RURAL STUDENTS IN UNIVERSITIES OF PUNJAB

A

Research Project
Sponsored by

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PREFACE

Punjab is one of the most prosperous and developed states, with the lowest poverty ratio, among the major states of India. The state has been ranked 2nd in terms of human development index (HDI) among these states. Its literacy rate was about 70 per cent in 2001 (65 per cent in rural areas and 79 per cent in urban areas). As per Census 2001, 66 per cent of state's total population and 70 per cent of its workforce live in rural areas. Clearly, Punjab predominantly continues to be a rural economy. Though rural education and rural health, along with modernization of agriculture and related activities, continue to be the pillars of rural development strategy, yet a big gap exists between the rural and urban Punjab. The rural-urban economic divide has, in fact, widened over the period of time. It has been amply demonstrated by the ever declining share of primary sector in the NSDP and very high proportion of rural workers in total workers of Punjab.

Consequently, rural people, particularly the marginal and small farmers and landless agricultural workers have lagged behind. They are disillusioned with the educational and development imbalances created over the period of time. The political leadership and civil bureaucracy, and even the academia, have been becoming increasingly insensitive and insincere to the rural people. Even the judiciary is promoting the hollow slogan of meritocracy. The rural people are deprived of opportunities in every walk of life. The rural education and health have been heading towards a total collapse during the last about three decades. As such, the proportion of rural students in higher education has been on the decline over the period of time.

Punjab, at present, demonstrates a classic case of societal transformation. Across the spectrum, there have been many significant changes in the production and distribution. Market forces have emerged as the principal

instrument not only in the commodity producing sectors but also in the services sector, particularly in education and health. These two sectors are basically responsible for the development of human resources.

Mainstream development economists are of the opinion that the skill, education, and knowledge are the prime movers of growth in any country/region. The empirical evidences reveal that the benefits of various development and welfare schemes in Punjab or elsewhere are cornered by the selected few groups among the rich and higher castes in rural areas. Similarly, the benefits of reservation of seats in educational institutions/services have been monopolized by creamy layers. This process has deprived an overwhelming majority of vulnerable sections of rural society from getting the benefits of these programmes/schemes and put restrictions on improving their quality of life. Consequently, a well organized section of the society consisting of rich-cum-higher castes households and a creamy layer among reserve categories have emerged as the moving force in sharing the development gains in Punjab.

In nutshell, there exists a big gap in terms of the facilities, services and opportunities available to the rural and urban people. People living in cities/towns have better schools and colleges, better teachers, better income earning opportunities, better transportation & communication means, etc. On the other hand, the villagers are deprived of such facilities and consequently lagged behind than their urban counterparts. As such they are unable to compete with the urban people on the basis of merit. The fact of the matter is that there is no level playing field in the determination of merit. How can the rural students compete with the urban students in the entrance tests and the qualifying examinations when their foundation (schooling) and counselling are much weaker than their urban counterparts?

There is an organic link among various levels of education (elementary, secondary and tertiary). The elementary and secondary levels are the

foundations of tertiary education and tertiary education provides teachers to the first two levels and generates knowledge. Tertiary education, in fact, is sine quo non for generation, absorption, transmission, preservation, application and dissemination of knowledge. Knowledge, in turn, is imperative for social, cultural, economic and political development of a state/country. It is the educated people of the country, even of a poor country, who would be able to promote, assert and protect their state's/nation's interest in the fast emerging knowledge society at the national/global level.

"The real wealth of a nation is its people. And, the purpose of development is to create an enabling environment for people to enjoy long, healthy and creative lives. This simple but powerful truth is too often forgotten in the purist of material and financial wealth." These are the opening lines of the first Human Development Report brought out by UNDP in 1990. The Human Development Report 2000 marks further advance in this direction through the inclusion of political and civil rights as another indicator of human development since "only with political freedom – the right for all men and women to participate equally in society – can people genuinely take advantage of economic freedoms".

In view of the above scenario, Punjabi University, decided to undertake a study regarding rural students in the universities of Punjab. In fact, the very idea of such a study was conceived by the Vice Chancellor, S. Swarn Singh Boparai. For any meaningful intervention and policy recommendations, a comprehensive study and database pertaining to the phenomenon is of paramount importance. Thus, the rationale and significance of the proposed project is self evident.

The basic determinants of human development are longevity, knowledge and a decent standard of living. It is measured by life expectancy, level of educational attainment and real GDP per capita. Clearly, the more important components of HDI, inter-alia, are health and education. Technical progress

emanates from the investment in human capital. "The main engine of growth is the accumulation of human capital – or knowledge – and the main source of differences in living standards among nations is a difference in human capital. Physical capital plays an essential but decidedly subsidiary role in development. Human capital takes place in schools, in research organizations, and in the course of producing goods and engaging in trade." (Lucas, R.E. Jr.: "Making a Miracle", *Econometrica*, 1993).

There has been a wide spread exclusion of rural students in Punjab from higher education particularly from professional and engineering education, over the last two decades or so, whatever may be the reason. Collapse of school education in rural Punjab, admission through entrance tests, costly education in private schools (beyond the reach of majority of ruralites), gap in rural-urban amenities and awareness, information gap, lack of guidance and coaching may be some of the reasons. One of the serious implications of all this is that rural students are unable to enter the higher education system through the present mode of entrance examination.

In Punjab, higher education sector, consisting of universities and colleges, has grown with the liberal state funding during the 1970s and 1980s. All universities and a large majority of colleges were either government owned or private owned aided colleges. The private aided colleges were largely financed through the statutory provisions of grants-in-aid policy (up to 95 per cent of recurring cost). During the recent years, particularly since the 1990s, the higher education delivery system in the state has changed substantially with the entry of the private for-profit entrepreneurs, especially in the fields of professional and technical education. As a consequence, full-cost recovery from the students has become an overriding dictum of private funded institutions. Indeed, the public funded institutions, when confronted with severe resource crunch, too started responding to market signals like (i) starting of the new self-financing courses,

(ii) charging more fees and funds for existing courses, (iii) increasing NRI/Industry sponsored seats, (iv) keeping posts vacant even after the incumbents retire, and (v) in-formalization of workforce (contract/adhoc/guest faculty).

In fact, the non-existing/non-responsive regulatory mechanism on the part of state has paved the way for over commercialization of higher education sector. This sector has become a most lucrative business activity having quick and high profits with a little risk and uncertainty. Selling/buying of academic courses at the highest possible price in the case of most sought after courses and at discounted price in the courses where seats remain vacant has emerged a thing of normal happening in Punjab's higher education sector. Moreover, these institutes have been imposing multiple user charges in the form of a variety of fee and funds under countless pretexts. Consequently, there is abnormal increase in fee and funds being charged from the students. On the other hand, deterioration as well as collapse of school education in rural government schools has added more worries to the state educationists in the state. All these forces started the exclusion process of rural students who are otherwise meritorious and hard working. Indeed, the proportion of rural students who studied from rurally located schools in the universities of Punjab has been very low compared to their share in total population.

The policy of liberalization, privatization and globalization (LPG) has opened the education and health sectors to private players whose main motive is not the societal gains but private profits. The entry of the private sector in the education has led to commercialization of education – a process where getting quality education has become costly and, moreover, out of the reach of majority of the population living in rural areas. It has been often said, by the government, policy makers and academia that the proportion of rural students in the

universities is very low. But there was no authentic data about this. In the absence of data it was all talking in the air.

The present study has made a serious attempt to estimate the number of rural students in the universities of Punjab and their regional centres. It has also made a comprehensive and objective assessment of some peculiar issues related to rural students such as their school background, academic achievements, motivators' role, parents' education, occupation and their current income levels, fees and funds paid by them, etc. This report is the product of a team effort. The team members developed the overall theme, sampling methodology and gave a unified treatment to the main contents of the work. The core members collected and processed the primary data themselves, exchanged their notes/contributions in varying degrees; revised/reformulated them and reorganized the contents, whenever necessary, to make the report a cohesive document without any ambiguity. The team members, therefore, are responsible for the contents, views and quality of the report.

Many institutions and individuals have extended their valuable cooperation during the completion of this study. The team members gratefully acknowledge their indebtedness to all those institutions and individuals. At the forefront of all, are the Vice Chancellor of Punjabi University, Patiala, S. Swarn Singh Boparai, Padam Shri and Kirti Chakra whose love for ruralites has already won him international recognition. In fact, the Vice Chancellor was very keen to work out the exact proportion of rural students in the universities of Punjab so that the rural education problems could be highlighted, with empirical support, more comprehensibly and logically at the highest policy levels. He very generously extended all possible help ranging from the granting liberal finances, timely extensions and administrative assistance in the completion the study. We are deeply beholden to him.

The team is highly thankful to the Punjabi University authorities, particularly the former Dean Academic Affairs, Professor R. K. Sehgal; the Registrar, Dr. Parm Bakhshish Singh Sidhu and the Finance Officer, S. Mohinder Singh. Among the Faculty Members of Economics Department of Punjabi University, we are highly indebted to Professor Sucha Singh Gill, Dean Academic Affairs; Dean, Faculty of Social Sciences, and Head, Department of Economics; Professor Inderjeet Singh and Dr. Lakhwinder Singh, for their valuable comments and assistance in crystallizing the thought process and improving the quality of final report. We are highly thankful to all of them.

The study is essentially based on the primary data. In the collection of primary data, the Offices of the Vice Chancellors, the Dean University Instructions/Academic Affairs, the Registrars of the different universities of Punjab has helped us in ways more than one. Further, all the Deans of various faculties, Heads of the Departments, faculty members and non-teaching staff of the university campuses, departments and regional centers of all the universities extended whole hog cooperation and provided us the ground level help in identifying the rural students and in filling up the questionnaire. It is very difficult to reproduce the name of all of them here. We thank all of them wholeheartedly. Nevertheless, we would like to mention a few names here: Professor Veer Singh, DUI, Panjab University; Prof. R.S. Bawa, Registrar, Guru Nanak Dev University; Professor V.K. Sharma, Registrar, Punjab Agricultural University; and Professor A.S. Joshi, Head, Department of Economics, Punjab Agricultural University. We are thankful to all of them for extending immense cooperation in collection of data and certain useful suggestions. We are especially grateful to the Heads and faculty members of Departments of Economics of respective universities for their valuable help in the collection of data. Our thanks are also due to all those rural students who extended cooperation to fill up the questionnaire. A large proportion among them has even

responding to our cross checking mechanism on the telephones/mobiles. The discussion of the project team members with the faculty members and student leaders in the universities of Punjab was also of immense help. Further, the help rendered by Statistical Officers of all the universities is duly acknowledged.

The library staff of the following institutions deserves special thanks: Bhai Kahn Singh Nabha Library and Department of Economics Library, at Punjabi University, Patiala; A.C. Joshi Library, Panjab University, Chandigarh; Jawaharlal Nehru University Library and Association of Indian Universities' Library, located at New Delhi; and State Planning Board Library, and Economic and Statistical Organization Library, both at Chandigarh.

The discussions with many well-known economists like Professor G.K. Chadha, Member, Economic Advisory Council to Prime Minister, Professor S.S. Johl, Vice Chairman, Punjab State Planning Board and Professor H.S. Shergill, Head Punjab Economy Division of Institute for Development and Communication, Chandigarh proved very useful in articulating the various issues relating to higher education in the state. We are extremely grateful to them.

Last but not the least, the role of Mr. Kulwinder Singh, Research Assistant in the project, in the collection, classification and tabulation of data and in finalizing the report is duly appreciated and acknowledged.

Ranjit Singh Ghuman Sukhwinder Singh Jaswinder Singh Brar

Chapter I

INTRODUCTION

Higher education plays an important role in achieving better employment opportunities, growth of productivity; strengthen the roots of democracy and civil society. It builds a foundation for accepting new ideas/attitudes, and for developing and adapting new innovations, scientific ideas and technologies that have the capacity to enhance the quality of life. It also provides the basic paraphernalia for a vibrant democracy in which the informed citizens exercise their franchise to nationalistic policies and constructive role in the world economy. It is the vital input to access the benefits of information revolution that has opened up new vistas across the whole world. Besides, it is necessary for the improved health and nutrition status of people.

This chapter, alongwith research design and methodology, highlights the various issues related to higher education sector. The attempt has been made to provide a comprehensive view of the education sector with the help of important findings of research in the area, the actual development experience of advanced countries and the education policies and practices followed by the country. So, the higher education sector of the state has been explored in a wider context. Accordingly, the chapter is divided into four parts: (a) the relationship between education and development; (b) financing of education; (c) access, equity and affordability; and (d) research design and methodology.

1.1 Education and Development:

Education commands pivotal place in socio-economic transformation of a country. The practitioners of development economics recognize it as the single largest contributor to growth. The ultimate foundation of wealth of nations rests on the accumulated stock of human capital. Education, in true sense, comprises

all types of competencies learned at home, formal institutions and work places. The human resources, being active factors of production, accumulate capital, exploit natural resources, build social, economic and political organizations, and carry forward the tempo of the prosperity and material well being. Education is the process of transferring the essence of accumulated knowledge and virtues from the past generations to the future generations in a more concentrated and an abridged form.

The economic literature, both theoretical and empirical, enumerates with high degree of precision the immense and multifarious benefits of education to an individual, the family, the economy and civil society. Moreover, the benefits of educational development have been well recorded, enlisted and robustly quantified. In this way, the vast literature, being emanated from economics of education conclusively established that educational progress affects the whole range of economic activities both in the market and non-market spheres of production, consumption and exchange. The externalities of education spill over to all economic-sectors: agriculture, industry and services. The farmers with formal education and training demonstrate higher level of productivity; greater absorption of new technological inputs viz. chemical, biological and organic; follow superior managerial, marketing and storage practices; better comprehend the market signals in the product, labour and credit markets, and acquire sophistication related to cost, profit and accounting propositions. Further, the agricultural and rural economy reaps immense benefits from farmers' education through improvement of organizational skills; mobility and migration; initiation of off-farm and non-farm activities, etc. (Lockheed et al., 1980, Schultz, 1988, and Foster, et al., 1995).

The contribution of higher education in developing societies is more pronounced and crucial. Apart from directly measurable economic benefits, the higher education imparts newer ideas, values, and attitudes and is instrumental

in behaviour transformation by making the individual more liberal in outlook and action. It is held that education is the most powerful tool for the growth of individual by advancing economic and social mobility, especially among the children of poor households (The World Bank, 1991). Education affects the whole course of life long earnings and has been instrumental in the curtailment of poverty and unemployment. Many micro-development studies conducted in the context of women education establish that women education has favourable impact on their general socio-economic wellbeing by influencing their earnings, life styles, occupational mobility, family sizes and nutritional status. The female education acts as the chief determinant of population growth rate because of its effect on their fertility behaviour, marriage age, contraceptive use, environmental protection, sanitation, etc. This results in the reduction of infant mortality, child mortality, maternal mortality and morbidity, etc. Indeed, women education has strong impact on the reduction of gender related discrimination (Nair, 1981; Dasgupta, 1990; The World Bank, 1997).

The growth in human capital base of workforce proves very helpful in the modernization and upgradation of technological content of production. Education is the key input in the augmentation of human capital by inculcating critical skills, knowledge, dexterity and scientific outlook to workforce. With this, the overall growth of the economy accelerates and becomes sustainable and the weight of national economy in global economy goes up (Oshima, 1988). Further, growth of education becomes a major engine for achieving social justice, equal opportunity and democratic values. It also encourages political participation, democratic governance and civil society (The World Bank, 1991, 2000).

The market fundamentals in the knowledge driven economic environment are closely associated with the quality of human resources. The differences in the stock of human resources determine the process of convergence or

divergence among countries. Thus, the national share in global education stock is very crucial in determining the overall position and power of the country in the world. The countries, which would fail to increase their share in global knowledge market, would face marginalization in world affairs. So, the education is considered as the cutting edge of a nation's international competitiveness, both economic and non-economic. Hence, education imparted with right content and quality has emerged as primary growth driver of an economy.

1.2 Financing of Education:

Education financing has always been a matter of great challenge and policy concern. The education sector as wholesome unit competes for resources with other sectors of the economy. Further, within the education sector, there always remains a competition for distribution of resources among its various sub-sectors. The fact worth noticing is that the resource requirement of the education sector is enormous, as education is a highly time and labour consuming process with long gestation period. The most pertinent and particular characteristic of the educational system is that it itself produces its most indispensable input, i.e. teachers (Schultz, 1988). Further, the various types and levels of education are complementary and dependent on each other. For example, the elementary education and higher education are interdependent by using each other's outputs, i.e. teachers, students and knowledge material, etc.

The principal mechanism for developing human skills and knowledge is the formal education system of a country. This requires vast provisioning of educational facilities through proper back up of resources. The role of public resources has been very profound in the development of education amongst all the countries. In fact, education holds a strong and legitimate claim on the

public resources because of it being a classic case of public good. Studies prove that not only the education acquirers but the society at large stands to gain from the educational attainments of the individuals. Thus, the social benefits or externalities, which spill over from the educational build-up, far outweigh the private individual benefits. These externalities include an improvement in health status, reduction in population growth, improvement in income distribution, strengthening of democracy, reduction in crime, ensuring of civil liberties, etc. (Tilak, 2004). The rapid adoptions of new technologies are necessary to arrest the diminishing marginal returns (Romer, 1988 and 1990). Such externalities constitute a powerful justification for public subsidization of education. The widely held view is that investment in education would be under-optimum if imparting of education were left to the households alone, because the parents make educational decisions without taking into account the societal benefits. Thus, the divergence between societal benefits and private costs could be one of the significant factors in favour of the public subsidization of education (The World Bank, 1991; and Tilak, 2004).

The findings and ultimately the realization of growth enhancing value of education and other endless societal benefits associated with it led to the involvement of public resources into the education sector. This involvement acquired either the form of direct public provisioning of supply of educational services or through providing public subsidies to the private suppliers or some mixture of both the methods. However, the degree and manner of the involvement of public resources vary across the countries and within the country across the various regions and provinces. Economic research shows that expenditure on education is an economic investment involving costs, returns, and productivity implications. It is held that investment in education is at least equally or more productive than the investment in other sectors of the economy and it generates returns more than any other form of investment

(Meier and Rouch, 2000). The internal efficiency of resource utilization in educational institutions also affects to a significant extent the resource requirements of this sector.

The advanced countries have been found to be spending good amount of public resources on education. For example, the advanced countries had spent, on an average, 5.4 per cent of their income on education though the medium of public spending during 1996 (The World Bank, 2000). Further, the share of education budget in the income of some selected countries was as follows: Canada (7 per cent), France (6 per cent), USA and UK (5.4 per cent), Australia (5.6 per cent). It is worth noticeable that the per capita public spending on education was $1394 in the USA in the 1996. Furthermore, in advanced countries, the share of public funds in the total educational expenditure of various countries was overwhelmingly in the range of 80 per cent to 90 per cent. However, in a typical university in the state of Punjab, the share of non-government sources of finance has surpassed than that of the government sources (Raiky, 2003).

In Punjab, the education sector has experienced constrained flow of public resources. It is important to note that the draft education policy of the state prepared in 2002 has no reference to the availability of resources for this sector (GOP, 2002). The share of education sector in the state budgetary expenditure declined over the period. For example, in terms of average of triennium of financial years, it declined from 23.66 per cent (1978-79 to 1980-81) to 16.82 per cent (1999-2000 to 2001-02). Further, the education sector of the state got resources worth 22.08 per cent of state budget during the average of pre-reform period of twelve years (i.e. from 1978-79 to 1989-90), but its share declined to 16.51 per cent during the post-reform period (i.e. 1990-91 to 2001-02).

Across the different five years plans, on an average basis, the education sector got 23.31 per cent of budget during Sixth Five Year Plan (1980-85), which went down to 14.41 per cent during the Eighth Plan (1992-97), and it improved to 17.24 per cent during the Ninth Plan (1997-2002). Similarly, the share of education sector in state income so far has not crossed the level of 3.31 per cent, which it has experienced during Ninth Five Year Plan. Further, the revenue account component comprised around 98 to 99 per cent of state's education budget, leaving practically nothing for physical infrastructure. Within education budget, more than a half goes to the secondary education alone, and university and higher education as sub sector of education sector got just 9.10 per cent of the education budget of the state during 2001-02 (Gill, Singh and Brar, 2005). Thus, the education sector in Punjab, in the face of severe budgetary squeeze, could not perform the task of expanding human capital of adequate quality in the state.

1.3 Equity, Access and Affordability:

The question of access and equity has always attracted a good deal of attention in all policies and plans related to higher education. However, the situation has become more serious particularly at this juncture because of changed policy regime consisting of substantial presence of private service suppliers, imposition of user charges, opening up of institutions to foreign players, ever-rising cost of education, constrained supply of public resources to education sector, loose regulatory mechanism, rising income inequalities, and depressed rural incomes, etc. Even, in advanced countries, the market driven reform process in education sector has been feared to adversely affect the participation in higher education (Pennell, 2005).

It is important to note that the physical provisioning alone does not determine the access to any service. It must be matched by adequate purchasing

power on the part of the service demander. So, the access at affordable prices determines the level of equity of any system from the angle of large-scale participation. If such aspects of any system are not taken care off, it resulted into the exclusion of non-affording sections of populace through the mechanism of pricing out in the education market. In case of education, the prevalence of such phenomenon lead to the exclusion of meritorious but not non-affording students, and thereby, the country remained bereft from realizing the benefits of vast pool of such talent. So, the education-based inequalities, in fact, perpetuate and sharpen all other types of inequalities among the individuals, households, regions, genders, population groups and ultimately among the countries. The existence of educational inequality between educated and illiterate persons leads to producing the sea of other social, political and cultural inequalities (Brar, 1999). It is to be understood that the latest form of societal stratification has been emerging from the very nature and functioning of inherently inegalitarian education system operating in the country. The inequalities being emanated from education have also been described as second or third generation inequalities. The solution to such inequalities in true means lies in massification of quality education and not simply in so called paper enrollments or various informal education programmes and campaigns.

The growth and expansion of education in the state as well as in the country is highly iniquitous in terms of regions, districts, locations, genders, population groups, classes and castes. Further, the state's relatively higher per capita income level is not commensurate with its relatively moderate level of education and health standards (Brar, 2002; Planning Commission, 2003). The number of students declined sharply with the rising level of education and age. For example, during 2001, the typical distribution of students in the state was as follows: elementary education (73.08 per cent); secondary education (20.41 per cent); ITIs and Polytechnics (0.72 per cent); graduate level courses (5.39 per

cent); post-graduate courses (0.39 per cent); research related programmes (.01 per cent) [Gill, Singh and Brar, 2005]. There has been a monumental gap in the literacy levels in the state. The rural scheduled castes females of Mansa district comprise the least literate group with literacy rate of 29.20 per cent in the state as per Population Census of 1991.

In Punjab, the educational outcomes turned out to be highly disturbing in the state when viewed in terms of drop out rates, pass percentages, age specific enrollments and learning achievements. For example, the percentage of successfully pass out students during matriculation examination was just 65.98 per cent in 1998, which further declined to 49.18 per cent in 2002-03 in case of regularly appeared students. The drop out rate was to the extent of 48.10 per cent in 2002-03 from first to tenth standard. And, for upper primary level, the percentage share of overage children was 18.19 per cent in 2004-05 (Gill, Singh and Brar, 2005). Moreover, the educational attainment of poor households fell during 1992-93 and 1998-99 across all the grades from first to nine. For example, as many as 75 per cent of children from the top quintile households completed the 9^{th} grade in 1998-99, but only 9 per cent from the bottom two quintile households reached the same level (The World Bank, 2004). The under-performance of education sector has crippled the education base of the workforce in the state. For example, during 1999-2000, the education level of the workforce in Punjab was as follows: illiterate (33.50 per cent); primary (22.10 per cent); middle (13 per cent); secondary and above (31.50 per cent) [Chadha, 2004]. Thus, the base of effective education in the state has remained highly skewed and, thereby it reflects the long drawn neglect of this sector by the successive regimes.

1.4 Research Design and Methodology:

1.4.1 Coverage and Scope of Study:

Keeping in view the specific objectives and scope of the study, it has been decided to conduct a comprehensive survey of the various universities of Punjab and their regional centres to know the ground realities. The study is confined to four universities, namely, Punjabi University, Patiala; Guru Nanak Dev University, Amritsar; Punjab Agricultural University, Ludhiana; and Panjab University, Chandigarh. Besides the university campuses, the regional centres of all these four universities have also been covered. In all, ten regional centres have been included. These are: five regional centres of Punjabi University, i.e. Guru Kashi Regional Centre (Talwandi Sabo); Punjabi University Regional Centre, Bathinda; Punjabi University College for Information Technology and Management (Mohali); Punjabi University College of Education, Bathinda; Nawab Sher Mohamad Khan Institute of Advanced Studies, Malerkotla; two regional centres of Guru Nanak Dev University, i.e. Guru Nanak Dev University Regional Centre, Gurdaspur, Guru Nanak Dev University Regional Centre, Jalandhar; three regional centres of Panjab University, i.e. Panjab University Regional Centre, Muktsar; Panjab University Regional Centre, Hoshairpur and Panjab University Regional Centre, Ludhiana. There has been no institution attached with Punjab Agricultural University, Ludhiana in the form of regional centre comprising any teaching programme. Thus, in the study, the term "Universities of Punjab" refer to the set of above mentioned institutions.

In order to get a genuine approximation of rural students in terms of number and other characteristics, a survey was conducted from each and every class and course from all of the teaching departments through a pre-tested questionnaire. The survey was executed through the help of the various

officials/administrators, heads of the departments, concerned teachers, student representatives and other known and effective persons besides the members of the study team. In the first round, a list of rural students was prepared from every class, and then questionnaires were got filled from all these rural students. In all, the universe of study comprises of 183 teaching departments as follows: Punjabi University (43 departments), Guru Nanak Dev University (37 departments), Panjab University (44 departments) and Punjab Agricultural University (54 departments). Further, the study has been confined to departments admitting regular students only. The students of distance education and those appeared privately in various university examinations have been excluded. Moreover, the students registered in doctorate programs are also excluded. Thus, the study is confined to regularly admitted bonafide rural students admitted in various courses of all of the teaching departments on the university campuses and their regional centres. There are some differences in the composition of faculties in terms of departments across the universities of the state. To solve this problem, the Punjabi University's composition of faculties has been taken as the base and the faculties of the rest of the universities have been adjusted accordingly.

1.4.2 Objectives of the Study:

The specific objectives of the study are:

1. to work out the share of rural students in the Universities of Punjab;
2. to study the educational background of the rural students admitted in the Universities of Punjab;
3. to explore the educational background and occupation status of the siblings (brothers/sisters) of rural students;
4. to examine the educational background of the parents of rural students;

5. to analyse the socio-economic status of the parents of rural students; and

6. to make policy recommendations.

1.4.3 Rural Students: Definition:

The idea to conduct the study originated out of the general feeling and concern emanating from four factors, viz. (i) declining standards of rural schooling, (ii) widening gap between rural and urban educational standards, (iii) systematic exclusion of masses from the quality education under the operation of the new economic policy regime, and (iv) growing tendency on the part of rurally based influential parents to shift their wards to urban schools mainly on daily-commuting basis. So, it is held that the share of students from the typically rurally located schools declined, over the time period, in the state and national level educational institutions and education based job markets under the cumulative pressure of entrance tests; academic merits; lack of exposure; and deficiency of human, material and social capital on the part of their parents. Thus, the above specificities have been given paramount importance in the adoption of the definition of the rural students. So, in this study the rural student has defined as below:

In the study, only those students are treated as rural students who have passed either of their matriculation or senior secondary (plus two) examination or both from the rural schools situated anywhere in India. Only those schools are considered as rural schools which do not fall in the area of a Municipal Corporation/Municipal Committee/small town/Notified Area. It is to be noted that the central thrust of the study was to assess the number of pass-outs from rurally located schools entering the universities of the state. Therefore, the present place of residence/stay of the student during study in the universities does not matter so far as the identification of the rural students is concerned. During the study in universities, the student may be residing either in the village

or in the hostel or in any urban location. Thus, what matters most for the purpose of identification, main objective of the study, is the location of the school from where a student passed out either matriculation or plus two examination or the both.

