.05	2.47	6658.02
2006-07	5475.24	634.85	0	691.5	5.65	9.13	8.17	0	0.35	6824.89
2007-08	5504.11	667	0	549.37	19.03	27.97	9.12	0	3.01	6779.61
2008-09	3214.54	604.98	0	607.91	19.84	69.16	16.18	0	1.94	4534.55
2009-10	2171.41	1139.83	0	751.76	0	40.75	0	0	0	4103.75
2010-11	1996.82	649.71		1168.6	23.58	80.97	16.93	0	0	3936.61
2011-12	2572.83	719.52	0	1270.49	50.93	61.7	9.09	0	0	4684.56
2012-13	1588.94	542	0	1905.89	9.26	59.69	14.05	0	0	4119.83
Total	49527.84	8099.26	10.44	8944.59	284.29	479.4	119.3	335.92	19.16	67820.20
Average	3809.83	623.02	0.87	688.05	21.87	36.88	9.18	25.84	1.47	5216.94
Percent	73.03	11.94	0.02	13.19	0.42	0.71	0.18	0.50	0.03	100.00
S.D.	494.33	89.43	0.00	399.52	21.17	11.75	3.97	0.00	0.00	389.85
C.V.	12.98	14.35	0.00	58.07	96.81	31.86	43.21	0.00	0.00	7.47
CAGR	-0.06	0.03	NA	0.14	-0.02	0.15	0.19	NA	-1.00	-0.01

### **5.2.3 NMMC's**

#### **Expenditure on Public Health Engineering**

The Corporation has 7 sewage treatment plants in its jurisdiction. These are located at CBD Belapur, Nerul, Sanpada, Vashi, Koparkhairne and Airoli. The total length of sewer line laid is 361.20 k.m., over 99 percent area of the Corporation. The raw sewage generated is 197.00 MLD. But these plants have the capacity of 420 MLD. NMMC had spent Rs. 811.93 Lakh from revenue account on public health engineering in 2000-01; it was increased by more than three times in 2012-13 and reached up to Rs. 2498.46 Lakh. Its detail account is shown in table no.5.7. In short, it can be concluded as following

1. Notably, open drains and holding ponds cost is not continued. It means that work is not done on regular basis. In future, it can become obstacle for the smooth flowing of water in the rainy season.
2. Electricity charges for treatment plants was main component of expenditure (49.04 percent), it is followed by repair and maintenance (40.15 percent) during the analysis period.
3. The CAGR was more for FRP Gate Fixing (26 percent) and R/M of sewerage treatment plan (16 percent).

#### **5.2.4 NMMC's Expenditure on Solid Waste Management from Revenue Account**

The disposal of Solid Waste Management is one of the significant functions of the Urban Local Government. It is expected to plan in such a way that the adverse effects of the accumulation of solid waste should be minimized in the city. Solid waste collection is carried out in 81 zones through private contractors. The daily average of solid waste generated and collected by NMMC in the year 2014-15 was 675 Metric Tonne.

It was about 470 grams of solid waste per capita. Its main source was household (more than 87 percent) in the same year. The Ward Koparkhairne had highest solid waste (102 Metric Tonne) and lowest (22.7 Metric Tonne) in Dhigha Ward. The total number of households covered for collection had around 2,77,622 out of which 2,21,776 (79.88 percent) were covered through door-to-door collection while the rest of waste collected through common facilities. In this regard, NMMC stood at first rank in Maharashtra and on 11<sup>th</sup> rank in India (Annual Budget-2014-15). In 2015- 16, Corporation stood at 3<sup>rd</sup> rank in the India. To undertake related work, Corporation having Turbhe located Modern Solid Waste Management project, which is producing fertilizer too. These works are undertaken under JNNURM project. Its detail account has shown in table no. 5.8. It shows the following facts:

1. Other expenditures which include IEC for garbage, vehicle depreciation, publicity and promotion, debris and tree removals, and city sanitation refund for contract worker (UPDAN). Among these, sanitation expenses were (65.60 percent) a major component of the expenditure. Its CAGR was comparatively high (33 percent).

2. A sanitation expense was the major component (65.60 percent), followed by garbage transportations (27.78 percent), it also had comparatively less coefficient of variation (57.82 and 79.75 percent respectively)

<b>Table No. 5.7: NMMC's Expenditure for Public Health Engineering from Revenue Account (Rs. In Lakh)</b>										
<b>Year</b>	<b>General Administrative</b>	<b>R/M Jetting / Unit</b>	<b>R/M Sewerage Treatment Plant</b>	<b>R/M Sewerage Pipeline</b>	<b>Sewerage Treatment Plant Electrical</b>	<b>Treatment Plant Electricity Charges</b>	<b>Open Drains and Holding Ponds</b>	<b>R/M Storm Water Pumping Station</b>	<b>FRP Gate Fixing</b>	<b>Total</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
2000-01	0	0	215.48	164.61	27.10	400.29	0	0	4.45	811.93
2001-02	0	0	222.17	72.87	1.22	293.44	30.60	0	1.60	621.90
2002-03	1.82	0	148.92	48.10	0	294.72	0	6.03	0	499.59
2003-04	38.32	83.65	249.58	64.86	0	304.84	0	0	9.27	750.52
2004-05	33.34	1.96	285.66	37.31	18.60	346.32	0	0	1.23	724.42
2005-06	68.97	10.14	316.58	27.90	20.95	297.36	0	35.14	13.21	790.25
2006-07	0	0.26	294.32	57.87	0	321.08	0	56.39	0.52	730.44
2007-08	0	0	282.76	12.45	0	373.2	0	0	7.22	675.63
2008-09	0	0	343.71	43.55	0	654.95	0	148.47	39.04	1229.72
2009-10	0	0	408.30	23.05	0	761.06	0	0	0	1192.41
2010-11	0	0	504.56	2.58	0	725.24	0	0	69.58	1301.96
2011-12	0	0	597.58	2.97	0	732.18	0	0		1332.73
2012-13	0	0	1414.44	41.48	1.82	949.56	0	0	91.16	2498.46
Total	142.45	96.01	5284.06	599.6	69.69	6454.24	30.60	246.03	237.28	13159.96
Average	10.96	7.39	406.47	46.12	5.36	496.48	2.35	18.93	19.77	1012.30
Percent	1.08	0.73	40.15	4.56	0.53	49.04	0.23	1.87	1.80	100.00
S.D.	21.95	23.08	326.35	41.94	9.79	231.72	8.49	42.66	29.83	526.30
C.V.	200.27	312.58	80.29	90.94	182.65	46.67	360.56	225.41	163.46	51.99
CAGR	NA	NA	0.16	-0.10	-0.19	0.07	NA	NA	0.26	0.09

<b>Table No. 5.8: NMMC's Expenditure for Solid Waste Management from Revenue Account (Rs. In Lakh)</b>						
<b>Year</b>	<b>Sanitation Expenses Urban &amp; Gaothan</b>	<b>Purchase of Germicides and Dustbins</b>	<b>Garbage Transportation Expenditure</b>	<b>Sanitation Expenditure MIDC Area</b>	<b>Others</b>	<b>Total</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
2000-01	852.94	0.2	84.44	0	10.25	947.83
2001-02	884.31	11.2	82.88	0	0	978.39
2002-03	843.91	0	118.18	0	0	962.09
2003-04	1165.86	16.72	121.18	0	70.08	1373.84
2004-05	1509	0.88	359	0	0.1	1868.98
2005-06	1425.87	198.97	558	39.26	0	2222.1
2006-07	1491.22	0	827.63	15.13	0	2333.98
2007-08	1650.83	26.14	1182.17	40.63	0	2899.77
2008-09	2659.52	0	1243.15	299.53	1.5	4203.7
2009-10	2332.73	0	1213.57	113.74	0	3660.04
2010-11	2924.42	0	1282.75	123.18	1002.75	5333.1
2011-12	2815.15	0	1551.06	176.99	0	4543.2
2012-13	4764.7	0	2096.85	0	407.22	7268.77
Total	25320.46	254.11	10720.86	808.46	1491.9	38595.79
Average	1947.73	19.55	824.68	62.19	114.76	2968.91
Percent	65.60	0.66	27.78	2.09	3.87	100.00
S.D.	1126.09	54.55	657.67	92.33	289.42	1944.07
C.V.	57.82	279.08	79.75	148.47	252.19	65.48
CAGR	0.14	-1.00	0.28	NA	0.33	0.17

### 5.2.5 NMMC's Expenditure on Road from Revenue Account

The quality of road determines speed of transportation and safety of travellers. Mainly repairs of road, footpath gutters, open nallah, flyovers etc., had undertaken under this head.

Normally, expenditure for this purpose is increasing and an average 88.56 percent expenditure had incurred for repair and maintenance of road, footpath and gutters.

Because, installing cables for various purposes, water connections, repairing of pipelines etc. works are going on continuously. Its detail expenditure is shown in table no. 5.9.

Table No. 5.9: NMMC's Expenditure for Road from Revenue Account (Rs. In Lakh)						
Year	R/M of Road, Footpath, Gutters	Other Road, Footpath, Gutters as suggested by Prabhag Committee	R/M of open Nallah	Road Footpath, Gutters in TTC Industrial Area	R/M Bridges/ Flyovers	Total
	1	2	3	4	5	6
2000-01	943.13	0	0	0	0	943.13
2001-02	698.19	0	0	0	0	698.19
2002-03	610.04	0	0	0	0	610.04
2003-04	849.98	0	0	0	0	849.98
2004-05	707.42	0	19.94	0	0	727.36
2005-06	1591.34	0	3.24	0	0	1594.58
2006-07	1583.28	119.86	89.95	0	0	1793.09
2007-08	1422.48	0	263.81	57.09	0	1743.38
2008-09	2939.27	0	240.34	467.35	9.52	3656.48
2009-10	4498.59	0	116.71	412.67	0.9	5028.87
2010-11	4096.17	0	158.44	588.63	0	4843.24
2011-12	5548.47	0	328.1	540.07	0	6416.64
2012-13	10973.98	0	130.01	1159.51	2.99	12266.49
Total	36462.34	119.86	1350.54	3225.32	13.41	41171.47
Average	2804.80	9.22	103.89	248.10	1.03	3167.04
%	88.56	0.29	3.28	7.83	1.00	100.97

### 5.2.6 NMMC's Expenditure on Street Lighting from Revenue Account

Street lighting increases beauty of the city and ensure safety of the citizens. From this account expenditure was incurred mainly for electricity charges, repairs and maintenance of street lights and other electricity works. Total expenditure on street lighting was Rs.540.99 Lakh in 2000-01; it was continuously increasing and reached up to Rs.1853.24 Lakh in 2012-13. It was increased by 3.42 times and major component of expenditure was electricity charges (66.61 percent), followed by repair and maintenance of street lights (24.90 percent) during the analysis period. The CAGR of expenditure on other was comparatively more (21 percent) and less for repair and maintenance (3 percent). Its detail account is shown in table no 5.10.

Table No. 5.10: NMMC's Expenditure for Street Lighting from Revenue Account (Rs. In Lakh)					
Year	Electricity Charges	R/M Street Lights	R/M of other Electricity work	Others	Total
	1	2	3	4	5
2000-01	354.81	178.96	7.22	0	540.99
2001-02	445.52	182.38	17.29	19.35	664.54
2002-03	382.38	13.97	3.68	0	400.03
2003-04	410.56	318.01	1.66	7.29	737.52
2004-05	464.5	200.91	2.85	1.94	670.2

<b>Table No. 5.10: NMMC's Expenditure for Street Lighting from Revenue Account (Rs. In Lakh)</b>					
<b>Year</b>	<b>Electricity Charges</b>	<b>R/M Street Lights</b>	<b>R/M of other Electricity work</b>	<b>Others</b>	<b>Total</b>
	1	2	3	4	5
2005-06	440.06	161.09	14.28	24.72	640.15
2006-07	365.01	131.41	1.7	42.29	540.41
2007-08	453.78	272.79	10.03	58.42	795.02
2008-09	555.67	207.67	12.78	69.07	845.19
2009-10	800.4	247.08	20.55	67.64	1135.67
2010-11	881.88	484.7	52.05	162.66	1581.29
2011-12	1103.13	343.31	70.32	134.2	1650.96
2012-13	1372.29	259.99	31.31	189.65	1853.24
Total	8029.99	3002.27	245.72	777.23	12055.21
Average	617.69	230.94	18.90	59.79	927.32
%	66.61	24.90	2.04	6.45	100.00
S.D.	323.37	113.95	20.93	64.26	474.95
C.V.	52.35	49.34	110.75	107.49	51.22
CAGR	0.11	0.03	0.12	0.21	0.10

### 5.2.7 NMMC's Expenditure on Primary Education from Revenue Account

In every city, a strong educational base is the most important pillar on which a person can build a career and mould the personality which is important for human resource development. There were 128 primary schools, 80 secondary schools and 510 teachers appointed by NMMC and 1092 teachers were appointed by private schools. Total no. of students was 1, 02,522 under the NMMC area. An education board of NMMC runs 56 Marathi schools, 09 Hindi, 01 Urdu, 02 of English medium schools such as total 68 primaries, 95 Balwadis and provides educations to the 35,235 students.

Under the secondary education board, there were 17 secondary schools, of which 14 were of Marathi medium, 02 Marathi and Hindi and 01 of Urdu medium, which have been providing education to 3135 students. (Annual Budget of 2014-15, page no 1.22)

In 2000-01, Corporation had spent Rs. 552.28 Lakh from revenue account for primary education as it was mainly focused. The secondary education grant was provided from 2006-07. But, again in last two years of analysis it was not provided by the corporation.

In 2012-13, total grant was Rs. 4320. 56 Lakh, it was increased by 7.82 times during the analysis period. Its detail is shown in table no. 5.11



<b>sTable No. 5.11: NMMC's Expenditure for Primary Education from Revenue Account (Rs. In Lakh)</b>				
<b>Year</b>	<b>Education Grant to Education Board</b>	<b>Secondary Education Grants</b>	<b>R/M Schools</b>	<b>Total</b>
	1	2	3	4
2000-01	550.00	0	2.28	552.28
2001-02	550.00	0	0	550.00
2002-03	100.00	0	30.98	130.98
2003-04	576.00	0	28.51	604.51
2004-05	842.84	0	43.49	886.33
2005-06	762.13	0	9.92	772.05
2006-07	1368.10	18.04	11.36	1397.50
2007-08	1230.47	34.76	32.63	1297.86
2008-09	1350.00	55.80	78.63	1484.43
2009-10	2327.09	88.00	87.37	2502.46
2010-11	2725.33	72.41	24.75	2822.49
2011-12	2800.50	0	64.61	2865.11
2012-13	4200.00	0	120.56	4320.56
<b>Total</b>	<b>19382.46</b>	<b>269.01</b>	<b>535.09</b>	<b>20186.56</b>
<b>Average</b>	<b>1490.96</b>	<b>20.69</b>	<b>41.16</b>	<b>1552.81</b>
<b>%</b>	<b>96.02</b>	<b>1.33</b>	<b>2.65</b>	<b>100.00</b>

### 5.2.8 NMMC's Expenditure on Malaria Eradication, Primary Health, Public Health and Hospital Services

Providing basic health facilities and preventing citizens from epidemic disease is one of the obligatory functions and prime objectives of the Corporation. In 2000-01, total expenditure for health services was Rs. 336.07 Lakh, of which 84.63 percent were spent for malaria eradication that includes mosquito and purchasing of pesticides, indoor spreading, awareness and water testing. However, its ratio had decreased to 24.53 percent in 2012-13. The main conclusions about it are as following:

1. The average expenditure on malaria eradication was 31.84 percent to the total expenditure incurred on health-related services, which was decreased from 84.63 percent in the study period. Its CAGR was comparatively less (6 percent).
2. On the other hand, expenditure proportion of public health and hospital services has increased from 10.20 percent to 65.26 percent during the same period. Its average contribution was 55.36 percent during the analysis period. It includes medicines, sonography, annual maintenance and equipment repairing and depreciation, surgical, patient laundry and diet. Its CAGR was comparatively more. (35 percent).
3. The expenditure incurred for primary health includes family planning grants, Pulse polio immunization grants, AIDS eradication grants etc. Its detail is shown in table no. 5.12

<b>Table No. 5.12: NMMC's Expenditure for Health facilities from Revenue Account (Rs. In Lakh) (Figures in Bracket shows the percentage)</b>				
<b>Year</b>	<b>Malaria Eradication</b>	<b>Public Health Hospital Services</b>	<b>Primary Health</b>	<b>Total-</b>
1	2	3	4	5
2000-01	284.4	34.29	17.38	336.07
%	(84.63)	(10.20)	(5.17)	(100)
2001-02	221.35	44.9	25.25	291.5
%	(75.93)	(15.40)	(8.66)	(100)
2002-03	187.22	180.06	28.68	395.96
%	(47.28)	(45.47)	(7.24)	(100)
2003-04	438.46	305.86	27.32	771.64
%	(56.82)	(39.64)	(3.54)	(100)
2004-05	465.93	256.93	43.83	766.69
%	(60.77)	(33.51)	(5.72)	(100)
2005-06	329.3	472.62	52.46	854.38
%	(38.54)	(55.32)	(6.14)	(100)
2006-07	374.07	562.82	73.93	1010.82
%	(37.01)	(55.68)	(7.31)	(100)
2007-08	388.77	682.04	77.27	1148.08
%	(33.86)	(59.41)	(6.73)	(100)
2008-09	490.99	951.99	396.98	1839.96
%	(26.68)	(51.74)	(21.58)	(100)
2009-10	421.87	1237.37	459.41	2118.65
%	(19.91)	(58.40)	(21.68)	(100)
2010-11	441.14	1142	367.18	1950.32
%	(22.62)	(58.55)	(18.83)	(100)
2011-12	483.78	1409.25	242.3	2135.33
%	(22.65)	(66.00)	(11.35)	(100)
2012-13	641.9	1707.9	267.11	2616.91
%	(24.53)	(65.26)	(10.21)	(100)
Total	5169.18	8988.03	2079.10	16236.31
Average	397.63	691.39	159.93	1248.95
%	(31.84)	(55.36)	(12.81)	(100)
S.D.	121.82	550.06	163.21	786.09
C.V.	30.64	79.56	102.05	62.94
CAGR	0.06	0.35	0.23	0.17

### 5.2.9 NMMC's Expenditure for Welfare Schemes and Social Services

The Women and Child Welfare Schemes, Backward Class Welfare Schemes and Physically Handicapped Rehabilitation scheme and Schemes for Scheduled Tribe are considered under this title in this study. There are number of schemes under women and child welfare schemes like economic assistance to the marriage of roofless or destitute or divorced women, professional training to the needy girls from poor families, appreciation grants to the adopters of orphan child, organising entrepreneur camp for women's group, Savitribai Phule Award, economic assistance for crèche or nursery, strengthening saving groups of women, providing employment tools and scholarship to the children of destitute or divorced women, yoga trainings, grants to the parents who sterilised after one or two girls, various programmes and study tours of the Corporators, scholarships for the children of rag pickers, child development centre, free legal advice to the women, insurance for the girls from poor families etc.

