CHAPTER IX

SUMMARY AND CONCLUSIONS

Education is such an important factor in the cultural life of a country that economic factors alone cannot be made a paramount consideration. However, economic factors do define the limits of possibilities in particular directions. Education has important implications for productivity, efficiency and distribution of income. In the foregoing chapters of this study, we have attempted an analysis of the costs and benefits of higher education in Tamil Nadu.

The elitist nature of Higher Education

The study shows that higher education in Tamil Nadu, as elsewhere in India, still continues to cater only to a small percentage of the relevant age group of population. In 1975-76 the percentage of the age -

group of population 17-23 that benefited from higher education was only 3.5 per cent in Tamil Nadu and 4.5 per cent in India as against the corresponding figures of 3.2 and 3.4 per cent each in 1973-74. The highly elitist nature of higher education in Tamil Nadu and India is clear from the figures. Further still, compared to the period of 1950-51 to 1969-70, there has been a slackening in the rate of growth of enrolment of students in higher education in Tamil Nadu and India during 1970-71 to 1976-77. Against the average rate of growth of enrolment of 8 to 9 per cent per annum during 1950-51 to 1969-70, the rate of growth of enrolment during 1970-71 to 1976-77 was only 4.3 per cent in Tamil Nadu and 4.7 per cent in India. With the population of India increasing at the rate of 2.2 per cent per year, this slackening in the rate of growth of higher education further highlights our contention that higher education in Tamil Nadu and in India continues to be the preserve of a select few of the relevant age - group of 17-23. The study also reveals the fact that 4/5th of the students enrolled in higher education pursued courses in General Education, while only 1/5th took up courses in Professional Education. And in General Education, the weightage was in favour of Arts and Commerce courses as against Science courses. However, in Tamil Nadu, enrolment in Science courses formed 32.9% of total enrolment as against only 18.2% in India in 1976-77.

State Net Domestic Product (SNDP), Expenditure on Education, cost per pupil and Enrolment

Using the statistical tool of rank correlation coefficient analysis to find out the relationship between

per capita SNDP, the percentage of states' Budget expenditure on education, enrolment and cost per pupil, we observe that:

1) there is significant rank correlation even at 1 per cent level of significance between the per capita SNDP and the percentage coverage of enrolment at the Middle and Secondary School levels corresponding to their respective age groups of population;

2) there is significant rank correlation at 5 per cent level of significance between SNDP and cost per pupil;

3) there is significant rank correlation at 5 per cent level of significance between cost per pupil and the percentage coverage of enrolment at the Middle School stage of education corresponding to the age-group 11 - 14;

4) there is negligible correlation between SNDP and enrolment in the University stage General Education as percentage coverage of age-group 17 - 23;

5) there is no correlation either between SNDP and the expenditure on education as percentage of the States' Total Budget or between SNDP and the enrolment in Primary education as percentage coverage of age-group 6 - 11;

6) the rank correlation between cost per pupil and enrolment in Secondary School education as percentage coverage of age-group 14-17 is

negligible;

7) there is no correlation between cost per pupil and educational expenditure as percentage of the States' Total Budget;

8) there is no correlation between cost per pupil and enrolment at Primary and University General Education stages as percentage coverage of their respective age-groups of population.

In other words, the analysis brings out in bold relief the lopsided nature of the allocation of resources meant for education at the states' level. The expansion of secondary and Higher education has been at the expense of the Primary Stage of education. There appears to be an element of truth in the ~~gossip~~ quip that the Indian educational system is 'top heavy and bottom weak'. A more rational allocation of educational resources at the states' level, therefore, is a must.

Enrolment, Direct Expenditure and per pupil cost

Enrolment

Examining the enrolment figures of education at the four stages of education, namely, primary, middle, secondary and higher, we find that during the 15 years' period from 1960-61 to 1975-76, the higher stages of education have grown at a ~~factor~~ faster rate than the lower ones, both in Tamil Nadu and in India. Against an increase in enrolment rates of 263 and 265 per cent each at the higher educational level in Tamil Nadu and in India, the corresponding rates of increase for secondary, middle and primary school levels of education were 137 and 154, 92 and 123 and 48 and 76 per cent respect-

ively, for Tamil Nadu and India.

