



Primary & Secondary Schools in Navi Mumbai  
Facilities, Student Enrolments & Performance and Staff Profile

Executive Summary

1. Introduction

The present study has been undertaken by CIDCO with a view to take stock of the progress of elementary education in Navi Mumbai in terms of growth of primary and secondary schools and, students' enrolments over last 39 years including total staff - teaching and non-teaching, presently employed. It is also aimed to identify grey areas of educational planning in the newly developed city and to provide benchmarks to educational planners of Navi Mumbai to devise strategies for more effective educational planning for future. As a development measure, CIDCO is bringing out such reports regularly focussing upon the needs of the inhabitants of the city and help bringing all modern facilities in different sectors of economy to make Navi Mumbai a world class city. This report is a sequel of earlier three reports entitled (i) *Health Infrastructure, Facilities, Personnel, and Services in Navi Mumbai*; (ii) *Wholesale, Retail, Service Industry and Open Markets in Navi Mumbai - Employment, investment and Turnover*; and (iii) *Employment in Service Sector in Navi Mumbai: Government & Private Offices*. The findings of the present report are based on the analysis of the data obtained in the *Census of Schools of Navi Mumbai\** undertaken during three months starting from September 2008. The reference date of the Census is September 1, 2008.

2. The Objectives

The main objective of the present study is to give the existing scenario of Primary & Secondary education in three types of management of schools, namely, NMMC, Private and Zilha Parishad, in Navi Mumbai. To be specific, the

study seeks to know the total number of schools, their distribution by nodes and other areas of the city, educational, infrastructural, sports and other facilities available, students' enrolments, student-teacher ratio, fee structure, and students' performance in SSC & HSC examinations 2008. The study also aims to focus on teachers' social background, their pay, age-sex structure, place of their origin and mode of transport generally used to commute between residence and school.

3. Salient Findings in Brief

This section briefly describes salient findings based on the data collected from 431 primary and secondary schools (including Jr. Colleges) of Navi Mumbai. In the sections to follow, we give the spatial distribution and characteristics of the schools by type of management - NMMC, Private and Zilha Parishad.

Number and location of schools by node/area and type of management

ES Table 1 gives the number of schools by node/area and by school management. Out of 431 schools, 62 (14.4%) and 96 (22.3%) schools were NMMC schools and Zilha Parishad schools, respectively. The rest of the 273 (63.3%) schools were Private Schools. The table shows that among the planned nodes, Nerul had the largest number (54) of schools followed by Vashi (42) and Airoli (31). NMMC schools were located in first seven nodes and in MIDC area; whereas, Zilha Parishad schools were found only in Panvel and Uran Talukas. Among the Private Schools, again the largest number (43) of schools was in Nerul followed by Vashi (33) and Panvel Taluka (33). It is found that the majority of these schools were located within less than one kilometre distance from the nearest mode of transport (Railway/Bus/Private).

\*.Navi Mumbai is comprised of 14 nodes, 95 villages, Panvel and Uran Municipal Councils and MIDC area.



**ES Table 1: Number of Schools by Node/Taluka and School Management**

Node/Taluka	NMMC Schools	Private Schools	Zilha Parishad* Schools	Total
Airoli	9	22	-	31
Ghansoli	5	19	-	24
Koparkhairane	8	19	-	27
Vashi	9	33	-	42
Sanpada	1	7	-	8
Nerul	11	43	-	54
CBD Belapur	4	10	-	14
Kharghar	-	15	-	15
Jui-Kamothe	-	10	-	10
Kalamboli	-	13	-	13
New Panvel	-	16	-	16
Panvel Taluka	-	33	67	100
Uran Taluka	-	21	29	50
MIDC	15	12	-	27
<b>Total</b>	<b>62 (14.4)</b>	<b>273 (63.3)</b>	<b>96 (22.3)</b>	<b>431</b>

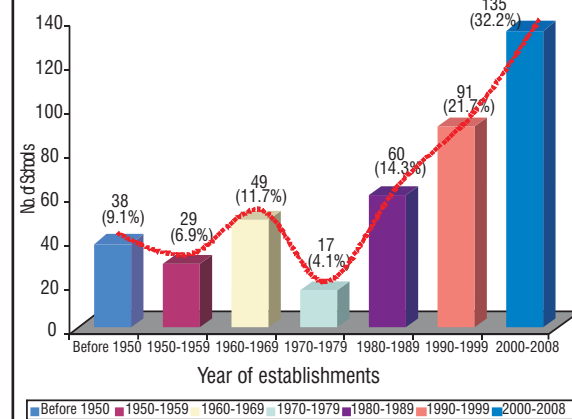
\* Includes 10 schools of Nagar Parishad out of which 9 were in Panvel Taluka and 1 was in Uran Taluka

#### Year of establishment of schools

ES Fig. 1 shows that 38 (9.1%) schools in Navi Mumbai were set-up before 1950. This is the cumulative number showing that some schools were established before 1950. The schools in planned nodes were established only after 1970. Setting-up of new schools got accelerated from 1980-1989. In this decade, 60 new schools were established in different nodes/Taluks and MIDC area registering 14.3% growth of new schools from previous decade 1970-1979. During the next 10-year period i.e., 1990-1999, 91 new schools came into existence (see ES Fig.1). It showed 21.7% growth of schools in this decade. The period of 2000-2008 witnessed a boom in the increase of new schools. During this period of 9 years, the number of new schools rose to 135. The increase in the number of schools in this period was 32.2% - the maximum growth rate ever

recorded during the observation period [Also see Appendix Table 2.4].

