### III. Objectives

The broad objective of the present study is to assess and compare quality of education in primary schools of Navi Mumbai by type of administration. Detailed objectives are outlined as under:

1. To give the spatial distribution of primary schools in Navi Mumbai and to study the time-trend of the year of their establishment by type of management;
2. To study the growth of students in primary schools and to assess their demand by type of management;
3. To construct a composite index to capture infrastructure facilities, student-teacher ratio, profile of teachers, and use this index to measure the quality of schools and compare it for three different types of management systems;
4. To assess overall development of infrastructure facilities available at primary schools of Navi Mumbai through Chernoff type face – a technique to represent k-dimensional data graphically; further this technique will be used to evaluate the hierarchy of development of schools within each type of management.
5. To assess the quality of education measured in terms of dropouts and performance of students in primary schools using school life table for each of the three types of management systems of schools;
6. To assess impact of socioeconomic profile of households of students on performance of students in class;
7. To develop multivariate statistical model to study the factors affecting the quality of primary education at schools run by different types of management controlling for the effects of socioeconomic variables and other covariates.

### IV. Data and Methods

The present study is based on the data collected from primary schools from standard I to standard VII. To accomplish the objectives of the proposed study, both primary and secondary data will be used.

**Secondary Data**

The secondary data will be taken from the study conducted by CIDCO on Census of Primary and Secondary Schools in Navi Mumbai (2010). This data set will be used
mainly to know spatial distribution of schools in different nodes, and *Talukas* of Navi Mumbai, their year of establishment, numbers of students and teachers and medium of instruction and to assess the available infrastructure facilities in schools by type of management.

**Primary Data**

Navi Mumbai comprises of 14 townships called nodes, 95 villages and Panvel and Uran Municipal Councils. The nodes are divided into two parts i) Developed nodes: There are 7 nodes and about 35 villages which are developed (urban) fall under the jurisdiction of thane district. They are handed over to Navi Mumbai Municipal Corporation (NMMC) for maintenance and development. ii) Developing nodes: Remaining nodes and villages called developing nodes and falls under Raigadh district.

The NMMC schools are looked after by Navi Mumbai Municipal Corporation. They are government schools, education is free up to primary level and they follow state board syllabus. The schools have better facilities as compare to Zilha Parishad (ZP) schools (CIDCO 2010).

The ZP schools are primary schools run by ZP in rural area. It is an autonomous body with 57 directly elected Z.P.T.C.Members, headed by the Chairman along with 19 M.L.As. and 4 Members of Parliament. This is preponderant democratic body empowered to review the development of the District besides giving direction. The ZP has 7 Standing Committees constituted by the above members. Each committee entrusted with specific fields of activity for review progress and give directions in the areas of development such as drinking water and Education Infrastructure, major services, Roads and Communication. ZP schools follow the state board curriculum and poorly maintained as compare to other schools.

The growth of private schools in Navi Mumbai is escalating particularly from last decade. Education is not free in private schools. Private schools have better school building and facilities in Navi Mumbai.

Navi Mumbai is an illustrious example of transformation of a vast rural area of fishing and agriculture to a developed urban centre of economic growth with all modern amenities of a world class planned city of 21st century. (CIDCO 2011). More than 1.6
million population was migrated in the city in addition to natural growth of population (Kapoor and Abbi 2011). Today, the population is about 2 million and its holding capacity is 4 million. Looking at the estimated future growth of Navi Mumbai population, the number of schools is also increasing to cope up the demand in future. Many schools have got the sanction up to secondary or higher secondary level and each year they are adding one more standard to their school. This is the reasons, why this city is having schools with different standards. For example, the primary schools in Navi Mumbai have pre primary to 2\textsuperscript{nd} standard, pre primary to 4\textsuperscript{th} standard, 2-4, 3-10, 1-4, 1-7, 1-6, 5-6, 5-9, 5-10, 5-12. Therefore, those schools having 1-7\textsuperscript{th} standard are listed for selection of sample size. There are 121 schools having classes 1-7\textsuperscript{th} standard in three type of management. It is suggested to select 20% schools from each management. The following table shows that minimum number of schools (34) is under NMMC and 37 school run by private institutions and 50 by ZP.

<table>
<thead>
<tr>
<th>Type of school</th>
<th>Total no of schools</th>
<th>20% sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>NMMC Schools</td>
<td>34</td>
<td>7</td>
</tr>
<tr>
<td>Private</td>
<td>37</td>
<td>7</td>
</tr>
<tr>
<td>Zilha Parishad</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>121</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

In order to measure the relationship between administrative system and quality of educational performance data will be collected through a structured questionnaire from school. The following information will be collected:

i) Type of school, aided, unaided, affiliation with syllabus, type of authority, location of school premises, academic achievements of students, sanctioned posts for teaching staff, vacant posts, number of students, their fees structure;

ii) Socio-economic profile of teachers, educational qualifications, whether trained or untrained, status of employment (Permanent/Temporary/on contract basis) If on contract, the period of contract, years of experience, salary;

iii) To compute the educational efficiency index, information on enrolment of students and number of students passed in particular grade will be collected. The educational performance will be monitored by following the cohort of students enrolled in class I till they complete standard VII. From school
records the information will be collected on dropouts and performance of students;

iv) Information on socioeconomic background of the parents of those children from each class standard I to VII whose educational performances were either exceptionally good or were very poor will be taken through structured questionnaire.