Opportunities for Higher Education: An enquiry into entry barriers

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1. Introduction

Education has become a powerful tool of social change, especially in a society in which the majority are poor. The Supreme Court of India declared in 1992 "Education is a means for life with dignity." A study by World Bank (The Hindu, 24 March 1998) also opined, "Education is a corner stone of economic growth and social development and a principal means of improving the welfare of individuals." Today in the context of the fast-growing knowledge-economy, education particularly, higher education, is a prerequisite not only for competitive success but for sheer survival as well. This is especially so in the case of marginalised groups, which are deprived of the material means of production. For emerging out of the shadows of marginalisation and getting involved in the new economy, knowledge and skills acquired through modern formal education are essential. For the marginalised, higher education is not only a means of seeking better economic opportunities but also an effective instrument for social liberation. Thus, both for its 'intrinsic' value and instrumental role, higher education is significant.

The idea that education could be an important means to equality in societies, in which wo/men are born unequal, is and will remain, a powerful one. Hence as societies grow richer, the demand for educational opportunities also increases. Education comes to be seen by families and the public at large as the key to social mobility. Almost everywhere education has come to absorb very high proportions of public resources. In several countries, free higher education became a right even before they had achieved universal primary education. However, in India, even after several decades of educational growth, the competition for educational success appears to operate in favour of the privileged sections of society. Despite growing educational expenditures, the country has failed to overcome the startling handicaps of the socially disadvantaged (OECD, 1971).

Nowadays, education has become a widely used device for social differentiation and exclusion. Education creates a divide between the educated and the uneducated or the semiliterate. This divide makes a society unequal. The educated, particularly the higher educated, becomes a class by itself as it has access to white-collar jobs and channels of upward social

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mobility. Access to brighter education is being narrowed in various ways by levying of high tuition fees and by inability of masses of children to meet the costs of subsistence while studying (Rodgers, et al, 1995). In India, the proposition that equity is provided when equal facilities are given to all, has failed. Research in India has shown that the vicious circle of inequality begins with birth, and that it is very hard to break the circle in later years. By the time a child enters the mainstream of education, the dice is already loaded (OECD, 1971).

Studies show that higher education is primarily a state responsibility even in countries such as the USA, which have free market economies and follow the ideology of private enterprise and private profit. In the USA, the government directly supports 78 percent of the students enrolled in public institutions of higher education, which receive 60 percent of their funds from the government. Federal aid supports the remaining 22 percent of the students enrolled in private institutions. Students enrolled in self-financing institutions get public funds to pay their fees (Sharma, 1996). These measures, besides securing egalitarian ends, also have the merit of enabling the consumer a chance to make a choice among institutions. If a country like the USA cannot afford to leave the questions of access and quality of higher education to the free play of market forces, how can the government of India, constitutionally committed to equality and social justice, leave higher education to the free play of market forces?

A World Bank study reveals that only 2.5 percent of children in the relevant age group attends colleges and universities in India as against 20 percent in Cuba, 38 percent in Korea, 47 percent in OECD countries, and 66 percent in USA and Canada. Whereas higher education is more democratic in these countries, an amazing degree of inequality prevails in India. For instance, 10 percent of the best-educated Indians received 61percent of the resources of higher education against 36 percent across Asia. State support for education has been grossly inadequate and the quality of education is fast becoming the preserve of the social and economic elite of the country.

Added to this is the problems created due to liberalisation. Recent policies for liberalisation have called for, *inter alia,* reduction in government subsidies for the provision of higher education through realisation of a larger share of costs from the beneficiaries. Application of liberalisation to higher education and the move to curtail public support to it is based on the argument that the recipients belong mainly to the top 30 percent of the income group parents, and that therefore such students are in a position to shoulder substantially a larger proportion of the cost of education. It is believed that this measure would relieve the government in terms of its financial commitment in due course of time. If these policies are pursued without due deliberations, we may reach a point when education would be available only to those who can afford to pay its full costs. Capitation fee colleges in Tamil Nadu and Karnataka are examples of such a policy, in which the admission is governed not so much by merit as by the candidate's capacity to pay the market price for education. The Supreme Court of India in its judgement in the case of Mrs Mohini Jain of Meerat Vs Government of Karnataka on 30 June 1992 highlighted the problems caused by the functioning of capitation fee colleges. It observed that the "opportunity for higher education can't be confined to the richer sections of society."

Unleashing market forces into the realm of education could be extremely hazardous for a

society with vast socio-economic disparities and very low levels of age-specific participation in higher education. Since intelligence, aptitude, and talent often do not concede with economic status, emphasis on making access to higher education dependent upon the capacity to pay could result in the deprivation of many who have the potential of marketing a signal contribution to social development. The justifiability of the government's unwillingness to support higher education and its promoting of the policy of liberalisation in the education sector are therefore questionable. This is the context in which we focus the problem for the present study.

The problem

Kerala has been facing several financial crises since the 1980's. The crisis has affected almost all sectors of the economy. In the education sector, the crisis is the result of both demand-side and supply-side factors. On the one side, the demand for more institutions of higher education, particularly professional and technical, has been rising. On the other side, the supply of investment funds to meet the quantitative expansion and to improve the quality of education has not been increasing. The supply of government funds has not been rising because of (1) reduced allocation of resources for higher education by the Central Government (2) reduction in the share of education in the total government expenditure of the state, and (3) increase in cost recovery in education. Because of the financial crisis, the government was compelled to raise the cost recovery (reduce subsidies) in education by hiking fees and other charges. The hike is nominal in the institutions of general education and significant in professional and technical education. The idea behind this measure is to recover from the students a part of at least the recurring expenditure on education. This idea is based on the logic that the students are the major if not the sole beneficiaries of higher education. The government also introduced a large number of self-financing courses in both the government and the private sectors. However, while introducing these measures, the capability of the students, whose academic and non-academic costs constitute a considerable part of the household expenditure, was overlooked or not given due consideration. In a country, where there is severe inequality in the distribution of income and wealth, private (parental) cost acts as a major barrier for a wide majority of the poor and middle class students. There are also so many non-financial barriers to entry into higher education.

These entry barriers lead to exclusion of the low socio-economic groups from the benefits of higher education, relegating them to the status of social outsiders. Of these groups, the Scheduled Castes and Scheduled Tribes and other Backward Communities (who already suffer from the cumulative effects of systematic exclusion from land ownership, education, and access to high-level jobs) become more vulnerable than earlier to the barriers to educational participation. It seems that there are systematic differences between socio-economic groups in higher education and that the new measures may make this difference even wider. The new measures, together with the existing multiple socio-economic barriers, would find cumulative expression in educational impoverishment of these sections. While the State's inability to finance the ever-growing educational expense has been well documented, no comprehensive studies exist on the entry barriers to higher education. The present study is an attempt to fill this gap.

Objectives

(1) To analyse the level of participation in higher education of various socio-economic groups; and

(2) To identify the entry barriers to higher education.

Scope of the study for local level planning

The study would help planners at the local level to initiate steps for removing the entry barriers to higher education. For instance, knowledge about the financial capability of the parents would help local bodies to offer financial assistance to the deserving and the meritorious students belonging to socially and economically backward and depressed sections of society. Knowledge of non-financial barriers also would throw light on the problem of dismantling structures of inequality in educational opportunity for higher education. This is particularly important in view of the fact that most of the opportunities in higher education particularly professional and technical education are appropriated by a small minority belonging to the middle and upper strata of society. It is also hopped that the study would offer insights into the capability of the rich parents and the higher middle-income groups to pay more for the higher education of their wards. The study hopes to come up with suggestions for a discriminatory system of fees with a discriminatory system of incentives.

Method of study and sources of data

The study uses both analytical and statistical methods. For the purpose of the study we consider only professional education and under it only medical and engineering degree courses. These courses are selected because entry barriers may be larger and more powerful there. This hunch arises from the fact that the representation of backward and depressed communities in these courses is lower than in others. In the absence of adequate secondary data, we have collected information for the present study through an in-depth household survey of the students who appeared at the Entrance Examination for Medical and Engineering courses during 1998 and 1999. The names and addresses of these students were collected from the office of the Commissioner for Entrance Examination, Thiruvananthapuram. At first they were classified by their districts and then by location - urban, semi-urban, and rural areas. Urban areas are defined as areas, which have all educational and other facilities including higher and educational institutions. Semi-urban areas have less of these facilities, but have relatively better access to institutions in the urban centres. Rural areas lack many of these facilities; their access to them in the urban areas being limited. Two localities each from these three types of areas in the Kozhikode district were purposively selected. Thus our sample included two urban areas - Kallai and West-Hill in the Kozhikode Corporation, two semi-urban areas - Kakkodi and Kunnamangalam, and two rural areas - Kodiathur and Kadalundi. A census survey of the selected students who appeared for entrance examination was conducted during the second half of the year 2000 by using interview schedules. The questionnaires focussed on entry barriers in higher education and also the ability/inability status of the parents in financing the education of their wards.

Information was also collected by observation, semi-structured interviews with important persons of the locality, and focus group discussions. The survey data were also supplemented by whatever secondary data were available. Of the total students appeared for entrance examination, some might have crossed the entry barriers and several admission to professional courses. At the same time, these may be others who were entrapped by these barriers and could not get admission to professional education. Out of 267 students who appeared for entrance examination, 104 crossed while the rest could not cross the barriers. Our study examines both the categories and looks into the entry barriers and the entry facilitators.

Entry barriers are defined as factors, which prevent or create obstacles to entry in medical and engineering courses in the government or private aided or self-financing institutions. The barriers may include economic and non-economic. The former may relate to high private cost of education and poor economic background of parents. The non-financial barriers may relate to educational and occupational background of parents and educational background of students at school and pre-degree levels in terms of type of schools (government, private aided, and self-financing), medium of instruction (English or Malayalam) and location of schools (rural, semi-urban, and urban), and nature of syllabi (CBSE and State). They also include entrance coaching, motivation of students, reservation policy, type of entrance examination and other caste and community of students. For the students who got entry in professional education, some of these factors might have served as entry facilitators, quality coaching, high motivation, and caste and community privileges.

In order to study the economic background of the students, we consider the income and the facilities in the house. Family income is calculated by taking into account both earned and unearned income (i.e., relative income). The annual family income (in Rs'000) is classified into five groups i.e., below 50, 50-100, 100-150, 150-200, 200 and above. The first group is termed as low-income group (poor), the second as lower middle, the third as upper middle and the fourth as high. The last two groups constitute the creamy layer according to the norms by the Government of India. The former is gross since it includes all deductions and recoveries from income such as PF contributions, insurance premia, repayment of house building advances and repayment of loans. Net income could not be calculated in the absence of reliable data on these deductions and recoveries. Had it been net income there would not have been much difference among most of the families included in the sample.

This classification of households, based on real income, into five groups, somewhat corresponds to the one made by the NCAER in 1990 which classified households in Kerala into five groups with incomes (in Rs Thousand) up to 12.5, 12.5-25, 25-40,40-55, and 55 and above (NCAER, 1994). Taking into account the growth of income and prices between 1990 and 1999 in Kerala, in real terms these income groups almost correspond to the one made by us. Houses of the students were classified as houses with good, average, and poor facilities. Concrete and/or tiled houses with TV, fridge, washing machine, telephone, vehicle, and other basic facilities are categorised as good houses. Tiled houses with basic facilities like pipe water, attached bathroom, electricity, and newspaper, are classified as average houses. But the thatched or tiled houses without these basic facilities are classified as poor houses.

Similarly by following Census classification, occupational status of parents is divided into seven groups – farmers, labourers, sales, and service personnel, professional, and administrative personnel, and clerical workers. The first four are grouped into low-level occupations and the last three into high-level occupations. Students were also classified according to their castes and grouped into Forward Community (FC), Scheduled Castes and Scheduled Tribes (SC/ST) and Other Backward Communities (OBC); following the pattern of government classification. Also student statistics are classified by their location (rural, semi-urban, and urban). Parents of the students are classified as illiterate, low-educated (having primary, secondary, higher secondary, ITI and other diploma), high-educated (having graduation in general and professional courses and post graduation in general) and very-high-educated (having PG Technical, M.Phil, and PhD).

In order to arrive at the parental cost of education, direct academic costs (fees, compulsory donations, capitations / deposits, book and stationery and non-academic costs on hostel/ lodge charges, travel, and extra expenditure on food, clothing, entertainment, and cosmetics were collected in detail. Fees include fees on admission, tuition (including private tuitions), examination, library and laboratory (for a discussion on the components of private costs of education see Salim, 1997). Information on expenditure incurred on coaching and on entrance examination (to qualify for the engineering and medical courses) was also collected. The major components of the same include admission fee and tuition fee for coaching and expenditure on reading materials, travel, hostel/lodge, and entrance examination fee.

Many of the components of private costs are self-explanatory. However, items like hostel/ lodge, extra expenses on food, and clothing need some clarification. Hostel expenses mean room rent paid by the students for their stay in the hostel/lodge during the period of study. Extra expenses on food, clothing, entertainment, and cosmetics refer to the additional amount spent on them over the expenses that would have been incurred had the student remained at home. Both the data on normal family expenditure on these items and the extra amount spent on these items due to enrolment in institutions were collected from the households.

The items of cost mentioned above are only items of direct private cost. Cost includes indirect cost (opportunity cost) also which refers to the earning foregone by the students while receiving education. In general, the opportunity cost is estimated from the age-specific earning data of those groups of students who have completed the previous level of education. For example the earning foregone by an engineering student is the first four years' earning of the pre-degree holders. Obviously, it is unrealistic to assume that all recipients of education will be able to get employment had they not been going to college. This is particularly true in the State of Kerala where the alternative to schooling may not be work at all, but unemployment. It may also be argued that most of the students of professional education in Kerala typically come from those strata of society where it is not usual for the students to participate in any kind of economic activity that becomes available. For these well-to-do parents, the disutility of keeping their children less educated is greater than any opportunity cost of educating them. Further, our field survey also revealed that the students, except a very few, undergoing different degree courses were neither employed nor had a job offer at the time of joining or during the course. Hence the opportunity cost of them is treated as zero (Salim, 1997). Other than the usual statistical tools, we also use

Discriminant Analysis to study the role of each factor, which block or facilitate entry into professional education.