**ES Fig. 1: Year of Establishment of Schools**

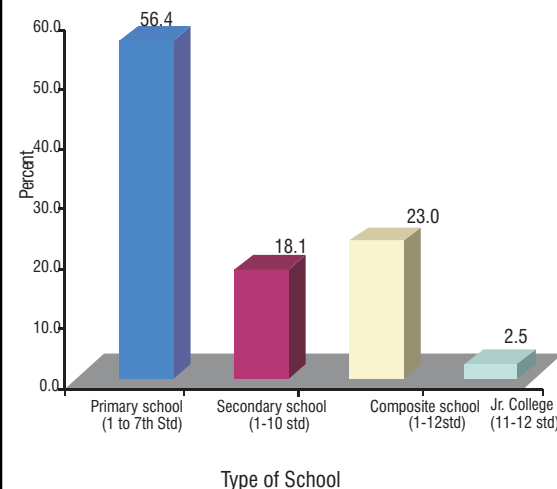


Source: Appendix Table 2.4

#### Distribution of schools by class standard

ES Fig.2 shows that the majority (56.3%) of schools were primary schools having class standards from 1 to 7\*; followed by composite schools (1 to 12 Std.) (23.0%). There were 78 (18.1%) secondary schools having classes from 1 to 10th standard. Junior colleges, giving education only for 11th and 12th standards students were only 11 (2.5%).

**ES Fig. 2: Distribution of Schools by Class Standards**



Source: Appendix Table 2.7

\* For details, also see Appendix Table 2.7A

#### Distribution of schools by financial grant status

All the 64 NMMC schools and 96 Zilha Parishad schools were fully aided by their respective managements. In these schools, education was free for both boys and girls. However, among 273 Private Schools, only 23.5% were fully aided; 9.5% partially aided and the majority (67.0%) was unaided. Most importantly, the percentage of fully aided and partially aided schools out of total (431) schools was more in villages, MIDC area and other rural habitations (see Appendix Table 2.8).

#### Distribution of schools by affiliation (syllabus)

ES Table 2 presents the distribution of schools by the syllabus they were offering and by type of management of schools. All the NMMC and Zilha Parishad schools were following Maharashtra State Board (MSB) syllabus. Among Private Schools also the majority (88.3%) of schools had opted for MSB syllabus. Out of 431 schools, the bulk (92.6%) was following MSB syllabus and only 4.9% and 2.5% of the total schools in Navi Mumbai were affiliated to CBSE and ICSE course curricula, respectively.

**ES Table 2: Distribution of Schools by Affiliation (Syllabus) and by Type of Management**

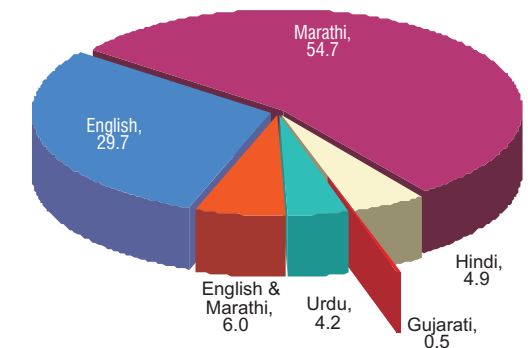
Affiliation (Syllabus)	NMMC Schools	Private Schools	Zilha Parishad Schools	Total
Maharashtra State	62	241	96	399 (92.6%)
CBSE	--	21	--	21 (4.9%)
ICSE	--	11	--	11 (2.5%)
<b>Total</b>	<b>62</b>	<b>273</b>	<b>96</b>	<b>431 (100.0)</b>

#### Distribution of schools by medium of instruction

ES Fig. 3 gives the distribution of schools by medium of instruction they follow. The majority (54.8%) of schools were Marathi medium schools followed by those schools (29.7%) in which the medium of instruction was English. 6% of schools had both English and Marathi medium of instruction. About 10% of the schools had medium of instruction Hindi, Urdu and Gujarati;

their language wise composition was: 21 (4.9%) Hindi medium schools, 18 (4.2%) Urdu medium schools and 2 (0.5%) Gujarati medium schools.

