CHAPTER - IV

EXPENDITURE ON GENERAL EDUCATION SCHOOLS

I

The last chapter was devoted to the First (i.e. elementary) level of education, where the trend in expenditure, total as well as public, was examined in detail. The first level of education covers the population of the age--group, 6-14, The second level of education covers the next age-group, namely, 14-17.

In this chapter, we examine the trend in recorded direct expenditure in non-technical (i.e. general education) part of the second level which is usually referred to as secondary education.

Let us first list the difficulties encountered in making this study. Firstly, secondary education is not of uniform duration in all the States. In some states secondary education covers four, in others three, years of schooling. Within a state also one encounters such lack of uniformity and it is impossible to disentagle information for 3-year education from that of 4-year education. Therefore, statistical information relating to total expenditure on secondary education, number of pupils in secondary schools, per pupil

direct expenditure, teachers, teacher-pulil ratio, and average annual salary-per-teacher - all the variables relevant in appraising the progress of education, suffers from the defect that they lump together 3-year and 4-year secondary education.

Secondly, the available data with respect to high/higher secondary schools does not draw a distinction between expenditure incurred on elementary departments of these schools and expenditure incurred on secondary departments. Nor is any separate information available with respect to teachers engaged in these two departments of secondary institutions. The reason why separate information is not given is not difficult to see. It might be difficult in practice to say what part of the expenditure incurred in a secondary school benefits the elementary stage students and what part benefits the secondary stage. Also some, at least, of the teachers might be teaching in both the departments. Finally, there always arises the question of allocating joint expenditure on school administration.

Still, if we want to make a meaningful study of the progress of secondary education, we have to devise some method of isolating data relating to the secondary stage from that relating to the elementary stage. This has been done

on the basis of three assumptions. It is assumed (i) that the direct expenditure per pupil in the elementary departments of secondary schools is the same every year as in the elementary schools, (ii) that the teacher-pupil ratio in the elementary stage of the secondary schools is also the same every year as in the elementary schools, and (iii) that the proportion of direct expenditure on elementary stage incurred on the salary of teachers is the same again as obtains for the elementary schools.

II

Trend in Expenditure :

Total direct expenditure on secondary schools was Rs.230.5 million in 1950-51 and Rs.689.1 million in 1960-61. These expenditure figures include the amount spent on the elementary departments of secondary schools. Of the direct expenditure incurred on secondary schools in 1950-51 nearly 61 per cent was financed out of fees and other sources' and 39 per cent out of government funds. In 1960-61, the roles were almost reversed in that the government funds met 53 per cent of the direct expenditure and only 47 per cent was met out of 'fees and other sources'. This has meant an increase in the absolute outlay of government funds on secondary schools of as much as 300 per cent as against the

increase of 133.2 per cent in 'fees and other sources'. (See Table I).

Direct expenditure on secondary general education (i.e. after excluding expenditure incurred on the elementary departments of secondary schools) increased from Rs.189.1 million in 1950-51 to Rs.550.9 million in 1960-61, an increase of 191.3 per cent (See Table II). Similar increase on elementary education, as has been observed in the preceding chapter, is 169.5 per cent. From Table II it can be seen that in terms of constant prices (i.e. composite index), the increase in direct expenditure on secondary education works out to 143.3 per cent (Cols.10 and 11), which is definitely very much higher than that of 72.9 per cent obtained for elementary education. How could we explain this large difference in the growth of real direct expenditure between the elementary stage and the secondary stage of education? The increase in average annual salary per teacher of both the stages explains the above difference. The salary-per-elementary school teacher rose by 65.5 per cent as against the increase of a maximum of 23.8 per cent at the secondary stage. As a result, the increase in salary expenditure in constant salary-per-teacher works out to 78.4 per cent with respect to elementary education, whereas with respect to secondary education it work out to 141.5 per cent.

Expenditure per Pupil :

Direct expenditure per secondary stage pupil was Rs.151.1 in 1950-51. It went upto Rs.178.8 in 1960-61, an increase of 18.3 per cent over the decade. Corresponding figures for elementary stage were Rs.21.7 in 1950-51 and Rs.31.2 in 1960-61. In other words, average direct expenditure of education per pupil at the secondary stage was 6 to 7 times the same at the elementary stage.[1]

In real terms (i.e. after adjusting the expenditure in terms of constant-salary per-teacher combined with constant wholesale prices) the expenditure per pupil of secondary stage declined from Rs.151.1 in 1950-51 to Rs.149.3 in 1960-61, i.e. by 1.2 per cent (See Table III). This decline of 1.2 per cent in real expenditure per pupil of secondary stage, once again, is very much lower than that of 7.8 per cent obtained for the elementary stage.

