# CHAPTER- VI

# EXPENDITURE ON HIGHER EDUCATION

Τ

This chapter is concerned with the analysis of the trends in expenditure incurred on education at the third level, i.e. in Universities and colleges. This covers general, professional (including teacher training colleges) and special education colleges.

Expenditure on research institutions is excluded as it is doubtful if these institutions can be regarded as falling within the scope of formal education (i.e. training of students in educational institutions - schools or colleges). However, expenditure incurred on research in universities and colleges is not excluded.

The entire expenditure incurred on both, boards of education (secondary and intermediate) and colleges for special education, is included. Strictly speaking the expenditure on boards of secondary education should be shown under the total direct expenditure on secondary education. But we do not get separate statistical information relating to secondary and intermediate boards.

In the chapter on Secondary Education we excluded the expenditure incurred on special education. The reason was in terms of enrolment, about 90 per cent of the total enrolment in special education schools was accounted for by adult schools whose students would not fall in the secondary school age-group. Nor would probably the type and technique of instruction in these adult schools be the same as in ordinary secondary schools. At the college level, however, special education institutions providing instructions in subjects like music, dancing and other fine arts, oriental studies, sociology and domestic science, are unlikely to be materially different in composition of students or in the type of Instruction than general colleges.

II

# Trend in Expenditure:

Table I gives information with regard to the growth of total recurring direct expenditure incurred on higher education during the period 1950-51 to 1960-61.

In 1950-51, total direct expenditure was of the order of Rs.170.5 million, which went upto Rs.541.8 million in 1960-61. This gives a decennial growth rate of 217.7 per cent, which is higher than the growth rate of 169.5 per cent and 191.3 per cent obtained for elementary and secondary stages of

education respectively. The expenditure on general, professional and special education colleges went up by 190.2 per cent, 274.4 per cent and 313.6 per cent respectively.

The proportion of total direct expenditure incurred on general education was as high as 70.8 per cent in 1950-51, but it declined to 64.7 per cent in 1960-61. The second in order comes the expenditure incurred on professional education. In 1950-51, we spent 24.7 per cent on professional education. The proportion increased to 29.3 per cent in 1960-61. In terms of absolute outlay, the expenditure incurred on general education in 1960-61 was nearly two times more than the expenditure incurred on professional education.

The increases in expenditure referred to above are in current prices. In terms of combined constant prices, the total direct expenditure increased from %.170.5 million in 1950-51 to %.454.3 in 1960-61 - giving a decennial growth rate of 166.4 per cent. The corresponding growth rates of expenditure for general education, professional education and special education, are 138.6 per cent, 237.2 per cent and 236.4 per cent respectively (See Tables II,IIA,IIB and IIC).

The growth rate works out to 160.7 per cent when the expenditure incurred on the Boards of Education is excluded from the total (See Col.6, Table II).

In terms of constant prices also, the increase in the expenditure incurred on higher education is higher than the comparable increases of 72.9 per cent and 141.3 per cent at the elementary and secondary levels of education respectively.

Thus the higher level of education has been expending more rapidly in India than the first two levels of education.

# Public Expenditure and Its Allocation:

Like the first two levels of education, at the third level of education also the proportion met out of government funds increased rapidly over the decade of 1950's. From Table III it can be seen that the public expenditure incurred on the third level increased from \$8.79.0 million in 1950-51 to \$8.267.6 million in 1960-61, indicating a decennial growth of 238.1 per cent. The proportion of public expenditure to total direct expenditure was 46.4 per cent and 49.4 per cent respectively in 1950-51 and 1960-61.

The allocation of direct public expenditure according to type of education shows that though the government spent, both in terms of absolute outlay as well as in terms of proportion, more on general education colleges, the proportion of the direct public expenditure incurred on general education colleges declined from 60.4 per cent in 1950-51 to 55.2 per cent in 1960-61. In comparison, that incurred on

professional colleges increased from 38.3 per cent in 1950-51 to 42.6 per cent in 1960-61.

# Direct Expenditure Per Pupil:

Table IV gives information with regard to the changes in per pupil direct expenditure over the past decade of 1950's.

Direct expenditure per pupil of higher education was R.409.9 in 1950-51. In 1960-61 it was R.525.7. This gives a decennial growth rate of 28.3 per cent. Similarly, for general, professional and special education, the increase in per pupil expenditure works out to 29.5 per cent, 4.4 per cent and 20.6 per cent respectively (See Tables IVA, IVB and IVC).

The lowest increase has taken place in the case of professional education, This is because of the fact that the per pupil expenditure with respect to teacher training colleges declined over the period by 112 per cent. The increase in expenditure per pupil of vocational colleges was of the order of 23.8 per cent.

In terms of constant prices, direct expenditure per pupil of higher education increased by 7.3 per cent, whereas that of elementary schools declined by 7.8 per cent. For secondary education (general and professional), the decline was of the order of 0.3 per cent. For general education colleges,

the increase in per pupil direct expenditure was of the order of 6.5 per cent. This should be compared with the decline of 1.2 per cent in per pupil direct expenditure of general school education at the secondary stage over the same period.

Per pupil direct expenditure of professional higher education declined by over 6 per cent. As against this the per pupil direct expenditure of professional education of the school level increased by 8.2 per cent. Here also the decline in per pupil direct expenditure must be accounted for by the decline in direct expenditure per pupil of teacher training colleges. The real per pupil direct expenditure on vocational education increased by 4 per cent.<sup>2</sup>

The above observations relating to the per pupil expenditure on higher education and on its components might be taken to confirm further that the third level of education in India has been expanding more rapidly than the first two levels of education.

