

2. NMMC Area

2.1 History

The growth of Mumbai city is constrained by creek at south, east and west. As a result total land area available for development of Mumbai is limited. Hence, developmental planners, in late 1960s started exploiting alternative for dispersal and control of Mumbai population. Eminent architects, Charles Coria, Shirish Patel and Pravin Mehta suggested Navi Mumbai as alternative to Mumbai.

Navi Mumbai has been developed as a planned city, a counter magnet for Mumbai. It has been developed as an independent, fully self-contained metro city. Navi Mumbai is the world's large, totally planned, well-balanced, modern city. Navi Mumbai has been planned and developed by CIDCO to meet the infrastructural needs of a modern metropolis.

CIDCO is a State Public Sector Undertaking registered under Companies Act in March 1970. CIDCO prepared developmental plan for Navi Mumbai covering 95 villages from Thane and Raigad district covering total area of 343.70 sq km. (Table 2.1.1). This was approved by the Government of Maharashtra in August 1979.

Navi Mumbai has been developed as an environment friendly, beautifully landscaped area with parks, gardens and promenades along waterfronts. Care has been taken to preserve the mountainous terrain, lakes and green spaces in Navi Mumbai, which cover nearly half of its total area.

For catering to the requirements of 29 villages in CIDCO project and 15 villages from Kalyan notified area NMMC was formed vide Government order dated December 17, 1991. NMMC came in to existence on January 1, 1992. Total area under NMMC is 162.5 sq km. (Table 2.1.2).

In the beginning, 15 villages under Kalyan notified area were transferred to NMMC. In the CIDCO area there are seven nodes viz. CBD Belapur, Vashi, Nerul, Koparkhairane, Ghansoli, Sanpada and Airoli. Except for Ghansoli node, other six nodes are fully developed and hence, all powers under the Maharashtra Regional and Town Planning Act 1966 have been transferred to NMMC.

2.2 Location

Navi Mumbai is a part of south Konkan coastline. This coastline joins Sahyadri mountain ranges in south and 50 to 100 m high hills in east. Navi Mumbai area lies between mountain ranges and coastline. Navi Mumbai is located between 19°5' and 19°15' latitude and 72°55' and 73°5' longitude.

2.3 Demography

Navi Mumbai is close to Mumbai. The Maharashtra Government industrial promotion policy leads to development of industrial belt in Navi Mumbai. These industries, in turn, attracted a large population as workers.

Many government and corporate offices have been shifted from Mumbai to Navi Mumbai. Chemical, Pharmaceutical, Engineering, Textile Processing, Petrochemical, Electronics, Oil and Processing, Paper, Plastic, Steel and Food Industries in the Talaja and Thane Belapur Industrial Belt of Navi Mumbai offer job opportunities of every conceivable kind - from engineers to mechanics and clerks to peons. As a result, a large population of service class and middle class population shifted to Navi Mumbai.

The population residing within NMMC area has increased from 3.18 lakhs in 1991 to 7.04 lakhs in 2001. The decadal growth rate in various zones of NMMC varied from 8 % in Airoli to 309 % in Digha. (Table 2.3.1). The overall increase in population during 1991-2001 was 82 percent.

As per UHP survey, the population residing within NMMC area during 2005-06 is 8.75 lakhs and projected population for 2006-07 shall be 9.25 lakhs (Table 2.3.2). Nerul, Ghansoli, and Sanpada areas are expected to grow in population at faster rate. The average density of population in NMMC area is 5387 persons per sq.km.

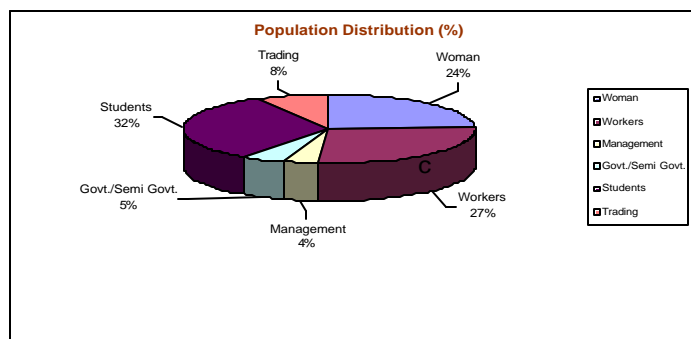
27 percent population staying in NMMC are workers. Out of these work 4.1% in management, 8% work in government services, 24% work in household working (women) and 32% population is students. In NMMC area literacy is 74 %. (Fig. 2.3.1).

