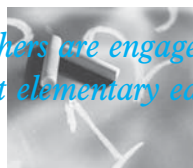


Teachers & Teacher-Related Indicators

About 3.16 million teachers are engaged teaching in schools that impart elementary education

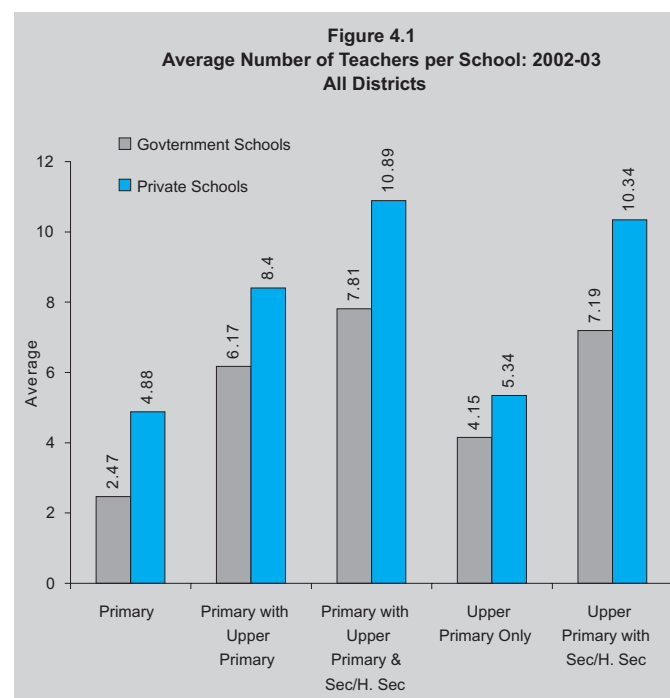


Part from information on school and enrolment indicators, a good amount of information on teachers is also collected under DISE. The rich set of information is useful in developing teacher education plans. Number of teachers by school category, its age & sex distribution, professional & educational qualifications, training status, pupil teacher ratio, average number of teachers by school category, distribution of female teachers, type of teachers, para-teachers etc. have been presented at the state level. The SCERT and DIET faculty across the country are the potential users of this mine of information on teachers. If needed, the same can also be obtained at disaggregated levels.

Average Number of Teachers

Number of teachers distributed by school category suggests that about 3.16 million teachers are engaged teaching in schools that impart elementary education in the country. Primary schools have more than 50 per cent (1.59 million) of the total 3.16 million teachers. On the other hand, it has been observed that every fourth teacher is teaching in independent Elementary school (27.61 per cent). In other types of schools, the percentage varies between 5.64 in integrated Higher Secondary to 9.27 in Upper Primary attached to Secondary & Higher Secondary schools. Obviously, because of its

size, the highest number of teachers is in Uttar Pradesh (0.35 million), that is, 11.08 per cent of the total teachers in the country. On the other hand, Uttaranchal has the least number of teachers (47.42 thousand, 1.50 per cent). Uttar Pradesh also has the highest number of teachers in Primary schools (0.27 million), which is 17 per cent of the total Primary teachers in the country. On the other hand, Himachal Pradesh has the least number of teachers in Primary schools (28 thousand).



The total number of teachers fails to provide any information about the availability of

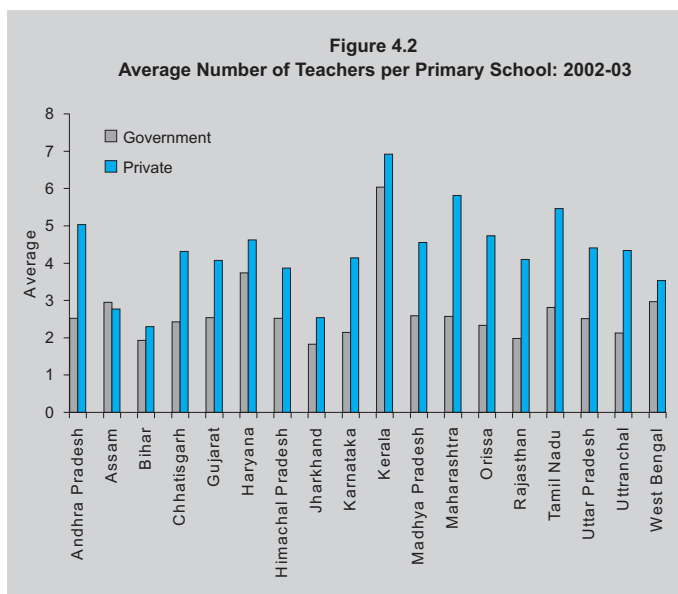
teachers in an individual school type unless the same is linked to the total number of schools in a school category. For this purpose, average number of teachers by school category is presented and is briefly analysed below.