1.4.4 Data Sources and Time-Period:

The study is primarily based on primary data. The data have been collected through a census survey method from all the identified rural students, i.e. 911 students consisting of 592 boys and 319 girls. The data pertaining to the total enrolment, class-wise and course-wise, have been obtained from the statistical wings of the respective universities. The survey and results of the study pertain to the academic year 2005-06. The survey has been carried out during the period of February 2006 to April 2006.

1.5 Chapter Scheme:

The study consists of five chapters. Chapter I, besides discussing the methodological framework, deal with three components: (a) relationship between education and development, (b) financing of education, (c) access, equity and affordability. Chapter II examines the higher education scenario in Punjab by exploring the growth, expansion and evolution of this sector. Chapter III provides the number and proportion of rural students in the universities and their regional centres. This Chapter also brings out the number and proportion of rural students, both faculty-wise and department-wise. Chapter IV dwells on certain important socio-economic and educational details about the rural students and the households where they come from. The summery of main conclusions and public policy prescriptions are put forth in the last chapter i.e. Chapter V.

Chapter II

HIGHER EDUCATION SECTOR IN PUNJAB: GROWTH, STRUCTURE AND PRIVATE INITIATIVE

The role of higher education in achieving an individual's aspirations like getting better income jobs, high living standards, intellectual stimulations, vertical mobility, and social esteem is well documented in the development economics (Schultz, 1961; Blaug, 1970; Harbison, 1973; and The World Bank, 2003). And, for the societies also, it definitely provides an option to promote the application of better technology, higher productivity, more economic progress (Benhabib and Spiegal, 1994) and the other ingredients to generate international competitiveness (The World Bank, 2003). It also creates, shapes and preserves the good virtues - social justice, equality of opportunity, democratization of polity, etc. - that are necessary to create a civil society (Todaro, 1985; Johnstone, 1993; and Tilak, 2004). To reap the benefits of global economy in one's favour, a large proportion of a country/region's population must have higher-level professional and technical education (The World Bank, 2000) and ready to acquire new ones.

This chapter is devoted to the growth and accessibility of higher education sector in the state. The chapter is divided into two sections. Section I deals with the expansion of colleges/institutes of higher learning, increasing enrollments in them and unregulated dynamics of private sector's initiatives in the higher education sector of the state. And, Section II examines the accessibility question of higher education in the state both from the macro and micro perspectives.

I

2.1 Development of Higher Education in Punjab

The higher education in Punjab - whether formal or non-formal - has a very long historical past with a strong colonial legacy. Its expansion was very limited and its accessibility to the general masses, however, was marred by the poor socio-economic conditions (Kaur, 1992) as the British Rule had vested interests in its expansion as well as accessibility. After India's independence in 1947, the Punjab government, especially after the Reorganization of Punjab in 1966, has made many conscientious and planned efforts to develop and expand higher educational facilities in the public sector to create a pool of highly skilled manpower to fulfill the anticipated demand of such persons in the state. Under this policy, the government (state) has allocated more funds to open the new higher education institutions. All these state efforts have brought out many significant changes in the expansion of higher education system in the state. The structure of higher education developed in the Punjab state, in fact, has followed the national pattern of imparting higher education generally in the liberal, technical and professional subjects through the universities and their affiliated colleges (Mittar, Singh and Brar, 2002).

2.1.1. Growing Number of Universities

In Punjab, there were three universities (84 affiliated colleges; 26.19 per cent rural) during 1966-67, and four universities (161 affiliated colleges; 32.30 per cent rural) during 1970-71 imparting the higher education in the whole state (GOP, 1978). And, now, there are nine universities (including a Deemed University) and 394 recognized colleges/institutes providing much-diversified courses of higher education in the state. Three important state universities, namely, Panjab University, Chandigarh (1948); Punjabi University, Patiala

(1962); and Guru Nanak Dev University, Amritsar (1969) train the students of state in the general as well as professional education. The range, diversity and sophistication of the courses/subjects offered by these universities (updated from time to time) are equivalent and of the same pattern as anywhere in India. During the last decade of 1990s, however, these universities have opened many professional and technical courses at their own campuses and regional centres (Ghuman, Singh and Brar, 2005). Another important university, i.e. Punjab Agricultural University, Ludhiana (1962) has earned a well-known distinction for its contribution in the field of agricultural and allied sciences related to higher education, research and extension services (research lab-to-field application) that has promoted the agricultural economy of the state.

Punjab Technical University, Jalandhar (January, 1997) and Baba Farid University of Health Sciences, Faridkot (July, 1998), which were established exclusively for developing technical education and medical sciences, respectively, are the affiliating and examining bodies. However, both universities do not have their on-campus teaching and research departments. Thapar Institute of Engineering and Technology, Patiala (earlier an engineering college) has acquired the status of a Deemed University during the year 2000. Two new universities – Guru Angad Dev Veterinary and Animal Science University, Ludhiana in 2006 by taking over the Department of Veterinary and Animal Science of Punjab Agricultural University, Ludhiana and Rajiv Gandhi National University of Law at Patiala in 2006 – has been established and are at the stage of infancy. Another self-financing private university - Lovely Professional University at Jalandhar - is being established with effect from this academic session (2006-07). These universities provide mostly graduate/postgraduate level higher education and research relevant to the state economy and elsewhere. These eight universities in Punjab, established and governed by the Acts passed by state/union governments from time to time, are

functioning as autonomous bodies. The state universities are highly dependent upon the state finances for their yearly budgetary provisions and most of them, now, are facing severe resource crunch due to the progressive cuts in allocation of state funds since 1990s.

2.1.2. Growing Number of Colleges/Institutes

At present, almost all types of universities and affiliated colleges exist in Punjab. Various departments of the universities generally provide postgraduate level higher education and research, and the affiliated colleges (government owned or private owned aided or un-aided) are mostly imparting undergraduate level of higher education. Some colleges/institutes also offer postgraduate level of education. The students enrolled in these colleges/institutes are getting the liberal education not only in arts, commerce and home science streams, but also the professional and technical education in engineering, medicine, nursing, business administration, computer science, veterinary science, agriculture, law, etc. Besides, in order to prepare teachers for the elementary and secondary schools, many teachers' training institutes (E.T.T. institutes for the elementary school teachers and B.Ed. colleges for the high/senior secondary school teachers) have come up in the state. Actually, all different types of educational institutions existing in the state at various levels highlight the diversity in the availability of courses/subjects of higher education. These affiliated colleges are broadly divided into two categories: (a) general education colleges and (b) professional education colleges.

(a) Dominance of General Education Colleges

General educational is defined as those education processes, which train the recipients with general qualities of reasoning, abilities, skills, family and community roles. General education in the study includes the liberal form of education in the subjects of arts, humanities, basic sciences, home science and commerce, etc. Many research studies revealed that the state government has

allocated more funds to higher education during the 1970s and mid-1980s (Gill, Singh and Brar, 2005) and the budgetary expenditure on the general education in the state is at the top (Ghuman, Singh and Brar, 2005). Naturally, the number of education colleges imparting knowledge in arts, basic sciences and commerce streams were the maximum (Table 2.1). In the year 1971, there were 138 such colleges (50 rurally located colleges; 36.27 per cent) in Punjab, and their number rose to 162 colleges (58 rurally located colleges; 35.20 per cent) in 1981, 171 colleges (63 rurally located colleges; 36.42 per cent) in 1991 and 223 colleges (64 rurally located colleges; 28.70 per cent) during 2003-04. Evidently, majority of the colleges established during the 1971-2004 period (33 years) were located in the urban Punjab. The trend growth rate in these colleges during the decade of 1971-81 was 1.62 per cent per annum compared to 0.54 per cent per annum during the decade of 1981-91. Further, during the 1991-2004 period, these colleges grew at the rate of 2.24 per cent per annum. On the other side, the number of teachers training (B.Ed. and/or M.Ed.) colleges has marginally increased from 17 in 1971 to 18 in 1991. In fact, only three such colleges were rurally located between 1981 and 1991. However, during the 1991-2004 period, 20 new colleges were added and 13 colleges (34.21 per cent) were located in rural areas. The trend growth rate found to be 6.42 per cent per annum (13.00 per cent per annum among the rural colleges) during the period of 1991-2004. Moreover, the colleges providing teachers training are likely to rise in a big way in the next couple of years due to liberalized policy of the state as well as central governments to open new such colleges in the big way.

(b) Growing Professional Education Colleges/Institutes

Professional education is part of higher education that qualifies the recipients for a specific profession. It imparts better skills/knowledge (marketable expertise), or specialized training/learning process or which is respected because it involves a high level of expertise, employability and

earnings. In fact, it integrates the knowledge, skills and career proficiencies with academic contents; and prepares recipients for the workplace, further education, training and family & community roles. Professional education consisting of engineering, medical, business administration, computer science, pharmacy, physiotherapy, laws, etc., is an important segment of higher education. Actually, the recent advances in these branches of knowledge, along with the application of networked transmission of information/knowledge at an astonishing speed, have created more opportunities at the doorsteps of those who have the higher skills and knowledge or who have the capacity to learn and add something new to already possessed qualities. These qualities of the labour force have the capacity to transform and increase the resources base of the economy.

The data show (Table 2.1) that a significant growth in the number of engineering and medical colleges has occurred recently in Punjab. For instance, there were just two engineering colleges in 1971, their number rose to three in 1991, four in 1991 and 32 in 2003-04. Thus, during the decades of 1971-81 and 1981-91, only one engineering college per decade was added in the Punjab state. The maximum addition in the number of such colleges has occurred during recent period between 1991 and 2003-04 period; growing at the rate of 18.92 per cent per annum. And, 20 engineering colleges were rurally located during 2003-04, growing at the rate of 28.36 per cent per annum. A similar trend has been observed in the case of higher education related to medical sciences. During the decade of 1971-81, only one medical college (allopathic) was added to four medical colleges (allopathic) in the state. No such college was added during the decade of 1981-91. However, during the recent period of 1991-2004, number of medical sciences related colleges which include medical (allopathic), dental, ayurvedic, homeopathic, pharmacy, nursing, etc., have increased to 66; showing an astonishing growth rate of 18.06 per cent per annum. Out of these, 16 colleges (24.24 per cent) are located in rural areas,

whereas none of the dental/medical college was located in rural areas during the two decades (1971-1991). The very location of these colleges in the rural area should not be taken that they are meant for rural students. The admission in these colleges is through the entrance tests and in the process rural students are not able to compete with their urban counterparts.

Table 2.1 (a): Growing Number of Recognized Colleges/Institutes in Punjab by Location and Type.

Type of college	1971		1981		1991		2003-04	
	Total	Rural	Total	Rural	Total	Rural	Total	Rural
Arts, Science, Commerce & Home Science	138 (85.71)	50 [36.27]	162 (86.17)	58 [35.20]	171 (84.65)	63 [36.42]	223 (56.60)	64 [28.70]
Teachers Training (B.Ed.)	17 (10.56)	1 [5.88]	18 (9.57)	3 [16.67]	18 (8.91)	3 [16.67]	38 (9.65)	13 [34.21]
Engineering & Technology	2 (1.24)	1 [50.00]	3 (1.60)	1 [33.33]	4 (1.98)	1 [25.00]	32 (8.12)	20 [62.50]
Medical/ Dental Sciences	4* (2.48)	-	5* (2.66)	-	9 (4.46)	-	66 (16.75)	16 [24.24]
MBA/MCA/LAW	-	-	-	-	-	-	35 (8.88)	13 [37.14]
Total	161 (100)	52 [32.30]	188 (100)	62 [32.46]	202 (100)	67 [32.68]	394 (100)	126 [31.98]

Table 2.1 (b): Compound Growth Rate of Recognized Colleges/Institutes in Punjab by Location and Type.

Type of college	Compound Growth Rate (Total)			Compound Growth Rate (Rural)		
	1971-81	1981-91	1991-2003	1971-81	1981-91	1991-2003
Arts, Science, Commerce & Home Science	1.62	0.54	2.24	0.50	0.83	0.13
Teachers Training (B.Ed.)	0.57	-	6.42	11.61	-	13.00
Engineering & Technology	4.14	2.92	18.92	-	-	28.36
Medical/ Dental Sciences	2.26	6.05	18.06	-	-	25.99
MBA/MCA/LAW	-	-	34.48	-	-	23.83
Total	1.56	0.72	5.73	1.77	0.78	3.90

Note: *Only allopathic medical colleges.
Figures in parentheses (...) are percentages and in index brackets [...] are rural proportions
Sources:
1. **Statistical Abstract of Punjab**, Economic and Statistical Organization, Chandigarh, various issues.
2. **Economic Survey**, Punjab, Economic and Statistical Organisation, Chandigarh, various issues.
3. **Social and Educational Statistics of Punjab**, Economic and Statistical Organisation, Chandigarh, various issues.

During the recent years, professional education in business management, computer science, and law subjects has also gained importance in the state. Earlier, the respective departments of three universities of Punjab provided such professional education on a limited scale. In fact, there was no college up to

1998 that provided higher education in these courses. Now, there are 35 colleges/institutes that impart higher education in these fields, showing an astonishing growth rate of 34.48 per cent per annum during 1991-2004. More than one-third among them was rurally located (37.14 per cent) during 2003-04; showing a growth rate of 23.83 per cent per annum during 1991-2004.

It means that, in principle, the state has taken a right decision by encouraging the establishment of colleges/institutes imparting professional and engineering education in Punjab. Earlier, the demand for such courses in the state was very much higher than that of the availability of seats in the state. Consequently, a large number of students had to move to other states willingly or unwillingly to get training, particularly in the engineering and medical courses by spending huge amounts as the capitation fee alone. All these new initiatives (opening up of new colleges/institutes) have increased the accessibility of higher education, both theoretically and practically, particularly in rural areas of Punjab.

2.1.3. Prominence of Private Initiative

An assessment of the ownership status of colleges/institutes indicates that the private sector's initiative in establishing the general education and profession education colleges is very much significant. At present, on the basis of ownership and financing patterns, there are three types of colleges in the state, i.e. (i) government owned, (ii) privately owned aided and (iii) privately owned unaided colleges. The majority of general education colleges fall under the category of privately managed but aided colleges. The state government provides grants-in-aid to finance the larger part of their recurring expenditure (up to 95 per cent). Actually, the entire liability of paying salary bill of teaching and non-teaching staff of these colleges on account of various pay revisions of teachers — 1973, 1986 and 1996 — is that of the state government. Therefore, it would be interesting to examine growth of privately managed and government

owned colleges separately. Table 2.2 gives this information for three years 1970-71, 1998-99 and 2003-04. The data show that more than four-fifths of general education colleges (81.58 per cent) were privately managed in 1970-71 and this proportion declined to 76.70 per cent during 1998-99 and rose marginally to 77.58 per cent (55.61 per cent aided and 21.97 per cent non-aided) during 2003-04. Similarly, an overwhelming majority of teachers' training colleges were managed by the private sector. Further, only 22.42 per cent of general education colleges and 10.53 per cent of teachers training colleges were government owned during 2003-04

Interestingly, in the case of engineering, medical science, MBA/MCA/Law Colleges, it is the private owned unaided colleges, which dominate the scene since the 1990s. The proportion of the government owned colleges and private aided colleges among these colleges in 2003-04 was very small. This has raised many important public policy implications for the future growth. Since the expansion of higher professional education facilities are overwhelmingly in the hands of for-profit private sector that led to the commercialization of higher education under the neo market friendly economic regime. The responsibilities of the state government and that of the universities of the state, therefore, increases manifold to monitor and regulate the quality of higher education and fees and funds being charged by these private unaided service providers.

The growth of higher educational facilities in general education in the state of Punjab did not seem to be rationally linked to the manpower requirements of the state economy or not tailored to the rising demand for new vocations at the level of national and world economy (Mittar, Singh and Brar, 2002). These initiatives are largely based on the uncoordinated plans of private trusts/societies/agencies whose motivations may not always be the spread of education. It can be seen that the general educators in arts and social sciences

subjects formed the major share of the total students getting higher education in the state. Indeed, the major contribution of the state government to higher education in reorganized Punjab came in 1969 when a multi-faculty Guru Nanak Dev University was established at Amritsar. The latest initiatives are in the form of establishment of the Punjab Technical University in 1997 at Jalandhar, Baba Farid University of Medical Sciences in 1998 at Faridkot, Guru Angad Dev Veterinary and Animal Science University in 2006 at Ludhiana, and Rajiv Gandhi National University of Law in 2006 at Patiala in recent years. All these steps, if organized and regulated properly, are likely to spread the professional education in the state.

Table 2.2: Distribution of Recognized Colleges in Punjab by Type of College and Management

Type of College	1970-71			1998-99			2003-04			
	Govt.	Private Aided and Non-aided	Total	Govt.	Private Aided and Non-aided	Total	Govt.	Private Aided	Private Non-aided	Total
Arts, Science, Commerce & Home Science	21 (18.42)	93 (81.58)	114 (100)	48 (23.30)	158 (76.70)	206 (100)	50 (22.42)	124 (55.61)	49 (21.97)	223 (100)
Teachers Training (B. Ed.)	3 (17.65)	14 (82.35)	17 (100)	3 (15.00)	17 (85.00)	20 (100)	4 (10.53)	15 (39.47)	19 (50.00)	38 (100)
Engineering & Technology	1 (50.00)	1 (50.00)	2 (100)	4 (22.22)	14 (77.78)	18 (100)	4 (12.50)	1 (3.12)	27 (84.38)	32 (100)
Medical/ Dental Sciences	2 (50.00)	2 (50.00)	4 (100)	6 (22.22)	21 (77.78)	27 (100)	12 (18.18)	-	54 (81.82)	66 (100)
MBA/MCA/ LAW	-	-	-	N.A.	N.A.	N.A.	2 (5.71)	-	33 (94.29)	35 (100)
Total	27 (19.71)	110 (80.29)	137 (100)	61 (22.51)	210 (77.49)	271 (100)	72 (18.27)	140 (35.53)	182 (46.19)	394 (100)

Source: 1. Brij Pal Singh (1974), p.52.

2. Office of DPI (Colleges), Punjab.

2.1.4. Growing Enrollment of Students

As expected, with the increase in number of colleges/institutes and available seats in them, the accessibility to higher education, at least theoretically, has increased in the state. As a result, the number of students enrolled in the higher education has increased many times. The analysis of data on student enrollments (Table 2.3) reveals many interesting tendencies regarding the dominance of general education, but inevitable structural changes

that will accompany in the future are in favour of professional education in the state. The major tendencies in general education are three. **First**, an overwhelming majority of total enrolled students (around 90 per cent) has been receiving the general education during 1971-72 to 2003-04. The number of students enrolled for general education grew at the rate of 2.05 per cent per annum during the decade of 1971-72 to 1981-82; at the rate of 2.92 per cent per annum during the decade of 1981-82 to 1991-92 and at the rate of 3.05 per cent per annum during the period of 1991-92 to 2003-04. **Second**, the proportion of girls within the general education has rose from 30.37 per cent in 1971-72, to 39.60 per cent in 1981-82 and 50.22 per cent in 1991-92. During 2003-04, this proportion has gained. This indicates that the number of girls in the general higher education has increased at the fast rate than that of boys during the given time period. **Third**, the enrollment of students in teachers training colleges has grown in a highly regulated way in all these years. However, the share of B. Ed.

Table 2.3 (a): Progress of Students Enrolled in Higher Education in Punjab by Gender and Type of College

Type of College		1971-72	1981-82	1991-92	2003-04
Arts, Science, Commerce & Home Science	B	70,022 (69.63)	74,403 (60.40)	81,778 (49.78)	n.a
	G	30,536 (30.37)	48,778 (39.60)	82,497 (50.22)	n.a
	T	100,558 (100)	123,181(100)	164,275 (100)	235,507
		(93.24)	(92.03)	(92.90)	(88.08)
Teachers Training (B. Ed.)	B	1,270 (39.05)	1,191 (34.10)	921 (27.27)	n.a.
	G	1,982 (60.95)	2,302 (65.90)	2,456 (72.73)	n.a.
	T	3,252 (100)	3,493 (100)	3,377 (100)	4,188
		(3.02)	(2.61)	(1.91)	(1.57)
Engineering & Technology	T	1,383	1,869	2,737	16,228
		(1.28)	(1.40)	(1.55)	(6.07)
Medical/Dental Sciences	T	2,652	3,148	4,380	9,815
		(2.46)	(2.35)	(2.48)	(3.67)
Veterinary and Agriculture	T	n.a.	2,159*	2,044**	1,632
			(1.61)	(1.16)	(0.61)
Total		107,845	133,850	176,813	267,370
		(100.00)	(100.00)	(100.00)	(100.00)

Note: B = Boys, G = Girls, T = Total. *For 1982-83 year. **For 1990-91 year. n.a.= not available.
Figures in parentheses are percentages
Sources: Reported in Table 2.1.

educators went down from 3.02 per cent in 1971-72, to 2.61 per cent in 1981-82, to 1.91 per cent in 1991-92, and 1.57 per cent in 2003-04. And, the girls out-numbered the boys among the trained teachers of school education right from the beginning (1971-72) to the end (2003-04).

Table 2.3 (b): Compound Growth Rate of Students Enrolled in Higher Education in Punjab by Gender and Type of College.

Type of College		Compound Growth Rate		
		1971-72 to 1981-82	1981-82 to 1991-92	1991-92 to 2003-04
Arts, Science, Commerce & Home Science	B	0.61	0.95	—
	G	4.80	5.40	—
	T	2.05	2.92	3.05
Teachers Training (B. Ed.)	B	-0.64	- 0.26	—
	G	1.51	0.65	—
	T	0.72	-0.34	2.18
Engineering & Technology	T	3.06	3.89	15.99
Medical/Dental Sciences	T	1.73	3.36	6.96
Veterinary and Agriculture	T	--	-0.05	-1.86
Total		2.18	2.82	3.50

Note: B = Boys, G = Girls, T = Total. *For 1982-83 year. **For 1990-91 year. n.a.= not available.
Figures in parentheses are percentages
Sources: Reported in Table 2.1.

In the case of profession education, students' enrollment in engineering and medical courses has been indicating a moderate rise between 1971-72 and 1991-92, but during 1991-92 to 2003-04 period, the students' enrollments has increased at the faster rate. That process has brought out the significant structural changes in favour of professional higher education in the state. For example, the number of students enrolled in engineering colleges has increased from 1383 (1.28 per cent) in 1971-72 to 1869 (1.40 per cent) in 1981-82, to 2737 (1.55 per cent) in 1991-92 and to 16228 (6.07 per cent) in 2003-04. During the period of 1991-92 to 2003-04, students enrolled in the engineering colleges grew at an astonishing rate of 15.99 per cent per annum. Similarly, student enrollment in medical colleges also showed a rising trend. For instance, in

1971-72, 2652 students (2.46 per cent) were enrolled in medical sciences' colleges in Punjab, but the number increased to 3148 students (2.39 per cent) in 1981-82, 4380 students (2.51 per cent) in 1991-92 and 9815 students (3.67 per cent) in 2003-04. Students enrolled in the medical colleges grew at the rate of 6.96 per cent per annum during the period of 1991-92 to 2003-04. The students enrolled in veterinary and agricultural courses did not show any favour by the Punjabi youth, as the number of students opting these courses had decreased both absolutely and relatively.

Since the bulk of the students are enrolled in the general education in Punjab, it is interesting to probe which course/s is/are preferred by the Punjabi students. Table 2.4 points out that about 90 per cent of students were studying at the graduation level and a little less than 10 per cent were at the post-graduation level of higher education in the state. Further, more than 70 per cent of students for graduation, and between 6.5 to 8.5 per cent of students for post-graduation enrolled themselves in the area of Arts and Social Sciences subjects during the period of 1971-72 to 2003-04. During the same period, more than one-tenth of students were studying the science courses and a little less than one-tenth were studying the commerce courses at the graduation level. On the other hand, at the postgraduate level, a very tiny proportion of general educators were studying science (vary between 0.52 per cent and 2.20 per cent) and commerce (between 0.14 per cent and 0.68 per cent) subjects. Similarly, the students enrolled for M.Phil./Ph.D. never reached one per cent during the time period of 1971-72 to 2003-04. It means that Punjabi students, in all classes, generally prefer Arts and Social Sciences courses. Indeed, the proportion of science students at graduate level decreased from 18.44 per cent in 1971-72, to 13.20 per cent in 1981-82, 11.19 per cent in 1991-92, and 11.12 per cent in 2003-04. Also, there was a corresponding increase in the share of commerce students at graduate level.

Table 2.4: Percentage Distribution of Students Enrolled in Punjab by Sex and Type of Course, 1971-72 to 2003-04

Name of Course	1971-72			1981-82			1991-92			2003-04		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1. Graduate	**94.15**	**92.04**	**93.53**	**93.16**	**89.97**	**91.85**	**92.46**	**90.64**	**91.50**	**93.59**	**87.08**	**89.92**
(i) B.A./B.A. (Hons.)	69.96	80.69	**73.12**	67.16	79.30	**72.16**	65.18	74.80	**70.24**	73.38	67.92	**70.30**
(ii) B.Sc./B.Sc. (Hons.)	21.40	11.34	**18.44**	15.63	9.74	**13.20**	12.69	9.84	**11.19**	9.75	12.19	**11.12**
(iii) B.Com./B.Com. (Hons.)	2.79	0.01	**1.97**	10.37	0.93	**6.48**	14.60	5.99	**10.07**	10.45	6.98	**8.50**
2. Postgraduate	**5.82**	**7.96**	**6.45**	**6.45**	**9.50**	**7.71**	**6.71**	**8.41**	**7.61**	**6.20**	**12.65**	**9.83**
(i) M.A.	5.32	7.39	**5.93**	5.73	8.57	**6.90**	5.33	6.88	**6.15**	4.51	8.86	**6.96**
(ii) M. Sc.	0.50	0.56	**0.52**	0.68	0.92	**0.78**	1.23	1.40	**1.32**	1.41	2.81	**2.20**
(iii) M. Com.	0.01	0.00	**0.00**	0.04	0.01	**0.03**	0.15	0.13	**0.14**	0.28	0.98	**0.68**
3. Ph.D./M.Phil.	**0.02**	**0.00**	**0.02**	**0.39**	**0.53**	**0.45**	**0.83**	**0.95**	**0.89**	**0.21**	**0.27**	**0.25**
Total	100.00	100.00	**100.00**	100.00	100.00	**100.00**	100.00	100.00	**100.00**	100.00	100.00	**100.00**

Source: **Statistical Abstract of Punjab**, (Various Issues), Economic Advisor to Government of Punjab.

The excessive-popularity of arts and Social Sciences courses could be either due to the greater demand for these courses or due to the greater availability of such seats offered by the colleges in Punjab. But, the high proportion of Arts and Social Sciences' graduates or postgraduates among the educated unemployed job seekers in Punjab nullify the possibility of greater demand for these courses in the market. The availability factor, thus, emerges as the more tenable explanation (Mittar, Singh and Brar, 2002). So, the increase in number of students enrolled in these colleges indicates that most of the students would like to go in for higher education of whatever kind available to them. Thus, the structure of education measured in terms of proportion of general education colleges and students enrolled in them has become highly biased in favour of general education that needs to be corrected. The recent emphasis of Punjab government to promote professional education in the state seems to be based on the rational expectations of people.

II

2.2 Higher Education and Weaker Sections

It is argued that for achieving cohesive, equitable and productive society, special schemes should be initiated to promote higher education among the scheduled castes/tribes and other disadvantaged groups. This can be done by providing positive protective discrimination (reservation of seats) and by increasing the number of institutions of higher learning in inaccessible areas. In Punjab, the growing number of colleges/institutes, wide spread all over the state and increased enrollment of students in them indicates that the access to higher education has been increased in the state. Since about one-third of the colleges/institutes located in rural areas of Punjab, it is, therefore, expected that the rural learners' accessibility of higher education (near the residence) has increased. Theoretically, expanding higher education related institutional paraphernalia is the necessary condition (not sufficient condition) for increasing the accessibility, but in reality the accessibility question is largely a function of demographic, economic and socio-cultural dynamics (macro environment) operating in the society.

