PART IV

CONCLUSIONS

Chapter VIII

CONCLUSIONS

The idea that human beings are the wealth of nations was first coined by Adam Smith in his book, "Wealth of Nations." The idea did not catch up though Irving Fisher pleaded for the all inclusive concept of capital. This might be due to the powerful influence of the writings of Marshall at that time and the later writings of Keynes. Marshall rejected the idea of treating human beings as capital, as there was an absence of market place for this type of capital unlike physical capital. According to him promise of higher future earnings can not be used as colateral for financing education. In Keynes' writings on the other hand, education as a factor in economic growth found no place as expenditure incurred by households on anything, including expenditure on education, is consumption and not investment expenditure.

Adam Smith's idea was revived in early 1960's by the Human Capital revolution pioneered by T.W. Schultz. Since then till today the idea has gained more strength, and probably for many more years to come the place of human capital in economic development will go unchallanged. Two recent reports - Human Development Report (1990) and World Development Report (1991) are a pointer in this

direction. Now a days we do not talk of Development strategies simply, but of Human Development Strategies for the 1990's. Notwithstanding, the recent emphasis on human development the world around, no country seems to have neglected human development. India is no exception. Since the launching of economic planning in India, through growing expenditures on education and health we have been trying sincerely to promote human development.

Measuring human development is not an easy task. Human Development Report says the following on measurement of human development. "This report suggests that the measurement of human development should for the time being focus on the three essential elements of human life-longevity, knowledge and decent living standard." To us it seems and rightly so, that the human development is possible by the formation of human capital through expenditures on education and health. The human capital formed this way can best be taken as an indicator of human development. Human development is measured in our study in terms of the growth and distribution of human capital during planning in India. i.e. from 1951 to 1980.

Enrolment ratios may not be a reliable indicator of human development as, sizeable proportion of those enrolled dropout without completing a given level of education.

8.3 Actual educational attainment i.e., actual number of years of schooling completed by a person is a better index of human development. However, the problem we faces is that of comparison. Though, a male and a female have actually acquired, let us say 11 years of schooling, it is not necessary true to say that they have invested equal amount in acquiring 11 years of schooling. Males might have invested more than females and thus the stock of human capital expressed in money terms embodied in males might be greater than that embodied in females. This might also be true for the stock of human capital embodied in rural persons vis-a-vis urban persons and that embodied in SC/ST population vis-a-vis non-SC/ST population. So equal education in terms of the same years of schooling acquired by persons of different categories does not tantamount to equal investment.

So in estimating the stock of human capital formed through investment in education, we have taken the actual years of schooling completed by a person, which is then multiplied by the factor or resource cost of education actually incurred to acquire that amount of schooling.

The structure of the resource or factor cost of education consist of (a) Public (government) expenditure on education. This is the recorded expenditure on education as it is available in a published form, (b) Private expenditure on education. This includes:

8.4. (i) Fees, again the recorded component of cost as information as fees - tuition, examination and others - is available in a published form,

(ii) Non-tuition private costs : This is unrecorded part of the total cost. A survey locally of the sampled students of the Faculty of Commerce was conducted to collect information on it.

(iii) Earnings foregone or opportunity cost of education i.e. the income foregone by a school going person who has preferred to go to a school rather than accepted a paid work.

(iv) Interest foregone by a household, if alternative to investment in education is investments in interest yielding securities and,

(c) Implicit cost of education. It is the imputed cost of buildings and other assets.

The factor or resource cost of education is then adjusted for such factors as (i) wastage and stagnation (ii) unemployment among educated persons, and (iii) brain drain.

Thus, we present two estimates of the stock of human capital (educational capital) formed through investment in education adjusted stock and unadjusted stock of human capital. These stocks are estimated, as far as possible, seperately for educated population and educated labour force classified by sex, region and caste for the four bench mark

years 1951, 1961, 1971 and 1980.

Stock of human capital formed through investment in health can not be similarly estimated as, health programmes increase the number in the working force as well as the quality of the labour product. Education chiefly affects quality of the producers. Units of quality change through human capital formation by health programmes can not be defined as tidely as units of education in the labour force. Health outlays i.e. health investment improve the labour products. Estimates of health capital in our study is in terms of addition to the labour product.

