

National Council of Educational Research
and Training.

Second All-India educational seminar

SECOND ALL-INDIA EDUCATIONAL
SURVEY

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NATIONAL COUNCIL OF EDUCATIONAL RESEARCH & TRAINING

ABBREVIATIONS

P - - - - - A school with a primary section only.

M - - - - - A school with a middle section only.

S - - - - - A school with a secondary section or

PM- - - - - A school with primary and middle
sections only.

MS- - - - - A school with middle and secondary
sections only.

PMS - - - - - A school with primary, middle and
secondary sections.

N.B.: The data have been collected as on 31-12-1965.

SUMMARY

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1. There are 9,82,251 rural habitations covered in this Report, and their population is estimated at 39,65,80,123. Of these, 76.41% are in the population slab 'below 500' and they account for 35.0% of the rural population. The percentage of small habitations is very high in all the States except Kerala.

2. The total number of urban habitations identified is 2,802.

PRIMARY EDUCATION

3. The percentage of rural habitations with primary sections in them or within the walking distance of a mile is 87.23. This includes 37.98% with primary sections in them.

4. The percentage of rural population with primary sections in their own habitations or within a walking distance of a mile is 94.96, including 71.48% having primary sections in their own habitations. The habitations in the slab '500 and above' are by and large served by primary sections. 87.23% of the rural habitations not served have a population 'below 300' each, including 45.37% with population 'below 100' each. The question of expanding primary school facilities in future will mainly be that of providing schools for the small habitations.

5. In Andhra Pradesh, Bihar, Gujarat, Madras, Maharashtra, Mysore and West Bengal more than 97% of the rural population are served by primary sections at present. In Assam, Kerala, Orissa and Uttar Pradesh, the percentages vary between 91 and

97. In the remaining States they vary between 87 and 90.

6. According to the First All-India Educational Survey, 83.09% of the rural population were served by primary sections on 31.3.1957 and the proposal envisaged a target of 99.30%. The percentage of population served at present is less than the target proposed in the First Survey.

7. There are 4,55,681 primary sections in the country.

Of these, 84.98% are primary schools, 13.58% are part of 'PM' schools and 1.44% are part of 'PMS' schools. The primary

sections, therefore, are largely primary schools. The percentage of primary sections which are primary schools, is

higher in rural than in urban areas. On an average, 9.23

primary sections and 24 teachers are available for every 10,000

population. The range of variation in the case of teachers

among the States is from 18 in Bihar to 34 in Madras. In

Manipur, however, 64 teachers are available for every 10,000 population.

8. On an average, a primary section has 104 pupils. The averages for rural and urban areas separately are 90 and 226

respectively. In rural areas the range of variation is from

39 in Jammu & Kashmir to 269 in Kerala. If Kerala is considered an exception because of its characteristic demographic

composition, the range of variation is from 39 in Jammu & Kashmir

to 130 in Uttar Pradesh.

9. In the urban areas the average enrolment varies from 115 in Bihar to 368 in Punjab.

10. There are many instances of disproportionate allocation of teachers in rural and urban areas.

11. In the rural areas, 40.72% of the primary sections are one-teacher sections, 23.49% are two-teacher sections and 14.72% have three teachers each. Only in 15.95% of the primary sections is the number of teachers four or more than four.

12. In the urban areas, 8.37% of the primary sections are one-teacher sections. These percentages are very high in Bihar (24.42%), Jammu & Kashmir (39.40%) and Orissa (26.94%). There is need to examine the existence of single-teacher schools in such large percentages in these States. 11.22% of the primary sections in the urban areas of the country are two-teacher sections and 12.43% are three-teacher sections. Thus, in about one-third of the primary sections in urban areas, the number of teachers is less than four. These percentages are very high, especially in Bihar, Jammu & Kashmir, Orissa and Goa, Daman & Diu.

13. In 23.68% of the primary sections in urban areas the enrolment is 'up to 100' only. Considered in the context of the recommendation of the Education Commission, only in 56.17% of the urban primary sections is the enrolment more than 160.

14. In 19.96% of the primary sections the enrolment is up to class III only. The percentages separately for rural and urban areas are 21.11 and 9.25 respectively.