There are 90 ward of NMMC and those are formed for recent NMMC election. Each ward is having 5000 average population.

Table 2.3.2: Population in NMMC Area (UHP Survey)

S.No	Year	Population	Increase %	Source
1	2001-02	7,03,947		Census
2	2002-03	7,26,126	3.1	UHP Survey
3	2003-04	7,59,311	4.56	UHP Survey
4	2004-05	8,46,100	11.42	UHP Survey
5	2005-06	8,75,311	3.45	UHP Survey
6	2005-07	9,25,346	5.71	UHP Projection

(Source: Health Department, NMMC)



2.4 Climate

Navi Mumbai temperature varies from 17oC to 41oC. In winter temperature is between 17oC to 30oC while summer temperature ranges from 36oC to 41oC. Out of total rainfall, 90 % rainfall is experienced during June to September. Average annual humidity is 61-86%.

Navi Mumbai Municipal Corporation (NMMC) has set up a continuous monitoring station at fire brigade premises at Vashi which daily collects meteorological data. Meteorological station started working in May 2004 and inaugurated on 26 th January 2005. Based on station observations, predominant wind direction in Navi Mumbai is southwest in monsoon and north-east during rest of the year.

NMMC has also set up a continuous rain monitoring station at ESR/GSR complex at sector 30A of Vashi node which daily collects rainfall data. Station started functioning in June 2004. Based on station observations, total rainfall during the year 2004 was recorded as 3268 mm.

NMMC installed and commissioned two more rain-monitoring stations so as to cover entire area of Navi Mumbai.

Micrometeorological observations were obtained from Ambient Air Quality Monitoring Station (AQMS) at Vashi from April to March 2006. It was observed that predominant wind direction S-W during April-May. As a result the city experiences improvement in every quality due to monsoon wash out along with pollution transport away from residential area during June to September. Maximum and minimum wind speed was 5.67 km/hr and 0.15 km/hr respectively. The maximum and minimum temperature was 36.33°C and 21.46°C. The maximum and minimum relative humidity values noted were 95.81% & 34.49%. (Table 2.4.1. A & B)

Table 2.4.2: Rainfall in NMMC Area

Year	Month	June	July	August	September	October	Total
2002	Rainfall (mm)	613	165	910	86	-	1774
2003	Rainfall (mm)	770.20	908.70	497.80	268.80	33.00	2478.30
2004	Rainfall (mm)	346.5	918.4	980.7	224.7	9.5	2640.37
2005	Rainfall (mm)	627.22	1505.12	452.4	683.4	-	3268.04

2.5 Composition of NMMC Area

Navi Mumbai is located at the centre of Mumbai Metropolitan Region. To the west and south of this area is Arabian Sea while to the east is Thane, Kalyan and Panvel towns.

The jurisdiction of NMMC starts at Digha in north and ends at Belapur in south. NMMC area has been divided in nine zones sprawling in 162.5 sq km. These are Belapur, Nerul, Turbhe, Vashi, Koparkhairane, Ghansoli, Airoli, Digha, and Dahisar