Stocks of both the types are expressed at current and constant prices. In our work, with the help of the estimates of the stock of human capital we have tried to analyse the issues pertaining to the growth and distribution of human capital.

How fast has the stock of human capital grown relative to say, the stock of physical capital and National Income? Has the observed growth in the stock of human capital changed the quality of the labour force? What about the relative participation rates of the educated and uneducated labour force? What about the distribution of this stock as between males and females, rural and urban areas and SC/ST and non SC/ST population? Does it exhibit a tendency towards better distribution?

The entire study is divided into four parts.

Part one consisting of 2 chapters is on Introduction and Educational attainment of India's population and Labour force 1951-1981. Part two consists of two chapters on Costs of Education, Public Expenditure on Education and Private Expenditure on Education. Part three consists of three chapters as, Stock of Human Capital (Educational Capital), Stock of Human Capital and Its Distribution by sex, region, caste and investment in health. Part four is on main findings of the study. Main findings of our work are narrated below :

(1) Social demand for education has phenomenally increased during plan period not in terms of enrolment ratios but in terms of actual educational attainment both of the population and the labour force. In 1951 over 6 percent of our population had formal schooling (excluding literate population). In 1981 the proportion was as high as 25 per cent. On the other hand, of the total labour force in 1961, 10 per cent had formal schooling, whereas, in 1981 the proportion was 33 per cent. Thus, the proportion of labour force with formal schooling is higher than that of the population. So our labour force is more educated than the population as a whole. The proportion of labour force with 'matriculation and above' of 2.4 per cent in 1961 went upto 11 per cent in 1981. The trend in these proportions show that

the skill level of the labour force has improved since independence in India.

(2) Our analysis of educational attainment also shows that the educational distance by sex and region and also to an extent by caste has narrowed. This observation holds true seperately both for population and labour force. In 1961, the proportion of educated male labour force was six times the female educated labour force, whereas, in 1981 the difference narrowed down to four times. Similarly the urban educated labour force which was 4.6 times the rural educated labour force in 1961, came down to 2.5 times in 1981. So the tendency of the narrowing of educational distance is quite clear.

Whether such a tendency in the behaviour of stock of educational capital can be observed or not becomes equally interesting i.e, whether narrowing of educational attainment gets reflected in the narrowing of the variation in the stock of human capital embodied in male and female and rural and urban labour force.

(3) Investment in education benefits both private individuals and society at large. So, education is financed by both. Thus, the formation of human capital is influenced by both. What role has state played in India in the formation of human capital vis-a-vis that played by the households? The answer depends on the

3.8 relative shares of the government and the private households in the total resource or factor cost of education. The term factor cost already defined includes the opportunity cost of education. It's share in the total factor cost of education hoavers around 2/3rds. This component in the literature is regarded as the private cost of education. Naturally then private cost of education forms a preponderant part of the total factor cost. At all levels of education the private cost of education inclusive of earnings foregone, give accounts for more than 90 per cent of the total factor cost of education. In that case the private individuals as investors in education have a major say in the formation of human capital. Even after excluding the opportunity cost of education from the total factor cost of education, the share of public cost works out to around 1/5th to 2/5th. Even then the private individuals' say in the formation of human capital is as high as 60 per cent. Earlier studies have put their respective shares in the ratio of 50:50. However, it should be kept in mind that the share of the State in total factor cost of education has persistently risen over time. And its policy of subsidising education of the weaker sections must have influenced the pace and the course of the formation of human capital. Thus, the formation of human capital in India seems to have

8.9 been influenced both by the decisions of the State and the private households. This finding becomes relevant in the context of the question of the growth and distribution of the stock of human capital also.