15. 1,08,840 primary sections, i.e. 23.89% are incomplete primary sections, that is, they do not have the final primary class according to the pattern of classes in every State and Union Territory. The percentages of incomplete primary sections for rural and urban areas are 25.26 and 11.27 respectively. In Bihar 67.29% of the primary sections (68.72% rural and 45.65% urban) are incomplete primary sections. In Orissa also, 64.46% of the primary sections are incomplete (65.21% rural and 46.32% urban). The percentages of incomplete primary sections are above all-India average also in Andhra Pradesh, Madras, Madhya Pradesh and Rajasthan.

16. Multiple-class teaching is necessary in 3,68,454 primary sections, i.e. 80.86% of the primary sections in the country. The percentages separately for rural and urban areas are 85.97 and 33.80 respectively. Some of the States where the percentages are very high, are Assam, (95.95), Bihar (92.25), Jammu & Kashmir (91.27), Madhya Pradesh (88.67), and Orissa (91.73). Kerala is the only exception to the large scale need of multiple-class teaching arrangements at the primary stage.

17. Girls constitute 36.20% of the enrolment in the primary sections in the country as a whole. The corresponding figures for rural and urban areas separately are 34.26 and 43.20 respectively.

18. The enrolment in classes I to V is 74.36% of the estimated population in the age-group 6+ to 10+. These percentages vary from 46.99 in Bihar to 116.57 in Kerala. The percentages of enrolment are very low also in Rajasthan (51.46), Jammu & Kashmir (56.10), Madhya Pradesh (56.35) and Assam (66.43). Compounding for the enrolment of the children below 6+ and above 10+, the percentages of children of the age-group 6+ to 10+ attending schools would be fairly low in all these cases. Considering the data in the context of the population served by primary sections, it becomes obvious that in many cases the enrolment has not kept pace with schooling facilities. The percentages of population served by primary sections in Bihar and Kerala are 97.13 and 92.57 respectively.

19. The enrolment in classes I to V is 74.36% of the estimated population in the age-group 6+ to 10+. The percentages separately for boys and girls are 93.39 and 54.70 respectively. The target of enrolment under the Third Five-Year Plan was 76.4% (90.4% for boys and 61.6% for girls).

The percentages for girls are below all-India average in Assam (50.40), Bihar (23.09), Jammu & Kashmir (31.92), Madhya Pradesh (31.46), Orissa (47.04), Rajasthan (23.86), Uttar Pradesh (53.64) and West Bengal (51.93).

20. 957 pupils are enrolled in classes I to V, for every 10,000 population. The indices for boys and girls separately are 610 and 346 respectively.

21. Of the total enrolment in classes I to V, 37.77% are in class I. These percentages for rural and urban areas are 40.36 and 28.53 respectively.

35.82% of boys and 41.20% of girls on the rolls are in class I.

22. The ratio between the enrolment in classes I and V is approximately 7:2 and the corresponding figures for rural and urban areas separately are 4:1 and 2:1 respectively.

23. Among boys, the ratio between the enrolment in classes I and V is 3:1 in the country as a whole and for the girls it is 9:2. The ratios for boys for rural and urban areas separately, are 7:2 and 7:4 respectively. As regards girls, the ratios for rural and urban areas are 6:1 and 2:1 respectively.

EDUCATION AT MIDDLE STAGE

24. 7,12,894 rural habitations (72.58%) are served by middle sections, i.e. they have middle sections in them or

within a three-mile walking distance. These include 69,424 (7.07%) habitations with middle sections in them.

25. 82.25% of the population in the rural areas are served by middle sections including 25.45% with middle sections in their own habitations.

26. According to the First All-India Educational Survey, 47.21% of the rural habitations were served and the proposals in them envisaged that the percentage would be raised to 89.06. Though the number of middle sections at present is more than visualised in the First Survey, the percentage of habitations served at present is below the target of the First Survey.

27. Of the habitations not served at present, 3.51% are in the slab '1000 and above' and 96.49% are in the slab 'below 1000'. The bulk of the habitations not served by middle sections at present are of small size. The percentages of population served by middle sections among the States vary from 55.70 in Rajasthan to 96.00 in Kerala. Considering only the population with middle sections in their own habitations, the lowest and the highest percentages are 10.23 in Uttar Pradesh and 63.08 in Gujarat.

28. There are 96,932 middle sections in the country. Of these 15.87% are part of 'M' schools, 63.84% are part

of 'PM' schools, 13.49% are part of 'MS' schools and 6.30% are part of 'PMS' schools. A large percentage of middle sections are, therefore, part of 'PM' schools. The percentage in rural areas is higher than that in urban areas.