From Table V it can be observed that direct expenditure

Number of teachers separately for vocational and teacher training colleges is not available. We obtain the number of teachers for vocational colleges on the assumption that the teacher-pupil ratio in vocational colleges is the same as obtains for professional colleges (including teachers training colleges).

per pupil in 1960-61 was R.31.2, R.190.9 and R.525.7 at the elementary, secondary and university stages of education in India respectively. This shows that per pupil direct expenditure at the third level was 18 and 3 times the per pupil direct expenditure at the elementary stage and secondary stage respectively. The direct expenditure per pupil of professional colleges in 1960-61 was nearly 4 times the expenditure per pupil of professional schools. Thus, in terms of per pupil direct expenditure, higher education is more costly than both the elementary and secondary education and secondary education is costlier than elementary education.

Nevertheless, the number of students at the secondary and college levels increased at a faster rate than that of the first level of education.

This, then, clearly shows that in <sup>I</sup>ndia more expensive levels of education have been expanding more rapidly than the less expensive (i.e. elementary) level of education.<sup>3</sup>

In this connection observation made by Prof.T.W.Schultz, with respect to the expansion of higher education in the U.S., in his book, "The Economic Value of Education" is worth quoting: "using costs of a year of schooling as the measure of the amount, a year of university work in the United States is nearly 12 times as large as that of a year of elementary schooling. Thus, the fact that the more expensive levels of schooling have been increasing at the higher rate becomes a major factor in the growth of schooling. For example, in the United States, whereas the total number of enrolled students rose to 57 per cent between 1930 and 1960, the enrolment in higher schools doubled, and undergraduates in higher education more than tripled", p.33, Chapt.2.

# Teacher-Pupil Ratio and Enrolment:

From Table VI it can be seen that the teacher-pupil ratio at the third level of education improved a little from 1:16.6 in 1950-51 to 1:16.1 in 1960-61. In the case of special education colleges, the ratio declined from 1:8.2 in 1950-51 to 1:9.6 in 1960-61. The teacher-pupil ratio remained more or less constant with respect to general as well as professional education (see Tables VIA, VIB and VIC).

At the Secondary stage it was observed that the number of students per teacher in the professional schools was much smaller than in non-professional schools, eventhough the number of students per teacher in the latter could by no standard be considered large. At the college level, there were only 11.2 students per teacher in professional colleges against 18.6 in general education colleges. At the secondary level we deplored the under-utilization of existing schooling facilities on the ground that the teacher-pupil ratio was higher than the optimum ratio. We felt that it could be allowed to decline.

The results obtained with respect to teacher-pupil ratio of higher general and professional education highly resemble to those obtained for general and professional school education. It appears that one could legitmately argue in favour of bringing down the teacher-pupil ratio of professional colleges as well.

It can be seen from Table VII that the total enrolment at the third level increased from 0.4 million in 1950-51 to 0.98 million in 1960-61, i.e. by 144.3 per cent. This growth rate of enrolment is very nearly the same as was registered for enrolment at the secondary stage. But it is higher than that of the elementary education. There the enrolment increased by 87 per cent during the same period.

The highest percentage increase in enrolment took place with respect to professional education. This was 258 per cent, which was more than twice the growth rate of 114 per cent in enrolment in the professional schools of the second level in the same period.

But the distribution of total enrolment in 1960-61 reveals that mearly 4/5ths of the total number of students were still in universities and colleges for general education. Only about 1/5th of the total number of students was studying in professional colleges in 1960-61.

Above observation relating to the distribution of pupils can be taken to show that the distribution is uneven what should we infer from the above observed imbalance in enrolment? Does it mean less than optimum use of resources? Does it in any way affect the process of economic growth? Answers to the questions seem to be in positive. Education can contribute to

economic growth only if the pattern of supply accords with the structure of demand for labour as differentiated by various types and levels of education.

Unemployment among educated persons, their employment in jobs which are not suited to their qualifications and shortage at the same time of trained technical hands go to show that in India at present the type/types of output of education industry is out of accord with the demands of the economic system.

One way of making better use of resources going to education will be to shift the relative proportion of students at the higher level in favour of science and technology education.<sup>5</sup>

On the assumption that enrolment at the third stage will increase at the same over all rate and in the same pattern (i.e. relative rates of growth of professional and non-professional enrolment will also be the same) as in the last decade, the students of professional colleges should comprise 28 per cent of the total number at this level of education in 1970-71.

See Harbison and Myers - 'Education, Manpower and Economic Growth - McGraw Hill. 1964. They write, "despite this expansion on manpower planning and increased enrolments in scientific and technical faculties in higher education, India is still plauged with excessive university enrolments in fields which are not clearly related to India's present stage of economic growth".

See Pitambar Pant - Record of statements made by him in connection with the policy conference on Economic growth and Investment in Education - Washington - 16th - 20th October, 1961.

# Level of Expenditure :

Like the earlier chapters, here also, we make an assessment of the state of higher education in India, with the help of the indices selected for the similar purpose. Enrolment of College Students by Branch of Study:

In Table VIII is given information for the two sets of countries - developed and underdeveloped - with regard to the distribution of students by branch of study.

It can be seen from the table that the proportion of 51 per cent of the students enrolled in the institutions of higher education of general type (i.e. humanities and social sciences) for India is the highest. Similarly, the proportion of 24.4 per cent of the students taking course in pure sciences in India is as high as the proportion of 25 per cent for Great Britain or 27 per cent for France. The proportion for India is twice as high as the proportion of 12 per cent for Iraq.

But the proportion of students enrolled in engineering and technology, medicine and agriculture in India is the lowest compared not only to the developed countries of the world but also to the underdeveloped countries.

The proportion of the college students enrolled in engineering and technology in India was 4 per cent in 1959-60. The Proportion of the students enrolled in medicine was also 4 per cent whereas that in agriculture was 1.2 per cent only. The corresponding proportion for germany are 12.8 per cent, 14.5 per cent and 2.2 per cent respectively. Those for Phillipines are 15.4 per cent, 10.0 per cent and 4.1 per cent respectively.

Thus, on the basis of international comparison of the distribution of students by branch of study, it appears that what is required in our case is the expansion of facilities in the fields of study of professional type.

### Teacher-Pupil Ratio:

In Table IX are given statistics for several countries, developed and underdeveloped, with respect to teacher-pupil ratio.