2.6 Land Use in NMMC Area

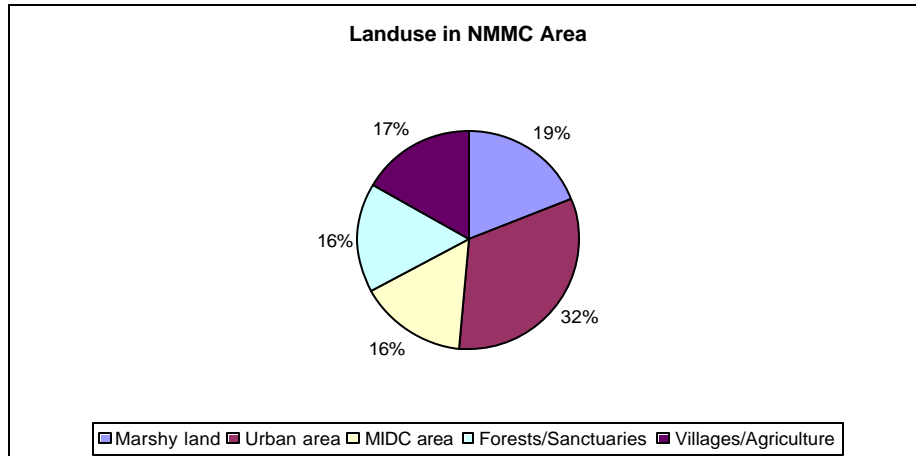
Government of Maharashtra had identified total area of 343.70 sq km for Navi Mumbai. Out of this only 162.5 sq km area is under NMMC. This area includes residential, industrial, commercial, depots and warehouses, administrative areas, education campuses, roads, railways, parking spaces, open spaces for public use, gardens, crematorium, water supply, sewerage and electric supply facilities. (Table 2.6.1, 2.6.2).

At present, agricultural activity in Navi Mumbai area is extremely limited. There are forests in the north-east area of Navi Mumbai. 16.35 % of total NMMC area (26.55 sq km) is forest area. The main plant species found in these forests are Aeranda, Arjuna, Apta, Shewaga, Palas, Behda etc.

Out of the total developed area of 162.50 sq km, 50.79 % area is used for urban, commercial, industrial, administrative areas and infrastructure such as crematorium, water supply and sewage disposal, roads, railways. 19.92 sq km area is undeveloped. There is forest area of 26.55 sq km, 0.52 sq km garden area, 0.52 sq km lake area and 34.2 km creek length within NMMC limits.

Maharashtra Industrial Development Corporation (MIDC) Trans Thane Creek (TTC) Industrial area is in NMMC. At present only 60% industries are almost closed or operating at low capacities.

There are over 1.92 lakh -registered properties in NMMC, which are used for residential, commercial and industrial purposes (Table 2.6.4). Construction of new buildings is going on in various zones. During year 2005-2006 over 1070 permissions to start new construction were granted. Review of records reveals that Nerul and Koperkhairane is the most preferred zones for construction of new buildings. (Table2.6.5)



2.7 Development Plan for NMMC

Navi Mumbai is a beautiful planned city. The development plan for Navi Mumbai envisages planning and development of various nodes or townships. Each nodal settlement is spread over 500 to 800 hectares of land and is further sub-divided into sectors. Each node has a population of about 100,000 to 300,000. The entire Navi Mumbai township is expected to have about 20 nodes with a total population of about 2 million and 700,000 jobs. The major job centres are planned at a number of locations taking into account the existing and future proximity of infrastructure, availability of port, natural gas etc.

The International Infotech Park (IIP) at Vashi, the Technology Centre at Belapur, and the Millennium Business Park at Mhape and the IT Hardware Park at Dronagiri offer tremendous potential for business related to computer hardware and software. Offices are available in these buildings for setting up Business in information technology, electronics, telecommunication and related industry. The best of all is that a single window clearance has been provided in the IIP to take care of all government formalities. Reliance Industries Ltd has set up biggest IT park and telecommunication centre in TTC area. Reliance Industries Ltd is also on his way to set up two more SEZ in the vicinity of Navi Mumbai. Navi Mumbai is right on its way to becoming the Silicon Valley of India.

A host of unique projects are on the anvil, such as the Multiplex and Family Entertainment Complex, International Exhibition Centre, Amusement Park, Golf Course, International IT Hardware Park and the like are expected to Navi Mumbai on to the world map.

NMMC proposes to prepare revised Development plan in current financial year for further improvement of infrastructure under for Jawahwelal Nerhru Urban Infrastructure Grant for Cities from Centre government.