29. 196 middle sections and 882 teachers are available per million of the population in the country.

30. On an average a middle section has 112 pupils. The corresponding figures for rural and urban areas are 84 and 212 respectively. Among the States with a middle stage of three years' duration, the range of variation is from 51 in Jammu & Kashmir to 185 in Kerala.

31. There are numerous instances of the disproportionate allocation of teachers and also of small middle sections. About 70% of the middle sections have an enrolment less than 121, the minimum optimum limit suggested by the Education Commission.

32. Considering the group of States and Union Territories with a three-year middle stage, 24.54% of the middle sections in rural areas have an enrolment up to 30 only. The percentages for some of the States are: Jammu & Kashmir (58.74), Gujarat (46.52), Mysore (40.26) and Rajasthan (5.64).

33. Assuming that in urban areas the minimum enrolment in a middle school of three years should be not less than 121, the percentage of sections not fulfilling this condition is as high as 36. These percentages are very high in Jammu & Kashmir and Mysore, but are low in Punjab and Kerala.

34. About 17% of middle sections are either one-teacher sections or do not have teachers at all. Middle sections 'without teachers' are either part of PM or MS or PMS schools and the teachers of those schools devote most of their time to primary and/or secondary sections.

35. In rural areas about 20% of the sections have up to one teacher each. The percentages of one-teacher middle sections are very high in Gujarat (47.95), Mysore (42.37), Jammu & Kashmir (32.57), Andhra Pradesh (14.82), Kerala (18.89) and Bihar (11.13).

36. In the urban areas, though the percentage of up to one teacher middle sections is not high for the country as a whole, in few cases they are appreciable and worth mentioning, especially in Mysore (15.32), Gujarat (11.21), and Kerala (8.43).

37. 18,347 middle sections, i.e. 18.93% are incomplete middle sections. The percentages for rural and urban areas

are 21.42 and 9.31 respectively.

38. Contrary to the common belief that multiple-class teaching is necessary at primary stage (and that, too, in rural areas only) multiple-class teaching arrangements have been found necessary in 16.59% of the middle sections. The percentages for rural and urban areas are 20.06 and 3.03 respectively. The percentages are very high in the rural areas of Mysore (43.45), Gujarat (39.40), Maharashtra (38.00) and Madras (22.39). As regards urban areas the percentages for some of the States are: Mysore (10.14), Maharashtra (5.70) and Gujarat (7.35).

39. The data regarding multiple-class teaching at the primary and the middle stages indicate the importance of this subject. The need for multiple-class teaching will be far greater if the recommendation of the Education Commission, that habitations with a population of '700 or above' should have higher primary sections, is implemented.

40. Of the enrolment in middle sections, girls constitute 27.78% only. The percentages for rural and urban areas are 22.00 and 36.13 respectively. The range of variation of the percentages of girls enrolment in rural areas is from 4.63% in Rajasthan to 44.13% in Kerala. The corresponding range for the urban areas is from 25.31% in Rajasthan to 45.72% in Kerala.

41. The enrolment in classes VI to VIII is equal to 30.07% of the estimated population in the age-group 11+ to

13+. The percentages for boys and girls are 43.34 and 16.23 respectively. The target under the Third Five-Year Plan was 28.6% (39.9% for boys and 16.5% for girls).

Like the primary stage, the enrolment at middle stage has not kept pace with the expansion of educational facilities in many States and Union Territories. For example, in Bihar whereas 90.71% of the population in rural areas are served by middle sections the enrolment in this State is 15.88% of the estimated population in the age-group 11+ to 13+. The enrolment percentages are below all-India average in Andhra Pradesh, Assam, ^{Jammu & Kashmir,} Madhya Pradesh, Orissa, Rajasthan, ^{Uttar Pradesh} and West Bengal. The enrolment percentages of girls in rural areas need special consideration in many States, especially in Andhra Pradesh, Bihar, Jammu & Kashmir, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh.

42. 207 pupils are on the rolls per 10,000 population, including 152 boys and 55 girls.

43. Of the total enrolment in classes VI to VIII, 39.93% are in class VI, 32.59% in class VII and 27.48% are in class VIII. Nearly half of the girls in classes VI to VIII in rural areas are in class VI.