**ES Fig. 3: Distribution of Schools by Medium of Instruction**



Source: Appendix Table 2.11

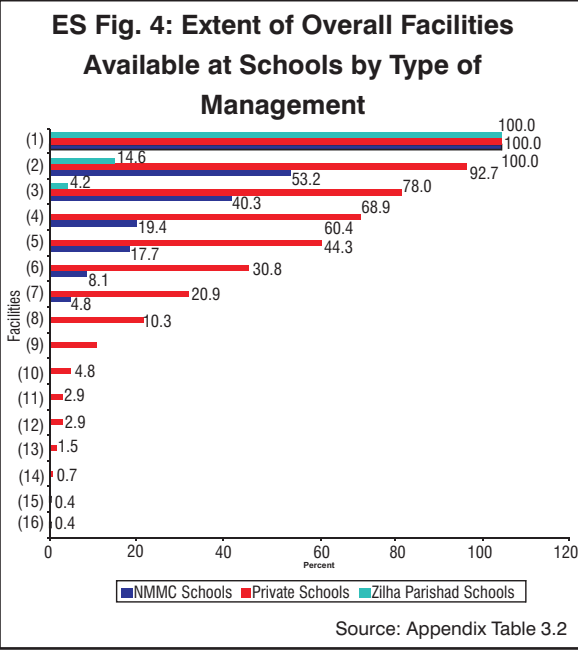
#### Distribution of schools by number of classrooms

The distribution of schools by number of classrooms is highly skewed for private schools as compared to those of NMMC and Zilha Parishad schools.. In private schools, 48 (18.5%) schools had more than 25 classrooms; whereas a moderately large number (18 i.e., 6.9%) of these schools had more than 40 classrooms. The average number of classrooms in private schools was highest (16.2 per school) followed by NMMC schools (7.0 per school). The average number of classrooms was lowest in Zilha Parishad schools (5.9 per school). However, the average depends upon the number of class standards in a school (Appendix Table 3.1)

#### Package of physical facilities available at schools by type of management

ES Fig. 4 gives the extent of overall facilities available at schools of Navi Mumbai by type of management. The figure shows that the minimum facilities such as drinking water, electricity, water supply and toilet, were available in all the 431 schools. The next category of the facilities has been formed by adding one more facility to the previous group of facilities which is found in maximum number of schools. The last category includes all the facilities listed in Appendix Table 3.1. There is only one private school in Navi

Mumbai which has the maximum number of facilities including hostels for boys and girls. The data suggest that the Private Schools in Navi Mumbai had more number of physical facilities available as compared to NMMC or Zilha Parishad schools.

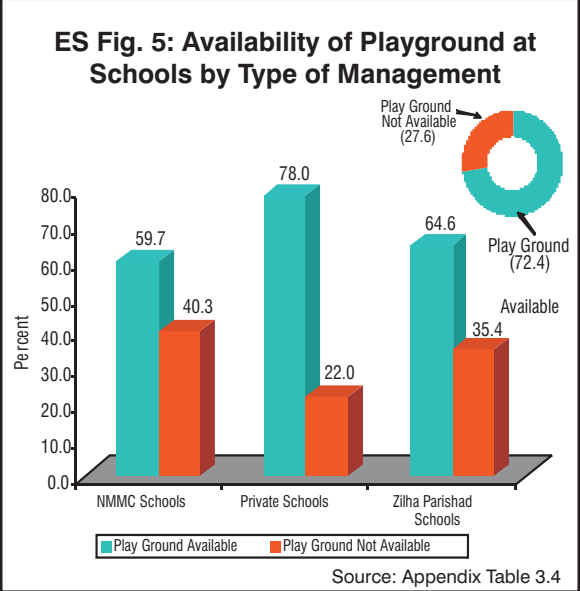


- (1) = Minimum facilities\* (9) = 8 + Telephone  
(2) = 1 + Staff room (10) = 9 + Common room  
(3) = 2 + Library (11) = 10 + Internet  
(4) = 3 + Laboratory (12) = 11 + Canteen  
(5) = 4 + Health/First aid (13) = 12 + Auditorium  
(6) = 5 + Parking (14) = 13 + Gymnasium  
(7) = 6 + Fire fighting (15) = 14 + Boys hostel  
(8) = 7 + Bus (16) = 15 + Girls hostel

\* Minimum facilities include Drinking water, Electricity, Water supply & Toilet

**Availability of playground at schools**

A playground at the schools is one of the most essential components of sports facility. ES Fig.5 presents information on availability of playground at schools by type of management. It is found that a large number of schools of Navi Mumbai had playground facility: out of 431 schools, 312 (72.4%) schools had a playground. A break-up of this facility by type of management of school suggests that the majority (68.2%) of Private Schools had a playground for their students (see Appendix Table 3.7). Nearly 12% of NMMC and about 20% of Zilha Parishad schools had playgrounds.