The welfare schemes for backward class includes providing machinery and tools to women for self-employment, economic assistance to promote inter-cast marriages, trainings to the unemployed youngsters, help for education, scholarship for talented students, distribution of bicycles, economic help for serious/ critical illness, economic assistance to the small saving groups of women, providing question- answer sets to the students for improving quality of education, yoga trainings, vocational education training institution management expenditure etc.

For the welfare of scheduled caste, scheduled tribe and below poverty line families, slum survey and photo pass, training for self-employment, providing machines and tools for self-employment, quarry, construction, sand, naka related schemes are being operated under the jurisdiction of NMMC.

Table No. 5.13: NMMC's Expenditure for Welfare and Social Services Schemes from Revenue Account (Rs. In Lakh.)				
Year	Women and Children Welfare Schemes	Backward Class Welfare Schemes-	Physically Handicapped Rehabilitation and Schemes for Scheduled Tribe	Total
	1	2	3	4
2000-01	10.4	36.55	0	46.95
2001-02	40.96	117.6	0	158.56
2002-03	65.67	13.81	0	79.48
2003-04	148.5	15.41	0	163.91
2004-05	19.14	20.25	0	39.39
2005-06	21.63	4.47	0.89	26.99
2006-07	30.48	14.21	0	44.69
2007-08	85.45	35.53	3.68	124.66

<b>Table No. 5.13: NMMC's Expenditure for Welfare and Social Services Schemes from Revenue Account (Rs. In Lakh.)</b>				
<b>Year</b>	<b>Women and Children Welfare Schemes</b>	<b>Backward Class Welfare Schemes-</b>	<b>Physically Handicapped Rehabilitation and Schemes for Scheduled Tribe</b>	<b>Total</b>
	1	2	3	4
2008-09	25.49	0	0	25.49
2009-10	220.09	59.11	28.95	308.15
2010-11	79.24	43.69	20.16	143.09
2011-12	93.43	58.41	72.13	223.97
2012-13	108.14	34.64	40.38	183.16
Total	948.62	453.68	166.19	1568.49
Average	72.97	34.90	12.78	120.65
Percent	60.48	28.92	10.60	100.00
S.D.	60.41	31.18	22.30	87.03
C.V.	82.78	89.36	174.44	72.13
CAGR	0.20	0.00	NA	0.11

Table no. 5.13 reveals that total Rs. 1568.49 Lakh expenditure was incurred for social welfare schemes during the period considered for this study. Of which, 60.48 percent (maximum) had spent for the schemes related to women and children followed by backward class welfare schemes (28.92 percent), physically handicapped people and scheduled tribe (10.60 percent). The Corporation is trying to provide employment-oriented facilities to the poor people, which are helping them to generate employment opportunities. However, provision on this head of expenditure has to increase as it was very less (average .57 percent of the total expenditure from revenue account – see table no. 5.4)

### 5.3 Capital Account Expenditure of N.M.M.C

The capital is an expenditure which either creates an asset or reduces liability of Government. It includes:

- A. Purchasing of land, buildings and machineries. 2. Investments in shares Loans 3. Acquisition of valuables.
- B. Repayments of loans

Capital expenditure is a very crucial in the development process. It occurs for maintaining existing asset of the government or create new asset to the Government. It brings long time returns to the government and society. It is incurred on construction of buildings and durable assets. Recently, the proportion of it in total expenditure is comparatively less for the upper-level governments (Maharashtra Government 13.13 percent Budgetary Estimate of 2014-15 and for Government of India 6.5 percent in the year of 2012-13 that was highest in last nine years). NMMC spent 53.01 percent of total expenditure on capital account. It is

observed that expenditure proportion on this account has increased in the analysis period. Its detail account is shown in table no 5.14.

It reveals that capital account expenditure of the NMMC was Rs. 8428.5 Lakh in 2000-01; it has been increased by 6.97 times and reached up to Rs. 58821.98 Lakh in 2012-13. The CAGR of capital account expenditure of the Corporation was 16 percent during the same period. Its coefficient of variation was 69.97 percent. The CAGR and CV are not equal for the all the heads of expenditure from capital account. The CAGR varies between 85 percent to -100 percent (negative) as there was not expenditure incurred on solid waste management in last four years from this account.

On the other hand expenditure on primary education has been increased more comparatively. But notably, there was no expenditure on education from capital account in 2000-01. The coefficient of variation is also varying from 205.61 to 37.22 for various heads of the expenditure of NMMC during the analysis period. The classification of capital account expenditure of NMMC has written in an equation form as following:

$$\text{CAE} = \text{F (AS+R+WS+PHE+SL+AB+SWM+EM+HS+NMMT+PE+L+SD+GTR+C+MD+JNNRUM}_p\text{+JNNNURM (NMMT)+O)}$$

Here,

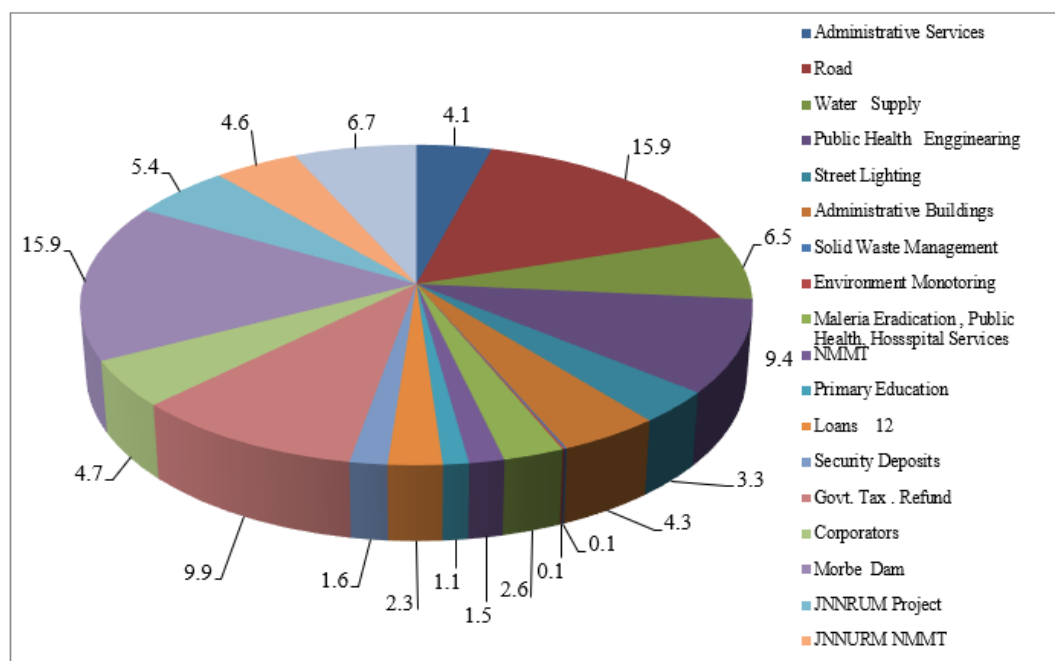
AS=Administrative Services	: 4.1 percent
R=Road	: 15.9 percent
WS= Water Supply	: 6.5 percent
PHE= Public Health Engineering	: 9.4 percent
SL=Street Lighting	: 3.3 percent
AB= Administrative Buildings	: 4.3 percent
SWM= Solid Waste Management	: 0.1 percent
EM= Environment Monitoring	: 0.1 percent
ME= Malaria Eradication, Public Health, and Hospital Services	: 2.6 percent
NMMT=Navi Mumbai Municipal Transport	: 1.5 percent
PE=Primary Education	: 1.1 percent
L=Loans	: 2.3 percent
SD=Security Deposits	: 1.6 percent
GTR=Government Tax Refund	: 9.9 percent
C= Corporators' fund	: 4.7 percent
MD= Morbe Dam	: 15.9 percent
JNNRUM p= Jawaharlal Nehru National Urban Renewal Mission	: 5.4 percent
JNNURMNMMT=Jawaharlal Nehru National Urban Renewal Mission to Navi Mumbai Municipal Transportation	: 4.6 percent
O= Others	: 6.7 percent

<b>Table No. 5.14: NMMC's Expenditure from Capital Account (Rs. In Lakh.)</b>										
<b>Year</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
2000-01	526.36	971.57	977.62	577.59	466.34	962.24	26.94	0.12	291.89	100.00
2001-02	1104.89	252.96	785.94	823.76	314.07	56.70	18.73	0.50	724.49	0.00
2002-03	612.27	298.09	1284.37	877.57	172.77	95.13	26.06	2.27	46.86	0.00
2003-04	670.28	1125.03	949.83	990.15	133.43	1866.17	32.45	53.56	153.72	0.00
2004-05	791.67	1745.34	838.83	643.75	609.32	1355.01	0.00	8.23	0.00	100.00
2005-06	858.56	1889.85	923.94	650.23	281.06	119.01	0.00	8.41	144.75	200.00
2006-07	557.40	6538.37	1502.28	13935.64	658.11	792.57	5.10	0.69	35.93	700.00
2007-08	532.26	7806.71	1791.90	7666.54	968.39	433.24	13.85	12.22	24.27	850.00
2008-09	706.70	13020.77	3025.78	2622.86	1167.58	324.24	0.44	82.57	481.62	300.00
2009-10	689.56	12758.77	3960.98	1057.75	1108.11	3429.68	0.00	13.12	691.15	1000.00
2010-11	1032.71	12104.01	256.57	290.45	2541.30	1962.07	0.00	20.17	2320.25	1500.00
2011-12	1547.89	11442.59	1344.37	423.30	2408.06	1044.65	0.00	0.00	3893.53	1879.00
2012-13	1235.55	10728.44	1680.61	520.44	4325.90	3732.81	0.00	100.96	4313.48	1790.54
Total	10866.10	80682.50	19323.02	31080.03	15154.44	16173.52	123.57	302.82	13121.94	8419.54
Average	835.85	6206.35	1486.39	2390.77	1165.73	1244.12	9.51	23.29	1009.38	647.66
S.D.	311.09	5297.78	998.80	3987.53	1227.48	1214.76	12.42	33.79	1507.55	700.96
C.V.	37.22	85.36	67.20	166.79	105.30	97.64	130.70	145.04	149.35	108.23
CAGR	0.068	0.203	0.043	-0.008	0.187	0.110	-1.000	0.679	0.230	0.248

<b>Table No. 5.14.1: NMMC's Expenditure from Capital Account (In percent)</b>										
<b>Year</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>Total-20</b>
2000-01	0.00	59.22	32.38	1521.45	1673.16	0.00	0.00	0.00	241.62	8428.50
2001-02	0.56	59.22	385.96	1933.49	2769.48	0.00	0.00	0.00	276.49	9507.24
2002-03	11.18	245.68	420.14	2702.30	977.49	0.00	0.00	0.00	285.56	8057.74
2003-04	48.98	255.96	171.54	2449.96	0.00	6038.05	0.00	0.00	573.88	15512.99
2004-05	73.76	255.96	260.60	2384.64	0.00	4840.47	0.00	0.00	1462.93	15370.51
2005-06	203.91	275.46	289.73	2702.20	0.00	6276.92	0.00	0.00	1301.83	16125.86
2006-07	148.36	294.96	169.33	0.00	0.00	4658.73	0.00	0.00	1380.83	31378.30
2007-08	534.87	265.35	213.28	0.00	0.00	6928.75	0.00	0.00	1934.77	29976.40
2008-09	1400.27	235.74	186.79	1064.00	0.00	6248.80	2138.83	0.00	3391.15	36398.14
2009-10	1356.51	235.74	644.00	0.00	0.00	13071.05	4337.35	12486.02	2539.88	59379.67
2010-11	969.34	1301.64	632.95	3859.62	0.00	7552.76	16478.33	11951.74	4555.86	69329.77
2011-12	566.17	5560.64	708.83	0.00	35.00	3675.68	11610.92	8020.32	4951.39	59112.34
2012-13	938.36	4061.60	1194.99	0.00	50.00	1503.55	8339.87	4616.56	9688.32	58821.98
Total	6252.27	13107.17	5310.52	18617.66	5505.13	60794.76	42905.30	37074.64	32584.51	417399.44
Average	480.94	1008.24	408.50	1432.13	423.47	4676.52	3300.41	2851.90	2506.50	32107.65
S.D.	523.79	1742.58	315.35	1345.12	870.70	3735.04	5459.58	4818.80	2668.40	22465.62
C.V.	108.91	172.83	77.20	93.92	205.61	79.87	165.42	168.97	106.46	69.97
CAGR	0.856	0.384	0.320	-1.000	-0.237	-0.130	0.313	-0.220	0.328	0.164

Where, 1= Administrative services, 2=Road, 3=Water Supply, 4=Public Health Engineering, 5=Street Lighting, 6=Administrative Buildings, 7= Solid Waste Management , 8=Environment monitoring, 9= Malaria Eradication, Public Health and Hospital services, 10= Navi Mumbai Municipal Transportation, 11=Primary Education, 12=Loans, 13= Security Deposits, 14= Government Tax Refund, 15= Corporators' fund, 16=Morbe Dam, 17= Jawaharlal Nehru National Urban Renewal Mission, 18=Jawaharlal Nehru National Urban Renewal Mission Navi Mumbai Municipal Transportation, 19= Others

**Graph No 5.4 NMMC's Expenditure from Capital Account (In percent)**



### 5.3.1 NMMCs Expenditure on Administrative Services from Capital Account

Administrative services include Administrative Department, Vehicle Department, Electricity and Computerization, Staff Loan, Pensions and Welfare Fund etc. Administrative Department includes- Purchasing of furniture, air conditioner, water coolers, depreciation of furniture / equipment. Vehicle dept includes- Purchase of vehicles, Vehicle Body buildings, workshop expenditures etc. Electricity and computerisation comprise of software development, computer purchasing, and depreciation. NMMC also has given home loan to their staff, vehicle loan, computer loan, and flood-affected staff's advance payments. Pensions and welfare fund- includes pension and gratuity, welfare fund, reserve fund for staff salary, interest on public provident fund. Its detail account has shown in table no 5.15.

Table No. 5.15: NMMC's Expenditure for Administrative Services from Capital Account (Rs. In Lakh.)						
Year	Administrative Department	Vehicle Department	Electricity and Computerisation	Staff Loan	Pensions and welfare fund	Total
2000-01	14.7	0	0	412.42	99.24	526.36
2001-02	13.9	73.59	4.32	589.08	424	1104.89
2002-03	9.04	31.3	81.5	414.43	76	612.27
2003-04	20.6	26.58	143.43	349.67	130	670.28
2004-05	8.93	40.74	85.61	366.39	290	791.67
2005-06	34.02	119.58	73.89	336.07	295	858.56

<b>Table No. 5.15: NMMC's Expenditure for Administrative Services from Capital Account (Rs. In Lakh.)</b>						
<b>Year</b>	<b>Administrative Department</b>	<b>Vehicle Department</b>	<b>Electricity and Computerisation</b>	<b>Staff Loan</b>	<b>Pensions and welfare fund</b>	<b>Total</b>
2006-07	56.58	36.65	58.41	140.76	265	557.4
2007-08	85.93	62.83	153.92	132.54	97.04	532.26
2008-09	60.3	75.5	206.34	97.56	267	706.7
2009-10	64.6	60	127.62	69.17	368.17	689.56
2010-11	42.93	82.29	55.42	328.34	523.73	1032.71
2011-12	62.02	156.91	118.08	635.23	575.65	1547.89
2012-13	62.26	146.77	95.12	439.29	492.11	1235.55
Total	535.81	912.74	1203.66	4310.95	3902.94	10866.1
Average	41.22	70.21	92.59	331.61	300.23	835.85
Percent	4.93	8.40	11.08	39.67	35.92	100.00
S.D.	25.87	46.99	58.17	179.06	169.80	311.09
C.V.	62.76	66.93	62.83	54.00	56.56	37.22
CAGR	0.12	0.06	0.29	0.005	0.13	0.07

Table no. 5.15 reveals that administrative expenditure from capital account was Rs. 526.36 Lakh in 2000-01. Initially it was incurred for administrative department, staff loan, and pension and welfare funds. It is fluctuating during the analysis period with coefficient of variation value 37.22. It had increased by 2.34 times during the analysis period. The main conclusions are as follows:

1. Out of total expenditure incurred on administrative services, 39.67 percent was on staff loan, followed by pension and welfare fund (35.92 percent), for electricity and computerisation (11.08), vehicle department (8.40 percent), and 4.93 percent on administrative department.
2. The CAGR was comparatively more for electricity and computerisation (29 percent) and less for staff loan (0.5 percent) during the analysis period.