Teacher-Pupil Ratio :

Information with regard to changes in teacher-pupil ratio over the decade of the 1950's is given in Table IV. The average teacher-pupil ratio for the decade as a whole works

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1 The explanation for this disparity lies in (a) the fact that the average salary per elementary school teachers is two-fifths of the average salary per secondary-stage teachers and (b) that the teacher-pupil ratio at the elementary stage is about half as low as that at the secondary stage.

out to 1:18.4. But over this period the ratio has declined by 2.2 per cent. This means that there were a few more students per teacher in 1960-61 than in 1950-51. As against this, the decline in the teacher-pupil ratio of 5 per cent, recorded for the elementary schools, is much higher. This nominal decline in teacher-pupil ratio at the secondary stage is evidently due to a more or less even increase, both, in the number of students and the number of teachers at this stage.

Our observations relating to per-pupil direct expenditure as well as to teacher-pupil ratio can thus be taken to show that the expansion of education at secondary stage has been in terms of quantity rather than quality.

Let us at this stage ask ourselves a question similar to the one asked in the preceding chapter. How consistent are our observations regarding declining teacher-pupil ratio and per-pupil direct expenditure at the secondary stage with the fact that over the decade per capita income rose by 16 (1960-61 prices) per cent?

In 1950-51, the percentage of children in the age-group 14-17 going to school was 5.6 whereas in 1960-61 the percentage was 11.3. This indicates a gain of 105.4 per cent over the

period and as was observed in the last chapter, it is this gain of 105.4 per cent which bears comparison with the increase in per capita income. This comparison shows that per capita increase in secondary education has been 6.5 times as fast as the increase in per capita income.[2]

III

Level of Expenditure :

Our observations in the preceding chapter regarding the difficulties of appraising the state of education apply equally to secondary education. Still we must attempt, some appraisal, however, inadequate.

School-Age Population Covered :

It is commonly assumed that children of the age-group 14 to 17 will ordinarily be studying ~~in~~ at the secondary stage. On the basis of this assumption, the proportion of children studying at the secondary stage comprised 11.3 per cent in 1960-61 of the total number of children in the age-group

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2 The underlying assumption that all children in the secondary stage belong to the age-group 14 to 17 is open to question. But for purposes of this particular comparison, it should not materially alter our conclusion even if we were to appraise the progress in terms of the proportion of the total population or of a wider age-group going to secondary schools assuming that the age-structure of the population has not changed over the period.

14 to 17.[3] This proportion is very low compared to what obtains in several other countries, underdeveloped as well as developed. It can be observed from the table that the proportion for India is the lowest of the countries listed. India is for behind the Phillipines and Indonesia in this respect (See Table-V).

Teacher-Pupil Ratio :

In Table VI are given statistics for several countries, developed and underdeveloped, with respect to teacher-pupil ratio. For India, two sets of figures have been shown, one for the secondary schools and the second for the secondary stage only. The second set of figures shows that the teacher-pupil ratio at the secondary stage in India is higher than even most of developed countries. But it is very much likely that the set of figures for other countries pertains to secondary schools and is therefore more approximately

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3 Actually, however, the assumption is open to serious question. In 1959-60, of the total enrolment of 2.7 million at the secondary stage only 13.5 million (i.e. 58 per cent) belonged to the age-group 14-17. Further, of the total number of school-going children of the age-group 14 to 17 which stood at 3.4 million in 1959-60, only 1.5 million were attending secondary classes and the rest elementary classes. In other words, only 43.0 per cent of the school-going children of the age-group 14-17 were attending secondary classes. But it also means that the proportion of children in the age-group 14-17 attending school (elementary or secondary) was 14.5 per cent, which is higher than the total enrolment (regardless of age) at secondary stage as a proportion of the population of the age-group 14 to 17.

comparable to India's figures for secondary schools and not for just secondary stage. Still India's ratio is higher than Japan's though it is much lower than Sweeden's.

Above two indices,namely, school-age population and teacher-pupil ratio, reflecting the stage of secondary education in India, might be taken to show that the main problem of secondary education is quantitative expansion, i.e. of enrolling a much larger proportion of the children of the age-group, 14 to 17, in secondary schools.