**Availability of facilities for sports and extra curricular activities**

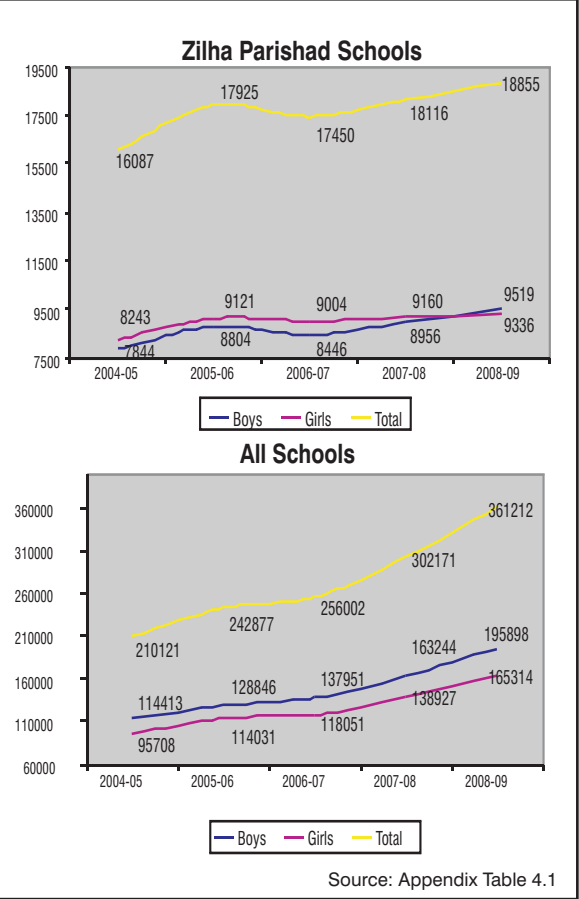
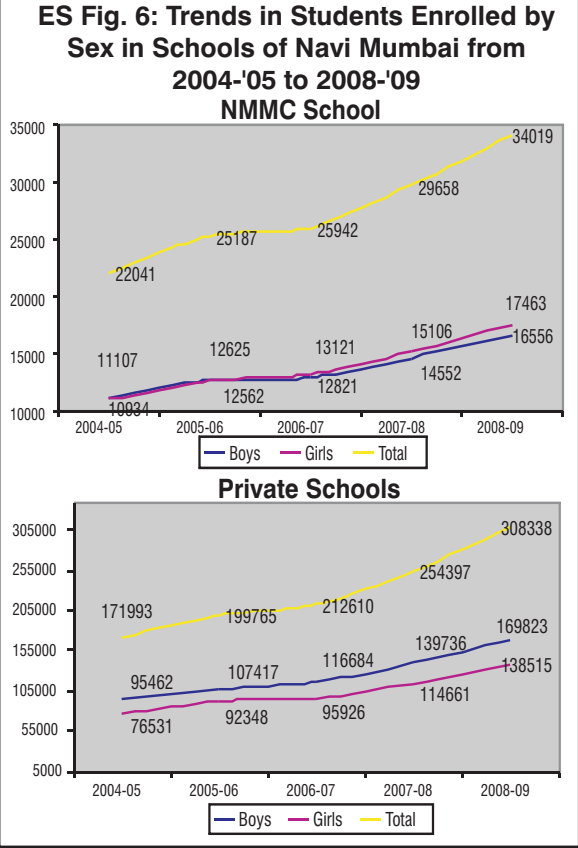
The data revealed that the majority of schools had sports facility for Kho Kho, Kabbaddi, Cricket, Football and Indoor Games. These five facilities cut across the type of school management and they occupy 1st to 5th rank positions in all the types of schools. Facilities for Mallakhamb were also available in a few schools. Some Private schools, however, had also facilities for other sports like Skating, Tennis, Swimming and Horse Ridding which none of the schools run by NMMC or Zilha Parishad had. Only a few schools had the facility for Hockey - the National Sport. Out of 62 NMMC schools, only one had the facility for Hockey; whereas 35 (12.8%) Private Schools were having facility for this sport. But the popularity of Hockey among students in these schools ranked much lower. None of the Zilha Parishad schools had the facility for Hockey.

**Trends in student enrolments in schools by sex from 2004-'05 to 2008-'09**

ES Fig. 6 gives the trends of student enrolments in schools of Navi Mumbai from 2004-'05 to 2008-'09 by type of management. There are four panels in the figure. The first four panels give the trends of enrolments of boys, girls and both sexes combined for 62 NMMC schools, 273 Private Schools, 96 Zilha Parishad schools and all the 431 schools, respectively. Total number of students enrolled in NMMC schools was 22,041 during 2004-'05 which rose to 34,019 in 2008 - '09.

The trends in enrolments of boys and girls were almost similar. However, during the period 2006-'07 and 2008-'09 more girls than boys were enrolled.