### 5.3.2 NMMCs Expenditure on Road from Capital Account

The construction of the road is the common responsibility of the governments. However, providing satisfactory road services and its proper maintenance in order to provide safe, fast and quick transportation to the citizens is one of the prime responsibilities of the Corporation. Considering these facts, corporation spent for construction of cement roads, gutters, construction of open Nallah, flyover and bridges, urban transfer fund, implementation of JNNURM reforms, construction of skywalk, holding ponds and underground ways etc. Its detail is shown in table no. 5.16. From which it concluded:

1. Initially, in 2000-00, NMMC spent Rs. 971.57 Lakh for this purpose, in subsequent two years, provision on road had decreased, but afterward it had increased up to Rs. 13020.67 Lakh in 2008-09. However, again it had decreased to Rs. 10728.44 Lakh in 2012-13.



2. Out of total expenditure of Rs. 80682.40 Lakh, 90.97 percent had spent for construction of road, footpath and gutters, followed by construction of bridges and flyovers (3.89 percent). For other purpose, money spent by Corporation was comparatively less.
3. From 2000-01 to 2009-10, Corporation did not make provision on skywalk & construction of holding ponds. Only in last year of time period considered in this study, corporation spent Rs.36.59 Lakh for the construction of underground ways.

**Table No.5.16: NMMC's Expenditure on Road from Capital Account (Rs. In Lakh.)**

Year	Construction of Road, Footpath, Gutters (Including TTC Area.)	Construction of open Nallah (Including TTC Area.)	Construction of Bridges/ Flyovers.	Urban Transfer Fund	JNNURM Reforms Implementations Expenditure	Skywalk	Construction of Holding Ponds	Construction of Underground Ways	Total
	1	2	3	4	5	6	7	8	9
2000-01	879.26	0	92.31	0	0	0	0	0	971.57
2001-02	246.22	0	6.74	0	0	0	0	0	252.96
2002-03	298.09	0	0	0	0	0	0	0	298.09
2003-04	1095.36	0	29.67	0	0	0	0	0	1125.03
2004-05	1708.71	8.43	28.2	0	0	0	0	0	1745.34
2005-06	1874.15	0	15.7	0	0	0	0	0	1889.85
2006-07	6228.44	252.23	57.7	0	0	0	0	0	6538.37
2007-08	7672.21	82.29	52.21	0	0	0	0	0	7806.71
2008-09	12969.91	13.22	37.54	0	0	0	0	0	13020.67
2009-10	12679.01	53.12	26.64	0	0	0	0	0	12758.77
2010-11	11161.58	15.48	446.07	0	124.47	332.07	24.34	0	12104.01
2011-12	7855.43	28.63	2205.13	1000	32.66	320.74	0	0	11442.59
2012-13	8729.09	34.01	141.1	578.95	392.17	227.34	589.19	36.59	10728.44
Total	73397.46	487.41	3139.01	1578.95	549.3	880.15	613.53	36.59	80682.40
Average	5645.96	37.49	241.46	121.46	42.25	67.70	47.19	2.81	6206.34
Percent	90.97	0.60	3.89	1.96	0.68	1.09	0.76	0.05	100.00
S.D.	4858.61	69.16	601.54	308.68	110.73	130.78	162.99	10.15	5297.77
C.V.	86.05	184.47	249.12	254.15	262.07	193.16	345.35	360.56	85.36
CAGR	0.19	0.17	0.03	-0.24	0.47	-0.12	1.89	NA	0.20

Note: NA= Not Applicable

### 5.3.3 NMMCs Expenditure for water supply from Capital Account

Water is one of the basic necessities of the life of human, animals, plants and economic developments. It is emerging as a global issue due to its pollution, availability, haphazard use, distribution, erratic nature and uneven rainfall. However, NMMC has done commendable work in this regard. It provides 24×7 water supply to the citizens. Its detail is shown in table no.5.17. Its implications are as follows:

1. New pumping machinery/ meters and new water pipeline was one of the regular and significant channels of expenditure. Since an average 78.95 percent of total expenditure was on water supply from capital account spent, it is followed by construction of ESR and GSR (9.17 percent) during the analysis period. It is expected that the installing water meters would check the haphazard use of the valuable water.
2. Apart from this separate provision was made by NMMC to purchase the Morbe Dam, which is located near to Khopoli, Dist Raigarh.

Table No. 5.17: NMMC's Expenditure for Water Supply from Capital Account (Rs. In Lakh.)							
Year	New Water connection Capitation fees, Security deposit and miscellaneous-Expenditure	Construction of ESR/ GSR	New Pumping Machinery / Flow Meter and New Water pipeline work	New Bore wells	Water Supply fund and Depreciation fund	Purchasing Dam and Ancillary fund	Total
	1	2	3	4	5	6	7
2000-01	0	349.76	506.9	9.54	111.42	0	977.62
2001-02	44.97	259.92	281.73	23.32	175.9	0	785.84
2002-03	20.98	92.74	339.2	1.95	236	593.5	1284.37
2003-04	4.12	246.06	361.08	6.57	332	0	949.83
2004-05	1.27	206.67	352.35	4.19	274.35	0	838.83
2005-06	0.1	267.01	261.88	5.18	389.77	0	923.94
2006-07	16.5	86.71	1397.24	1.83	0	0	1502.28
2007-08	0	86.67	1698.54	6.69	0	0	1791.9
2008-09	0	147.45	2877.4	0.93	0	0	3025.78
2009-10	0	13.67	3945.41	1.9	0	0	3960.98
2010-11	0	0	256.57	0	0	0	256.57
2011-12	2.7	0	1331.82	9.85	0	0	1344.37
2012-13	8.75	14.33	1646.23	11.3	0	0	1680.61
Total	99.39	1770.99	15256.35	83.25	1519.44	593.5	19322.92
Average	7.65	136.23	1173.57	6.40	116.88	45.65	1486.38
%	0.51	9.17	78.95	0.43	7.86	3.07	100.00
S.D.	13.16	118.65	1158.40	6.26	146.88	164.61	998.80
C.V.	172.09	87.10	98.71	97.77	125.66	360.56	67.20
CAGR	-0.13	-0.22	0.09	0.01	-1.00	NA	0.04

### 5.3.4 NMMCs Expenditure for Public Health Engineering from Capital Account

Public health engineering department is responsible for the waste water treatment, installing new lines, and sanitary sewerage in the jurisdiction of the NMMC. The raw sewage generated in developed nodes of NMMC is around 180 MLD. There are seven sewage treatment plants and one aerated lagoon at Nerul in the area of the Corporation. Treatment on sewage is essential as it has a negative cumulative impact on environment. Corporation had used SCADA (Supervisory Control and Data Acquisition System which can monitor water transport, distribution and treatment) system which was a very significant step regarding public health engineering. But Corporation can run it on large scale so that all sewerage could treat. Furthermore, instead of releasing treated water in the sea, it can be used to maintain gardens, cleaning toilets, vehicles etc. Maximum amount (average 79.38 percent) was spent for up gradation of the sewerage stations. As villages had become nodes of Navi Mumbai; earlier set up had not well planned set up of drainage system in these

villages. But Corporation tried to provide sewerage system in Gaothan area and spent an average 13.98 percent of total of public health engineering expenditure was incurred from capital account during the analysis period. Corporation also spent on modification of holding ponds and boating. However, provision on it was not regular and substantial. Its detail account is shown in table no 5.18.

<b>Table No. 5.18: NMMC's Expenditure for Public Health Engineering from Capital Account</b> (Rs. In Lakh.)								
Year	G.E.S. Sewerage Scheme	Purchasing of New Machine SCADA/Recycling	Up gradation of Sewerage station and Reserve Sewage Fund	Depreciation Fund	Modification / New Pipeline Sewerage in Urban Area	Purchasing of Jetting Machine	Modification of Holding Ponds and starting of Boating	Total
	1	2	3	4	5	6	7	8
2000-01	466.17	0	103.37	8.05	0	0	0	577.59
2001-02	647.86	0	157.95	17.95	0	0	0	823.76
2002-03	609.23	32.34	216	20	0	0	0	877.57
2003-04	99.56	0	818.59	72	0	0	0	990.15
2004-05	328.83	6.46	236.46	72	0	0	0	643.75
2005-06	292.87	0	239.76	107.55	10.05	0	0	650.23
2006-07	474.81	0	13374.63	0	12.12	0	74.08	13935.64
2007-08	1021.89	0	6573.95	0	0	40.31	30.39	7666.54
2008-09	0	328.32	1888.89	0	341.27	59.97	4.41	2622.86
2009-10	97.42	67.59	183.76	0	667.83	0	41.15	1057.75
2010-11	15.44	25.57	224.73	0	24.71	0	0	290.45
2011-12	156.72	0	266.58	0	0	0	0	423.3
2012-13	134.83	0	385.61	0	0	0	0	520.44
Total	4345.63	460.28	24670.28	297.55	1055.98	100.28	150.03	31080.03
Average	334.28	35.41	1897.71	22.89	81.23	7.71	11.54	2390.77
%	13.98	1.48	79.38	0.96	3.40	0.32	0.48	100.00
S.D.	300.21	90.28	3873.18	36.41	199.49	19.25	23.08	3987.53
C.V.	89.81	254.99	204.10	159.09	245.59	249.58	199.99	166.79
CAGR	-0.09	NA	0.11	-1.00	NA	NA	NA	-0.01

### 5.3.5 NMMCs Expenditure for Street Lighting from Capital Account

Street light is one of the important services provided by the N.M.M.C. It provides safety and increases the beauty of the city. In our province, N.M.M.C. spent Rs. 466.34 Lakh in 2000-01. Afterward, this amount was decreased in next three years. But again, it was increased up to Rs. 4325.90 Lakh in 2012-13. It was increased by 9.27 times during the analysis period. The expenditure pattern on street light from capital account is shown in table no. 5.19. It reveals:

1. NMMC did not spent for underground electric cables till 2007-08 from 2000-01, but afterwards, particularly in last year of the analysis; Corporation spent Rs. 2680.30 Lakh for laying underground cable. Its average expenditure was 37.54 percent to the total expenditure on street light from capital account which was comparatively more than others.
2. On street light improvement, average 24.28 percent has been spent; followed by road electrification (16.46 percent), high mast (8.40 percent), and traffic control work (2.57 percent).
3. Notably, Corporation paid attention towards the use of modern technique like GPRS and SCADA for improve the management of the street light. But, still there is long way to go ahead in this direction. Because, if Corporation could instruct to the commuters through electric symbols about busy ways, traffic jams, substitute ways and other problems through electronic displays, commuters can get relief from concerned problems and it will help to save the time of citizens and valuable fuel too.
4. Since 2008-09, the Corporation has focused to lay underground electric cables; it is a good thing and need of time

<b>Table No. 5.19: NMMC's Expenditure for Street Lighting from Capital Account</b>													
<b>(Rs. In Lakh)</b>													
<b>Year</b>	<b>Road Electrification</b>	<b>Electric Instrument fitting</b>	<b>New Electric Connection</b>	<b>Street Light Improvement</b>	<b>High Mast</b>	<b>Traffic Control Work</b>	<b>Building Electrification / Installing C.C. T.V. Cameras</b>	<b>Depreciation</b>	<b>Road Electrification in TTC Industrial Area</b>	<b>H. T. Line</b>	<b>Under Ground of Electric Cables</b>	<b>Management by GPRS/ SCADA-</b>	<b>Total</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>
2000-01	318.78	143.65	3.91	0	0	0	0	0	0	0	0	0	466.34
2001-02	302	1.18	10.89	0	0	0	0	0	0	0	0	0	314.07
2002-03	157.33	4.89	10.43	0	0	0.12	0	0	0	0	0	0	172.77
2003-04	72.46	2.93	0.59	42.92	0	4.53	0	10	0	0	0	0	133.43
2004-05	121.75	3.15	8.24	400.24	8.65	30.84	22.3	14.18	0	0	0	0	609.35
2005-06	76.15	3.33	25.47	114.63	6.05	14.04	16.39	25	0	0	0	0	281.06
2006-07	228.64	26.68	22.38	241.57	84.68	0	5.53	0	48.63	0	0	0	658.11
2007-08	267.65	66.83	39.99	336.81	204.26	5.12	0	0	47.73	0	0	0	968.39
2008-09	183.47	12.89	76.76	485.81	148.21	40.84	50.43	0	94.54	5.57	69.06	0	1167.58
2009-10	312.81	40.35	39.28	293.34	115.79	4.87	25.64	0	31.76	8.35	235.92	0	1108.11
2010-11	103.35	38.74	12.43	337.28	128.45	4.75	70.51	0	3.44	0	1842.35	0	2541.3
2011-12	167.38	16.38	13.33	783.62	200.54	0	25.4	0	40.5	0	861.05	299.86	2408.06
2012-13	182.9	12.18	20.4	644.04	376	283.91	49.4	0	53.3	0	2680.3	23.47	4325.9
Total	2494.67	373.18	284.1	3680.26	1272.63	389.02	265.6	49.18	319.9	13.92	5688.68	323.33	15154.47
Average	191.90	28.71	21.85	283.10	97.89	29.92	20.43	3.78	24.61	1.07	437.59	24.87	1165.73
Percent	16.46	2.46	1.87	24.28	8.40	2.57	1.75	0.32	2.11	0.09	37.54	2.13	100.00
S.D.	87.70	39.65	20.48	253.27	114.70	77.39	23.50	7.85	30.56	2.67	860.75	82.88	1227.48
C.V.	45.70	138.13	93.72	89.47	117.17	258.62	115.03	207.58	124.21	249.78	196.70	333.22	105.30
CAGR	-0.04	-0.17	0.14	0.31	0.52	1.03	0.09	NA	0.01	NA	1.08	-0.72	0.19

### 5.3.6 NMMCs Expenditure for Administrative Building from Capital Account

As population of Navi Mumbai is increasing, the need of various services also increasing, to provide these services, N.M.M.C. required to create an administrative buildings and offices, stores and construction of compound walls etc. The N.M.M.C. also purchased land for this purpose. Total expenditure made for this purpose was Rs. 16173.50 Lakh during the analysis period, of which 82.55 percent expenditure was incurred on construction of offices and residential buildings. For purchasing land, corporation spent an average 15.49 percent during the analysis period. However, for store and constructing protection walls, provision made by corporation was less and not regular. Its average proportion was only 1.96 percent during the same period. Its detail account is given in table no 5.20.

<b>Table No. 5.20: NMMC's Expenditure for Administrative Building from Capital Account (Rs. In Lakh)</b>				
<b>Year</b>	<b>Construction of Offices/ Residential Buildings</b>	<b>Purchase of Land</b>	<b>Others</b>	<b>Total</b>
	1	2	3	4
2000-01	929.81	32.43	0	962.24
2001-02	35.32	21.38	0	56.7
2002-03	28.9	66.23	0	95.13
2003-04	1835.32	12.87	17.98	1866.17
2004-05	647.69	707.32	0	1355.01
2005-06	101.39	17.62	0	119.01
2006-07	6.34	786.23	0	792.57
2007-08	65.94	319.88	47.42	433.24
2008-09	221.89	71.07	31.28	324.24
2009-10	3249.51	87.61	92.56	3429.68
2010-11	1890.65	71.42	0	1962.07
2011-12	875.83	123.91	44.91	1044.65
2012-13	3461.97	188.05	82.79	3732.81
Total	13350.56	2506.02	316.94	16173.5
Average	1026.97	192.77	24.38	1244.12
Percentage	82.55	15.49	1.96	100.00
S.D.	1221.14	260.23	33.24	1214.76
C.V.	118.91	134.99	136.36	97.64
CAGR	0.11	0.14	0.16	0.11

### 5.3.7 NMMCs Expenditure for Solid Waste Management from Capital Account

MoEF has defined Municipal Solid waste as “commercial and residential wastes generated in a municipal or notified area in either solid or semi-solid form excluding industrial hazardous wastes but including treated bio-medical wastes”. Under NMMC area, waste dust on road is collected through sweeping machine, while household waste is collected by door-to-door collection. The corporation has started the mechanical sweeping for effective cleaning of the road. The collected domestic solid waste (wet/ dry) is transported to the sanitary landfill at Turbhe on daily basis. There is a scientific closure of dumping ground at Kopakhairne. However, only Rs. 123.57 Lakh spent on solid waste management from capital account during the analysis period. Purchasing of dustbins and garbage equipment are the main channels of spending from this account. Notably, for the construction of platforms for dustbin and waste processing unit, the corporation did not make provision from capital account during the analysis period. Table no. 5.21 shows its detail.