Framework of the study

The study is organised in the following way. The second section carries an overview of the equality of opportunities for higher education. It also discusses the participation in professional education of different socio-economic groups and evaluates the ability/ inability of the parents to pay more fees and other charges. A detailed analysis of the major entry barriers in professional education is attempted in the third section. The last section summarises the discussion and draws the conclusions.

Limitations

Our basic objective is to study the entry barriers in higher education. The term "higher education" has a wide meaning as it embraces all kinds of education at the degree level and above, in different branches and disciplines such as general education, professional education, and technical education. Owing to the constraints of time and finance, the present study is limited to professional higher education alone. Even in this area, only two branches, Engineering and Medicine, were selected. It has not been possible to cover the whole State. The study was confined to two rural, two semi-urban and two urban areas in the Kozhikode district.

Earlier studies made in India had found that "the vicious circle of inequality starts very soon after birth, and is very hard to break in later years. By the time the child enters the mainstream of education, the dice are already loaded" (OECD 1971). This is evidenced from the fact that more than 80 percent of the beneficiaries of higher education are drawn from the top 30 percent of the income group (Ansari, 1994). Our study also reveals that more than 90 percent of the students who appeared for entrance examination belonged to parents of relatively high socio-economic background. Entry barriers exit right from the stage of school education and the barriers at the school level may be more severe than those at higher levels. However, our study is confined to the barriers at the higher education stage. Further, only the students who appeared in Entrance Examination for professional courses have been included in our sample. Obviously, there exist thousands of students who did not reach the stage of appearing for Entrance Examination. For capturing the entire gamut of barriers, all these students also should have to be considered. Considered against this background, the present exercise marks only a modest beginning of research in this area.

2. Equality of opportunity in Higher Education: An overview

Equality of educational opportunity in higher education is considered essential because higher education is a powerful tool for reducing or eliminating income and wealth disparities. If higher education is fully privatised and priced at its full cost, only those who can afford will buy it. The stability of the society will be disturbed if it consists of sections of the population which get higher education acquire income and assets at increasing rate while large proportion of the population remain deprived of higher education and remain poor. The income redistributive effects of higher education provide the rationale for keeping access to it open and extending government subsidies. The idea of equalising educational opportunities also lies in the fact that " the ability to profit by higher education is spread among all classes of people. There are great reserves of untapped ability in the society; if offered the chance they can rise to the top. A great deal of talent of the highest level is, in fact, lost by an inegalitarian system of education" (Balachander, 1986).

The Indian situation

A World Bank study (*The Hindu*, 24.03.1998) reveals a high degree of inequality in Indian higher education. The higher income groups concentrated mainly in urban areas, send their children to elitist schools that provide quality education and it is the majority of the products of these institutions who go for higher studies in Medicine, Engineering, and Science. Participation of the poor and the depressed becomes progressively lower at the higher levels of education; the decline begins at secondary level, continues and becomes more marked as one proceeds to higher education until it becomes insignificant in professional courses and research programmes. In India, in 1988, only 91 percent of the total enrolment in higher education belonged to SC/ST (Chitnis and Altbach, 1993). The University Grants Commission of India had found that more than 80 percent of the beneficiaries of university education went to the top 30 percent of the income groups (Ansari, 1994). Thus in India, like in the majority developing countries, the beneficiaries of higher education are largely and traditionally drawn from higher income groups and their university degrees contribute to social status as well as earnings over their working life, which consequently perpetuate socio-economic disparities. There also exist considerable differences in educational participation of individuals classified by socio-economic background, location, (urban and rural areas), caste, language, and religion (Fields, 1980).

Though India has the second largest university system in the world and the largest in the third world (Altbach, 1993), only 6 percent of the relevant age group (18-23 years) is enrolled for higher education compared to 14.1 percent in developing countries as a whole and 40.2 percent in developed countries (UNESCO, 1996). The share of the SC/ST and other backward communities in enrolment is very small. In 1996-'97, the all-India proportion of SC/ST students in professional education was as low as 8.7 percent for SC and 3.02 percent for ST (Chanana, 2000). Only low-quality government and aided institutions are accessible to them. There is virtual untouchability practised against them in the various 'centres of excellence' with regard to both the recruitment to faculty position as well as selection of students for courses. Even the statutorily reserved positions are seldom filled.

In Central Universities, their representation is either normal or non-existent (Rajalakshmi, 2000).

Thus higher education in India is still under the grip of upper castes. It is a status stabiliser rather than an invader on status rigidities. Despite a long history of reservations, most of the seats in higher education are being appropriated by elite groups. Further, higher technical education provides a passport for a high-status, lucrative job. Graduates of Indian Institute of Technologies who mostly belong to upper castes enjoy more prestige and are more in demand than the ordinary engineering graduates. Higher education has not filtered down, as expected, to the lowest sections and the declamations of equal access are more rhetoric than fact for the unequal groups.

Factors affecting equality of opportunity

Socio-economic incentives

Provision of equality of opportunity does not automatically mean greater participation of the poor and depressed. Equality becomes meaningful only if it is inextricably linked with other strong socio-economic incentives. As Combs rightly put it, "history shows that educational disparities rooted in socio-economic disparities can't be overcome by education alone." The same is the argument of UNDP. Communities which have suffered from an iniquitous social structure cannot merely be given equal opportunity in education but require affirmative action within the institution to remedy past injustice (UNDP, 1996). This is because economic constrains are translated into inability of families to provide adequate resources to meet the direct and indirect costs of education. Mere extension of higher educational opportunities with equalised subsidy, especially in a world of unequal incomes, may not contribute to the improvement of the distribution of income. Sensing that SC/ST and OBCs in India suffer from the cumulative effects of systematic exclusion from education, land ownership, and jobs the Constitution mandated positive discrimination like reservation in jobs courses in their favour. But the implementation of these measures has remained half-hearted. The vested interests from the forward communities are on the offensive to frustrate the efforts of the backward (Saradomani, 1981). Even after five decades of qualitative expansion, we have only partially succeeded in increasing equality of opportunity. The so-called higher education boom, instead of equalising opportunities, has, in fact, legitimised and even aggravated inequality.

Opportunity cost

Children of the rural poor find it difficult to import education to their children beyond the level of higher secondary, up to which tuition is free in government and private-aided institutions. The opportunity cost also becomes large beyond this level of which the children reach their working age. Since there is a positive correlation between a person's level of education and his level of life- time earning, it follows that there will be a reinforcement of income inequality if the students from the upper middle and richer sections continue to be represented disproportionately in higher education. Effective positive steps would be necessary to alleviate the economic disadvantages of students who find it difficult to prosecute studies at the higher stage of education. Even with the rapid expansion of the higher education that has been taking place all over India in recent decades, large numbers of talented

children belonging to the poor sections of the population fail to avail of its benefits.

Faulty subsidisation policy

Higher education has been provided in India at prices much below its cost; the students pay only a very small proportion of the cost, by way of tuition fees. The indirect subsidies given to students in the form of hostel, board and transport facilities are also large. The extent of government subsidies is thus quite substantial in both government-run and private-aided institutions. The amount of public subsidy is available to all students regardless of their capacity to pay. In other words, the subsidy helps both the rich and the poor alike. While for the rich the subsidy is inessential, for the poor it is inadequate. Since more than 80 percent of the 3.5 million students doing higher education in India come from the top 30 percent of the income group, the benefit of subsidy largely goes to students belonging to this group (Bhagawati, 1973; Balachander, 1986; Tilak, 1987; Salim, 1998).

In a country like India in which where the major proportion of its revenue comes from indirect taxes (almost 80 percent of the total tax revenue), which are quite regressive in nature, the cost burden of higher education is spread over the masses and not merely on the well-to-do classes. This means that bulk of the costs of higher education of the upper middle and higher income groups is being subsidised mostly out of tax revenue extracted from the poor who form the majority of the population (Balachander, 1986; Salim, 1998; Ansari, 1994). The result has been the accentuation of the already skewed distribution of higher education opportunities. Under the current dispensation, the beneficiaries are largely the better-off sections, implying a process of negative transfer of resources from the poor to rich.

Subsidisation is the highest in professional and technical education in India. These courses generate prospects of larger private gains later for the users far in excess of their social benefits. A large proportion of the products of such institution go abroad after completing their studies for lucrative career prospects. Thus the benefits of costly investment made by the country on their education accrue to other countries. In order to make amends for this inequitable situation, it is necessary to introduce a discriminatory subsidisation policy of charging higher fees on better-off sections and incentives to poor students. The emerging tendency of withdrawal of the state from the field of higher education forebodes harm to the long run interest of the country. The emergence of private self-financing institutions which charge fees to cover not only the recurrent costs, but also the capital costs, on the principle of ‘what the traffic can bear’ effectively forecloses the entry of the poor into higher education. Even the government agencies and universities are now turning to the commercial mode making access to professional education dependent entirely on the paying capacity of the students.

The Kerala situation

In Kerala, education is the prime cause of social progress. Lewis, after more than three decades of ‘India Watching’ opined that education was the ‘one sector above all that Indian leaders single out for priority attention” and asserted that “the whole country needs to be Keralised” (Lewis, 1997). However, all is not well with the education in Kerala even though

attainment of total literacy is undoubtedly an enviable achievement. The issues relating to equity and access in higher education remains largely unattended, though various committees and commissions have studied issues relating to higher education.

At present the education sector as a whole in the State is characterised by the existence of a dual system: one segment comprising high-quality institutions catering to the affluent five percent of the population (George and Ajith Kumar, 1999) and the second consisting of low-quality institutions meant for the masses. The State never made any attempt at equitable distribution of quality higher education, the access to which is virtually barred to the children of the marginalised groups like SC/ST and other socially and economically backward caste and communities (Kunhaman, 2000). The principles of equity and access are thought to be the concerns only of government-run and aided private institutions. Even here SC/ST and other backward sections are unable to avail themselves fully of the facilities statutorily made available to them. Though the government has reserved 20 percent (15 percent for SC and 5 percent for ST) of seats in the government and aided Arts and Science Colleges in Kerala for SC/ST students, their annual quotas are seldom filled, not even as late as 2000 (GOK, 2000). The SC/ST Development Department of the Government of Kerala found that in 2000, the share of SC/ST enrolment in Arts and Science Colleges was only 12.86 percent. In a note prepared by the department in August 2000, it was pointed out that in the case of self-financing courses run by the university, the share of SC/ST students was marginal. For instance, in the computer course their proportion was only two percent. In the case of other professional and technical courses also, the seats allotted to these communities are seldom filled in full.

In Kerala, the proportion of enrolment of SC/ST students has been higher in General Education than in Professional Education. The proportion of SC/ST in the professional stream at the postgraduate level is nearly one-half of its corresponding share at the degree level (Kunhaman, 2000). The proposition of SC/ST and OBC enrolment in professional courses at the postgraduate level is almost one-half of that in the corresponding courses at the degree level. These figures not only indicate their low share in enrolment but also the high attrition rate among them as they move up the educational ladder.

Participation in higher education of various socio-economic groups

As noted earlier, our study included 267 students from all areas who appeared for entrance examination during 1998 and 1999. Table 21 shows that nearly 43 percent of them belonged to urban areas, 40 percent to semi-urban, and only 17 percent to rural areas. Thus the share of rural area in professional education is much smaller than their share in the State population (73.6 percent). Students from the urban and semi-urban areas appropriate to themselves most of the regular low-fee seats in professional education. Though the State's historical achievements in reducing rural-urban differentials in school education are laudable (Salim and Nair 2001) professional education in the State remains heavily biased against the rural population. It is observed that 32 percent of the sample students belongs to forward communities, 57 percent belong to OBCs, and only 11 percent to SCs and STs. The large representation of OBC is accounted by the fact the study area is largely populated by OBCs. It is also found that larger representation of FC and SC/ST came from the urban areas while that of the OBCs came from the semi-urban areas.

Table 2.1 Students who appeared for entrance examination by their location and caste

Category	Urban		Semi-Urban		Rural		All	
	No.	%	No.	%	No.	%	No.	%
FC	47	17.6	36	13.5	3	1.1	86	32.2
OBC	55	20.6	61	22.8	35	13.1	151	56.6
SC/ST	13	4.9	10	3.8	7	2.6	30	11.2
All	115	43.1	107	40.1	45	16.8	267	100.0

Table 2.2 shows that of the total students who appeared for entrance examination, nearly 39 percent were able to obtain admission to professional education and the rest (61 percent) could not, either within the State or outside. In other words, they were not able to cross the entry barriers. Of the 39 percent who crossed the barriers, representation of the rural areas was only 11.5 percent; students from urban and semi-urban areas appropriated the rest. The representation of SC/ST was barely 8 percent. While 43 percent of the candidates in the urban areas and 90 percent in the semi-urban areas were able to get entry, only less than 27 percent of those in rural areas succeeded. Thus rural areas and SC/STs are grossly under-represented in professional education. Those who could not get entry into professional education, joined BSC and other degree courses either within or outside the State.