As expected, a large number of students were enrolled in Private Schools as compared to NMMC and Zilha Parishad schools. This is mainly because the number of Private Schools is much more than the numbers of both NMMC and Zilha Parishad schools combined in Navi Mumbai. Also, the parents may prefer their children to get education in Private Schools due to better infrastructure and sports facilities in these schools. By and large, the growth trends in enrolments of boys, girls and both sexes combined are found similar. Curiously enough, enrolments of boys exceeded girls in Private Schools in all the five academic years. The students' enrolments in Zilha Parishad schools of Navi Mumbai showed a increase during 2004-'05 and 2008-'09. In 2004-'05, 16,087 students were enrolled and the number rose to 17,925, 17,450, 18,116 and to 18,855 in 2005-'06, 2006-'07, 2007-'08 and 2008-'09, respectively. Interestingly in all the five academic years from 2004-'05 to 2008-'09, more girls than boys were enrolled. (see Appendix Table 4.1).

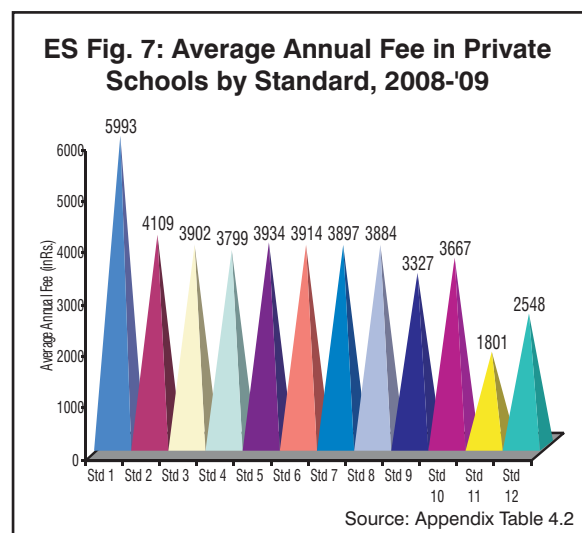


**Average annual fees in private schools / composite schools / junior colleges**

ES Fig. 7 gives the average annual fee (in Rupees) charged to students admitted to Private Schools/composite schools/junior colleges, from Standards 1 to 12. The fee structure refers to the year 2008-'09. The average annual fee for Standard 1 which includes admission fee, was highest. It was nearly Rs.6000/-. The average annual fee from Standards 2 to 10 staggered between a minimum of Rs.3,327/- for Standard 9 to a maximum of Rs.4,109/- per year. It may be noted that the annual fee for Standard 2 was higher than the annual fees of Standards 3 to 10. This may be due to the fact that some students take admission in Standard 2 directly and for them it becomes the first entry point in their school education. Students are required to pay more at the entry point (also see Appendix Table 4.3).

Annual fees at junior college level (Standards 11 & 12) were much lower than the annual fees for Standards 1 to 10. The average fees for Standards 11 & 12 were Rs.1,801/- and Rs.2,548/- per year, respectively.



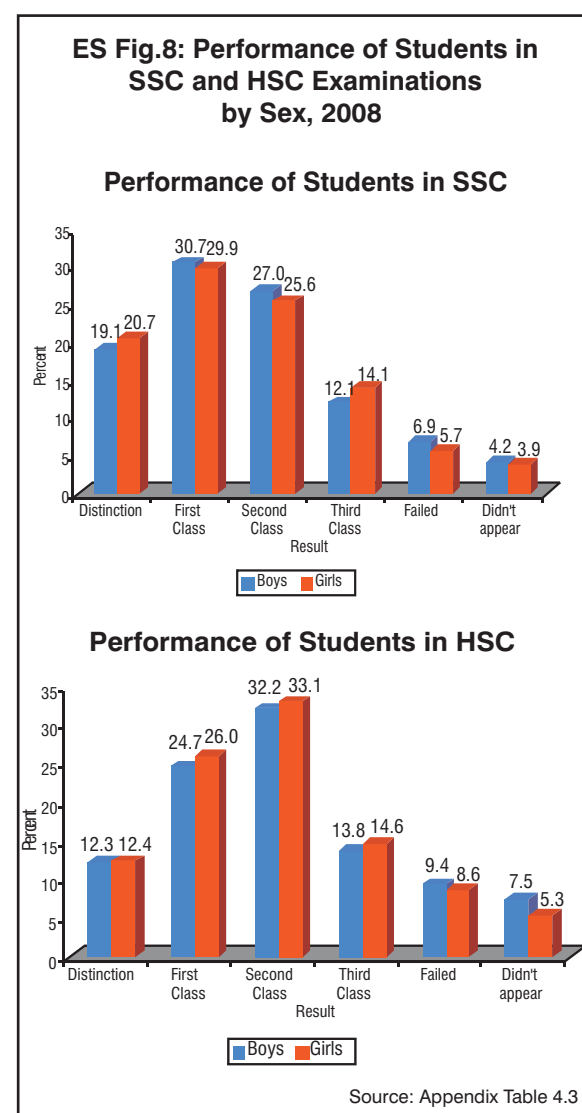


#### Performance of students in SSC/HSC examinations 2008

ES Fig.8 presents the result of students for boys and girls appeared in SSC and HSC examinations of 2008. The performance of the students has been evaluated in six categories of outcomes, namely, (i) passed with distinction; (ii) passed in first class; (iii) passed in second class; (iv) passed in third class i.e., pass class; (v) percentage of students failed; and (vi) percentage of students who did not appear in the examination. A comparison of the performances of boys and girls in the SSC examination reveal that by and large the patterns of results for both the sexes were similar. However, girls had slight edge over boys. For example, 88.9% of boys passed the SSC examination; whereas the percentage of girls declared successful was 90.4. The percentage of girls in distinction class was 20.7 against 19.1 for boys. The percentages of girls in both failed or did not appear categories in the SSC examination were slightly lower than the respective percentages of boys in these two groups of outcomes