<b>Table No.5.21: NMMC's Expenditure on Solid Waste Management from Capital Account (Rs. In Lakh)</b>				
<b>Year</b>	<b>Garbage Equipment Dustbin</b>	<b>Construction of Platform for Dustbin</b>	<b>Waste Processing Unit</b>	<b>Total</b>
	1	2	3	4
2000-01	26.94	0	0	26.94
2001-02	18.73	0	0	18.73
2002-03	26.06	0	0	26.06
2003-04	32.45	0	0	32.45
2004-05	0	0	0	0
2005-06	0	0	0	0
2006-07	5.1	0	0	5.1
2007-08	13.85	0	0	13.85
2008-09	0.44	0	0	0.44
2009-10	0	0	0	0
2010-11	0	0	0	0
2011-12	0	0	0	0
2012-13	0	0	0	0
Total	123.57	0	0	123.57

### 5.3.8 NMMCs Expenditure for Environment Monitoring from Capital Account

The major cities of the country like Delhi, Mumbai etc. are facing very serious problem of environment degradation. The city of Navi Mumbai is also not an exception for that. According to Environment Status Report of NMMC- 2013-14, Environment Quality Index has been increased from 70.02 tCO<sub>2</sub>e in 2012-13 to 70.69 tCO<sub>2</sub>e in 2013-14. However, per capita emissions were around 2.51 tCO<sub>2</sub>e as against the national average of 1.50 tCO<sub>2</sub>e. Around 70 percent of the total GHG emissions were because of electricity consumption, followed by usage of petroleum products (26 percent) and mere 4 percent GHG emission

attributed to waste under the jurisdiction of NMMC. (Environment Status Report NMMC-2013-14.) Corporation had spent only Rs. 0.12 Lakh for environment monitoring in 2000-01. It had been increased up to Rs. 100.96 Lakh in 2012-13. But, provision for levelling of rock mines was zero during the analysis period. Provision for environment green housing concept, solar heaters, water recycling etc. is also zero till 2009-10. Its detail account is given in table no. 5.22.

<b>Table No. 5.22: NMMC's Expenditure for Environment Monitoring from Capital Account (Rs. In Lakh)</b>				
<b>Year</b>	<b>Environment Control Cell / Equipment Expenditure</b>	<b>Levelling of Rock Mines</b>	<b>Environment Green Housing Concept, Solar, Heaters, Water Recycling Self Granted-</b>	<b>Total</b>
	1	2	3	4
2000-01	0.12	0	0	0.12
2001-02	0.5	0	0	0.5
2002-03	2.27	0	0	2.27
2003-04	53.56	0	0	53.56
2004-05	8.23	0	0	8.23
2005-06	8.41	0	0	8.41
2006-07	0	0	0	0
2007-08	12.22	0	0	12.22
2008-09	82.57	0	0	82.57
2009-10	13.12	0	0	13.12
2010-11	4.11	0	16.06	20.17
2011-12	0	0	0	0
2012-13	0	0	100.96	100.96
Total	185.11	0	117.02	302.13
Average	14.24	0.00	9.00	23.24
Percentage	61.27	0.00	38.73	100.00

### 5.3.9 NMMCs Expenditure for Public Health and Hospital Services from Capital Account

Good environmental conditions and health facilities determines public health and efficiency of the citizens, which is one of the important determinants of economic progress as well as human resource development.

The city of Navi Mumbai has diverse health care services and facilities including clinics, hospitals, super specialty hospitals, dispensaries etc. The Corporation has five own hospitals, 21 dispensaries and 02 mobile dispensaries (Environment Status Report of NMMC – 2013-14).

Initially Corporation spent Rs. 291.89 Lakh for this purpose from capital account. It was increased up to Rs.4313.48 Lakh in 2012-13. However, it was not regular during the analysis period. The detail of expenditure incurred on public health and hospital services is shown in table no 5.23. The conclusions are as follows:

1. Out of total provision made for public health and hospital services from capital account, 91.17 percent spent for construction of hospitals.
2. Corporation also made provision for Trauma units from 2008-09.
3. It shows that more amount was spent on construction, but purchasing of equipment is also equally important.

<b>Table No. 5.23: NMMC's Expenditure for Public Health and Hospital Services from Capital Account (Rs. In Lakh)</b>					
<b>Year</b>	<b>Construction of Hospitals-</b>	<b>Hospital Material and Purchasing of Furniture</b>	<b>Hospital equipment (Dialysis Machine)</b>	<b>Construction of Trauma Unit and equipment</b>	<b>Total</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	
2000-01	NA	NA	NA	NA	291.89
2001-02	NA	NA	NA	NA	724.49
2002-03	0	0	11.93	0	11.93
2003-04	152.71	0	1.01	0	153.72
2004-05	0	0	0	0	0
2005-06	83.83	5.65	55.27	0	144.75
2006-07	29.12	0	6.81	0	35.93
2007-08	10.14	0	14.13	0	24.27
2008-09	84.52	36.83	28.5	331.77	481.62
2009-10	460.7	0	162.18	68.27	691.15
2010-11	2275.44	44.81	0	0	2320.25
2011-12	3691.07	90.52	111.94	0	3893.53
2012-13	4216.97	96.51	0	0	4313.48
Total	11004.5	274.32	391.77	400.04	13087.01
Average	846.5	21.10	30.14	30.77	928.51
Percentage	91.17	2.27	3.25	3.31	100.00

### 5.3.10 NMMCs Expenditure for NMMT from Capital Account

The NMMT is a separate transport wing of the NMMC. It had having 256 buses, 02 depots, 1346 employees, travelling 51,86,258 passengers monthly, travelled distance 44,104 kms, 16250 liters diesel consumption and earns Rs. 11,31,717 revenue per day.

Although, NMMC is spending from capital account for NMMT as a grant, purchasing land for construction of depots and making provision of urban transport fund. Corporation has given Rs. 8419.54 Lakh to NMMT during analysis period, of which maximum was grant (90.50 percent), followed by urban transport fund (7.13 percent), and purchasing land (2.38 percent). Its detail account is given in table no 5.24.



**Table No. 5.24: N.M.M.C.'s Expenditure on NMMT From capital Account  
(Rs. In Lakh)**

Year	N.M.M.T. Grants	Purchasing Land for Depot and development of the same	Urban Transport Fund	Total
	1	2	3	4
2000-01	100	0	0	100
2001-02	0	0	0	0
2002-03	0	0	0	0
2003-04	0	0	0	0
2004-05	100	0	0	100
2005-06	200	0	0	200
2006-07	700	0	0	700
2007-08	850	0	0	850
2008-09	100	200	0	300
2009-10	1000	0	0	1000
2010-11	1500	0	0	1500
2011-12	1379	0	500	1879
2012-13	1690.54	0	100	1790.54
Total	7619.54	200	600	8419.54
Average	586.12	15.38	46.15	647.66
Percentage	90.50	2.38	7.13	100.00

### 5.3.11 NMMCs Expenditure for Primary Education from Capital Account

The primary education with adequate quality becomes basic need of the society. The investment in education is bringing comparatively more and long-term returns to society. With this perception, Government of India made 86<sup>th</sup> constitutional amendment in 2002 and make primary education compulsory to the all. Accordingly, Government of Maharashtra also passed and enacted Right to Education act from April 1<sup>st</sup> 2010 in the State. Accordingly, local Governments also working for the primary education. It is also an obligatory function of the Municipal Corporation. Its detail is given in table no 5.25. The conclusions from this table are as follows:

1. The NMMC spent Rs. 0.56 Lakh in 2001-02 from capital account for constructing schools; it was increased up to Rs. 1400.27 Lakh in 2008-09. However, provision has decreased later on during the analysis period.
2. Out of total provision, 98.15 percent was only for construction of the schools.
3. Seating benches for the students were purchased by NMMC during analysis period. However, provision on it was merely 1.85 percent and was not regular in the analysis period.

<b>Table No. 5.25: NMMC's Expenditure for Primary Education from Capital Account (Rs. In Lakh)</b>			
<b>Year</b>	<b>Construction of Schools</b>	<b>Purchase of School Benches</b>	<b>Total</b>
	<b>1</b>	<b>2</b>	<b>3</b>
2000-01	0	0	0
2001-02	0.56	0	0.56
2002-03	11.18	0	11.18
2003-04	10.16	38.82	48.98
2004-05	69.95	3.81	73.76
2005-06	203.91	0	203.91
2006-07	148.36	0	148.36
2007-08	534.87	0	534.87
2008-09	1400.27	0	1400.27
2009-10	1298.34	58.17	1356.51
2010-11	969.34	0	969.34
2011-12	551.27	14.9	566.17
2012-13	938.36	0	938.36
Total	6136.57	115.7	6252.27
Average	472.04	8.90	480.94
Percentage	98.15	1.85	100.00

### 5.3.12 NMMCs Expenditure for repaying loan from Capital Account

The NMMC is supposed to repay loan of MMRDA as per agreement made with MMRDA which was established on 25<sup>th</sup> Jan 1975 accordance with Mumbai Metropolitan Act, 1974. MMR is spread over 4355 sq. km. It covers eight municipal corporations, nine municipal councils and over one thousand villages of Thane and Raigad Districts. It makes long term planning, promoting new growth centres and working for making MMR a destination for economic activity by promoting infrastructure development and improves the quality of life. MMRDA gives loan for this purpose which is supposed to pay back as per agreement mode by the concern local body. It compels Corporation to make provision for the same. In 2000-01, loan repayment provision of MMRDA was Rs. 59.22 Lakh; it has been increased by 60.14 times and reached up to Rs. 3561.60 Lakh in 2012-13. It had increased substantially, particularly in last three years of analysis.

From last two years of analysis, Corporation also made provision of sinking fund. During 2000-01 to 2010-11, Corporation did not make provision of sinking fund. Megacity loan MMRDA provision was only for three years. In eighth plan, Megacity scheme was started by GOI. Its aim was to prepare the local governments to use institutional finance and eventually market instruments like municipal bonds for the capital investment requirements. Under this scheme, GOI and State Government provided 25 percent to each and the

remaining 50 percent was to be raised from financial institutions by the implementing agencies. Its detail given in table no 5.26.

<b>Table No. 5.26: NMMC's Expenditure for paying loan from Capital Account (Rs. In Lakh)</b>				
<b>Year</b>	<b>MMRDA Loan Refund - Civil/ Electric/ Sewerage</b>	<b>Sinking Fund</b>	<b>Megacity Loan MMRDA Sewerage</b>	<b>Total</b>
	1	2	3	4
2000-01	59.22	0	0	59.22
2001-02	59.22	0	0	59.22
2002-03	123.78	0	121.9	245.68
2003-04	134	0	121.96	255.96
2004-05	134	0	121.96	255.96
2005-06	275.46	0	0	275.46
2006-07	294.96	0	0	294.96
2007-08	265.35	0	0	265.35
2008-09	235.74	0	0	235.74
2009-10	235.74	0	0	235.74
2010-11	1301.64	0	0	1301.64
2011-12	3040.64	2520	0	5560.64
2012-13	3561.6	500	0	4061.6
Total	9721.35	3020	365.82	13107.17
Average	747.80	232.31	28.14	1008.24
Percentage	74.17	23.04	2.79	100.00

### 5.3.13 NMMCs Expenditure on Security Deposit (Refund) from Capital Account:

While providing various services and awarding contracts, concerned contractor or individuals are supposed to keep some amount as a security deposit with NMMC. These security deposits are supposed to return to the concerned contractors or individuals after a specific time which is mentioned in the agreements or rule. If, it has not been refunded within time, corporation must repay it with interest. Security deposits are not an own source of income, but it is available to use for specific time with Concerned Government or institution. Corporation is also supposed to refund of cess and property tax to the citizens. The major component of refund was security deposits of contractors (69.59 percent), followed by security deposit refunded TPO (29.44 percent) during the analysis period. Its details are given in table no 5.27.

<b>Table No. 5.27: NMMC's Expenditure on security deposit (refund) from Capital Account (Rs. In Lakh)</b>						
<b>Year</b>	<b>Security Deposit Refund-TPO</b>	<b>Cess Refund</b>	<b>Property Tax Refund</b>	<b>Security Deposit Refund with interest</b>	<b>Security Deposit Refund Contractors</b>	<b>Total</b>
2000-01	32.1	0	0.07	0.21	0	32.38
2001-02	334.69	50.79	0.19	0.29	0	385.96
2002-03	420.14	0	0	0	0	420.14
2003-04	171.54	0	0	0	0	171.54
2004-05	260.6	0	0	0	0	260.60
2005-06	289.73	0	0	0	0	289.73
2006-07	0	0	0	0	169.33	169.33
2007-08	0	0	0	0	213.18	213.18
2008-09	4.92	0	0	0	181.87	186.79
2009-10	0	0	0	0	644.00	644.00
2010-11	1.22	0	0	0	631.73	632.95
2011-12	48.56	0	0	0	660.27	708.83
2012-13	0	0	0	0	1194.99	1194.99
Total	1563.50	50.79	0.26	0.50	3695.37	5310.42
Average	120.27	3.91	0.02	0.04	284.26	408.49
Percentage	29.44	0.96	0.005	0.01	69.59	100.00

### **5.3.14 Refunded Tax to the Government of Maharashtra and amount of BSUP projects from Capital Account**

On behalf of the Government of Maharashtra, NMMC is collecting state education tax and professional tax. It is supposed to refund to the state government. In 2000-01, Rs. 1521.45 Lakh was refunded to the state; it was increased by 3.43 times and reached up to Rs. 5225.49 Lakh in 2012-13.

In this major contribution of state education tax was 87 percent. This proportion was not changed much during the analysis period. It revealed as:

1. The CAGR of state education tax was comparatively more (10 percent) than employment guarantee tax (8 percent).
2. It should be noted that, till the year 2005-06, it was included in capital account expenditure, but afterward, it had shown separately. Therefore, the figures in column of tax refunded to Government of Maharashtra and the total of table no 5.28 are not matching.

The amount of BSUP project is also mentioned in this table. Corporation did not continue this scheme, which was a sub- mission of JNNURM

**Table No. 5.28: NMMC Refunded Tax to the Govt. and BSUP projects from Capital Account (Rs. In Lakh)**

Year	State Education Tax	State Employment Guarantee Tax	Total
	1	2	3
2000-01	1274.4	247.05	1521.45
%	83.76	16.24	100.00
2001-02	1655.2	278.29	1933.49
%	85.61	14.39	100.00
2002-03	2332.2	470.1	2802.3
%	83.22	16.78	100.00
2003-04	2185.42	264.54	2449.96
%	89.20	10.80	100.00
2004-05	2021.76	362.88	2384.64
%	84.78	15.22	100.00
2005-06	2351.53	350.67	2702.2
%	87.02	12.98	100.00
2006-07	2034.74	304.04	2338.78
%	87.00	13.00	100.00
2007-08	1786.56	274.51	2061.07
%	86.68	13.32	100.00
2008-09	2635.89	393.86	3029.75
%	87.00	13.00	100.00
2009-10	2934.55	438.48	3373.03
%	87.00	13.00	100.00
2010-11	3657.07	546.46	4203.53
%	87.00	13.00	100.00
2011-12	3893.79	581.83	4475.62
%	87.00	13.00	100.00
2012-13	4546.18	679.31	5225.49
%	87.00	13.00	100.00
Total	33309.29	5192.02	38501.31
Average	2562.25	399.39	2961.64
%	86.51	13.49	100.00
S.D.	460.46	68.80	529.27
C.V.	17.97	17.23	17.87
CAGR	0.10	0.08	0.10

### 5.3.15 Corporators fund allotted from Capital Account

To undertake the developmental functions in the wards, NMMC uses to make provision from capital account as a Corporators fund. In 2000-01, 2001-02 and 2002-03, provision was made of Rs. 1673.16, 2520.26 and 770.2 Lakh respectively. However, later on, it had decided that, instead of allotting fund to Corporators from capital account, they could recommend the work, which they are expecting to be undertaking in their respective ward. Expenditure incurred on these works had shown in the general expenditure. In 2001-02 and 2002-03, Corporation also has made a provision of ward committee fund, but it was also discontinued in further period. Because, in spite of making such provision, General body felt that, it would always better to suggest work to be undertaken in their respective wards. The provision as Mayor's fund had in last two years of analysis that was Rs. 35 and Rs. 50 Lakh respectively. It was to undertake the works which, suggested by the Mayor. Here, notable thing is that, discontinuation of Corporators fund to brought transparency in the contracts awarded by NMMC.