(4) Estimates of the stock of human capital (educational capital) are given in chapter V. The unadjusted stock of educational capital embodied in population gives a steady increase from decade to decade in nominal terms. During the first decade of planning the stock increased by about 14 per cent per annum. In the second and the third decade of planning the growth rates were 30 per cent and 35 per cent respectively. The behaviour of the stock of human capital embodied in labour force has also exhibited the similar growth trend. For the period as a whole i.e. from 1950-51 to 1979-80, the stock of human capital embodied both in population and labour force gives an annual increase of 134 and 141 per cents respectively. However, in absolute terms the stock of human capital embodied in labour force has throughout remained approximately 1/2 of the stock embodied in our population.

(5) The adjusted stock of human capital embodied both in population and the labour force is around six to eight times the unadjusted stock of human capital. By level of education, at the elementary education level, the difference between the two estimates work out to 8 to 9 times; at the secondary education level it is

six times and at the higher education level it is about three times. This large difference between the two estimates i.e. unadjusted and the adjusted stock of human capital gives an idea of the cost effectiveness of the whole system of education. It seems that the formation of human capital through investment in education has been a very costly affair. Of the three factors namesly wastage and stagnation, educated unemployment and brain drain, the first factor has mostly influenced such a big hike in the absolute value of the adjusted stock of human capital. This also reveals that the internal efficiency of the education system is pitiably low. This raises the question : should we allocate more resources to this sector or should we concentrate on better utilization of resources already invested in education? Along with the higher allocation of resources the question of raising the level of internal efficiency of the education system is rather more relevant in the context of the heavy resource crunch.

(6) The adjusted real human capital stock was 16 per cent higher thant that of the adjusted nominal stock in 1950-51. In 1970-71, on the other hand, the adjusted real stock of human capital was just 56 per cent (a little more than one half) of the adjusted nominal stock. Similarly, in 1979-80 the adjusted real stock was just 25 per cent of the adjusted nominal stock. Thus, in 1970-71 less than 50 per cent of the increase in

real stock of human capital and in 1979-80 75 per cent of the increase in the stock was due to the phenomenon called inflation. The simple average annual rate of growth of the adjusted real stock during 1950's was 8 per cent, during 1960's around 18 per cent and it was just 6 per cent during 1970's. The corresponding decenial growth rates of adjusted nominal stock were 10.9 per cent, 40.3 per cent and 26.8 per cent respectively.

(7) In real terms the adjusted stock of human capital has increased at a faster rate than the increase in the real stock of physical capital as well as increase in real national income. So the growth of real stock of human capital has outstripped the growth of both the physical capital and national income.

(8) What is the impact of this improvement in the stock of human capital on the skill level of population and the labour force? We have noticed that the relative representation of persons with eight years of elementary schooling in the total stock of human capital during the plan period has declined from 61 per cent in 1950-51 to 45 per cent in 1979-80. This means that the relative representation of the persons with higher level of education has improved from 39 per cent in 1950-51 to 55 per cent in 1979-80. The relative shares of the persons with completed schooling beyond elementary education in the labour force of 44 per cent

.12 in 1950-51 and 61 per cent in 1979-80 show that the qualitative change on account of the formation of human capital is relatively faster in the labour force than that in the population as a whole. Thus, there is definitely an improvement in the skill level of persons in our economy.

It has also been observed that the participation rate of educated persons is higher than that of the aggregate labour force participation rate. In 1960-61 it was higher by 13 per cent, whereas, in 1979-80 it was higher by 1/3rd. Not only this, but participation rates vary by level of education attained. The participation rate of 65.2 per cent of the persons with college/university education is the highest. Next is the persons with elementary school education. Their participation rate worked out to 52 per cent.

(9) We have estimated skill intensity in terms of the real human capital per worker. The index number of real human capital per worker was 418 in 1979-80 taking 1950-51 as base. So the skill intensity seems to have increased by more than three times. The physical capital intensity similarly estimated gives roughly two times increase. So the skill intensity appears to have increased at a faster rate than the increase in

13 physical capital intensity. This observation shows that these two types of intensities are complementary. Our observation is in conformity with the theoretical premise that they are complementary in nature. The above inference can be used to refute the argument that the increase in the labour productivity is by and large due to the increase in the availability of physical capital per worker. It is equally true that the observed improvement in the productivity of labour at the same time can be ascribed to the increase in the skill intensity. Consequently, the real wage of workers have also increased albeit, slowly than the increase in labour productivity. However, this leads us to believe that the motive force behind the investment in education is mainly economic in nature.