The result of HSC examination had clearly shown better performance of girls in 2008 examination. 83.1% of boys passed the HSC examination; whereas 86.1% of girls were successful in the examination. The comparison of the four outcomes of successful categories, namely, 'passed with distinction', 'passed in first class', 'passed in second class' and 'passed in third class' reveals that girls consistently fared better than boys in all the four categories of successful

candidates. Also, the percentages of boys who either failed or did not appear in the HSC examination were higher than the respective percentages for girls. In both SSC and HSC examinations, girls performed better than boys but certainly girls performance was relatively better than boys in HSC examination (see Appendix Table 4.3).



#### Mode of transport used by majority of students

The data suggest that the majority (73.4%) of students commute between their homes to schools by 'Walk', followed by those (17.3%) who used school bus or hired a private transport to reach school. For about 6% of the students local train was the preferred mode of transport to travel between their homes and schools. Only 3.5% of the students commute between their homes and schools by their own transport (see Appendix Table 4.6).

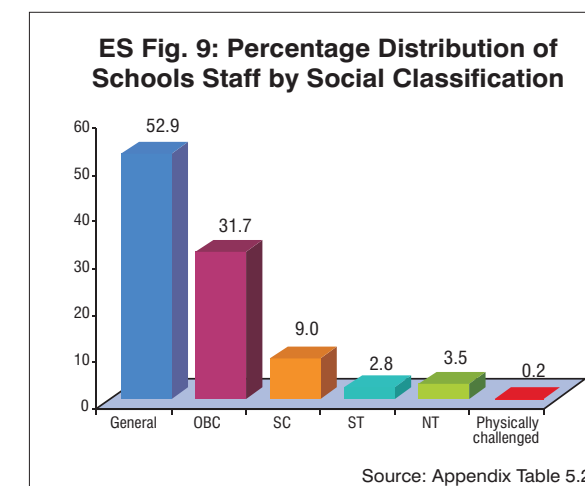
#### Total number of teaching and non-teaching staff and student-teacher ratio

ES Table 3 gives total teaching staff on payroll of 431 schools, total number of students enrolled in these schools and student teacher ratio by type of school management as found in 2008-'09. The total teaching staff of NMMC schools, Private Schools and Zilha Parishad schools were 569, 6,658 and 539, respectively; whereas the total number of students enrolled in these three types of schools in 2008-'09 were 34,019, 308,338 and 18,855, respectively. The student - teacher ratios were found 60:1, 46:1 and 35:1 for NMMC schools, Private Schools and Zilha Parishad schools, respectively. The student- teacher ratio is quite high in NMMC schools where there was only one teacher for 60 students, on average. The ratio is slightly better in Private Schools where for 46 students there was one teacher. The student-teacher ratio (35:1) was lowest in Zilha Parishad schools.

ES Table 3: Total Numbers of Students and Staff and Student-Teacher Ratio by Type of Management, 2008-'09.			
Type of Management	Total Students	Total Teaching Staff	Student-Teacher Ratio
NMMC Schools	34,019	569	60.1
Private Schools	308,338	6658	46.1
ZP Schools	18,855	539	35:1
<b>Total</b>	<b>361,212</b>	<b>7,766</b>	<b>47:1</b>

#### Percentage distribution of school staff by social classification

ES Fig. 9 gives the percentage distribution of school staff by social groups. As can be seen from the figure, about 53% of the school staff was appointed from General category; whereas under the reserved categories, 31.7% of the staff was from OBC followed by 9.0% and 2.8% staff belonging to SC and ST. 3.5% was of NT category. Only tiny percentage (0.2) of the school staff belonged to 'Physically Challenged' category (also see Appendix Table 5.4).



#### Percentage distribution of school staff by educational qualifications

In both the NMMC and Zilha Parishad schools, the largest percentage of teachers was only SSC with D.Ed./ATT\*. The data show that in NMMC and Zilha Parishad schools, 37.4% and 40.6% of the teachers had only SSC + D.Ed./ATT qualifications, respectively. In case of NMMC schools the next largest percentage (20.3) of teachers had HSC + D.Ed./ATT qualifications followed by those (19.0%) who were graduates with D.Ed./ATT. The Zilha Parishad schools had by and large, the same pattern of qualifications of their staff with one exception that in these schools, the second largest percentage (23.8) of teachers was graduates with D.Ed./ATT. In these schools, only 16.6% of teachers were having HSC with D.Ed./ATT qualifications. However, the percentage of teachers with graduate degree in a subject and also graduate degree in education (B.Ed.) was more (13.0%) in NMMC schools as compared to Zilha Parishad schools. Teachers having Postgraduate degree with D.Ed./ATT were relatively more in NMMC schools as compared to Zilha Parishad schools. A small percentage of school staff in both the public schools was either graduate or postgraduate without any teachers training.