Table 2.2 Students who crossed/ not crossed: Entry binaries in education by location and caste

Category		Urban		Semi-urban		Rural		Total	
		No.	%	No.	%	No.	%	No.	%
Crossed	FC	16	15.4	15	14.4	-	-	31	29.8
	OBC	29	27.9	24	23.1	12	11.5	65	62.5
	SC/ST	4	3.8	4	3.8	-	-	8	7.7
	All	49	47.1	43	41.3	12	11.5	104	100.0
Not Crossed	FC	31	19.0	21	12.9	3	1.8	55	33.7
	OBC	26	16.0	37	22.7	23	14.1	86	52.8
	SC/ST	9	5.5	6	3.7	7	4.3	22	13.5
	All	66	40.5	64	39.3	33	20.2	163	100.0

Table 2.3 indicates that among such students, 29 percent were undergoing non-professional regular courses in the government institutions, 60 percent in the aided colleges, and the rest 11 percent in self-financing colleges. Among those secured entry into professional courses, nearly 68 percent joined government-run colleges, 16 percent private, aided institutions, and only 15 percent self-financing colleges. Further, among the former, 89 percent were undergoing courses within the State while among the latter, it was 86 percent. Almost

Table 2.3 Course details of the students who crossed/not crossed the barriers

Category		Not crossed		Crossed	
		No.	%	No.	%
Management of the college	Government	44	29.1	71	68.3
	Private aided	91	60.3	17	16.3
	Private unaided	16	10.6	16	15.4
	Total	151*	100.0	104	100.0
Location	State	135	89.4	89	85.6
	Outside	16	10.6	15	14.4
Nature of Admission	Open Merit	78	51.7	52	50.0
	Reservation	32	21.2	32	30.8
	Payment	41	27.1	20	19.2

* 12 Students are preparing for another attempt at entrance examination

50 percent of the students who entered professional courses obtained admission through the open quota; 31 percent through community reservation and the rest 19 percent through the payment seats quota. Among those who failed to get entry into professional courses, about 27 percent obtained admission to non-professional courses by paying donations to or making huge deposits with managements.

The distribution of students who had crossed the entry barriers according to their sex is given in Table 2.4. It is seen that nearly 53 percent who appeared for entrance examinations and 62.5 percent who crossed the entry barriers were male. Professional education is thus found to be dominated by males as against the situation in general education in which females constitute the larger proportion. The caste-wise distribution also shows a similar pattern except in the case of SCs/STs. It is interesting to find that 67 percent of the SC/ST who appeared for entrance and 87 percent of those crossed were females.

The average family size of both the categories – approved and crossed – of students is the same, 4.7 (Table 2.5). However, the average family size of the students in the rural area was higher than that in the other two areas. Further, among those non-crossed the lowest family size was that of SCs/STs while among the crossed it was that of FCs. It is found that many of the parents of SC/ST students belonged to the cream of the community, i.e. they belonged to a special category [Traditional *Vaidyers* (doctors)] educated, economically sound and holding large tracts of landed property.

Education profile of the parents

There do not exist vast differences in educational status of father, as between students who prepared entrance examinations and who did not. Differences as between communities and locations are also not significant. However, it seems that the educational level of fathers of students who secured entry into professional courses was marginally higher. The differences in this respect among communities and locations are shown in Table 2.6.

Table 2.4 Students who appeared and crossed the barrier by their sex

Category			FC	OBC	SC/ST	All	
			No.	No.	No.	No.	%
Urban	Male	Appeared	21	29	4	54	20.2
		Crossed	10	20	1	31	29.8
	Female	Appeared	26	26	9	61	22.8
		Crossed	6	9	3	18	17.3
Semi-urban	Male	Appeared	21	35	3	59	22.1
		Crossed	10	15	0	25	24.0
	Female	Appeared	15	26	7	48	18.0
		Crossed	5	9	4	18	17.3
Rural	Male	Appeared	-	25	3	28	10.5
		Crossed-	-	9	0	9	8.7
	Female	Appeared	-	10	4	17	6.4
		Crossed	-	13	0	3	2.9
All	Male	Appeared	42	89	10	141	52.8
		Crossed	20	44	1	65	62.5
	Female	Appeared	44	65	20	126	47.2
		Crossed	11	21	7	39	37.5

Table 2.5 Average family size of the students

Category	Family Size (No. of Members Per Family)							
	Not Crossed				Crossed			
	Urban	Semi-urban	Rural	All	Urban	Semi-urban	Rural	All
FC	4.4	4.5	4.7	4.5	4.1	4.1	-	4.1
OBC	4.7	4.8	5.4	5.0	5.4	4.9	4.8	5.1
SC/ST	4.2	4.5	4.6	4.4	3.8	4.5	-	4.1
ALL	4.6	4.6	5.2	4.7	4.8	4.6	4.8	4.7

Educational status of grandparents of the students who crossed the entry limit to professional education is also seen to be marginally higher (Table 2.7). Differences are observed between the groups in this respect also as between communities and locations.

Occupational profile of parents

Occupation of the parent is a major determinant of the education of children. Fathers with high-level occupations are more concerned and careful about the education of their children. In general, the children of doctors and engineers becoming doctors and engineers are not rare in Kerala. Our sample data reveal that 36.8 percent of the students who could not crossentry barriers had parents with low-level occupations while only 30 percent of the crossed students had such parents (Table 2.8). Further, bout 75 percent of these students

Table 2.6 Distribution of fathers' education of the students (in percentage)

Category					Educational Status		
	Not Crossed (163 students)				Crossed(104 students)		
		Low	High	Very high	Low	High	Very high
Urban	FC	29	68	3	56	31	13
	OBC	54	38	8	41	45	14
	SC	44	56	-	75	25	-
	Total	41	55	41	49	39	12
Semi -urban	FC	76	24	-	53	27	20
	OBC	84	13	3	58	38	4
	SC	50	50	-	50	-	50
	Total	78	20	2	56	30	14
Rural	FC	67	33	-	-	-	-
	OBC	83	17	-	92	-	8
	SC	100	-	-	-	-	-
	Total	85	15	-	92	-	8
All	FC	49	49	2	55	29	16
	OBC	74	22	4	47	34	9
	SC	64	36	-	63	12	25
	Total	64	33	3	57	31	12

Table 2.7 Grandparents' education of the students (in percentage)

Education	Not Crossed (163)				Crossed (104)			
	Urban	Semi-urban	Rural	All	Urban	Semi-urban	Rural	All
Illiterate	6	11	12	9	2	16	-	8
Literate	24	34	36	31	25	12	25	19
School	58	49	43	51	53	58	75	58
College	12	6	9	9	20	14	-	15
Total	41	39	20	100	47	41	12	100
	FC	OBC	SC/ST	All	FC	OBC	SC/ST	All
Illiterate	4	9	23	9	3	8	25	8
Literate	25	35	27	31	23	18	12	19
School	56	49	45	51	61	57	50	58
College	15	7	5	9	13	17	13	15
Total	34	53	13	100	30	62	8	100

belong to parents who are placed in high level occupations and living in urban and semi-urban areas. In the rural area, only about 50 percent students belonged to this category. The number of children of farmers and labourers are found to have been quite small. Social mobility brought about through professional education seems to be limited in Kerala.

Table 2.8 indicates that the proportion of fathers having low-level education is higher among students who did not get entry into professional courses than among children who did. This is true of all the community groups. Surprisingly, it is children of highly placed fathers, belonging to SC/ST groups, who secured admission, not the lowly placed among them.

Table 2.8 Occupation of fathers of the students (in percentage)

Occupation		Not Crossed (163)				Crossed (104)			
		Urban	Semi-urban	Rural	All	Urban	Semi-urban	Rural	All
Low	Farmers	2	6	3	4	2	2	-	2
	Labourers	-	11	21	9	2	7	16	6
	Sales	20	16	12	16	18	12	17	15
	Service	3	14	6	8	2	5	17	5
High	Clerical	24	19	6	18	10	9	17	10
	Administrative	20	11	12	15	33	35	-	30
	Professional	31	23	40	30	33	30	33	32
Total		100	100	100	100	100	100	100	100
		FC	OBC	SC/ST	All	FC	OBC	SC/ST	All
Low	Farmers	2	6	-	4	3	1	-	2
	Labourers	5	9	14	9	-	9	-	6
	Sales	16	20	4	16	10	20	-	15
	Service	2	13	5	8	-	5	25	5
High	Clerical	27	11	23	18	16	6	25	10
	Administrative	15	12	27	15	39	28	12	30
	Professional	33	29	27	30	32	31	38	32
Total		100	100	100	100	100	100	100	100

More than two-thirds of the number of mothers of non-crossed students were housewives; the corresponding figure for crossed students was lower, only 61 percent (Table 2.9). Further, all mothers in the rural area, all except six in the urban and semi-urban areas were either housewives or persons employed in high-level jobs. The proportion of the

employed among the mothers of FC and SC/ST students; and they were employed in high-level occupations. Both the parents are employed in the organised sector for nearly 27 percent of the non-crossed students and 38 percent of the crossed students. From the occupation of grandparents (Table 2.10), it is observed that more than two-thirds among them held low-level occupations. Thus it is interesting to find that whereas the majority of parents are engaged in high-level occupations, a significant majority of the grandparents were persons engaged in low-level jobs. Thus occupational mobility has taken place in the families of these students. Instances of children of farmers, labourers, and businessmen becoming doctorsandengineers are not rare.

Table 2.9 Occupation of mothers of the students (in percentage)

Occupation	Not Crossed (163)				Crossed (104)			
	Urban	Semi-Urban	Rural	Total	Urban	Semi Urban	Rural	Total
Low	5	3	-	3	-	2	-	1
High	33	28	24	29	41	37	25	38
House wife	62	69	76	68	59	61	75	61
	FC	OBC	SC	All	FC	OBC	SC	All
Low	7	1	-	3	3	-	-	1
High	38	19	50	29	39	34	63	38
Housewife	55	80	50	68	58	66	37	61

Table 2.10 Occupation of grandparents of the students (in percentage)

Occupation	Not Crossed (163)				Crossed (104)			
	Urban	Semi-Urban	Rural	Total	Urban	Semi Urban	Rural	Total
Low	67	70	67	68	57	74	83	67
High	33	30	33	32	43	26	17	33
	FC	OBC	SC	Total	FC	OBC	SC	Total
Low	60	76	59	68	55	74	63	67
High	40	24	41	32	45	26	37	33

Economic profile

Almost 84 percent of the students belonged to the middle and rich sections of society (Table 2.11). Only 17 percent of the non-crossed students and 14 percent of the crossed belonged to poor parents having annual income of less than Rs 50,000. Among the former, only 7 percent in the urban and 22 percent in the semi-urban, and 27 percent in the rural areas belonged to poor parents. Similarly, in the second group, the corresponding figures are 4 percent, 25 percent, and 17 percent for the three areas. This result is quite expected due to the fact that higher education is generally appropriated by the economically well-off sections of society. In the Urban area, richer sections appropriate the majority (51 percent)

Table 2.11 Distribution of students by their annual parental income (in percentage)

Group	Income						
	(Rs '000)	Not Crossed (163)				Crossed (1	
		Urban	Semi-Urban	Rural	All	Urban	Se
Poor	0-50	7	22	27	17	4	25
	50-100	36	34	39	36	18	26
Middle	100-150	23	25	18	23	27	30
	150-200	23	6	12	14	16	5
Rich	≥200	11	13	3	10	35	14
	All	100	100	100	100	100	10
		FC	OBC	SC/ST	All	FC	OB
Poor	0-50	13	19	23	17	10	15
	50-100	36	36	36	36	26	23
Middle	100-150	20	25	18	23	32	25
	150-200	24	7	18	14	13	12
Rich	≥200	7	13	5	10	19	25
	All	100	100	100	100	100	10

Source: Consumer Market Demographics in India, National Council for Applied Economic Research (NCAER), New Delhi, 1994.

opportunities. The Table also shows that only 13 percent, 19 percent, and 23 percent of the FC, OBC, and SC/ST students in the first group belonged to poor parents. In the second group, these figures are 10 percent, 15 percent, and 25 percent respectively. It shows that OBC and SC/ST students were relatively poorer than FC students. The largest single group among the non-crossed belonged to the income group Rs 50,000-Rs 1,50,000 and among the crossed to the income Rs 1,00,000-1,50,000. This is true for all areas and castes.

We may compare our income distribution based on the sample data with the one prepared by NCAER in 1990. It gives the distribution of households in Kerala into five income groups (Table 2.12). Only 5 percent households in Kerala belonged to the last three income groups as against 14 percent in all-India. Considering the growth in household income and prices between 1990 and 1999 in Kerala, we presume that in real terms, the first two income groups in Table 2.12 correspond roughly to our first income group in Table 2.11. In that case, we may say that the 5 percent of the households capture 86 percent of the seats in professional education. The poor income group (First two groups of Table 2.12) representing 95 percent of the households in Kerala could get only 14 percent of the seats in professional education. In self-financing courses, the representation will be still lower. The figures indicate the presence of serious economic barriers faced by 95 percent of the households in Kerala to higher education particularly professional education. In other words, professional courses are not able to utilise the talents from 95 percent of the households in Kerala. This choice is largely confined to the 5 percent elite households.

All these pieces of evidence indicate that higher education in Kerala is skewed in favour of the better off. This bias is seen to be predominant in the case of professional education. The study also indicates that the opportunities for professional education are higher for children

Table 2.12 Distribution of households by income groups: 1990

Income Group	Kerala			India		
	Rural	Urban	Total	Rural	Urban	Total
Up to 12,500	84.52	67.24	80.83	67.34	37.14	58.84
12,501 to 25,000	12.41	20.60	14.15	23.89	34.76	26.95
25,001 to 40,000	2.56	8.05	3.73	7.07	17.89	10.11
40,001 to 56,000	0.46	2.26	0.84	1.06	6.46	2.66
Above 56,001	0.06	1.85	0.44	0.54	3.75	1.44

from the upper classes, good for those from the middle classes, and poor for those from the lower classes. Social differentiation of opportunities in professional education seems to be a characteristic of the educational structures in Kerala also. The findings of studies on Columbia, Chile, Kenya, and Malaysia confirm the view that socio-economic bias in higher education in favour of the middle and upper income groups is worldwide phenomenon in the developing countries (Jallade, 1974; World Bank, 1988; Feilds, 1957).

The economic background of the students may also be assessed in terms of family expenditure and standard of living. Field data show that the majority of families of the two groups of students spent in between Rs 50-100 thousand in all the three areas (Table 2.13). However, only 4 percent of the non-crossed students had spent amounts higher than Rs One lakh while 24 percent of the crossed were in this expenditure bracket. Further SC/ST spent amounts much lower than those of the other two groups. A comparison of Tables 2.11 and 2.13 shows that the majority of households of the two groups of students (except the lowest two income/expenditure groups) were not savers. So these households were able to spend their surplus income for securing seats for their children in professional education by paying huge amounts as donations, capitations, and deposits. So economic status was not a barrier to entry into professional education for the majority of the households in our sample. However, it should be mentioned here that the income considered in the study is gross income, not net income. If we consider net income, not much difference is observed as between the income and expenditures of the households in the sample. It is also observed from the field data that several families (4 percent in the first group and 6 percent in the second group) had large borrowings between Rs 10,000 and Rs 1,20,000 and a few families were in continuous debt for educating their children.