The teacher-pupil ratio of 16 for India is much higher than that for both the developed and underdeveloped countries. In France, it was 35. In Phillipines, the teacher-pupil ratio was 27. For professional colleges in India, the teacher-pupil ratio was 11 in 1960-61. For general education colleges of India, it was 18.

See D.S. Kothari, "Some Aspects of University Education" - University Grants Commission, New Delhi. He writes, "it is apparent that what is required in our case is not so much an expansion of enrolment in pure science, as in medicine, engineering and still in agriculture and veterinary sciences".

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No doubt the higher teacher-pupil ratio at the third level of education in India is the indicative of the superiority in the standards of higher education. But in our opinion, it is more an indicator of under-utilisation of teaching capacity. Most probably quality of college education would not suffer if the teacher-pupil ratio is allowed to decline.

### Conclusion:

In terms of the indices selected for the appraisal of the performance of education, it seems to us that the higher education has made rapid progress.

The increase in real terms in the direct expenditure incurred on the third level is higher than the corresponding In real terms increases at the first and second level of education. The direct expenditure per pupil in real terms of higher education increased by 7 per cent over the period under review. As against this, at the elementary stage, the per pupil direct expenditure in real terms declined by nearly 8 per cent whereas at the secondary stage, it remained almost unchanged. The increase in enrolment of students at this stage was also much faster.

Thus, the standard of higher education seems to have improved with the improvement in the general economic position of the country.

But what is of particular interest to us is the distribution of students by branch of study at the third level of education. It has been observed that nearly four-fifths of the students were studying in colleges of general type in 1960-61. Also, the direct expenditure incurred on general education colleges and universities was twice as high as the expenditure incurred on professional higher education. Thus, there is the concentration both of students and direct expenditure in the fields of study of general type at the third level of education. Unemployment among educated persons shows that most of them are educated in a way that they cannot gainfully be employed. So, the expansion of facilities at the third brage of education should be related to the needs of the society for different categories of manpower.

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# TABLE - I

(In B.million) Progress of Total Direct Expenditure on the Third Level of Education in Current Prices

Year	Universit	Universities and colleges General Education	leges for	Colleges for Professional Education	s for Professi Education		Special education	Boards of secondary	Expendi-
	Univer- sities	Arts & science	Total (a+b)	Vocational colleges	Teacher training	Total (d+e)	colleges	interme- diate edu-	third level
	œ	colleges b	ဗ	ď	e e e e e e e e e	મ	-	cation	(1+2+2+4)
		-			2		3	4	-5
1950-51	49.1	71.7	120.8(70.8%)	38.6	3.6	42.2(24	42.2(24.7)2.2(1.3)	5.3(3.2)	170.5
1951-52	49.8	81.1	130.9	46.2	3.8	50.0	2.2	7.8	190.9
1952-53	59.4	88.1	147.5	49.4	4.3	53.7	2.5	9.4	213.1
1953-54	65.5	95.8	161.3	51.7	4.4	56.1	2.7	11.5	231.6
1954-55	74.2	105.6	179.8	57.9	5.2	63.1	3.4	12.3	258.6
1955-56	79.8	116.5	196.3	63.4	9•9	70.0	3.6	13.2	283.1
1956-57	92.0	128.2	220.2	6•69	8.0	77.9	4.9	15.0	318.0
1957-58	98.1	141.2	239.3	78.1	10.3	88.4	8.9	17.6	351.5
1958-59	115.6	158.4	274.0	100.0	11.9	111.9	7.0	20.5	413.4
1959-60	128.1	181.6	309.7	113.3	17.9	131.2	7.7	23.7	472.3
1960-61	141.4	209.2	350.6(64.7)	136.5	21.5	158.0(29	158.0(29.3)9.1(1.7)	24.1(4.3)	541.8
Decennial growth rate	188.0%	191.7%	190.2%	253.6%	497.2%	274.4%	313.6%	354.7%	217.7%

Source: Cols. 1 to 5: Based on the Report on Education in India - Vol.I, Table: 'Expenditure on Education According to Heads of Charge - Ministry of Education, Government of India.

Note: Figures in brackets denote the proportions of the total direct expenditure (Gol.5) incurred on general education, professional education, special education and boards of secondary and intermediate education.

TABLE - II

Progress of Total Direct Expenditure on the Third Level of Education in Constant Prices.

(In B.million)

Year Total Salary. Natreet direct expendine three on current the third prices level in current prices 1950-51 165.2 73.7(43.1952-53 203.7 97.2 1955-56 269.9 128.4 1956-57 313.0 143.7 1958-59 392.9 180.0 1959-60 448.6 215.4	lary Non-salary	Salary N	Non-salary	Total direct	Total Direct	Total direct
expenditure on the third prices on current prices 185.2 185.1 205.7 220.1 246.3 269.9 313.0 353.9 448.6	1		exnenditure		expenditure	expenditure
ture on c the third p level in current prices 165.2 183.1 203.7 220.1 246.3 269.9 313.0 333.9 592.9			in constant		on the third	in constant
the third p level in current prices 165.2 183.1 203.7 220.1 246.3 269.9 313.0 333.9 448.6	urrent prices	in con- w	wholesale	prices	level in	prices
current prices 165.2 183.1 203.7 220.1 246.3 269.9 313.0 333.9 448.6	rices	stant. salary	prices	(4+5) (Composite	current prices	(Composite index)
165.2 183.1 203.7 220.1 246.3 269.9 313.0 333.9 448.6		per teacher		index)	ı	
165.2 183.1 203.7 220.1 246.3 269.9 313.0 333.9 448.6	2 3	4	5	9	7	8
203.7 203.7 220.1 246.3 269.9 313.0 392.9 448.6	73.7(43.2)91.5(56.8)	3) 73.7	91.5	165.2	170.5	170.5
203.7 220.1 246.3 269.9 313.0 333.9 448.6	87.5 95.6	79.9	96.1	176.0	190.9	183.9
220.1 246.3 269.9 313.0 333.9 448.6	97.2 106.5	84.8	118.1	202.9	213.1	213.3
246.3 269.9 313.0 333.9 448.6	104.3 115.8	91.3	127.9	219.2	231.6	231.9
269.9 313.0 333.9 392.9 448.6	115.7 130.6	103.1	150.8	253.9	258.6	267.9
313.0 333.9 392.9 448.6	128.4 141.5		194.6	-	283.1	
333.9 392.9 448.6 517.7	143.7 169.3	126.1	179.7	305.8	318.0	289.9
392.9 448.6 517.7	162.4 171.5	135.0	176.8	311.8	351.5	330.0
517.7	180.0 212.9	150.5	210.8	361.3	413.4	381.6
517.7	215.4 233.2	166.5	222.7	389.2	472.3	411.8
	242.2(44.7)275.4(55.3)186.2	.3)186.2	246.6	432.8	541.8	454.3
Decennial 213.4% 228.2% growth rate	228.2% 201.4%	-152.6%	169.5%	160.7%	217.7%	166.4%