<b>Table No. 5.29: Corporators fund allotted from Capital Account (Rs. In Lakh.)</b>				
<b>Year</b>	<b>Corporators fund</b>	<b>Ward Committee fund</b>	<b>Mayor Fund</b>	<b>Total</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
2000-01	1673.16	0	0	1673.16
2001-02	2520.26	249.22	0	2769.48
2002-03	770.2	207.29	0	977.49
2011-12	0	0	35	35
2012-13	0	0	50	50
Total	4963.62	456.51	85	5505.13
Average	381.82	35.12	6.54	423.47
%	90.16	8.29	1.54	100.00

### 5.3.16 NMMC's Expenditure on Morbe Dam from Capital Account

To quench the thirst of Navi Mumbai and Nava Sheva region, Morbe Dam is constructed on Dhavri River during 1999 to 2006 by water supply and sanitation department of GOM. This river is a tributary of Patalganga River. The Dam has 59.1 Meter height and 3420 Meter length. Its gross storage capacity is 19089 km<sup>3</sup>. Total 11 villages and 2897 families affected by this Dam (Census 1981). However, the GOM had permitted to NMMC to take over this Dam on 25<sup>th</sup>, November 2002. It is the unique project of the Corporation, which other corporations do not have in our country. The cost of this dam was Rs. 383.40 crore and cost of treatment plan and allied works was Rs. 170.30 crore. It includes water treatment plant at Bokharpada with capacity of 300 MLD. Corporation required around 335 MLD water every day. Of which, 30 MLD supplied by CIDCO, 50 MLD by MIDC and 225 MLD water is coming from Morbe Dam. On August 29<sup>th</sup>, 2010, the last cheque of Rs. 21 crore

was given to MJP as a last instalment of total cost Rs.554 crore. But the total amount spent by NMMC from capital account was Rs. 60794.76 Lakh during 2003-04 to 2012-13. Out of which, 54.51 percent had spent on purchasing dam, 36 percent on pipe line, 8 percent on water process centre at Bokharpada and 0.07 percent on beautification of the dam. As mentioned earlier, it is a unique and very significant work done by NMMC. Furthermore, NMMC can think about solar projects on this dam, as it will help to stop the evaporation and generate power by non-traditional source, which is a need of the time. The detail account of it shown in table no. 5.30.

<b>Table No. 5. 30: N.M.M.C.'s Expenditure on Morbe Dam from Capital Account (Rs. In Lakh)</b>						
<b>Year</b>	<b>Purchasing of Dam, Step-I and II.</b>	<b>Pipeline at Kalamboli Node</b>	<b>Continued high power lines and power sub-centre</b>	<b>Water Process Centre at Bhokar-pada</b>	<b>Morbe Dam Beautification</b>	<b>Total</b>
	1	2	3	4	5	6
2003-04	6038.05	0	0	0	0	6038.05
2004-05	4840.47	0	0	0	0	4840.47
2005-06	6276.92	0	0	0	0	6276.92
2006-07	4646.73	12	0	0	0	4658.73
2007-08	2747.75	4181	0	0	0	6928.75
2008-09	2202.9	4045.9	0	0	0	6248.8
2009-10	2814.15	10031	0	186.4	39.5	13071.05
2010-11	2973.5	2291.71	463.75	1819.39	4.41	7552.76
2011-12	364.6	1527.52	0	1783.56	0	3675.68
2012-13	234.31	0	0	1269.24	0	1503.55
<b>Total</b>	<b>33139.38</b>	<b>22089.13</b>	<b>463.75</b>	<b>5058.59</b>	<b>43.91</b>	<b>60794.76</b>
<b>Average</b>	<b>3313.94</b>	<b>2208.91</b>	<b>46.38</b>	<b>505.86</b>	<b>4.39</b>	<b>6079.48</b>
<b>%</b>	<b>54.51</b>	<b>36.33</b>	<b>0.76</b>	<b>8.32</b>	<b>0.07</b>	<b>100.00</b>

### 5.3.17 NMMC's Expenditure under JNNURM from Capital Account

JNNRUM is one of the flagship programs of the GOI started in 2005-06. It aims to create economically productive, efficient, equitable and responsive cities in the country. This mission is working with two sub- missions.

#### 1. Urban infrastructure and governance

#### 2. Basic services to urban poor (BSUP)

This mission is working under the overall guidance and supervision of NSG (National Steering Group) which was chaired by minister of urban development, GOI. NSG is

supported by TAG (Technical Advisory Group). At the state level there are steering committees chaired by chief ministers, which coordinates the JNNRUM. These state level committees being supported by nodal agencies that invites the projects, appraises them, manage and monitor the overall JNNRUM at State level. On the basis of City Development Plan (CDP), Detailed Project Report (DPR), and time line projects cities are being selected under this scheme. However, it works on the conditions of reforms at state level and municipal levels, which have classified as mandatory and optional reforms, for instance, at the state level, effective implementation of 74<sup>th</sup> CAA 1992, Repeal of urban land (ceiling and regulation) Act 1976, Rationalization of stamp duty to bring it down to less than 5 percent within six years. At the municipal level, it was expected that municipals should accept modern accrual – based double entry system of account, e- governance, GIS, MIS for various services and property tax, levy of reasonable user charges, internal earmarking for BSUP etc.

Initially total 63 cities identified eligible cities in the country. These were from different categories for which funding pattern is also different in accordance to sub- missions. Its detail is given in table no 5.31.

Table no. 5.31: Funding pattern of JNNURM						
Mission I- Urban Infrastructure and Governance						
Sr. No.1	City Category	Population of the City  (Census 2001)	No. of cities	Funding pattern in %		ULB/ loans from banks /FIs in %
				GOI	State Govt.	
1	A	>4 million	07	35	15	50
2	B	1 to 4 million	28	50	20	30
3	C	< one million of North Este States and J & K	28	90	10	00
		Others			80	10
Mission- 02- Funding pattern for BSUP projects						
Sr. No.1	City Category	Population of the City (Census 2001)	No. of cities	Fund from GOI as a grant in %	State/ ULB/ Parastatal share including beneficiaries’ contribution in %	
1	A	>4 million	07	50	50	
2	B	1 to 4 million	28	50	50	
3	C	< One million of North East States and J & K	28	90	10	
		Others			80	20



<b>Table No.5. 32: NMMCs expenditure under JNNURM from Capital Account (Rs. In Lakh)</b>							
<b>Year</b>	<b>Augmentation of water supply system</b>	<b>Augmentation of sewerage system</b>	<b>Implementation of E- Governance</b>	<b>Rejuvenation of storm water system</b>	<b>Corridor improvement plan for Palm Beach Road</b>	<b>Integrated solid waste management project</b>	<b>Total</b>
	1	2	3	4	5	6	7
2008-09	575.83	910.96	55.99	277.07	318.98	0	2138.83
2009-10	2080.53	14080.92	80.16	0	460.76	121	16823.37
2010-11	8672.34	17491.94	758.84	0	0	1506.95	28430.07
2011-12	7014.8	9305.61	205.42	0	0	3105.41	19631.24
2012-13	5010.2	7467.16	205.24	0	0	273.83	12956.43
Total	23353.7	49256.59	1305.65	277.07	779.74	5007.19	79979.94
Average	4670.74	9851.318	261.13	55.414	155.948	1001.438	15995.988
%	29.20	61.59	1.63	0.35	0.97	6.26	100.00
S.D.	3357.83	6367.51	286.69	123.91	219.35	1321.90	9614.65
C.V.	71.89	64.64	109.79	223.61	140.65	132.00	60.11
CAGR	0.16	0.15	0.09	-1.00	-1.00	0.23	0.13

Table no. 5.32 reveals that NMMC focused much on first sub- mission of JNNRUM, which is related to Urban Infrastructure and Governance. NMMC became part of this scheme from 2008-09, under which substantial amount is spent on infrastructure. Initially, total Rs. 2138.83 Lakh expenditure was incurred from capital account; it has been increased by 6.05 times and reached up to Rs. 12956. 43 in 2012-13. Obviously, Corporation has given more importance for sewerage system as out of total expenditure, 61.59 percent was spent on it, followed by water supply (29.20 percent), and solid waste management (6.26 percent). For e- governance, storm system and road construction allotment were around one percent of total expenditure incurred under JNNRUM from capital account. It is found that corporation has neglected the second mission which was related to Basic Services to Urban Poor which, were related to personal benefits particularly for poor people for instance construction of homes.

### 5.3.18 NMMC's Expenditure on other factors from Capital Account

It includes expenditure on city beautification, garden, market, art and social welfare, crematorium, public toilets, fire brigade, Vishnudas Bhawe Auditorium, providing civic amenities, tree authority, cattle pond, social services, dumping ground, providing civil amenities, pay and park, lakes and ponds, slum upgradation, sports and cultural program etc. The proportion of amount spent on other factors from capital account hovering between 2.9 to 16.5 percent during analysis period. Obviously, the components included in other factors are more, but expenditure was comparatively less. As its included items were more and allotment on them was not regular. Therefore, it had shown in main table of capital account expenditure. (Table no. 5.14)

### 5.3.19 NMMC's Per Capita Expenditure and Per Capita Tax Collection

The calculation of per capita expenditure and tax collection shows that how much corporation is spending (per-capita) more rather than they collected as a tax from citizens.

Obviously, its ratio has increased in 2011 (1.96) as compared to the year 2001(1.75). Its detail is given in table no. 5.33.

<b>Table No. 5.33: NMMC's per capita Expenditure and per capita tax collection</b>						
<b>Year</b>	<b>Total population</b>	<b>Total Expenditure (In Rs. Lakh)</b>	<b>Total Tax collection (Rs. In Lakh)</b>	<b>Percapita Expenditure (Rs. In Lakh)</b>	<b>Percapita Tax collection (Rs. In Lakh.)</b>	<b>Ratio - Per capita Expenditure to Percapita Tax</b>
2000-01	7,03,947	19973.66	11399.71	2837.38	1619.39	1.75
2010-11	11,20,547	107256.01	54625.04	9571.75	4874.85	1.96

### 5.3.20 N.M.M.C. s Revenue Receipts and Revenue Expenditure

The total revenue receipts and revenue expenditure shows the cost recovery on various services provided by the Corporation. Most of the time for upper-level governments like state and centre, revenue account used to be in a deficit position. But, for NMMC, revenue account was in surplus position, which helps to increase the capital account expenditure, which brings long time benefits to the citizens. Its detail is shown in table no. 5.34. Main conclusions were:

1. Revenue account was continuously in surplus position during the analysis period.
2. The CAGR of total revenue receipts (13 percent) was more than revenue expenditure (11 percent).
3. There was an increasing trend in the 'surplus size' of the revenue account.

<b>Table No 5. 34: NMMC's Revenue Receipts and Revenue Expenditure (In Rs. Lakh.)</b>					
<b>Years</b>	<b>Receipts from Revenue Account</b>	<b>Expenditure on Revenue Account</b>	<b>Surplus/ Deficit ( +- )</b>	<b>Percentage to Total Receipts</b>	<b>Total Receipts</b>
	1	2	3	4	5
2000-01	15705.42	11545.16	4160.26	21.09	19727.89
2001-02	17448.31	11465.68	5982.63	28.60	20920.98
2002-03	17727.16	10420.29	7306.87	35.60	20526.59
2003-04	24930.42	13536.36	11394.06	40.24	28312.72
2004-05	25388.75	15815.85	9572.9	31.56	30331
2005-06	31571.98	17798.84	13773.14	41.93	32849.77
2006-07	38005.5	19329.2	18676.3	38.36	48692.8
2007-08	47048.55	20997.57	26050.98	45.10	57756.84

<b>Table No 5. 34: NMMC's Revenue Receipts and Revenue Expenditure (In Rs. Lakh.)</b>					
2008-09	57907.12	25626.3	32280.82	43.90	73532.19
2009-10	60626.05	28874.48	31751.57	38.55	82363.18
2010-11	72370.78	33722.71	38648.07	37.71	102485.66
2011-12	82638.33	39130.93	43507.4	42.18	103138.11
2012-13	95024.78	55710.55	39314.23	31.97	122978.52
Total	586393.15	303973.92	282419.23	476.79	743616.25
Average	45107.17	23382.61	21724.56	36.68	57201.25
S.D.	26553.09	13206.31	14118.75	6.83	36142.24
C.V.	58.87	56.48	64.99	18.61	63.18
CAGR	0.13	0.11	0.16	0.03	0.13

## 5.4 Quality of Expenditure

The quality of expenditure depends on the ratio of capital expenditure in the total expenditure (capital + revenue). If the ratio of it is higher, it is said to be an improvement in the quality of expenditure and vice- versa. Regarding NMMC's expenditure capital expenditure was 42.20 percent in 2000-01, 47.53 percent in 2005-06, 64.64 percent in 2010-11 and 49.12 percent in 2012-13. It means except last two years of analysis, quality of expenditure is improving during the analysis period.

## 5.5 Summing-up

The total expenditure of NMMC comprises of revenue account expenditure, capital account expenditure and tax refunded to GOM (Education tax and Employment Guarantee Tax). Till 2005-06, N.M.M.C included tax refunded to GOM in capital account expenditure, but later on, it was mentioned separately. In total expenditure, the proration of revenue account expenditure was decreased from 57.80 percent to 46.52 percent during 2000-01 to 2012-13. On the other hand, expenditure on capital account expenditure was increased from 42.30 to 49.12 percent during the same period. It is a good sign, because capital expenditure was productive. The revenue account of the Corporation was continuously in surplus position.

The water supply (28.99 percent) administration services (19.68 percent) solid waste management (11.99 percent) and road (10.91 percent) were the major heads of the expenditure from revenue account. Notably, on social services, expenditure made by corporation was very less (0.57 percent).

On the other hand, from capital account, road (16 percent), Morbe Dam, (15.9 percent), public health engineering (9.4 percent), government tax refunded (9.9 percent) and expenditure under JNNURM's sub mission and NMMT combinely heads around 10 percent were the major channels of the expenditure. Notably, provision made for environment monitoring was only 0.1 percent of total capital expenditure. Education got only 1.1 percent from capital account during the analysis period.

The first sub- mission of JNNURM (Infrastructure and Governance) is implemented vigorously by NMMC. But, second i.e., Basic Services to Urban Poor; which was related to personal benefits to the urban poor was totally neglected.

## **5.6 References:**

1. Tyagi B.P., 2014, Public Finance, Jai Prakash Nath and Co. Gath, Nauchandi Garh Road, Merut City, U.P., India.
2. [WWW.economicsdiscussion.net/expenditure](http://WWW.economicsdiscussion.net/expenditure).
3. Environment Status Report of NMMC, 2013-14, Page No. 158.
4. Annual Budget Reports of NMMC during 2000-01 to 2012-13.

## **Chapter 6**

### **Feedback from Stakeholder**

#### **6.0 Introduction**

This chapter fully devoted for the assessment of the citizens satisfaction on various services provided by the NMMC. Every Government takes efforts to meet the citizens need through using financial resources and performing activities in our domain of the work. According to constitution of India, each government, it may be Central, State or Local, they have their own domain to work. Undoubtedly, each government satisfied the citizens up to some extent on various requirements, but how much satisfaction is enjoyed by citizens? It is the basic question while conducting this study. Scientifically, its accurate measurement is very difficult. However, it can be measured / assessed by taking feedback of the citizens on various services provided by the concerned Government. Up to what extent they are satisfied, it depends on the expectations of the citizens and service quality offered by the concerned Government. Recently, it is observed that, citizens' expectations are high and day by day these are increasing. In this situation, Governments' task becomes difficult and will be so long with strong efforts to make citizens satisfied. Really, to assess the performance and efficiency of the government's expenditure, there is no exact & accurate measurement rod and scientific parameter developed yet. However, we can assess it based on citizen's feedback on various services provided by the government. Here, in this book, in chapter number fifth, the researcher has discussed the expenditure pattern and its trends for specific period. Subsequently, it is also equally important that, what citizens are talking & expecting about various services provided by NMMC. Furthermore, as Corporation has received various awards and recognitions, but it is very important to understand that what citizens are getting from the Corporation. Whether citizens are satisfied or not? On which services they are satisfied, up to what extent, and on which services they are not satisfied. With these questions, this chapter is designed and work has been carried out.

#### **6.1 Awards Received by NMMC:**

As mentioned earlier, Navi Mumbai Municipal Corporation was established on January 1<sup>st</sup>, 1992. There are seven nodes under the Jurisdiction of NMMC. These are Airoli, Ghansoli, Koparkhairne, Vashi, Sanpada, Nerul and C.B.D. /Belapur. Area of NMMC is little over one third of Navi Mumbai (108 .63 sq. km). CIDCO has developed infrastructure in the city and Corporation has the responsibility of maintain it. Even though, NMMC is one of the new Urban Local Bodies, has received more than 15 various awards. till 2015:

1. Government of Maharashtra awarded 1<sup>st</sup> prize under the Sant Gadgebaba urban cleanliness campaign twice, 2002-03 and 2005-06 with cash reward of Rs. 50 Lakh.
2. National Water Award - 2008 by Government of India for providing best water service.
3. Awarded by Administrative Staff College of India, Hyderabad and FCCI for successful water supply for 24 × 7 hours.
4. 1<sup>st</sup> rank in implementing Sarva Shiksha Abhiyan in 2007-08 and 2008-09.

5. National Water Award- 2009 by President of India.
6. Vasundhara Award by Government of Maharashtra in 2009.
7. Best City Award for improvement in wastewater and sanitation services under JNNURM- 2009.
8. National Urban Water Award 2010 for improved customer satisfaction.
9. National Urban Water Award-2010 for sanitary improvements and safe disposal practices, integrated storm water disposal system.
10. Indian Municipal Vision 2020 award for WISITEX green urban development award for the decade.
11. For best sanitation practices, Sant Gadgebaba Award by Government of Maharashtra - 2008-09.
12. Best Practices Award by Government of Maharashtra for best practices like education and training for handicap.
13. Best Information Communication and Technology Award for E-Governance by Government of Maharashtra.
14. First prize by Government of Maharashtra for implementing Family Planning Programme, Tuberculosis prevention and mother child health care.
15. Clean city of the state and stood at third rank in the Country in 2015.

Such as, Corporation bestowed with various awards and recognitions. However, it is interesting to study that whether citizens are satisfied with the main services provided by NMMC or not?

Where NMMC should pay more attention? What are the suggestions of the citizens? It is studied in this chapter.