Among the non-crossed 91 percent families in the urban, 88 percent in the semi-urban and 79 percent in the rural areas spent less than Rs 25,000 per annum on education of their wards. In the case of Parents of the crossed students, 63 percent in the urban, 47 percent in the semi-urban, and 33 percent in the rural are spend more than Rs 25000. So parents of students who get entry into professional education are found to spend more on the education of their children. It is also reported that nearly 9 percent of the students belonging to FC and OBC got entry by paying huge amounts as donations.

The standard of living of the families is measured by the indicators of affluence like possession of consumer durables or facilities in the house. A classification of parents by their household facilities indicates that 79 percent of the first group students came from houses

Table 2.13. Students by their total family expenditure (in percentage)

Expenditure	Not crossed (163)			Crossed (10		
(Rs. '000)	Urban	Semi-Urban	Rural	All	Urban	Sem
<50	38	33	70	38	14	14
50 –100	58	64	26	58	49	70
100-150	4	3	-	3	21	5
≥151	-	-	4	1	16	11
All	100	100	100	100	100	100
	FC	OBC	SC	All	FC	OB
<50	29	37	64	38	10	15
50-100	69	57	36	58	61	62
100-150	2	5	-	3	19	9
≥150	-	1	-	1	10	14
All	100	100	100	100	100	100

with good facilities and only 4 percent belonged to houses with poor facilities. Almost 92 percent students in the urban, 75 percent in the semi-urban, and 61 percent in the rural areas belonged to good and well-built houses. Among the second group of students, these percentages were 94 percent, 84, percent and 67 percent respectively for the three areas. In terms of castes, we find that 92 percent of the FC, 80 percent of the OBC, and 63 percent of the SC/ST students of the two groups came from good houses. Representation of the poor among the FC students is nil; among OBC, it is only 3 percent and among SC, it is only 10 percent. Thus it is found that both the two groups of students – who aspired for entry and failed and who aspired for entry and succeeded – came from families with good standard of living.

To sum up, our field data reveal that professional education in the State is heavily biased against the rural population and backward and depressed communities. The share of the rural areas in professional education is much smaller than their share in the State population. Students from semi-urban and urban areas appropriate most of the regular low-fee seats in Professional education.

We also find the parents of all the students who appeared for entrance examination were educated. But the parents of the students who get entry into higher education are even better educated than parents of non-crossed students. Even the SC/ST parents of these categories of students in rural areas were educated. Further the elders and grandparents of the students who crossed are better educated than those of the students who could not get admission for professional education. Thus professional education is mostly appropriated by the children of educated parents and elders. The study also reveals that a large proportion of the students

Table 2.14 Distribution of students by their family education expenditure (in percentage)

Education Expenditure (Rs. '000)	Not crossed(163)				Crossed (104)			
	Urban	Semi-Urban	Rural	All	Urban	Semi-Urban	Rural	All
<10	58	42	49	50	12	2	-	7
10-25	33	45	30	37	25	51	67	40
25-50	9	8	18	10	35	33	25	32
50-100	-	5	-	2	18	5	-	11
>=100	-	-	3	1	10	9	8	10
All	100	100	100	100	100	100	100	100
	FC	OBC	SC	All	FC	OBC	SC	All
<10	51	40	86	50	10	2	38	7
10-25	38	45	5	37	29	45	50	40
25-50	11	11	9	10	32	35	12	32
50-100	- 3	-	2	23	6	-		11
>=100	- 1	-	1	6	12	-		10
All	100	100	100	100	100	100	100	100

who appeared for entrance examination belonged to parents with high-level occupations, more so in the case of students who got entry into professional courses. Occupational levels were higher of the parents in the urban areas and of forward castes. Surprisingly, most of the parents of SC/ST students also held high occupations, a fact that confirms the view that only the cream of that community gets access to professional education or is even able to appear for entrance examination. Among those crossed the entry barrier, the children of government employees constituted 55 percent. It is interesting to find that both the parents were employed in the organised sector for nearly 38 percent of the crossed students. The study also reveals that whereas the majority of parents were engaged in high-level occupations, a significant majority of grand parents had engaged themselves in low-level jobs. Thus occupational mobility has taken place in the families of these students.

It is observed that more than four-fifths of the students who appeared for entrance belonged to the middle income and rich sections of society. Only less than one-seventh of the crossed students and a little over one-sixth of the non-crossed belonged to the poor income group. OBC and SC/ST students were relatively poor compared to FC students. This result is quite expected due to the fact that higher education is generally appropriated by the economically well-off sections of society. However, for majority of students in the sample family incomes were not significantly different as between the crossed and the non-crossed students. We find that the top 5 percent households in Kerala appropriated 82 percent of the seats in professional education. The poor income group representing 95 percent households got only 18 percent of the total seats in professional education. In self-financing courses, the

representation is likely to have been still lower. Thus it is found that in Kerala, the professional courses are not able to utilise the talents from 95 percent households in Kerala. The study also shows that parents of the students who crossed the entry barriers are found to have spent more on the education of their children even at the earlier stages – at the primary, secondary, and higher secondary levels and that a few FC and OBC students got entry into professional education by paying huge donations to managements of professional institutions. Facilities in the house are also found good for the majority of the two groups of students.

We thus find that the opportunities for professional education are limited to the students of highly educated parents holding high-level occupations and high economic background. Although a few SC/ST families also benefit from professional education, they represent the cream of the community and not the average families. The poor, the low educated, and the lowly occupied are only marginally represented in professional education. The majority of the students who appeared for entrance examination belonged to the rich and elite sections of the society. The process of elimination of students starts even earlier, right from the stage of school education. The students who appeared for entrance examination were in fact those who had already crossed might of the entry barriers to higher levels of education. Any comprehensive study on entry barriers should start, therefore, from the stage of initial school enrolment. The whole educational structure is a device for sieving and sifting the 'chaff' from the 'grain' which should reach each higher stage.

Table 2.15 Distribution of students by the facilities in house (in percentage)

Facilities	Not crossed				Crossed			
	Urban	Semi-Urban	Rural	All	Urban	Semi-Urban	Rural	All
Good	92	75	61	79	94	84	67	86
Average	6	23	27	17	4	14	33	12
Poor	2	2	12	4	2	2	-	2
All	100	100	100	100	100	100	100	100
	FC	OBC	SC	All	FC	OBC	SC	All
Good	91	76	64	79	94	86	62	86
Average	9	21	23	17	6	11	38	12
Poor	-	3	13	4	-	3	-	2
All	100	100	100	100	100	100	100	100

3. Entry Barriers to Professional Education

As noted earlier, entry barriers are defined for our present exercise, as factors, which prevent, or create disturbances for entry into professional education. Similarly, entry facilitators are factors, which help students get admission to professional education. Barriers are both financial and non-financial. A proper quantitative measurement of many of the non-financial barriers is difficult. However, we expect that the limited information obtained in our field survey, on non-financial barriers, would throw some light on the problem under study. The following section carries a detailed discussion of the major entry barriers – financial and non-financial – into professional education, based on our sample data.

Private (Parental) cost of school/pre-degree education

As noted earlier, private cost is divided into academic and non-academic costs. The former is directly related to instruction while the latter is not so. Here we look into the annual parental cost at pre-degree level and then go to their components. We also take into account the expenditure on entrance examination and coaching per attempt for entry into professional education. The amount of money spent by the parents at school/pre-degree level has its influence on the education of the student. At these levels of education, no tuition fees are charged in schools excepting self-financing schools. So the major part of academic expenses covered private tuition charges. Out field data reveal that among the crossed students 86 percent of the private costs for secondary school and 93 percent for higher secondary school/pre-degree course was spent on private tuitions; among those non-crossed the corresponding figures were 75 percent and 79 percent respectively (Table 3.1). Only lower proportions of crossed students were from the rural area and almost all students of this category who came from the urban area went in for private tuitions.

Table 3.1 Proportion of Students by Location who Incurred/did not Incur Expenditure on Private Tuitions (in percentage)

Location	Not Crossed (163)				Crossed (104)			
	SSLC		Pre-degree		SSLC		Pre-degree	
	NPT	PT	NTP	PT	NTP	PT	NTP	PT
Urban 15	85	11	89	2	98	-	100	
Semi-urban	22	78	27	73	23	77	12	88
Rural	48	52	30	70	33	67	17	83
All	25	75	21	79	14	86	7	93

Note : NPT= No Private tution, PT = Private tution

Nearly 94 of the non-crossed and 64 percent of the crossed students spent an amount less than Rs 5000 per year on private tuitions at the secondary pre-degree courses. We also find that SC/ST students spent amounts lower than those spent by FC and OBC students. Table 3.3 shows that a crossed student spent Rs 6240 (62 percent higher) as against Rs 3,850 incurred by the non-crossed student. Further we find significant inter-caste and inter-

Table 3.2 Students by their Annual Private Expenditure at School/Pre-degree Level

Location	Not Crossed				Crossed			
	FC	OBC	SC/ST	All	FC	OBC	SC/ST	All
Urban	4.60	3.80	1.85	3.87	6.55	8.25	4.7	7.35
Semi-urban	3.15	4.30	4.31	3.95	6.45	5.15	5.05	5.55
Rural	4.32	3.65	3.25	3.65	-	4.50	-	4.50
All	4.10	3.89	3.55	3.85	6.51	6.33	4.84	624

Note: Not much variation in expenditure is observed as between secondary and pre-degree courses. So its is the averages of the two that are shown in the Table.

Table 3.3. Annual Expenditure on Private Tuitions at Secondary /Pre-degree Level

Location/ Caste	Not Crossed				Crossed			
	Urban	Semi-Urban	Rural	All	Urban	Semi-Urban	Rural	All
FC	17322	12415	24718	15215	41572	37245	-	38037
OBC	8565	14273	9315	12728	29121	43819	27930	35275
SC	7916	5819	4912	6295	24540	18039	-	23825
All	14317	13819	9554	13476	13476	40075	27930	36385

regional variations between the two groups. However, crossed students from all castes and areas spent higher amounts on private tuitions than their counterparts among the non-crossed.

Table 3.4 shows that the annual average expenditure incurred at the pre-degree level of the non-crossed student amounts to Rs 13,476 while the same for the crossed student is Rs 36,385, about three times the former. Among the crossed, those belonging to FC spent 2.5 times those belonging to BC nearly three times and the SC nearly four times of the corresponding amounts spent by non-crossed students. The crossed students belonging to urban areas spent 2.4 times, those in the semi-urban area spent nearly three times and those in the rural area spent three times of the corresponding amounts spent by non-crossed students.

Table 3.4 Annual Private Cost Present Course (in Rupees)

Expenditure (Rs 000)	Not Crossed				Crossed			
	Urban	Semi-Urban	Rural	All	Urban	Semi-Urban	Rural	All
0-3	54	52	61	55	10	23	42	19
3-5	33	45	39	39	37	56	42	45
5-10	11	3	-	5	47	16	16	31
e”10	2	-	-	1	6	5	-	5
All	100	100	100	100	100	100	100	100

Private cost by its components is given in Table 3.5. It is seen that academic cost formed only 19 percent of the total educational expenditure of the crossed students while it formed about 41 percent of the total for the non-crossed students. This is especially so for the students living in hostels or lodges (66 percent of the crossed and 15 percent of the non-crossed). For the crossed students, coming from the rural and semi-urban areas, the share of academic expenses was lower; hostel/lodge expenses account for a much larger share, as most of these students were inmates of hostels. Of the total academic expenses, the largest amount is spent on fees including private tuition fees. This is due to the fact that a large number of students attended self-financing institutions, which levy higher tuition and other charges.

The Table also shows that it is the maintenance expenses, which was more important for the crossed students and for those staying in hostels/lodges. Among the crossed students, those coming from rural and semi urban areas incur higher costs on maintenance charges as the distance between their homes and colleges (which are mainly located in urban areas) is high. This high cost is reported to be one of the factors, which account for the poor representation of students from rural areas in professional courses. In the non-academic costs of the crossed students, expenses on donation/capitation fees formed the largest item (also the second-largest of the total parental cost) in all areas. For some students, non-interest-bearing deposits made with the professional institution formed the largest item. Almost 48 percent of the crossed students and 39 percent of the non-crossed had to pay compulsory donations/capitation fees. Hostel expenses constituted 16 percent of the total expenses for the former while they were 14 percent for the latter. The two groups of students also spent heavily on dress and entertainment, food, cosmetics, etc. Not much difference was observed in this respect among students coming from the three areas. However, regular students and students attending self-financing courses were found to spend only lower amounts on these items. The higher fees and other charges levied by self-financing institutions might have compelled the students enrolled in them to cut down their maintenance expenses (Figures 1 and 2).