In fact, opening of new institutions of higher learning largely under the market friendly policies of neo-liberal paradigm adopted since the 1991 will seriously diminish the right to access to higher education in the state. Accessibility question in the study has been examined both at the macro and the micro levels. At the macro level, it takes into account the proportion of scheduled castes students who have enrolled themselves in the colleges/institutes of higher education in the whole state. And, the micro level aspect has been studied by taking into account the share of students belonging to the weaker sections of society admitted in the departments and regional centers of Punjabi University, Patiala during the academic session of 2005-06.

2.2.1 Accessibility Question: Macro Perspective

It is true that the Indian society is highly hierarchical, stratified and deficit in vertical mobility. The socio-economic differentials between the different classes, particularly between the rich and the poor, the large farmers and the small/marginal farmers, the educated and the uneducated, and the scheduled castes/tribes and the non-scheduled castes/tribes' populations are very large (Kothari Commission, 1964-66), and may be widen in the coming years due to non-initiation of pro-poor programmes on the bigger scale (Hirway, 2006). A similar situation is prevalent in the Punjab state, where the people living in the rural areas, belonging to the scheduled castes and economically backward classes do not have equal access to educational opportunities compared to the other better off sections of society. In Punjab, the scheduled castes population constitutes about 29 per cent of total population in 2001, but their proportion in students' enrollment at higher education level is significantly low (Mittar, Singh and Brar, 2002).

Table 2.5 shows the proportion of scheduled castes' students out of the total students enrolled in the various types of higher education in Punjab. On the whole, the proportionate share of students belonged to the scheduled castes has been low (10.23 per cent in 2000-01 and 10.25 per cent in 2003-04) compared to their proportion in the total population (28.95 per cent as per Population Census of 2001). Although the share of scheduled castes' students has risen from 8.86 per cent in 1981-82, to 11.25 per cent in 1991-92, but declined to 10.23 per cent in 2000-01 and 10.25 per cent in 2003-04. Gender-wise, the girl students belonging to scheduled castes have increased their share from 3.88 per cent of total girl students in 1981-82, to 7.20 per cent in 1991-92, to 9.03 per cent in 2000-01 and to 9.76 per cent in 2003-04.

Table 2.5: Percentage Distribution of Scheduled Castes Students' Enrollment out of Total Students Enrolled in Punjab by Type of Course and Sex

Name of Course	1981-82			1991-92			2000-01			2003-04		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1. Graduate	**11.08**	**3.85**	**8.60**	**15.08**	**7.12**	**10.93**	**11.16**	**8.92**	**9.97**	**11.12**	**10.13**	**10.58**
(i) B.A./B.A. (Hons.)	13.85	4.31	9.53	18.85	8.01	12.78	12.89	10.16	11.40	12.11	11.47	11.76
(ii) B.Sc./B.Sc. (Hons.)	4.60	0.32	3.13	8.10	3.50	5.97	6.90	4.62	5.67	9.09	5.67	6.98
(iii) B.Com./B.Com. (Hons.)	2.87	0.93	9.39	4.30	1.95	3.56	5.41	4.27	4.88	6.07	4.93	5.55
2. Postgraduate	**13.70**	**2.02**	**7.77**	**17.68**	**6.40**	**11.12**	**16.76**	**7.57**	**10.21**	**10.80**	**6.73**	**7.86**
(i) M.A.	14.87	2.24	8.41	20.50	7.48	12.83	18.34	8.40	11.25	11.80	7.72	8.89
(ii) M. Sc.	4.73	0.00	2.44	5.40	1.73	3.35	8.28	3.85	5.18	9.01	4.43	5.72
(iii) M. Com.	0.00	0.00	0.00	18.03	0.00	9.17	18.30	4.99	8.42	3.75	4.40	4.28
3. B. ED.	**27.16**	**7.16**	**14.64**	**20.85**	**8.34**	**11.94**	**25.21**	**17.34**	**19.66**	**22.92**	**14.05**	**16.37**
4. Professional	**13.37**	**7.61**	**12.46**	**20.28**	**12.44**	**18.22**	**11.29**	**9.92**	**10.98**	**8.48**	**8.94**	**8.60**
(i) B.E./B. Tech./B. Arch.	6.50	0.00	6.39	15.85	3.57	14.87	10.29	6.26	9.55	7.49	5.32	7.03
(ii) M.B.B.S. Only	20.44	8.01	17.15	26.83	13.94	21.29	19.44	17.45	18.50	18.68	17.95	18.30
5. Ph. D./M. Phil.	**3.09**	**0.00**	**1.58**	**3.26**	**1.86**	**2.48**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Total	11.64	3.88	8.86	15.65	7.20	11.25	11.55	9.03	10.23	10.83	9.76	10.25

Source: Culled from the data given in the **Statistical Abstract of Punjab**, (Various Issues), Economic Advisor to Government of Punjab.

Across the different courses of higher education, the share of scheduled castes students increased among the majority of graduate and postgraduate courses of general education during the first two decades (1981-82 to 1991-92) and thereafter it began to decrease. The proportion of scheduled castes students who opted for science and commerce courses has been very low compared to the share of scheduled castes students opting for arts and social science courses both at the graduate and postgraduate levels. The proportion of scheduled castes students who enrolled in the B.Ed. course has increased from 14.64 per cent in 1981-82, to 19.66 per cent in 2000-01; an increase of 5.02 percentage points in 20 years time period. But their share declined to 16.37 per cent in 2003-04. Moreover, the share of scheduled castes students getting engineering education had increased from 6.39 per cent (1981-82), to 14.87 per cent (1991-92), but decreased to 9.55 per cent (2000-01) and 7.03 per cent (2003-04). In the MBBS course, the share of scheduled castes students receiving training in medical colleges of the state has increased from 17.15 per cent in 1981-82, to 21.29 per cent in 1991-92, but decreased to 18.50 per cent in 2000-01 and 18.30 per cent

in 2003-04. Moreover, the share of scheduled castes' girls has been picking upward among all courses over the time period, yet their shares have been remained consistently lower compared to the share of scheduled castes' boys. These facts indicate that the human capital formation among the scheduled castes students of the state has been very slow and demands corrective measures.

2.2.2 Accessibility Question: Micro Perspective

The universities are considered to be the highest seats of learning and research in India or elsewhere. All students who are able to get admission in any department or regional centre of the university are supposed to be intelligent as well as hardworking. Moreover, these students consider themselves to be lucky. In all courses/subjects, particularly among the professional courses, the admission is either through the competitive entrance tests or through competitive merit of the qualifying examination/s. Among almost all the university departments, the number of applicants are very large than that of the available seats in each course. Indeed, the very high scoring students are admitted in the university teaching departments. The regional centres are placed at the second order of preference by the students. Further, the university students are expected to perform well in their academic lives and, later on, become the achievers in the various socio-economic fields of their choice. It is, therefore, interesting to examine the proportion of weaker sections of society in the university level higher education. For this purpose, Punjabi University, Patiala has been chosen as the case study. The analysis has been carried out across the broader subjects/courses taught in the university departments and its regional centers. These subjects/courses are clubbed together and divided into (i) Arts, Languages and Social Sciences, (ii) Life Sciences, (iii) Physical Sciences, (iv) Education and Information Sciences, and (v) Professional Courses.

An analysis of data reveals that on the whole, 5281 students (50.45 per cent boys and 49.55 per cent girls) were admitted in the different departments at the campus and regional centers of Punjabi University, during the academic session of 2005-06. Out of them, 4251 students (48.62 per cent boys and 51.38 per cent girls) were studying at the campus and 1030 students (57.96 per cent boys and 42.04 per cent girls) were getting higher education in the regional centers. Thus, the university departments attracted more than four-fifths of students (80.50 per cent; 4251 students) and the regional centers of university about one-fifth of students (19.50 per cent; 1030 students).

Table 2.6: Distribution of Students Enrolled in Punjabi University, Patiala by Type of Course and Hostel Status, 2005-06

Faculty/Course	Total Enrollment			Hostellers		
	Boys	Girls	Total	Boys	Girls	Total
University Campus						
Professional Courses	1023	466	1489	464	198	662
	(100.00) [38.40]	(100.00) [17.81]	(100.00) [28.20]	(45.36)	(42.49)	(44.46)
Arts, Languages and Social Sciences	604	852	1456	174	305	479
	(100.00) [22.67]	(100.00) [32.56]	(100.00) [27.57]	(28.81)	(35.80	(32.90)
Life Sciences	195	357	552	66	146	212
	(100.00) [9.32]	(100.00) [13.64]	(100.00) [10.45]	(33.85)	(40.90)	(38.41)
Physical Sciences	144	374	518	94	216	310
	(100.00) [5.41]	(100.00) [14.29]	(100.00) [9.81]	(65.78)	(57.75)	(59.85)
Education & Information Science.	101	135	236	48	60	108
	(100.00) [0.41]	(100.00) [5.16]	(100.00) [4.67]	(47.53)	(44.44)	(45.76)
Sub total	2067	2184	4251	846	925	1771
	(100.00) [77.59]	(100.00) [83.45]	(100.00) [80.50]	(40.93)	(42.35)	(41.66)
Regional Centres						
Professional Courses	537	289	826	74	22	96
	(100.00) [20.15]	(100.00) [11.05]	(100.00) [15.64]	(13.78)	(7.61)	(11.62)
Arts, Languages and Social Sciences	60	144	204	0	0	0
	(100.00) [2.25]	(100.00) [5.50]	(100.00) [3.86]	(0.00)	(0.00)	(0.00)
Sub total	597	433	1030	74	22	96
	(100.00) [22.41]	(100.00) [16.55]	(100.00) [19.50]	(12.40)	(5.08)	(9.32)
Grand Total (University Departments and Regional Centres)	2664	2617	5281	920	947	1867
	(100.00) [100.00]	(100.00) [100.00]	(100.00) [100.00]	(34.54)	(36.19)	(35.35)

Figures in parentheses are the percentages and in index brackets are column-wise percentages.
Source: Office of Statistical Officer, Punjabi University, Patiala.

The course–wise distribution of students shows that the Professional Courses attracted 28.20 per cent of total university students (38.40 per cent of boys and 17.81 per cent of girls) followed by Arts, Languages and Social Sciences (27.57 per cent; 22.67 per cent of boys and 32.56 per cent of girls), Life Sciences (10.45 per cent; 9.32 per cent of boys and 13.64 per cent of girls), Physical Sciences (9.81 per cent; 5.41 per cent of boys and 14.29 per cent of girls) and Education & Information Sciences (4.67 per cent; 3.79 per cent of boys and 5.16 per cent of girls). Among the Regional Centres, the Professional Courses have more dominance (15.64 per cent; 20.15 per cent for boys and 11.05 per cent for girls) compared to the Arts, Languages and Social Sciences (3.86 per cent; 2.25 per cent for boys and 4.50 per cent for girls). Regarding the hostellers, more than one-third of total students of University campus (35.35 per cent; 34.54 per cent boys and 36.19 per cent girls) opted to live in the university hostels. The proportion of hostellers among the university campus departments was found to be higher (41.66 per cent: 40.93 per cent boys and 42.35 per cent girls) than that of the students of Regional Centres (9.32 per cent; 12.40 per cent for boys and 5.08 per cent for girls). Further, the students of Physical Sciences have higher proportion of hostlers (59.85 per cent; 65.78 per cent for boys and 57.75 per cent for girls) followed by the Education and Information Sciences (45.76 per cent; 47.53 per cent for boys and 44.44 per cent for girls), Professional Courses (44.46 per cent; 45.36 per cent for boys and 42.49 per cent for girls) and Life Sciences (38.41 per cent; 33.85 per cent for boys and 40.90 per cent for girls). The Arts, Languages and Social Sciences Courses had the least proportion of the hostlers (32.90 per cent; 28.81 per cent for boys and 35.80 per cent for girls).

Regarding the accessibility of university education among the different sections of society, the Scheduled Castes/Scheduled Tribes students, backward classes students, physically handicapped (all weaker sections of society) & sports persons on one hand, and the Industry/NRI sponsored students (supposed

to be resource rich students) as well as general category students on the other hand were taken separately. The data point out that an overwhelming proportion of students (in the range of 70-90 per cent) across various courses/subjects got admission under the general category students. On the whole, more than 80 per cent (78.49 per cent for boys and 85.48 per cent for girls) fall in the general category students. Among the university departments, general category students held a lower proportion of 79.96 per cent (75.23 per cent for boys and 84.25 per cent for girls) compared to 90.58 per cent (89.78 per cent for boys and 91.69 per cent for girls) of the general category students of regional centres. Further, a little more than 5 per cent students (5.33 per cent for boys and 4.93 per cent for girls) admitted under the Industry/NRI sponsored quota seats. Moreover, as expected, the Industry/NRI sponsored students held higher proportion among the Professional Courses, Physical Sciences, Life Sciences and Education & Information Sciences. No Industry/NRI sponsored student preferred to get admission in the arts, languages and social sciences courses against such seats during the academic session of 2005-06.

On the other hand, the scheduled castes/scheduled tribes' students (enjoyed 22.5 per cent reservation of seats in the state) who got admission against the reserved seats constituted a little less than one-tenth of total students (9.18 per cent; 11.30 per cent for boys and 7.03 per cent for girls). The scheduled castes/scheduled tribes' students held the highest proportion in the case of the Education & Information Sciences (13.56 per cent; 17.82 per cent for boys and 10.37 per cent for girls), followed by the Professional Courses (13.23 per cent; 14.76 per cent for boys and 9.87 per cent for girls), Physical Sciences (10.23 per cent; 18.06 per cent for boys and 7.23 per cent for girls), Life Sciences (11.05 per cent; 12.31 per cent for boys and 10.36 per cent for girls), and Arts, Languages and Social Sciences (6.66 per cent; 9.11 per cent for boys and 4.93 per cent for girls). Among the regional centers, their proportion both in the Professional Courses (4.36 per cent; 4.10 per cent for boys and 4.84

per cent for girls) and Arts, Languages and Social Sciences courses (4.41 per cent; 8.33 per cent for boys and 2.78 per cent for girls) is very low compared to the overall as well as individual proportions of the university campus departments.

Table 2.7: Distribution of Students Enrolled in Punjabi University, Patiala by Social Category and Type of Course, 2005-06

Faculty/Course	General Category			Scheduled Castes/Tribes			Backward Classes			Sports, OH, etc.			NRI/Industry Sponsored			Total Enrolment		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
University Campus																		
Professional Courses	741	354	1095	151	46	197	26	8	34	18	4	22	87	54	141	1023	466	1489
	(72.43)	(75.97)	(73.54)	(14.76)	(9.87)	(13.23)	(2.54)	(1.72)	(2.28)	(1.76)	(0.86)	(1.48)	(8.50)	(11.59)	(9.47)	(100.00)	(100.00)	(100.00)
Arts, Languages and Social Sciences	521	792	1313	55	42	97	23	15	38	5	3	8	0	0	0	604	852	1456
	(86.26)	(92.96)	(90.18)	(9.11)	(4.93)	(6.66)	(3.81)	(1.76)	(2.61)	(0.83)	(0.35)	(0.55)	(0.00)	(0.00)	(0.00)	(100.00)	(100.00)	(100.00)
Life Sciences	140	281	421	24	37	61	9	5	14	5	3	8	17	31	48	195	357	552
	(71.79)	(78.71)	(76.27)	(12.31)	(10.36)	(11.05)	(4.62)	(1.40)	(2.54)	(2.56)	(0.84)	(1.45)	(8.72)	(8.68)	(8.70)	(100.00)	(100.00)	(100.00)
Physical Sciences	91	309	400	26	27	53	4	9	13	5	1	6	18	28	46	144	374	518
	(63.19)	(82.62)	(77.22)	(18.06)	(7.22)	(10.23)	(2.78)	(2.41)	(2.51)	(3.47)	(0.27)	(1.16)	(12.50)	(7.49)	(8.88)	(100.00)	(100.00)	(100.00)
Education & Information Science	62	104	166	18	14	32	8	3	11	1	1	2	12	13	25	101	135	236
	(61.38)	(77.04)	(70.34)	(17.82)	(10.37)	(13.56)	(7.91)	(2.22)	(4.66)	(0.99)	(0.74)	(0.85)	(11.88)	(9.63)	(10.60)	(100.00)	(100.00)	(100.00)
Sub total	1555	1840	3395	274	166	440	70	40	110	34	12	46	134	126	260	2067	2184	4251
	(75.23)	(84.25)	(79.86)	(13.26)	(7.60)	(10.35)	(3.39)	(1.83)	(2.59)	(1.65)	(0.55)	(1.08)	(6.48)	(5.77)	(6.12)	(100.00)	(100.00)	(100.00)
Regional Centres																		
Professional	492	267	759	22	14	36	13	4	17	2	1	3	8	3	11	537	289	826
	(91.62)	(92.39)	(91.89)	(4.10)	(4.84)	(4.36)	(2.42)	(1.38)	(2.06)	(0.37)	(0.35)	(0.36)	(1.49)	(1.04)	(1.33)	(100.00)	(100.00)	(100.00)
Arts and Social sciences	44	130	174	5	4	9	4	6	10	0	1	1	0	0	0	60	144	204
	(73.33)	(90.28)	(85.29)	(8.33)	(2.78)	(4.41)	(6.67)	(4.17)	(4.90)	(0.00)	(0.69)	(0.49)	(0.00)	(0.00)	(0.00)	(100.00)	(100.00)	(100.00)
Sub total	536	397	933	27	18	45	17	10	27	2	2	4	8	3	11	597	433	1030
	(89.78)	(91.69)	(90.58)	(4.52)	(4.16)	(4.37)	(2.85)	(2.30)	(2.62)	(0.33)	(0.46)	(0.39)	(1.34)	(0.69)	(1.07)	(100.00)	(100.00)	(100.00)
Grand Total	2091	2237	4328	301	184	485	87	50	137	36	14	50	142	129	271	2664	2617	5281
	(78.49)	(85.48)	(81.95)	(11.30)	(7.03)	(9.18)	(3.26)	(1.91)	(2.59)	(1.35)	(0.54)	(0.95)	(5.33)	(4.93)	(5.13)	(100.00)	(100.00)	(100.00)

Figures in parentheses are percentages.
Source: Office of Statistical Officer, Punjabi University, Patiala.

The student belonging to backward classes have five per cent reservation of seats in Punjab, so is true in the case of Punjabi University, Patiala. However, the 'backward classes' students who got admission against the reserved seats constituted a very little share (2.59 per cent; 3.26 per cent for boys and 1.91 per cent for girls). In the case of the Education & Information Sciences, the backward classes' students held the highest proportion (4.66 per cent; 7.91 per cent for boys and 2.22 per cent for girls), followed by the Arts, Languages and

Social Sciences (2.61 per cent; 3.81 per cent for boys and 1.76 per cent for girls), the Life Sciences (2.54 per cent; 4.62 per cent for boys and 1.40 per cent for girls), Physical Sciences (2.51 per cent; 2.78 per cent for boys and 2.41 per cent for girls), and the Professional Courses (2.28 per cent; 2.54 per cent for boys and 10.36 per cent for girls), Among the regional centers, the proportion of students belonged to the backward classes in the Arts, Languages and Social Sciences Courses constituted 4.90 per cent (6.67 per cent for boys and 4.17 per cent for girls), and in the Professional Courses, the proportion was very low (2.06 per cent; 2.42 per cent for boys and 1.38 per cent for girls).

Similarly, the handicapped students and sports persons who have reservation of seats in the education institutions in Punjab (3 per cent for handicapped and 2 per cent for sports students) have a very little proportion of seats. For instance, their combined share is less than 1 per cent of the total seats (1.08 per cent at the university campus and 0.39 per cent in the regional centres). Further, the handicapped and sports students have intra-course and gender variations, but these variations are not so strong that need the attention of policy makers. So, whatever may be the reasons, the weaker sections of society have very low access to higher education in the state. This situation demands major public policy interventions on the part of state to increase the enrollments of weaker sections of society in the higher education sector.

In nutshell, the higher education of the state has witnessed two significant trends. One, during the decades of 1970s and 1980s, most of the established colleges were providing the general education. Two, during the 1990s and onwards, the new colleges/institutes imparting professional and technical education have gained an upper hand, mainly due to the private initiative at the very fast speed. Numerically, about 90 per cent of students enrolled in higher education preferred general education courses between 1971-72 and 2003-04. And, an overwhelming majority of them prefers the arts &

social sciences courses compared to the science & commerce streams. Further, girl students have now out-numbered the boys except in engineering and technical courses - a welcome sign for the women empowerment. The students from weaker sections of society, especially from scheduled castes/tribes (nearly 10 per cent) and backward classes (2.60 per cent) across the higher education are a cause of concern. Further, the share of scheduled castes/tribes girls is abysmally low even in the higher general education. On the other side, for-profit marketable courses have accelerated the ‘exclusion process’ among the students of the weaker sections of society.

Chapter III

RURAL STUDENTS: THEIR NUMBER AND PROPORTION

The chapter provides the main results of primary survey in the most abridged form. It presents the number and proportion of rural students across the universities, regional centres, faculties and departments. Further, in each case, the results have been presented separately for boys and girls. Accordingly, the chapter has been divided into three parts. Part I presents the overall number and proportion of rural students in the universities of the state and their regional centres. It further analyses the overall position of the rural students at the state level across the various faculties and departments. Part II provides the university specific position of rural students across the faculties. Part III discusses the department-wise scenario of rural students in various universities of Punjab.

I

3.1 Overall: Universities and Regional Centres

During the academic session 2005-06, the total number of students in all the universities of state was 22,360 (Table 3.1). Out of this, the proportion of boys and girls was 53.40 per cent and 46.60 per cent respectively. At the campus departments, the boys and girls were almost evenly divided (50.44 per cent boys and 49.56 per cent girls), and at the regional centres, the boys constituted more than two-thirds share (68.05 per cent) and the rest were the girls (31.92 per cent). The rural students at the universities and their regional centres constituted a meager proportion of 4.07 per cent (911 students). The share of rural boys and rural girls in universities' overall boys and overall girls was 4.96 per cent and 3.06 per cent, respectively. The proportion of rural students in the universities of Punjab is, thus, far below than that of the

proportion of rural population in the state (66.05 per cent as per Population Census of 2001). Further, proportion of the girl students from the rural areas is rather dismal. Amongst the total students enrolled the universities of Punjab, the share of girl students is 46.60 per cent, whereas the share of rural girls among the total rural students is 35.20 per cent. Thus, as compared to their urban counterparts, the share of rural girls in the universities of Punjab is much lower.

Table 3.1: Number of Students in Universities of Punjab* (2005-06): University Campus and Regional Centre

	Total Enrollment			Rural Students					
				Number			Percentage		
	Boys	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**
(a) Campus	9381 (50.44)	9217 (49.56)	18598 (100)	451 (64.80)	245 (25.20)	696 (100.00)	4.81	2.66	**3.74**
(b) Regional Centres	2560 (68.05)	1202 (31.95)	3762 (100)	141 (65.58)	74 (34.42)	215 (100.00)	5.51	6.16	**5.72**
Total (a+b)	**11941 (53.40)**	**10419 (46.60)**	**22360 (100)**	**592 (64.98)**	**319 (35.02)**	**911 (100.00)**	**4.96**	**3.06**	**4.07**

Figures in parentheses are percentages.

Note: *Universities of Punjab here means four universities viz. Punjabi University, Patiala, Panjab University, Chandigarh, Punjab Agricultural University, Ludhiana and Guru Nanak Dev University, Amritsar

Source: Primary Survey.

The university specific scenario of rural students presents a varying picture (Table 3.2). Punjabi University has the highest proportion of rural students (8.16 per cent; 10.47 per cent for boys and 5.81 per cent for girls) among all the universities of Punjab. Punjab Agricultural University, with a share of 4.73 per cent (4.99 per cent for boys and 4.37 per cent for girls) has come at the next rank. Guru Nanak Dev University and Panjab University have 3.01 per cent (3.38 per cent for boys and 2.55 per cent for girls) and 2.20 per cent (2.95 per cent for boys and 1.38 per cent for girls) rural students on their rolls respectively. The higher share of rural students in Punjabi University may be attributed to the feeding area, which has relatively higher proportion of rural population compared to the jurisdictional areas of other universities. The lower proportion of rural students in Punjab Agricultural University, whose students

are broadly trained to serve the agriculture and allied agricultural activities, is a very disappointing phenomenon, though it is also true about other universities of the state.

Table 3.2: Rural Students in Universities of Punjab*: University- Wise Scenario

PUNJABI UNIVERSITY PATIALA									
	Total Enrollment			**Rural Students**					
				Number			**Percentage**		
	Boys	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**
a. Campus	2067	2184	4251	217	125	342	10.50	5.72	**8.05**
b. Regional Centres	597	433	1030	62	27	89	10.39	6.24	**8.64**
Total (a+b)	2664	2617	5281	279	152	431	10.47	5.81	**8.16**
GURU NANAK DEV UNIVERSITY, AMRITSAR									
	Total Enrollment			**Rural Students**					
				Number			**Percentage**		
	Boys	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**
a. Campus	2370	2513	4883	89	55	144	3.76	2.19	**2.95**
b. Regional Centres	1472	587	2059	41	24	65	2.79	4.09	**3.16**
Total (a+b)	3842	3100	6942	130	79	209	3.38	2.55	**3.01**
PANJAB UNIVERSITY, CHANDIGARH									
	Total Enrollment			**Rural Students**					
				Number			**Percentage**		
	Boys	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**
a. Campus	3842	3742	7584	90	31	121	2.34	0.83	**1.60**
b. Regional Centres	491	182	673	38	23	61	7.74	12.64	**9.06**
Total (a+b)	4333	3924	8257	128	54	182	2.95	1.38	**2.20**
PUNJAB AGRICULTURAL UNIVERSITY, LUDHIANA									
	Total Enrollment			**Rural Students**					
				Number			**Percentage**		
	Boys	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**
Campus	1102	778	1880	55	34	89	4.99	4.37	**4.73**

Note: *Universities of Punjab here means four universities viz. Punjabi University, Patiala, Panjab University, Chandigarh, Punjab Agricultural University, Ludhiana and Guru Nanak Dev University, Amritsar.

Source: Primary Survey.

Across the universities, the proportion of rural students enrolled in their respective regional centres is much higher than that of those who enrolled in the respective campus departments at Amritsar, Patiala and Chandigarh. This phenomenon is very prominent in the case of Panjab University, where the share of rural students at its regional centres was 9.06 per cent compared to just 1.60 per cent at its campus departments. It may be due to proximity of such centres to their villages and/or due to lower academic merit of students admitted in the

regional centres. It lends support for the establishment of regional centers or neighbour-hood campuses by the universities.

Among all the campus departments of the universities, the share of rural girl students is substantially lower compared to the share of rural boy students. The difference is more prominent in the case of Punjabi University (10.50 per cent for boys and 5.72 per cent for girls) and Panjab University (2.34 per cent for boys and 0.83 per cent for girls) compared to Guru Nanak Dev University (3.76 per cent for boys and 2.19 per cent for girls). All these facts call for special initiatives for promoting rural girl students' enrollment in higher education. Moreover, among the regional centres of the universities, the share of rural girls has been at the highest in the case of Panjab University (12.64 per cent), followed by the Punjabi University (6.24 per cent) and Guru Nanak Dev University (4.09 per cent). It shows that urban girl students prefer generally the university campuses and rural girl students prefer nearby regional centres.

Further, the share of total girls among the total students in various universities has been much higher than that of rural girl students. The overall share of girl students was 49.55 per cent (Punjabi University), 44.66 per cent (Guru Nanak Dev University), 47.52 per cent (Panjab University) and 41.38 per cent (PAU). As compared to it, the proportionate share of rural girl students out of total girl students was a mere 5.81 per cent, 2.55 per cent, 1.38 per cent and 4.37 per cent, respectively. Clearly, there is a long way before the state to cross the road that could raise the enrollment of rural girl students in the universities of Punjab.