(10) The formation of human capital through expenditure on health is also estimated. Like expenditure on education, expenditure on health is also viewed as investment expenditure. This investment raises the capabilities of persons as productive agents. So, while estimating the human capital formed through investment in health we have simply estimated the addition to the labour product. The share of health expenditure incurred on the labour force is found to be as high as their share in the total population. Assuming that there is no investment in health, the labour force would

8.14 have grown during 1951-1961 and 1971-1981 by the same rate of 13.3 per cent for the decade 1941-51. Then, the labour force in 1961 would be 157.5 millions as against the census figure of 188 millions. So the net addition to the labour force is of the order of 18.5 millions. To express it in real terms we have multiplied the figure of 18.5 millions additional workers in the labour force by the real per capita health expenditure. This gives the magnitude of health capital of Rs. 196 millions in 1960-61. Similar exercise has given us the health capital of Rs.550 million in 1979-80, an increase of nearly three times over 20 years period. Thus, health capital seems to have increased in real terms as fast as the educational capital. So alongwith the improvement in the educational stock of labour force the health stock has also improved. Both these improvements must have ultimately influenced the productivity of labour in India.

(11) The pace of formation of both the types of capital has far exceeded the growth of real national income in India. As a result the capital/output ratio whether physical or human capital has tended to increase implying thereby low total factor productivity. The total factor productivity in India just accounts for 37 per cent of that in the U.K. and only 20 per cent

.15 of that in the U.S.A. in the year 1975. Thus, apart from making efforts at forming further these two types of capital, it is time to divert our efforts to make efficient deployment of the existing stocks of these two types of capital.

(12) Does equal educational attainment imply equal investment? Earlier we have observed that the educational distance between male and female has narrowed. Even the trend in the formation of educational capital by sex during plan period in India shows that the formation of human capital was much faster (6.4 times) in case of females than in case of males (3.5 times). As a result the share of females in the total stock of human capital has improved from around 12 per cent in 1950-51 to 19 per cent in 1979-80. However, from this observation it cannot be inferred that the quality of the stock of human capital embodies in females is as high as that found in males. If the quality of the said stock depends on the amount invested in education, then the quality of the stock embodied in females is quite low as we have invested only 1/2 of what we have invested in the education of males. The reason for such a difference in the investment in education by sex is largely on account of the difference in the unrecorded non-tuition private cost of education. Households spend on girls' education

16 just 1/2 of what they spend on boys' education. Thus, we are investing less in the schooling of girls. This reflects the deep rooted social bias against the education of girls. Thus, it seems there prevails in India, some kind of human capital discrimination against females.

Unfortunately, the share of females in the active stock of human capital (human capital embodied in labour force) is in the range of 4 per cent to 5 per cent only. Around 16 per cent of the educated women are actively engaged in the productive activity as against 65 per cent of males. In this context importance of female education should be judged more by their contribution to non-market production as against market production.

Of the two factors influencing the distribution of the stock of human capital namely population growth and investment, it is the investment factor that is mainly responsible for the observed distribution of the stock of human capital by sex. The growth rate of male and female population in India has been identical and the sex ratio has hardly altered during the period of study.

(13) The distribution of the stock of human capital between rural and urban areas presents a different

17 story. The share of rural population and rural labour force in the human capital stock (Total as well as active) has increased. As a result, the distribution of the stock which was two times in favour of urban areas in 1960-61, came down to 1.5 times in 1979-80. Though, the distribution of the stock of human capital between regions seems to have improved in favour of rural areas, the quality of the stock embodied in rural population and labour force seems to be low relative to that of the urban population and labour force. As on average urban people have invested more in their education.