Figure 3.1 Education expenditure of students who could not cross the barriers

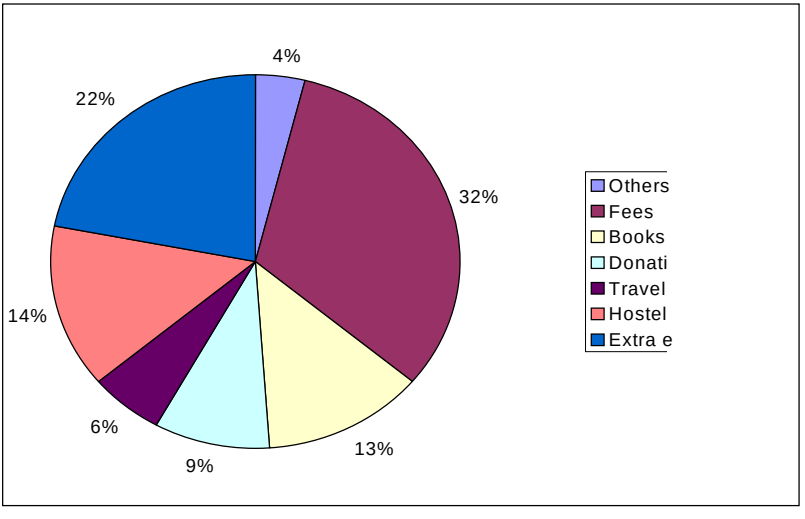
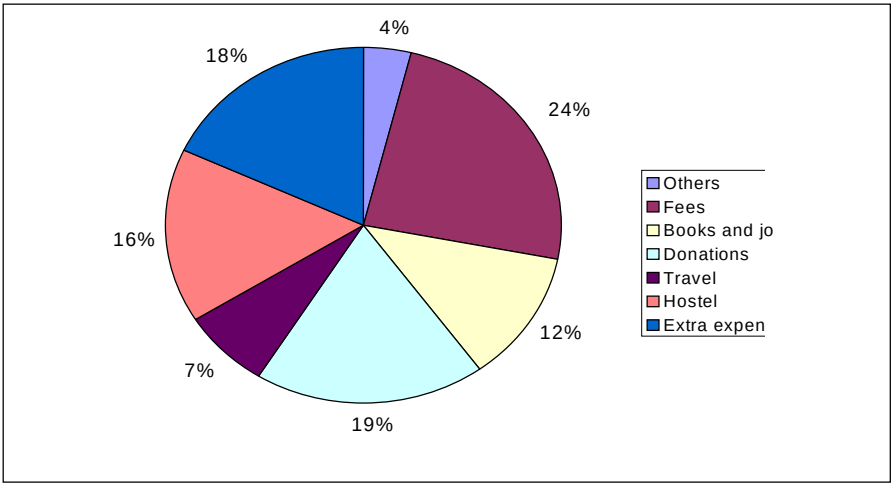


Table 3.5 Annual Average Cost Per Student by Cost Components (in Rs)

Components		Not Crossed		
		Urban	Semi-urban	Rural
Academic	Fees	5122(36)	4150(30)	4215(40)
	Books	798(7)	976(7)	812(8)
	Stationery	864(6)	1050(8)	583(6)
Non-academic	Donations	1725(12)	1215(9)	685(7)
	Travel	740(5)	815(6)	764(6)
	Hostel	1615(5)	2107(15)	1210(12)
	Food	479(3)	586(4)	475(4)
	Clothes	1119(8)	1316(10)	715(7)
	Entertainment	584(4)	615(5)	510(4)
	Cosmetics	718(5)	490(3)	411(3)
	Others	453(3)	499(3)	174(2)
Total		14317(100)	13819(100)	10554(10

Figures in parentheses show percentages

Figure 3.2 Education expenditure of students who crossed the barriers



From the preceding discussion, we found that the crossed students incur substantially higher costs than the non-crossed. This is because they incur larger amounts for private tuitions and several non-academic items. Further, since quality institutions happen to be located at considerable distances from their homes, they have to incur higher expenditure on hostel/lodge charges also. Thus it is obvious that high private cost, particularly on items like tuition fees, donations/capitation fees and hostel expenses, act as major entry barrier to a large number of students of low economic status. Further, students from the high-income households spend large amounts on non-academic items, many of which are non-essentials, such as cosmetics, expensive clothes, and entertainment.

It is observed that 56 percent of the non-crossed students spent less than Rs 5000 for Entrance Examination and coaching, for one attempt (Table 3.6). But almost 66 percent of the crossed ones spent more than Rs 5000. While in the former group the majority of students, belonging to all areas, spent only less than Rs 5000, among the latter 68 percent in the urban, 60 percent in the semi-urban, and 75 percent in the rural areas belonged to the two high expenditure classes. Candidates from the rural area had to spend more for coaching because these centres were situated far away from their houses. It is also seen that 77 percent of the non-crossed SC/ST spent less than Rs 5000 whereas 68 percent FC, 63 percent OBC, and 75 percent SC/ST among the crossed spent more than Rs 5000, per attempt. So the students from rural areas and from SC/ST groups had an added disadvantage in terms of economic ability for entry into professional education.

Table 3.7 shows that the crossed group spent, on the average, Rs 7645 for coaching and entrance examination while the non-crossed group spent Rs 5076, 51 percent lower. FC and OBC are found to spent more than the SC/ST. Similarly, crossed students in urban area spend 59 percent more than their counterparts in the non-crossed group; the corresponding proportion in semi-urban areas were 31 percent more and in rural area 88 percent more. So there exist considerable regional and community inequalities in coaching expenses. Higher expenditure lowers entry barriers, other things being equal; and for poor students, most of

Table 3.6 Students by their Expenses for Coaching per Attempt (in percentage)

Expenditure (Rs '000)	Not Crossed (163)				C	
	Urban	Semi-Urban	Rural	All	Urban	Se Ur
1-3	38	42	45	41	14	21
3-5	17	12	18	15	18	19
5-10	29	33	19	28	39	44
=10	16	13	18	16	29	16
	FC	OBC	SC/ST	All	FC	O
1-3	38	37	63	41	13	15
3-5	18	14	14	16	19	22
5-10	22	36	14	28	39	40
=10	22	13	9	15	29	23

Table 3.7 Expenses for Entrance Examination and Coaching Per Attempt (in Rupees)

Location	Not Crossed				Crossed			
	FC	OBC	SC/ST	All	FC	OBC	SC/ST	All
Urban	4991	6196	2139	5077	7652	8721	4750	8048
Semi-urban	5784	4591	6610	5172	7393	5733	10445	6751
Rural	8867	4559	4296	4864	-	9213	-	9213
All	5506	5067	3547	5076	7527	7709	5969	7645

whom come from rural areas and belong to Scheduled Castes and Scheduled Tribes, the barriers become formidable.

It is found that the categories of students allocated almost 65 percent of the total expenses for coaching for entrance examination on fees (Table 3.8). Further, the crossed students are found to have spent higher amounts on all items of expenditure than the non-crossed, particularly for the first four items (Figures 3 and 4). This is because most of the crossed students are reported to have attended better and more expensive coaching centres located in metropolitan areas. The quality of coaching and the amount spent on coaching are found to have been important determinants of entry into professional education.

Economic background of parents

Professional education is a monotonically increasing function of income and only well-off sections of society can afford its expenses. As noted earlier, the lower income groups representing 95 percent of the households in Kerala could get only 14 percent of the seats in professional education. The rest 88 percent is appropriated by the richer sections.

It is found that the average family income of the crossed students is 42 percent higher than those of the non-crossed students (Table 3.9). In the case of the non-crossed group, the income of FC and SC (for all areas taken together) are almost equal while in the second

Table 3.8 Expenses for Entrance Examination and Coaching by Components (in Rupees)

Category	Not Crossed				Crossed			
	Urban	Semi-urban	Rural	All	Urban	Semi-urban	Rural	All
Coaching fee	3345	3189	3356	3286	5147	4151	7042	4954
Reading materials	417	307	133	316	745	463	331	624
Travel	384	584	554	497	752	693	1002	756
Hostel/lodge	176	234	15	166	440	521	-	427
Exam fee	507	580	591	552	607	538	692	588
Others	248	278	245	259	357	295	146	307
Total	5077	5172	4894	5076	8048	6751	9213	7646

Figure 3.3. Expenditure for entrance exam and coaching of the students who did not cross enterbarriers

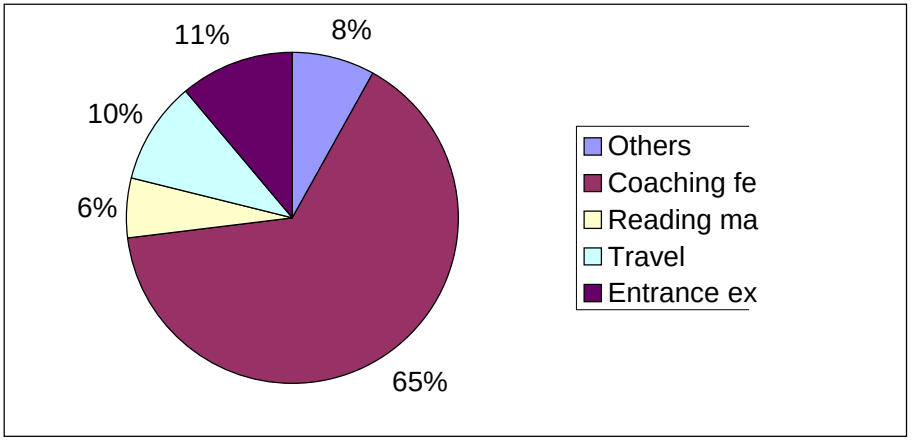


Figure 3.4. Expenditure for entrance exam and coaching of the students who crossed the enterbarriers

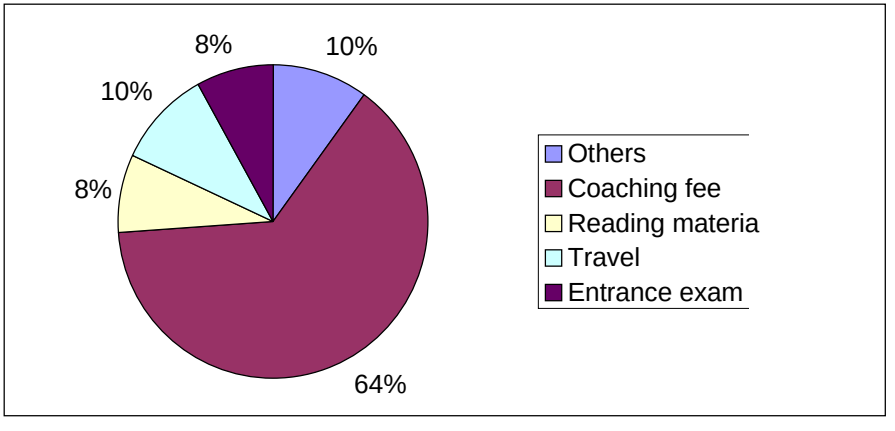


Table 3.9 Average Family Income of Students (in Rs thousand)

Category	Not Crossed				Crossed			
	FC	OBC	SC/ST	All	FC	OBC	SC/ST	All
Urban	136.16	142.31	150.56	140.55	181.63	231.86	113.75	205.82
Semi-urban	75.71	132.67	96.67	110.61	157.13	120.04	265.25	146.49
Rural	75.67	98.93	69.86	90.42	-	95.5	-	95.5
All	109.78	126.48	110.18	118.64	169.77	165.4	189.5	168.56

group the SC group had the highest average income among the three categories. It indicates that only the cream of the SC and OBC have access to the professional education. Inequalities in total family expenditure are even higher (Table 3.10).

Table 3.10 Average Annual Expenditure of Household (in Rs thousand)

Category	Not Crossed				Crossed			
	FC	OBC	SC/ST	All	FC	OBC	SC/ST	All
Urban	61.18	59.50	44.20	58.20	106.71	124.38	43.08	111.97
Semi-urban	65.14	66.36	56.90	65.08	86.87	123.89	76.05	106.54
Rural	70.90	59.09	46.86	57.57	-	73.92	-	73.92
All	63.22	62.34	48.51	60.77	97.11	114.88	59.56	105.33

In order to find out the capacity of parents to bear the cost of higher education the share of family expenditure to family income and the share of education expenditure (for all children) to annual family income and the percentage of expenditure for higher education of the student to family income were worked out. Education expenditures of the two groups of students were also compared with the average household income in Kerala. Table 3.11 shows that educational expenditure formed 51 percent of the income of the household of the non-crossed students; for the other group the corresponding figure is 63 percent. Presumably, higher education, particularly professional education, is appropriated by the well-to-do sections that are capable to bear even higher educational cost. Nearly 17 percent of the family income is spent on the education of all children in the family by parents of the first group, the corresponding figure for the second group being far higher, 38.5 percent.

The ratio of education expenditure for the crossed students to family income (21.6 percent), two times that for the non-crossed (11.4 percent). The ratio is 64 percent more in urban areas, two times in semi-urban areas and nearly three times in rural areas, than the Kerala. corresponding figures for non-crossed students. Among the community groups, the ratio for the crossed students is 61 percent more for FC, two times more for the OBC, and 69 percent more for the SC/ST than the corresponding ratios for the non-crossed. Thus the parents of the crossed students are capable of allocating larger proportions of their incomes for the education of their children irrespective of location or community status for the education of their children. Ninety-five percent of the poor and low-income households of Kerala are found to devote the required amount of funds for the professional education of

Table 3.11 Expenditure as Proportion of Family Income (in percentage)

Location	Caste	Not Cro	
		% of E to Y	% of EE to Y
Urban	FC	44.9	26.1
	OBC	41.8	8.3
	SC	29.4	6.6
	ALL	41.4	17.6
Semi-Urban	FC	86.0	20.9
	OBC	50.0	14.8
	SC	58.9	11.2
	ALL	58.8	15.0
Rural	FC	93.7	66.0
	OBC	59.9	19.7
	SC	67.1	10.6
	ALL	63.8	28.3
All	FC	57.6	23.6
	OBC	49.3	13.6
	SC	44.0	7.4
	ALL	51.2	16.9

Note: Y= average family income of the sample HY= average household income in Kerala E= Total family expenditure including education EE=family education expenditure for all children EEN and EEC=education expenditure of the non-crossed and crossed students respectively. Annual average household income of Kerala (Rs 77310) is calculated by multiplying the per capita income at current prices for the year 1998/99 (Rs 14642) with the average household size (5.28) in Kerala.

their children. The high amounts and the high proportion of the amounts to annual family income work as major entry barriers to the majority of families and a large percentage of students.

The financial burden of the upper middle and richer sections of society as compared to that of the lower middle class and poor seems to be small (Table 3.12). Among the crossed students the financial burden of the first three income groups is very high; these groups have spent in the range of 25 to 48 percent of their total family income on their wards for higher, professional education. The proportions are lower for the higher income groups, 18 to 20 percent.