44. Private aided institutions account for the largest percentage of the enrolment at the middle stage.

SECONDARY EDUCATION

45. At present 6,01,154 habitations (61.20%) are served by secondary sections, including 16,231 habitations (1.65%) with secondary sections in them. Evaluating the present position in terms of population, 71.37% of the population is served by secondary sections including 9.09% with secondary sections in their own habitations.

46. In the population slab '5000 and above' 1,881 habitations (94.05%) are served by secondary sections, including 1,333 (66.65%) with secondary sections in them. The percentages of the 'habitations not served' in the population slabs '2000-4999' , '1000-1999' and 'below 1000' are 16.83, 24.05 and 40.43 respectively.

47. In 1957, 3,01,553 habitations (35.90%) were served by secondary sections, including 4,500 habitations (0.54%) with secondary sections in them. The proposals of the First Survey envisaged that the number of habitations served would be increased to 6,98,874 (83.20%) including 13,487 habitations (1.61%) with secondary sections in them. Excluding the areas not covered in the First Survey, the number of habitations served at present is 5,41,008, including 14,497 with secondary sections in them. Though the number of habitations with secondary sections in them, in the areas common to the two Surveys is about one thousand more than the proposals of the First Survey, the number of habitations served is less by

about 1.5 lakhs.

48. The range of variation in population served by secondary sections is from 38.13% in Rajasthan to 93.00% in Kerala. These percentages vary between 81 and 90 in Bihar, Madras, Punjab and West Bengal, between 71 and 80 in Andhra Pradesh, Assam, Jammu & Kashmir and Maharashtra and between 61-70 in Gujarat, Mysore, Orissa and Uttar Pradesh. In Madhya Pradesh, however, the percentage is as low as 42.65.

49. On an average, a secondary section in the rural areas serves about ~~24,490~~^{17,500} population.

50. There are 26, 883 secondary sections. Of these, 26.81% are 'S' schools, 48.64% are part of 'MS' schools and 24.54% are part of 'PMS' schools.

51. Both in rural and urban areas, about half of the secondary sections are part of 'MS' schools. But the percentage of 'S' schools is higher in rural areas (34.38) than in urban areas (15.18). It will be seen later that the secondary sections, especially in rural areas, are largely small units. Their existence as 'S' schools in large percentage in the rural areas should be a matter of enquiry in the future.

52. On an average, a secondary section in the country has 232 pupils. The figures for rural and urban areas separately are 168 and 329 respectively. In rural areas the average enrolment in a secondary section in the States varies from 59 in Jammu & Kashmir to 517 in Kerala. If Kerala

were treated as an exception, then the next highest average is 241 in Bihar. The averages are below all-India average in Andhra Pradesh (93), Madhya Pradesh (138), Madras (149), Maharashtra (138), Orissa (129), Punjab (109), Rajasthan (108) and West Bengal (86).

53. In the urban areas the average enrolment per secondary section varies from 162 in West Bengal to 623 in Kerala. The averages are below all-India figures in Andhra Pradesh (283), Assam (268), Jammu & Kashmir (169), Madhya Pradesh (285), Orissa (235), Punjab (228), Rajasthan (281). In Delhi the average enrolment per secondary section is very low (234). It is true that some variation in the average enrolment exists here because of the different pattern of classes at the secondary stage. Nevertheless, it is necessary that secondary sections should have adequate enrolment in order to be economically viable units, irrespective of the classes. The low averages in urban areas in so many states call for a close examination of the secondary sections.

54. 41.52% of the secondary sections in rural areas have enrolment 'up to 100' only. The percentages of secondary sections in rural areas with enrolment of 'up to 100' are fairly high in Andhra Pradesh, Jammu & Kashmir, Madhya Pradesh, Maharashtra, Punjab, Rajasthan and West Bengal. About 80% of the secondary sections in rural areas have enrolment less than 241 each.

55. In urban areas 48.80% of the secondary sections have an enrolment 'less than 241' each. The percentages of secondary sections with enrolment 'less than 241', are high in Andhra Pradesh, Assam, Jammu & Kashmir, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Uttar Pradesh and West Bengal.

56. In rural areas 35.84% of the secondary sections have teachers 'up to 5' only. The percentages are high in Andhra Pradesh, Jammu & Kashmir, Maharashtra, Mysore, Punjab and West Bengal.