According to the Third Plan, the proportion was to be raised from 11.3 per cent in 1960-61 to 15.6 per cent in 1965-66. It is now estimated that the actual enrolment at the secondary stage might exceed the 1965-66 target. The target for 1970-71 is put at 22.1 per cent.[4] The 1970-71 target is lower than the proportions already reached in the Phillipines and even Indonesia. Nor is this target likely to meet the demand.With the expansion of the elementary base, it is but natural that a much larger proportion in the age-group 14-17, will want to go through the secondary stage. Of course, there will be other factors which too will reinforce this tendency, such as rising level of incomes and greater appreciation of the gains, economic as well as non-economic, of education. The fact that the achievement in 1965-66 is

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4 See Memorandum on the Fourth Five Year Plan, Government of India, Planning Commission, October,1964.

expected to exceed the Third Plan target shows that because of the pressure of demand, facilities for secondary education had to be expanded at a much faster pace than was provided for in the Third Plan.

Expenditure Per Pupil :

In 1960-61, direct expenditure per pupil at the secondary school stage (general education) in India was Rs.178.8. In the United States, expenditure per pupil of high schools was $428[5] in 1956, which when converted in terms of the pre-devaluation rate of exchange is equal to Rs.2037. This means that in 1956, in the U.S., per pupil expenditure was 11.4 times as high as that in the higher secondary schools of India in 1960-61.

How do we interpret the disparity of this size? To what extent does the disparity in teachers' salaries at the secondary stage between the U.S.A. and India explain such a gulf in per pupil expenditure?

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5 Annual school cost per student of high schools in the United States in 1956 was $568 (See T.W. Schultz - The Economic Value of Education). It includes not only salary cost and other recurring costs but also the factor costs of depreciation and implicit interest. As such, the above cost per student is not comparable to the direct expenditure per pupil in India. In order to reduce it to a comparable level, we have taken out the proportion of the factor costs involved init. Then, the school cost per student per year in the U.S.A. in 1956 works out to $428.

Average annual salary per secondary stage teacher was Rs.2338.5 in 1960-61 in India. As against this, in the U.S.A., it was $5500[6] (Rs.26,675), i.e. 11.4 times as high as in India. Thus the disparity in average salaries of teachers between India and the U.S.A. is as large as that in per-pupil total expenditure.

It is interesting to note that in 1961, in the U.S.A. the average annual salary of an elementary school-teacher was $5034, whereas that of a high school teacher was $5500. As against this, the picture is quite different in India. Average annual salary per elementary school teacher was Rs.932.4 in 1960-61, whereas that of a secondary school teacher was Rs.2,338.5 in 1960-61. This shows that the average annual salary per teacher at the secondary stage was 2½ times higher than that of his counterpart in an elementary school.

This explains why the disparity in wage-rates of teachers at the secondary stage in India and the U.S.A. is much lower at 1:11.4 compared to the disparity of 1:26 with respect to the salaries of teachers of elementary schools between the two countries.

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6 See Table No.165, "Public Elementary and Secondary Schools - Estimated Number and Average Salary of Class-room Teachers. Statistical Abstracts of the U.S., 1962. Annual Edition, U.S.Dept. of Commerce.

The disparity between India and the U.S.A. in salary-per--teacher fully explains the disparity in per-pupil total expenditure. To this, one must also add that the teacher-pupil ratio in the U.S.A. is higher than that in India[7], so that the disparity in per-pupil expenditure on teachers' salaries should be larger at 1:14.0. This is higher than the disparity in per-pupil total expenditure.

The adjusted teacher-pupil ratio for India is higher than that in the U.S.A. Then the disparity in per-pupil expenditure on teachers' salaries should be lower at 1:9.2.

Even then, since the disparity in per-pupil expenditure on teachers' salaries is almost as large as that in per--pupil total expenditure, it must follow that the disparity with respect to non-salary expenditure at the secondary stage is much smaller than that obtained for elementary education. Thus judging the quality of secondary education, not only by the teacher-pupil ratio but also by the non-salary expenditure incurred per pupil on the provision of various teaching aids and other facilities provided to the students attending secondary schools, it appears that the leeway to be made up in the quality of secondary education between India and the developed countries is not as great as that for elementary education.

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7 Here we compare the U.S. ratio with the unadjusted teacher--pupil ratio for India because our presumption is that the U.S.A. figure is also unadjusted.

Conclusion :

The proportionate share of the general education schools (secondary stage) in the total direct expenditure increased from 25.6 per cent in 1950-51 to 26.4 per cent in 1960-61. As a result, the corresponding share of the elementary education declined from 54.8 per cent in 1950-51 to 51.7 per cent in 1960-61. The increase in real terms of the order of 143 per cent in the direct expenditure incurred on general education schools is higher than that of 73 per cent for elementary schools.

