CHAPTER - VII

Conclusions and certain policy suggestions

7.1 Main findings of the study

7.1.1 Conclusions from the General Characteristics of the Students

i) The composition of students reveals the dominance of middle and lower classes of the society. Majority of the students hail from urban middle class family with parents holding middle level white collar jobs that too in government. Among the white collar, teachers of government schools are considerable in number. This implies that teaching community is much aware of benefits of higher education.

ii) The dominance of middle class in human investment in particular in professional education as observed in this study is in conformity with the findings of Behrman and Ryan Schneider 1991 that in India investment in human capital relatively had been skewed towards middle and upper middle income groups during 1960s and late 1980s towards lower and middle income groups. This change in the composition may be due to (1) reservation policy of government, which has entitled the underprivileged sections to have access to higher education, professional courses in particular, (2) the awareness of the middle class about the benefits of higher education. However, the rural poor are unable to benefit from the reservation of places due to lack of empowerment.

iii) The general presumption that professional students mostly hail from the parents with higher level of occupations, does not hold good in this study.
iv) The middle and lower class nature of students is further confirmed by the average level of income of the family and moderate level of education of parents.

v) The Socioeconomic Status Index (SES) represents family background well, hence SES could be used as a proxy.

vi) The composition of students with respect to choice of group at Higher secondary education reveals that nearly 75% of students preferred to study group I with mathematics, physics, chemistry and biology subjects, which enables the students to be eligible to apply for all courses, in particular professional courses. Since higher secondary group is allotted on the marks obtained at secondary exam (SSLC/Matriculation), students’ choice decisions get shaped even at secondary level at school.

vii) Nearly 55% of students studied higher secondary in private schools and obtained higher marks compared to students in government schools and thus are better placed to choose the best professional course. However, the type of group to be studied (preferably group I and II) is the primary concern rather than types of school for the marginal students. That is why students migrate from private to government schools or vice versa in search of better higher secondary group.

viii) Among the professional courses, engineering is the most preferred that too computer engineering or electronics engineering. Computer Science tops the preference list in science courses. The choice pattern expressed by the students reflects the trend in the labor market. Therefore students choice behavior is guided by labour market conditions.
Caste wise classification of students in professional and science courses, exhibits the dominance of Backward caste (BC) students. In fact considerable number of these students have been selected under open general category. This implies that BC students are capable of competing in the open category also. This reflects another aspect that some BC students though caste wise backward, economic and social status wise may be well placed in the society. Barring a few, Scheduled Cast (SC) students got selected only in SC quota. This means that SC students are not capable of competing in open general quota. It also justifies the continuation of reservation of places in higher education for SC students.

7.1.2 The regress analysis of data reveals the following on individual demand

1) The influence of gender appears to be neutral to demand for professional as well as science courses. Boys and girls are evenly placed in numbers. The absence of gender bias reflects social dimensions of marriage and marital status of women. Except a few, girls have stated that they would not discontinue the course if marriage alliance is finalized. Nearly 40% of the girls in professional courses stated that the degree course would enhance employment or self employment opportunity and thus enhance the possibility of getting alliance from men with professional qualification.

2) Type of caste significantly influences the choice of course in professional and science areas. SC/ST students are better placed when compared to other castes. Fulfilling caste criterion is a necessary condition in the choice of course. Level of higher secondary marks obtained, in science subjects in particular forms the basis for choice.
3) Among the family background variables like educational level of parents, annual family income and type of occupation of parents, the last variable exhibits significant influence on the choice between professional courses. Students whose parents hold middle class white collar job have better chances of choosing engineering when compared to students whose parents are agriculturists or businessman etc. The logit results do not support the general statement that parents expect their wards to choose a course which enables students to enter into their fathers occupation. In the choice of science courses mother's education and family income appear to influence significantly.

4) The extent and nature of influence of these family related variables simultaneously do not exhibit a clear cut direction of influence. The strong inter relationship between these variables could be one of the reasons. Socioeconomic Status index, a proxy to family related variables appears to be more appropriate variable. It's influence on the choice of the course is significant. It's direction of influence i.e. more is the socioeconomic status, less is the probability of choosing engineering in professional courses and computer science in science courses, though not expected, confirms the clue that the middle class and lower class have better chances of selecting engineering than other professional courses and computer science than other science courses.

5) The cost of the course measured in three forms i.e. in absolute rupee terms, cost-income ratio and cost plus foregone earnings, does not exhibit significant influence, in view of subsidy of cost by government. Cost-income ratio appears to be more
appropriate among the three. The importance of foregone earnings is not reflected, probably because of the subsidy of cost and dim prospects for job for higher secondary qualification. The broad conclusion is that it is difficult to identify the real and exact influence of cost on the choice of courses, in a subsidized educational system. As an alternative expected rate of return could be a proxy for cost and expected earnings.

6) It is noticed that in case of choice between professional courses, ie engineering vs non engineering it is the expected initial salary that influences choice significantly than expected job time. However in a real choice situation where a student is offered admission to engineering and at least in one or more other professional courses after fulfilling predetermined and necessary conditions of academic standard in terms of marks and caste, it is the job opportunity that influences the choice decision.

7) An analysis of choice between engineering branches viz. computer, electronics and electrical which are stated by students as 1st preference and got selected also, reveals that neither expected salary nor job time appear to influence significantly the choice among these three options. In a real choice situation where the students can enroll in the most preferred courses, expected salary or job time between options differ only marginally. It appears that the student is indifferent to choice with respect to economic factors. The observed indifference to choice through logit results is further confirmed by margined differences in expected salary and job time stated by the sample students as well as marginal differences in the
initial salary offered by various companies for fresh graduates of electronics, computer & electrical.