57. In urban areas 15.28% of the secondary sections have teachers 'up to 5' only. The percentages are high in Andhra Pradesh, Jammu & Kashmir, Punjab, Rajasthan and West Bengal.

58. 3,595 sections, i.e. 13.37%, are incomplete secondary sections. The percentages separately for rural and urban areas are 17.52 and 7.00 respectively. Taking rural and urban areas together, the percentages of incomplete secondary sections are fairly high in Andhra Pradesh, Gujarat and Jammu and Kashmir. In West Bengal, however, almost all secondary sections are complete units.

59. Of 26,883 secondary sections, 8,032 are without science laboratories of any kind. The latter include 5,928 (36.40%) secondary sections in rural, and 2,104 (19.85%) secondary sections in urban areas. The number of laboratories for general science, physics, chemistry, biology and home

Science are 14,550, 7,081, 6,922, 3,240 and 1,005 respectively.

60. In the rural areas, 95.12% of the secondary sections have one medium of instruction and 4.40% have two media of instruction each. The sections with one medium of instruction largely use their respective regional languages.

61. In urban areas, 84.21% have only one medium of instruction each. 72.49% have their respective regional languages as the medium of instruction. 178 secondary sections in non-Hindi speaking areas have Hindi as a medium of instruction. 590 secondary sections (5.57%) have English as a medium of instruction. 1465 secondary sections have two media of instruction each. These include 827 sections with English and a regional language as media of instruction, and 47 sections where English and a language other than regional language or Hindi are media of instruction. In 178 secondary sections the regional language and two other languages are media of instruction.

62. The girls in secondary sections constitute 23.36% of the enrolment in secondary sections. The percentages for rural and urban areas are 16.58 and 28.69 respectively.

There is considerable variation in the proportions of girls' enrolment in the rural areas in the various States and Union Territories. In Uttar Pradesh the ratio of enrolment of boys to girls in rural areas is 55:1.

63. The enrolment in class IX and X is equal to 19.37% of the estimated population in the age-group 14+ and 15+. The percentages for boys and girls separately are 29.03 and 9.26 respectively. The range of variation for boys is from 16.87 in Orissa to 49.75 in Kerala. The percentages are below all-India average in Andhra Pradesh, Assam, Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh and West Bengal. In case of girls the range of variation is from 2.06 in Bihar to 39.62 in Kerala. After Kerala, the next highest percentage is 16.89 in Madras. The percentages are below the all-India average also in Andhra Pradesh, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh and West Bengal.

64. 82 children are in classes IX and X per 10,000 population including 63 boys and 19 girls.

65. Of the total enrolment in the country, 64.50% are in private aided institution.

TEACHERS

66. There are 19,09,187 teachers in the country including 11,96,111 (62.6%) in primary sections, 4,35,939 (22.8%) in middle sections and 2,77,137 (14.6%) in secondary sections.

67. Women constitute 21.7% of the total number of teachers in the schools.

68. A local body is the single largest employer, followed by voluntary organisations (30.9%) and the Government (20.7%).

69. The percentages of trained teachers at primary, middle and secondary stages are 73.7, 75.2, 69.5 respectively. The over-all percentage of trained teachers for all stages is 73.4.

TEACHERS IN PRIMARY SECTIONS

70. The teachers in primary sections include 22,907 (1.9%) below-middle pass, 5,94,354 (49.7%) middle pass, 4,93,682 (41.3%) matriculates and 85,169 (7.1%) who are above matriculates or in other categories.

71. The percentages of trained teachers vary from 43.80 in West Bengal to 97.61 in Punjab. The percentages of trained teachers are below all-India average in Assam, Gujarat, Jammu & Kashmir, Mysore, Orissa, Rajasthan and Uttar Pradesh. The percentages of trained teachers among men and women teachers separately are 73.02 and 76.02 respectively.

72. Considering matriculation and teacher training as the desirable qualifications at primary stage, only 32.70% of the teachers fulfil both these qualifications. The percentages separately for men and women teachers are 32.45 and 33.60 respectively. Among the States, the percentages of the teachers fulfilling these qualifications vary from 3.40 in Orissa to 81.11 in the Punjab. The percentages are below all-India average in Assam, Bihar, Gujarat, Madras, Maharashtra, Uttar Pradesh and West Bengal also.

73. The percentages of the teachers fulfilling these qualifications in schools of different managements are 52.55 in Government Sections, 25.59 in local body sections, 35.41 in private aided sections and 33.20 in private unaided sections.