The increase of the order of 146 per cent in the number of students enrolled in general education schools is much faster than that of 87 per cent for elementary schools.

Even then the proportion of 11.3 per cent of the age-group, 14-17, attending secondary schools in India in 1960-61 was far below the proportions already reached in the Phillipines and Indonesia. It is also estimated that the actual enrolment at the secondary stage might exceed the 1965-66 target. The enrolment target for 1970-71 is placed at 22.1 per cent of the age-group, 14-17. This target is lower than the proportions already attained by the underdeveloped countries such as Phillipines or Indonesia. Nor is this target likely to meet the demand.

Thus, it appears that at the secondary stage the main need is to concentrate on enrolling a higher proportion of children of the age-group, 14-17. But this means a further allocation of direct expenditure in favour of secondary schools of general type.

Assuming that the additional funds available for the expansion of facilities at the secondary stage as a whole are fixed over, say the next period, expansion of secondary general education can take place only at the expense of elementary education.

Moreover, the expansion of facilities at the secondary stage is more costly than that at the elementary stage. The direct expenditure per pupil of general education schools is roughly six times the direct expenditure per pupil of elementary schools.[8]

With regard to elementary education, we have yet to fulfil the constitutional target of free and universal education of the age-group, 6-14, by 1961.

The direct expenditure per pupil of elementary schools in real terms declined by some 8 per cent. The non-salary

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8 The direct expenditure per pupil of general education schools of the secondary level of education (i.e. including the elementary departments of high schools) was Rs.92.0 in 1960-61. It is three times the direct expenditure per pupil of elementary schools.

expenditure per pupil of elementary schools declined by 18 per cent in constant wholesale prices whereas that of general education schools remained at the same level. In terms of the quality of education, the standard of elementary education seems to have gone down. Thus, while the general economic position of the country has improved, the quality of elementary education has possibly deteriorated.

Furthermore, the elementary level constitutes the very base of the whole system of education and the quality of secondary education is bound to be adversely affected if the quality of education at the elementary stage is allowed to deteriorate further.

At the secondary stage of education, expansion of facilities should take place in relation to manpower requirements.

Viewed in this manner, the expansion of secondary general education schools at the cost of the quality of the elementary education appears to be most ill-advised.

TABLE - I

Progress of Total Direct Expenditure in Current Prices-Secondary Schools(General Education)

(In Rs.million)

Year	Total direct expenditure on secondary general education schools	Expenditure met from 'fees and other' sources'	Public expenditure on secondary schools
	1	2	3
1950-51	230.5	139.9(60.6%)	90.6(39.4%)
1951-52	261.5	157.9	103.8
1952-53	284.3	172.0	112.3
1953-54	316.4	191.8	124.6
1954-55	340.6	200.2	140.5
1955-56	376.1	210.2	165.9
1956-57	415.9	224.2	191.7
1957-58	464.7	239.3	225.4
1958-59	525.2	264.2	261.0
1959-60	599.0	283.8	315.2
1960-61	689.1	326.8(47.3%)	363.1(52.7%)
Decennial growth rate	199%	133.2%	300%

Sources: "Education in India", Vol.I: 'Direct Expenditure on high/higher secondary schools by Sources.(1950-51 to 1960-61),Ministry of Education,Government of India.

Note: Figures in brackets in Col.2 refer to the proportion of the direct expenditure incurred on secondary general education schools met out of fees and other sources. And those in brackets in Col.3 refer to the proportion of the direct expenditure incurred on secondary general education schools met out of the government funds.

TABLE - II

Progress of Total Direct Expenditure on Secondary Stage of Education in Constant Price Indices

(In Rs.million)