We observe that the growth rates of enrolment at all stages of education in Tamil Nadu and India have slackened sharply after 1965. We further notice that in Tamil Nadu:

1) between 1960-61 to 1975-76 the share of enrolment at the primary stage to total enrolment at all stages declined from 57 to 48 per cent;

2) the share of enrolment at the middle school level to total enrolment at all stages increased from 25 to 28.9 per cent between 1960-61 to 1970-71, but declined from 28.9 to 27.6 per cent between 1970-71 to 1975-76;

3) the share of enrolment at the secondary school stage to total enrolment at all stages increased from 15.8 to 21.2 per cent between 1960-61 to 1975-76; and

4) the share of enrolment at the higher educational level to total enrolment at all stages increased from 1.6 to 3.3 per cent between 1960-61 to 1975-76.

The enrolment in primary education as percentage coverage of the age-group 6-11 is 116. This is because at the primary stage are to be found many who are below 6 and above 11 years of age. It does not, however, mean that the target of universal enrolment for the children of 6 - 11 has been attained in Tamil Nadu.

Similar trends in the growth rates of enrolment are also seen at the all India level during 1960-61 to

1975-76. The corresponding rates are:

1) a decline in the share of enrolment at the primary stage to total enrolment at all stages from 58 to 50 per cent;

2) an increase in the share of enrolment at the middle school stage to total enrolment at all stages from 23 to 25 per cent (1960-61 to 1975-76);

3) an increase in the share of enrolment at the secondary school stage total enrolment at all stages from 16 to 20 per cent; and

4) an increase in the share of enrolment at the higher educational level to total enrolment at all stages from 2.6 to 4.7 per cent.

Direct Expenditure

Our analysis of the direct expenditure on education in Tamil Nadu from 1960-61 to 1975-76 shows that while the direct expenditure on primary and middle school level of education decreased, there has been anincrease in direct expenditure on secondary and higher education. The increase has been particularly significant in the case of higher education from 18.8 per cent of total educational expenditure in 1960-61 to 23.8 per cent in 1975-76 similar trends are also visible in the case of India. While the direct expenditure on primary and secondary education declined, that of middle school and higher education increased during 1960-61 to 1975-76. The increase in direct expenditure on higher education was to the tune of 4.1 per cent, that is, from 23.5 to 27.6 per cent between 1960-61 to 1975-76.

It may be here recalled that while in terms of enrolment, the share of higher education to the relevant age group of population was only 3.5 per cent in 1975-76 in Tamil Nadu, in terms of its share in total direct expenditure it was as high as 23.8%. The corresponding figures for all India were 4.5 and 27.6 per cent, respectively.

Per Pupil Cost and Sources of Finance

At current prices, educational expenditure per pupil between 1960-61 to 1975-76 at different stages of school education shows significant increases both for Tamil Nadu and India. At 1970-71 constant prices, the increase has been significant for primary and middle school education and only marginal for secondary school education. The direct expenditure per pupil for Higher Education showed an increase of 135 per cent each for Tamil Nadu and India at current prices. However, at 1970-71 constant prices, there was an actual decrease of 12 per cent each. This means that while both at the state and all India levels, the enrolment figures of Higher Education show an increase during 1960-61 to 1975-76, the allocation of resources per pupil has been declining. In other words, larger numbers have been accommodated at the expense of decreasing allocation of educational resources per pupil.

Between 1960-61 to 1975-76 the share of government funds to total direct expenditure on education increased from 61.8 per cent to 79.2 per cent in Tamil Nadu. ~~With the~~ The increase on the dependence on

government funds resulted in a consequent decrease in the share from other sources like fees, endorsements and university, district, municipal and local board funds.