The all-India average of 461 district reveals that, on an average, there are 3.70 teachers in a school that imparts elementary

average number of teachers in Primary schools reveals that, on an average, a Primary school has more than two (2.64) teachers. Bihar (1.93) and Jharkhand (1.84) are the only two states that have lower than two teachers in Primary schools, in sharp contrast to Kerala where it is as high as 6.55 teachers at this level of schools.

The analysis further reveals that irrespective of the school type and state, private- managed schools have better average number of teachers than the government-managed schools. Compared to 2.47 teachers in government-managed Primary schools, the corresponding number in private-managed schools is as high as 4.88 teachers. Even in a few states, the average number of teachers in government-managed Primary schools is lower than the national average of 2.47 teachers. In the states of Bihar (1.93 teachers), Jharkhand (1.83) and Rajasthan (1.98), the average number of teachers is even lower than two. The private managed Primary schools in these states have more than two teachers. The same is significantly high in Rajasthan with 4.10 teachers in every private-managed Primary school. The average number of teachers in Primary schools in Kerala is as high as 6.04, which is the highest among all the states that reported DISE data. However, not much difference is noticed in average number of teachers in private-

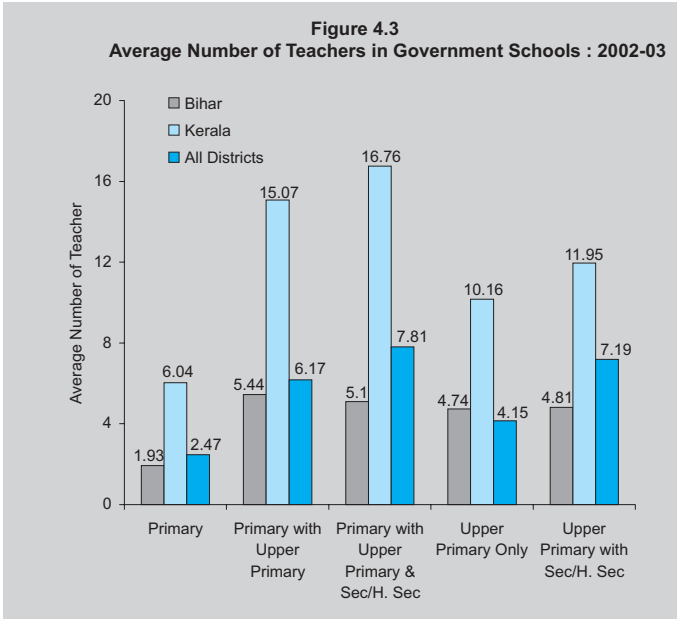
managed Primary schools (6.92). Irrespective of the type of school, the average number of teachers in Kerala is very high compared to the national average and other states considered in the analysis. The average number of teachers in government-managed Elementary and



education. Kerala has the highest number of teachers (9.85) and Bihar the lowest (2.55). The average number of teachers by school category reveals that the highest number of teachers per school is observed in case of integrated Higher Secondary schools (9.60), followed by independent Elementary (6.64) and Upper Primary (4.32) schools.

The scheme of Operation Blackboard was initiated in 1987. One of the provisions was to provide at least two teachers to each of the Primary schools covered under the scheme. The

On an average, there are 3.70 teachers in a school that imparts elementary education. Kerala has the highest number of teachers (9.85) and Bihar the lowest (2.55)



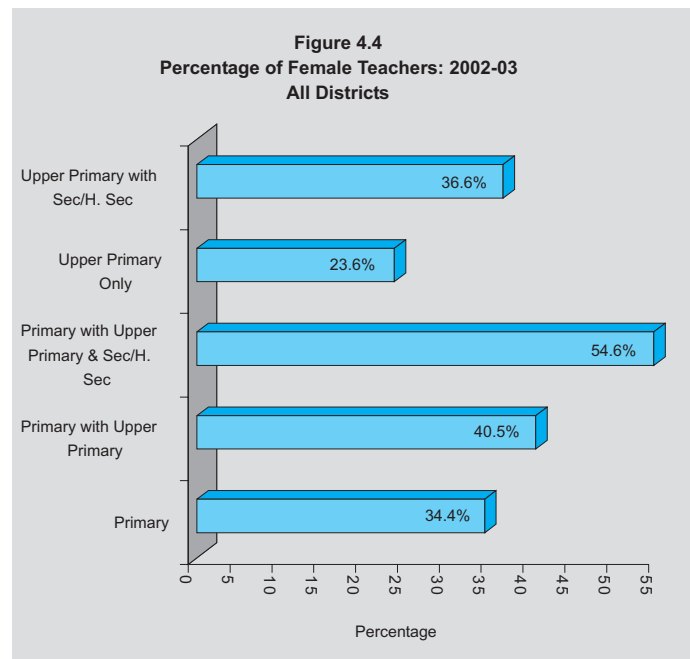
integrated Higher Secondary schools in Kerala is as high as 15.07 and 16.76 while the same in private-managed schools is still higher at 19.64 and 20.50 teachers, which is also applicable to other states.