Year	Total direct expenditure in current prices	Salary expenditure in current prices	Salary expenditure in current prices	Non-salary expenditure in current prices	Non-salary expenditure in current prices	Salary expenditure in constant salary per teacher	Salary expenditure in constant salary per teacher	Non-salary expenditure in constant wholesale prices	Non-salary expenditure in constant wholesale prices	Total direct expenditure in constant salary-per teacher and constant wholesale prices (composite index) (6+8)	(7+9)
	1	2	3	4	5	6	7	8	9	10	11
1950-51	189.1	126.3	130.6	62.8	58.5	126.3	130.6	62.8	58.5	189.1	189.1
1951-52	215.1	150.3	155.2	64.8	59.9	147.9	152.9	65.1	60.2	213.0	213.1
1952-53	232.8	166.4	171.0	66.4	61.8	160.4	166.0	73.6	68.5	234.0	234.5
1953-54	261.3	184.1	189.4	77.2	71.9	174.0	180.0	85.3	79.4	259.3	259.4
1954-55	278.1	191.7	198.7	86.4	79.4	176.5	182.4	99.7	91.7	276.2	274.1
1955-56	305.5	212.6	220.0	92.9	85.5	192.6	198.9	112.3	103.3	304.5	302.2
1956-57	334.9	229.8	239.3	105.1	105.6	204.6	211.2	111.6	112.1	316.2	323.3
1957-58	369.5	252.7	264.8	116.8	104.7	276.6	234.3	120.4	108.0	347.0	342.0
1958-59	418.1	287.8	302.0	130.3	116.1	254.1	261.7	129.0	115.0	383.1	376.7
1959-60	576.4	324.9	343.8	151.5	132.6	291.7	300.0	144.7	126.6	436.4	426.6
1960-61	550.9	377.7	388.2	173.2	162.7	305.1	315.3	155.1	145.7	460.2	460.0
Decennial growth rate	191.3%	199.0%	197.2%	175.8%	178.1%	141.5%	141.4%	147.0%	149.0%	143.3%	143.3%

Note: Col.1 - Based on Col.5, Table A.
Col.2 - Based on Col.5, Table D.
Col.3 - Based on Col.8, Table D.
Col.4 - Obtained by substracting Col.2 From Col.1.
Col.5 - Obtained by substracting Col.3 from Col.1.
Col.6 - Salary expenditure is expressed in terms of 'salary-Index' (Col.4, Table E).
Col.7 - Salary Expenditure is expressed in terms of salary-index (Col.7,Table E.).
Col.8 & 9: - Non-salary expenditure is expressed in terms of constant wholesale prices.
Cols.10 & 11: - Total direct expenditure is expressed in terms of constant indices.

TABLE - III

Expenditure Per Pupil of Secondary Stage in Current and Constant Prices

Year	Total direct expenditure on secondary stage of education in current prices (In Rs.million)	Number of pupils (secondary stage) (In million)	Per pupil expenditure in current prices (1 ÷ 2) (In Rs.)	Per pupil expenditure in constant prices (In Rs.)
	1	2	3	4
1950-51	189.1	1.3	151.1	151.1
1951-52	215.1	1.5	143.4	142.0
1952-53	232.8	1.6	145.5	146.3
1953-54	261.3	1.7	153.7	152.5
1954-55	278.1	1.8	154.5	153.4
1955-56	305.5	2.0	152.8	153.3
1956-57	334.9	2.2	161.3	143.7
1957-58	369.5	2.3	160.7	150.9
1958-59	418.1	2.5	167.2	153.2
1959-60	476.4	2.7	176.4	161.6
1960-61	550.9	3.1	178.8	149.3
Decennial growth rate	191.3%	146.1%	18.3%	-1.2%

Note: Col.1 - From Table II, Col.1
Col.2 - Based on Col.5, Table B.
Col.3 - Obtained by dividing ~~the number of pupils by~~ total direct expenditure incurred on the secondary stage of education, by the number of pupils.
Col.4 - Col.3 is expressed in terms of 'composite-index'.

TABLE - IV

Teacher-Pupil Ratio
(Secondary Stage)

Year	Enrolment	Teacher	Teacher-pupil Ratio
	1	2	3
1950-51	12,51,976	68,700	1:18.2
1951-52	14,82,319	80,423	1:18.4
1952-53	16,14,519	87,208	1:18.5
1953-54	17,21,837	94,602	1:18.2
1954-55	18,17,046	95,960	1:18.9
1955-56	19,86,243	1,04,565	1:19.0
1956-57	21,52,731	1,11,133	1:19.4
1957-58	23,11,798	1,23,211	1:18.7
1958-59	25,15,224	1,38,016	1:18.2
1959-60	26,88,023	1,57,798	1:17.0
1960-61	30,81,134	1,66,000	1:18.6
Decennial growth rate	146.1%	141.6%	-2.2%

Note: Col.1 - Based on Col.5, Table B.

Col.2 - Based on Col.5, Table C.

Col.3 - Obtained by dividing the number of students by the total number of teachers.

TABLE - V

Proportion of the Population of the Age-Group 14-17, Attending Schools

(In million)

Name of the country and the year of statistics	Total population	Attending schools	Percentage of 2 to 3
1	2	3	4
(A) DEVELOPED COUNTRIES			
U.S.A. (1960)	11.3	9.8	87.5
France (1962)	3.1	2.2	63.3
Soviet Union (1959)*	9.8	5.4	55.0
(B) UNDERDEVELOPED COUNTRIES			
Phillipines (1960)	2.3	0.8	34.2
Indonesia (1961)	5.6	1.5	27.7
India+(1960-61)	27.3	3.1	11.3

Source : Based on Table 15 'Population by School-Attendance, Age and Sex. pp.428-446. Demographic year book, New York, 1964.