The same pattern of development is seen in India. The share of government funds increased from 63.8 per cent in 1960-61 to 81.9 per cent in 1975-76.

Looking at the different stages of education, we observe that in Tamil Nadu, between 1960-61 to 1975-76, there has been an increase in the share from government funds at all stages of education, except at the primary stage.

Similar trends in the allocation of government funds to the different stages of education between 1960-61 to 1975-76 are also observed at the all India level. At all stages of education, the share of the government towards financing of education shows a rising trend.

The contribution from the recipients of education by way of fees has declined considerably over the years. This is markedly significant in the case of secondary school education where the percentages have declined from 26.6 and 39.2 per cent respectively, for Tamil Nadu and India in 1960-61 to 6.1 and 18.5 per cent. In the case of higher education the percentages have declined from 34.9 to 23.2 in the case of Tamil Nadu and from 34.7 to 24.1 in the case of India between 1960-61 to 1970-71. In Tamil Nadu as education up to the Higher Secondary level is free of cost, the contribution from fees is bound to decline.

This declining trend in contribution from the part of scholars towards their education may be explained from the point of view of the socialistic pattern of society, it would be work while to consider whether the recipients of education, especially at the higher levels of education, should not be made to pay for their education proportionately to their income. This point becomes all the more processing when we consider that a good percentage of the small proportion of the population who enjoy the benefits of higher education also receive state or central government scholarships towards their higher educational expenses.

The influence of Socio-Economic factors on Higher Education

Our analysis of the socio-economic factors effecting access to higher education highlights the following points:

a) Female students are still lagging behind their male counterparts at every stage of education. The coefficient of equality is far below 100 at each level of education.

b) People from rural areas have only about half as much a chance of going to a college as compared to persons from the urban areas. The disadvantage suffered by rural females is even sharper as compared to urban females.

c) Inspite of the reservation of seats for the scheduled castes and scheduled tribes and backward class students, the coefficient of equality are less than 100, the scheduled castes being particularly unfavourably reflected.

d) The majority of both men and women students have their parents who have studied up to the secondary school level.

There are more illiterate fathers than mothers suggesting that the chances of an illiterate father sending his son daughter for higher education are brighter than that of an illiterate mother. And further, considering the coeffi-cient of equality of women students, the opportu-nities for higher education for girls depends upon the educational level of their fathers. The chances of a girl whose father is illiterate, to go for higher education are still very low.

e) Students prefer to study in English medium than in Tamil medium colleges, inspite of the Govern-ments' efforts to encourage Tamil medium sections in colleges through the grant of stipends and book-allowances to students.

f) The majority of the students of general higher education have studied in private management colle-ges at the pre-university level.

g) Apart from good academic performance, education in private management English medium colleges at the Pre-University level appears to be an essential conditions for admission to professional courses.

h) The abler students opt for professional education.

i) Falling academic standards in General Higher Educat-ion can be partly explained by the type of students that go in for general education courses.

j) Occupation-wise, parents with white collar class jobs are able to send a large proportion of their children to professional courses as compared to agricultural and mannal classes. And occupation-cum-caste-wise, the castes with the benefit of reservation are able to send a large proportion of their students to professional courses as compared to castes without reservation whether they belonged to white collar classes or manual class including agriculture.

k) Income-wise, 42.5% of students of the sample population came from households with incomes less than Rs.400/- per month. Students who came from households with Rs.1000 and above incomes per month constituted 23 per cent.

l) The chance of a student from a household with an income of Rs.1000 and above per month were, six times as high as those of a student coming from a household with an income below Rs.400/- per month.