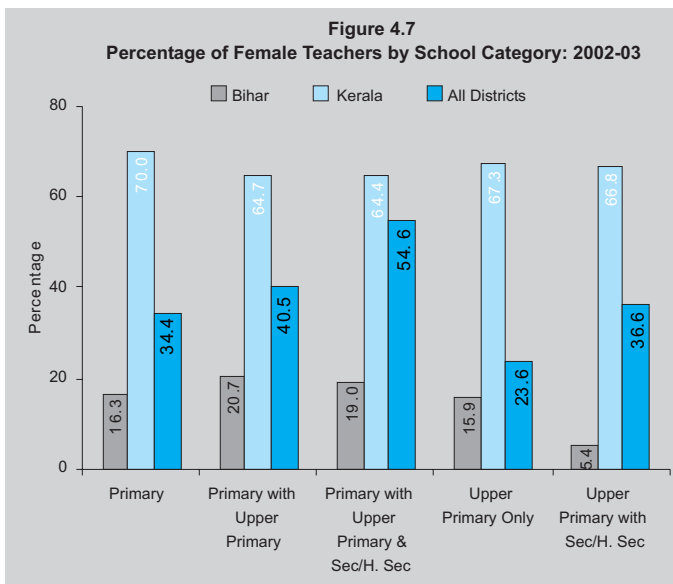
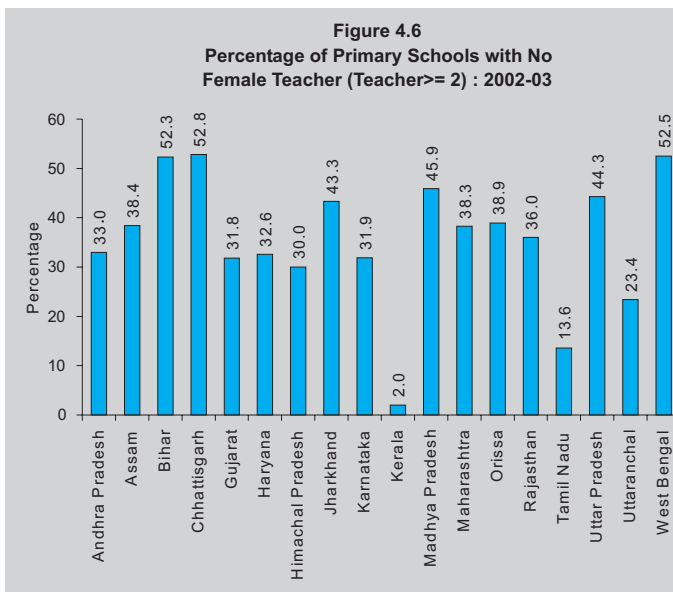
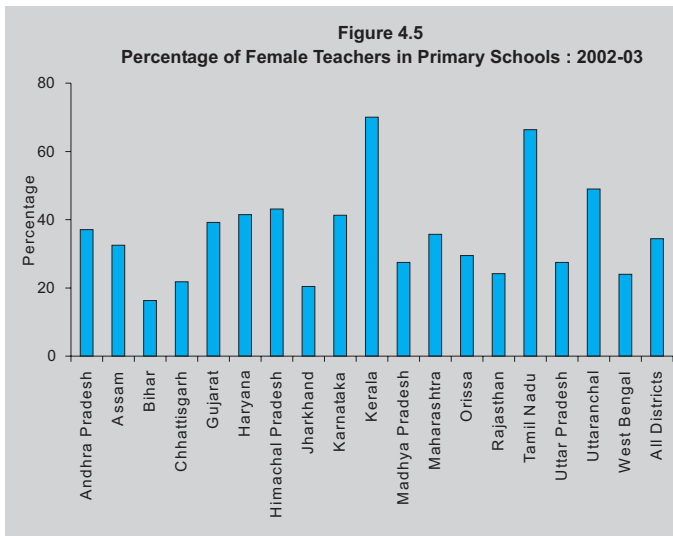
Female Teachers

One of the other provisions of the scheme of Operation Blackboard was to ensure that one of the teachers appointed would preferably be the female. There are about 77 districts across 18 states that have more than 50 per cent female teachers. The percentage of female teachers by school category across 18 states reveals that irrespective of the school type, barring integrated Higher Secondary schools, in none of the other school type, the percentage of female teachers is satisfactory. In Higher Secondary schools, female teachers outnumber their male counterparts, as their percentage is as high as 54.6. However, a few states such as Bihar (19.0 per cent), Jharkhand (23.6 per cent), Rajasthan (25.6 per cent), Uttar Pradesh (30.7 per cent) and West Bengal (30.7

per cent) have very low percentage of female teachers in this category. On the other hand, in Tamil Nadu (80.0 per cent), Karnataka (68.1 per cent) and Kerala (64.4 per cent), majority of teachers in integrated Higher Secondary schools are female.