3.1.1 Overall: Faculty-Wise

The faculty-wise scenario of rural students getting higher education in the university campus departments and regional centres is presented in Table 3.3. Among the university campus departments, the data shows that the proportion

of rural students in the faculty of Education and Information Science was the highest (12.14 per cent; 19.64 per cent for boys and 7.19 per cent for girls), followed by the faculties of Art and Culture (8.87 per cent; 15.56 per cent for boys and 3.16 per cent for girls), the Social Sciences (6.76 per cent; 13.15 per cent for boys and 2.85 per cent for girls), the Agriculture & Agricultural Engineering (6.21 per cent; 6.55 per cent for boys and 5.40 per cent for girls), the Life Sciences (3.71 per cent; 5.02 per cent for boys and 3.10 per cent for girls)and the Veterinary Sciences (3.63 per cent; 3.62 per cent for boys and 3.66 per cent for girls) . The proportion of rural students in the remaining two faculties, as expected, was the least in the case of the Professional Courses (1.41 per cent; 1.71 per cent for boys and 0.85 per cent for girls) and the Physical Sciences (2.86 per cent; 3.84 per cent for boys and 2.14 per cent for girls).

Compared to the university campuses, the enrollment of rural students in the regional centres of the universities is the highest in the case of Social Sciences (16.51 per cent; 17.07 per cent for boys and 16.18 per cent for girls), followed by the Languages (13.33 per cent; 13.11 per cent for boys and 13.57 per cent for girls) and the Professional Courses (4.88 per cent; 4.68 per cent for boys and 3.96 per cent for girls). The Education & Information Science Faculty did not report any rural student on its rolls during the time of survey.

Further, out of the total rural students among the campus departments of universities, the highest proportion of rural students is in the faculty of Social Sciences (23.13 per cent; 161 students out of 696 rural students). Their proportion in the faculties of Physical Sciences, Languages, Education and Information Sciences, Professional Courses, and Life Sciences varies between 10.34 per cent and 15.09 per cent. Contrary to it, the share of rural students out of total rural students admitted in the Professional Courses at the regional centres of universities is very high (66.51 per cent; 143 students out of 215 such students). At the regional centres, however, the Languages faculty is another

area, in which the rural students have a high proportion (25.12 per cent; 54 students out of 215 such students).

Table 3.3: Rural Students in Universities of Punjab*: Faculty-Wise

University Campus									
	Total Enrollment			Rural Students					
				Number			*Percentage*		
Name of Faculty	**Boys**	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**
Social Sciences	905	1475	2380	119	42	161	13.15	2.85	**6.76**
Art & Culture	135	158	293	21	5	26	15.56	3.16	**8.87**
Life Sciences	896	1933	2829	45	60	105	5.02	3.10	**3.71**
Physical Sciences	1069	1449	2518	41	31	72	3.84	2.14	**2.86**
Languages	675	1075	1750	40	39	79	5.93	3.63	**4.51**
Education & Information Science	275	417	692	54	30	84	19.64	7.19	**12.14**
Professional Courses	4450	2350	6800	76	20	96	1.71	0.85	**1.41**
Veterinary Sciences	304	82	386	11	3	14	3.62	3.66	**3.63**
Agriculture & Agricultural Engg.	672	278	950	44	15	59	6.55	5.40	**6.21**
Campus Total	**9381**	**9217**	**18598**	**451**	**245**	**696**	**4.81**	**2.66**	**3.74**
Regional Centers									
	Total Enrollment			**Rural Students**					
				Number			***Percentage***		
Name of Faculty	**Boys**	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**
Social Sciences	41	68	109	7	11	18	17.07	16.18	**16.51**
Languages	206	199	405	27	27	54	13.11	13.57	**13.33**
Education & Information Science	26	27	53	0	0	0	0.00	0.00	**0.00**
Professional Courses	2287	908	3195	107	36	143	4.68	3.96	**4.48**
RC Total	**2560**	**1202**	**3762**	**141**	**74**	**215**	**5.51**	**6.16**	**5.72**
Grand Total	**11941**	**10419**	**22360**	**592**	**319**	**911**	**4.96**	**3.06**	**4.07**

Note: *Universities of Punjab here means four universities viz. Punjabi University, Patiala, Panjab University, Chandigarh, Punjab Agriculture University, Ludhiana, Guru Nanak Dev University, Amritsar

Source: Primary Survey.

3.1.2 Overall: Department-Wise

The department-wise enrollment of rural students in the universities and their regional centres is given in Table 3.4. In the faculty of Social Sciences, the department of Religious Studies accounts for the highest share (21.43 per cent). Departments of Defence Studies (11.76 per cent), Public Administration (11.18 per cent), Political Science (10.75 per cent) and Social Work (10.53 per cent) follow it. In the faculty of Art and Culture, the preferred subject is the Theatre and Television (21.43 per cent). In the faculty of Life Sciences, Family

Resource Management accounts for the highest share of rural students (36.36 per cent). In the faculty of Physical Sciences, the most preferred subject is Applied Chemistry (10.67 per cent). Interestingly, the Anthropological Linguistics is the most preferred area in the faculty of Languages (17.65 per cent), followed by the Sanskrit & Pali (9.20 per cent) and the Punjabi (7.48 per cent). As expected, the Physical Education is at the top (15.68 per cent) in the faculty of Education and Information Sciences. The proportion of rural students in the faculty of Professional Courses is very low (1.41 per cent).

As compared to the campus departments, the proportion of rural students at the regional centres is the highest in the Political Science Department (20.37 per cent) followed by the Economics Department (12.73 per cent) in the faculty of Social Sciences (16.51 per cent). The corresponding proportion, in the faculty of Languages, is the highest (26.90 per cent) in the case of Punjabi. In the faculty of Professional Courses, the highest proportion of rural students is in the course of Business Management (8.99 per cent), followed by the Engineering & Computer Science (4.39 per cent) and the Law (3.98 per cent).

Table 3.4: Rural Students in Universities of Punjab*: Department-Wise

Name of Faculty	Total Enrollment			Rural Students					
				Number			Percentage		
	Boys	Girls	Overall	Boys	Girls	Overall	Boys	Girls	Overall
University Campus									
Social Sciences									
Psychology	29	208	237	4	1	5	13.79	0.48	**2.11**
History	131	148	279	11	5	16	8.40	3.38	**5.73**
Political Science	125	154	279	21	9	30	16.80	5.84	**10.75**
Defense Studies	51	17	68	6	2	8	11.76	11.76	**11.76**
Social Work	17	21	38	3	1	4	17.65	4.76	**10.53**
Public Administration	75	86	161	17	1	18	22.67	1.16	**11.18**
Sociology	35	159	194	8	7	15	22.86	4.40	**7.73**
Economics	214	488	702	25	13	38	11.68	2.66	**5.41**
Religious Studies	43	13	56	12	0	12	27.91	0.00	**21.43**
Philosophy	38	39	77	3	1	4	7.89	2.56	**5.19**
Geography	67	77	144	8	2	10	11.94	2.60	**6.94**
Social Sciences	58	51	109	1	0	1	1.72	0.00	**0.92**
Gandhian Studies	22	9	31	0	0	0	0.00	0.00	**0.00**
Centre for Women Studies	0	5	5	0	0	0	0.00	0.00	**0.00**
Sub Total	**905**	**1475**	**2380**	**119**	**42**	**161**	**13.15**	**2.85**	**6.76**
Art & Culture									
Music	58	75	133	3	3	6	5.17	4.00	**4.51**
Fine Arts	16	35	51	4	1	5	25.00	2.86	**9.80**
Theatre & Television	44	12	56	11	1	12	25.00	8.33	**21.43**
Dance	0	28	28	0	0	0	0.00	0.00	**0.00**
Gurmat Sangeet	17	8	25	3	0	3	17.65	0.00	**12.00**
Sub Total	**135**	**158**	**293**	**21**	**5**	**26**	**15.56**	**3.16**	**8.87**
Life Sciences									
Botany	99	310	409	8	12	20	8.08	3.87	**4.89**
Zoology	46	200	246	3	11	14	6.52	5.50	**5.69**
Human Biology	3	41	44	1	2	3	33.33	4.88	**6.82**
Bio-Technology	69	130	199	8	3	11	11.59	2.31	**5.53**
Sports Science & Physiotherapy	54	122	176	1	3	4	1.85	2.46	**2.27**
Pharmaceutical & DR	304	282	586	16	6	22	5.26	2.13	**3.75**
Food Science & Technology	66	65	131	0	4	4	0.00	6.15	**3.05**
Human Genetics	31	95	126	1	4	5	3.23	4.21	**3.97**
Microbiology	106	200	306	0	1	1	0.00	0.50	**0.33**
Molecular Biology & Biochemistry	56	144	200	0	2	2	0.00	1.39	**1.00**
Biophysics	25	73	98	0	0	0	0.00	0.00	**0.00**

Professional Courses									
Computer Science & Engineering	1094	606	1700	15	7	22	1.37	1.16	**1.29**
Business Management	538	297	835	17	5	22	3.16	1.68	**2.63**
Commerce	50	187	237	2	1	3	4.00	0.53	**1.27**
Law	1515	686	2201	30	2	32	1.98	0.29	**1.45**
Electronics and Printing Technology	148	52	200	5	0	5	3.38	0.00	**2.50**
Centre for Env. & Vocational Studies	6	56	62	0	1	1	0.00	1.79	**1.61**
School of Planning & Architecture	105	134	239	4	4	8	3.81	2.99	**3.35**
University Institute of Engineering	965	322	1287	0	0	0	0.00	0.00	**0.00**
University Centre for Instrumentation & Microelectronics	29	10	39	3	0	3	10.34	0.00	**7.69**
Sub Total	**4450**	**2350**	**6800**	**76**	**20**	**96**	**1.71**	**0.85**	**1.41**
Veterinary Sciences									
All Courses	304	82	386	11	3	14	3.62	3.66	**3.63**
Sub Total	**304**	**82**	**386**	**11**	**3**	**14**	**3.62**	**3.66**	**3.63**
Agriculture & Agricultural Engineering									
All Courses	672	278	950	44	15	59	6.55	5.40	**6.21**
Sub Total	**672**	**278**	**950**	**44**	**15**	**59**	**6.55**	**5.40**	**6.21**
Regional Centres									
Social Sciences									
Economics	11	44	55	4	3	7	36.36	6.82	**12.73**
Political Science	30	24	54	3	8	11	10.00	33.33	**20.37**
Sub Total	**41**	**68**	**109**	**7**	**11**	**18**	**17.07**	**16.18**	**16.51**
Languages									
English	29	116	145	7	8	15	24.14	6.90	**10.34**
Punjabi	79	66	145	20	19	39	25.32	28.79	**26.90**
Urdu	6	3	9	0	0	0	0.00	0.00	**0.00**
Shastri	92	14	106	0	0	0	0.00	0.00	**0.00**
Sub Total	**206**	**199**	**405**	**27**	**27**	**54**	**13.11**	**13.57**	**13.33**
Education & Information Science									
Journalism & Mass Communication	26	27	53	26	0	0	0.00	0.00	**0.00**
Sub Total	**26**	**27**	**53**	**0**	**0**	**0**	**0.00**	**0.00**	**0.00**
Professional Courses									
Business Management	167	100	267	22	2	24	13.17	2.00	**8.99**
Commerce	0	2	2	0	0	0	0.00	0.00	**0.00**
Law	1264	396	1660	53	13	66	4.19	3.28	**3.98**
Engineering & Computer Science	838	368	1206	32	21	53	3.82	5.71	**4.39**
Education	18	42	60	0	0	0	0.00	0.00	**0.00**
Sub Total	**2287**	**908**	**3195**	**107**	**36**	**143**	**4.68**	**3.96**	**4.48**
Grand Total	**11941**	**10419**	**22360**	**592**	**319**	**911**	**4.96**	**3.06**	**4.07**

Note: *Universities of Punjab here means four universities viz. Punjabi University, Patiala, Panjab University, Chandigarh, Punjab Agriculture University, Ludhiana, Guru Nanak Dev University, Amritsar

Source: Primary Survey

II

3.2 University-cum-Faculty-wise

The university-wise enrollment of rural students among the different faculties is reproduced in Tables 3.5, 3.6, 3.7 and 3.8. At the Punjabi University Campus (Table 3.5), the faculty of Education and Information Science accounts for 19.92 per cent of rural students. The faculties of Social Sciences (10.79 per cent), Languages (12.85 per cent), Art and Culture (8.99 per cent), Physical Sciences (6.95 per cent), and Life Sciences (6.34 per cent) follow it. The Professional Courses constitutes the lowest proportion (3.56 per cent) of rural students. On the other hand, the highest proportion of rural students at the regional centres of Punjabi University was in the faculty of Languages (14.18 per cent), followed by the Professional Courses (7.85 per cent) and the Social Sciences (5.71 per cent).

Table 3.5: Rural Students in Punjabi University, Patiala (Faculty-Wise)

a. University Campus									
Name of Faculty	**Total Enrollment**			**Rural Students**					
				Number			**Percentage**		
	Boys	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**
Social Sciences	359	474	833	78	29	107	21.73	6.12	**12.85**
Art & Culture	80	98	178	13	3	16	16.25	3.06	**8.99**
Life Sciences	195	357	552	14	21	35	7.18	5.88	**6.34**
Physical Sciences	144	374	518	17	19	36	11.81	5.08	**6.95**
Languages	165	280	445	20	28	48	12.12	10.00	**10.79**
Education & Information Science	101	135	236	29	18	47	28.71	13.33	**19.92**
Professional Courses	1023	466	1489	46	7	53	4.50	1.50	**3.56**
Campus Total	**2067**	**2184**	**4251**	**217**	**125**	**342**	**10.50**	**5.72**	**8.05**
b. Regional Centers									
Name of Faculty	**Total Enrollment**			**Rural Students**					
				Number			***Percentage***		
	Boys	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**
Social Sciences	5	30	35	0	2	2	0.00	6.67	**5.71**
Languages	37	104	141	9	11	20	24.32	10.58	**14.18**
Professional Courses	555	299	854	53	14	67	9.55	4.68	**7.85**
Regional Centre Total	**597**	**433**	**1030**	**62**	**27**	**89**	**10.39**	**6.24**	**8.64**
Grand Total	**2664**	**2617**	**5281**	**279**	**152**	**431**	**10.47**	**5.81**	**8.16**

Source: Primary Survey

Guru Nanak Dev University displays almost the similar preferences of rural students, as is the case of Punjabi University (Table 3.6). Like the latter, the proportion of rural students in the former is the highest in the faculty of Education and Information Science (13.82 per cent) at the University campus, followed by the faculty of Social Sciences (5.54 per cent), the faculty of Life Sciences (3.46 per cent), the faculty of Art & Culture (3.45 per cent), and the faculty of Physical Sciences (3.07 per cent). The faculties of Languages and Professional Courses constitute the lowest proportion (1.76 per cent and 1.70 per cent, respectively) of rural students. On the other side, at the regional campuses of the GNDU, the highest proportion of rural students can be seen in the faculty of Languages (23.08 per cent) and the lowest in the faculty of Professional Courses (2.98 per cent).

Table 3.6: Rural Students in Guru Nanak Dev University, Amritsar (Faculty-Wise)

a. University Campus									
Name of Faculty	**Total Enrollment**			**Rural Students**					
				Number			***Percentage***		
	Boys	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**
Social Sciences	195	319	514	19	10	29	9.74	3.13	**5.64**
Art & Culture	7	22	29	0	1	1	0.00	4.55	**3.45**
Life Sciences	319	548	867	12	18	30	3.76	3.28	**3.46**
Physical Sciences	318	399	717	18	4	22	5.66	1.00	**3.07**
Languages	219	293	512	6	3	9	2.74	1.02	**1.76**
Education & Information Science	59	64	123	8	9	17	13.56	14.06	**13.82**
Professional Courses	1253	868	2121	26	10	36	2.08	1.15	**1.70**
Campus Total	**2370**	**2513**	**4883**	**89**	**55**	**144**	**3.76**	**2.19**	**2.95**
b. Regional Centres									
Name of Faculty	**Total Enrollment**			**Rural Students**					
				Number			***Percentage***		
	Boys	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**
Languages	14	12	26	1	5	6	7.14	41.67	**23.08**
Education & Information Science	26	27	53	0	0	0	0.00	0.00	**0.00**
Professional Courses	1432	548	1980	40	19	59	2.79	3.47	**2.98**
RC Total	**1472**	**587**	**2059**	**41**	**24**	**65**	**2.79**	**4.09**	**3.16**
Grand Total	**3842**	**3100**	**6942**	**130**	**79**	**209**	**3.38**	**2.55**	**3.01**

Source: Primary Survey

Panjab University displays a different picture (Table 3.7). The highest proportion of rural students at the Panjab University Campus is in the faculty of

Art and Culture (10.45 per cent), followed by faculty of Education and Information Science (6.25 per cent) and the faculty of Languages (2.77 per cent). The faculty of Professional Courses has the lowest share (0.19 per cent). At the regional centres of Panjab University, the highest proportion of rural students is in the faculty of Social Sciences (21.62 per cent), followed by the Languages (11.76 per cent) and the Professional Courses (4.71 per cent).

Table 3.7: Rural Students in Panjab University, Chandigarh (Faculty-Wise)

a. University Campus									
Name of Faculty	**Total Enrollment**			**Rural Students**					
				Number			***Percentage***		
	Boys	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**
Social Sciences	326	661	987	22	3	25	6.75	0.45	**2.53**
Art & Culture	48	38	86	8	1	9	16.67	2.63	**10.47**
Life Sciences	351	707	1058	19	7	26	5.41	0.99	**2.46**
Physical Sciences	601	656	1257	6	7	13	1.00	1.07	**1.03**
Languages	291	502	793	14	8	22	4.81	1.59	**2.77**
Education & Information Science	113	207	320	17	3	20	15.04	1.45	**6.25**
Professional Courses	2112	971	3083	4	2	6	0.19	0.21	**0.19**
Campus Total	**3842**	**3742**	**7584**	**90**	**31**	**121**	**2.34**	**0.83**	**1.60**
b. Regional Centres									
Name of Faculty	**Total Enrollment**			**Rural Students**					
				Number			***Percentage***		
	Boys	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**
Social Sciences	36	38	74	7	9	16	19.44	23.68	**21.62**
Languages	155	83	238	17	11	28	10.97	13.25	**11.76**
Professional Courses	300	61	361	14	3	17	4.67	4.92	**4.71**
RC Total	**491**	**182**	**673**	**38**	**23**	**61**	**7.74**	**12.64**	**9.06**
Grand Total	**4333**	**3924**	**8257**	**128**	**54**	**182**	**2.95**	**1.38**	**2.20**

Source: Primary Survey

In the case of Punjab Agricultural University (Table 3.8), the highest proportion of rural students is in the faculty of Agriculture and Agricultural Engineering (6.21 per cent). The faculties of Life Sciences (3.98 per cent), Physical Sciences (3.85 per cent) and Veterinary Sciences (3.63 per cent) follow it. And, the faculty of Professional Courses has the lowest share (0.93 per cent). The faculties of Social Sciences and Education & Information Science do not report any rural students.

Table 3.8: Rural Students in Punjab Agricultural University, Ludhiana (Faculty-Wise)

a. University Campus									
Name of Faculty	**Total Enrollment**			**Rural Students**					
				Number			***Percentage***		
	Boys	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**
Social Sciences	25	21	46	0	0	0	0.00	0.00	**0.00**
Art & Culture	0	0	0	0	0	0	0.00	0.00	**0.00**
Life Sciences	31	321	352	0	14	14	0.00	4.36	**3.98**
Physical Sciences	6	20	26	0	1	1	0.00	5.00	**3.85**
Languages	0	0	0	0	0	0	0.00	0.00	**0.00**
Education & Information Science	2	11	13	0	0	0	0.00	0.00	**0.00**
Professional Courses	62	45	107	0	1	1	0.00	2.22	**0.93**
Veterinary Sciences	304	82	386	11	3	14	3.62	3.66	**3.63**
Agriculture & Agricultural Engg.	672	278	950	44	15	59	6.55	5.40	**6.21**
Campus Total	**1102**	**778**	**1880**	**55**	**34**	**89**	**4.99**	**4.37**	**4.73**

Source: Primary Survey

III

3.3 University-cum-Department-wise

The department-wise proportion of rural students in various universities and their regional campuses is given in Tables 3.9, 3.10, 3.11 and 3.12.

3.3.1 Punjabi University

Since the proportion of rural students was found to be the highest in Punjabi University (8.16 per cent, 10.47 per cent for boys and 5.81 per cent for girls), it would be interesting to examine the department-wise proportionate share of rural students in the university. The data in Table 3.9 reveal that in the faculty of Social Sciences, the share of rural students was the highest in department of Sociology (27.78 per cent), followed by the departments of Defence Studies (24.14 per cent), Religious Studies (21.43 per cent), Geography (15.67 per cent) and History (14.08 per cent). These are the subjects in which most of the urban and meritorious students often do not have the first preference. In the faculty of Art and Culture, subjects of Fine Arts (16.13 per cent), Gurmat Sangeet (12.00 per cent) and Theatre & T. V. (9.38 per cent) are the most preferred destination of rural students. In the faculty of Life Sciences, Zoology has the highest proportion of rural students (14.86 per cent) and the

next best in the Botany (7.32 per cent). Chemistry has the highest proportion of rural students (11.17 per cent) in the faculty of Physical Sciences, followed by the Statistics (10.10 per cent) and Forensic Science (5.66 per cent) departments.

Table 3.9: Rural Students In Punjabi University, Patiala: Department-wise

		Total Enrollment			Rural Students					
					Number			*Percentage*		
S. No.	**Name of Department/ Course**	**Boys**	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**
	University Campus									
A.	**Social Sciences**									
1	Psychology	20	99	119	4	1	5	20.00	1.01	**4.20**
2	History	36	35	71	7	3	10	19.44	8.57	**14.08**
3	Political Science	37	52	89	6	4	10	16.22	7.69	**11.24**
4	Defense Studies	20	9	29	5	2	7	25.00	22.22	**24.14**
5	Social Work	17	21	38	3	1	4	17.65	4.76	**10.53**
6	Public Admin.	38	30	68	10	0	10	26.32	0.00	**14.71**
7	Sociology	10	26	36	4	6	10	40.00	23.08	**27.78**
8	Economics	85	152	237	16	9	25	18.82	5.92	**10.55**
9	Religious Studies	43	13	56	12	0	12	27.91	0.00	**21.43**
10	Philosophy	19	11	30	3	1	4	15.79	9.09	**13.33**
11	Geography	34	26	60	8	2	10	23.53	7.69	**16.67**
	Total Social Sciences	**359**	**474**	**833**	**78**	**29**	**107**	**21.73**	**6.12**	**12.85**
B.	**Art & Culture**									
12	Music	28	34	62	3	2	5	10.71	5.88	**8.06**
13	Fine Arts	11	20	31	4	1	5	36.36	5.00	**16.13**
14	Theatre & T.V.	24	8	32	3	0	3	12.50	0.00	**9.38**
15	Dance	0	28	28	0	0	0	0.00	0.00	**0.00**
16	Gurmat Sangeet	17	8	25	3	0	3	17.65	0.00	**12.00**
	Total Art & Culture	**80**	**98**	**178**	**13**	**3**	**16**	**16.25**	**3.06**	**8.99**
C.	**Life Sciences**									
17	Botany	18	64	82	2	4	6	11.11	6.25	**7.32**
18	Zoology	11	63	74	2	9	11	18.18	14.29	**14.86**
19	Human Biology	3	41	44	1	2	3	33.33	4.88	**6.82**
20	Bio-Technology	24	43	67	2	2	4	8.33	4.65	**5.97**
21	Sports Science	30	60	90	1	1	2	3.33	1.67	**2.22**
22	Pharmaceutical & DR	109	86	195	6	3	9	5.50	3.49	**4.62**
	Total Life Sciences	**195**	**357**	**552**	**14**	**21**	**35**	**7.18**	**5.88**	**6.34**
D.	**Physical Sciences**									
23	Chemistry	15	96	111	4	9	13	26.67	9.38	**11.71**
24	Physics	66	115	181	5	1	6	7.58	0.87	**3.31**
25	Statistics	31	68	99	5	5	10	16.13	7.35	**10.10**
26	Mathematics	14	77	91	1	4	5	7.14	5.19	**5.49**
27	Forensic Science	18	18	36	2	0	2	11.11	0.00	**5.56**
	Total Physical Sciences	**144**	**374**	**518**	**17**	**19**	**36**	**11.81**	**5.08**	**6.95**
E.	**Languages**									
28	English	21	121	142	2	14	16	9.52	11.57	**11.27**
29	Punjabi	71	69	140	13	5	18	18.31	7.25	**12.86**
30	Hindi	15	44	59	2	4	6	13.33	9.09	**10.17**
31	Sanskrit & Pali	9	8	17	2	0	2	22.22	0.00	**11.76**

32	Urdu & Persian	4	4	8	0	0	0	0.00	0.00	**0.00**
33	Anthr. Linguistics	16	18	34	1	5	6	6.25	27.78	**17.65**
34	Foreign Languages	29	16	45	0	0	0	0.00	0.00	**0.00**
	Total Languages	**165**	**280**	**445**	**20**	**28**	**48**	**12.12**	**10.00**	**10.79**
F.	**Education & Information Science.**									
35	Education & CS	35	33	68	11	2	13	31.43	6.06	**19.12**
36	Physical Edu.	32	35	67	9	11	20	28.13	31.43	**29.85**
37	Journalism & Mass Communications	17	31	48	3	0	3	17.65	0.00	**6.25**
38	Library & Information Science	17	36	53	6	5	11	35.29	13.89	**20.75**
	Total Edu, & Inf. Sciences	**101**	**135**	**236**	**29**	**18**	**47**	**28.71**	**13.33**	**19.92**
G.	**Professional Courses**									
40	Computer Science & Engineering	114	99	213	3	2	5	2.63	2.02	**2.35**
41	Punjab School of Mgt. Studies	137	56	193	6	0	6	4.38	0.00	**3.11**
42	Commerce	11	93	104	1	1	2	9.09	1.08	**1.92**
43	Law	274	99	373	28	2	30	10.22	2.02	**8.04**
	Total Professional Courses	**536**	**347**	**883**	**38**	**5**	**43**	**7.09**	**1.44**	**4.87**
H.	**UCE, Uni. Campus**									
(i)	B.Tech	487	119	606	8	2	10	1.64	1.68	**1.65**
	Sub Total	**487**	**119**	**606**	**8**	**2**	**10**	1.64	1.68	**1.65**
	All Campus Departments	**2067**	**2184**	**4251**	**217**	**125**	**342**	**10.50**	**5.72**	**8.05**
I.	**Regional Centres**									
1	**Guru Kashi College (Talwandi Sabo)**									
(i)	MBA	87	49	136	12	0	12	13.79	0.00	**8.82**
(ii)	M.Com.	0	2	2	0	0	0	0.00	0.00	**0.00**
	Sub Total	**87**	**51**	**138**	**12**	**0**	**12**	**1.00**	**0.00**	**8.70**
2	**Regional Centre (Bathinda)**									
(i)	Economics	5	30	35	0	2	2	0.00	6.67	**5.71**
(ii)	Laws	130	42	172	6	2	8	4.62	4.76	**4.65**
(iii)	English	8	67	75	3	5	8	37.50	7.46	**10.67**
(iv)	Punjabi	23	34	57	6	6	12	26.09	17.65	**21.05**
	Sub Total	**166**	**173**	**339**	**15**	**15**	**30**	**9.04**	**8.67**	**8.85**
3	**Regional Centre, PURIMIT (Mohali)**									
(i)	Mgt.	50	30	80	10	2	12	20.00	6.67	**15.00**
(ii)	Com. Sci.	58	47	105	9	3	12	15.52	6.38	**11.43**
	Sub Total	**108**	**77**	**185**	**19**	**5**	**24**	**17.59**	**6.49**	**12.97**
4	**Yadwindera College of Engg., Talwandi Sabo**									
(i)	B.Tech	127	26	153	15	7	22	11.81	26.92	**14.38**
(ii)	M.Tech	19	15	34	0	0	0	0.00	0.00	**0.00**
(iii)	M.C.A	34	12	46	1	0	1	2.94	0.00	**2.17**
	Sub Total	**180**	**53**	**233**	**16**	**7**	**23**	8.89	13.21	**9.87**
5	**PUECCE, Jaito**									
(i)	BCA	3	9	12	0	0	0	0.00	0.00	**0.00**
(ii)	PGDCA	11	15	26	0	0	0	0.00	0.00	**0.00**
	Sub Total	**14**	**24**	38	**0**	**0**	**0**	**0.00**	**0.00**	**0.00**

6	**PUC of Edu. Bathinda**									
(i)	B.Ed	18	42	60	0	0	0	0.00	0.00	**0.00**
	Sub Total	**18**	**42**	**60**	**0**	**0**	**0**	**0.00**	**0.00**	**0.00**
7	**NSKIAS, M/Kotla**									
(i)	Certificate course in Urdu/Parsian	4	2	6	0	0	0	0.00	0.00	**0.00**
(ii)	PGDCA	18	10	28	0	0	0	0.00	0.00	**0.00**
(iii)	M.A	2	1	3	0	0	0	0.00	0.00	**0.00**
	Sub Total	**24**	**13**	**37**	**0**	**0**	**0**	**0.00**	**0.00**	**0.00**
	Grand Total	**2664**	**2617**	**5281**	**279**	**152**	**431**	**10.47**	**5.81**	**8.16**

Source: Primary Survey

In the faculty of Languages, Anthropological Linguistics ranks the highest in terms of the proportion of the rural students (17.65 per cent). Then come the Punjabi (12.86 per cent), Sanskrit & Pali (11.76 per cent) and English (11.27 per cent). Physical Education registered the highest proportion of rural students (29.85 per cent), followed by Library and Information Science (20.75 per cent) and Education & Community Service (19.12 per cent) in the faculty of Education and Information Science. In the faculty of Professional Courses, the department of Law has the highest proportion of rural students (8.04 per cent). The University College of Engineering had just 1.65 per cent of rural students. The very low proportion of rural students in the engineering, computer science, physics and other science subjects may be attributed to the collapse of rural education in general and that of science education in particular.