(14) Real per capita stock of human capital embodied in rural population in 1960-61 was 10 per cent of the real per capita human capital stock embodied in urban population. In 1979-80 the rural people accounted for 20 per cent of the real per capita human stock acquired by the urban people. This improvement has not reflected in the relative growth of percapita real Net Domestic Product. On the contrary the difference between the rural per capita real NDP and the urban percapita real NDP has widened between 1951-53 and 1975-83. This has happened on the top of a slightly higher participation rate of educated rural labour force. The observed improvement in the share of rural population in the stock of

human capital is mainly due to the population factor. The growth of rural population has been much slower than that of urban population. Does it imply that with reference to the investment in education in rural areas we have yet to attain the take off stage? If this were so then the goal of regional equality could be achieved by reallocating more resources in favour of rural areas.

(15) Of the three components of costs viz., Public, Private and earnings foregone, it is the private non-tuition cost that affects the quality of the stock of human capital embodied in the SC/ST and non-SC/ST population. Public expenditure on education by caste rarely varies. In the computation of earnings foregone we have taken the position that SC/ST and non-SC/ST people forego the same amount of earnings. The difference in the non-tuition cost is more than two times at each level of education in favour of non-SC/ST students. The human capital stock embodied in non-SC/ST population is 15 to 20 times that of SC/ST population. Such a large difference can be accounted for by the faster growth of SC/ST population relative to non-SC/ST population. To the extent the quality of the stock is influenced by private non-tuition cost, the quality of the stock possessed by the SC/ST population is relatively inferior.

19 Three things pertaining to the growth and distribution of the stock of human capital in India since independence clearly emerge from our study.

First, the human capital formed - education as well as health - has increased rapidly, than the increase in physical capital formation and national income. The rapid increase in the stock of human capital is on account of the three adjustment factors chosen by us. Such a striking difference between the unadjusted and the adjusted stock of human capital brings to light one important fact that the formation of human capital has been a very costly affair. This further confirms wide spread belief that the internal efficiency of the education system is very low. Raising of this efficiency deserves a priority in any policy programmes, especially when the resources picture is very bleak.

Second, the quality of the stock of human capital varies by sex, region and caste. Equal educational attainment can not be taken as equal investment. This raises the basic question, whether, it is human capital discrimination against females and rural people that is more relevant or the labour market discrimination. Particularly with reference to rural areas though their share in the stock of human capital has improved and though the participation rate is also not unfavourable, the gap between real per capital NDP between rural and urban areas has widened. This suggests that we have yet to attain the critical

minimum investment in education in rural areas to achieve the objective of regional equality. So on the one hand we have to raise the efficiency of the whole system and on the other hand we have to reallocate larger resources in favour of rural areas and females. Third, the trend in human capital/output ratio shows that we require more units of human capital to produce given output. Even the unadjusted human capital/output ratio shows that more units of human capital are required to produce a given level of output. The ratio which was 0.32:1 in 1950-51 rose to 1.65:1 in 1979-80. This raises the question regarding the deployment of the stock of human capital. These are some of the issues to be probed in detail in future.

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Table : A-1

Factor Cost of Education Per Pupil Per Annum at

Elementary Level of Education

(in Rs.)

Year	Public Cost	Private Cost				Total Private Cost (3+4+5+6)	Total Factor/ Resource/Social/ Cost (2 + 7)
		Tuition Fee	Non-Tuition cost	Interest Foregone	Earnings Foregone		
1	2	3	4	5	6	7	8
1950-51	19.00 (5.5)	2.00 /0.67	80.00 /24.87	3.00 /0.97	238.00 /73.77	323 (94.5) /100.07	342 (100.0)
1960-61	26.00 (5.9)	2.00 /0.57	98.00 /24.07	5.00 /1.27	303.00 /74.37	408 (94.1) /100.007	434 (100.0)
1970-71	63.00 (10.11)	3.00 /0.57	147.00 /26.27	11.00 /2.07	399.00 /71.37	560 (89.89) /100.007	623 (100.0)
1979-80	154.00 (9.98)	4.00 /0.37	296 /21.37	37.00 /2.77	1052.00 /75.77	1389 (90.02) /100.07	1543 (100.0)

Source : Col : 2 and 3 Education in India Vol I and II for the respective years

Col : 4 and 5 Derived from sample survey of M.S. University Students

Col : 6 Taken from Table 3.V

(Figures in paranthesis are percentages)

Table : A-2

Factor Cost of Education Per Pupil per Annum at
Secondary Level of Education

(Rs.)