Source: Col.1

Expenditure figures do not cover the expenditure incurred on 'Boards of Education.'

Expenditure on 'Boards of Education' is treated as Non-Salary Expenditure.

Based on the 'Report on Education-Vol.II, Table, "Expenditure on Institutions for Boys & Girls" Col.1-Col.2: Col.4.Salary-expenditure is expressed in terms of constant-salary-perteacher (See Table 1):Col.5. Non-salary expenditure is expressed in constant wholesale prices: Col.4+Col.5: :Col.7: Covers the expenditure incurred on 'Boards of Education. Gol.2 -

Col.6 - (Col.8 - (

TABLE - IIA

Progress of Direct Expenditure on General Education.

Universities and Colleges in Constant Prices

Year         Total Direct salary expenditure e		DITAGE	Universities and colleges in Constant Frices	eges in Const	ant Frices	(In B. Million)	ion)
120.8 52.9 67.9 52.9 67.9 67.9 130.9 64.2 66.7 58.4 67.3 147.5 71.3 76.2 59.8 84.4 161.3 75.7 85.6 65.4 94.5 112.1 . 196.3 92.2 104.1 78.5 112.1 . 220.2 103.7 116.5 86.6 123.5 274.0 124.2 149.8 98.7 148.3 170.1 . 350.7 156.3 173.4 109.0 165.6 350.6 160.7 189.9 118.3 170.1	Year	Total Direct expenditure on general education universities and colleges in current prices	Salary expenditure in current prices	Non-salary expenditure in current prices	Salary expenditure in constant salary per teacher	Non-salary expenditure in constant wholesale prices	Total direct expenditure in constant prices(4+5)
120.8 52.9 67.9 52.9 67.9 67.9 130.9 67.3 147.5 64.2 66.7 58.4 67.3 67.3 147.5 71.3 76.2 59.8 84.4 67.3 161.3 75.7 85.6 65.4 94.5 172.1 72.5 112.1 78.5 143.2 220.2 103.7 116.5 86.6 123.5 220.2 103.7 116.5 86.6 123.5 274.0 124.2 149.8 98.7 148.3 173.4 109.0 165.6 350.6 160.7 189.9 118.3 170.1	v		2	3	4	5	9
130.9 64.2 66.7 58.4 67.3 147.5 147.5 76.2 59.8 84.4 161.3 75.7 85.6 65.4 94.5 179.8 82.7 97.1 72.5 112.1 . 196.3 92.2 104.1 78.5 143.2 220.2 103.7 116.5 86.6 123.5 274.0 124.2 149.8 98.7 148.3 309.7 156.3 177.4 109.0 165.6 350.6 160.7 189.9 118.3 170.1	1950-51	120.8	52.9	61.9	52.9	- 6.49	1.20.8
147.5 71.3 76.2 69.8 84.4 161.3 75.7 85.6 65.4 94.5 179.8 82.7 97.1 72.5 112.1 . 196.3 92.2 104.1 78.5 143.2 220.2 103.7 116.5 86.6 123.5 239.3 113.7 125.6 93.4 129.5 274.0 124.2 149.8 98.7 148.3 309.7 136.3 173.4 109.0 165.6 350.6 160.7 189.9 118.3 170.1	1951–52	130.9	64.2	66.7	58.4	67.3	125.7
161.3 75.7 85.6 65.4 94.5 179.8 82.7 97.1 72.5 112.1 . 196.3 92.2 104.1 78.5 143.2 220.2 103.7 116.5 86.6 123.5 239.3 113.7 125.6 93.4 129.5 274.0 124.2 149.8 98.7 148.3 309.7 136.3 173.4 109.0 165.6 350.6 160.7 189.9 118.3 170.1	1952-53	147.5	71.3	76.2	8.69	84.4	144.2
179.8       82.7       97.1       72.5       112.1       .         196.3       92.2       104.1       78.5       143.2         220.2       103.7       116.5       86.6       123.5         239.3       113.7       125.6       93.4       129.5         274.0       124.2       149.8       98.7       148.3         309.7       136.3       173.4       109.0       165.6         350.6       160.7       189.9       118.3       170.1         ate       190.2%       204.0%       179.7%       114.3%       150.5%       1	1953-54	161.3	75.7	85.6	65.4	94.5	159.9
196.3 92.2 104.1 78.5 143.2 220.2 103.7 116.5 86.6 123.5 239.3 113.7 125.6 93.4 129.5 274.0 124.2 149.8 98.7 148.3 309.7 136.3 173.4 109.0 165.6 350.6 160.7 189.9 118.3 170.1	1954-55	179.8	82.7	97.1	72.5	112.1 .	1-84:6
220.2 103.7 116.5 86.6 123.5 259.3 113.7 125.6 93.4 129.5 274.0 124.2 149.8 98.7 148.3 148.3 150.6 160.7 189.9 118.3 170.1	1955-56	196.3	92.2	104.1	78.5	143.2	221.7
239.3 113.7 125.6 93.4 129.5 274.0 124.2 149.8 98.7 148.3 309.7 136.3 173.4 109.0 165.6 350.6 160.7 189.9 118.3 170.1 ate 190.2% 204.0% 179.7% 114.3% 150.5% 1	1956-57	220.2	103.7	116.5	9.98	123.5	210.1
274.0 124.2 149.8 98.7 148.3 309.7 136.3 173.4 109.0 165.6 350.6 160.7 189.9 118.3 170.1 ate 190.2% 204.0% 179.7% 114.3% 150.5% 1	1957-58	239.3	113.7	125.6	93.4	129.5	222.9
309.7     136.3     173.4     109.0     165.6       350.6     160.7     189.9     118.3     170.1       ate     190.2%     204.0%     179.7%     114.3%     150.5%     1	1958-59	274.0	124.2	149.8	98.7	148.3	247.0
350.6 160.7 189.9 118.3 170.1 ate 190.2% 204.0% 179.7% 114.3% 150.5%	1959-60	309.7	136.3	173.4	109.0	165.6	274.6
ite 190.2% 204.0% 179.7% 114.3% 150.5%	1960–61.	350.6	160.7	189.9	118.3	170.1	288.4
	ecennial growth rate	190.2%	204.0%	179.7%	114.3%	150.5%	138.6%