Even at the level of regional centres of Punjabi University, the proportion of rural students in the Engineering and other such course is very low. For example, in the Yadwindra College of Engineering, Talwandi Sabo (B.Tech. Four-Year Course), proportion of rural students was merely 14.38 per cent; in the MBA course it was 8.82 per cent; and in the MCA course only 2.17 per cent students were from the rural areas. Similarly, at its Jaito Centre, there was no student from the rural area. At the Bathinda regional Centre, again there was no rural student in B.Ed. course. However, at the Bathinda regional Centre, the subject of Punjabi has the highest proportion (21.05 per cent), followed by the

English (10.67 per cent), Economics (5.71 per cent) and Law (4.65 per cent). Interestingly, the regional centre at Mohali attracted 15.00 per cent rural students in the MBA course and 11.43 per cent in the MCA course.

3.3.2 Guru Nanak Dev University

In the case of Guru Nanak Dev University (Table 3.10), the rural students' proportion in many departments is much lower than that in Punjabi University. There are 35 courses run at the university campus departments. Out of these, 17 courses are related to the science and engineering courses. The remaining courses are from the languages, social sciences and law (LLM), etc. Five courses run by the different departments (Applied Chemistry, Psychology, Philosophy, Hindi and Foreign Languages) do not have any rural students. Besides, out of 17 science and engineering departments, the proportion of rural students was less than 5 per cent in the eleven such departments. The proportion of rural students in the courses run in the Commerce and Management departments was also less than 5 per cent. In the faculty of Languages, the proportion of rural students in Punjabi was just 4.35 per cent and in English, it was 3.95 per cent. Among various other departments, the highest proportion of rural students was observed in the courses run by the departments of Political Science (18.29 per cent), History (7.41 per cent) and Sociology (7.14 per cent) in the case of faculty of Social Sciences; and among other faculties, the departments of Library & Information Science got the highest share of rural students (16.67 per cent), followed by Physical Education (12.64 per cent), the Computer Science & Technology (10.67 per cent) and the Human Genetics (5.81 per cent).

Out of the two regional centres of Guru Nanak Dev University (Gurdaspur and Jalandhar), there was no rural student in the MBA course at Gurdaspur. However, at the Gurdaspur centre, the MCA course attracted 7.53

per cent of rural students, and the Law (Five Year) course 6.00 per cent as rural students. At the Jalandhar centre, out of 9 courses, in five courses there was no rural student. And, those who reported rural students have very low share; not more than 2.17 per cent (Table 3.10)

Table 3.10: Rural Students in Guru Nanak Dev University, Amritsar: Department-wise

		Total Enrollment			**Rural Students**					
					Number			***Percentage***		
S. No.	**Name of Department/ Course**	**Boys**	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**
A.	**Social Sciences**									
1	Psychology	3	19	22	0	0	0	0.00	0.00	0.00
2	History	22	32	54	3	1	4	13.64	3.13	7.41
3	Political Science	47	35	82	10	5	15	21.28	14.29	18.29
4	Social Sciences	58	51	109	1	0	1	1.72	0.00	0.92
5	Sociology	9	19	28	1	1	2	11.11	5.26	7.14
6	Economics	53	157	210	4	3	7	7.55	1.91	3.33
7	Philosophy	3	6	9	0	0	0	0.00	0.00	0.00
Total Social Sciences		**195**	**319**	**514**	**19**	**10**	**29**	**9.74**	**3.13**	**5.64**
B.	**Art & Culture**									
8	Music	7	22	29	0	1	1	0.00	4.55	3.45
	Total Art & Culture	**7**	**22**	**29**	**0**	**1**	**1**	**0.00**	**4.55**	**3.45**
C.	**Life Sciences**									
9	Botany & Environmental Sciences	46	130	176	3	4	7	6.52	3.08	3.98
10	Zoology	9	22	31	1	0	1	11.11	0.00	3.23
11	Bio-Technology	19	26	45	6	1	7	31.58	3.85	15.56
12	Sports Science	24	62	86	0	2	2	0.00	3.23	2.33
13	Pharmaceutical & DR	55	57	112	1	1	2	1.82	1.75	1.79
14	Human Genetics	21	65	86	1	4	5	4.76	6.15	5.81
15	Micro Biology	67	93	160	0	1	1	0.00	1.08	0.63
16	Food Sci. and Tech.	66	65	131	0	4	4	0.00	6.15	3.05
Total Life Sciences		**307**	**520**	**827**	**12**	**17**	**29**	**3.91**	**3.27**	**3.51**
D.	**Physical Sciences**									
17	Chemistry	59	168	227	3	2	5	5.08	1.19	2.20
18	Applied Chemistry	26	24	50	0	0	0	0.00	0.00	0.00
19	Physics	89	155	244	2	0	2	2.25	0.00	0.82
20	Applied Physics	32	9	41	3	1	4	9.38	11.11	9.76
21	Mathematics	48	32	80	2	1	3	4.17	3.13	3.75
22	Chemical Sciences and Tech.	64	11	75	8	0	8	12.50	0.00	10.67
Total Physical Sciences		**144**	**374**	**518**	**17**	**19**	**36**	**11.81**	**5.08**	**6.95**

E.	**Languages**									
23	English	17	59	76	1	2	3	5.88	3.39	3.95
24	Punjabi	70	100	170	4	0	4	5.71	0.00	2.35
25	Hindi	10	35	45	0	0	0	0.00	0.00	0.00
26	Sanskrit & Pali	0	9	9	0	1	1	0.00	11.11	11.11
27	Urdu & Persian	16	6	22	1	0	1	6.25	0.00	4.55
28	Foreign Languages	106	84	190	0	0	0	0.00	0.00	0.00
	Total Languages	**219**	**293**	**512**	**6**	**3**	**9**	**2.74**	**1.02**	**1.76**
F.	**Education & Information Science.**									
29	Physical Edu.	43	44	87	5	6	11	11.63	13.64	12.64
30	Library & Information Science	16	20	36	3	3	6	18.75	15.00	16.67
	Total Edu, & Inf. Sciences	**59**	**64**	**123**	**8**	**9**	**17**	**13.56**	**14.06**	**13.82**
G.	**Professional Courses**									
31	Computer Sci. & Engn.	385	306	691	4	2	6	1.04	0.65	0.87
32	Commerce & Business Mgt.	249	222	471	12	4	16	4.82	1.80	3.40
33	Law	366	154	520	1	0	1	0.27	0.00	0.19
34	Electronics and Printing Technology	148	52	200	5	0	5	3.38	0.00	2.50
35	Architecture and Planning	105	134	239	4	4	8	3.81	2.99	3.35
Total Professional Courses		**1253**	**868**	**2121**	**26**	**10**	**36**	**2.08**	**1.15**	**1.70**
Campus Total		**2370**	**2513**	**4883**	**89**	**55**	**144**	**3.76**	**2.19**	**2.95**
H.	**Regional Centres**									
1.	**Regional Centre, Gurdaspur**									
(i)	B.Tech (Com. Sci.&Eng.)	114	54	168	2	0	2	1.75	0.00	1.19
(ii)	B.Tech (Ele.& Comm. Eng.)	140	39	179	1	3	4	0.71	7.69	2.23
(iii)	LL.B FYIC	484	166	650	31	8	39	6.40	4.82	6.00
(iv)	MBA	30	21	51	0	0	0	0.00	0.00	0.00
(v)	MCA FYIC	53	40	93	3	4	7	5.66	10.00	7.53
	RC Total	**821**	**320**	**1141**	**37**	**15**	**52**	**4.51**	**4.69**	**4.56**
2.	**Guru Nanak Dev University Regional Centre, Jalandhar**									
(i)	BA LL.B HS	126	59	185	2	0	2	1.59	0.00	1.08
(ii)	B.Tech (Com. Sci.&Eng.)	109	53	162	1	1	2	0.92	1.89	1.23
(iii)	B.Tech (Ele.& Comm. Eng.)	107	31	138	0	3	3	0.00	9.68	2.17
(iv)	LL.B	263	77	340	0	0	0	0.00	0.00	0.00
(v)	LL.M	6	8	14	0	0	0	0.00	0.00	0.00
(vi)	M.A English	0	2	2	0	0	0	0.00	0.00	0.00
(vii)	M.A Mass Comm.	26	27	53	0	0	0	0.00	0.00	0.00
(viii)	M.A Punjabi	0	0	0	0	0	0	0.00	0.00	0.00
(ix)	M.Phill English	0	4	4	0	0	0	0.00	0.00	0.00
(x)	M.Phil Punjabi	14	6	20	1	5	6	7.14	83.33	30.00
	RC Total	**651**	**267**	**918**	**4**	**9**	**13**	**0.61**	**3.37**	**1.42**
	Grand Total	**126**	**59**	**185**	**2**	**0**	**2**	**1.59**	**0.00**	**1.08**

Source: Primary Survey

3.3.3 Panjab University

The department-wise presence of rural students in the case of Panjab University (Table 3.11) is not better than that of the Guru Nanak Dev University. Interestingly, among all the campus departments of Panjab University, the proportion of rural students was just 1.60 per cent. Out of the total 44 departments at the campus, in seven courses pertaining to science and engineering (Zoology, Bio-technology, Bio-physics, Microbiology, Human Genome, Chemistry, and Geology), there was not even a single student from the rural areas. And, in the Social Sciences, 5 departments (Psychology, Geography, Philosophy, Gandhian Studies, and Centre for Women Studies) were such where there was no rural student.

Journalism & Mass Communication and Foreign Languages did not report any rural students. Among the Professional Courses, Commerce & Business Management too did not have any rural students. Out of the remaining departments, 15 are such where the proportion of rural students was less than five per cent. There are eight departments where the proportion of rural students varied between 5 to 10 per cent. Surprisingly, the department of Indian Theatre had 37.50 per cent students from the rural areas.

At its regional centre (Muktsar), the MCA course did not have any rural student. Punjabi has the highest proportion of rural students (30.88 per cent), followed by Economics (25.00 per cent), Political Science (20.37 per cent), English (10.94 per cent) and Law (5.26 per cent). Nevertheless, the aggregate proportion of rural students at the regional centre of Muktsar was 12.72 per cent. This is much higher than that at the regional centre, Ludhiana (6.02 per cent) and at the regional centre, Hoshiarpur (2.20 per cent).

Table 3.11: Rural Students in Panjab University, Chandigarh: Department-wise

		Total Enrollment			Rural Students					
					Number			*Percentage*		
S. No.	**Name of Department/ Course**	**Boys**	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**	**Boys**	**Girls**	**Overall**
A.	**Social Sciences**									
1	Psychology	6	90	96	0	0	0	0.00	0.00	0.00
2	History	73	81	154	1	1	2	1.37	1.23	1.30
3	Political Science	41	67	108	5	0	5	12.20	0.00	4.63
4	Defense Studies	31	8	39	1	0	1	3.23	0.00	2.56
5	Public Admin.	37	56	93	7	1	8	18.92	1.79	8.60
6	Sociology	16	94	110	3	0	3	18.75	0.00	2.73
7	Economics	51	178	229	5	1	6	9.80	0.56	2.62
8	Gandhian Studies	22	9	31	0	0	0	0.00	0.00	0.00
9	Philosophy	16	22	38	0	0	0	0.00	0.00	0.00
10	Geography	33	51	84	0	0	0	0.00	0.00	0.00
11	Centre for Women Studies & Deve.	0	5	5	0	0	0	0.00	0.00	0.00
Total Social Sciences		**326**	**661**	**987**	**22**	**3**	**25**	**6.75**	**0.45**	**2.53**
B.	**Art & Culture**									
12	Music	23	19	42	0	0	0	0.00	0.00	0.00
13	Fine Arts	5	15	20	0	0	0	0.00	0.00	0.00
14	Theatre & T.V.	20	4	24	8	1	9	40.00	25.00	37.50
Total Art & Culture		**48**	**38**	**86**	**8**	**1**	**9**	**16.67**	**2.63**	**10.47**
C.	**Life Sciences**									
15	Botany	31	96	127	3	2	5	9.68	2.08	3.94
16	Zoology	22	93	115	0	0	0	0.00	0.00	0.00
17	Bio-Technology	26	61	87	0	0	0	0.00	0.00	0.00
18	Pharmaceutical & DR	140	139	279	9	2	11	6.43	1.44	3.94
19	Anthropology	37	48	85	7	2	9	18.92	4.17	10.59
20	Biochemistry	31	89	120	0	1	1	0.00	1.12	0.83
21	Biophysics	25	73	98	0	0	0	0.00	0.00	0.00
22	Microbiology	31	86	117	0	0	0	0.00	0.00	0.00
23	Human Genome	8	22	30	0	0	0	0.00	0.00	0.00
Total Life Sciences		**351**	**707**	**1058**	**19**	**7**	**26**	**5.41**	**0.99**	**2.46**
D.	**Physical Sciences**									
24	Chemistry	51	165	216	0	0	0	0.00	0.00	0.00
25	Physics	112	142	254	3	4	7	2.68	2.82	2.76
26	Statistics	19	40	59	0	2	2	0.00	5.00	3.39
27	Mathematics	53	159	212	2	1	3	3.77	0.63	1.42
28	Geology	38	41	79	0	0	0	0.00	0.00	0.00
29	Chemical Engg.. & Technology	328	109	437	1	0	1	0.30	0.00	0.23
Total Physical Sciences		**601**	**656**	**1257**	**6**	**7**	**13**	**1.00**	**1.07**	**1.03**
E.	**Languages**									
30	English	22	213	235	0	0	0	0.00	0.00	0.00
31	Punjabi	50	68	118	10	0	10	20.00	0.00	8.47

32	Hindi	24	77	101	2	5	7	8.33	6.49	6.93
33	Sanskrit & Pali	34	27	61	2	3	5	5.88	11.11	8.20
34	Urdu & Persian	33	6	39	0	0	0	0.00	0.00	0.00
35	Foreign Languages	128	111	239	0	0	0	0.00	0.00	0.00
Total Languages		**291**	**502**	**793**	**14**	**8**	**22**	**4.81**	**1.59**	**2.77**
F.	**Education & Information Science.**									
36	Education & CS	35	70	105	10	0	10	28.57	0.00	9.52
37	Physical Education	51	31	82	6	0	6	11.76	0.00	7.32
38	Journalism & Mass Communication	22	60	82	0	0	0	0.00	0.00	0.00
39	Library & Info. Sci.	5	46	51	1	3	4	20.00	6.52	7.84
Total Edu, & Inf. Sciences		**113**	**207**	**320**	**17**	**3**	**20**	**15.04**	**1.45**	**6.25**
G.	**Professional Courses**									
40	Computer Sci. & Engineering	1073	404	1477	0	1	1	0.00	0.25	0.07
41	Commerce & Business Mgt.	129	68	197	0	0	0	0.00	0.00	0.00
42	Law	875	433	1308	1	0	1	0.11	0.00	0.08
43	UCIM	29	10	39	3	0	3	10.34	0.00	7.69
44	Centre for Env. & Voc. Studies	6	56	62	0	1	1	0.00	1.79	1.61
Total Professional Courses		2112	971	3083	4	2	6	0.19	0.21	0.19
Campus Total		**3842**	**3742**	**7584**	**90**	**31**	**121**	**2.34**	**0.83**	**1.60**
I.	**Regional Centres**									
Panjab University's Regional Centre (Mukatsar)										
1	Punjabi	42	26	68	13	8	21	30.95	30.77	30.88
2	English	21	43	64	4	3	7	19.05	6.98	10.94
3	Economics	6	14	20	4	1	5	66.67	7.14	25.00
4	Political Science	30	24	54	3	8	11	10.00	33.33	20.37
5	Laws	115	18	133	6	1	7	5.22	5.56	5.26
6	M.C.A	45	17	62	0	0	0	0.00	0.00	0.00
	Sub Total	**259**	**142**	**401**	**30**	**21**	**51**	**11.58**	**14.79**	**12.72**
	Panjab University's Regional Centre (Ludhiana)									
7	Laws									
(i)	LL.B I	52	11	63	3	1	4	5.77	9.09	6.35
(ii)	LL.B II	50	9	59	2	1	3	4.00	11.11	5.08
(iii)	LL.B III	38	6	44	3	0	3	7.89	0.00	6.82
Sub Total		**140**	**26**	**166**	**8**	**2**	**10**	**5.71**	**7.69**	**6.02**
Panjab University's Regional Centre (Hoshiarpur)										
(i)	Prak Shastri - I	8	0	8	0	0	0	0.00	0.00	0.00
(ii)	Prak Shastri - II	19	0	19	0	0	0	0.00	0.00	0.00
(iii)	Shastri - I	15	0	15	0	0	0	0.00	0.00	0.00
(iv)	Shastri - II	15	0	15	0	0	0	0.00	0.00	0.00
(v)	Shastri - III	9	0	9	0	0	0	0.00	0.00	0.00
(vi)	M.A - I (Shastri)	14	10	24	0	0	0	0.00	0.00	0.00
(vii)	M.A - II (Shastri)	12	4	16	0	0	0	0.00	0.00	0.00
Sub Total		**92**	**14**	**106**	**0**	**0**	**0**	**0.00**	**0.00**	**0.00**
GRAND TOTAL		**4333**	**3924**	**8257**	**128**	**54**	**182**	**2.95**	**1.38**	**2.20**

Source: Primary Survey

3.3.4 Punjab Agricultural University

As regards Punjab Agricultural University (Table 3.12), it comprises of five colleges, namely, College of Basic Sciences and Humanities; College of Home Science; College of Veterinary Sciences; College of Agriculture; and College of Agricultural Engineering. As mentioned earlier, there were 4.73 per cent rural students in all the colleges and courses run by them taken together. Each college consists of various departments. However, there are wide variations in the proportion of rural students across the colleges and departments of this university.

Out of 12 departments in the College of Basic Sciences and Humanities, there is no rural student in Journalism, Fisheries, Biochemistry, Economics, Genetics, Statistics, Microbiology and Physics. The proportion of rural students in Botany, Zoology and Chemistry was 9.52 per cent, 8.70 per cent and 5.56 per cent, respectively. The proportion of rural students in the department of Business Management was just 1.16 per cent and it was only in the MBA. In the MBA (Agriculture Business) and various other diplomas (both postgraduate and undergraduate), there was no student from the rural areas. At the aggregate level, the proportion of rural students in the College of Basic Sciences and Humanities was a meagre 1.99 per cent. Further, out of the 301 total students in this college, 58.14 per cent were girls and the remaining (41.86 per cent) were boys. There was not a single male student from the rural areas in any of the departments of this college.

In the College of Home Science, out of the 243 students, only 10 were from rural areas, i.e. 4.12 per cent. In the department of Home Science and Extension Education, there is not a single rural student. In the department of Food and Nutrition, Human Development, Sociology and undergraduate diploma in ID, there was no student from the rural areas. Nevertheless, Family

Table 3.12: Rural Students in Punjab Agricultural University, Ludhiana: Department-wise

		Total Enrollment			Rural Students					
					Number			Percentage		
S.No.	**Name of Department/ Course**	**B**	**G**	**O**	**B**	**G**	**O**	**B**	**G**	**O**
A.	**College of Basic Sciences and Humanities**									
1	Botany	3	18	21	0	2	2	0.00	11.11	**9.52**
2	Chemistry	3	15	18	0	1	1	0.00	6.67	**5.56**
3	Biochemistry	13	27	40	0	0	0	0.00	0.00	**0.00**
4	Economics	25	1	26	0	0	0	0.00	0.00	**0.00**
5	Genetics	2	8	10	0	0	0	0.00	0.00	**0.00**
6	Statistics	0	0	0	0	0	0	0.00	0.00	**0.00**
7	Microbiology	8	21	29	0	0	0	0.00	0.00	**0.00**
8	Zoology	1	22	23	0	2	2	0.00	9.09	**8.70**
9	Journalism	0	0	0	0	0	0	0.00	0.00	**0.00**
10	Physics	3	5	8	0	0	0	0.00	0.00	**0.00**
11	Fisheries	0	0	0	0	0	0	0.00	0.00	**0.00**
12	Business Mgt.									
(i)	MBA	45	41	86	0	1	1	0.00	2.44	**1.16**
(ii)	MBA (Agriculture Business)	17	4	21	0	0	0	0.00	0.00	**0.00**
13	Under Graduates Courses									
(i)	PG in Dip. AJMC	2	11	13	0	0	0	0.00	0.00	**0.00**
(ii)	PG in Dip. HAP	1	2	3	0	0	0	0.00	0.00	**0.00**
(iii)	Dip. In Fisheries	3	0	3	0	0	0	0.00	0.00	**0.00**
	Sub Total	**126**	**175**	**301**	**0**	**6**	**6**	**0.00**	**3.43**	**1.99**
B.	**College of Home Science**									
1	Food and Nutrition	0	24	24	0	0	0	0.00	0.00	**0.00**
2	Family Resource Management	0	11	11	0	4	4	0.00	36.36	**36.36**
3	Home Science. Extension Education	0	0	0	0	0	0	0.00	0.00	**0.00**
4	Human Development. & Sociology	0	16	16	0	0	0	0.00	0.00	**0.00**
5	Clothing and Textile	0	5	5	0	1	1	0.00	20.00	**20.00**
6	Sociology	0	4	4	0	0	0	0.00	0.00	**0.00**
7	Under Graduates Courses									
(i)	B.Sc. (Hons.) Home Science	0	122	122	0	1	1	0.00	0.82	**0.82**
(ii)	Dip. In ID	0	5	5	0	0	0	0.00	0.00	**0.00**
(iii)	Dip. In FPB	0	15	15	0	1	1	0.00	6.67	**6.67**
(iv)	Dip. In FD	0	25	25	0	2	2	0.00	8.00	**8.00**
(v)	Dip. In MCNS	0	16	16	0	1	1	0.00	6.25	**6.25**
	Sub Total	**0**	**243**	**243**	**0**	**10**	**10**	**2.00**	**4.12**	**4.12**
C.	**College of Veterinary Sciences**									
1	Animal Breeding & Genetics	2	3	5	1	0	1	50.00	0.00	**20.00**
2	Animal Nutrition	4	0	4	0	0	0	0.00	0.00	**0.00**
3	.Animal Reproduction, Gynecology & Obst	7	2	9	0	0	0	0.00	0.00	**0.00**
4	Clinical Veterinary Medicine, Ethics & Jurisprudence	5	2	7	1	0	1	20.00	0.00	**14.29**

5	Epidemiology and Preventive Vet. Medicine	4	5	9	0	0	0	0.00	0.00	**0.00**
6	Livestock Production and Mgt.	4	0	4	0	0	0	0.00	0.00	**0.00**
7	Veterinary Anatomy & Histology	5	1	6	2	0	2	40.00	0.00	**33.33**
8	Veterinary Biochemistry	4	0	4	0	0	0	0.00	0.00	**0.00**
9	Veterinary Microbiology	5	5	10	0	0	0	0.00	0.00	**0.00**
10	Veterinary Parasitology	3	2	5	0	0	0	0.00	0.00	**0.00**
11	Veterinary Pathology	6	4	10	1	1	2	16.67	25.00	**20.00**
12	Veterinary Pharmacology & Toxicology	7	0	7	0	0	0	0.00	0.00	**0.00**
13	Veterinary Physiology	4	0	4	0	0	0	0.00	0.00	**0.00**
14	Veterinary Public Health	2	4	6	0	0	0	0.00	0.00	**0.00**
15	Veterinary &Animal Husbandry Extension	2	0	2	0	0	0	0.00	0.00	**0.00**
16	Veterinary Surgery & Radiology	9	2	11	0	0	0	0.00	0.00	**0.00**
17	Livestock Products & Technology	3	0	3	0	0	0	0.00	0.00	**0.00**
18	Under Graduates Courses									
	B.V.Sc	228	52	280	6	2	8	2.63	3.85	**2.86**
	Sub Total	**304**	**82**	**386**	**11**	**3**	**14**	**3.62**	**3.66**	**3.63**
D.	**College of Agriculture**									
1	Agronomy	31	16	47	2	1	3	6.45	6.25	**6.38**
2	Agro Meteorology	3	2	5	0	0	0	0.00	0.00	**0.00**
3	Extension Education	12	11	23	4	0	4	33.33	0.00	**17.39**
4	Entomology	20	15	35	3	1	4	15.00	6.67	**11.43**
5	Horticulture (Pomology)	7	20	27	7	0	7	100.00	0.00	**25.93**
6	Food Science & Technology	25	7	32	5	1	6	20.00	14.29	**18.75**
7	Vegetables & Crops	32	4	36	2	1	3	6.25	25.00	**8.33**
8	Floriculture & Landscaping	5	2	7	0	1	1	0.00	50.00	**14.29**
9	Plant Breeding, Genetics & Biotechnology	18	9	27	1	1	2	5.56	11.11	**7.41**
10	Plant Pathology	11	4	15	3	2	5	27.27	50.00	**33.33**
11	Soils	21	11	32	2	1	3	9.52	9.09	**9.38**
12	Forestry	5	4	9	1	0	1	20.00	0.00	**11.11**
13	Under Graduates Courses									
(i)	B.Sc. Agri. (Hons)	253	104	357	7	3	10	2.77	2.88	**2.80**
(ii)	B.Ed	2	22	24	0	0	0	0.00	0.00	**0.00**
(iii)	Dip. In PM	1	0	1	0	0	0	0.00	0.00	**0.00**
(iv)	Dip. In Apiculture	1	0	1	0	0	0	0.00	0.00	**0.00**
(v)	Dip. In FT	4	1	5	0	0	0	0.00	0.00	**0.00**
(vi)	Dip. In SPT	5	0	5	0	0	0	0.00	0.00	**0.00**
	Sub Total	**456**	**232**	**688**	**37**	**12**	**49**	**8.11**	**2.00**	**7.12**

E.	College of Agriculture Engineering									
1	Farm Power and Machinery	10	4	14	0	0	0	0.00	0.00	**0.00**
2	Soils & Water Engineering.	5	2	7	0	1	1	0.00	50.00	**14.29**
3	Agro Industrial Processing	1	0	1	0	0	0	0.00	0.00	**0.00**
4	Processing & Food Engineering.	8	6	14	0	0	0	0.00	0.00	**0.00**
5	Civil Engineering	0	0	0	0	0	0	0.00	0.00	**0.00**
6	Computer Sciences & Electrical Engineering	9	6	15	2	0	2	22.22	0.00	**13.33**
7	Under Graduates Courses									
(i)	B.Tech	183	28	211	5	2	7	2.73	7.14	**3.32**
	Sub Total	**216**	**46**	**262**	**7**	**3**	**10**	**3.24**	**6.52**	**3.82**
	Grand Total	**1102**	**778**	**1880**	**55**	**34**	**89**	**4.99**	**4.37**	**4.79**

Source: Primary Survey

Resource Management course had 4 rural students out of the total eleven students (36.36 per cent). In the Clothing and Textiles, out of 5 students only one was from rural areas. It is very revealing that in the B.Sc. (Hons.) Home Science, out of 122 students there was only one rural student (0.82 per cent). Similarly, out of 15 and 16 students respectively in the FPB and MCNS diplomas, the number of rural students was only one in each course.