Year	Public Cost	Private Cost				Total Private cost 3 to 6+	Total Factor Resource/Social Cost 2+7
		Tuition Fee	Non-Tuition cost	Interest Foregone	Earnings Foregone		
1	2	3	4	5	6	7	8
1950-51	28.00 (2.6)	24.00 /2.3/	176.00 /17.1/	6.00 /0.6/	820.00 /80.0/	1026 (97.4) /100.0/	1054 (100.0)
1960-61	61.00 (4.16)	22.00 /1.6/	215.00 (15.3)	10.00 (o.7)	1157.00 /82.4/	1404 (95.84) /100.0/	1465 (100.0)
1970-71	123.00 (4.41)	28.00 /1.1/	324.00 (12.3)	22.00 (o.8)	2239.00 /85.7/	2613 (95.59) /100.0/	2736 (100.0)
1979-80	304.00 (4.6)	38.00 /0.6/	652.00 /10.5/	68.00 /1.1/	5443.00 /97.7/	6201 (95.4) /100/	6505 (100.0)

Source : Same as in Table A-1

(Figures in paranthesis are percentages)

Table : A-3

Factor Cost of Education per Pupil Per Annum at Higher Level of Education

Year	Public Cost Rs.	Private Cost (Rs.)				Total Private Cost 3 to 6+	Total Factor/ Resource/ Social Cost 2+7
		Tuition Cost	Non-Tuition cost	Interest Foregone	Earnings Foregone		
1	2	3	4	5	6	7	8
1950-51	201.00 (9.3)	189.00 /9.7	333.00 /17.1	16.00 /0.8	1406 /72.3	1944 (90.7) /100.0	2145 (100.0)
1960-61	217.00 (9.09)	167.00 /6.2	407.00 (15.0)	24.00 (0.9)	2112 (78.0)	2710 (90.9) /100.0	2981 (100.0)
1970-71	482.00 (10.3)	164.00 /3.9	613.00 (14.7)	66.00 (1.6)	3334 (79.8)	4177 (89.7) /100.0	4659 (100.0)
1979-80	1169.00 (10.6)	260.00 /2.7	1235.00 /12.6	154.00 /1.6	8142 /83.1	9791 (89.4) /100.0	10960 (100.0)

Source : Same as in Table A-1

(Figures in paranthesis are percentages)

Table : B-1

Factor Cost of Education Per Pupil Per Annum by Sex
at Elementary Level of Education

(in Rs.)

Year	Public Cost (Rs.)		Private Cost (Rs.)							
			Tuition Cost		Non-Tuition cost		Interest Foregone		Earnings Foregone	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	2	3	4	5	6	7	8	9	10	11
1950-51	24	7	2	1	94	70	3	2	238	95
1960-61	35	7	2	1	115	85	5	4	303	121
1970-71	91	14	3	1	176	129	13	10	399	239
1979-80	226	33	8	1	350	259	44	32	1052	631

contd...

Table : B-1 contd...

Year	Total Private Cost		Total Factor Cost	
	Male 4+6+8+10	Female 5+7+9+11	Male 2+12	Female 3+13
1	12	13	14	15
	337	168	361	175
	425	211	460	218
	591	379	682	393
	1454	923	1680	956

Source : Col. 2, 3, 4, 5 Education in India Vol. I & II
Col. 6, 7, 8, 9 Sample Survey of M.S. University students.
Col. 9, 10 Table 3.V

Table : B-2

Factor Cost of Education Per Pupil Per Annum by Sex

at Secondary Level of Education

Year	Public Cost (Rs.)		Private Cost (Rs.)							
			Tuition Cost		Non-Tuition cost		Interest Foregone		Earnings Foregone	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	2	3	4	5	6	7	8	9	10	11
1950-51	28	28	27	20	225	130	8	5	820	492
1960-61	58	38	27	13	275	159	13	8	1157	694
1970-71	148	67	33	14	414	240	28	16	2239	1343
1979-80	390	139	49	18	835	483	87	49	5443	3266

contd....