## **6.2 Ward Wise Break-up of the Respondents**

Total 216 respondents inquired, of which 56 percent were male and 44 percent were females. However, as Vashi is central and significant place of the Navi Mumbai, maximum respondents are from Vashi and comparatively less were from Airoli Node. Table no. 6.1 shows the ward wise break-up of the respondents.

<b>Table No. 6.1: Node wise Break-up of the Respondents</b>			
<b>Sr. No.</b>	<b>Name of the Node</b>	<b>Frequency</b>	<b>Percent</b>
1	CBD/Belapur	20	9.26
2	Nerul	22	10.19
3	Turbhe Gaon	23	10.65
4	Vashi Gaon	37	17.13
5	Koparkhairne	36	16.67
6	Airoli	16	7.41
7	Ghansoli Gaon	32	14.81
8	Digha	30	13.88
	<b>Total</b>	<b>216</b>	<b>100</b>

### 6.3 Language Wise Break-up of the Respondents

As Navi Mumbai was developed as sister city of the Mumbai, is one of the planned cities of Asia, it becomes attractive magnet city to not only for surrounding people, but also for others from various corners of the country and state.

Language wise break-up of the respondents is shown in table no 6.2. Even though, there were different languages spoken by the respondents, still Marathi was major language (79.6 percent) and only .5 percent (Minimum) respondents were speaking English language as their mother tongue among the respondents.

<b>Table No. 6.2: Language wise break-up of the Respondents</b>			
<b>Sr. No.</b>	<b>Language</b>	<b>Frequency</b>	<b>Percent</b>
1	Marathi	172	79.6
2	Hindi	28	13.0
3	English	1	0.5
4	Others	15	6.9
	<b>Total</b>	<b>216</b>	<b>100</b>

### 6.4 Age Group and Inhabit Years of the Respondents

The old age people which have been living since long time, have more experience and a good sense about the various services provided by the government. At the same time, what young generation is thinking and expecting is also important. Out of total respondents, 66.2 percent were from the age group of 21 to 50 years and 26.4 percent respondents were residing more than 21 years, who might have seen the performance of NMMC since its inception. Age wise breakup and residing years of respondents have shown in table no 6.3.

<b>Table No. 6.3: Age group and residing years of the respondents</b>						
<b>Age wise Distribution of the Respondents</b>				<b>Residing Years of the respondents</b>		
<b>Sr. No.</b>	<b>Age Range- (In Years)</b>	<b>Freq uency</b>	<b>Perce nt</b>	<b>Years</b>	<b>Freq uency</b>	<b>Perce nt</b>
1	Below 20	35	16.2	01 to 05	51	23.6
2	21 to 30	92	42.6	06 to 10	52	24.1
3	31 to 40	25	11.6	11 to 15	24	11.1
4	41 to 50	26	12.0	16 to 20	32	14.8
5	51 to 60	21	9.7	Above 21	57	26.4
6	Above 61	17	7.9	Total	216	100
	<b>Total</b>	<b>216</b>	<b>100</b>	--	--	--

## 6.5 Income Group Wise Break-up of the Respondents

Income of the consumer is one of the important aspects in economic analysis, which determines the consumption pattern and standard of living. The accessibility of the person to education and health facilities depends on income level of the person. It also determines the way in which person is seeing to the facts exists in the society. While conducting the survey, as random sample method is used, there was not a choice to select respondents based on income level. However, out of 216 respondents, maximum (54.2 percent) had from the income group of Rs. 10,001 to 25,000 and notably no one was from the income group of up to Rs. 10,000. Its detail is shown in table no. 6.4.

<b>Table No. 6.4: Income wise Distribution of the Respondents</b>			
<b>Sr. No.</b>	<b>Income Range in Rs.</b>	<b>Frequency</b>	<b>Percent</b>
1	Up to 10,000	00	00
2	10001 to 25000	117	54.2
3	25001 to 50000	61	28.2
4	50001 to 100000	33	15.3
5	Above 100001	5	2.3
	<b>Total</b>	<b>216</b>	<b>100.0</b>

## 6.6 Road, Street Lighting, Maintaining Lakes, Ponds, and Gardens

To make city beautiful and joyful place for residents and visitors, the quality of road, street light, gardens and maintaining lakes and ponds are necessary. Undoubtedly, Corporation is taking efforts for that, but what citizens felt, it is also important for making plan for the future. Regarding road services, even though this city was the one of the planned cities of Asia, only 6.5 percent respondents felt that this service was excellent. On the other hand, comparatively more (12 percent) citizens were unsatisfied at all. Even though, capital account expenditure of the corporation was increasing in which expenditure incurred on road was significant (16 percent from capital account and 10.92 percent from revenue account) citizens were not fully satisfied on the same. Regarding street lighting, 10.6 percent respondents were not satisfied, but 34.7 percent citizens had good opinion.

There are 25 lakes in the jurisdiction of the NMMC. Includes CBD/ Belapur-7, Nerul-4, Vashi-2, Turbhe-1, Koparkhairne-3, Ghansoli-4, Airoli-3 and Dhiga-1 which occupied the area of 3,33,023 sq meter and that having water level of minimum .5 meter to maximum 3 meter. While considering the location of the Navi Mumbai, the role of ponds is also significant because as high tide level with respect to mean sea level is 4.5 meter. It was necessary to reclaim the land at least 3.5 meter in order to avoid flooding in this area. Ponds act as retention basin in normal condition; act as storage during high tide and helps to avoiding water loggings. This city has a separate storm water disposal system and waste water disposal system which were planned on the lines of Netherlands and called “Dutch Method”.



However, on the basis of responses given by respondents, it is conclude that every fourth person told that, it was very poorly maintained and there is urgent need to take necessary action on the same. However, citizens are also equally responsible for that because of bad habits and not having well discipline. There were 199 gardens covering an area of 7.62 sqm area in the various nodes of Navi Mumbai, includes CBD/ Belapur 45, Nerul 42, Turbhe /Sanpada 11, Vashi 44, Koparkhairne 21, Ghansoli 7 and Airoli/ Dhigh 29. Definitely, credit goes to CIDCO for its well long-term planning. The gardens are considered as lungs of the city.

However, only 12 percent respondents had opinion that it is excellent. As compared to Road, Street lighting and maintenance of lakes and ponds, the respondents' opinion about garden was comparatively good. Its detail is given in table no. 6.5

<b>Table no. 6.5: Citizens' opinion on Road, Street Light, Lakes and Ponds and Gardens</b>									
<b>Sr. No.</b>	<b>Response</b>	<b>Road</b>		<b>Street Light</b>		<b>Maintain Lakes and Ponds</b>		<b>Creation and Maintenance of Garden</b>	
1	Excellent	14	6.5	15	6.9	12	5.6	26	12.0
2	Very Good	50	23.1	52	24.1	25	11.6	48	22.2
3	Good	78	36.1	75	34.7	74	34.3	60	27.8
4	Satisfactory	48	22.2	51	23.6	52	24.1	55	25.5
5	Not Satisfactory	26	12.0	23	10.6	53	24.5	27	12.5
	<b>Total</b>	<b>216</b>	<b>100</b>	<b>216</b>	<b>100</b>	<b>216</b>	<b>100</b>	<b>216</b>	<b>100</b>

## 6.7 Citizens' opinion on Cattle pound and Veterinary Services

An animals that are not belonging to ownerships of any person or entity and wandering here and there (stray animals) without control in the city, and their diseases and physical movements creates the problems to the citizens. Efficient control on them and appropriate treatment for their diseases is very important for citizens to avoid these problems, which caused by them. Sometimes, because of such animals serious accidents takes place and people lost their lives. To avoid such an incidences local government needs to maintain it properly through cattle ponds and veterinary services. The data shows that, every third person was unsatisfied about the cattle pond service provided by NMMC. Only 1.9 percent (minimum) respondents had opinion that it was excellent. It was the reflection of poor service of cattle pond rendered by Corporation. Regarding veterinary services, situation was comparatively good. However, it needs to improve as 23.6 percent respondents were not in favour of the corporation's performance on the same. Its detail shown in table no 6.6.

<b>Table No. 6.6: Citizens on Cattle Pound Veterinary Services</b>					
<b>Cattle Pound</b>				<b>Veterinary Services</b>	
<b>Sr. No.</b>	<b>Response</b>	<b>Frequency</b>	<b>Percent</b>	<b>Frequency</b>	<b>Percent</b>
1	Excellent	4	1.9	8	3.7
2	Very Good	15	6.9	16	7.4
3	Good	61	28.2	78	36.1
4	Satisfactory	64	29.6	63	29.2
5	Not Satisfactory	72	33.3	51	23.6
	<b>Total</b>	<b>216</b>	<b>100</b>	<b>216</b>	<b>100</b>

## 6.8 Market Facilities, Art, Culture, and Crematoriums

Even though, Navi Mumbai is one of well-planned city, still hawkers and other small seller are selling various objects on the road. The respondents have given positive and negative opinions about market facilities in the jurisdiction of the corporation. In order to preserve the heritage of culture and art, Navi Mumbai has the well-furnished Vishnudas Bhave Auditorium at the central place of the city (Vashi).

Renowned artist frequently come and perform here, but as compared to population, it is not sufficient, citizens are expecting well platform for the same in order to offer the opportunities to the upcoming generation and to preserve the culture and promote the artist. Regarding crematorium, openly no one is asking and talking about this service. However, particularly in the metropolitan cities, it becomes necessity. Out of total respondents, 42.1 (maximum) percent told that this service was good and 13.4 percent respondents were unsatisfied. Its detail is given in table no. 6.7.

<b>Table No. 6.7: Citizens' opinion on Market Facilities, Crematoriums, Art and Culture</b>							
<b>Sr. No.</b>	<b>Response</b>	<b>Market Facilities</b>		<b>Art and Culture</b>		<b>Crematoriums</b>	
		<b>Frequency</b>	<b>Percent</b>	<b>Frequency</b>	<b>Percent</b>	<b>Frequency</b>	<b>Percent</b>
1	Excellent	26	12.0	11	5.1	8	3.7
2	Very Good	48	22.2	32	14.8	26	12.0
3	Good	60	27.8	75	34.7	91	42.1
4	Satisfactory	55	25.5	59	27.3	62	28.7
5	Not Satisfactory	27	12.5	39	18.1	29	13.4
	<b>Total</b>	<b>216</b>	<b>100</b>	<b>216</b>	<b>100</b>	<b>216</b>	<b>100</b>

## 6.9 Solid Waste Management, Dumping Ground and Public Toilets

The CIDCO handed over dumping ground of Koparkhairne to the NMMC in 2004. This was the only dumping ground for the years. However, as it was emanating foul smell and citizens were frequently complaining against the same. Finally, MPCB and Court directed to the NMMC, not to be continue that dumping ground for further period as its capacity was over. Corporation followed this order sincerely and decided to convert Koparkhairne dumping ground into green zone.

The closure zone involved digging of dumping land creation of impermeable earth layers around garbage to extract methane gas and avoids soil pollution due to percolation of leachate. The emitted gases from the garbage collected and stored in underground storage tank. It was one of the good practices of the Corporation. Now there is a dumping ground at Turbhe. Table no. 6.8 shows that, every fourth respondents had opinion that, solid waste management was not satisfied at all. Particularly citizens from Turbhe were very distressed due to foul smell of dumping ground. As like in Brihanmumbai's dumping ground at Deonar becomes major issue, similarly it can be, if NMMC will not take appropriate steps at the proper time, the intensity of the problem would be increase in the future. Therefore, it should be developed with modern technology of the disposal.

There were 320 public toilets with 3626 seats along with 11 mobile toilets in area of the NMMC. The responsibility of looking after these toilets had been given to seven social workers organisations. Furthermore, NMMC proposed to provide public toilet facility to the Gaothan area in order to reduce open defecation. However, open defecation particularly in slums along the six-lane arterial Thane-Belapur Road at Turbhe, Dhiga could prove to a major deterrent to the NMMC. Out of total respondents, one-third respondents were unsatisfied about public toilet facility provided by the NMMC. It is not befitting to the Corporation. Its detail is given in table no. 6.8.

<b>Table No. 6.8: Citizens' opinion on Solid Waste Management, Dumping Ground and Public Toilet Facilities</b>							
<b>Sr. No.</b>	<b>Response</b>	<b>Solid Waste Management</b>		<b>Dumping Ground</b>		<b>Public Toilet Facilities</b>	
		<b>Frequency</b>	<b>Percent</b>	<b>Frequency</b>	<b>Percent</b>	<b>Frequency</b>	<b>Percent</b>
1	Excellent	8	3.7	15	6.9	6	2.8
2	Very Good	35	16.2	26	12.0	21	9.7
3	Good	61	28.2	62	28.7	61	28.2
4	Satisfactory	58	26.9	58	26.9	54	25.0
5	Not Satisfactory	54	25.0	55	25.5	74	34.3
	<b>Total</b>	<b>216</b>	<b>100</b>	<b>216</b>	<b>100</b>	<b>216</b>	<b>100</b>

## 6.10 Malaria Eradication, Primary and Secondary Education

In the jurisdiction of NMMC, there are 189 registered nursing homes (private), 20 UHPs (Urban Health Posts) and three operating hospitals (Vashi- 300 Bed, Turbhe-25 Bed and Koparkhairne -25 Bed) and 3 newly inaugurated hospitals (Airoli-50 Bed, Nerul-100 Bed and Belapur- 50 Bed) owned by NMMC.

The Corporation undertakes the fogging and spraying at mosquito-breeding spots in the city. However, 396 cases of malaria had registered in 2013. Nevertheless, only 10.6 percent respondents were unsatisfied on efforts of Corporation to eradicate malaria.

The Corporation spent Rs.1552.81 Lakh from revenue account (5.89 percent) and Rs. 480.94 Lakh from capital account (1.1 percent) for education. Nevertheless, citizens are expecting more from Corporation as private schools are charging very high fees, which is not affordable, particularly for middle-income groups.

The secondary education being provided from 2006-07, but compare to primary education, respondents were more satisfied on secondary education. The feedback of the respondents given in table no. 6.9.

<b>Table No. 6.9: Citizens Opinion on Malaria Eradication, Primary and Secondary Education</b>							
<b>Sr. No.</b>	<b>Response</b>	<b>Malaria Eradication</b>		<b>Primary Education</b>		<b>Secondary Education</b>	
		<b>Frequency</b>	<b>Percent</b>	<b>Frequency</b>	<b>Percent</b>	<b>Frequency</b>	<b>Percent</b>
1	Excellent	5	2.3	46	21.3	43	19.9
2	Very Good	50	23.1	64	29.6	59	27.3
3	Good	75	34.7	59	27.3	69	31.9
4	Satisfactory	63	29.2	26	12.0	26	12.0
5	Not Satisfactory	23	10.6	21	9.7	19	8.8
	<b>Total</b>	<b>216</b>	<b>100</b>	<b>216</b>	<b>100</b>	<b>216</b>	<b>100</b>

## 6.11 Environment Monitoring and Public Health Engineering

NMMC has established environment laboratory in 2005 to carry out environment monitoring. It carries out analysis of water, sewage, nallah water and solid waste samples. It also has mobile air sampling and analysis stations to carry out air monitoring at traffic junctions. Corporation calculates regularly EQI (Environment Quality Index), Urban Infrastructure Index (UII) and Quality of Life Index (QOLI) to have a comprehensive

overview of environmental performance and the state of resources. EQI and UII have direct effect on QOLI that was improved by 0.40 percent in 2013-14 as compared to 2012-13 with EQI (70.69 percent), UII (70.06 percent) and QOLI (74.88 percent). However, Corporation has spent only 0.1 percent from capital account for environment monitoring during the analysis period. Even though environment quality index was improving, only 3.2 percent respondents were fully satisfied and 15.3 percent respondents were unsatisfied about environment monitoring efforts of the NMMC. Regarding public health engineering, Corporation's performance was very good. Its detail is given in table no.6.10.

<b>Table No. 6.10: Citizens' opinion on Environment Monitoring and Public Health Engineering</b>					
<b>Sr. No.</b>	<b>Response</b>	<b>Environment Monitoring</b>		<b>Public Health Engineering</b>	
		<b>Frequency</b>	<b>Percent</b>	<b>Frequency</b>	<b>Percent</b>
1	Excellent	7	3.2	5	2.3
2	Very Good	27	12.5	43	19.9
3	Good	73	33.8	93	43.1
4	Satisfactory	76	35.2	56	25.9
5	Not Satisfactory	33	15.3	19	8.8
	Total	216	100	216	100

## 6.12 Fire Brigade and Vigilance, Disaster Management

There were four firefighting stations each at CBD/ Belapur, Nerul, Vashi and Airoli. There was one another emergency centre at Khairnae MIDC that was serving to Thane Belapur industrial belt. This department had 17 various types of vehicles including latest two Branto Skylift (52 m) and 114 employees excluding fire officer. Nevertheless, as per norms set by the State Government, the Fire Brigade sought 350 additional firefighters. However, the proposal is pending before the urban development department. Notably, most of the respondents were satisfied. Nevertheless, it was observed that at the small villages there was not a sufficient space to enter fire vehicles and take action in case of firebreak out in the city.

The NMMC has separate disaster management committee under the leadership of commissioner. It includes 28 members from various concerned departments. The commissioner has published Disaster Plan Report I and II in May 2012 in which probable risks, plan to cope with it, mechanism, functions and contact numbers of various departments and officers are given. Navi Mumbai is also having equal probable risks (Flood, Tsunami, High Tide etc.) like Mumbai.