The pattern of the educational qualifications of the staff of Private Schools was quite different than those of NMMC and Zilha Parishad schools. The majority of teachers in the Private Schools was more qualified than those of the two public

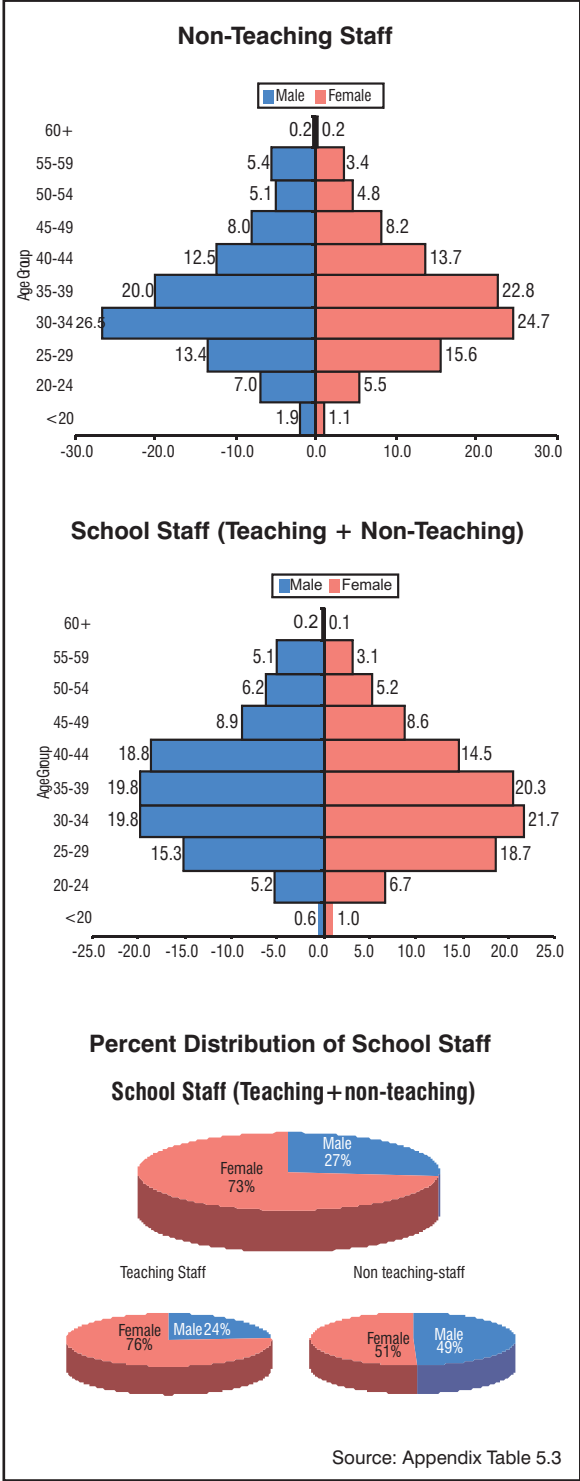
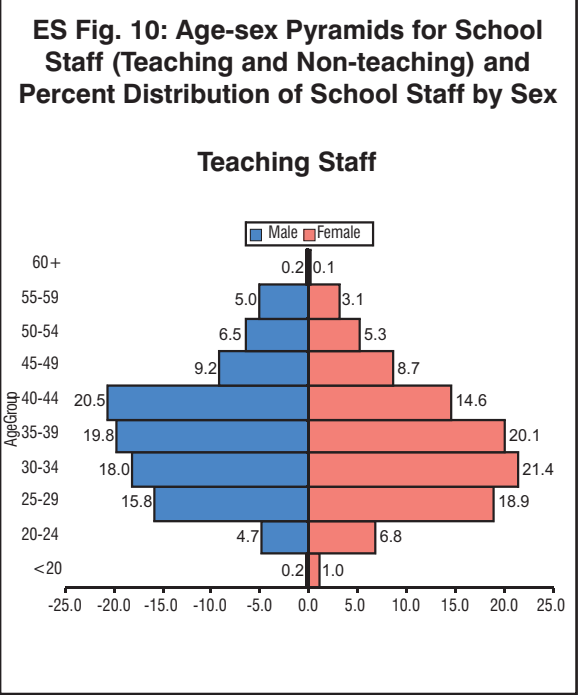
\* ATT: Any Teachers Training

schools. For instance, the highest percentage (31.2) of school teachers of Private Schools was graduates with bachelor of education (B.Ed.) degree - the most desired/preferred qualifications for appointment as a school teacher. The next highest percentage (18.4) of teachers was Postgraduates with D.Ed./ATT qualifications (see Text Table 5.2)..