Table : B-2 contd...

Year	Total Private Cost (Rs.)		Total Factor Cost (Rs.)	
	Male (4+6+8+10)	Female (5+7+9+11)	Male (2+12)	Female (3+13)
1	12	13	14	15
	1080	650	1108	678
	1472	874	1540	912
	2714	1613	2862	1680
	6414	3816	6804	3955

Source : As per Table No. B-1.

Table : B-3

Factor Cost of Education per Pupil per Annum by Sex at Higher Level of Education

Year	Public Cost (Rs.)		Private Cost (Rs.)							
			Tuition Cost		Non-Tuition Cost		Interest Foregone		Earnings Foregone	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	2	3	4	5	6	7	8	9	10	11
1950-51	213	106	197	49	416	253	19	9	1406	844
1960-61	278	198	200	24	509	310	30	14	2112	1267
1970-71	576	160	161	13	767	466	61	31	3334	2000
1979-80	1457	357	333	81	1544	939	193	105	8142	4885

contd...

Table : B-3 contd...

Year	Total Private Cost (Rs.)		Total Factor Cost (Rs.)	
	Male (4+6+8+10)	Female (5+7+9+11)	Male (2+12)	Female (3+13)
1	12	13	14	15
	2038	1155	2251	1261
	2851	1615	3129	1813
	4323	2510	4899	2670
	10212	6010	11669	6367

Source : As per table No. B-1.

Table : C-1

Factor Cost of Education Per Pupil Per Annum at Elementary Level of Education Region-wise

Year	Public Cost (Rs.)		Private Cost (Rs.)							
			Tuition Cost		Non-Tuition Cost		Interest Foregone		Earnings Foregone	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
1	2	3	4	5	6	7	8	9	10	11
1950-51	17	27	2	4	47	80	2	3	116	360
1960-61	25	30	1	5	57	98	3	5	126	480
1970-71	57	85	1	9	86	147	6	12	198	600
1979-80	128	239	4	9	173	296	22	38	400	1704

contd...

Table C-1 contd...

Year	Total Private Cost (Rs.)		Total Factor Cost (Rs.)	
	Rural (4+6+8+10)	Urban (5+7+9+11)	Rural (2+12)	Urban (3+13)
1	12	13	14	15
	167	447	184	474
	187	588	212	618
	291	768	348	853
	599	2047	727	2286

Source : As per Table No. B-1.

Table : C-2

Factor Cost of Education Per Pupil per Annum at Secondary Level of Education - Region-wise

Year	Public Cost (Rs.)		Private Cost (Rs.)							
			Tuition Cost		Non-Tuition Cost		Interest Foregone		Earnings Foregone	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
1	2	3	4	5	6	7	8	9	10	11
1950-51	15	40	11	40	99	176	3	7	820	820
1960-61	49	75	6	40	121	215	5	11	1157	1157
1970-71	109	137	21	33	182	324	13	23	2239	2239
1979-80	240	381	28	50	366	652	39	69	5443	5443

contd...

Table : C-2 contd...

Year	Total Private Cost (Rs.)		Total Factor Cost (Rs.)	
	Rural (4+6+8+10)	Urban (5+7+9+11)	Rural (2+12)	Urban (3+13)
1	12	13	14	15
	933	1043	948	1083
	1283	1423	1332	1498
	2455	2619	2564	2756
	5876	6214	6116	6595

Source : As per Table No : B-1

Table : C-3

Factor Cost of Education Per Pupil per Annum by

Region at Higher Level of Education

Year	Public Cost (Rs.)		Private Cost (Rs.)							
			Tuition Cost		Non-Tuition Cost		Interest Foregone		Earnings Foregone	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
1	2	3	4	5	6	7	8	9	10	11
1950-51	78	243	20	247	210	333	7	18	1406	1406
1960-61	69	381	20	276	257	407	12	29	2112	2112
1970-71	275	514	80	163	386	613	31	51	3334	3334
1979-80	878	1244	148	296	778	1235	95	158	8142	8142

contd...