TABLE - IIB

Progress of Direct Expenditure on Professional

College (Higher) Education in Constant Prices

					(In B.million)	ou)
Year	Total direct expenditure on profess- ional higher education in	Salary expenditure in current prices	Non-salary expenditure in current prices	Salary expenditure in constant salary per teacher	Non-salary expenditure in constant wholesale price	Total direct expenditure in constant prices (4+5)
		2	3	4	5	9
1950-51	42.2	19.3	22.9	19.3	22.9	42.2
1951-52	50.0	21.8	28.2	20.6	28.3	48.9
1952-53	53.7	24.3	29.4	24.1	32.6	56.7
1953-54	56.1	26.9	29.2	24.8	32.3	57.1
1954-55	63.1	30.8	32.3	29.4	37.3	0.79
1955-56	70.0	33.5	36.5		50.2	
1956-57	77.9	36.9	41.0	36.1	43.5	9.67
1957-58	88.4	44.9	43.5	43.6	44.8	88.4
1958-59	111.9	52.3	59.6	51.1	59.1	110.2
1959-60	131.2	64.2	0.79	57.1	64.0	121.1
1960–61	158.0	75.9	82,1	0.69	73.5	142.5
Decennial growth rate	274.4%	293.3%	258.5%	257.5%	220.9%	237.2%

Progress of Direct Expenditure on Special Education

Colleges in Constant Prices

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•	-	
•	5	3
	ç	1
	2	4
		_

				i)	(In R. million)	
Year	Direct expenditure on special education colleges in current	Salary expenditure in current prices	Non-salary expenditure in current prices	Salary expenditure in constant salary per teacher	Non-salary expenditure in constant wholesale prices	Direct expenditure in constant prices(4+5)
	_	2	3	4	5	9
1950-51	2.2	1.5	7.0	1.5	1.0	2.2
1951–52	2.2	1.5	7.0	1.5	1.0.	2.2
1952-53	2.5	1.6	6.0	1.6	1.0	2.7
1953-54	2.7	1.7	1.0	1.7	1.1	2 <b>.8</b>
1954-55	3.4	2.2	1.2	2.0	1.4	3.4
1955-56	3.6	2.7	0.0		1.2	
1956-57	4.9	3.1	6.1	2.7	1.9	4.6
1957-58	6.2	3.8	2.4	3.1	2.5	5.6
1958-59	7.0	4.5	2.5	3.5	, S,	0.9
1959-60	7.7	4.9	2.8	3.8	2.7	6.5
1960-61	. 1.6	5.7	3.4	4.4	3.0	7.4
Decennial growth rate	313.6%	260•0%	385.7%	193.3%	328.5%	236.4%

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TABLE - III Growth of Direct Public Expenditure (Higher Education)

(In R.million)

Year	Direct public expenditure on general education universities and colleges	Direct public expenditure on professional education col-	Direct public expenditure on special education colleges	Direct public expenditure (2+3+4)
	2	3	4	5
1950-51	47.7(60.4%)	30.2(38.2%)	1.1(1.4%)	79.0(46.4%)
1951-52	50.9	36.4	1.2	88.5
1952-53	56.2	36.4	1.4	94.0
1953-54	62.8	38.4	7.1	102.7
1954-55	40.9	44.0	1.7	116.6
1955-56	73.2	47.7	1.8	122.7
1956-57	85.0	52.9	2.9	140.8
1957-58	94.6	59.4	3.9	157.9
1958-59	112.8	76.7	4.1	193.6
1959-60	125.2	92.7	4.4	222.3
1960–61	147.6(55.2%)	114.0(42.6%)	5.9(2226%)	267.6(4924%)
Decennial growth rate	209.4%	277.4%	430:3%	238.1%
			•	

Education Source: Based on the Table "Distribution of Government Expenditure on Education" - in India, Vol. I, Ministry of Education; Government of India.

Note :i)Figures in brackets in Cols.2,3 and 4 denote the proportion of the public expenditure (Col.5) incurred on general education, professional education and special education

ii)Figures in brackets in Col. 5 denote the proportion of the direct expenditure incurred on higher education met out of government funds.