So far as the primary schools are concerned, one out of every three teachers is female but in states like Kerala (70.0 per cent) and Tamil Nadu (66.4 per cent), majority of Primary school teachers are female. On the other hand, in states such as Bihar (16.3 per cent), Chhattisgarh (21.8 per cent), Jharkhand (20.4 per cent), Madhya Pradesh (27.5 per cent), Rajasthan (24.2 per cent), Uttar Pradesh (27.5 per cent) and West Bengal (24.0 per cent), female teachers are in minority and their number is much lower than their counterpart male teachers. In Elementary schools, the percentage of female teachers is a bit higher than the same in the Primary schools. On the other hand, the percentage of female teachers in independent Upper Primary schools is only 23.6 per cent but a few states such as Kerala (67.3 per cent) and Tamil





Nadu (63.4 per cent) have more female teachers than male teachers. In Upper Primary attached to Secondary & Higher Secondary schools, the percentage of female teachers is about 37. Karnataka (61.8 per cent), Kerala (66.8 per cent) and Tamil Nadu (60.5 per cent) too have a very high percentage of female teachers in this category also.

Schools without Female Teachers

In addition to the percentage of female teachers presented above, percentage of schools with no female teacher has also been analysed. About 84 per cent schools (all types) have two or more teachers of which 47.53 per cent schools do not have any female teacher. Schools having two and more teachers are considered in the analysis. Further, it is observed that in as many as 45.1 per cent Primary schools (271 thousand schools), no female teacher is posted. The percentage of schools without female teachers is as high as 52 per cent in the states of Bihar, Chhattisgarh and West Bengal. Rajasthan and Uttar Pradesh too have a large number of Primary schools without female teachers. Except Kerala and Tamil Nadu, in other states, schools without female teachers are above 20 per cent. However, percentage of such schools is only 2.0 in Kerala and 13.6 in Tamil Nadu.

So far as independent Upper Primary schools are concerned, in as many as 52 per cent schools no female teacher is posted. The percentage of such Upper Primary schools in 2003 was as high as 62.4 in Bihar, 75.4 in Orissa and 69.3 in Uttaranchal and it was the lowest in Kerala (1.2 per cent). Only 9.4 per cent Upper Primary schools in Tamil Nadu do not

have female teachers. Further, it has been observed that irrespective of the type of school, a large number of schools in the country do not have any female teacher. This is also applicable to Elementary (24.7 per cent) and integrated Higher Secondary (13.5 per cent) schools. Kerala and Tamil Nadu too have only few such schools. Majority of teachers, irrespective of the school type, in Kerala and Tamil Nadu are female teachers.

Pupil Teacher Ratio

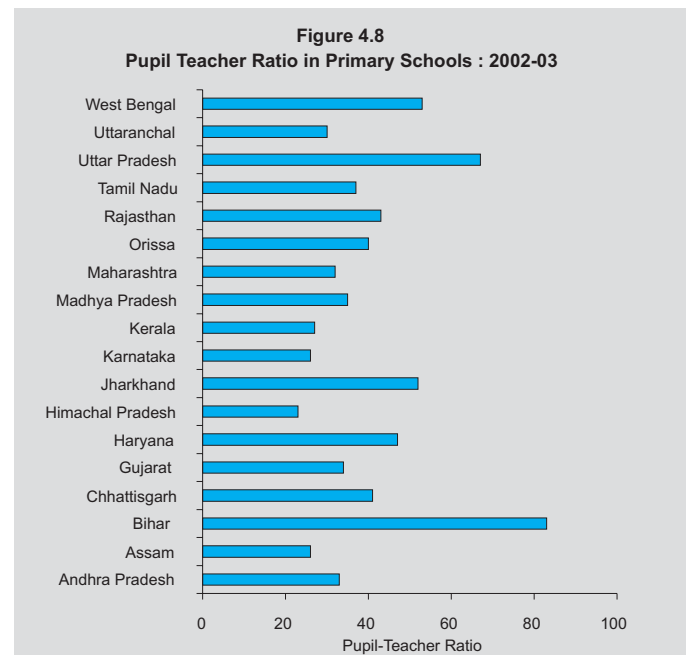
One of the important indicators that influence classroom transaction is the pupil teacher ratio which is presented by school category. The highest pupil teacher ratio is observed in the case of the Primary schools (1: 46), followed by Elementary (1: 38), Upper Primary attached to Secondary & Higher Secondary (1:37), integrated Higher Secondary (1:34) and independent Upper Primary (1: 31) schools. Further, pupil teacher ratio in the case of a few states is observed to be higher than the national average which is true for all types of schools.