Table : C-3 contd...

Year	Total Private Cost (Rs.)		Total Factor Cost (Rs.)	
	Rural (4+6+8+10)	Urban (5+7+9+11)	Rural (2+12)	Urban (3+13)
1	12	13	14	15
	1643	2004	1721	2247
	2401	2824	2470	3205
	3831	4161	4106	4675
	9163	9831	9950	11194

Source : Same as in Table No.B-1.

Table : D-1

Factor Cost of Education per Pupil Per Annum
at Elementary level of Education by Caste, SC/ST

(Rs.)

Year	Public Cost Rs.	Private Cost (Rs.)			Total Private Cost (Rs.) (3+4+5)	Total Factor Cost (Rs.) (2+6)
		Non-Tuition Cost (Rs.)	Interest Foregone	Earnings Foregone		
1	2	3	4	5	6	7
1950-51	19	41	1	238	280	299
1960-61	26	50	2	303	355	381
1970-71	63	76	5	399	480	543
1979-80	154	153	18	1052	1223	1377

Source : Same as shown in Table No. A-1.

Table : D-2

Factor Cost of Education per Pupil Per Annum
at Secondary Level of Education SC/ST

(Rs.)

Year	Public Cost Rs	Private Cost (Rs.)			Total Private Cost (Rs.) (3+4+5)	Total Factor Cost (Rs.) (2+6)
		Non-Tuition cost	Interest Foregone	Earnings Foregone		
1	2	3	4	5	6	7
1950-51	28	68	2	820	890	918
1960-61	61	83	3	1157	1243	1304
1970-71	123	125	8	2239	2372	2495
1979-80	304	252	25	5443	5720	6024

Source : Same as shown in Table No. A-1.

Table : D-3

Factor Cost of Education Per Pupil Per Annum

at Higher Level of Education SC/ST

Year	Public Cost Rs.	Private Cost (Rs.)			Total Private Cost (Rs.) (3+4+5)	Total Factor Cost (Rs.) (2+6)
		Non Tuition Cost	Interest Foregone	Earnings Foregone		
1	2	3	4	5	6	7
1950-51	285	160	5	1406	1571	1856
1960-61	385	196	8	2112	2316	2701
1970-71	684	295	19	3334	3648	4332
1979-80	1660	594	61	8142	8797	10457

Source : As in Table No.A-3

PROFORMA QUESTIONNAIRE

FOR RESEARCH PURPOSE ONLY

PRIVATE COSTS OF EDUCATION 1986-87

NAME OF THE STUDENT :

RESIDENTIAL ADDRESS :

CASTE :

RELIGION :

CLASS STUDYING :

1. FAMILY BACKGROUND

Sr. No.	SEX M	SEX F	AGE	OCCUPATION	ANNUAL INCOME (Rs.)	SCHOOLING COMPLETED	SCHOOLING IN PROGRESS
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							

2. FINANCIAL AID RECEIVED FOR EDUCATION
NUMBER OF RECEIPENTS OF AID IN YOUR FAMILY : ( )
TYPE OF AID ANNUAL AMOUNT RECEIVED PER CANDIDATE (Rs.)

1. College University Free Studentship	1	2	3	4	5	6	7
2. Merit Scholarship							

3. Loan Scholarship
4. Employer's Contribution
5. Charity Trust
6. B.C./E.B.C./O.B.C./
7. Book Aid
8. Any other

EXPENDITURE ON EDUCATION (ANNUAL IN Rs.) 1986-87

EXPENDITURE

Sr. No.	Tuition Fees	Exam. Fees	Other Fees	Books	Stationary	Hostel Room Rent
1	2	3	4	5	6	7
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						

contd...

Proforma contd...

Sr. No.	Mess Bill	Refresh-ment	Private Tuition	Local Trans-port	Up Country Tra-nsport	Misc.	Total
1	8	9	10	11	12	13	14
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							