Table 3.12 Average Family Income and Education Expenditure by Income Group (in Rs thousand)

Income (Rs '000)	Not Crossed			Crossed		
	Income	Expen-diture	% of Income to Expen-diture	Income	Expen-diture	% of Income to Expen-diture
<50	35.6	7.8	20.9	36.7	17.5	47.7
50-100	79.5	18.5	23.2	82.7	26.7	32.3
100-150	123.1	16.5	13.4	126.4	31.2	24.7
150-200	163.8	18.5	11.3	169.9	31.4	19.5
e"200	299.3	28.5	9.5	338.5	60.6	17.9
All	118.6	13.5	11.4	168.6	36.4	21.6

The extent of financial burden of the parent becomes clear by the indicators like the proportion of family education expenditure to total family expenditure (Table 3.13). While parents of the non-crossed students spent 33 percent of the family expenditure on education of all the students of the family, 87 percent of such expenditure was on the student who appeared but did not cross the entry limit. The corresponding proportion of total educational expenditure to total family expenditure for crossed students was 61.6 percent. Of the total educational expenditure 83 percent went to the education of the crossed student. It shows that the parents of the crossed students allocated a much larger proportion of family budget for education of which more than four-fifths was on the student who had entered professional education. In the rural area, the allocation to education in the first group is the highest (among urban, semi-urban, and rural areas) while in the second group, it is the lowest. But it is interesting to find that almost 94 percent of the family education expenditure is spent for the crossed student. Further its is the SC/ST parents in the semi-urban who allocate the smallest proportion for the education of their children and in the urban, it is also the SC/ST who spend the highest proportion. On the whole, the above indicators reveal that for majority of the parents in our sample, economic background is not a major factor determining entry into professional education. But for a number of parents belonging to rural areas and SC/ST, the mounting private cost must be really squeezing their family finances. One of the reasons for the lower proportion of students from the low-income families in professional education is their inability to finance it even at the existing partially subsidised costs. Fees in regular courses are not so high as in self-financing courses.

Table 3.13 Proportion of Education Expenditure to Total Family Expenditure.

Location	Caste	Not Crossed		Crossed	
		% of EE to E	% of EEC to EE	% of EE to E	% of EEC to EE
Urban	FC	58.1	79.0	66.7	79.0
	OBC	19.9	65.6	59.8	89.0
	SC	22.4	91.2	94.7	83.0
	ALL	42.4	71.7	63.1	82.5
Semi-Urban	FC	19.5	66.7	51.5	78.7
	OBC	29.7	94.1	65.4	90.8
	SC	18.8	65.2	35.8	58.7
	ALL	25.4	85.5	59.4	86.6
Rural	FC	70.4	80.3	-	-
	OBC	32.9	95.6	46.5	93.9
	SC	15.9	27.7	-	-
	ALL	44.4	69.4	46.5	93.9
All	FC	41.0	88.9	56.1	94.0
	OBC	27.6	97.4	75.5	63.2
	SC	16.7	89.9	80.3	67.5
	ALL	33.1	87.1	61.6	82.9

Note: E=Total family expenditure, EE=Total educational expenditure of the family; EEN=Educational Expenditure of the family on the Non-crossed student; EEC=Educational expenditure of the family on the crossed student.

The students received only very small help from the state and other sources by way of awards, scholarships, stipends, lump-sum grants, fee concessions, free books and reading materials. Table 3.14 shows that 40 percent of the non-crossed students got fee concessions and 19 percent other incentives during their pre-degree course; for their present degree course the figures are 28 percent and 16 percent for the two courses. Among the community groups, 2 percent FC, 19 percent OBC and 2 percent SC/ST got fee concessions during the pre-degree course, further 11 percent OBC and 12 percent SC/ST received both. Among the crossed students, 15 percent received fee concessions and 3 percent other incentives and 11 percent both during their pre-degree course. Looked at from the community group angle, we find that 19 percent OBC got fee concessions/incentives or both and all SC/ST received both. For all the other students, family income was the sole source of financing.

It should be noted here that the annual income limit fixed for eligibility for KPCR scholarship is Rs 42000. Only those who are within the income limit of Rs 36000 per year can avail lump-sum grants/pocket money under KPCR. Fee concessions alone are given to those in the income group of Rs 36000-42000. Further, the amounts given as stipends/lump-sum grants to this group are small. Thus few families in the income group are able to meet the huge private cost of collegiate and professional education. The incentives are grossly inad

Table 3.14 Distribution of Students According to Incentives Received during the Pre-degree Course (in percentage)

Category	Not Crossed				Crossed			
	CF	OI	BOTH	NI	CF	OI	BOTH	NI
FC	2	1	-	31	1	1	-	28
OBC	19	1	11	21	14	2	3	43
SC/ST	2	-	12	-	-	-	8	-
ALL	23	2	23	52	15	3	11	71

Note: CF=fee concessions OI=other incentives like scholarships, ;ump-sum grants, stipends, free books, reading materials and awards NI=No incentives

equate to cover even the non-fee component of private cost of collegiate education. Inadequate incentives themselves act as a major entry barrier to poor students belonging to all communities. It is found that students in families with poor incomes seldom receive scholarships. They go largely to socially and economically well-off segments of the population. This is found true because a large proportion of the students in professional education come from families in relatively high economic and social status (for similar finding, see Ranganathan, 1998).

We found that almost 40 percent of the students in our sample who received fee concessions during the pre-degree course belonged to higher income groups. A significant proportion of students from low-income groups who reach the stage of higher education do not qualify for scholarships, fee concessions or other financial incentives.

From the foregoing discussion, we find that high costs act as an empty barrier. However, economic background is not found to have been a major barrier to large number of students in the sample. In the following section, we discuss some of the non-financial barriers to entry into professional education.

Social background of the family

The social status of the family of students may be judged in terms of occupation and education of parents, their attitude towards children's education and also facilities in the house. Literate and well-educated parents are more likely to send their children to schools and colleges than illiterate and low-educated parents. But given proper facilities, even illiterate parents may become enthusiastic about education of their children. Children's accessibility to the parents' human capital depends both on the physical presence of the parents in family, and on the attention and encouragement given by the parents to the child. The atmosphere in the house expressed in the form of living conditions (housing) and other facilities in the house also determines the educational performance of students.

Our field data reveal that family background of many students who could not get access to professional education was relatively poor. Nearly 37 percent of the non-crossed and 28 percent of the crossed students belonged to low social background. Students belonging to FC and those lived in urban and semi-urban areas enjoyed a high social background. It is

also found that the accessibility of many children to parents' human capital was lacking; many fathers of non-crossed students worked at places far away from their homes. Despite their interest to educate their children, these could not get actively involved in the efforts. For about 25 percent of the non-crossed students, encouragement of the parents was found wanting; the family atmosphere was not itself conducive for the development of study habits. Almost 64 percent of the total non-crossed students were 'first generation' students in higher education. The parents of the majority of the crossed students were much better educated and held higher status of jobs than of their counterparts among the non-crossed students (Tables 2.6 and 2.8). Fifty-one percent of the 'first generation' non-crossed students could not attend entrance classes due to lack of access, financial difficulty, and other reasons (Table 3.15). Forty-seven percent in this group had appeared for Entrance Examination more than once but could not get through. Seventy percent of them lived in rural and semi-urban areas. Again 83 percent of them belonged to OBC or SC/ST; 26 percent were poor and 53 percent belonged to parents employed in low-level occupations. Further among the non-crossed, 6 percent students belonged to families of government servants, 19 percent to traders and 27 percent Gulf-migrants. Among the first generation crossed students, 85 percent had gone for coaching classes and 54 percent had attempted entrance examination more than once. The socio-economic background of these students was higher than those of their counterparts among the non-crossed.

Quality of school education

Early selection for a coveted school itself determines all other opportunities in life (Desai, 1984). Schooling background was found to have been a major barrier to those who could not get entry into professional education. On the other hand, it acted as a facilitator for those who got entry into professional education. Usually, schooling background of a candidate for professional education is analysed in terms of types of school attended by the student, medium of instruction, location of schools, syllabi, and performance of the student at the SSLC and the pre-degree levels.

Type of school

The type of the institutions in which the student had schooling till the pre-degree level (standard I-XII) significantly determines his/her entry prospects to professional education. Table 3.16 shows that only about 19 percent of those who crossed the entry barrier had their studies in government schools for standards up to X. All the rest had studied in central schools, private aided or self-financing, unaided schools. While government schools accommodates about 40 percent of the high school students in the State, they have contributed only 19 percent students who gained entry into professional education. The share of self-financing or unaided schools (13 percent) is highly in excess of their share in high school enrolment in the state (only 2.7 percent). At the pre-degree course, only 22 percent of the students are enrolled in government schools. In the case of non-crossed students, almost 21 percent of the students for standard I-X and 31 percent for XI-XII studied in government schools. Among those who crossed only 18 percent had their homes in the urban area, 23 percent in the semi urban area, and 8 percent in the rural area had studied in government schools. The corresponding proportions for pre-degree classes were 27 percent, 14 percent, and 33 percent. Among the students who failed to gain entry to profes

Table 3.15 Distribution of First Generation Students by Their Socio-economic and Other Background (in percentage)

Category		Not-crossed (105 students)	Cro stu
Entrance Coaching			
(i) Appeared		49	
(ii) (ii) Not appeared		51	
Number of AEE			
(i) Urban		53	
(ii) Semi-urban		36	
(iii) Rural		11	
Location			
(i) Urban		30	
(ii) Semi-urban		47	
(iii) Rural		23	
Community			
(i) FC		17	
(ii) OBC		65	
(iii) SC/ST		18	
Income			
(i) Rich		9	
(ii) Middle		65	
(iii) Poor		26	
Occupation			
(a)	(i) High	47	
	(ii) Low	53	
(b)	(i) GS	6	
	(ii) TC	19	
	(iii) GM	27	
	(iv) Others	48	

Note: FC=forward community OBC=other backward community SC/ST=scheduled castes and tribes GS=government servants TC= trading class GM=gulf migrants

sional education, the corresponding proportions were much higher among students who were not able to cross the barrier. Thus we find that a large number of students who succeeded in securing admission to professional education had their schooling in central, and unaided schools and a few aided schools too. There were a few private schools which imparted quality education through the vast majority of them (also government schools) has been showing indifferent results for quite sometime now.

The choice of the type of school by a household for the education of its children is determined to a very great extent by its financial background. Some schools in rural area cannot afford anything but “chalk and talk”. Indifference and inertia characterise a major propor

Table 3.16 Type of Schools Attended by Students (in percentage)

Location of Students	Standard	Not Crossed				Crossed			
		C	G	PA	PUA	C	G	PA	PUA
Urban	I-XXI-XII	2-	2141	7459	3-	108	1827	5555	1710
Semi-urban	I-XXI-XII	32	2827	6470	51	7-	2314	5672	1414
Rural	I-XXI-XII	--	621	9479	--	--	833	9267	--
Total	I-XXI-XII	21	2131	7467	31	84	1922	6063	1311

tion of the ordinary government and aided schools, particularly schools in rural and semi-urban areas. It is children of the low-income groups that enrolled in these poorly run schools. At the same time, the children coming out of central and unaided schools would have achieved the standards normally demanded for entry into higher education. The students of low-income groups students thus face a serious competitive disadvantage in their attempts to gain entry into professional education.

Location of Schools

Kerala's achievement is remarkable in the spatial spread of schools to every village of the State. But most of the quality schools are concentrated in urban and metropolitan areas. Most of the seats in these are being appropriated by students belonging to the better-off sections of society. The elite and the well-to-do even in rural areas send their children to good quality urban or semi-urban schools. It is children of the landless, the poor and the disadvantaged groups, which send children to the ordinary-run, indifferent rural schools. As noted earlier, only 20 percent of the students who were not crossed and 11.5 percent who crossed the entry barrier, belonged to rural areas. Among the non-crossed students from rural areas, only 12 percent had their schooling in urban areas; the corresponding proportion for students from semi-urban areas was 44 percent (Table 3.17). Among the crossed students 51 percent of them in the semi-urban area had their schooling in urban schools and 58 percent during the pre-degree course. Urban educational institutions accounted for the large majority of students who were able to secure admission to professional courses. It may be remembered that it is rural schools, which account for more than 70 percent of school enrolment in Kerala.

Medium of instruction

The question of medium of instruction is relevant in Kerala only up to standard X, after which English is the medium though there exists a provision that Arts and Commerce students may, if they so wish, write their examination in the regional language (Malayalam) at the pre-degree and undergraduate levels. From Table 3.18, we find that 43 percent of the non-crossed students and 61 percent of the crossed had studied in English-medium schools. Further among those who secured admission to professional courses, 80 percent in urban areas, 51 percent in semi-urban, and only 17 percent in rural areas had school education in the English medium. The corresponding percentages of the non-crossed were 73 percent, 30 percent, and 12 percent respectively. Again almost two-thirds of the FC and OBC stu

Table 3.17 Distribution of Students by Location of School Attended (in percentage)

Location of Students	Course	Location of Schools					
		Not Crossed			Crossed		
		Urban	Semi-Urban	Rural	Urban	Semi-Urban	Rural
Urban	SSLC	100	-	-	94	6	-
	PDC	97	3	-	100	-	-
Semi-urban	SSLC	44	56	-	51	49	49
	PDC	45	55	-	58	42	-
Rural	SSLC	12	39	49	-	58	42
	PDC	36	46	18	25	67	8
Total	SSLC	60	30	10	65	60	5
	PDC	64	32	4	71	25	4

SSLC= Secondary School Leaving Certificate, PDC=Pre-degree course

Table 3.18 Distribution of Students by Medium of Instruction at School Level (in percentage)

Location	Medium	Not Crossed				Crossed			
		FC	OBC	SC/ST	All	FC	OBC	SC/ST	All
Urban	English	8416	6931	4456	7327	8119	8317	5050	8020
	Malayalam								
Semi-urban	English	3862	2773	1783	3070	4753	5842	2575	5149
	Malayalam								
Rural	English	-100	1387	1486	1288	--	1783	--	1783
	Malayalam								
All	English	6238	3664	2773	4357	6535	6238	3862	6139
	Malayalam								

dents of the crossed category had English medium at the school level; 62 percent of the crossed SC/ST students had school education in the Malayalam medium. It should be noted here that all these SC/ST students got their admission to professional education through the reservation quota. Both the categories of students reported that English-medium helped entry better than Malayalam; particularly the questions for Entrance Examination are asked in English. Similarly, since most of the textbooks used for the pre-degree course and Entrance Examination are in English, English medium facilitates better preparation for the entrance examination.