In the College of Veterinary Sciences, out of 386 total students, only 14 were rural students (3.63 per cent). More importantly, out of 304 boys, only 11 students (3.62 per cent) and out of 82 girls only 3 students (3.66 per cent) were from rural areas. The major course in this college is the B.V.Sc. and there were 280 students in this course. Out of 280 students only 8 students (2.86 per cent) were from rural areas. Out of 228 boys, only six students (2.63 per cent) and out of 52 girls only 2 girl students (3.85 per cent) were from rural areas respectively. In all other courses (17) in the College, the number of total students was very small and varied from 2 to 11 students. Only four courses, out of these 17 courses, had rural students and their number was 1, 1, 2 and 2 respectively. Their percentage share, however, varied from 14 per cent to 33 per cent. Out of these four courses, only one had a girl student from the rural

areas. In other words, in 13 courses, there was not even a single student from the rural areas.

Out of 688 students in the College of Agriculture, the number of rural students was 49 (7.12 per cent). There were 37 boys (8.11 per cent) and 12 girls (2.00 per cent) from rural areas out of 456 boys and 232 girls respectively. In the College of Agriculture, the overall percentage of girls was 33.72 and that of boys was 66.28. The proportion of rural girls and rural boys in the total rural students was, however, 24.49 per cent and 75.51 per cent respectively. Agro-meteorology was the only subject amongst the postgraduate courses in which there was no student from the rural area. In all post-graduate courses, the number of rural students varied between one and seven (between 6.38 per cent and 33.33 per cent), with Plant Pathology had the highest (33.33 per cent) and Agronomy (6.38 per cent) had the lowest proportion of the rural students. In the four postgraduate courses, the number of rural girls was zero.

In the undergraduate veterinary courses, the proportion of rural students was very low (2.86 per cent). There were only 8 rural students in a total of 280 students in all the undergraduate courses. In fact, out of 6 undergraduate courses, in five there was no rural student. In the B.Sc. agriculture (Hons.), out of 357 students, there were only 10 rural students (2.80 per cent), 7 boys (2.77 per cent) and 3 girls (2.88 per cent). It is interesting to note that, in all, the proportion of girls in B.Sc. Agriculture (Hons.) was 29.13 per cent (104 girls out of 357 total students) and that of rural girl students amongst total girls was a meagre 2.88 per cent. The proportion of rural students in the College of Veterinary Sciences and College of Agriculture was mere 3.62 per cent (3.63 per cent for boys and 3.66 per cent for girls) and 7.12 per cent (8.11 per cent for boys and 2.00 per cent for girls) respectively.

The proportion of rural students in the College of Agriculture Engineering was also very low (3.82 per cent). Out of 6 post-graduate courses, there was no student in Civil Engineering. In another three courses, there was no rural student. However, in the Soils and Water Engineering, out of 7 students only one (14.29 per cent) was from rural areas and that, too, was a girl student. In the Computer Science and Electrical Engineering, out of 15 students 2 students (13.33 per cent) were from rural areas, and those, too, were boys. Out of 211 students admitted in the B. Tech. (Agricultural Engineering), only 7 students (3.32 per cent) were from rural areas.

In the nutshell, the scenario about the share of rural students in the four universities of Punjab and their regional centres, emerging from the preceding discussion, is a disappointing one. More so, it is a pointer to the deteriorating quality of education in rural schools and, by proxy measure, may be an indicator of deteriorating economic position of the ruralities. To enhance the number and proportion of rural students in higher education is of utmost importance. It is more so because the rural students (when trained in such a skill and expertise) would be able to interact with the farmers in a more effective manner. Besides, being familiar to the rural conditions and needs, they would feel more concerned with the rural economy in general and agriculture and dairying in particular. Apart from this, it would contribute to the upliftment of human resources in the rural Punjab.

In fact, the negligible proportion of rural students in the university education in general and engineering science and other professional courses in particular is a cause of worry and needs immediate attention. There is a need for short term and long term strategies to tackle such a serious problem. In the short run, there is a need to create additional seats for ruralites, or even reserve a substantial number of existing seats for the rural students. In order to provide a level playing field for the rural students, there is a need to improve the quality

of school education in the rural Punjab. Again, this requires both short term and long term strategies on the part of the government. Along with this, there is an immediate need to establish a Rural Education Commission with a specific focus on rural education and enhancing the enrollment of rural students in higher education, particularly in the university level education. In fact, Punjabi University has already established two neighborhood campuses and one Engineering College (YCoE) where there are 100 per cent reservations for rural students. There is an overwhelming response to this venture.

Since the present study is the first one of this kind in the state of Punjab, it is difficult to comment on the earlier scenario, about the share of rural students in the universities of Punjab. From the presence of ruralities in various the services of Punjab, during the earlier period, may help us to say that the situation was not as bad as it is now.

Chapter IV

RURAL STUDENTS: SOME SOCIO-ECONOMIC CHARACTERISTICS

Socio-economic background of students is considered to be very important determinant of educational attainment and performance. Therefore, it was decided to collect information about the socio-economic parameters of rural students though a well structured and pre tested questionnaire (Appendix-I). All the identified rural students were motivated to fill-in the questionnaire. This chapter is based on the information and data provided by the rural students themselves. The information on relevant social, economic and education-oriented variables have been classified and clubbed into fourteen sub-parts so as to present a comprehensive picture of the situation. An attempt has been made to present all the relevant information about rural students in the text of this chapter. But, it was neither possible and also nor desirable to present all the collected information in the tabular form. So, the text contains information which flows simultaneously from two channels: (a) the primary survey based data presented in tables and analysed in this chapter, and (b) the other information originated from the same primary survey but could not displayed in the form of data tables. Thus, the information of latter variety, wherever needed, has been cited by mentioning 'primary survey' in the bracket.

4.1 Social Features

Table 4.1.1 provides the sex and age wise composition of the rural students in the universities of Punjab state. The maximum concentration of rural students is in the age group of 21-23 years. These three years of age account for 58.51 per cent of rural students. Between 18-20 years of age and between 24-26 years of age, the proportion of rural students was 17.13 per cent

and 17.12 per cent, respectively. The proportion of rural students beyond 26 years was only 7.24 per cent.

Table 4.1.1: Distribution of Rural Students in Universities* of Punjab by Sex and Age

Age (in Years)	Boys	%	Girls	%	Overall	%
18	31	5.24	28	8.78	59	6.48
19	25	4.22	15	4.70	40	4.39
20	28	4.73	29	9.09	57	6.26
21	88	14.86	83	26.02	171	18.77
22	109	18.41	68	21.32	177	19.43
23	139	23.48	46	14.42	185	20.31
24	64	10.81	20	6.27	84	9.22
25	52	8.78	20	6.27	72	7.90
26+	56	9.46	10	3.13	66	7.24
Total	**592**	**100.00**	**319**	**100.00**	**911**	**100.00**

Source: Primary Survey.
* The Regional Centres are also included in the universities.

As regard rural male and rural female students, again, the maximum concentration was in the age group of 21-23 years, 56.75 per cent in the case of males and 61.76 per cent in the case of females. As regards the proportion of rural students beyond 24 years, it was higher in the case of boys (19.05 per cent) compared to that of girls (15.67 per cent). Contrary to it, the proportion of girls in the age group between 18-20 years is higher (22.57 per cent) than that of boys (14.19 per cent). It shows that the boys enter the university at a bit later age than that of the girls. However, they leave the university at a higher age than that of the girls. But the model age group, both for boys and girls, of rural students in the university was, however, 21-23 years.

The religion-wise distribution of rural students is given in Table 4.1.2. As many as 70.25 per cent students belong to Sikh religion, 27.44 per cent to Hindu religion, 0.88 per cent to Islam, and 1.43 per cent to others. It almost synchronizes with the proportion of Sikhs and Hindus in the rural population of Punjab. As per the Population Census of 2001, the Sikh-religion's share in rural population was 71.86 per cent, that of the Hindu-religion 25.25 per cent and the Muslim-religion population 1.34 per cent. Thus, the proportion of Hindu

religion students is slightly higher and that of Sikhs and Muslims is slightly lower than their respective proportion in the rural population in Punjab. It is interesting to note that the proportion of Sikh-religion girls is quite higher than that of Sikh-religion boys. The situation is otherwise in other religious groups.

Table 4.1.2: Distribution of Rural Students in University of Punjab by Religion

Religion	Boys	%	Girls	%	Overall	%
Sikh	404	68.24	236	73.98	640	70.25
Hindu	173	29.22	77	24.14	250	27.44
Muslim	6	1.01	2	0.63	8	0.88
Others	9	1.52	4	1.25	13	1.43
Total	**592**	**100.00**	**319**	**100.00**	**911**	**100.00**

Source: Primary Survey

The scheduled castes comprise 28.85 per cent population in Punjab (GOP, 2005), whereas the proportion of rural SC students in the total rural students in the universities of Punjab is comparatively low, i.e. 14.60 per cent (Table 4.1.3). However, the proportion of SC girls is very less (7.52 per cent) as compared to the SC boys (18.41 per cent). Further, the proportion of female students from the other backward classes is very dismal (0.63 per cent). Contrary to it, the proportion of female students in the general category is higher (84.95 per cent) than that of the male students (70.44 per cent).

Table 4.1.3: Distribution of Rural Students in Universities by Social Category

Category	Boys	%	Girls	%	Overall	%
General	417	70.44	271	84.95	688	75.52
SC	109	18.41	24	7.52	133	14.60
BC	44	7.43	22	6.90	66	7.24
OBC	22	3.72	2	0.63	24	2.63
Total	**592**	**100.00**	**319**	**100.00**	**911**	**100.00**

Source: Primary Survey

4.2 Location of Village

Approximately 45 per cent of rural students came from the villages located on the main roads, whereas the remaining 55 per cent were from the villages located on the link road (Table 4.2.1). The distance of the villages located on the link roads from the main roads varied from 2 to 10 kms (Table 4.2.2). It means that they have to cover extra distance to reach the destination.

About 23 per cent of rural students travelled up to 2 kms, 36.06 per cent between 3 and 5 kms, 24.50 per cent between 6-10 kms and 16.14 per cent travelled more than 10 kms to reach at the main roads.

Table 4.2.1: Distribution of Rural Students in Universities of Punjab by Location of Village (on Main/Link Road)

Village Location	Boys	%	Girls	%	Overall	%
On Main Road	258	43.58	151	47.34	409	44.90
On Link Road	334	56.42	168	52.66	502	55.10
Total	**592**	**100.00**	**319**	**100.00**	**911**	**100.00**

Source: Primary Survey

Table 4.2.2: Distribution of Rural Students in Universities of Punjab by Distance of Link Road located Village from Main Road

Distance (km)	Boys	%	Girls	%	Overall	%
Up to 2	82	24.55	35	20.83	117	23.31
3 - 5	115	34.43	66	39.29	181	36.06
6 - 10	82	24.55	41	24.40	123	24.50
10 +	55	16.47	26	15.48	81	16.14
Total	**334**	**100.00**	**168**	**100.00**	**502**	**100.00**

Source: Primary Survey

4.3 Hostel/Daily Commuting

Nearly 62 per cent rural students were found to be living in the hostel, etc., and 38 per cent were daily commuters (Table 4.3.1). The percentage of girls living in the hostel was higher (64.58 per cent) than that of the boys (59.97 per cent). Contrary to it, the percentage of girls commuting daily was lower than that of boys. Perhaps the inconvenience involved in travelling by girls was the main reason behind it. The distance travelled by the daily commuters ranged between 10 km to 61 km (Table 4.3.2). About 26 per cent students travelled a distance up to 10 km daily to reach the university/regional centre. Nearly 25 per cent students has to travel a distance between 11 to 20 km, 15.43 per cent between 21-30 km, 10.57 per cent between 31-40 km, 9.43 per cent between 41-50 kms and 8.57 per cent above 60 km.

Table 4.3.1: Distribution of Rural Students in Universities of Punjab by their Hostel Status

Hostel Status	Boys	%	Girls	%	Overall	%
Hostellers/Boarders	355	59.97	206	64.58	561	61.58
Daily Commuters	237	40.03	113	35.42	350	38.42
Total	**592**	**100.00**	**319**	**100.00**	**911**	**100.00**

Source: Primary Survey

Table 4.3.2: Distribution of Rural Students in Universities of Punjab who Commute Daily by the Distance Traveled

Distance (Km.)	Boys	%	Girls	%	Overall	%
> 10	49	20.68	41	36.28	90	25.71
11-20	53	22.36	35	30.97	88	25.14
21-30	34	14.35	20	17.70	54	15.43
31-40	32	13.50	5	4.42	37	10.57
41-50	27	11.39	6	5.31	33	9.43
51-60	25	10.55	5	4.42	30	8.57
61+	17	7.17	1	0.88	18	5.14
Total	**237**	**100.00**	**113**	**100.00**	**350**	**100.00**

Source: Primary Survey

It is very astonishing to note that the percentage of girl students travelling a distance up to 30 kms is much high (84.95 per cent) than the percentage of boys (57.39 per cent) travelling the same distance daily. However, the proportion of boys travelling a distance beyond 30 kms is higher than that of girls. The daily commuting by the students in Punjab has been made easy by higher frequency of buses and other means of transportation and by the provision of concessional charges for student bus pass. Besides, the hostel expenses are higher than the travelling expenses. Therefore, the rural students or their parents preferred daily commuting.

Regarding the modes of transport used by the daily commuters, the data point out that nearly three-forth students (74.00 per cent) travelled by buses and 18.29 per cent used their own scooters/motorcycles to reach the university/regional centre (Table 4.3.3). A very small number of students travelled by train (3.14 per cent) and by own car/jeep (4.57 per cent). The proportion of girls travelling by buses is higher (82.30 per cent) than that of boys (70 per cent). On the other hand, the proportion of boys using

scooter/motorcycles as the transport mode is higher than that of girls. The same is true in the case of cars.

Table 4.3.3: Distribution of Rural Students in Universities of Punjab who Commute Daily by Transport Means

Traveling Mode	Boys	%	Girls	%	Overall	%
Bus	166	70.04	93	82.30	259	74.00
Train	9	3.80	2	1.77	11	3.14
Own Scooter/Motorcycle	47	19.83	17	15.04	64	18.29
Own Car/Jeep	15	6.33	1	0.88	16	4.57
Total	**237**	**100.00**	**113**	**100.00**	**350**	**100.00**

Source: Primary Survey

Daily travelling involves lot of precious times of the students. Half an hour travelling time is not very abnormal. Even the most of urban students have to put in this much time in travelling. About one-fourth of students (24.29 per cent) reached the university/regional centre within half an hour. Above 55.43 per cent students put in between one hour and one and a half hour travelling time daily (Table 4.3.4). Another 12.57 per cent students spent two hours daily in travelling and 7.71 per cent spent three hours and more in travelling daily. To some extent, there are variations in the time spent by sex of the students.

Table 4.3.4: Distribution of Rural Students in Universities of Punjab who Commute Daily by Traveling Time

Travel Time	Boys	%	Girls	%	Overall	%
1/2 hour	53	22.36	32	28.32	85	24.29
1 hour	70	29.54	53	46.90	123	35.14
1.30 hour	54	22.78	17	15.04	71	20.29
2 hour	34	14.35	10	8.85	44	12.57
3+ hour	26	10.97	1	0.88	27	7.71
Total	**235**	**100.00**	**115**	**100.00**	**350**	**100.00**

Source: Primary Survey

4.4 Admission Status and Education Level

Although the universities are mainly supposed to impart post graduation level of higher education and research, yet they run some undergraduate level courses also, both at their campuses and regional centres. As such, 22.17 per cent rural students were in the undergraduate courses and 77.83 per cent were in the postgraduate courses (Table 4.4.1). The proportion of rural female students

is slightly higher in the undergraduate courses (24.45 per cent) than that of male students (20.95 per cent). Contrary to it, the proportion of male rural students amongst the total male students is higher than that of female students. The difference between the two proportions, however, does not seem to be significant. About 78 per cent undergraduate rural students were in the Professional Courses (Table 4.4.2) and 16 per cent in the Science Courses. Out of total post-graduate rural students, the highest proportion (69.53 per cent) was in Arts/Humanities stream, followed by Science stream (25.67 per cent), Professional stream (2.82 per cent) and Commerce stream (1.98 per cent) (Table 4.4.3).

Table 4.4.1: Distribution of Rural Students in Universities of Punjab by Education Level

Education Level	Boys	Girls	Overall
Undergraduate Courses	124 (20.95)	78 (24.45)	202 (22.17)
Postgraduate Courses	468 (79.05)	241 (75.55)	709 (77.83)
Total	**592 (100.00)**	**319 (100.00)**	**911 (100.00)**

Figures in parentheses are percentages
Source: Primary Survey

Table 4.4.2: Distribution of Rural Students Studying Undergraduate Courses in Universities of Punjab by Type of Course

Type of Course/Education	Boys	%	Girls	%	Overall	%
Arts/Humanities	5	4.03	6	7.69	11	5.45
Science Courses	13	10.48	19	24.36	32	15.84
Professional Courses	104	83.87	53	67.95	157	77.72
Languages Courses	2	1.61	0	0.00	2	0.99
Total	**124**	**100.00**	**78**	**100.00**	**202**	**100.00**

Source: Primary Survey

Table 4.4.3: Distribution of Rural Students Studying Post Graduate Courses in Universities of Punjab by Type of Course

Type of Course/Education	Boys	%	Girls	%	Overall	%
Arts/Humanities	328	70.09	165	68.46	493	69.53
Science Courses	11	2.35	3	1.25	14	1.98
Professional Courses	111	23.75	71	29.46	182	25.67
Languages Courses	18	3.84	2	0.83	20	2.82
Total	**468**	**100.00**	**241**	**100.00**	**709**	**100.00**

Source: Primary Survey

In the universities of Punjab, there are statutory reservations in each course. Table 4.4.4 shows a picture of rural students who got admission against these statutory reservations. Out of 911 total rural students in the universities and their regional centres, 58.73 per cent got admission in the general category. The proportion of SC students of rural areas was 14.60 per cent. Only 15.15 per cent rural students got admission against the reservation/additional seats meant for rural students. The proportion of backward classes was 4.61 per cent. The share of all the remaining categories varied between 0.33 per cent and 0.66 per cent. It is interesting to note that the proportion of girls is higher in the general category (61.76 per cent for girls compared to 57.09 per cent for boys) and in the seats reserved for rural students (20.38 per cent for girls compared to 12.33 per cent for boys). The proportion of girls in SC category (7.84 per cent) is significantly lower than that of boys (18.41 per cent). Also, the proportion of SC students is much below the proportion of their population in rural Punjab, which is 33 per cent (GOI, 2005). It is clear that tendency to send SC girls to higher education in the universities is very low. The deprivation of rural students in general and those of SC students in particular would increase the hiatus between rural-urban and between general and SC population.

Table 4.4.4: Distribution of Rural Students in Universities of Punjab by Admission Category

Admission Category	Boys	%	Girls	%	Overall	%
General	338	57.09	197	61.76	535	58.73
SC/ST	109	18.41	24	7.52	133	14.60
Rural	73	12.33	65	20.38	138	15.15
BC	35	5.91	7	2.19	42	4.61
BA/BR	4	0.68	2	0.63	6	0.66
Freedom Fighters	2	0.34	2	0.63	4	0.44
Sports Persons	3	0.51	2	0.63	5	0.55
Riot Victims	2	0.34	2	0.63	4	0.44
Defence Personnel	6	1.01	3	0.94	9	0.99
Handicapped	2	0.34	1	0.31	3	0.33
NRI/IND	18	3.04	14	4.08	32	3.40
Total	**592**	**100.00**	**319**	**100.00**	**911**	**100.00**

Source: Primary Survey

The study team also tried to look at those persons by whom the rural students were motivated to join the universities of Punjab state. Table 4.4.5 shows that 63.25 per cent students got the motivation from their parents. Their teachers motivated another 18.53 per cent. And, the friends motivated nearly 10 per cent. It is a point of great satisfaction that amongst the rural female students, the parents motivated 76.44 per cent and the teachers motivated another 14 per cent of rural girls. It speaks of the awareness on the part of parents and teachers regarding education of girls.

Table 4.4.5: Distribution of Rural Students in Universities of Punjab by Admission Motivator's Category

Motivator	Boys	%	Girls	%	Overall	%
Parents	351	56.25	253	76.44	604	63.25
Teachers	130	20.83	47	14.20	177	18.53
Relatives	31	4.97	11	3.32	42	4.40
Friends	84	13.46	12	3.63	96	10.05
Others	28	4.49	8	2.42	36	3.77
***Total**	**624**	**100.00**	**331**	**100.00**	**955**	**100.00**

* Many students gave multiple responses
Source: Primary Survey

4.5 Examination Score

The study team also decided to look into the school and college level academic performance of rural students admitted in the universities. Table 4.5.1, 4.5.2 and 4.5.3 present their score in the matriculation, +2 and graduation levels of education respectively. Nearly 62 per cent rural students were having first division in matriculation, 55.65 per cent in +2, and 44.16 per cent in graduation. Clearly, their performance while moving towards the higher levels of education witnessed a decline. However, the proportion of rural students who got second division at the respective levels of education registered an increase. The proportion of rural students getting third division, however, declined as they moved from matriculation to graduation. It may be attributed to the sense of awareness and responsibility, which is likely to be increased with the maturity of age, towards the importance of higher education.

Table 4.5.1: Distribution of Rural Students in Universities of Punjab by Score in Matriculation Examination

Marks (%)	Boys	%	Girls	%	Overall	%
<44	22	3.72	4	1.25	26	2.85
45-49	61	10.30	13	4.08	74	8.12
50-59	182	30.74	64	20.06	246	27.00
60-69	163	27.53	106	33.23	269	29.53
70-79	121	20.44	83	26.02	204	22.39
80+	43	7.26	49	15.36	92	10.10
Total	**592**	**100.00**	**319**	**100.00**	**911**	**100.00**

Source: Primary Survey

Table 4.5.2: Distribution of Rural Students in Universities of Punjab by Score in Plus Two Examinations

Marks (%)	Boys	%	Girls	%	Overall	%
<44	9	1.52	2	0.63	11	1.21
45-49	29	4.90	7	2.19	36	3.95
50-59	257	43.41	100	31.35	357	39.19
60-69	219	36.99	136	42.63	355	38.97
70-79	64	10.81	62	19.44	126	13.83
80+	14	2.36	12	3.76	26	2.85
Total	**592**	**100.00**	**319**	**100.00**	**911**	**100.00**

Source: Primary Survey

Table 4.5.3: Distribution of Rural Students in Universities of Punjab by Score in Graduation Level Examination

Marks (%)	Boys	%	Girls	%	Overall	%
<44	4	0.85	0	0.00	4	0.56
45-49	30	6.41	5	2.07	35	4.94
50-59	259	55.34	98	40.66	357	50.35
60-69	129	27.56	106	43.98	235	33.15
70-79	44	9.40	28	11.62	72	10.16
80+	2	0.43	4	1.66	6	0.85
Total	**468**	**100.00**	**241**	**100.00**	**709**	**100.00**

Note: 202 Students of Undergraduate Courses (124 Boys and 78 Girls) are yet to Appear in graduation examination

Source: Primary Survey

With regard to the gender, the data reveal that the performance of rural girl students was better than that of boys at all levels of education. Approximately, three-fourth girls (74.61 per cent) got first division in matriculation, 65.85 per cent in +2, and 57 per cent in graduation examinations. Compared to it, the corresponding proportion of boys was 55.23, 50.16 and 36.86 per cent, respectively. Though there is decline in the performance of both boys and girls while going from lower to higher levels of education, yet the

deterioration in the performance is more noticeable in the case of boys while moving from +2 to graduation. Towards the higher end of score i.e. above 70 per cent, the girls performed much better than the boys at all levels. This may be attributed to the more studious and sensitive nature of girls and the tendency among more meritorious boys to go in for professional education (especially in the engineering courses and in the polytechnics) after matriculation and +2.

4.6 Schools: Type, Affiliation and Location

Table 4.6.1 presents a picture about ownership of schools from where the rural students in the universities acquired their education. As regards primary and middle school, 63 to 67 per cent students studied in government/aided schools. This proportion in the case of high and senior secondary schools was 71.57 and 70.14 per cent, respectively. Clearly, a very sizeable proportion of students studied in the government and government aided schools. Contrary to the popular perception and belief, the proportion of rural girls studied in private rural schools at all levels of school education has been higher than that of the boys. This is inspite of the fact that the private schools are more costly than the government/aided schools. This is something, which negates the gender discrimination on the part of the parents of the rural students and moreover, these girl students are from relatively rich and educated rural parents.

A very high proportion of students (83.42 per cent), who joined the universities, came from schools affiliated to Punjab School Education Board (PSEB) (Table 4.6.2). The owners of schools having affiliation to CBSE/ICSE and other boards are thus shy of establishing their schools in the rural areas. The schools affiliated to the CBSE/ICSE are the English medium schools and too costly. Thus, these schools are most likely beyond the access and affordability of majority of rural students coming from weaker sections of

society. As regards the proportion of boys and girls coming from the PSEB and other boards, there is no significant difference.

Table 4.6.1: Distribution of Rural Students in Universities of Punjab by Ownership Pattern of Schools

Primary Schools						
Ownership Pattern	**Boys**	**%**	**Girls**	**%**	**Overall**	**%**
Government/Aided	405	68.41	167	52.35	572	62.79
Private	187	31.59	152	47.65	339	37.21
Total	**592**	**100.00**	**319**	**100.00**	**911**	**100.00**
Middle Schools						
Ownership Pattern	**Boys**	**%**	**Girls**	**%**	**Overall**	**%**
Government/Aided	425	71.79	186	58.31	611	67.07
Private	167	28.21	133	41.69	300	32.93
Total	**592**	**100.00**	**319**	**100.00**	**911**	**100.00**
Secondary Schools						
Ownership Pattern	**Boys**	**%**	**Girls**	**%**	**Overall**	**%**
Government/Aided	444	75.00	208	65.20	652	71.57
Private	148	25.00	111	34.80	259	28.43
Total	**592**	**100.00**	**319**	**100.00**	**911**	**100.00**
Senior Secondary schools						
Ownership Pattern	**Boys**	**%**	**Girls**	**%**	**Overall**	**%**
Government	435	73.48	204	63.95	639	70.14
Private	157	26.52	115	36.05	272	29.86
Total	**592**	**100.00**	**319**	**100.00**	**911**	**100.00**

Source: Primary Survey

Table 4.6.2: Distribution of Rural Students in University of Punjab by School Affiliation

Examination Board	**High**			**Higher**		
	Boys	Girls	Overall	Boys	Girls	Overall
PSEB	480 (81.08)	260 (81.50)	740 (81.23)	487 (82.26)	273 (85.58)	760 (83.42)
CBSE/ICSE	50 (8.45)	43 (13.48)	93 (10.21)	44 (7.43)	30 (9.40)	74 (8.12)
Others	62 (10.47)	16 (5.02)	78 (8.56)	61 (10.30)	16 (5.02)	77 (8.45)
Total	**592 (100.00)**	**319 (100.00)**	**911 (100.00)**	**592 (100.00)**	**319 (100.00)**	**911 (100.00)**

Figures in parentheses are percentages
Source: Primary Survey

As regards the location of primary schools of rural students, 64 per cent studied in their own village school and 36 per cent in schools located outside the village (Table 4.6.3). Interestingly, higher percentage of rural girl students had their primary education outside their village. The distance travelled by the

students to reach the primary schools varied from one km to 10 kms (primary survey). This scenario reflects back the availability of primary schools in the villages of Punjab some 15 to 18 years back. It is something amazing that in a developed state like Punjab, the primary school students had to travel this much distance. And, it goes to the credit of those rural students (35 per cent) who managed to enter universities in the face of such odds.