However, in case of emergency, compared to Brihanmumbai, Navi Mumbai is in better position to face the challenges. Fortunately, yet, most horrible things not happened. Hope, in future also it would not happened. However, citizens' response on disaster management of NMMC is given in table no. 6.11.

<b>Table No. 6.11: Citizens Opinion on Fire Brigade, Vigilance and Disaster Management</b>					
<b>Sr. No.</b>	<b>Response</b>	<b>Fire Brigade and Vigilance</b>		<b>Disaster Management</b>	
		Frequency	Percent	Frequency	Percent
1	Excellent	18	8.3	5	2.3
2	Very Good	60	27.8	52	24.1
3	Good	78	36.1	80	37.0
4	Satisfactory	48	22.2	61	28.2
5	Not Satisfactory	12	5.6	18	8.3
	<b>Total</b>	<b>216</b>	<b>100</b>	<b>216</b>	<b>100</b>

### 6.13 Sports and Water Supply

The number of participants in national level sports has been increased from Navi Mumbai in last three years (2011-12- 28, 2012-13- 32 and in 2013-14-79). There is Navi Mumbai Sports Association to promote the different sports. NMMC also plans to set up a sport complex at Ghansoli for all games that are included in Olympic. Regarding sports, 89.8 percent, respondents were satisfied on the efforts taken by the corporation.

As mentioned earlier, Navi Mumbai is the one of unique Corporation having own Dam and providing 24X7-water supply to the citizens. In 2013-14, Corporation provided 250 LPCD (Litre per capita per day), it was 1.8 times more than service level benchmark of 135 LPCD recommended by MoUD, GOI. Regarding water charge, it was Rs. 50 per home per month for Gaothan and flat owners too. Nevertheless, in case, water use is more than 30,000 litres in a month, then all used water charged Rs. 4.75 per thousand litres. More than 95 percent respondents were satisfied on water supply service provided by the corporation. Its detail is given in table no.6.11.

<b>Table No. 6.12: Citizens' Opinion on Sports and Water Supply</b>					
<b>Sr. No.</b>	<b>Response</b>	<b>Sports</b>		<b>Water Supply</b>	
		Frequency	Percent	Frequency	Percent
1	Excellent	23	10.6	34	15.7
2	Very Good	50	23.1	68	31.5
3	Good	76	35.2	62	28.7
4	Satisfactory	45	20.8	42	19.4
5	Not Satisfactory	22	10.2	10	4.6
	<b>Total</b>	<b>216</b>	<b>100</b>	<b>216</b>	<b>100</b>

### 6.14 Slum Improvements, Poverty Alleviation and Social Welfare Schemes

According to CAA 1992 (74<sup>th</sup> Constitutional Amendment Act. 1992.), Slum improvements and upgradation, poverty alleviations and safeguarding interest of the weaker section are obligatory functions of the local Governments. According to survey of 2001, there were 48 slum settlements with 41,805 slum dwellers in the area of NMMC. Of which, 29 in MIDC area, 17 in CIDCO area and 2 on Governments land.

According to census report of 2011, there were 48,577 slum dwellers residing 2,07,645, which accounted 18.53 percent to the total population of the Navi Mumbai. In order to solve this problem, NMMC had received Rs. 10.64 crore from GOI and Rs. 30.85 crore from GOM in 2008. (Out of 299.88 crore approved under BSUP project to develop 13600 slums in Navi Mumbai). However, under this scheme, 10 to 12 percent of total cost, beneficiaries have to pay as their own contribution. Therefore, NMMC prefers to SRA (Slum Rehabilitation Scheme) in which beneficiaries need not to contribute in total cost incurred for the dwelling. Under SRA, with offering more FSI, corporation is expecting more bid from private developers, which will help to raise the fund to the land owner authorities (MIDC and CIDCO). Yet, corporation do not have more scope to do something for the slum improvement, as the other authorities also owned land. However, this issue cannot be ignored. Under the area of NMMC, exact data on poverty was not available. However, for the welfare of the weaker section, particularly for scheduled caste and scheduled tribe and handicapped citizens, Corporation runs various schemes through which economic assistance, scholarships, imparting trainings etc., are offered. Regarding slum improvement, 25 percent and poverty alleviation, 26.9 percent respondents were unsatisfied. Notably, the proportion from the category of excellent was comparatively less even for social welfare schemes. It was observed that citizens were not aware about the social welfare schemes in spite of different awareness programme of the NMMC. Its detail is given in table no. 6.13.

**Table no. 6.13: Citizens' feedback on Slum Improvements, Poverty Alleviation and Social Welfare Schemes**

Sr. No.	Response	Slum Improvements		Poverty Alleviation		Social Welfare Schemes	
		Frequency	Percent	Frequency	Percent	Frequency	Percent
1	Excellent	6	2.8	4	1.9	7	3.2
2	Very Good	21	9.7	19	8.8	37	17.1
3	Good	73	33.8	75	34.7	90	41.7
4	Satisfactory	62	28.7	60	27.8	58	26.9
5	Not Satisfactory	54	25.0	58	26.9	24	11.1
	<b>Total</b>	<b>216</b>	<b>100</b>	<b>216</b>	<b>100</b>	<b>216</b>	<b>100</b>

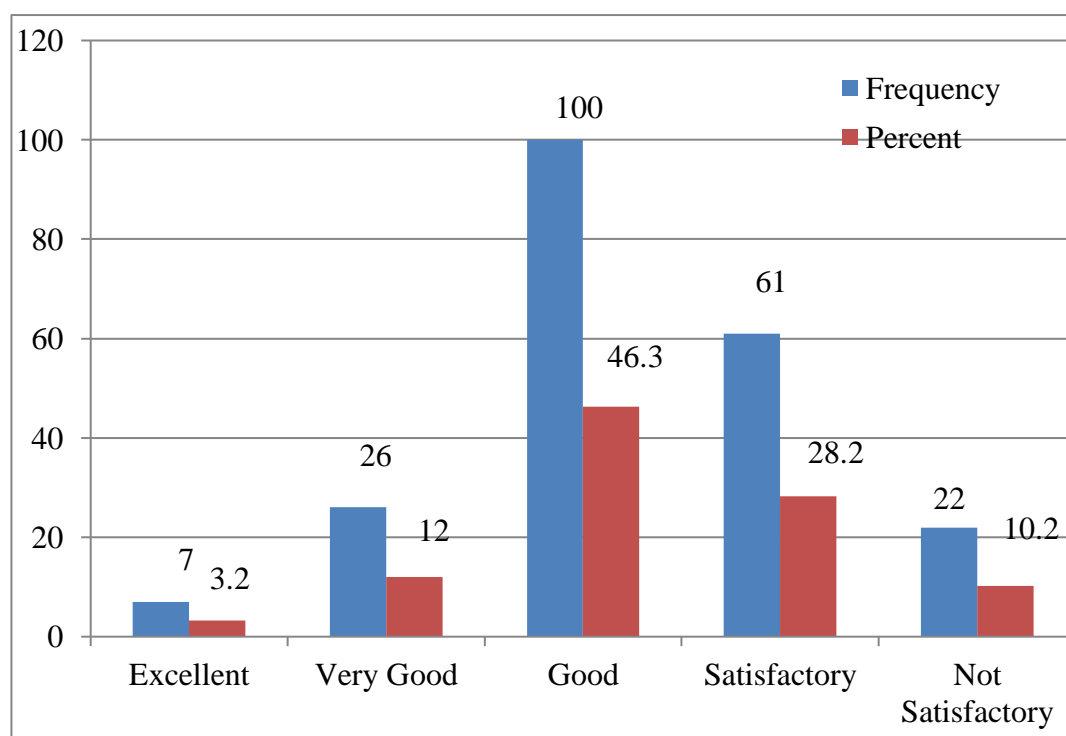
## 6.15 Overall performance of the NMMC

Out of total respondents, 89.8 percent were either satisfied or better than that. It was recognition for good performance of the NMMC. Nevertheless, only 3.2 percent citizens had opinion that NMMC's performance was excellent. As NMMC has a dream to be a smart city, despite it was not selected in first lot of Smart City declared by MoUD, GOI. Corporation has miles to go about slum improvement, welfare schemes to the weaker section of the society, services delivery and environment degradation. Feedback about overall performance of the Corporation shown in table no.6.13.

Table no 6.14: Citizens' Opinion on Overall performance of the NMMC			
Sr. No.	Response	Frequency	Percent
1	Excellent	7	3.2
2	Very Good	26	12.0
3	Good	100	46.3
4	Satisfactory	61	28.2
5	Not Satisfactory	22	10.2
	<b>Total</b>	<b>216</b>	<b>100.0</b>

Graph No. 6.1

Citizens' Opinion on Overall performance of the NMMC





## **6.16 Conclusions:**

1. As far as road service is concerned under the jurisdiction of NMMC, 12 percent respondents were unsatisfied and remaining were satisfied or said good, very good etc. Nevertheless, the bumpy roads are one of the major issues as these constructed on muddy land.
2. Maintaining lakes and Ponds attracting attention of the citizens and travelers. Out of total respondents, 24.5 percent were unsatisfied on it. Especially NMMC should pay attention to the cleanliness. Citizens also supposed to follow the discipline with this regard.
3. Art and cultural centers were not sufficient in the jurisdiction of the NMMC.
4. Every third respondent was unsatisfied regarding cattle pound service (33.3 percent). It creates the problems of traffic and became cause for the accidents and lost lives.
5. Regarding Solid Waste Management and Dumping Ground, respectively 25 percent and 25.5 percent respondents were unsatisfied.
6. Public Toilet Facilities, especially for women and in slum area were poor in the city. Out of total respondents, 34.3 percent respondents were unsatisfied about it. Only 2.8 percent respondents had opinion that it was excellent.
7. Regarding primary and secondary education, in terms of quantity and quality, respondents were expecting more participation of NMMC, private schools/ institutions are charging very high fees, which is not affordable to the middle class.
8. Regarding Fire Brigade and Disaster Management, respondents were satisfied. However, at some places particularly at Villages like Karave and Juhugaon, Turbhe etc. In case something happens there, entering fire Brigades Vehicle is impossible as sufficient space is not available to take action immediately.
9. Water Supply is one of the best practices of the NMMC, but haphazard use of it should be avoided by specific mechanism. Citizens also should give due respect to this valuable resource.
10. Slum Improvements, Poverty Alleviation both are obligatory functions of the Local Bodies. Nevertheless, 25 percent and 26.9 percent respondents respectively were unsatisfied on performance of NMMC. It is observed that citizens were not aware about that these functions are obligatory functions of the Corporation.
11. Regarding overall performance of NMMC, out of total respondents, 89.88 percent respondents had positive opinion. However, Corporation has miles to go about slum improvement, welfare schemes to the weaker section of the society, services delivery and environment degradation.

## **6.17 References:**

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5. J.K. Sinnnarkar, Dy. Commissioner, NMMC, Disaster Management Plan, May. 2012, P.N. 01 to 95.
6. Annual Budget Reports of the NMMC.
7. Environment Status Report of NMMC, 2013-14.
8. Primary data collected by conducting survey.

## Chapter 7

### Findings and Suggestions

#### 7.0 Introduction

In a democratic set up, Government's role is significant and they are supposed to work as a trustee as well as promoter of all-round development of the people. To promote all-round development is a crucial objective of the Government. While achieving it, economic aspect is very important. In this aspect, total receipts, various sources of receipts and expenditure pattern of the Government determine success of the above said objectives. In this book, the author has analysed total receipts and total expenditure pattern of the N.M.M.C. and come to some conclusions about total receipts, expenditure, its trends and stakeholders' feedback on performance of NMMC during 2000-01 to 2012-13. Important findings are mentioned in this chapter. Accordingly, suggestions have been made to solve these problems and achieve the above-mentioned objectives of the Local Government.

#### 7.1 Major Findings about Receipts

1. It is observed that the total receipts of NMMC including Education and Employment Guarantee Tax, had increased from Rs. 19727.89 lakh to Rs. 122978.52 lakh during the analysis period. It had increased by 6.23 times during the analysis period. An average growth rate for total receipts was 17.20 percent. (Table no.: 4.1)
2. It is found that out of total thirteen years of analysis, in seven years (2000-01, 01-02, 03-04, 04-05, 06-07, 09-10 and 10-11), actual budget of NMMC was in a deficit position. (Table no.: 4.1)
3. The data shows that in total receipts of the NMMC, the source of tax was dominant. All taxes of NMMC contributing on an average 55.74 percent to total receipts during the analysis period. (Table no. :4.3)
4. Among taxes of the NMMC, cess was important source (contributed average 62.7 percent in total tax revenue), followed by property tax (27.4 percent) and sewerage tax (3.3 percent). (Table no. :4.4)
5. It is found that among non-tax revenue, proportion of services declined from 89.11 percent to 39.22 percent. On other hand, proportion of fees increased from 10.89 percent to 60.78 percent during the analysis period. (Table no. :4.7)
6. As far as revenue from services is concerned, the service of water supply was significant (average to total revenue from services 62.90 percent), followed by road (15.41 percent), administrative services (9.78 percent). (Table no. :4.8)
7. It is found that among the total revenue collected from fees, town-planning fees was significant and it accounted an average 94.72 percent to total fees during the analysis period. Encroachment fees (3.88 percent) and license fees (1.05 percent) followed it. (Table no. :4.14)
8. NMMC was not self-sufficient, as loan had been taken in eight years out of thirteen years of analysis. However, it was mainly under the schemes of Jawaharlal Nehru Urban Renewal Mission and Mumbai Metropolitan Region Development Authority. (Table no. :4.2 and 4.20)

9. The proportion of grants in total receipts was less than one percent until 2005-06 from 2000-01. However, it had increased up to 14 percent in 2008-09 and then declined to 5.77 percent in 2012-13. Nevertheless, its average contribution was 3.77 percent to total receipts. (Table no. :4.3)
10. Government service grants and primary health grants were regular and contributed on an average 24.62 percent and 4.72 percent respectively. However, since 2008-09, grants under JNNURM were substantial, which accounted 66.58 percent to the total grants received by NMMC. (Table no.: 4.17)
11. Among internal source of capital account, security deposits were a major source, especially from contractors (average 32.28 percent), followed by water supply (18.21 percent) during the analysis period. The CAGR were comparatively more for both (15 and 29 percent respectively). However, receipts collected from internal sources of capital account were available to the Corporation for dispose on determined heads of expenditure. It was supposed to pay back to concerned contractors, entity or institutions. Therefore, it was not belonging to the corporation's own right of revenue collection. (Table no. :4.15)
12. As the Government of Maharashtra scraped Local Body Tax since August 1, 2015, not only NMMC but also other Municipal Corporations of Maharashtra (except Brihanmumbai, as it had not accepted LBT, still octroi is in exist) are facing the financial problem to meet the determined expenditure.
13. This study reveals that per capita expenditure of NMMC was Rs. 2837.38 in 2000-01, it has been increased by 3.37 times and reached up to 9571.75 in 2010-11. The ratio of per-capita tax collected/ per-capita expenditure was 1.75 percent in 2000-01, which had increased up to 1.96 percent in 2010-11. On other hand per capita tax collection had Rs. 1619.39 in 2000-01, it was increased by 3.01 times and reached up to Rs. 4874.85 in 2010-11.
14. As far as revenue receipts and revenue expenditure are concerned, this account was continuously in surplus position throughout the analysis period. It was hovering between 21. 09 percent to 45.10 percent with an average of 36.68 percent to the total receipts. It was a very good thing because, most of the time for local bodies there is a major problem of cost recovery but NMMC does not have this problem. (Table no. :5.34)

## **7.2 Major Findings about Expenditure**

1. This study shows that in 2000-01, total expenditure of NMMC was Rs. 19973.66 lakh. It increased by 5.99 times and reached up to Rs. 119758.02 lakh in 2012-13. CAGR of it was 15 percent during the analysis period. (Table No. 5.1)
2. Revenue expenditure had increased by 4.82 times and capital expenditure by 6.97 times during the same period.
3. The proportion of revenue expenditure was decreased (57.80 percent to 46.52 percent) during the analysis period; it was a very significant change in the expenditure pattern of the NMMC. On other hand, capital expenditure proportion was increased (42.20 percent to 49.12 percent) which is productive. (Table No. 5.2)
4. It is found that from the revenue account expenditure, main channel of expenditure was water supply (28.99 percent), followed by administrative services (19.68 percent) and solid waste management (11.99 percent). (Table No. 5.4)

5. This study shows that, out of total administrative services expenditure, establishment expenditure (salary and allowances) was the major component (average 81.60 percent) and remaining (average 18.40 percent) was administration expenditure. (Table No. 5.5)
6. It is observed that out of total expenditure incurred on water supply from revenue account, maximum (average 73.03 percent) was on water purchasing, followed by distribution and maintenance (13.19 percent) and electricity charges (11.94). Notably, the expenditure on water purchasing is decreasing from 2007-08. (In 2007-08, it was Rs. 5504.11 lakh and in 2012-13 Rs.1588.94 Lakh). (Table No. 5.6)
7. Out of thirteen years considered for this study, in the first six years, taxes refunded to the State Government (Employment Guarantee Tax and State Education Tax) were included in the capital expenditure of the Corporation, but thereafter, it had been mentioned separately. (Table No. 5.2)
8. It is found that from capital account expenditure, mainly, construction of the road (15.9 percent), Morbe Dam (15.9 percent), tax refunded to GOM (9.9 percent), Public Health Engineering (9.4 percent) and water supply (6.5 percent) were important channels of expenditure. (Table No. 5.14.1)
9. CAGR was same for total receipts and total expenditure (15 percent) during the analysis period. However, coefficient of variation was comparatively less (61.57) for total receipts than total expenditure (63.59). (Table No.: 4.1)
10. It is found that from revenue account expenditure, Corporation spent 5.89 percent and from capital account only 1.1 percent for the education during the analysis period. (Table No.: 5.4 and 5.14.1)
11. NMMC is providing mainly primary education. Secondary education is providing since 2006-07 and the Corporation is not providing higher education. (Table No. 5.11)
12. For social services like imparting trainings, scholarships, promoting people from weaker section for education, giving prizes etc. to the weaker sections of the society (poor from scheduled cast, scheduled tribe, other backward class and nomadic tribe etc.), only 0.57 percent of total expenditure of revenue account was spent by the NMMC. (Table No.: 5.4)
13. Environment monitoring that is one of the burning issues nowadays not only in major cities of the India but also across the world. Nevertheless, NMMC spent only 0.1 percent for this purpose during the analysis period. (Table No.: 5.14.1)
14. Initially, Corporation was making provision of 'Corporators fund', but since 2003-04, it had totally closed. However, it had decided that, they could suggest work, which would be getting fund from general (Common) expenditure of the NMMC. (Table No.: 5.14)
15. Study reveals that out of total expenditure incurred on administrative services from capital account, maximum (average 39.67 percent) was on staff loan, followed by pension and welfare fund (35.92 percent) and electricity and computerization (11.08 percent). (Table No. 5.15)
16. It is observed that, NMMT a separate wing of NMMC, has received Rs. 8419.54 Lakh during the analysis period, of which, maximum was grant (90.5 percent), followed by transport fund (7.13 percent) and purchasing of land (2.38 percent). (Table No. 5.24)
17. NMMC has purchased Morbe Dam, which was one of the commendable decisions of the Corporation. Since 2003-04, there was a provision on Morbe Dam. Total Rs.33139.38 lakh has paid during the analysis period (accounted 54.51 percent of total provision made on Dam), followed by water pipeline (36.33 percent), water process center at Bokharpada (8.32 percent).