* Based on "Economic Aspects of Higher Education" - (Ed.)S.E. Harris, O.E.C.D., Paris, 1962.

\+ Population figure is based on Paper No.2(1963) - "Age-Tables", Census of India, 1961.

TABLE - VI

Teacher-Pupil Ratio

Developed and Underdeveloped Countries

(High School level)

Name of the country and the year of statistics		Number of teachers	Number of pupils	Teacher-Pupil ratio
1		2	3	4
DEVELOPED COUNTRIES				
Sweeden (1959)		15,000	2,15,000	1:14.3
U.K. (1959)		1,53,000	31,72,000	1:20.7
Germany (1959)		54,000	11,70,000	1:21.6
France (1959)		68,000	11,93,000	1:22.0
U.S.A. (1959)*		4,87,577	1,11,05,419	1:22.7
Japan (1960)		3,38,000	91,26,000	1:27.0
UNDERDEVELOPED COUNTRIES				
Iran (1959)		11,000	2,56,000	1:23.2
Pakistan (1958)		54,000	13,46,000	1:25.0
India (1960-61)+	(1)	2,96,305	75,11,514	1:25.3 (unadjusted)
	(2)	1,66,000	30,81,134	1:18.6 (adjusted)
Indonesia (1959)		30,000	8,46,000	1:28.2
Phillipines (1958)		20,000	5,79,000	1:29.0

Sources: Based on Table No.1258, education and Health, pp.935-936. Statistical Abstract of the United States, U.S.Dept.of Commerce, 1962.

* 1-Based on Table No.166, "Public Secondary Schools - numbers, enrolment, teachers and pupil-teacher ratios by states, 1959.

+ (1) Teacher-Pupil Ratio is arrived at by dividing the number of secondary school pupils by the number of secondary school teachers.

(2) Refers to the teacher-pupil ratio at the secondary stage (See Table-IV).

TABLE - VII

Direct Salary and Non-Salary Expenditure Per Pupil in Constant Prices.

(Elementary and Secondary Stage of Education)

(In Rupees)

Year	Salary expenditure per pupil in constant salary--per-teacher (Elementary stage)	Non-Salary expenditure per pupil in constant wholesale prices (Elementary stage)	Salary expenditure per pupil in constant salary--per-teacher (General education schools - secondary stage)	Non-salary expenditure per pupil in constant wholesale prices (General education schools - secondary stage)
1	2	3	4	5
1950-51	17.3	4.4	100.9	50.2
1951-52	17.4	4.1	98.6	43.4
1952-53	17.7	4.7	100.3	46.0
1953-54	17.6	4.8	102.4	50.1
1954-55	17.9	5.0	98.1	55.3
1955-56	17.8	5.4	96.3	57.0
1956-57	17.4	4.7	93.0	50.7
1957-58	17.3	4.7	98.5	52.4
1958-59	16.6	4.2	101.6	51.6
1959-60	16.6	3.6	108.0	53.6
1960-61	16.4	3.6	99.0	50.3
Decennial growth rate	-4.7%	-18.2%	-1.9%	0.2%

TABLE - A

Progress of Total Direct Expenditure in Current Prices on Secondary Education

(Secondary Stage)

(In Rs. million)

Year	Total direct expenditure on high/higher secondary schools	Number of pupils in elementary departments of secondary schools	Expenditure per pupil of elementary school (In Rs.)	Expenditure on elementary departments of high schools*	Total Direct expenditure on secondary stage
	1	2	3	4	5
1950-51	230.5	19,07,525	21.7	41.4	189.1
1951-52	261.5	19,64,667	23.1	45.4	215.1
1952-53	284.3	20,84,246	24.7	51.5	232.8
1953-54	316.4	22,56,495	24.4	55.1	261.3
1954-55	340.6	24,80,799	25.2	62.5	278.1
1955-56	376.1	27,27,314	25.9	70.6	305.5
1956-57	415.9	30,34,210	26.7	81.0	334.9
1957-58	464.7	32,49,970	29.3	95.2	369.5
1958-59	525.2	36,56,315	29.3	107.1	418.1
1959-60	599.0	40,74,523	30.1	122.6	476.4
1960-61	689.1	44,30,380	31.2	138.2	550.9
Decennial growth rate	199%				191.3%

Sources: Col.1 - Based on Col.1 of Table 1.
Col.2 - Based on Col.4 of Table B
Col.3 - Based on Col.3, Table V of the chapter on 'Expenditure on Elementary Education'.
Col.4 - Col.2 multiplied by Col.3

* It is assumed that per-pupil direct expenditure in elementary departments of secondary schools is the same every year as in the elementary schools.