TABLE - IV

Direct Expenditure per Pupil in Current and Constant Prices: (Third Level)

Year	Number of pupils (third level)	Total direct expenditure in current prices (B.million)	Total direct expenditure in constant prices (B.million)	Direct expenditure per pupil in current prices (R.)	Direct expenditure in constant prices (B.)
,		2	3	4	5
1950-51	4.02.975	165.2	165.2.	409.9	409.9
1951-52	4,49,917	183.1	176.0	407.0	591.2
1952-53	4,99,600	203.7	202.9	407.4	4 06.0
1953-54	5,52,400	220.1	219.2	266.83	365.3
1954-55	6,16,341	246.3	253.9	410.5	423.2
1955-56	6,79,219	269.9	•	385.5	
1956-57	7,47,943	313.0	305.8	447.1	382.2
1957–58	8,01,503	333.9	311.8	417.4	789.7
1958-59	8,73,360	392.9	361.3	436.7	401.4
1959-60	9,46,975	448.6	389.2	498.0	432.4
1960-61	9,84,601	517.7	432.8	525.7	439.7
Decennial	144.3%	213.4%	160.7%	28.3%	7.3%
Brown Fare		1	4 - 1 - 1	T	The state of the s

Source: Col.1: Based on Table - "General Summary of Institutions, Pupils and Teachers" "Education in India" - Vol.II, Winistry of Education, Government of India.

Col.2: Same source as Cols.1 to 5 of Table I.

Col.3: Based on Table II.

Col.3: Based on Table II.

Cols.4 & 5: Obtained by dividing the number of students by the total direct expenditure cols.4 & 5: Obtained by dividing the number of students by the constant prices, by the constant prices, by

number of pupils (cor. 2).

TABLE - IVA

Expenditure Per Pupil in Current and Constant Prices (General Education Universities and Colleges) Direct

Year	Number of	Direct expenditure	Direct expenditure	Direct expenditure	Direct expenditure
		in current prices (B.million)	in constant prices (R.million)	per pupil in current prices	per pupil in constant prices
	1	2	2	4	5
1950–51	3,41,444	120.8	120.8	353:7	353.7
1951-52	3,82,158	130.9	125.7	327.2	314.2
1952-53	4,24,193	147.5	144.2	368.8	360.5
1953-54	4,69,089	161.3	159.9	322.6	319.8
1954-55	5,19,991	179.8	184.6	359.9	369.2
1955-56	5,72,006	196.3	221.7	327.2	369.5
1956-57	6, 25, 482	220.2	210.1	367.0	350.2
1957-58	6,59,408	239.3	22.9	341.8	318.4
1958-59	7,11,361	274.0	247.0	391.4	352.8
1959-60	7,50,403	7,09.7	274.6	387.1	343.3
1960-61	7,65,013	350.6	288.4	458.3	376.8
Decennial growth rate	124.3%	190.2%	138.6%	29.5%	+6.5%

E	of proposition and the
H	
TABLE	

Direct	Expendi ture	Direct Expenditure per Pupil in Current and Constant Prices	rrent and Cone	stant Prices	-
	(Profess:	(Professional Education Colleges	(Colleges)		
Year	Number of	Direct expenditure	Direct expenditure	direct Expenditure per pupil	Direct expenditure
	2 <del>1</del> 1 2 3 3	in current	in constant	in current	per pupil
		prices (R.million)	prices (Estailion)	prices (题)	in constant prices (B.)
	-	2	3	<b>†</b>	5
1950-51	54,150	42.2	42.2	779.3	779.3
1951-52	60,898	50.0	48.9	821.4	714.3
1952-53	67,406	53.7	56.7	796.6	841.2
1953-54	74,136	56.1	57.1	756.7	770.2
1954-55	84,451	63.1	67.0	747.2	793.3
1955-56	93,898	70.0		745.5	
1956-57	1,07,172	77.9	9.67	726.7	742.7
1957-58	1,24,461	88.4	88.4	710.3	710.3
1958-59	1,39,876	111.9	110.2	800.0	787.8
1959-60	1,72,981	131.2	121.1	756.5	700.1
1960–61	1,94,291	158.0	142.5	813.2	728.3
Decennial	258.8%	274.4%	.237.2%	4.4%	-6.5%

TABLE - IVC

Direct Expenditure Per Pupil in Current and Constant Prices ( Special Education Colleges )

				A	
Year	Number of pupils	Direct expenditure	Direct expenditure	Expenditure per pupil	Direct expenditure
		oprices of	orices	prices	per pupin
		(Es.million)	(B.million)	(Rs.)	prices (B.)
	-	2	3	7	5
1950–51	7,381	2.5	2.5	301.3	301.3
1950-52	6,861	2.2	2.2	320.6	320.6
1952-53	8,001	2.5	2.7	312.4	337.4
1953-54	9,175	2.7	2.8	294.3	305.2
1954-55	11,899	3.4	3.4	285.7	285.7
1955-56	13,315	3.6		270.4	
1956-57	15,289	4.9	4.6	320.5	300.9
1957-58	17,634	6.2	5.6	351.6	317.6
1958-59	22,123	7.0	0.9	316.4	275.7
1959-60	23,591	7.7	6.5	326.4	275.5
1960–61	25,297	9.1	7.4	260.7	292.5
Decennial growth rate	242.0%	313.6%	236.4%	20.6%	-1.9%



 $\frac{\text{TABLE} - V}{\text{Direct Expenditure Per Pupil According to Level and Type of Education}}$ (In Current Prices)

Year	Direct expenditure per pupil	Direct expenditure per pupil	Direct expenditure per pupil of	Direct expendi- ture per	Direct expenditure per pupil		Direct expenditure per pupil
	or elemen- tary educa- tion	of secondary stage of education	general - sefondary stage school	pupil of profess- ional schools	of higher education	pupil of general education	of profes- sional colleges
	1	2	3	4	5	9	7
1950-51	21.7	156.9	151-1	196.6	409.9	353.7	779.3
1951-52	23.1	149.8	143.4	212.8	407.0	327.2	821.4
1952-53	24.7	151.5	145.5	200:5	407.4	368•8	9.967
1953-54	24.4	158.5	153.7	202.5	366.8	322.6	756.7
1954-55	25.2	154.3	154.5	230.0	410.5	359.6	747.2
1955-56	25.9	163.7	152.8	182.0	385.5	327.2	745.5
1956-57	26.7	163.7	161.3	193.3	447.1	367.0	726.7
1957–58	29.3	170.0	, 160.7	240.7	417.4	341.8	710.3
1958-59	29.3	178.6	167.2	249.0	436.7	391.4	800.0
1959-60	30.1	183.6	176.4	258.1	498.0	387.1	756.5
1960-61	31.2	190.9	178.8	284.4	525.7	458.3	813.2
Decennial growth rate	+43.8%	+21.6%	+18.3%	+44.6%	+28.3%	+29.5%	+4.4%