The highest pupil teacher ratio in Primary schools is observed in Bihar (1:83) followed by Uttar Pradesh (1: 67). One can easily imagine the classroom conditions where pupil teacher ratio is as high as 1: 83. In addition, many schools are single teacher and single classroom schools all of which further deteriorate the situation within the classroom. The high pupil teacher ratio is also indirectly reflected when student classroom ratio is analysed which is as high as 83 in case of Bihar and 64 in Uttar Pradesh. On an average, the student classroom ratio in a Primary school is 48 compared to which in other school types, the same is lower than

that in Primary schools. In Bihar, it is not only student classroom ratio in primary schools that is high but the same is also very high in the case of independent Elementary (90), Upper Primary (75) and Higher Secondary (72) schools. On the other hand states such as Assam (1:26), Himachal Pradesh (1: 23), Karnataka (1:26) and Kerala (1:27) have almost an ideal pupil teacher ratio.

Comparatively, pupil teacher ratio in Upper Primary schools (1:38) is better than that in Primary schools. Bihar too, has a very high pupil teacher ratio even in independent Elementary schools (1: 74) while integrated Higher Secondary Schools in Bihar have a pupil teacher ratio of 1:64. Reasonably, in a good number of other states like Assam (1:17), Himachal Pradesh (1:14) and Uttaranchal (1:21) pupil teacher ratio in Elementary schools is satisfactory.

The percentage distribution of schools with pupil teacher ratio above 100 further reveals that in as many as 53,809 primary schools, the pupil teacher ratio is above 100, which is 8.94



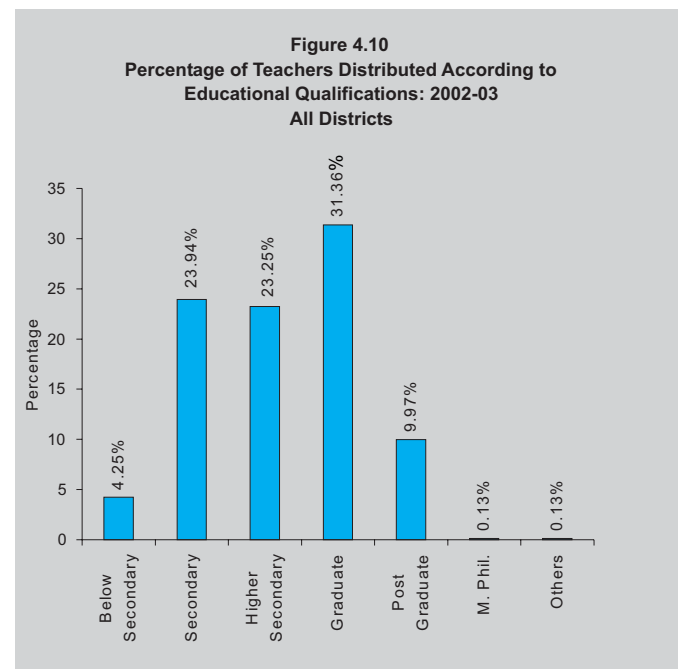
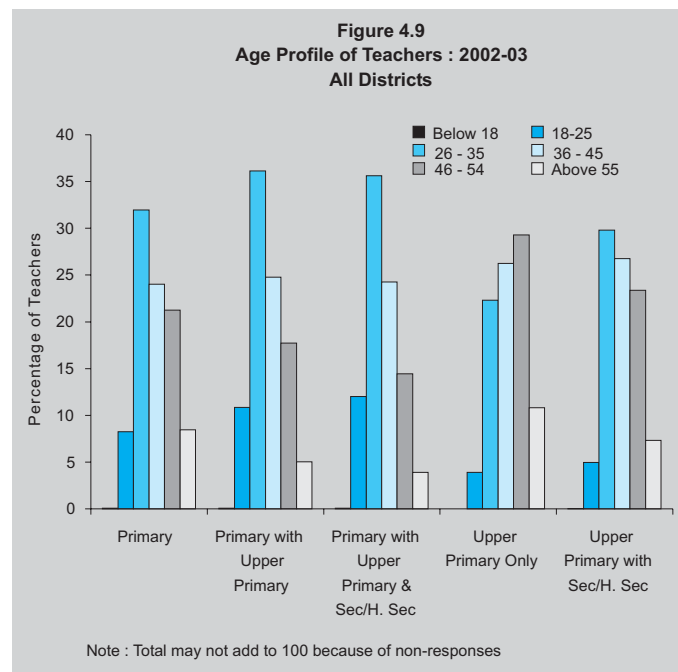
per cent of the total Primary schools in the country. Extant of such schools is as high as 31.6 per cent in Bihar, 30.9 per cent in Chhattisgarh, 11.9 per cent in Jharkhand and 24.2 per cent in Uttar Pradesh. Himachal Pradesh, Karnataka, Kerala and Tamil Nadu had only few such schools in 2003. The percentage of schools with pupil teacher ratio above 100 further reveals that in other school types, the same is a bit lower than that in the Primary schools. However, significant number of such schools in Bihar, Jharkhand, Uttar Pradesh and West Bengal had pupil teacher ratio above 100 in 2003.