Col.5 - Obtained by subtracting Col.4 from Col.1

TABLE - B

Enrolment at the Secondary Stage

Year	Total enrolment of students in high/higher secondary schools	Enrolment at the elementary stage (I-VIII)	Number of pupils in elementary schools	Number of pupils in elementary departments of high schools	Enrolment at the secondary stage
	1	2	3	4	5
1950-51	31,59,501	2,22,74,000	2,03,66,475	19,07,525	12,51,976
1951-52	34,46,986	2,31,98,000	2,12,33,333	19,64,667	14,82,319
1952-53	36,98,765	2,39,15,000	2,18,31,754	20,84,246	16,14,519
1953-54	39,78,352	2,55,01,000	2,32,44,505	22,56,495	17,21,837
1954-55	42,97,845	2,72,72,000	2,47,91,201	24,80,799	18,17,046
1955-56	47,13,557	2,94,60,000	2,67,32,686	27,27,314	19,86,243
1956-57	51,86,941	3,13,49,000	2,83,14,790	30,34,210	21,52,731
1957-58	55,61,768	3,30,98,000	2,98,48,030	32,49,970	23,11,798
1958-59	61,71,539	3,61,98,000	3,25,41,685	36,56,315	25,15,224
1959-60	67,62,546	3,88,82,000	3,48,07,477	40,74,523	26,88,023
1960-61	75,11,514	4,16,90,000	3,72,59,620	44,30,380	30,81,134

Sources: Col.1- Based on Table "Number of Pupils in High/Higher Secondary Schools' given in the yearly publication of the Ministry of Education, "Education in India", Vol.1(Report)
Cols.2&3 - Based on Statistical Tables 8 and 3C respectively of the Indian Year Book of Education, 1964 (Second Year Book - Elementary Education) N.C.E.R.T., New Delhi.
Col.4 - Obtained by subtracting Col.3 from Col.2.
Col.5 - Obtained by subtracting Col.4 from Col.1

TABLE - C

Number of Secondary Stage Teachers

Year	Total No. of Teachers (high/higher secondary schools)	Number of pupils in elementary departments of secondary schools	Teacher-pupil ratio (elementary schools)	Number of teachers (elementary departments of secondary schools)*	Number of teachers at secondary stage)
	1	2	3	4	5
1950-51	1,26,504	19,07,525	1:32.7	57,804	68,700
1951-52	1,39,958	19,64,667	1:33.4	59,535	80,423
1952-53	1,52,341	20,84,246	1:31.9	65,133	87,208
1953-54	1,65,117	22,56,495	1:31.9	70,515	94,602
1954-55	1,75,986	24,80,799	1:31.4	80,026	95,960
1955-56	1,89,794	27,27,314	1:31.8	85,229	1,04,565
1956-57	2,05,617	30,34,210	1:32.3	94,819	1,11,133
1957-58	2,21,695	32,49,970	1:32.6	98,484	1,23,211
1958-59	2,45,555	36,56,315	1:33.8	1,07,539	1,38,016
1959-60	2,67,637	40,74,523	1:34.0	1,09,839	1,57,798
1960-61	2,96,305	44,30,380	1:34.3	1,30,305	1,66,000
Decennial growth rate					141.6%

Sources: Col.1 - Based on Table 'Number of Teachers in High/Higher Secondary Schools' - Education in India Vol.I - Ministry of Education, Govt. of India.

Col.2 - Based on Col.4, Table B.

Col.3 - Based on Col.3, Table VI of the chapter on "Expenditure on Elementary Education"

Col.4 - Obtained by dividing the number of pupils (Col.2) by the teacher-pupil ratio in Col.3.

* It is assumed that the teacher-pupil ratio is the same in elementary departments of secondary schools every year as in the elementary schools.

Col.5 - Obtained by subtracting Col.4 from Col.1

Col.4 - Based on Col.3.

* It is assumed that the proportion of total direct expenditure on elementary stage incurred on the salary of teachers is the same as obtains for the elementary schools.

Col.5 - Obtained by substracting Col.4 from Col.1.