TABLE - VI

Teacher-Pupil Ratio
(Third level)

Year	Total number of pupils	Total number of teachers	Teacher-Pupil Ratio
	<u> </u>	2	3
1950-51	4,02,975	24,202	1:16.6
1951-52	4,49,917	26,351	1:17.1
1952-53	4,99,600	27,836	1:18.0
1953-54	5,52,400	30,040	1:18.3
1954-55	6,16,341	33,873	1:18.2
1955-56	6,79,219		
1956-57	7,47,943	41,430	1:18.1
1957-58	8,01,503	44,454	1:18.0
1958-59	8,73,360	49,408	1:17.5
19 <b>59-</b> 60	9,46,975	54,648	1:17.3
1960-61	9,84,601	61,154	1:16.1
Decennial growth rate	144.3%	152.6%	+3.0

Source: Col.1 - Same as Col.1 of Table IV.

cCol.2 - Same source as Col.1 of Table IV.

Co.3 - Number of pupils divided by the number of teachers.

TABLE - YYA

Teacher-Pupil Ratio

(General Education Universities and Colleges)

Year	Number of pupils	Number of teachers	Teacher-Pupil Ratio
	1	2	·
1950-51	3,41,444	18,397	1:18.5
1951-52	3,82,155	20,180	1:18.9
1952-53	4,24,193	20,794	1:20.4
1953-54	4,69,089	22,735	1:20.7
1954 <b>-55</b>	5,19,991	25,207	1:20.6
1955-56	5,72,006	27,309	1:20.9
1956-57	6,25,482	30,125	1:20.7
1957-58	6,59,408	31,506	1:20.9
1958-59	7,11,361	34,304	1:20.7
1959-60	7,50,403	37,829	1:19.8
1960-61	7,65,013	41,144	1:18.6
Decennial growth rate	124.5%	123.6%	-0.6%

TABLE - VYB
Teacher-Pupil Ratio

(Professional Higher Education )

Year	Numberof pupils	Number of teachers	Teacher-pupil Ratio
1950-51	54,150	4,901	1:11.04
1951-52	60,898	5,245	1:11.6
1952-53	67,406	6,066	1:11.8
1953-54	74,136	6,297	1:11.8
1954-55	84,451	7,476	1:11.3
1955-56	<b>93,</b> 898		
1956-57	1,07,172	9,675	1:11.1
1957-58	1,24,461	11,072	1:11.2
1958-59	1,39,876	12,969	1:10.8
1959-60	1,72,981	14,516	1:11.9
1960–61	1,94,291	17,361	1:11.2
Decennial growth rate	258.8%	254 • 2%	

TABLE - VIC

Teacher-Pupil Ratio

(Special Education Colleges)

Year	Number of pupils	Number of teachers	Teacher-Pupil Ratio
		2	3
1950-51	7381	904	1:8.2
1951-52	6861	926	1:7.4
1952-53	8001	976	1:8.2
1953-54	9175	1008	1:9.1
1954-55	11899	1190	1:9.9
1955-56	13315	۴	
1956-57	15289	1630	1:9.4
1957-58	17634	1876	1:9.4
1958-59	22123	2135	1:10.3
1959-60	23591	2303	1:10.2
1960-61	25297	. 2649	1:9.6
Decennial growth rate	242.7%	193.0%	

TABLE - VII

Total Number of Pupils According to Type of Education (Third Level)

Year	Total number of pupils (Third level)	Number of pupils (general education colleges & universities	Number of pupils (Profess-ional colleges)	Number of pupils (special colleges)	Pupils in general colleges to Total (Gol.1)	Pupils in professi- onal colle- ges to total(Col.1)	Fupils in special colleges to Total (Col.2)
	•	2	3	4	5	9	7
1950-51	4,02,975	3,41,444	54,150	7,381	84.7	13.4	1.9
1951-52	4,49,917	3,82,155	60,898	6,861	85.0	13.5	<b>1</b> •5
1952-53	4,99,600	4,24,193	67,406	8,001	84.9	13.5	1.6
1953-54	5,52,400	4,69,089	74,136	9,175	85.0	13.4	1.6
1954-55	6,16,341	5,19,991	84,451	11,899	84•4	13.7	1.9
1955-56	6,79,219	5,72,006	93,898	13,315	84.4	13.7	1.9
1956-57	7,47,943	6,25,482	1,07,172	15,289	83.3	14.3	2.4
1957-58	8,01,503	6,59,408	1,24,462	17,634	82.3	15.5	2.2
1958-59	8,73,360	7,11,361	1,39,876	22,123	81.4	16.1	2.5
1959-60	9,46,975	7,50,403	1,72,981	23,591	79.4	18.3	2.3
1960–61	9,84,601	7,65,013	1,94,291	25,297	7.77	19.7	2.6
Decennial growth rate	144.3%	124.5%	258.8%	242.7%			1 1

Table - VIII

Distribution of Students by Branch of Study

(Higher Education)

(In Percentages)

Name of the country and the year of statistics.	Humanities (including social sciences)	Education	Pure science	Engine- ering & Tech.	Wedi- cine	Agricul- ture	Others (Law, Fine Arts, and not specified)
	2	3	4	5	9	7	ω
DEVELOPED COUNTRIES							
Great Britain(1961-62)	39	4	25	15	15	7	1
Canada (1958)	45.5	8.3	13.0	16.0	2.6	3.0	4.5
France(1958)	26.6	9.0	27.3	6.9	18.2	1.0	19.4
Germany (FR)(1958)	35.2	0.3	14.2	12.8	14.5	2.2	20.8
UNDERDEVELOPED COUNTRIES	Si						
India (1959-60)	50.7	3.8	24.4	3.9	4.1	1.2	11.9
U.A.R. (1958)	44.7	8.2	4.7	8.3	9.5	6.2	18.4
Iraq (1958)	38.2	2.1	12.1	9.4	15.6	2.0	17.6
Philippines (1957)	48.3	11.1	9•0	15.4	10.0	4.1	10.5
والمالية وال							

Sources: Great Britain: See Table 10, p.26 - Robbins Report on Higher Education.