Private Expenditure on Higher Education

The detailed analysis of the private expenditure on higher education reveals the following:

1) the percentage of expenditure per pupil on college and university examination fees is higher for women than for men students of general education, while they are equal in the case of men and women students of professional education;

2) the percentage of expenditure per pupil on variable expenditure is higher for men than for women of general education, while they are practically the same in the case of men and women of professional education;

3) the per pupil expenditure of hostel residents, men and women, of both general and professional education, is at least twice as high as that of day-scholars;

4) more than 50 per cent of the total private expenditure of hostel residents of both sexes goes to meet the expenditure on room rent and mess fees, except in the case of women hostel residents of general education;

5) the private expenditure of professional higher education is higher than that of general education by 29 and 42 per cent each, for men and women day-scholars, and by 39 and 47 per cent each, for men and women hostel residents; and

6) considering the combined annual total expenditure of day scholars and hostel residents, the private expenditure on professional education exceeds that of general education by 71 and 49 per cent respectively, in the case of men and women students.

Financing of Higher Education and Factor Cost

As for financing of higher education, 91 per cent of the sample population depended on farental income for their higher education unlike in advanced countries

where merit scholarships and opportunities for work are responsible for financing the education of the bulk of their graduates.

The State and Central Governments grant scholarships to socially and economically backward students belonging to the scheduled caste, scheduled tribe and backward classes. Economically backward students belonging to the forward class communities are assisted by private scholarships given by Management colleges and charitable tructs. 49% of men and 38% of women of General Education and 72% of men and 52% of women of Professional Education are recipients of scholarships and loan scholarships. Both in terms of thea percentage of scholarships/loan scholarships receipients and the actual amount of money received, students of professional education received a larger store of financial aid than their counterparts in general education.

Regarding the distribution of scholarships and loan scholarships according to the caste and monthly income of parents, we find that:

a) higher education in Tamil Nadu is highly subsidized through the governments' schemes of National Scholarships and Loan Scholarships;

b) all the students belonging to the scheduled caste/tribe communities, irrespective of income, are recipients of government scholarships;

c) the lower income brackets of the backward class communities have benefited from the scholarship schemes;

d) private scholarships help the lower income groups of the forward class communities;

e) 57% of loan scholarships benefit the backward class students as against 43% of students of forward class communities benefiting from the same;

f) faculty-wise while all the backward and forward class students of professional education belonging to the below Rs.120/- and Rs.120/- - 400/- per month income group received scholarships, among the students of the same castes pursuing general education, only those belonging to the below Rs.120/- per month received cent per cent scholarships; and

g) in both general and professional education, the percentage of men students who received scholarships are higher than that of women.

Our study of the factor cost of Higher Education in Tamil Nadu brings out the following points:

a) the importance of earnings foregone cannot be overlooked as they formed 46 and 45 per cent each of total costs of higher education for general and professional education (upper estimate), and 44 and 39 per cent each of the total costs of higher education (lower estimate);

b) the total factor cost of higher education (1978-79) as percentage of State Net Domestic Product (SNDP-1977-78) came to 2 and 1.9 percentage each for upper and lower estimates for general educat-

ion, as against 0.7 and 0.6 per cent each for professional education; and

c) the relative cost of higher education in Tamil Nadu with reference to the per capita expenditure on higher education (1978-79) and (with respect to) the per capita income of the state (1977-78) came to 8:1 (upper estimate) and 7:1 (lower estimate) for general education, and 15:1 (upper estimate) and 14:1 (lower estimate) for professional education. That is, the cost of educating a student for general higher education is 8 times and that of professional education 15 times the per capita income of the state.

Private Rates of Return to Higher Education

Our estimates of the private rate of returns to higher education in Tamil Nadu are low, the discount rate being only 7.7%. An important reason for the low rate of returns is the limitations of the data available on earnings of Matriculates and Graduates in Tamil Nadu. The data at hand were not only a decade old, but also did not contain earnings of self employed graduates. From our analysis of the data we came to the conclusion that higher education in Tamil Nadu does not appear to be a very attractive proposition. In the earlier pages of this study we have observed that the rates of growth of enrolment of higher education in Tamil Nadu between 1970-71 to 1976-77 have slackened. This may be a partial explanation for the low estimates of the private rate of returns or vice versa.

If the private rates of returns of higher education are low, the obvious question that comes to our mind is why do students still go for higher education in Tamil Nadu?