Col.6 - Shows the percentage of expenditure on teachers' salary to total direct expenditure on high/higher secondary schools.

Col.7 - Based on Col.6.

\+ It is assumed that the proportion of direct expenditure on elementary stage incurred on the salary of teachers is the same as obtains for the secondary schools.

Col.8 - Obtained by substracting Col.7 from Col.1

TABLE - D

Salary Expenditure on Secondary Education

(In Rs. million)

Year	Total salary expenditure on high/ higher secondary schools	Total direct expenditure on elementary departments of secondary schools	Percentage of expenditure on teacher's salary (elementary schools	Salary expenditure on elementary depts. of secondary schools*	Salary expenditure on secondary stage of education	Percentage of expenditure on teacher's salary (secondary schools)	Salary expenditure on elementary depts.of secondary schools+	Salary expenditure on secondary stage of education
	1	2	3	4	5	6	7	8
1950-51	159.2	41.4	79.7	32.9	126.3	69.1	28.6	130.6
1951-52	187.8	45.4	82.5	37.5	150.3	71.8	32.6	155.2
1952-53	208.9	51.5	82.6	42.5	166.4	73.5	37.9	171.0
1953-54	229.3	55.1	82.0	45.2	184.1	72.5	39.9	189.4
1954-55	243.3	62.5	82.5	51.6	191.7	71.4	44.6	198.7
1955-56	270.8	70.6	82.5	58.2	212.6	72.0	50.8	220.0
1956-57	297.1	81.0	83.5	67.3	229.8	71.4	57.8	239.3
1957-58	331.1	95.2	84.5	80.4	252.7	71.7	68.3	264.8
1958-59	379.3	107.1	85.4	91.5	287.8	72.2	77.3	302.0
1959-60	432.2	122.6	87.5	107.3	324.9	72.1	88.4	343.8
1960-61	498.1	138.2	87.1	120.4	377.7	72.3	109.9	388.2
Decennial growth rate	200.3%	233.5%		266.0%	199.0%		284.2%	197.2%

Sources : Col.1 - Based on Table, 'Salaries of High/higher Secondary School Teachers' - 'Education in India', Vol.I - Report, Ministry of Education, Government of India.

Col.2 - Based on Col.4 of Table A.

Col.3 - Shows the percentage of total direct expenditure on elementary education incurred on the salary of elementary school teachers. It is based on the 'Total Expenditure on Teachers' salaries', given in "The Second Year Book of Education" - Elementary Education, N.C.E.R.T., New Delhi. 1964.

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(Continued)

TABLE - E

Index Number of Secondary Stage Teachers' Salary

Year	Number of teachers (secondary stage)	Expenditure on secondary stage teachers' salary (Rs. million)	Average annual salary per secondary teacher (Rs.)	Index Number of secondary teachers' salary (1950-51=100)	Expenditure on secondary stage teachers' salary (Rs. million)	Average annual salary per secondary teacher (Rs.)	Index number of secondary teachers' salary (1950-51=100)
	1	2	3	4	5	6	7
1950-51	6,8700	126.3(66.8%)	1838.4	100.0	130.6(68.1%)	1901.1	100.0
1951-52	80,423	150.3	1868.8	101.6	155.2	1929.9	101.5
1952-53	87,208	166.4	1908.1	103.7	171.0	1960.8	103.0
1953-54	94,602	184.1	1946.0	105.8	189.4	2002.7	105.3
1954-55	95,960	191.7	1997.7	108.6	198.7	2070.6	108.9
1955-56	1,04,565	212.6	2033.2	110.4	220.0	2103.9	110.6
1956-57	1,11,133	229.8	2065.9	112.3	239.3	2153.3	113.3
1957-58	1,23,211	252.7	2050.9	111.5	264.8	2149.2	113.0
1958-59	1,38,016	287.8	2085.3	113.3	302.0	2188.2	115.0
1959-60	1,57,798	324.9	2059.5	111.4	343.8	2178.7	114.6
1960-61	1,66,000	377.7(68.5%)	2275.3	123.8	388.2(70.4%)	2338.5	123.1
Decennial growth rate	141.6%	199.0%	23.8%	23.8%	197.2%	23.1%	23.1%

Sources: Col.1 - Based on Col.5, Table C.
Col.2 - Based on Col.5, Table D.
Col.3 - Obtained by dividing the Salary Expenditure by the number of teachers.
Col.4 - Based on Col.3.
Col.5 - Based on Col.8, Table D.
Col.6 - Obtained by dividing the Salary expenditure by the number of teachers.
Col.7 - Based on Col.6.