Branch of Study", p.56 - Basic Facts and figures, 1960, UNESCO. India - Education in India - Vol. II (1959-60), Winistry of Education, Govt. of India. See Table 8 - "Higher Education: distribution of studies by All other countries:

Table - IX

Teacher-Pupil Ratio
(Higher Education)

Name of the country and the year of statistics	Teacher-pupil ratio
DEVELOPED COUNTRIES	
France (1960)	34.7
Swedden (1961)	20.8
Germany (FR) (1961)	13.2
U.S.A. (1960)	13.0
UNDERDEVELOPED COUNTRIES	
Phillippines (1960)	26.6
U.A.R. (1961)	23•2
Iraq (1961)	20.6
India (1960-61)	16.1

Sources: U.S.A., Based on <u>Table 6</u> "University Student/Staff Ratio - 1960", Robbins Report on Higher Education.

France, Sweeden, Phillippines, U.A.R. and Iraq - Based on "Educational Statistics" - International Year Book of Education - Vol.XXV, 1963. International Bureau of Education, Geneva.

India - Based on Table No.VI.

<u>Table - 1</u>

<u>Index Number of Teachers' Salary</u>

(Third Level of Education)

Year	Growth of salary expenditure in current prices (%.million)	Total Number of teachers	Average annual salaryper-teacher (B.)	Salary index (1950- 1951= 100)	Salary expenditure in constant salary-perteacher (B. million)
1950-51	73.7	24,202	3045.2	100.0	73•7
1951-52	87.5	26,351	3320.9	109.5	79•9
1952 <del>-</del> 53	97.2	27,836	3491.8	114.6	84.8
1953-54	104.3	30,040	3472.3	114.2	91.3
1954-55	115.7	33,874	3415.7	112.2	103.1
1955-56	128.4				,
1956-57	143.7	41,430	3468.5	113.9	126.1
1957-58	162.4	44,454	3655.4	120.3	135.0
1958-59	180.0	49,408	3643.1	119.6	150.5
19 <b>9</b> 9-60	215.4	54,648	3941.6	129.4	166.5
1960-61	242.3	61,154	3962.2	130.1	186.2
Decennial growth rate	228.8%	152.6%	30.1%	30.1%	152.6%

Table - 2

Index Number of Teachers' Salary (General Education Universities and Colleges)

Year	Salary expenditure in current prices (R.million)	Number of teachers	Average annual salary per- teacher (R.)	Salary index (1950-51=100)	Salary expenditure in constant salary-per teacher (E.million)
		2	3	4	5
1950-51	52.9	18,397	2875.5	100.0	52.9
1951-52	64.2	20,180	3181.3	110.6	58.4
1952-53	71.3	20,794	3428.8	119,22	59.8
1953-54	75.7	22,735	3329.6	115.8	65.4
1954-55	82.7	25,207	3280.8	114.1	72.5
1955-56	92.2	27,309	3379.9	117.5	78.5
1956-57	103.7	30,125	3442.3	119.7	9.98
1957-58	113.7	31,506	3608.8	122.2	93.4
1958-59	124.2	34,304	3620.5	125.9	7.86
1959-60	136.3	37,829	3602.8	125.3	109.0
1960–61	160.7	41,144	3905.8	135.8	118.3
Decennial growth rate	203.0%	123.6%	35.8%	35.8%	123.6%

Table - 3

Index Number of Teachers' Salary (Professional Higher Education)

Year	Salary expenditure in current prices (B.million)	Number of teachers	Average annual salary per teacher (B.)	Salary Index (1950-51=100)	Salary expenditure in constant salary-perteacher (R. million)
	-	2	3	4	5
1950-51	19.3	4901	3938.0	100.0	19.3
1951-52	21.8	5245	4166.3	105.5	20.6
1952-53	24.3	9909	4005.9	101.2	24.1
1953-54	26.9	6297	4271.8	108.4	24.8
1954-55	30.8	7476	4119.8	104.6	29.4
1955-56	33.5	3			
1956-57	36.9	9675	4020•7	102.1	36.1
1957-58	44.9	11072	4055.3	102.9	43.6
1958-59	52.3	12969	4025.0	102.2	51.1
1959-60	64.2	14516	4422.7	112.3	57.1
1960–61	75.9	17361	4371.8	111.0	0*69
Decennial growth rate	293.3%	254.2%	11.0%	11.0%	257.5%

able - 4

Index Number of Teachers' Salary (Special Education Colleges)

Year	Salary expenditure in current prices (R.million)	Number of teachers	Average annual salary per teacher (B.)	Salary Index (1950-51=100)	Salary expenditure in constant salary per teacher
1950-51	1.5	904	1654.8	100.0	1.5
1951–52	7·5	926	1619.8	6.76	1.5°
1952-53	1.6	916	1639.3	9.66	1.6
1953-54	1.7	1008	1686.5	100.3	1.7
1954-55	2.2	1190	1848.8	111.7	2.0
1955-56	2.7				
1956-57	3.1	1630	1901.8	114.9	2.7
1957-58	3.8	1876	2025.6	122.4	3.1
1958-59	4.5	2135	2107.6	127.4	3.5
1959-60	4.9	2303	2127.6	128.6	3.8
1960–61	5.7	2649	2151.7	129.9	4 • 4
Decennial growth∵rate	260.0%	19.3%	29.9%	29.9%	193.3%