Age Profile & Type of Teachers

The distribution of teachers in different age groups and type of teachers by school category has also been presented. Below 18, 18-25, 26-35, 36-45, 46-54 and above 55 years are the age groups in which the percentage of male and female teachers is presented. This has also been presented separately in case of the rural areas. Head Teacher, acting teacher, para-teacher, part-time teacher, community teacher, language teacher etc. are the type of teachers according to which percentage of male and female teachers by school category is presented. The information presented can be of great help in developing teacher education programmes.

The average of 461 districts suggests that majority of teachers in Primary schools are between the age group 26-45 years which is also true for other types of schools. A few teachers across school type are found to be below 18 years of age that is true both for male and female teachers. No significant difference is noticed in the rural areas also. Further, teachers' profile by type of teacher and school category suggests that majority of the teachers are designated as Teacher

which is also true for all type of schools. Further, it is observed that Community teachers are only few. Barring Primary



schools, language teachers are noticed in all other type of schools. Head Teacher and Acting Head Teacher are the other two

categories under which a large number of teachers fall which is true for all types of schools.

Qualifications of Teachers

Both educational as well as professional qualifications of teachers across school types have been presented. Irrespective of the type of school, qualification of a good number of teachers is below Secondary level. This is also applicable even to integrated Secondary and Upper Primary attached to Secondary & Higher Secondary schools.

The distribution of Primary school teachers in position by qualification further reveals that majority of teachers are Higher Secondary and below (51.44 per cent). About 4.25 per cent teachers are below Secondary and another 23.94 per cent have completed Secondary level of education. Only 31.36 per cent of the total primary school teachers are Graduates and another 9.97 per cent are Post-Graduates. A few of them even have the M.Phil degree.

Further, it has been observed that as many as 13.95 and 21.33 per cent Primary school teachers respectively in the states of Assam and Himachal Pradesh are below Secondary level. Majority of teachers in Assam (54.44 per cent) have passed the Secondary level. More than 95 per cent teachers in Kerala have passed Secondary and other higher levels. About 65.18 and 46.30 per cent of the total Primary teachers in Tamil Nadu and Andhra Pradesh are graduates. One in every fourth Primary school teacher in Rajasthan (26.19 per cent) and Uttaranchal (25.78 per cent) is having a Post-Graduate degree.

Distribution of Primary school teachers in position by qualification reveals that majority of teachers are Higher Secondary and below

It has also been observed that compared to teachers in Primary schools, teachers in other school types are better qualified. Only 2.17 per cent teachers in Elementary schools are below Secondary level.

About 29.45 and 12.37 per cent teachers in such schools are Graduates and Post-Graduates. Majority of Teachers in integrated Higher Secondary schools are either Graduates (38.71 per cent) or Post-Graduates (19.96 per cent). About 38.08 per cent teachers in such schools in Uttaranchal are Post-Graduates. Majority of teachers in independent Upper Primary schools are either Graduates or Post-Graduates. About 39.31 and 36.89 per cent teachers in such schools in Madhya Pradesh and Rajasthan are Post-Graduates. Similar pattern is observed in the case of Upper Primary integrated with Higher Secondary schools too.

Teachers' profile by professional qualification suggests that about 19.38 & 42.21 per cent male and 9.00 & 17.19 per cent female teachers are B.Ed or equivalent respectively at the Primary and Upper Primary stage of education. In states such as Andhra Pradesh, Madhya Pradesh and Rajasthan, the percentage of such teachers is much higher than the average of 461 districts. The percentage of teachers having M.Ed or equivalent degree is only 1.13 & 2.76 in the case of male and 0.66 & 1.28 per cent in the case of female teachers respectively at the Primary and Upper Primary stages of education. A large number of teachers across states have also undergone J.B.T, S.B.T and other equivalent professional courses.