Private cost of school/pre-degree education

Quality of school education can assessed also in terms of performance in examination on the basis of the percentage of marks scored examinations. An attempt has been made to evalu-

ate performance in terms of marks obtained at the SSLC and pre-degree examinations. Those with the score of 40 percent-60 percent mark is classified as average; those with 60-80 percent as good and 80-100 percent as excellent. From Table 3.19, we find that the case of crossed students comprised mostly students who had shown good or excellent performance, 96 percent of them had shown this level of performance at the SSLC level and 86 percent at the pre-degree level. The corresponding proportions for those non-crossed were the same

Table 3.19 Percentage Marks Obtained at SSLC and Pre-degree Examinations (in percentage)

Location	Not Crossed						C		
	SSLC			PDC			SSLC		
	40-60	60-80	80-100	40-60	60-80	80-100	40-60	60-80	80-100
Urban	2	58	40	33	53	14	2	33	65
Semi-urban	6	73	21	27	67	6	7	21	72
Rural	3	64	33	52	42	6	-	50	50
Caste									
FC	2	53	45	27	58	15	-	19	81
OBC	2	70	28	31	61	8	3	34	63
SC/ST	14	77	9	64	36	-	25	38	37
All	4	65	31	34	56	10	4	30	66

(96 percent) at the pre-degree level, but much lower (66 percent) at the pre-degree level. Though all the students who appeared for Entrance Examination had fared well in the SSLC examination, the performance of the non-crossed at the PDC examination was lower. This is the case for all the three areas. Thus we find that performance at PDC/Higher Secondary level is crucial in determining the chances of entry chances to professional education. Among the communities, FC and OBC students showed better performance at all levels than SC/ST students.

Nature of syllabus

The syllabus followed by the students during their school/pre-degree levels is also seen to be a significant element. We find that students who had followed the Central syllabus and the syllabi of CBSE, ICSE, *Kendriya Vidyalaya* and *Navodaya* Schools, had performed better than those who followed the State syllabus. In Kerala, from the 52.5 lakh school students in standards I-X, only 3 percent followed the Central syllabus (GOK, 2001:TS). But our field data reveal that of the total students who got entry into professional education, almost 39 percent had followed the Central syllabus. A large majority of them belong to urban and semi-urban areas, and to forward communities. Among the non-crossed students, nearly 4 percent from the urban and semi-urban areas only had followed Central syllabus. Further it was observed that the nature and type of questions asked in the Entrance Examination had a bias in favour of the Central syllabi.

Entrance coaching

Entrance coaching is found to facilitate entry to professional education. It gives some advantage to students who undergo training over those who do not. The extent of this advantage varies according to both quality of the coaching and the quality of the students. In most cases entrants to coaching are persons who had better socio-economic backgrounds.

We find that most of the coaching centres are located in urban areas. So proximity to better coaching centres gives some an advantage to the urban and semi-urban students. Table 3.20 shows that almost 91 percent of the crossed students had entrance coaching – 60 percent long – duration coaching extending over six months to three years and the rest crash coaching of six months or lower duration. In the group of students who crossed the barrier, 94 percent in the urban, 86 percent in the semi-urban and all in the rural areas had utilised coaching. There were only 13 percent of FC, 5 percent of the OBC, and 25 percent of the SC/ST who had not attended coaching classes from among the successful group. Among the non-crossed students 67 percent had gone for entrance coaching; 23 percent for long-duration coaching and 44 percent for short duration coaching. Further most SC/ ST students of this group attended only short-duration courses. In this group, the proportion of students from rural areas who could not go far coaching is higher (49 percent) than the proportion of students from other areas (29 percent).

Table 3.20 Distribution of Students by their Entrance Coaching (in percentage)

Location	Not Crossed			Crossed		
	No Coaching	Coaching		No Coaching	Coaching	
		Short	Long		Short	Long
Urban	29	21	50	6	39	55
Semi-Urban	30	20	50	14	28	58
Rural	49	30	21	-	17	83
All	33	23	44	9	31	60
Caste						
FC	33	20	47	13	35	52
OBC	30	21	49	5	30	65
SC/ST	46	36	18	25	25	50
All	33	23	44	9	31	60

Reading materials

It is observed that 53 percent non-crossed students did not make use of any proper reading materials for preparation for entrance examination. They solely depended on the coaching classes. Among those crossed, 57 percent made use of proper reading materials. The majority of the first group in the semi-urban and rural areas had little access to reading materials while the majority in the second group (the crossed) belonging to all areas and communities; had access to reading materials. Thus use of proper reading materials is

found to be a determinant of performance in the entrance examination. It is found that the ineffectiveness of coaching for some students is compensated by access to reading materials. A few students (5 percent) who neither wept for coaching nor made use of any reading materials also passed the entrance examination. They must have been exceptionally brilliant. Almost 49 percent who crossed the entry limit had gone for coaching cases and also used reading materials. Nearly 8 percent were able to cross the entry limit with the help of reading materials alone. The rest 38 percent crossed, benefiting from the coaching alone.

Number of appearances

It is found that 64 percent of persons, who crossed, passed the examination in the first attempt, 34 percent in the second attempt, and only 2 percent in the third attempt. Surprisingly, the proportion of students who got entry in the first attempt itself was more in the rural areas than in other areas. It is also interesting to find that forward community students were less successful than students of the other community groups in crossing the entry barrier in the first attempt (Table 3.22).

Motivation and hard work

Increase in income levels of families, expansion of enrolment facilities and improvement of instructional quality in educational institutions, are all essential for removal of barriers to entry to professional education. However, there are other factors also which determine entry possibilities. For instance, lack of strong motivation or hard work may keep even talented children away from higher education. Undoubtedly, children of more successful parents have a higher degree motivation and greater interest for achievement than others. Students who have strong motivation work hard. In the case of a number of students, this motivation and the consequent hard work are found to have been a major factor in their success to cross entry barriers. Among the non-crossed students, 35 percent reported lack of hard work as a major reason for their failure to enter professional courses. Similarly, among the crossed students, high motivation and hard work are reported by an equal proportion as the principal reason for their success.

Government reservation policy

The State government follows a reservation policy by which 50 percent of the total seats in professional education are kept for admission according to merit; 25 percent for socially and economically backward classes (OBC) and 10 percent for SC and ST. The remaining 15 percent is set apart for regional reservation in the ratio 8:5 between Travancore-Cochin and Malabar regions. Among the crossed students in our sample, almost 26 percent had secured admission by community reservation; almost 32 percent of the non-crossed students also secured admission (to general education courses) through community reservation. Both in professional and general higher education, backward and depressed communities receive seats only lower than the allotted quota for (GOK, 1999).

Location

In Kerala, facilities for professional education continue to be biased in favour of relatively developed urban and semi-urban areas. Hence the pupils in these areas have more access to

Table 3.21 Percentage of Students by the Use of Reading Materials

Caste	Not Crossed						
	U		SU		R		
	NRM	RM	NRM	RM	NRM	RM	NR
FC	35	65	24	76	67	33	33
OBC	46	54	68	32	65	35	60
SC/ST	89	11	50	50	71	29	73
All	47	53	52	48	67	33	53

Note: U=Urban SU=semi-urban, R-Rural, NRM=No Reading Materials RM=Reading materials

Table 3.22 Students by the Number of Appearances in Entrance Examination (in percentage)

Location	Not Crossed			Crossed		
	No. of Appearances			No. of Appearances		
	1	2	e”3	1	2	e”3
Urban	52	36	12	59	39	2
Semi-urban	59	39	2	70	28	2
Rural	67	24	9	67	33	-
All	58	35	7	64	34	2
Caste						
FC	62	29	9	52	48	-
OBC	62	35	3	71	28	1
SC/ST	32	50	18	62	25	13

institutions of higher learning. Students from rural areas who join institutions in urban areas have to spend much larger amounts than their counterparts from urban and semi-urban areas on travel, lodge/hostel, and food. Location is found to have been a major factor in determining the chances of entry. Naturally, therefore, students from urban and semi-urban areas appropriate most of the low cost, regular (open merit) seats in professional education. A large proportion of students from rural areas get into professional education through the self-financing route.

Community

Community logistics do play their role in the appropriation of seats in education. In Kerala, 65 percent of the total population belongs to backward communities while only 35 percent belongs to forward castes. The majority of the children of backward communities used to drop out at SSLC or Pre-degree stage itself or fail in these examinations. Some do pass, but do not get marks of 45 percent or above, prescribed as eligibility criterion for appearance in Entrance Examinations for professional courses. These backward students face a lot of additional barriers too unlike forward community students. Among the backward sections, SC/ST are the most vulnerable. Considering this backwardness, mandatory reservation is granted by the government in case of SC/STs. But, in actual practice, even the reserved seats are not filled, mainly for want of qualified students, but at times for other reasons as well.

Nearly 8 percent of the total crossed students belong to SC/ST, 62.5 percent to OBC, and 30 percent to FC. The representation of FC is smaller and OBC than their respective shares in total population due to the fact that more than 66 percent of the population in the sample areas belong to OBC, 16 percent of the FC, and 18 percent to SC/ST. It is also found that unlike in most other areas, the OBC families in the two sample areas are relatively economically well off. In this respect, therefore, our sample does not represent the overall community logistics in Kerala. However, it cannot be gain-said that community is one of the factors determining entry into professional education. This is evidenced by the community-wise results of the factors determining entry in to higher education, which we had discussed earlier.

The foregoing discussion establishes that the private (parental) cost of higher education, educational and occupational background of the parents, quality of school (expressed in terms of location and type of schools, medium of instruction, syllabi, and percentage of mark at SSLC, percentage of marks obtained at the pre-degree level, encouragement received from parents/teachers, motivation and intensity of effort, community and location are the major factors that help or hinder entry into professional education.

Parents'/student's perspective

Parents/students included in the survey were asked to name the factors in order of their importance, which deterred or facilitated entry of their children in to professional education. A classification of these factors is given in the following section. Among the parents of non-crossed students, nearly 47 percent named four barriers and the remaining 53 percent less than four (Table 3.23). It is seen that 45 percent of the 163 non-crossed students

opined the lack of motivation and hard work as the most important factor responsible for failure to secure entry into professional education. Another 17 percent of the non-crossed opined this as the second factor and about 6 percent considered this as the third or fourth barrier. The first column under the non-crossed category indicates that 45 percent of them considered hard work as the most important barrier, 21 percent considered the quality of entrance coaching as the most important factor; and 9 percent attributed socio-economic background.

Table 3.23 Factors of Entry Barriers as Identified by the Parents/Students

Factors	Not Crossed				Crossed			
	Order of Importance				Order of Importance			
	1	II	III	IV	1	II	III	IV
Intensity of Effort	74	28	7	3	36	20	9	3
Economic Background	7	16	12	9	12	12	12	6
Reservation	10	11	5	4	11	8	7	6
Encouragement	10	19	12	8	8	21	23	10
Entrance Coaching	35	27	13	10	20	22	11	7
School Education	8	13	21	14	13	7	9	11
Community & Social Background	8	8	17	13	2	7	10	7
Others*	11	21	16	15	2	5	9	13
All	163	143	143	76	104	102	90	63

*Others include absence of adequate number of institutions, non-availability of educational loans and incentives, high level of fees including capitation, absence of father from house, etc.

For the students who crossed the barriers also, hard work was the single most important factor according to 35 percent of the group; the next factor in the order of importance (for 19 percent of the group) was the quality of coaching. For 13 percent students socio-economic background was the major reason and for 12.5 percent of them quality of school education was the most important factor. The first under the crossed category shows that 35 percent crossed students reported motivated hard work as the first factor, another 19 percent of them identified this as the second most important factor; and another 12 percent found this as the third factor or fourth important factors. Interestingly four percent students either gave no importance or only marginal importance to this factor. On the whole, we find that a large number of students/parents gave prime importance to effective coaching, hard work, quality of school education and socio-economic background.

Discriminant Analysis Results

One of the major tasks involved in the analysis of factors influencing entry to higher education was the quantification of their relative efforts. Discriminant Analysis was one of the simple methods, which we could get to choose for the purpose. We took educational opportunity as the dependent variable (by assigning a value of unity for those who crossed the barriers and a value zero for those who could not cross the barrier). The independent variables selected were private cost of education (including the expenditure for entrance exami-

nation and coaching), education and occupation of father, encouragement received from parents, achers, entrance coaching, intensity of effort of the students, marks obtained at the pre-degree examination, benefits of community reservation enjoyed, quality of school education and location. Pre-degree mark is given in terms of percentages and cost is given in monetary terms. The values assigned to other variables are given in Table 3.24.

Table 3.24 Values Assigned to Entry Barriers in Education

Factors	Values
Education of father	Very high – 3 High-2, Low-1
Encouragement	Very good-2 Good-1 Poor-0
Entrance Coaching	Effective-2 Not effective-1 No coaching-0
Motivation and Intensity of Effort	Yes-1 No-0
Govt. Reservation	Benefiotted-1 Not benefited-0
Occupation of Father	Prfessional-7 Administrative-6 Clerical – 5Sales-4 Servce-3 Labourer-2 Farmer-1
School Education	Very good-2 Good-2 Poor-0
Location	Urban-3 Semi-urban-2 Rural-1

Table 3.25 gives the results of discriminant analysis on education opportunity for 267 students (all areas and caste combined) who appeared for entrance examination. The values under column two are standardised canonical discriminant function coefficients, which show change in the dependent variable (education opportunity) as a result of a unit change in the factors influencing it. For instance, one unit change in pre-degree mark can increase education opportunity by 0.647units and one unit change in education expenditure brings 0.358 unit change in opportunity for professional education. The magnitude of values under column 2 reveals that pre-degree mark, entrance coaching, cost of education, intensity of effort and quality of school education are the major entry facilitators/barriers. The relative influence of these factors varies from 23 to 11 percent (column 3); ranks are given according to the relative importance of these factors (column 4). The results suggest that in order to increase education opportunity, it is these factors that should be strengthened.