As Mark Blaugh etal[1] say, there are several plausible reasons as to why students in India go for higher education than seek employment after Matriculation, such as,

a) it is a prestige issue to have a university degree,

b) the private returns to higher education will improve with the passage of time,

c) there are difficulties in finding a job and the waiting period for employment for a graduate is less than that of a matriculate, and

d) there is something wrong with the Indian educational systems that turns out graduates with preference for white collar than blue collar jobs.

The fact that there is a fall in the rate of growth of enrolment in higher education in Tamil Nadu shows that the students, as well as their parents, are aware of the educated manpower surplus and the declining private monetary returns from higher education in Tamil Nadu and in India.

Concluding Observations

Three questions may be posed before we conclude this study on the Economics of Higher Education in Tamil Nadu, namely,

---

1 - Blaugh Mark et al, The causes of Graduate Unemployment in India, Allen Lane, the Penguin Press, London, 1969.

1) Who benefits most from higher education?

2) Have the government's schemes of scholarships achieved the purpose for which they were instituted?

3) Should not graduates of professional education be made to serve society for a minimum period of time after their graduation?

To the first question our answer is that it is the urban based families that benefit most from higher education. Tamil Nadu has the highest percentage of students of higher education in India who reside in hostels with 41.7 per cent of total enrolment in 1973-74 against the all India average of 14.9 per cent.[2] In our sample survey, 38.8% of students residents in hostels with as high as 56.2 per cent of professional education students residing in hostels. This means that students from rural areas rush to urban based colleges with hostel facilities for higher education. The cost of education of a student staying away from home is at least twice as high as that of a student staying with his parents. In other words, students from rural areas have to pay twice as much for their education as these from urban areas. And further, between 1960-61 to 1970-71, while the share of fees towards the direct expenditure on higher education in Tamil Nadu decreased from 34.9 to 23.2 per cent, that ~~of~~ from government funds increased from 50.2 to 62.6 per cent. Therefore, any further reduction in tuition fees collected from students would chiefly go to benefit the students from urban areas.

---

2 - Third All India Educational Survey on Higher Education, University Grants Commission, New Delhi, 1973-74.

To the second question our answer is that the governments' schemes of scholarships appear to have achieved the ends for which they have been established. The socially and economically backward sections of the community have definitely benefited from these schemes. However, the economically but not socially backward communities, that is, those without the benefit of reservation, have been left out from the orbit of these schemes. 27.4% of the population of Tamil Nadu, that is, 11,535,767 people out of the total population of 41,199,168 (1971 census) belong to those communities who do not enjoy the benefits of reservation. There are also economically backward students in these communities. They have to depend either on private philanthropy or on loan scholarships for financing their higher education. It would be in keeping with the canons of equity if the government sponsored scholarships schemes were extended to cover also these economically backward sections of society. Financial aids operated by the government should be based an economic backwardness, irrespective of caste and creed. In India caste has a tremendous hold on society and on government policy decisions. Any bold step taken by the government of Tamil Nadu in the right direction would help to break the strangle hold of casteism on Indian society.

Our last question brings in its wake several important issues. Professional education in Tamil Nadu, as elsewhere in India, is a paying proposition. The more talented students go for professional education. Added to that, it is also heavily subsidized. 63% of men and 43% of women students of professional education of the

sample survey reside in hostels. This means that, by and large, those who go for professional education come from the better off families. Therefore is it necessary to subsidize so heavily expensive professional education, such as, Engineering and Medical education, especially for women who do not desire to take up practice? Since the remunerations to engineers and doctors are not regulated (an important reason for our low estimates of the private returns to higher education, as was pointed out, is the absence of any data on the remunerations of self employed engineers and doctors), the benefits of a restrictive admission policy accrue to them in the form of higher emoluments. Therefore, a policy of compulsory rural service for a minimum number of years by all engineering and medical graduates should be welcome. It would be one way to make them realise their social responsibilities. They would be only repaying society, in a small measure at least, for the costs society has incurred on their education.