74. Considering the backlog of untrained teachers in accordance with the recommendations of the Education Commission, regular training courses are necessary for 1,80,545 (57.38%) teachers and short training courses are necessary for 1,34,080 (42.62%) teachers.

TEACHERS IN MIDDLE SECTIONS

75. The teachers in middle sections include 3,40,121 (78.02%) men teachers and 95,818 (21.98) women teachers. The percentages of women teachers in rural and urban areas separately are 12.72 and 38.09 respectively.

76. The percentage of trained teachers is 75.25. The percentages for rural and urban areas are 73.23 and 78.75

respectively. The percentages of trained men and women teachers are 74.13 and 79.21 respectively.

77. The percentages of trained teachers are very much below the all-India average in Assam (27.75), Orissa (31.24) and West Bengal (33.28).

78. 86.91% of the teachers are at least matriculate. These percentages, for men & women separately are 86.52 and 88.26 respectively.

79. The percentage of teachers who have passed at least the matriculation examination varies from 58.49 in Gujarat to 96.80 in Rajasthan.

80. 14.9% of the teachers are graduates and 2.5% are post-graduates. The graduates or post-graduates constitute a small fraction of the teachers.

81. Considering matriculation and teacher training as the minimum desirable qualifications for teachers at the middle stage, 63.82% of the teachers fulfil these qualifications. The percentages separately for men and women teachers are 62.28 and 69.25 respectively. The percentages of teachers fulfilling these qualifications vary from 15.86 in Assam to 90.09 in Madras. These percentages are very low in Gujarat (46.38), Orissa (29.56) and West Bengal (32.69).

82. The percentages of teachers fulfilling these desirable qualifications in schools of different managements are: 74.53 in Government schools, 62.68 in local-body schools, 59.93 in

private aided schools and 42.34 in private unaided schools.

83. If a degree with teacher training is considered desirable qualifications, 16.58% of the teachers fulfil it. The percentages separately for institutions of different managements are: 24.10 in government, 9.38 in local-body, 18.18 in private aided and 21.35 in private unaided sections.

84. Accepting the recommendations of the Education Commission regarding the nature of training for untrained teachers, in accordance with their age and experience, it is found that 62,456 (58.0%) will require a full course of teacher training, and the remaining 42% will require short-term training courses.

TEACHERS IN SECONDARY SECTIONS

85. There are 2,77,137 teachers in secondary sections including 2,26,358 (81.68%) men teachers and 50,779 (18.32%) women teachers.

86. The teachers in secondary sections in rural areas constitute 46.52% of the teachers in secondary sections. The corresponding percentages for primary and middle sections are 77.82 and 63.50 respectively.

87. Of the total number of teachers in secondary sections, 20.66% are in government schools, 12.99% in local body schools, 63.33% in private aided institutions and 3.03 in private unaided institutions. Voluntary organisation, therefore, play a dominant role at the secondary stage.

88. 75.4% of the teachers are 'graduates or above'. The corresponding percentages for men and women teachers separately

are 74.9 and 77.9 respectively. Thus, there is virtually no difference between the percentages of 'graduates or above' among men and women teachers.

89. The percentages of teachers who are 'graduates or above' are 80.4 in government sections, 66.4 in local body sections, 75.6 in private aided sections and 77.7 in private unaided sections.

90. 0.4% of the teachers are 'less than matriculates' and 8.7% are matriculates. The percentages of 'matriculates or less' are relatively high in Andhra Pradesh (14.58), Gujarat (18.88), Jammu & Kashmir (13.79) and Maharashtra (23.29).

91. 69.57% of the teachers are trained. The corresponding percentages for rural and urban areas are 63.59 and 74.78 respectively.

92. The percentages of trained teachers among men and women teachers are 67.75 and 77.68 respectively.

93. The percentages of trained teachers vary from 20.17 in Assam to 95.45 in the Punjab. The percentages are below all-India average in Bihar (43.18), Madhya Pradesh (61.28), Mysore (59.04), Orissa (50.12), Rajasthan (60.31) and West Bengal (51.88).

94. Although the private aided sections employ the largest number of teachers, the percentage of trained teachers in them is lower (64.9) than in government sections (80.1).

95. 60.64% of the teachers fulfil the desirable qualifications of the degree and teacher training. The percentages vary from

15.14 in Assam to 85.09 in Kerala.