Age-sex structures of teaching and non-teaching staff

A look at the age-sex structures of teaching and non-teaching staff shown in ES Fig. 10 brings contrasts between the two age-sex pyramids. The age-sex structure of teaching staff was relatively old as compared to that of non-teaching staff of schools. In case of teaching staff, more percentage of the teachers was in the age range 30 to 49 years; whereas in case of non-teaching staff the majority (26.5% males and 24.7% females) was in the age group 30-34 years. Also, very young (less than 25 years of age) non-teaching staff was more (8.9% males and 6.6% females) as compared to 4.9% males and 7.8% females of teaching staff in this age group.

The sex composition was highly skewed in case of teaching staff. The bulk (76%) of teachers was females; whereas, among non-teaching staff the distribution was nearly even. 51% of the non-teaching staff was females and 49% males.



Average monthly salary of teaching and non-teaching staff by type of management

ES Table 4 gives the average (both mean and median) salary of teaching and non-teaching staff separately by type of management of schools. In case of teaching staff the mean salary per month was highest (Rs.12595/-) in Zilha Parishad schools followed by NMMC schools (Rs.10439/-) and Private Schools (Rs.9091/-). A large difference is found in between respective mean

and median salaries. The difference was highest in case of Zilha Parishad schools. This indicates that a large number of teachers of Zilha Parishad schools get more salary which may be due to their seniority. Among non-teaching staff, however, there was not much difference between mean salary and median salary in all the three types of schools. The average salary (both mean and median) for non-teaching staff was highest in Private Schools followed by Zilha Parishad schools and NMMC schools.

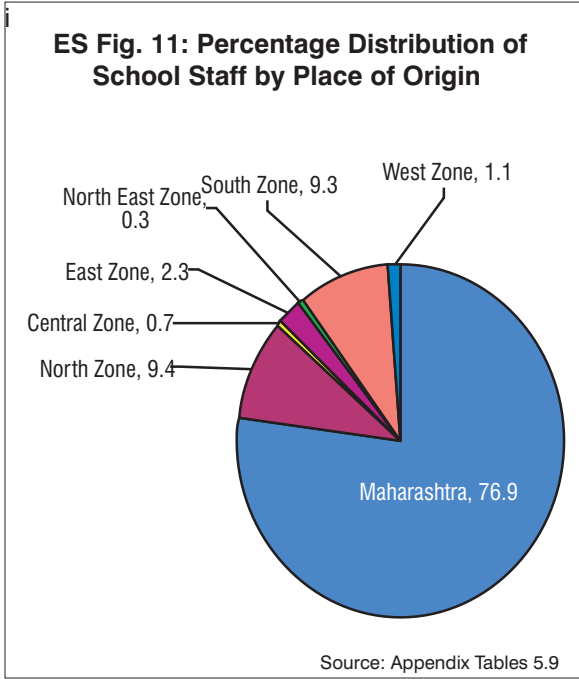
**ES Table 4: Average Monthly Salary (in Rs.) of School Staff by Type of Management**

Salary	NMMC Schools	Private Schools	ZP Schools
Teaching			
Mean	10439/-	9091/-	12595/-
Median	7600/-	7800/-	1400/-
Non-teaching			
Mean	2980/-	5930/-	5438/-
Median	3000/-	4500/-	3750/-
Overall staff			
Mean	10150/-	8660/-	12388/-
Median	7087/-	7300/-	14000/-

Source: Computed from Data

Place of origin of school staff

As can be seen from ES Fig. 11, the bulk (76.9%) of school staff was from Maharashtra. The rest of the Indian states have been grouped in six zones, namely, North Zone, Central Zone, East Zone, North-East Zone, South Zone and West Zone. The next highest percentage (9.4) of school staff came from North Zone with four states, namely, Bihar, Punjab, Rajasthan and Uttara Khand. Next zone from which more (9.3%) school staff came was South Zone which included the staff from Andhra Pradesh, Karnataka, Kerala and Tamil Nadu. 2.3% of school staff was from East Zone which included the states of Assam, West Bengal and Orissa. The West Zone (States of Gujarat and Goa) contributed 1.1% of the total school staff in Navi Mumbai. Only 0.7% of school staff migrated from Central Zone comprising of four states, namely, Chattisgarh, Delhi, Madhya Pradesh and Uttar Pradesh. The lowest percentage (0.3) of the school staff was from North-East Zone.



Mode of transport used by staff to commute between residence and school

The major modes of commuting between the place of residence and school were by 'Walk', 'Bus', 'Own Transport', 'Local Train' and 'Private Transport'. ES Fig. 12 shows, the majority (33.4%) of the staff comes to school by walking followed by those (27.8%) who commute by bus. The next highest (11.6%) mode of transport used was own transport. 7.7% of the staff was commuting by local train; whereas nearly the same percentage (7.3) used private transport. Those who come from farther distances generally used train (6.5%) or staff bus (5.7%).