Table 4.6.3: Distribution of Rural Students in Universities of Punjab by Location of Primary and Middle Schools

Location	Boys	%	Girls	%	Overall	%
Primary Schools						
Within Village	395	66.72	191	59.87	586	64.32
Outside Village: Rural	197	33.28	128	40.13	325	35.68
Total	**592**	**100.00**	**319**	**100.00**	**911**	**100.00**
Middle Schools						
Within Village	309	52.20	160	50.16	469	51.48
Outside Village: Rural	283	47.80	159	49.84	442	48.52
Total	**592**	**100.00**	**319**	**100.00**	**911**	**100.00**

Source: Primary Survey

The percentage of rural students coming from the middle schools situated in their own villages was, however, lower (51.48 per cent) than that of primary schools. There is no significance difference in the proportion of boys and girls in this respect. The distance travelled to reach the respective middle schools, located outside their own villages, again varied from one to 10 kms. Majority of such students travelled a distance from two to five kms. There was not much difference as far as boys and girls are concerned (primary survey).

As can be expected, the proportion of students entering the university after doing matriculation from the schools located in their own villages further declined (Table 4.6.4). About 50 per cent of rural students did matriculation from the schools located in other village and 1.21 per cent from the urban schools. The distance travelled by such students (in majority of the cases) was between 2 to 5 kms. There is much difference in the proportion between boys and girls, as far as the distance travelled is concerned (primary survey).

Table 4.6.4: Distribution of Rural Students in Universities of Punjab by Location of High and Senior Secondary Schools

Location	Boys	%	Girls	%	Overall	%
High Schools						
Within Village	290	48.99	152	47.65	442	48.52
Outside Village: Rural	294	49.66	164	51.41	458	50.27
Outside Village: Urban	8	1.35	3	0.94	11	1.21
Total	**592**	**100.00**	**319**	**100.00**	**911**	**100.00**
Senior Secondary Schools						
Within Village	154	26.01	87	27.27	241	26.45
Outside Village: Rural	222	37.50	125	39.18	347	38.09
Outside Village: Urban	216	36.49	107	33.54	323	35.46
Total	**592**	**100.00**	**319**	**100.00**	**911**	**100.00**

Source: Primary Survey

In the case of senior secondary schools, the proportion of rural students having passed this stage from the schools located in their own villages was just 26.45 per cent. Out of the remaining students, 38.09 per cent passed senior secondary schools from the rural schools located outside their own village and another 35.46 per cent from the urban schools. The rising proportion of students from primary level to senior secondary level, having passed the respective examinations from schools located outside their villages, is bit a natural phenomenon. The number of schools gets declining as we move to higher levels of school education. Unlike the distance travelled by the students of middle and secondary schools, it has increased for the senior secondary schools. About 59 per cent students had to travel between 2 to 10 kms distance for reaching their schools. Nearly 22 per cent students travelled a distance of 6-10 kms for reaching schools (primary survey).

4.7 Study Stream: +2 and Graduation

The senior secondary stage of education is very important because during this stage the students opt for different study streams. Out of the total rural students as many as 62.79 per cent opted for arts and humanities stream (Table 4.7.1). Another 33.04 per cent opted for medical and, only 2.63 per cent joined the non-medical stream and 1.54 per cent opted for the commerce stream. English and Mathematics seem to be the main hurdles for rural students which

debar them to go in for science classes. Besides, either the non-availability of science teachers and/or the non-availability of +2 level science courses in rural schools are also responsible for this. Apart from this, +2 science classes were in the colleges (when the present day university students were at that state) and it were mainly the urban colleges which were running science classes at +2 level. As such, those rural students who opted for science joined +2 in the urban located colleges.

Interestingly, no rural student opted for the vocational stream. And, a higher proportion of girls opted for medical stream than that of boys. In the case of non-medical and arts/humanities, the proportion of boys was marginally higher than that of girls. But, no one opted for vocational stream. At the graduation level, 55.54 per cent of rural students opted for arts/humanities (Table 4.7.2), followed by science (23.49 per cent), others (19.43 per cent) and commerce (1.54 per cent). The others include the B.Tech., B. Pharmacy, BBA, BCA, MBA (five year), Law (five year), etc. Proportion-wise, girls dominated in the science group and boys in the 'others' category.

Table 4.7.1: Distribution of Rural Students in Universities of Punjab by course Stream during senior secondary

Stream	Boys	%	Girls	%	Overall	%
Arts/Humanities	377	63.68	195	61.13	572	62.79
Commerce	11	1.86	3	0.94	14	1.54
Medical	184	31.08	117	36.68	301	33.04
Non-Medical	20	3.38	4	1.25	24	2.63
Vocational	0	0.00	0	0.00	0	0.00
Total	**592**	**100.00**	**319**	**100.00**	**911**	**100.00**

Source: Primary Survey

Table 4.7.2: Distribution of Rural Students in Universities of Punjab by Type of Graduation Level Stream (Appeared/Appearing)

Stream	Boys	%	Girls	%	Overall	%
Arts/Humanities	335	56.59	171	53.61	506	55.54
Commerce	11	1.86	3	0.94	14	1.54
Science	124	20.95	90	28.21	214	23.49
Others *	122	20.61	55	17.24	177	19.43
Total	**592**	**100**	**319**	**100.00**	**911**	**100.00**

*Others include B. Tech., B. Phar., BBA, BCA, MBA (Five Year), Law (Five Year), etc.
Source: Primary Survey

4.8 Education Level of Family

Education level of the family members is another important determinant of access to and choice of course at the university level higher education. Educated members, particularly the parents, encourage their children to go in for higher education and bear their expenses willingly. Table 4.8.1 shows that 8.78 per cent fathers and 20.97 per cent mothers of rural students were uneducated. A good proportion (37.87 per cent fathers and 34.14 per cent mothers) was having education beyond middle level but up to high/higher secondary level. Another 23.16 per cent fathers and 7.90 per cent mothers were having graduation degree. The proportion of fathers and mothers having postgraduate and professional degrees was 5.38 per cent and 1.87 per cent; and 11.31 per cent and 3.95 per cent respectively. Thus, the situation was quite improved during the post-independence era, i.e. during 1950s, 60s and 70s. Probably, this improved education level was due to public and philanthropic investment in education sector up to 1970s in Punjab. That must have caused awareness among the parents who preferred to send their wards to the universities for attaining higher education.

Education level of paternal grandparents i.e. 'dada' and 'dadi' shows that grandfathers of 57 per cent of students were not having any formal education and the corresponding proportion of grandmothers was 77 per cent. The academic qualification of 20 per cent grandfathers and 16 per cent grandmothers was up to primary level only. Another 6.70 per cent grandfathers and 2.74 grandmothers was middle pass, whereas 12.84 per cent grandfathers and 3.18 per cent grandmothers were studied up to high/higher secondary level. As regards graduation, only 2.31 per cent grandfathers and 0.44 per cent grandmothers were having this qualification (primary survey).

Table 4.8.1: Distribution of Rural Students in Universities of Punjab by Educational Level of Parents

Education Level	Boys Students		Girls Students		Overall Students	
	Father	Mother	Father	Mother	Father	Mother
No Education	58 (9.80)	157 (26.52)	22 (6.90)	34 (10.66)	80 (8.78)	191 (20.97)
Primary	33 (5.57)	90 (15.20)	12 (3.76)	27 (8.46)	45 (4.94)	117 (12.84)
Middle	48 (8.11)	87 (14.70)	13 (4.08)	31 (9.72)	61 (6.70)	118 (12.95)
High/Higher Secondary	230 (38.85)	173 (29.22)	115 (36.05)	138 (43.26)	345 (37.87)	311 (34.14)
Graduate in Arts/Science/Commerce	137 (23.14)	40 (6.76)	74 (23.20)	32 (10.03)	211 (23.16)	72 (7.90)
Postgraduate in Arts/Science/Commerce	31 (5.24)	7 (1.18)	18 (5.64)	10 (3.13)	49 (5.38)	17 (1.87)
Profession	48 (8.11)	14 (2.36)	55 (17.24)	22 (6.90)	103 (11.31)	36 (3.95)
Others	7 (1.18)	24 (4.05)	10 (3.13)	25 (7.84)	17 (1.87)	49 (5.38)
Total	**592 (100.00)**	**592 (100.00)**	**319 (100.00)**	**319 (100.00)**	**911 (100.00)**	**911 (100.00)**

Figures in parentheses are percentages

Source: Primary Survey

Table 4.8.2 presents education level of brothers of rural students. It is very encouraging phenomenon that 34.17 per cent elder brothers and 47.89 per cent younger brothers are having educational qualifications up to secondary/higher secondary level. The corresponding proportion having graduate degree is 21.57 per cent and 32.96 per cent, respectively. The proportion of postgraduate and professional degree holder elder brothers is 12.61 per cent (3.38 per cent for younger brother) and 17.37 per cent (4.51 per cent for younger brother). It shows that the educated parents are quite aware about the education of their sons.

The awareness level of the parents about the education of their daughters also seems to be quite high (Table 4.8.3). The proportion of elder sisters having matriculation, graduation, post-graduation, and professional qualification is 28.61 per cent, 27.14 per cent, 22.12 per cent and 19.47 per cent, respectively. Similarly, the proportion of younger sisters having matriculation, graduation, post-graduation, and professional qualification is 45.99 per cent, 33.21 per cent,

7.30 per cent and 7.30 per cent, respectively. It is evident that there is a strong relationship between the education level of parents and children. It is in this context that the urban children are having an edge over their rural counterparts. Since most of the present day rural parents are either uneducated or having a very low level of education, their children are bound to be adversely affected by this phenomenon. More so, since education is the ladder for socio-economic upliftment, the educated parents have a better capacity to finance the education of their children.

Table 4.8.2: Distribution of Rural Students in Universities of Punjab by Educational Level of Brothers

Education Level	Boys Students		Girls Students		
	Elder Brother	Younger Brother	Elder Brother	Younger Brother	Elder
No Education	9 (3.77)	0 (0.00)	4 (3.39)	0 (0.00)	(3
Primary	2 (0.84)	1 (0.52)	1 (0.85)	4 (2.45)	(0
Middle	5 (2.09)	7 (3.65)	7 (5.93)	19 (11.66)	(3
High/Senior Secondary	85 (35.56)	90 (46.88)	37 (31.36)	80 (49.08)	1 (34
Graduate in Arts/Science/Commerce	52 (21.76)	72 (37.50)	25 (21.19)	45 (27.61)	(2
Postgraduate in Arts/Science/Commerce	33 (13.81)	7 (3.65)	12 (10.17)	5 (3.07)	(1
Profession	43 (17.99)	12 (6.25)	19 (16.10)	4 (2.45)	(1
Others	10 (4.18)	3 (1.56)	13 (11.02)	6 (3.68)	(6
Total	**239 (100.00)**	**192 (100.00)**	**118 (100.00)**	**163 (100.00)**	**3 (10**

Figures in parentheses are percentages
Source: Primary Survey

Table 4.8.3: Distribution of Rural Students in Universities of Punjab by Educational Level of Sisters

Education Level	Boys Students		Girls Students		Overall Students	
	Elder Sister	Younger Sister	Elder Sister	Younger Sister	Elder Sister	Younger Sister
No Education	1 (0.41)	0 (0.00)	0 (0.00)	0 (0.00)	1 (0.29)	0 (0.00)
Primary	3 (1.24)	2 (1.12)	0 (0.00)	1 (1.04)	3 (0.88)	3 (1.09)
Middle	6 (2.48)	9 (5.06)	0 (0.00)	5 (5.21)	6 (1.77)	14 (5.11)
High/Senior Secondary	78 (32.23)	85 (47.75)	19 (19.59)	41 (42.71)	97 (28.61)	126 (45.99)
Graduate in Arts/Science/Commerce	57 (23.55)	55 (30.90)	35 (36.08)	36 (37.50)	92 (27.14)	91 (33.21)
Postgraduate in Arts/Science/Commerce	56 (23.14)	11 (6.18)	19 (19.59)	9 (9.38)	75 (22.12)	20 (7.30)
Profession	38 (15.70)	14 (7.87)	21 (21.65)	4 (4.17)	66 (19.47)	20 (7.30)
Others	3 (1.24)	2 (1.12)	3 (3.09)	0 (0.00)	6 (1.77)	2 (0.73)
Total	**242 (100.00)**	**178 (100.00**	**97 (100.00)**	**96 (100.00)**	**346 (100.00)**	**276 (100.73)**

Figures in parentheses are percentages
Source: Primary Survey

4.9 Occupation of Family

Occupation of parents, too, has a relationship with the education of their children. As is evident from Table 4.9.1, 44.13 per cent rural students came from the families whose parents are cultivators. Nearly 82 per cent of the male students' mothers were doing household work. As regards the service, the fathers of 35 per cent students are in service whereas only 16.25 per cent students' mothers are in service. The proportion of students whose fathers are in business, etc. is nearly 10 per cent. The proportion of students coming from the labourer class is just 4.39 per cent. It is important to note that the proportion of girls is very low from the labourer's class.

Table 4.9.1: Distribution of Rural Students in Universities of Punjab by Occupation Status of Parents

Occupation Status	Boys Students		Girls Students		Overall Students	
	Father	Mother	Father	Mother	Father	Mother
Cultivation	258 (43.58)	0 (0.00)	144 (45.14)	0 (0.00)	402 (44.13)	0 (0.00)
Household Work	0 (0.00)	514 (86.82)	0 (0.00)	237 (74.29)	0 (0.00)	751 (82.44)
Service	197 (33.28)	72 (12.16)	123 (38.56)	76 (23.82)	320 (35.13)	148 (16.25)
Ex-Service	37 (6.25)	0 (0.00)	9 (2.82)	0 (0.00)	46 (5.05)	0 (0.00)
Business/Shop	60 (10.14)	0 (0.00)	33 (10.34)	0 (0.00)	93 (10.21)	0 (0.00)
Labour	35 (5.91)	0 (0.00)	5 (1.57)	0 (0.00)	40 (4.39)	0 (0.00)
Others *	5 (0.84)	6 (1.01)	5 (1.57)	6 (1.88)	10 (1.10)	12 (1.32)
Total	**592 (100.00)**	**592 (100.00)**	**319 (100.00)**	**319 (100.00)**	**911 (100.00)**	**911 (100.00)**

* It includes artisans also.
Figures in parentheses are percentages
Source: Primary Survey

Regarding the occupation of brothers of rural students, 28 per cent of elder brothers and 11 per cent of younger brothers are cultivators (Table 4.9.2). Another 39 per cent elder brothers are in service or business. The proportion of students whose elder brothers are labourers is very small (2.24 per cent). Nevertheless, it is matter of satisfaction that the younger brothers of 72 per cent students are studying at various levels of education. As regards, the occupation of sisters of rural students, 47 per cent of elder sisters and 26 per cent of younger sisters are simply doing household work (Table 4.9.3). Only 25 per cent of rural students' elder sisters are in service. Nevertheless, 65 per cent students' younger sisters are students at various levels of education.

Though occupation of grandparents (both paternal and maternal) is not supposed to directly influence the education level of their grand children, yet an effort has been also made to look into this aspect. The grandfathers of 78 per cent rural students were in cultivation (primary survey) and grandmothers of 94 per cent rural students were doing household work. It is interesting to note that

the proportion of students whose fathers are in cultivation is much lower than their grandfathers. Thus, there has been an occupational shift during the next generation. The proportion of students whose grandfathers were in service, business and labourers is very low (primary survey).

Table 4.9.2: Distribution of Rural Students in Universities of Punjab by Occupation of Elder/Younger Brothers

Occupation Status	Boys Students		Girls Students		Overall Students	
	Elder	Younger	Elder	Younger	Elder	Younger
Agriculture	63 (26.36)	23 (11.86)	38 (32.20)	16 (9.94)	101 (28.29)	39 (10.99)
Service	73 (30.54)	22 (11.34)	20 (16.95)	13 (8.07)	93 (26.05)	35 (9.86)
Business/Shop	28 (11.72)	7 (3.61)	11 (9.32)	6 (3.73)	39 (10.92)	13 (3.66)
Labour	4 (1.67)	4 (2.06)	4 (3.39)	1 (0.62)	8 (2.24)	5 (1.41)
Student	55 (23.01)	136 (70.10)	39 (33.05)	121 (75.16)	94 (26.33)	257 (72.39)
Others *	16 (6.69)	2 (1.03)	6 (5.08)	4 (2.48)	22 (6.16)	6 (1.69)
Total	**239 (100.00)**	**194 (100.00)**	**118 (100.00)**	**161 (100.00)**	**357 (100.00)**	**355 (100.00)**

* It includes artisans also.
Figures in parentheses are percentages
Source: Primary Survey

Table 4.9.3: Distribution of Rural Students in Universities of Punjab by Occupation of Elder/Younger Sisters

Occupation Status	Boys Students		Girls Students		Overall Students	
	Elder	Younger	Elder	Younger	Elder	Younger
HH Work	121 (50.21)	47 (26.55)	38 (38.78)	25 (25.77)	159 (46.90)	72 (26.28)
Cultivation	0 (0.00)	2 (1.13)	3 (3.06)	0 (0.00)	3 (0.88)	2 (0.73)
Service	56 (23.24)	19 (10.73)	29 (29.59)	3 (3.09)	85 (25.07)	22 (8.03)
Business/Shop	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
Labour	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
Student	61 (25.31)	109 (61.58)	26 (26.53)	69 (71.13)	87 (25.66)	178 (64.96)
Others*	3 (1.24)	0 (0.00)	2 (2.04)	0 (0.00)	5 (1.47)	0 (0.00)
Total	**241 (100.00)**	**177 (100.00)**	**98 (100.00)**	**97 (100.00)**	**339 (100.00)**	**274 (100.00)**

* It includes artisans also.
Figures in parentheses are percentages
Source: Primary Survey

4.10 Medium of Examination/Instruction

Medium of instruction and medium of examination also play an important role in obtaining knowledge, communication and placement in the occupation/profession. Punjabi is the mother tongue of the Punjabis, more so in the rural Punjab. Though it is important to have proficiency in one's mother tongue, yet it is equally important to have proficiency in English. These days English is a language of market and a link language across the globe, so a student's ability to communicate in English is very important. The emerging global scenario also requires proficiency in English. India's edge over China in getting a bigger share in Business Processing Outsourcing (BPOs) is largely because of Indian students' proficiency in English. Keeping in view all this, the study has also tried to look into distribution of rural students according to their medium of instruction and examination.

The proportion of rural students, in the universities of Punjab, getting instructions in English medium increased as they move from secondary to higher secondary schools (Table 4.10.1). The shift from Punjabi medium to English medium is quite substantial at the higher secondary level, as the proportion of students getting instruction in English medium increased from 21.95 per cent at high school level to 40.07 per cent at higher secondary level. There is 15.70 percentage points shift from Punjabi medium and 2.41 percentage points shift from Hindi medium. Thus, the proportion of rural students in the universities coming from English medium at the higher secondary level is quite substantial. Another important feature is that the proportion of girls with English medium has been higher than that of boys at all levels of the school. The scenario is reverse in the case of Punjabi medium and Hindi medium.

Table 4.10.1: Distribution of Rural Students in University of Punjab by Medium of Instruction at School Level

Medium of Instructions	High			Higher		
	Boys	Girls	Overall	Boys	Girls	Overall
Punjabi	416 (70.27)	213 (66.77)	629 (69.05)	332 (56.08)	154 (48.28)	486 (53.35)
English	108 (18.24)	92 (28.84)	200 (21.95)	214 (36.15)	151 (47.34)	365 (40.07)
Hindi	68 (11.49)	14 (4.39)	82 (9.00)	46 (7.77)	14 (4.39)	60 (6.59)
Total	**592 (100.00)**	**319 (100.00)**	**911 (100.00)**	**592 (100.00)**	**319 (100.00)**	**911 (100.00)**

Figures in parentheses are percentages
Source: Primary Survey

Further, almost similar patterns are noticeable in the case of medium of examination during the matriculation and senior secondary levels of education (Table 4.10.2). However, at the university level examination, around 68 per cent opted English as the medium of examination. The proportion of those who opted Punjabi, Hindi/Sanskrit and Urdu as the medium of examination was, respectively, 28.43 per cent, 3.51 per cent and 0.11 per cent (Table 4.10.3). Moreover, there is no significant difference between boys and girls regarding the medium of examination.

Table 4.10.2: Distribution of Rural Students in University of Punjab by Medium of Examination at School Level

Medium of Examination	High			Higher		
	Boys	Girls	Overall	Boys	Girls	Overall
Punjabi	413 (69.76)	211 (66.14)	624 (68.50)	323 (54.56)	154 (48.28)	477 (52.36)
English	111 (18.75)	94 (29.47)	205 (22.50)	218 (36.82)	152 (47.65)	370 (40.61)
Hindi	68 (11.49)	14 (4.39)	82 (9.00)	51 (8.61)	13 (4.08)	64 (7.03)
Total	**592 (100.00)**	**319 (100.00)**	**911 (100.00)**	**592 (100.00)**	**319 (100.00)**	**911 (100.00)**

Figures in parentheses are percentages
Source: Primary Survey

Table 4.10.3: Distribution of Rural Students in Universities of Punjab by Medium of Examination at University Level Education

Medium of Examination	Boys	%	Girls	%	Overall	%
English	403	68.07	216	67.71	619	67.95
Punjabi	172	29.05	87	27.27	259	28.43
Hindi/Sanskrit	16	2.70	16	5.02	32	3.51
Urdu, etc.	1	0.17	0	0.00	1	0.11
Total	**592**	**100.00**	**319**	**100.00**	**911**	**100.00**

Source: Primary Survey

4.11 Fee Concession and Scholarship

Fee concession and scholarships are other important variables that may help the rural students in accessing as well as in affording the higher education. The analysis of data reveals that a very small proportion of rural students in the universities has availed the benefit of fee concession (Table 4.11.1). Out of 911 students, only 72 students (7.90 per cent) got the benefit of fee concession. The proportion of students, who got fee concession, were 33.33 per cent in the Professional Courses, 25.00 per cent were from the Social Sciences, 13.89 per cent from the Languages and 11.11 per cent from Physical Sciences. The amount of fee concession was very small, up to Rs. 10,000 per year for a majority of rural students (72.22 per cent) who got fee concession. Only 14 per cent students availed the benefit of fee concession between Rs. 15,000 and Rs. 25,000. About 8 per cent students got fee concession above Rs. 25,000 (primary survey).

Table 4.11.1: Distribution 0f Rural Students Availing of Fee Concession by Faculty/ Course

Faculty/Course	Boys	%	Girls	%	Overall	%
Social Sciences	14	26.42	4	21.05	18	25.00
Art & Culture	0	0.00	0	0.00	0	0.00
Life Sciences	3	5.66	2	10.53	5	6.94
Physical Sciences	7	13.21	1	5.26	8	11.11
Languages	3	5.66	7	36.84	10	13.89
Education & Information Science	2	3.77	1	5.26	3	4.17
Profession Courses	20	37.74	4	21.05	24	33.33
Veterinary Sciences	1	1.89	0	0.00	1	1.39
Agriculture & Agricultural Engineering	3	5.66	0	0.00	3	4.17
Total	**53**	**100.00**	**19**	**100.00**	**72**	**100.00**

Source: Primary Survey

As regards the scholarships, in all 50 students (5.49 per cent) out of a total of 911 rural students got the scholarship (Table 4.11.2). Out of these 50 students, 32 were boys (64 per cent) and 18 were girls (36 per cent). The highest proportion of such students (22 per cent) was from the Professional Courses. It was followed by the Social Sciences and the Agricultural & Agricultural Engineering (16 per cent each) and then by the Life Sciences and the Physical Sciences (14 per cent each).

Table 4.11.2: Distribution 0f Rural Students Availing of Scholarship by Faculty/ Course

Faculty Name	Boys	%	Girls	%	Overall	%
Social Sciences	6	18.75	2	11.11	8	16.00
Art & Culture	1	3.13	0	0.00	1	2.00
Life Sciences	5	15.63	2	11.11	7	14.00
Physical Sciences	3	9.38	4	22.22	7	14.00
Languages	2	6.25	2	11.11	4	8.00
Education & Information Science	2	6.25	0	0.00	2	4.00
Professional Courses	8	25.00	3	16.67	11	22.00
Veterinary Sciences	2	6.25	0	0.00	2	4.00
Agriculture & Agricultural Engineering	3	9.38	5	27.78	8	16.00
Total	**32**	**100.00**	**18**	**100.00**	**50**	**100.00**

GATE=1, ICAR=2 and UGC=1
Source: Primary Survey

The amount of scholarship was between the range of Rs. 2,500 and Rs. 25,000+ per annum. In all, 60 per cent of such students got scholarship less than Rs. 5,000 only. Another 18 per cent got a scholarship amount between Rs. 5,000 and Rs. 10,000. The proportion of students who got scholarship between Rs. 15,000-20,000 was 12 per cent (primary survey).

4.12 Land Holdings and Income

The study team also thought it proper to look into the economic background of the rural students in the universities of Punjab. As land holding is one of the main sources of income in rural Punjab, the size of land holdings is given in Table 4.12.1. The data show that 28 per cent of rural students came from the non-agricultural land owing families. As regards the landholders, 24

per cent students came from the families having the marginal and small land holdings. The proportion of students coming from families having 6-10 acres of land is 22.50 per cent. The proportion of students coming from families having land between 11 and 20 acres was 18.55 per cent, and those above 20 acres, it was 7 per cent.

Table 4.12.1: Distribution of Rural Students in Universities of Punjab by Size of Land Holdings of their Family

Land Holding (in Acre)	Boys	%	Girls	%	Overall	%
No Land	171	28.89	84	26.33	255	27.99
0.5 to 5	146	24.66	72	22.57	218	23.93
6-10	127	21.45	78	24.45	205	22.50
11-15	75	12.67	42	13.17	117	12.84
16-20	32	5.41	20	6.27	52	5.71
21+	41	6.93	23	7.21	64	7.03
Total	**592**	**100.00**	**319**	**100.00**	**911**	**100.00**

Source: Primary Survey

If we compare the above picture with the size of land holdings in Punjab, then there emerges an interesting picture. As per 1995-96 agricultural census, 35 per cent operational holdings are marginal and small holdings. Operational holdings also include leased-in land, which means the proportion of owned holdings up to 5 acres must be considerably higher than the proportion of operational holdings. Thus, from a very high proportion of small-owned holdings, only 24 per cent families are sending their wards to attain education in the universities of Punjab and their regional centres. The proportion of semi-medium sized operational holdings between 5.1 and 10 acres is 29 per cent, and the proportion of students from these size-holdings is 22.50 per cent. The proportion of students from the medium holding size (11 to 20 acres) is 18.55 per cent, whereas the share of operational medium size holding in Punjab is 28 per cent. The share of large-size operational holdings in Punjab is 7.28 per cent and the proportion of students from this class is 7.03 per cent. Thus, in all land-holding sizes, but for large-size holdings, the proportion of students in the universities is less than their share in operational holdings in Punjab.

As regards landless agricultural workers, their share in total rural main workers in Punjab was 22 per cent (GOP, 2005). However, the proportion of rural students in the category of no-land holders in the universities in Punjab is 28 per cent. It should not be construed from this that a very high proportion of rural students in the universities are coming from landless agricultural workers. In fact, a very high proportion of landless agricultural workers belong to the scheduled castes. And, we have observed in Table 4.1.3, that the proportion of SC rural students in the universities is just 14.60 per cent. There are many families in the rural Punjab who are landless but otherwise in service or other professions and a good proportion of rural students in the universities may be coming from this section of population.

Table 4.12.2 presents a picture related to the sources of income. Those families who are dependent only on the agricultural income alone are sending 33.92 per cent of the rural students to the universities. This proportion is very near to the proportion of cultivators (31.5 per cent) in rural main workers of Punjab. Another section of rural students has income from both the agriculture and the service. The proportion of students coming from this section is 27.00 per cent. Thus, 61 per cent students are coming from these two categories. The proportion of students coming from salaried class is 14.82 per cent. Then there are some families whose income is coming from agriculture and business combined. The proportion of such students is 6.81 per cent. The proportion of students whose parents' income comes from business only is 6.26 per cent. The proportion of students coming from wage earner households is just 3.62 per cent. Then there are some other categories of income earners. These categories together send only 7.58 per cent students to the universities.