Trained Teachers

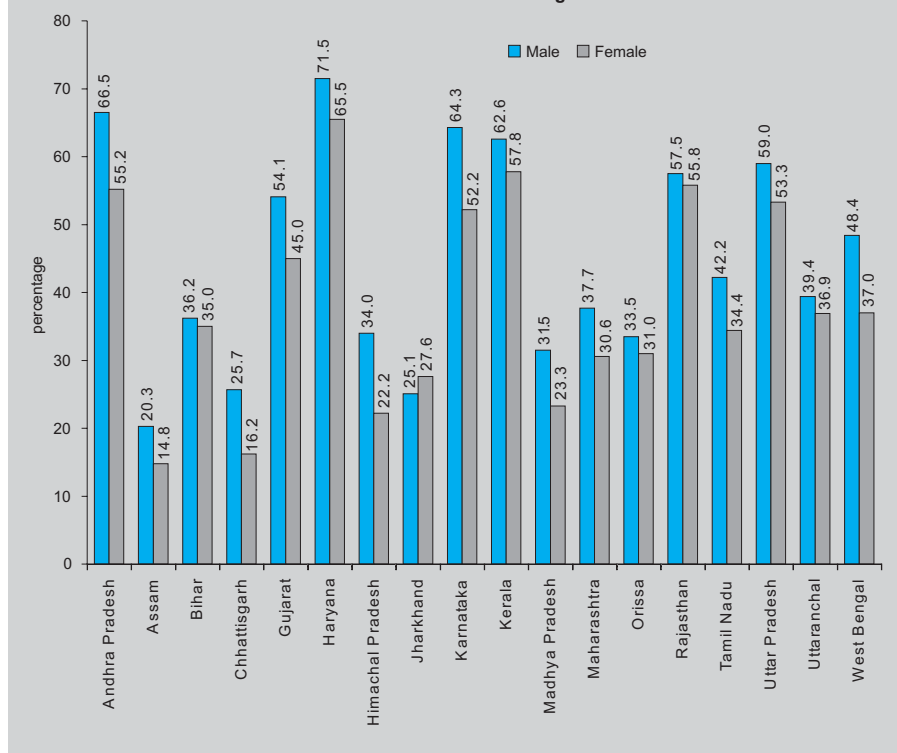
Like other indicators, percentage of trained teachers across all types of schools has also presented in case of all the eighteen states. It is observed that only 44.4 per cent teachers in Primary schools have received in-service training. The percentage of trained male and female Primary school teachers is 46.3 and 40.9 respectively. A few states such as Andhra Pradesh (62.1 per cent), Karnataka (59.2 per cent), Kerala (59.1 per cent), Uttar Pradesh (57.3 per cent) etc. have much higher percentage of trained teachers than the average of 461 districts (44.4 per cent). The percentage of trained teachers in the states of Assam (18.5 per cent), Chhattisgarh (23.7 per cent), Himachal Pradesh (28.7 per cent), Jharkhand (25.6 per cent), Madhya Pradesh (29.4 per cent) etc. is very low as the majority of primary school teachers in these states are untrained. In the other types of schools also, percentage of trained teachers is low. Not much difference is noticed in the case of male and female teachers.

Para-teachers

Comprehensive data on para teachers has been collected which reveals that all the 18 states have appointed para-teachers. It has also been observed that para-teachers are not

As many as 198 thousand para teachers were appointed in 2003, of which the percentage of female para-teachers is only 34. In as many as 45,387 schools, only para-teachers were posted

Figure 4.11
Percentage of Teachers in Primary Schools Received In-service Training : 2002-03

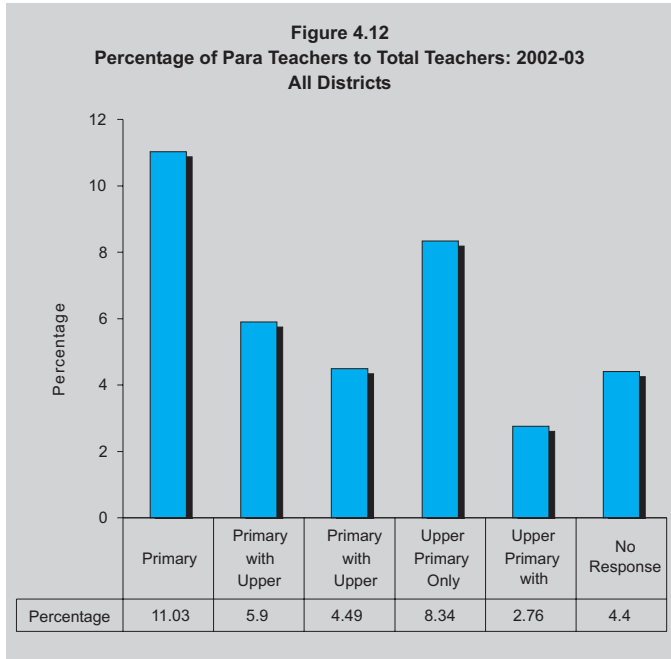


confined only to Primary and Upper Primary schools but a good number of them have also been appointed and posted in other types of schools. Across the country, as many as 198 thousand para teachers were appointed in 2003, of which the percentage of female para-teachers is only 34. In addition, it has also been observed that in as

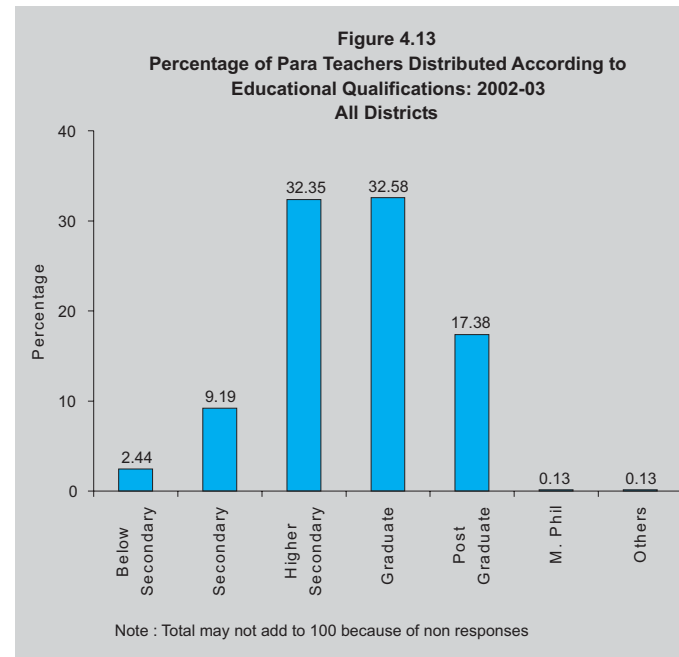
many as 45,387 schools, only para-teachers were posted.