### **7.3 Major Findings about Stakeholders' Feedback**

1. The conducted study reveals that regarding road services under the jurisdiction of NMMC, 12 percent respondents were unsatisfied and remaining had opinion as satisfied or good, very good etc. Nevertheless, the bumpy roads are one of the major issues as these are built-up on muddy land. (Table No. 6.5)
2. It is found that Lakes and Ponds attracting attention negatively of the citizens and travelers. Out of total respondents, 24.5 percent were unsatisfied on it. NMMC should pay attention especially to the cleanliness. Citizens also supposed to follow the discipline with this regard. (Table No. 6.5)
3. Regarding street lighting, maximum (34.7 percent) respondents had opinioned as a good; minimum (6.9 percent) opined that it was excellent. However, 10.6 percent respondents were unsatisfied on the same. (Table No. 6.5)
4. The gardens (199) made under jurisdiction of the NMMC is one of the excellent practice and far-sightedness of the planner. However, maintenance of it is a matter of discussion. It had observed while conducting survey, gardens were poorly maintained. Nevertheless, only, 12.5 percent respondents were unsatisfied. (Table No. 6.5)
5. Every third respondent was unsatisfactory about cattle Pound service (33.3 percent) provided by NMMC. It creates the problems of traffic and became cause to the accidents. (Table No. 6.6)
6. Regarding veterinary services, situation was comparatively good. However, still needs to improve as 23.6 percent respondents were not in favour of the corporation's performance on the same. (Table No. 6.6)
7. The respondents have given positive and negative opinions about market facilities in the jurisdiction of the corporation. Even though, Navi Mumbai is one of the biggest planned cities of Asia, still hawkers are selling objects on the road. (Table 6.7)
8. Art and cultural centers were not sufficient in the jurisdiction of the NMMC. Out of total respondents, 18.1 were unsatisfied. (Table 6.7)
9. Regarding crematorium, openly no one is asking and talking about this service. However, particularly in the metropolitan cities, it becomes necessity. Out of total respondents, 42.1 (maximum) percent told that this service was good and 13.4 percent respondents were unsatisfactory. (Table No. 6.7)
10. Regarding Solid Waste Management and Dumping Ground, respectively 25 percent and 25.5 percent respondents were unsatisfied. (Table No. 6.8)
11. This study reveals that public toilet facilities, especially for women and slum area were poor in the city. Out of total respondents, 34.3 percents respondents were unsatisfied about it. Only 2.8 percent respondents had opinion that it was excellent. (Table No. 6.8)
12. It was found that Corporation undertakes the fogging and spraying at mosquito-breeding spots in the city. However, 396 cases of malaria had been registered in 2013. Nevertheless, only 10.6 percent respondents were unsatisfied on efforts of Corporation to eradicate malaria. (Table No. 6.9)
13. Regarding primary and secondary education, in terms of quantity and quality, respondents were expecting more participation of NMMC, as private schools/institutions are charging very high fees, which is not affordable to the middle class. Out of total respondents, 9.7 percent for primary education and 8.8 percent for secondary education were unsatisfied. (Table No 6.9)
14. Corporation had spent only 0.1 percent from capital account for environment monitoring during the analysis period. Even though environment quality index was

- improving, as 2011-12-69.05, 2012-13-70.02, 2013-14-70.69. Nevertheless, more 3.2 percent respondents were fully satisfied and 15.3 percent respondents were unsatisfied about environment monitoring efforts of the NMMC. (Table No. 6.10)
15. It is found that regarding public health engineering; Corporation's performance was very good. In near future, NMMC will be successful to make 100 percent citizens satisfied about this service. Only 8.8 percent respondents were unsatisfied. (Table No. 6.10)
  16. This study reveals that on Fire Brigade and Disaster Management, most of the respondents were satisfied (94.4 percent). However, at some places particularly at villages like Karave and Juhugaon, Turbhe etc. In case something happens there, sufficient space is not available to take action immediately. (Table No. 6.11)
  17. Water Supply is one of the best practices of the NMMC, out of total respondents 95.4 percent respondents were satisfied or had an opinion as good, very good etc. (Table No. 6.11)
  18. It is observed that there is Navi Mumbai Sports Association to promote the different sports. NMMC also plans to set up a sport complex at Ghansoli for all games that are included in Olympic. Regarding sports 89.8 percent, respondents were satisfied on the efforts taken by the corporation. (Table No. 6.11)
  19. Slum Improvements, Poverty Alleviation both are obligatory functions of the Local Bodies. Nevertheless, 25 percent and 26.9 percent respondents respectively were unsatisfied on performance of NMMC. It had observed that citizens were not aware about that these functions are obligatory functions of the Corporation. (Table No. 6.12)
  20. It had found that on social welfare scheme of the weaker section of the society; only 0.57 percent from revenue account had spent by the corporation. Out of total respondents, 11.1 percent were unsatisfied. (Table No. 5.4 and 6.12)
  21. About overall performance of NMMC, out of total respondents, 89.88 percent respondents had positive opinion that it was good, very good or excellent. However, Corporation has miles to go about slum improvement, welfare schemes to the weaker section of the society, services delivery and environment degradation. (Table No.6.13)

#### **7.4 Testing of Hypothesis**

1. First hypothesis: The revenue and expenditure of NMMC both are increasing continuously but expenditure is more than revenue. Actually, this hypothesis can be classified into two parts. First is revenue and expenditure both are increasing continuously. It is true as both are increasing with 15 percent CAGR. As far as second part of hypothesis concerned, expenditure is more than revenue it is also true. (Table No. 4.1 and 4.2)
2. Second hypothesis: Revenue structure of NMMC is changed during the analysis period. Regarding revenue from taxes, there were slight fluctuations, drastic changes did not happen. However, among non- tax revenue, drastic change has taken place as contribution of revenue from services declined from 89.11 percent to 39.22 percent. On other hand, the ratio of revenue from fees had increased from 10.89 percent to 60.78 percent. It means revenue structure of NMMC is changed. This hypothesis is true. (Table No. 4.16). Furthermore, as Government of Maharashtra scraps Local Body Tax, revenue sources of Corporations weakened. For instance, As Government of Maharashtra had given Rs. 2092 Crore for August to November 2015, Rs. 2016 crore for December 15 to March 2016; which means Corporation's financial dependency on

upper-level Governments increased, its intensity in future may be increase, if proper solution is not come out at appropriate time.

3. Third hypothesis: Resources of NMMC were not sufficient to meet expenses. As own resources were able to contribute around 80 percent of total receipts, an average ratio of loan was 3.92 percent of total receipts. It implies that revenue sources were not sufficient to meet the expenditure. However, Corporation has taken loan only under the schemes of JNNURM and MMRDA. (Table No. 4.2) Fourth Hypothesis: NMMC's provision on education and health was not sufficient. NMMC's incurred average expenditure on education from revenue account was 5.9 percent (Table No. 5.3), from capital account it was 1.1 percent (Table No. 5.14.1). However, 9.7 percent respondents for primary education and 8.8 percent respondents for secondary education were unsatisfied and expecting more participation of NMMC (Table No 6.9). Regarding Social welfare schemes, NMMC spent only 0.57 percent from revenue account (Table No. 5.4). Out of total respondents, 3.2 percent had opinion that efforts of Corporation were excellent and 11.1 percent respondents were unsatisfied. It implies that provision of NMMC was not sufficient on education and social services; means this hypothesis is true.
4. Fifth hypothesis: NMMC is trying to provide various services to citizens but it is not fully successful to satisfy them. It is also true as only 3.2 percent respondents told that NMMC's performance is excellent, 12 percent told that it was very good, 46.3 percent respondents had opinion that it was good, 28.2 percent opined that it was satisfactory and 10.2 percent respondents had opinion that performance was unsatisfactory, means this hypothesis is true. (Table No. 6.13)

## **7.5 General Observations**

1. Revenue sources were insufficient to meet the expenditure of NMMC.
2. To meet social obligations and upliftment of the weaker section is the challenge in front of the NMMC.
3. According to 73<sup>rd</sup> amendment of Indian constitution, XII schedule included in Indian constitution and contains a subject list of 18 entries for urban local bodies. However, to carry these responsibilities, resources has not been devolved sufficiently to the Local Governments.
4. As local Government is the subject matter of the state governments, they got freedom up to some extent but still local bodies do not have sufficient freedom to take decisions on some particular issues. For examples CIDCO, MIDC and State Government mainly owned slum land in Navi Mumbai. Therefore, Corporation could not take firm decisions about slum upgrading and rehabilitations. Furthermore, the state government is regularizing the slum huts time to time. Therefore, to stop the encroachment slum upgradation becomes difficult task to the NMMC. However, slum upgradation is one of the significant obligatory functions of local bodies.
5. Accurate data on poverty in the jurisdiction of NMMC had not available.
6. Even though, 74<sup>th</sup> constitutional amendment compels State Governments to constitute there is not regularity regarding constitutions of SFCs. For instance, in Maharashtra, third SFC constituted on January 15, 2005(for the time period (2006-07 to 2010-11), but data was not available.<sup>1</sup>

## **7.6 Suggestions**

1. To increase the revenue sources, NMMC should try to earn revenue from various services (Not by increasing service charges but increasing quality services) rather than increasing revenue from taxes, which are not quid pro quo.
2. In the financial year 2015-16, NMMC had kept target of Rs. 850 crores from LBT but NMMC will be received only around Rs.200 crore, as there were only 82 eligible traders to pay the LBT. It affects negatively on the ongoing projects of the Corporation. Finance commissions of both the Governments (GOM and GOI) should think seriously and devolve sources to the Municipal Corporations. Otherwise, it will hamper the developmental works of Local Governments.
3. The quality of the road determines safety and speed of transport system. Regarding road services NMMC should take more care, maintenance of road is required with advanced techniques. If this work done based on contract with third party monitoring, it will always better for the citizens.
4. The maintenance of lakes and ponds is also related to the health of the citizens. As 24.5 percent, respondents were unsatisfied on this service; NMMC can think about private contractual mechanism for the maintenance. At the same time, rules and regulations should be strict against citizens who are responsible for the uncleanliness and harming the environment.
5. In order to preserve memorials of art and culture of the society, NMMC can construct more Auditoriums like Visnudas Bhav Auditorium Vashi, based on public private partnership model of the infrastructure.
6. Cattle Pound and veterinary services should be improved by NMMC, most of the time; it creates the problems for traffic and become cause for accidents. Moving cattle Pounds will be useful to solve these problems.
7. Number of public toilets must be increased, particularly for women and it should be maintained properly. In this regard, NMMC can follow the neighboring Brihanmumbai Municipal Corporation's model, under which modern public toilets have been constructed based on pay and use. Corporation can take help of some NGOs (which are working for the ragpicker) and small saving groups of women. Initially, on the pilot basis, some public toilets should be handed over to them, and then based on experience, next decision can be taken.
8. Regarding education, NMMC paying attention to primary education, for secondary education since 2006-07, but nearest Brihanmumbai Corporation is providing higher education through own Hospitals and Medical Colleges (KEM, SION and NAIR). This Corporation also can follow the same way so that citizens will be benefitted in both ways of education and health services. Furthermore, it is observed that, private educational institutes are charging very high fee, which is not affordable for the common citizens. Therefore, Corporation should increase the schools with quality education.
9. Slum improvement and poverty alleviation programme should be rigorously implemented in the jurisdiction of the NMMC. Most of the citizens were not aware about that, according to 74<sup>th</sup> constitutional amendment act 1992 which included IX A part into the constitution which contains articles 243 P to 243 ZG dealing with the Municipalities, poverty alleviation and slum improvements are an obligatory function of the Municipal Corporation. NMMC has received an amount under of BSUP (Basic Services to Urban Poor) project for some years from the Central Government, but



NMMC preferred to work according to Slum Rehabilitation Act under which there is no need to make financial provision financially by of dwellers, which was 10 to 12 percent of total cost of the home under BSUP dwelling.

10. Even though Navi Mumbai Municipal Corporation has bestowed with more than 15 awards and recognitions from State Government, Centre Government and other Institutions, yet, 10.2 percent citizens were unsatisfied about overall performance of the NMMC. Therefore, Corporation should start the open forum/discussion once or twice in a month so that citizens will get exposure/ platforms to express their opinions. Municipal Corporation should respect to the valuable suggestions of the citizen and make necessary changes in the policy. According to citizens' suggestions, what action is to be taken should be informed to the concerned citizens through message, email or on their mobile.
11. Art and cultural centers need to be increased in the jurisdiction of the NMMC. As it is a healthy practice to preserve values and mould the new generation, NMMC can increase the related activities and give incentives to the participants.
12. NMMC can collect garbage at the nighttime like Singapore city. Biogas and compost plants can be started with the collaboration of the farmers, which will generate energy and help to increase the agricultural productivity.
13. Instead of following traditional budgeting, NMMC should opt for zero- budgeting in which need for various activities and services examined afresh before making any provision for them. The problem of padding considered by this budgeting. Performance budgeting is also required in which financial outlays correlate with the physical targets.
14. As far as need of capital is concerned for some major projects, NMMC can start the Municipal Bond System, which will also help to improve the accounting system, as it is a prerequisite for the same. In developing countries like South Africa, Hungary, Russia, and Mexico municipal bond market is developed. In America Municipal Bond is the principal mode of financing urban infrastructure. It accounted for a big chunk for financing city projects in Canada, South Africa, Hungary, Russia, Brazil and Mexico.<sup>2</sup>
15. To maintain the environmental balance, NMMC should make more provision for tree plantation, water treatment /filtration, control of air pollution, environment monitoring etc. As chemical companies are located around and, in the city, Corporation must strictly ask them to take necessary actions in connection to the environmental degradation.
16. NMMC needed to make special and effective efforts to alleviate poverty. Since poverty alleviate is one of the obligatory functions of corporation.
17. During the observation period, NMMC did not made strong effort for slum up gradation. However, under BSUP mission of JNNURM, there was not a problem of land as it is under SRA.
18. To solve the problem of solid waste management an average expenditure from revenue account and from capital account was 11.54 and 0.11 percent respectively. However, to find out concrete solution, NMMC should increase the expenditure from capital account. It implies that there is need of modern projects of solid waste management.
19. The expenditure on social welfare schemes and education must be increase on priority basis. Corporation can impart training to them for self-employment.
20. In order to avoid the haphazard use of water, Corporation should extend the SCADA for all water supply connections.

### **7.7 Challenges and Opportunities to NMMC:**

Eventhough, NMMC is one of the Corporations that received various awards and recognitions, environmental degradation, slum improvements, providing health facilities compensate the revenue which is lost due to scraping the LBT and introduction of GST are the main challenges. On the other hand, planned infrastructure, well connectivity both internal as well as external, educated citizens are the positive sides of the NMMC.

### **7.8 Scope for Further Study:**

In this book, author studied only about Navi Mumbai Municipal Corporation. The real progress of this Municipal Corporation will identify through comparative study of this corporation and other corporations. However, researcher unable to do such type of study because of considering hypothesis and objectives of the designed research. Comparative study with other municipal corporation in India and other countries is remaining area of the study. Therefore, it is the scope for future study. It will be helpful to follow the best practices of each other's. Besides researcher has focused on all economic aspects of NMMC, but in future researcher or any other researcher can study of any single economic factor or variable like taxation, Outcome of the expenditure etc. regarding the concerned or any other Municipal Corporation in Maharashtra or Indiass

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