8) Whereas, in the choice among science courses and in the choice among arts and humanities courses, it is the expected job time that significantly influences choice. Though the direction of influence of expected initial salary is as expected, it is insignificant. Occupation prospects of the subject of study appears to be the base motive in choice, in a dull labor market for arts and science courses.

9) Therefore the extent of influence of economic factors much depend on the choice situation and nature of choice options. When the options are very close or near substitutes, the student is indifferent to choice with respect to expected initial salary and job time. Whereas when choice options are unrelated and distinct, then influence of economic factors is explicit and significant.

10) The average initial expected salary and job time stated by students are almost similar to that offered by various companies and institutions. This gives a clue that students are remarkably guided by conditions of labour market. The rational behavior appears to be in line with human capital theory, even in a rigid choice system.

11) The broad conclusion can be that student's course choice decision is guided by differences in economic benefits between choice options, expected job opportunity in particular. The hypothesis of human capital theory of rational economic behavior of individuals, holds good in the horizontal educational investment choice also in a government controlled/
limited choice option system. Economic motives, job prospects in particular dominate the choice decision.

12) An analysis of influence of family related and individual factors on the expectation formation of students in terms of expected salary and job time estimated by professional students reveals expectations differ only marginally between students of different backgrounds. Therefore it appears that differences in expectations are not due to differences in family related factors.

13) Of the two types of expectations viz. salary and job prospects, majority of students ranked the later as the number one motive. The ranking does not appear to be different with respect to sex, caste and family related factors. This gives a clue that in the formation of expectations, family related factors may not influence significantly. A more regressive analysis is required to estimate the interdependence between predetermined variables and unobserved economic variables like expected salary or job opportunities.

14) The statistical tests indicate that the logit model is more appropriate for choice analysis, than linear probability model. It is also possible to predict the probability of choice, of a course given the values of independent variables with the values of coefficients of these variables. The logit results indicate that the data fits well with the model.

7.2 Certain Policy Suggestions

7.2.1 Necessity of altering course mix

Though Government of Pondicherry is catering to the individual's requirements of higher education, the course mix
needs to be drastically altered in line with the choice preferences. The strength in unwanted courses have to be reduced drastically or the course itself have to be dropped altogether or at least modified suitably in tune with the requirements of the labor market. For instance in engineering, out of the 5 branches, no student prefers Civil branch. As a lost resort some students enroll in Civil as it appears to be better than a science course. Either the course content should be modified to a specialized field or the student strength should not be increased further if not reduced. As a drastic measure, the branch can be dropped altogether. But this may create a problem of faculty displacement. The problem could be solved partially by engaging the staff in post-graduate teaching and research and R & D works.

In the area of arts and humanities, Tamil and English language courses though least preferred by students, continue to expand in terms of number of places and ironically have maximum number of places. As a first step, the strength should not be increased further. The course content has to be suitably modified. Alternatively, the stagnant strength in certain science courses like computer science and chemistry, may be increased considerably.
7.2.2 Tuition fee increase

The tuition fee in various courses are very low and remained same for a long time. A 5 to 10% increase in the existing level may not hit hard the parents especially in arts and science courses. A drastic increase in BDS and Bvsc courses is necessary on two counts. i) to help these institutions to generate fund for self governing i) to make students feel the responsibility and upkeep the quality of education. Ironically, the Government of Pondicherry in its 1998-99 budget has announced that students of arts and science in the government colleges will have free education. It is feared that this decision may water down drastically since anything offered free of cost may be abused. In the absence of accountability, neither the student nor the faculty will strive for higher level of efficiency. Thus national resources may be either wasted or under utilized.

7.2.3 Privatization of Higher Education

To overcome the financial crunch in providing the courses wanted by students the Government can either divert resources to education from other sectors or enhance the tuition fee to generate more funds. The former cannot be since the sectors are competing with each other for funds. The later can be only a part solution. Therefore, the alternative is permit the private institution. However a private institution can survive at full cost pricing only. In such a case majority of the students from low
income families cannot afford to study. To solve this, govt. has fixed quota i.e. 50% of seats to be allotted based on merit with the tuition fee paid in a government institution and the rest with full cost pricing.

There is a possibility that private institutions may charge more fees in diverse ways on the one hand, as it is happening now and may not provide adequate facilities and may not have qualified staff on the other. The supervisory role of government is so vast, its bodies/agencies are unable to monitor the proper functioning of these in institutions. Therefore efficient functioning of the private institution with social motive much rests on the effective monitoring by government agencies.

7.2.4 Alternative to Privatization

The simple contrast of the private demand for higher education and the available limited government funds, may not permit sustainable system in the long run and hence selective cost recovery by the government itself could be the solution. In the present system the private college is permitted to charge on the basis of full cost pricing for 50% of students admitted under payment quota. The same may be extended to government institution. The World Bank study 1996 on financing of education in developing countries, also suggests the selective cost recovery by government institutions. This doesn't mean that private
institutions should be discouraged due to fear of exploitation. Rather the concept of selective cost recovery should be introduced in government. institutions in order to create competition between private and government institutions, as already recommended by Psacharopoulos 1991. This could increase the efficiency in education.

7.2.5 Certain suggestions for further research

1) This study is only at micro level area wise and hence the conclusions are tentative. Further it is a cross section study only for a year. Therefore it is highly desirable to go in for on a large scale and with a time series data for a period of at least 10 years.

2) This study has made an attempt to analyze the expectation formation and choice behavior simultaneously. However, a more regressive analysis is required to estimate the interdependence between predetermined and unobserved variables i.e. expected salary and job time, as already suggested by Fuller et al 1982.

3) It is desirable to identify the structural relation between students post-secondary choice and subsequent career related decision.