96. The percentages of teachers fulfilling both the desirable qualifications are, 73.53 in government sections, 65.52 in local body sections, 55.95 in private aided sections and 50.01 in private unaided sections.

97. Considering the existing backlog of untrained teachers, in accordance with the recommendations of the Education Commission, regular full-time training courses are necessary for 51,775, i.e. 61.4% of the untrained teachers. Short-term training courses will be necessary for the remaining 38.6% of the untrained teachers.

TEACHERS TEACHING SCIENCE IN SECONDARY SECTIONS

98. 64,981 teachers (23.5%) are teaching science. The academic qualifications of these teachers vary from 'matriculation without science' to a Master's Degree in science.

99. The number of teachers who have science in their last academic examination either at the degree or post-graduate level, is 43,848 (67.5%), including 38,511 (59.3%) who are graduates only and 5,337 (8.2%) who are post-graduates.

100. The number of teachers who have science in the last academic examination at degree level or above and are also trained in methods of teaching science as one of their subjects is 20,254 only. They constitute 46.19% of the science teachers who are 'graduates or above' and 31.16% of the total number of

less than one:

101. Only ^{22,297} science graduates and post-graduates out of 43,848, i.e. 50.83% devote more than 60% of their teaching time to science. It is, therefore, surprising that all the science graduates and post-graduates do not devote their full time to teaching science, especially when the available resources of science teachers are very meagre.

SCHOOL BUILDINGS

102. The data regarding class rooms pertain to primary sections only. There are 9,08,749 class rooms for primary sections including 7,08,182 (77.93%) in rural areas and 2,00,567 (22.07%) in urban areas.

103. The average area of a class room is 288.19 sq.ft. The averages for rural and urban areas are 290 sq.ft. and 281 sq.ft. respectively.

104. The average area per pupil is 5.54 sq.ft. The figures for rural and urban areas separately are 5.64 sq.ft. and 5.53 sq.ft. respectively. Though the averages for rural and urban areas do not differ very much, they need not reflect similar features. It is possible that the average area per pupil in rural areas is low because a number of pupils study in the open air or Varandhas etc. which have not been included in the class room space. As regards urban areas, the average may be low because the class rooms are over crowded.

105. In the rural areas the average area per pupil varies from 2.9 sq.ft. in Uttar Pradesh to 8.5 sq.ft. in Jammu &

Kashmir. In the urban areas the variation is from 4.3 sq. ft. in Andhra Pradesh to 8.0 sq. ft. in Madras.

106. In rural areas 5.09% of the 'P' schools and 5.03% of 'PM' schools run in shifts. The percentages for 'M', 'S', 'MS' and 'PMS' schools are very small.

107. In urban areas 12.61% of 'P' schools, 21.39% of 'PM' schools, 19.99% of 'MS' schools and 11.97% of 'PMS' schools run in shifts. The percentages of schools that run in shifts in urban areas are fairly high.

108. The percentage of schools sharing buildings, in rural areas is very low, but the figure for urban areas is fairly high (11.28%).

109. In the rural areas 66.97% of the buildings of the primary sections is owned by the school managements, 7.26% are hired and 25.77% are not owned but available free of rent. In the urban areas, 50.89% of the buildings of primary sections are owned, 38.36% are hired and 10.75% are not owned, but are available on a rent free basis.

110. For middle sections in rural areas, the percentages of buildings which are 'owned', 'rented', 'not owned but rent free' are 74.16, 10.88 and 14.96 respectively. The corresponding percentages of urban areas are 65.96, 27.99 and 6.05.

111. For secondary sections the percentages of buildings in rural areas which are 'owned', 'rented', 'not owned but rent free' are 72.19, 16.94 and 10.86. In urban areas these

percentages are 66.79, 28.34 and 4.86 respectively.

112. 1,85,044 primary sections in rural areas (45.0%) have facilities for playgrounds. These include 28.64% of the primary sections with their own playgrounds and 16.37% which have the facilities for playgrounds but these are not owned by the school managements.

113. 4,584 secondary sections in rural areas (28.15%) have hostel facilities in their own villages. The percentages vary from 3.47% in Jammu & Kashmir to 77.33% in Orissa.

114. 5.71% of the students on the rolls in secondary sections in rural areas reside in hostels. The percentages are very low in almost all States except in Orissa (21.04%) and West Bengal (14.47%).