Table 3.25 Discriminant Analysis on Education Opportunity – General

Variables	SCDFC	% Importance	Rank	Correlation*
Education Expenditure	.358	12.7	3	.403
Entrance Coaching	.384	13.6	2	.373
School Education	.303	10.7	5	.247
Pre-degree Marks	.647	22.9	1	.655
Intensity of Effort	.340	12.0	4	.247
Parent's Education	.072	2.6	10	.238
Parent's Occupation	.180	6.4	8	.172
Encouragement	.220	7.8	6	.237
Reservation	.213	7.5	7	.056
Location	.108	3.8	9	.161

Note: SCDFC-Standard Canonical Discriminant Function Coefficients.

* Absolute Correlation between discriminant functions and discriminating variables

A region-wise discriminant analysis (Table 3.26) reveals changes in the role of these factors. Though pre-degree mark still remains the dominant factor in determining the entry to professional education in both urban and semi-urban areas, in rural areas it is entrance expenditure. Cost of education, entrance coaching, reservation and quality of school education are the second, third, fourth, and fifth major determinants in urban areas; in the semi-urban area these positions are held by intensity of effort, parents' occupation, encouragement and entrance coaching; in the rural area the corresponding variables are pre-degree mark, parents' occupation, encouragement, and school education, in that order.

A study of the results by castes (Table 3.27) indicates that for the forward castes, the first five factors determining education opportunity are pre-degree marks, cost of education, quality of school education, parents' occupation and intensity of effort. In the case of OBCs, these are pre-degree marks, education expenditure, entrance coaching, encouragement, and quality of school education. For SC/ST, the factors hard work, education expenditure, encouragement, location and parent education have emerged as the most important. Thus region-wise and community-wise variations in education opportunity are found to be significant. Finally a look at Table 3.28 shows that all these functions, except those for rural areas and for SCs/STs, are highly significant at 5 percent level and that these functions provide perfect fit for the sample data.

Table 3.26 Discriminant Analysis on Education Opportunity by Location

Variables	Urban		
	SCDFC	%	Rank
Education Expenditure	.417	16.6	2
Entrance Coaching	.409	16.3	3
School Education	.254	10.1	6
Pre-degree Marks	.497	19.8	1
Intensity of Effort	.345	13.7	5
Parent's Education	.034	1.4	8
Parent's Occupation	.185	7.3	7
Encouragement	.003	0.1	9
Reservation	.371	14.7	4

Table 3.27 Discriminant Analysis on Education Opportunity by Castes

Variables	FC			O
	SCDFC	%	Rank	SC
Education Expenditure	.537	17.9	2	.3
Entrance Coaching	.243	8.1	6	.4
School Education	.467	15.5	3	.2
Pre-degree Marks	.689	22.9	1	.6
Intensity of Effort	.264	8.8	5	.2
Parent's Education	.012	0.4	10	.0
Parent's Occupation	.379	12.6	4	.1
Encouragement	.083	2.8	9	.2
Reservation	.237	7.9	7	.1
Location	.094	3.1	8	.1

Table 3.28 Mean Scores of Discriminant Functions and X^2 Values

Category	Mean Score		X^2 Value	Degree of Freedom	Significance
	Not Crossed	Crossed			
General	-.497	.780	85.4	12	High
Urban	-.657	.885	49.9	11	High
Semi-urban	-.543	.808	36.7	11	High
Rural	-.357	.980	11.7	11	Low
FC	-.598	1.061	39.0	12	High
OBC	-.587	.776	54.2	12	High
SC/ST	-.629	1.728	17.4	11	Low

4. Summary and Conclusion

Education is a powerful tool of social change in a society in which the majority of the population is poor. In a fast-growing knowledge economy, higher education is not only a means of seeking better economic opportunity but also an effective instrument for social liberation. Hence as societies grow richer, there emerges a rapidly growing demand for educational opportunities. In India even after several decades of rapid educational growth, the competition for educational success appears to operate in favour of the privileged sections of society. In a country where only 2.5 percent of the population in the relevant age group enter colleges and universities, it is quite natural that most of these seats are appropriated by the well-to-do. Further 10 percent of the best-educated received 61 percent of the resources for higher education in India against 36 percent across Asia (World Bank, 1998). In this country, state support for higher education has remained grossly inadequate, the quality education fast becoming the preserve of the socially and economically privileged.

Added to this is the problems created by the tendency for withdrawal of government from its commitment to development of higher education. The government has begun reduction of educational subsidies to higher education. A large number of self-financing institutions and courses in both the government and private sectors have emerged. The governmental excuse for this turn of events is severe financial crisis it has been facing for the past several years. If these policies are wantonly pursued, the situation, which is highly loaded in favour of the rich and the powerful, might deteriorate further, and would turn the exclusive pressure of the dominant minority.

In a country like India where there exists severe inequality in the distribution of income and wealth, high parental cost acts as a major entry barrier for a large majority of the poor and middle class parents. There are also many non-financial barriers to entry into higher education. These barriers together, aided and abetted by the new turn of educational policy would ultimately lead to total exclusion of the low socio-economic groups from the benefits of higher education, relegating them to the status of social outcasts.

It is expected that the study would help the planners at the local level to initiate steps in removing many of the entry barriers to higher education. It is also hoped that the study would offer insights to the planners at the State level about the capability of rich parents and the inability of the poor and the lower middle class to pay more fees and other charges. This would help them to initiate a more effective financing policy to higher education and to find alternative sources of financing.

It is found that professional education is heavily biased against the rural population and backward and depressed communities. The share of the rural areas in professional education (5 percent) is much smaller than their share in the State population (73.6 percent). Students from urban and semi-urban areas appropriate most of the regular low-fee-paying seats in professional education. Opportunities for professional education are mostly limited to the students of well-educated parents holding high-level occupations and high economic

background. Although a few SC/ST students do benefit from professional education, they represent the cream of the community and not the masses. The children of the poor, low-educated and lowly occupied parents are only marginally represented in professional education. The majority of the students who appeared for entrance examination belong to well-off sections of society. It indicates that the process of elimination of the students might have started right from the beginning of the school education process and that the students who appeared for entrance examination had already crossed many of the entry barriers in higher education. So any comprehensive study on this should start from the beginning of the school education process.

The study has identified 14 major entry barriers/facilitators in professional education. They are annual private cost of professional education at pre-degree level and for entrance examination, parents' education, quality of school education, pre-degree marks, entrance coaching, motivation and intensity of effort of the student, government reservation policy, location, and encouragement from parents and teachers. It is found that the parental costs are substantially higher for the crossed students than for the non-crossed students. This is because crossed students spent higher amounts on fees and non-academic items than the non-crossed. Further since the institutions in which most of the crossed students studied are located in places far away from their homes, some of them had to incur heavy expenditure on hostel/lodge expenses. Thus high private costs, particularly on items like fees, donations/capitations, and hostel acted as major entry barriers to a large number of students. The economically well-off sections of society spend larger amounts on all items of educational expenditures than the rest of the community. Further, the students from the high-income households spend larger amounts on non-academic items, many of which are on non-essentials such as cosmetics, apparel, and entertainment.

It is found that the lower income groups (with annual income of less than Rs 50,000) representing 95 percent of the households in Kerala could secure only 14 percent of the seats in professional education. The rest 86 percent seats are appropriated by the better-off sections of the society. The average family income and family expenditure of the crossed students of professional education are found higher than those of students who did not get entry into professional education. The majority of the crossed students are found to be capable of learning even at higher costs, a fact which throws some light on their paying capacity. We find that nearly 11 percent of the family income of the non-crossed students was spent on education while for the crossed students the corresponding proportion was 22 percent. Further OBC and SC/ST households and households in rural areas spent lower amounts on the education of their wards. The ratio of private cost to average household income of Kerala formed nearly 17 percent for the non-crossed while it constituted almost 47 percent for the crossed. We also find that the parents of the crossed students allocated almost 62 percent of the total family expenditure to education (of all children in the family) while the corresponding proportion was 33 percent for the non-crossed.

The high share of education expenditure to family income and high share of education expenditure to total family expenditure work as major entry barriers to a large number of students, particularly those belonging to depressed communities and rural areas. For several parents belonging to rural areas and SC/ST, the mounting private costs must be a heavy

burden. One of the reasons for the lower representation of students from the low-income families in professional education is their inability to finance it. However, for the majority of parents in our sample, economic background (assessed in terms of gross income) is not found to have been a major factor determining entry into professional education.

It is found that against the mounting private costs, students of higher education get only very small help from the state by way of incentives. The incentives are grossly inadequate to cover even the academic cost of education. Further, the government makes only a token effort to help the poor through these incentives. In the present context of privatisation and the proliferation of self-financing of higher education, even these incentives are likely to be withdrawn. The study suggests that a number of students might have gone for professional education had they received assurance of adequate financial assistance. But one striking aspect of student financing is the large extent to which aid is given to those with high incomes. In our sample, almost 40 percent of the crossed students who received fee concessions belonged to higher income groups. We have found that the majority of the crossed students come from low-income groups are not adequately represented at this stage of education, a significant number of this group reaching the stage being denied fee concessions and other incentives. Thus, inadequate incentives themselves act as entry barriers to poor students belonging to all communities.

The study shows that the social background of the family of the student, expressed in the form of education and occupation of the parents and encouragement from parents and teachers, determines the performance, even entry of students into professional education. The social background of the non-crossed students is found lower than that of crossed students. For the first group, accessibility of many children to parents' human capital was lacking; many of their fathers worked at distant places. The encouragement of the parents and the family atmosphere were not conducive for the development of study habits. Professional education is seen to be practically closed to 'first generation students'. The parents or elders of the majority of the crossed students were highly educated and hold high levels of employment. Most of the 'first generation' students could not attend entrance classes due to difficulty of spatial access, financial difficulty, and related reasons. They tried more than once but could not get through the entrance examination. Many of them belonged to rural areas were socially and economically poor, and were children of Gulf migrants and trading classes.

Schooling background was found a major facilitator/barrier in several cases. This variable was analysed in terms of type of school and location, medium of instruction, syllabi and performance at SSLC and Pre-degree examinations. A large number of students who secured entry had their schooling in central schools or unaided schools, which followed CBSE and ISSC syllabi, and a few aided schools. The very few socially and economically backward students who endeavoured to seek entry into professional education but who had poor schooling background, were thus at a clear competitive disadvantage.The study shows that educational institutions in the urban areas contribute the large majority of students to professional courses. The contribution made by rural schools to professional education is found have been less than 12 percent, though at the school level, the majority of students in Kerala are from rural areas. We also find that more-than three-fifths of the

students who secured into professional education had studied in English medium schools. Most of them were residents of urban and semi-urban areas and almost two-thirds of the FC and OBC students among them had English-medium education. It is found that this medium helped the candidates since the textbooks used for Pre-degree course and the Entrance examinations were in English; the questions asked at the Entrance Examination were also in English. Nearly two-fifths of the students who passed the Entrance Examination were those who followed the Central syllabus. The questions asked in the Entrance Examination had reportedly a clear bias in favour of the central syllabus.

Though the performance of all the students who appeared for Entrance Examination had been high at the SSLC examination that of the non-crossed at the Pre-degree course was relatively low, irrespective of the area of their residence. But the performance of FC and OBC was higher at the SSLC and the pre-degree status, than of the SC/ST students. A large number of crossed students had taken intensive private tuition for all subjects spending large amounts. The crossed students from urban and semi-urban areas and those of FC and OBC are found to have spent more than the students from rural areas and belonging to the SC/ST category. On the whole, it is found that schooling background was a major entry barrier/facilitator for professional course.

It is observed that entrance coaching is a major factor determining chances of entry to professional education. We find that most of the quality entrance coaching centres is located in urban areas. Proximity to good coaching centres gives, therefore, an advantage to pupils from urban and semi-urban areas. Almost all students who secured entry into professional courses had undergone long-duration training courses in coaching centres; the students who did not pass the entrance examines comprised mostly of those who had not such long duration coaching. Interestingly, we find that all the crossed students from rural areas had gone for long duration coaching. Further, most SC/ST students had attended coaching classes, but only short-duration courses. The crossed students were able to spend larger amounts on entrance coaching than their counterparts. It is interesting to find that 64 percent of those who secured entry into professional education got it in the first attempt; 34 percent of them got in their second attempt. We also find that coaching expenses were not affordable for a large number of those who failed to get entry.

Intensity of effort is also an important factor determining the chances of professional education. Among those who get entry, hard work was reportedly a major factor for about 35 percent. Interestingly, 35 percent of the non-crossed students themselves admitted that they had not put in hard work in their pursuit of success in the Entrance Examination. Government reservation of certain seats in professional education is found to have helped a few SC/ST and OBC students in getting admission to professional education. Place of residence also had some influence in the determination of chances of entry into professional education. Students from rural areas had a clear disadvantage. Social backwardness is also a handicap. Among the backward, SC/ST is the more vulnerable. Our sample did not bring out this dimension adequately since it was not representative of the community logistics of the State as a whole.

A study of the parents'/students' perspective of the major entry barriers to professional

education has shown lack of motivation and hard work as the most important factor responsible for non-entry for about 45 percent of the students. Another one-fifth attributed non-entry to lack of or ineffective coaching as most important factor. Poor economic background, faulty reservation policy, and poor school education were the factors mentioned. Conversely, the factors of success were reportedly high motivation, hard work, effective coaching, better schooling, and comfortable socio-economic background.

The determinant analysis of the factors confirmed that pre-degree marks, cost of professional education, intensity of effort, quality of school education, and entrance coaching were the major factors. A region-wise analysis showed that pre-degree marks was the dominant factor in semi-urban and urban areas; but in the rural area it is entrance coaching. There did not exist wide differences in terms of factors across communities.

The study has shown that wide inequalities exist in terms of opportunities for professional education among locations, socio-economic groups, and community groups. In order to remove the entry barriers and remove inequalities in opportunities, a discriminatory approach, based on differences in locality, socio-economics background, community, and quality of student will have to be adopted.

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