The number of such schools in Rajasthan and Madhya Pradesh is as high as 19,974 and 15,704 schools, which is 24.61 and 18.43 per cent of the total schools in these states. Except in case of Chhattisgarh (3,662), Andhra

Pradesh (2,641) and Himachal Pradesh (1,039), in other states, such schools are only few.



The distribution of para-teachers by school category further reveals that 11.03 per cent (175 thousand) of the total teachers posted



in Primary schools are the para-teachers. Significant percentage of para-teachers (to total teachers) in Primary schools is observed in the states of Andhra Pradesh (11.11 per cent), Chhattisgarh (40.57 per cent), Himachal Pradesh (22.64 per cent), Madhya Pradesh (51.89 per cent) and Rajasthan (31.61 per cent). Primary schools alone in Rajasthan and Madhya Pradesh have 36,593 and 80,509 para-teachers, which is 20.90 and 45.98 per cent of the total para-teachers in Primary schools. In rest of the states, the percentage of para-teachers in Primary schools is very low.

As has been mentioned, para-teachers are not confined only to the Primary schools. A good number of other types of schools also had para-teachers in 2003. However, majority of them have been posted in the Primary schools. Their number is more than 50 thousand in case of Elementary schools, which is 5.90 per cent of the total teachers in Elementary schools. States of Andhra Pradesh (15.43 per cent), Chhattisgarh (17.35 per cent) and Madhya Pradesh (37.46 per cent) have a high percentage of para-teachers (to total teachers) in Elementary schools. On the other hand, as many as 18,310 para-teachers were posted in independent Upper Primary schools which is 8.34 per cent of the total teachers in these schools. Chhattisgarh (23.59 per cent) and Madhya Pradesh (48.00 per cent) too have significant number of para-teachers in this category also. Compared to Primary, Upper Primary and Elementary schools, integrated Higher Secondary and Upper Primary attached to Secondary & Higher Secondary schools have only a few para-teachers. In both the types of these schools, about 8 thousand para-teachers were appointed in 2003, which is 4.49 and 2.76 per cent of the total teachers in these schools.

Qualifications of Para-teachers

The distribution of para-teachers by school category reveals that para-teachers are better qualified than regular teachers. More than half of the para-teachers (56.02 per cent) are graduates and above, compared to which 51.44 per cent Primary school teachers are below Higher Secondary level. Only 48.56 per cent Primary school teachers are graduate and above. On the other hand, of the total 198 thousand para-teachers, only 2.44 per cent are below Secondary, compared to which 4.25 per cent Primary school teachers are below Secondary level. About 9.97 per cent Primary school teachers are Post-Graduates as compared to 17.38 per cent para-teachers. A few para-teachers are even M.Phil holders.

The state-specific distribution of para-teachers by qualifications suggests that a few states have higher percentage of teachers below Secondary level than the average of 461 districts (2.44 per cent). Assam (6.73 per

Para-teachers are better qualified than regular teachers. More than half of the para-teachers (56.02 per cent) are graduates and above

cent), Jharkhand (6.82 per cent), Rajasthan (6.40 per cent), Himachal Pradesh (7.45 per cent) etc. are a few such states. On the other hand, Chhattisgarh (0.78 per cent), Madhya Pradesh (1.02 per cent), Orissa (1.48 per cent), Uttar Pradesh (0.87 per cent) and Uttaranchal (0.80 per cent) have lower percentage of para-teachers below the Secondary level. Similarly, in a number of states, para-teachers with Secondary are much higher in percentage than the national average of 9.19 per cent. Assam (34.64 per cent), Bihar (34.92 per cent), Jharkhand (35.53 per cent), Karnataka (29.69 per cent) and Tamil Nadu (20.36 per cent) are a few such states. Little less than half of the para-teachers in Orissa are Graduates (48.22 per cent). Andhra Pradesh (38.77 per cent), Himachal Pradesh (38.17 per cent) and Rajasthan (40.99 per cent) also have a good number of Graduate para-teachers. In Madhya Pradesh, about 24.05 per cent para-teachers are Post Graduates. Chhattisgarh too has a good number of Post-Graduate para-teachers (26.96 per cent).