Table 4.12.2: Distribution of Rural Students in Universities of Punjab by Source of Income

Source of Income	Boys	%	Girls	%	Overall	%
Agriculture Land Only	193	32.60	116	36.36	309	33.92
Agriculture Land & Salary	159	26.86	87	27.27	246	27.00
Salary Only	88	14.86	47	14.73	135	14.82
Agriculture. Land & Business	39	6.59	23	7.21	62	6.81
Business Only	34	5.74	23	7.21	57	6.26
Wages Only	26	4.39	7	2.19	33	3.62
Agriculture Land & Pension/Remittances	18	3.04	7	2.19	25	2.74
Business & Salary	13	2.20	4	1.25	17	1.87
Pension/Remittances Only	11	1.86	3	0.94	14	1.54
Agriculture Land & Wages	5	0.84	2	0.63	7	0.77
Agriculture Land & Any Other	6	1.01	0	0.00	6	0.66
Total	**592**	**100.00**	**319**	**100.00**	**911**	**100.00**

Source: Primary Survey

Table 4.12.2 also presents a very significant scenario of the various sources of income of rural households in Punjab. Since the study has covered the four universities and their regional centres, one may safely conclude that student from all districts/tehsils have been represented. This table makes an explicit and important revelation that the proportion of students whose parents' income, somehow or other, contains a major or minor component of income from land is 72 per cent. In other words, land still remains a significant source of support in one way or the other in rural students' case.

The distribution of students coming from households with different income levels is given in Table 4.12.3. About 10 per cent students are coming from such households whose income is less than Rs. 50,000 per annum. Nearly 34 per cent students are from an income range between Rs. 51,000 – 1lakh per annum. Another 30.41 per cent students are from income bracket between Rs. 101 thousands and Rs. 150 thousands per annum. Thus, a sizeable proportion of students (64.33 per cent) are coming from income range of Rs. 51 thousands and Rs. 1.5 lakh per annum. The proportion of students from the income range of Rs. 1.51 lakhs and Rs. 2.00 lakhs is 13.28 per cent. The proportion of students coming from the income bracket above Rs. 2 lakh is nearly 12 per cent.

Table 4.12.3: Distribution of Rural Students in Universities of Punjab by Family Income Level

Family Income (in Thousand Rs.)	Boys	%	Girls	%	Overall
>50	61	10.30	32	10.03	93
51-100	199	33.61	110	34.48	309
101-150	187	31.59	90	28.21	277
151-200	78	13.18	43	13.48	121
201-250	26	4.39	16	5.02	42
251-300	12	2.03	9	2.82	21
301+	29	4.90	19	5.96	48
Total	592	100.00	319	100.00	911
Mean Family Income (Rs.)	**146789**		**145850**		**146460**

Source: Primary Survey

Keeping a cell phone, perhaps, has become a fashion with the students rather than a necessity. While a large majority of students in the universities keep cell phones, quite a high proportion of rural students, too, keep the cell phone. According to our survey, 54 per cent of rural students at the campuses, and 45 per cent of at the regional centres of the universities have the cell phones. Interestingly, the percentage of boys and girls with cell phones both at the campuses and regional centres are almost the same.

4.13 Earnings and Expenditure

The very negligible proportions of students are following the practice of 'earn while you read'. Table 4.13.1, shows that only 4.50 per cent rural students (5.24 per cent boys, and 3.13 per cent girls) follow this dictum, the rest are non-earners. In other words, the entire expenses of their education are borne out by their parents. Unlike the developed countries, where almost all the students in higher education follow the practice of 'earn while you read', here the students continue to be dependent on their parents till they are gainfully employed. It may be a healthy practice from the standpoint of our value system and strong family ties, but it is a hindrance in the tendency to become self-dependent and self-confidence. The same Indian students when they go to the western countries for study do part time work to lower the burden on their parents. Why

do we not practise it here in India? There is a need to answer a very serious question: If the students and parents in the rich countries follow this practice, why don't we follow this practice in a poor country? The nation and the protagonists of Indian value system must ponder over this question. Somewhere something is lacking and missing and there is a need to come out of this value-loaded mind-set.

Table 4.13.1: Distribution of Rural Students in University of Punjab by Their Earning Status to Finance Higher Education

Earning Status	Boys	Girls	Overall
Earners	31 (5.24)	10 (3.13)	41 (4.50)
Non-earners	561 (94.76)	309 (96.87)	870 (95.50)
Total	592 (100.00)	319 (100.00)	911 (100.00)
Total Yearly Earnings (Rs,)	373600	91100	464700
Mean Earnings (Rs)	**12052**	**9110**	**11334**

Figures in parentheses are percentages

Source: Primary Survey

Table 4.13.2: Distribution of Rural Students in Universities of Punjab by Source of Study Expenditure

Source of Study Expenditure	Boys	%	Girls	%	Overall	%
Parents	575	97.13	309	96.87	884	97.04
Uncle/Aunty	2	0.34	1	0.31	3	0.33
Brother/Sister	6	1.01	4	1.25	10	1.10
Others	9	1.52	5	1.57	14	1.54
Total	**592**	**100.00**	**319**	**100.00**	**911**	**100.00**

Source: Primary Survey

Table 4.13.2 clearly shows that 97 per cent rural students are dependent on their parents for meeting their study and living expenses. A very small proportion of rural students' study expenses have been financed by persons other than parents, such as brother/sisters and uncle/aunty and others, etc. In this respect, there is no significant difference between boys and girls.

4.14 Study Loss and Additional Degree

The data show that before joining the universities at the late stage, the rural students have lost some of their study years. In overall, 168 students (18.44 per cent) have lost some of their study years at various stages. Table 4.14.1 depicts that, on an average, those rural students who lost study year had lost 1.54 study years before reaching the university or even while being in the universities. The mean lost years (1.57 years) in the case of boys is higher than the mean lost years by girls (1.47 years). The proportion of those who lost their one year is 61.31 per cent (60.33 boys and 63.83 per cent girls). Those who lost two years accounted for 25.60 per cent (24.79 per cent boys and 27.66 per cent girls), whereas the corresponding proportion of those who lost 3 years was 10.71 per cent (12.40 per cent boys and 6.38 per cent girls). The proportion of those who lost more than three years was just 2.38 per cent. Though it is a matter of concern that the students lost their study years, yet it is a matter of satisfaction that inspite of that they managed to enter the universities and complete their education.

Table 4.14.1: Distribution of Rural Those Students Who Lost Study Year by Number of Years

Years Lost	Boys	%	Girls	%	Overall	%
1 Year	73	60.33	30	63.83	103	61.31
2 Year	30	24.79	13	27.66	43	25.60
3Year	15	12.40	3	6.38	18	10.71
3+	3	2.48	1	2.13	4	2.38
Total	121	100.00	47	100.00	168	100.00
Mean Years Lost	**1.57**		**1.47**		**1.54**	

Source: Primary Survey

A very sizeable majority of students lost their study years during the post-matriculation period. Only 10.11 per cent students lost a study year up to the matriculation. The highest proportion (31.54 per cent) of students who lost their study years is during the graduation level. As many as 23.21 per cent had lost study year during +2 stage, 22.62 per cent during post-graduation, and 12.52 per cent because of leaving of study in between (primary survey). One may like to

attribute this to various reasons. But the single most important reason may be that after matriculation level when the students joining +2 classes, there is a considerable degree of change of environment. In the absence of training to cope with that environment and use that freedom towards self-regulation, they advertently or inadvertently develop a habit of wasting their time on non-study pursuits. Almost, similarly may be the reasons for high proportion of lost study years at the graduation and post-graduation levels. In fact, our schooling is highly regulated and strictly disciplined both at the level of school and at the level of home, but as the student moves towards higher levels of education as such the discipline, control and regulations gets slackened. It is not bad to give freedom to the students as it is often said that '**Nurse the baby, protect the child and free the adult**'. But the adult must have the required degree of responsibility to govern himself/herself. There may be some supplementary reasons for the lost study years, such as students with lower merit in matriculation and +2 stage join the liberal education in colleges and universities and hence they continue to think that there is, perhaps, no need to study regularly.

It is also interesting to note that sizeable proportions of rural students in the universities of Punjab were having additional degrees (in addition to B.A./B.Sc./B.Com., etc.) before joining the university departments and their regional centres. It is clear from Table 4.14.2 that 46.54 per cent did have B.Ed./B.P.Ed./E.T.T. degrees prior to joining the universities. About 32 per cent were having post-graduation level degree prior to joining the present degree. It means these students (32 per cent) were pursuing their second post-graduate degree or post-graduate diplomas, etc. Besides, nearly 17 per cent were having degrees/diplomas in other disciplines before joining the present class in the universities. The percentage of marks of those students who were having some additional degree/diploma before joining the present class in the

university reveals that 26.42 per cent were having second division, 41 per cent were having first division (between 60-69 per cent marks) and nearly one-third (32.70 per cent) were having a score higher than 70 per cent (primary survey).

Table 4.14.2: Distribution of Rural Students having Additional Degree/s Before Admission in Universities of Punjab by Type of Degree/Stream

Degree/Stream	Boys	%	Girls	%	Overall	%
B.Ed./BP.Ed./E.T.T.	38	36.89	36	64.29	74	46.54
B.Lib.	1	0.97	6	10.71	7	4.40
M.A./M.SC./M.COM.	41	39.81	10	17.86	51	32.08
Others*	23	22.33	4	7.14	27	16.98
Total	**103**	**100.00**	**56**	**100.00**	**159**	**100.00**

*Others consist of PGDCA, Diplomas in Computer, Textiles, ITI Trades, etc.
Source: Primary Survey

To sum up, it is apparent that the students from relatively better off sections of society succeeded in entering the university campus departments and regional centres for their higher studies. Their families are found to be better placed in rural society in terms of the educational, social and economic factors. While at the most of undergraduate courses, majority of rural students were doing undergraduate professional courses, whereas the majority of their counterparts in the post-graduate courses were studying Arts and Humanities courses. The majority of rural students who entered the universities were the product of government schools affiliated to the state examination bodies. The parental resources were almost the only source of educational finance for the rural students in the universities. Thus, a unique equilibrium has been got established, which works in a systematic manner against the educational interests and higher educational security of the ruralities. Hence, only a multi pronged strategy pertaining to rural economy, rural education and higher education could mitigate the problem of educational deficit at the rural level.

Chapter V

Summary, Main Conclusions and Public Policy Interventions

Socio-economic transformation of a country/region is inextricably linked to the education. The educational progress generates immense and multifarious benefits to its people. And, the benefits accrue both to the market and household sectors. Higher education is the single largest contributor to economic growth and engine of societal well being. It is the key input in the creation and accumulation of human capital. It is instrumental in the inculcation of marketable skills, dexterity and scientific outlook to the workforce. The national share in global stock of higher education is very crucial in determining the overall position and power of the country in world affairs and global economy.

The formal education system is the principal mechanism for developing human skills, competencies and capabilities. It requires extensive provisioning of all types and stages of education. Public resources have played very profound role in the emergence of educationally advanced societies. The irrefutable fact that intimately connected with the education is that not only the education acquirer but also the society at large definitely gains from the educational attainments of the individuals. The externality in the form of social benefits, received from the education of others, by its non-direct recipients not only justifies but also legitimizes the claim of education sector over public resources.

The advanced countries by according high priority provide good amount of public resources to the education sector. In such countries, the per capita availability of public resources to education sector is quite high because of coexistence of large public budgets and national incomes alongwith compact

population size. However, in the developing world, by and large, the educational sectors are vulnerable to budgetary squeezes. And, India's education sector is no exception; more so is the case of Punjab state. Moreover, the resource-equilibrium of its education sector witnessed a further deterioration during the new economic dispensation.

In the last decade or so, Punjab's higher education sector has gone through sea changes both at the individual and collective levels. **First**, the state government has withdrawn from this sector at a greater speed. **Second**, the private entrepreneurs have opened new institutions of higher learning in the fields of professional, technical and medical education. **Third**, the entry of private entrepreneurs has completely changed the scenario of providing higher education from social service to for-profit education service. This has led to the commercialization of higher educational products like other goods and services. **Fourth**, these private educational enterprises are in the process of recovering of more than full-cost, in the shortest possible time, of imparting higher education from the students or their parents. And, **lastly**, the very high fees and funds charged by these for-profit institutions will certainly accelerate the 'exclusion process' of students belonging to the weaker sections of society (students of scheduled castes, backward classes, rural areas, landless agricultural workers, marginal, small and medium farmers, petty shopkeepers, etc., and urban marginalized sections, petty traders, slum dwellers, etc.) from acquiring the higher education, who are otherwise talented and hardworking. Such a scenario would result in a mediocratic society rather than a meritocratic society.

During the 1990s and onwards, more emphasis has been given to the professional and technical education. However, the structure of higher education in the state still is inclined towards the general education. Numerically, about 90 per cent of students getting higher education in the state were enrolled in general education courses between 1971-72 and 2003-04. And,

an overwhelming majority of them are in the arts & social sciences courses compared to the science & commerce streams. The girl students have now out-numbered the boys, a welcome trend for women empowerment. The low share of students belonged to weaker sections of society, especially of the students of scheduled castes (nearly 10 per cent) and backward classes (2.60 per cent) among the different streams of higher education compared to seats reserved for them in the state is a cause of concern. Further, the share of scheduled castes girls is abysmally low even in the higher general education, what to speak of the professional education.

Many scholars may argue that opening up of the professional and technical education sector to the private players will supplement the state efforts. They state that earlier the demand for these courses in the state was much higher than that of the availability of seats. So, a large number of students had to move to other states to acquire education in these subjects by spending huge amounts in the form of capitation fee and living expenses. That tantamount to out-flight of money from the state. Increasing the number of institutions running such courses has checked the out-flight of money. In fact, the parents or their children, with increase in their family incomes, demand quality of higher education. Parents also expect the greater probability of getting high-salary jobs, so they are willing to pay more for professional and technical education. So, they welcome the private efforts. Nevertheless, the main prerequisite for providing high quality education through the private for-profit institutes requires a rigorous quality control mechanism w.r.t. costs and accessibility questions; otherwise the state will face a serious crisis in creating civil society based on the principle of justice and equality.

In Punjab, the share of education sector in state budgetary expenditure declined noticeably over the time period. In terms of triennial average of financial years, it declined from 23.66 per cent during the triennium period of

1978-79 and 1980-81 to 16.82 per cent during the triennium period of 1999-2000 and 2001-02. In comparative terms, the education sector of the state got resources worth 22.08 per cent of the state budget during the average of pre-reform period consisting of twelve years (i.e. from 1978-79 to 1989-90), but its share declined to 16.51 per cent during the post-reform period (i.e. 1990-91 to 2001-02). Further, the share of education sector in the state income so far has not crossed the peak level of 3.31 per cent, which it has experienced during Ninth Five Year Plan (1997-2002). The share of university and higher education in the education budget of the state was only 9.10 per cent during 2001-02.

The educational progress in the state has been iniquitous in terms of regions, districts, locations, population groups, genders, classes and castes. The educational outcomes are highly disturbing when viewed in terms of drop out rates, pass percentages, age specific enrollments and learning achievements. For example, 75 per cent of children from the top quintile of households completed the ninth grade in 1998-99, but only nine per cent from the bottom two-quintile households reached at the same level. So, the education system has been generating a specific type of social stratification with educational inequalities at its base.

During the academic session 2005-06, the proportion of rural students among the overall students of surveyed universities of the state was 4.07 per cent. The share of rural boys and rural girls in the universities' overall boys and girls was 4.96 per cent and 3.06 per cent, respectively. Punjabi University has the highest proportion (8.16 per cent) of rural students among all the universities of Punjab. Punjab Agricultural University, with a share of 4.73 per cent, comes at the next. Guru Nanak Dev University and Panjab University have 3.01 per cent and 2.20 per cent of rural students on their rolls, respectively. The

proportion of rural students at the respective regional centres was found to be higher than that of the concerned university's campus departments.

For the university campus departments and regional centres combined, the share of girl students in total students was found to be the highest in Punjabi University (49.55 per cent), followed by Panjab University (47.52 per cent), Guru Nanak Dev University (44.66 per cent), and Punjab Agricultural University (41.38 per cent). As compared to it, the respective share of rural girl students in total girl students was 5.81 per cent, 1.38 per cent, 4.37 per cent, and 2.55 per cent respectively. However, the share of rural girl students at the regional centres of the universities was higher than that of their respective campuses.

At the campuses of the universities of state, it is the faculty of Education and Information Science that has the highest proportion of rural students (12.14 per cent), followed by the faculty of Art & Culture (8.87 per cent) and the faculty of Social Sciences (6.76 per cent). As expected, faculty of Professional Courses has the lowest proportion of rural students (1.41 per cent). And, the Department-wise, the proportion of rural students was the highest in the departments of Family Resource Management (36.36 per cent), followed by the Religious Studies and the Theatre & TV (21.43 per cent each). The lowest proportion of rural students was found to be in department of Chemical Engineering (0.23 per cent). On the whole, however, eight departments have no rural students. These are: Biophysics, Chemical Engineering, Geology, Gandian Studies, Centre for Women Studies, Dance, Foreign Languages and University Institute of Engineering.

The five departments of the universities where the proportion of rural students was highest are as follows (in descending order): **Punjabi University** – Departments of Physical Education (29.85 per cent), Sociology (27.78 per cent),

Defence Studies (24.14 per cent), Religious Studies (21.43 per cent) and Library & Information Science (20.75 per cent); **Guru Nanak Dev University** – Departments of Political Science (18.29 per cent), Library & Information Science (16.67 per cent), Bio-Technology (15.56 per cent), Physical Education (12.64 per cent), Sanskrit & Pali (11.11 per cent); **Panjab University** – Departments of Theatre & T.V. (37.50 per cent), Anthropology (10.59 per cent), Education & Community Services (9.52 per cent), Public Administration (8.60 per cent) and Punjabi (8.47 per cent); and **Punjab Agricultural University** – Departments of Family Resource Management (36.36 per cent; 4 rural students out of 11), Plant Pathology (33.33 per cent; 5 rural students out of 15), Veterinary Anatomy & Histology (33.33 per cent; 2 rural students out of 6), Horticulture (25.93 per cent; 7 rural students out of 27), Animal Breeding & Genetics (20 per cent; 1 rural students out of 5), Clothing & Textiles (20 per cent; 1 rural students out of 5) and Veterinary Pathology (20 per cent; 2 rural students out of 10).

Among the regional centres of the universities of the state, the highest proportion of rural students was found in the faculty of Social Sciences (16.51 per cent), and among the departments, it was the highest in Punjabi (26.90 per cent). Even at the regional centres, five Departments did not have any rural student. These are: Urdu, Shastri, Journalism & Mass Communication, Commerce and Education.

The educational attainments and performance of rural students show great deal of sensitivity to their socio-economic backgrounds. The proportion of rural scheduled caste students in the total identified rural students was 14.60 per cent. The maximum proportion of rural students (56.75 per cent) was in the 21-23 years age group. And, 70.25 per cent rural students belong to Sikh-religion, 27.44 per cent to Hindu-religion, 0.88 per cent to Islam, and 1.43 per cent to others. About 45 per cent rural students came from the villages located on the

main roads, and the remaining 55 per cent were from the villages located on the link roads. Nearly 62 per cent students were found to be living in hostels, and the remaining 38 per cent were daily commuters. The distance travelled by daily commuters ranged between 10 kms and 61 kms. Nearly three-fourth travelled by buses, and 18.29 per cent by their own conveyance. About 55.43 per cent rural students put in between one hour and one and half hour time daily in travelling.

Out of total rural students, 22.17 per cent were in undergraduate courses, and 77.83 per cent in postgraduate courses. Further, 55.73 per cent students got admission in general category and the rest 41.27 per cent against other types of reserved and additional seats. Interestingly, 63.25 per cent of rural students got admission in universities by the motivation of their parents and only 18.53 per cent by the teachers. Among undergraduate rural students, 77.72 per cent were in Professional Courses, 15.84 per cent in science courses and 5.45 per cent in Arts and Humanities. However, in case of post-graduate rural students, 69.53 per cent were studying Arts and Humanities, and 25.67 per cent Science courses. Nearly 62 per cent rural students were having first division in matriculation, 55.65 per cent in +2, and 44 per cent in graduation level of education. However, the rural girl students performed that of the better than boys during all of the above stages.

About 64 per cent of rural students studied in their own villages during primary level and 36 per cent did primary from schools located outside the village. However, 48.52 per cent did matriculation from their village-based schools and 50.27 per cent from outside the villages. According to ownership of schools, between 63 and 67 per cent of rural students were studied in government schools during the primary and middle standards. However, such proportion was around 70 per cent during matriculation and senior secondary levels. Further, above 80 per cent of the schools of rural students were affiliated

with PSEB, and rest with CBSE, etc. Around 63 per cent of rural students opted for arts/humanities during senior secondary and 56 per cent during graduation. Further, 23 per cent opted to the graduation in science subjects.

As regards the educational attainments of their parents, 37.87 per cent fathers and 34.14 per cent mothers of rural students were qualified up to secondary/senior secondary. Further, 41.72 per cent of fathers and 19.1 per cent of mothers of rural students have qualification above secondary/senior secondary. The respective proportions were 58 per cent for elder brothers and 43.38 per cent for younger brothers. These proportions were 69 per cent for elder sister and 48 per cent for younger ones. Moreover, 44.13 per cent of rural students came from the families whose parents are cultivators. Nearly, 82 per cent of students' mothers were doing household work. Further, 65 to 72 per cent of younger brothers and sisters were students at the time of survey.

Approximately 69 per cent of rural students received instructions in Punjabi and 22 per cent in English during high school. The corresponding proportion was 54 per cent and 40.07 per cent during senior secondary. However, while at the university, 68 per cent opted for English as medium of examination. Very few rural students (8 per cent) availed of any fee concession, and still fewer rural students (5.49 per cent) availed of any scholarship.

In terms of resource base, 72 per cent families of rural students (656 students) have some amount of land. Out of these, 33 per cent have land between 0.5 to 5 acres. And, 31.25 per cent have land between 6-10 acres. Further, 34 per cent families were found to be dependent only on the agriculture as source of income. The rest were as follows: agricultural land with salary 27 per cent, salary alone 15 per cent, and business alone 6.26 per cent.

Out of total rural students, 34.48 per cent have family income between Rs. 51,000 to Rs. One Lakh; 28.21 per cent between Rs. 1,00,001 to Rs.

1,50,000; and 13.48 per cent between Rs. 1,51,000 to Rs. 2,00,000. As regards the students' own earning, it was found during the study that a negligible proportion of rural students (4.50 per cent) have earned some income on their own. And, the parents financed 97.04 per cent of study related expenditure of rural students. And, 168 students (18.44 per cent) reported loss of study years at the one or the other stage during their entire study period. Out of these, 61 per cent reported loss by one year. Further, 159 students (17.45 per cent) did an additional degree (apart from graduation degree) before joining the university departments or regional centres.

The study establishes that the presence of rural students, passed-out from the typically rurally located schools, has been very low in the universities of Punjab state. Further, the students from the relatively better off sections of rural society (educationally, economically and socially) succeeded in getting entry in the university campuses and regional centres. The situation as a whole warrants radical changes in the public policy pertaining to the rural school/college education as well as the university level higher education. The policy interventions on the following lines are of dire and immediate necessity:

1. **The state must allocate at least six per cent of the state income to the education sector and 30 per cent of it to the higher education in a specified time and systematic manner**. This requires doubling of education budget. It can be achieved within a period of five years by increasing it at least twenty per cent per annum.

2. Out of total budget of higher education, the share of universities, government colleges and aided colleges be specifically raised keeping in view the global demands and resource requirements of these sub-sectors. Moreover, **rural sector institutions should get more**

allocation of funds, even more than the proportion of rural population to bridge the rural-urban divide.

3. The ongoing education system has definitely been showing the strong signs of exclusion process, particularly from the quality education, and that too of the weaker sections consisting of landless labourers; marginal, small and medium sized farmers; factory workers; slum dwellers, low level technicians, and low income earners in self employment activities. There is a need to mitigate the educational vulnerability of such sections by strengthening the public provisioning along with the more effective ways of motivation and involvement of the stakeholders.

4. There is a strong need to provide special incentives to students from the weaker sections of society that pass out from the rural schools, and get admission in the universities and other prestigious institutions. The state should finance the study cost of such students by creating a special fund, and reimburse the fees, funds and hostel charges of such students to the concerned institutions.

5. Since there is an organic link among all levels of education– elementary, secondary and tertiary – there is a need to strengthen and improve the quality of education at all the levels. It is recommended that instead of allowing a mushrooming growth of private schools (sub-standard, ill-equipped and for-profit, albeit teaching shops) without social responsibility, there is a need to strengthen the existing government and private aided-schools in the rural areas.

6. Education at all levels in general, and higher education in particular, deserves a public funding to a large extent due to its social benefits, public returns and externalities. As such public investment in education sector should not be treated as a wasteful expenditure. It is, rather, the most productive investment in human capital. The government must not withdraw from the education sector considering it a soft-target. The history of economic development of various countries testifies that investment in human capital has played most important role in development.

7. Instead of the lame excuse of resource crunch for justifying government withdrawal from education, the state should resort to more resource mobilization through better tax-compliance (plug tax evasion), bringing more services under tax-net and lowering the size of black economy in the state. It has been often admitted by the successive Finance Ministers of Punjab that there is an under mobilization of tax resources ranging between Rs. 2500 crore to 3000 crore per annum. Keeping in view the proportion of black economy (40 to 45 per cent), it is estimated that the size of black economy in the state during 2004-05 ranged between Rs. 31600 crores and Rs. 35550 crores per annum. The downsizing of black economy would generate enough resources to finance education and other development activities in the state.

8. **The present mechanism of recruitment, administration and control in government owned schools has almost been discredited; as such the recruitment, administration and control of these schools should be vested with some independent, autonomous and transparent authority. Alternatively, all these functions of rural government schools along with full budgetary allocations be**

handed over to the concerned university (Punjabi University, Patiala; Guru Nanak Dev University, Amritsar; and Panjab University, Chandigarh) as per their jurisdictional areas.

9. The present practice of freezing the aided posts in the private aided colleges/schools must be stopped with immediate effect, and all the posts which were freezed/abolished in the past decade because of retirement of the incumbents must be revived and filled in immediately. The level of aid to private aided college/schools must be restored to its previous level of 95 per cent from the present level of 65 per cent.

10. The state must show more administrative sensitivity to the education sector and should not put it into unnecessary experimentation, uncoordinated policy changes and adhocism. The regular mode of employment of teachers - an accepted practice throughout the world - must be followed more vigorously in the state.

11. Grants and funds to the education sector be released on priority basis and in advance. The aided sector should not suffer on account of delays and squeezes in the release of grants-in-aid and other bureaucratic hindrances.

12. Out of the total education budget, some proportion of it be reserved exclusively for capital account to provide physical infrastructure in the schools, colleges and universities. At the university level, sufficient resources be provided for funding research and development activities.

13. For the purpose of enhancing the participation and performance of rural students, particularly from the weaker sections of rural society, a **Rural Education Commission** be established to workout the

modalities and other ways and means to ensure equity in accessibility and affordability of higher education to rural children.

14. **The state and educational institutions must make efforts to strengthen the voluntary, philanthropic, diasporic and community funding in the education sector through various forms (incentives, concessions, etc.), particularly in the typically rural, backward and other disadvantageous areas and sections of the society**. The state has not yet realized the full potential of these sources of funding to the education sector. The funds collected by the state under education cess needs to be transferred fully to the education sector.

15. The government colleges in the state have been confronting with severe shortage of teaching staff because no recruitment has been made during the past so many years. So, there is a crying need to fill-up the vacancies immediately.

16. **It is imperative to enhance the enrollment in higher education from a very low level of 6-7 per cent**. For this purpose, strengthen the school/college education in government sector by (i) allocating more funds; (ii) appointing more regular teachers; (iii) shifting no teacher/post from rural to urban centres; (iv) attracting & retaining the talented teachers through incentives; and (v) punishing work-shirkers at all stages of education.

17. The need is to fine tune and enhance the efficiency of all the government departments dealing with the higher education sector. The universities, too, should earnestly implement the quality control mechanism mandated by the UGC and other statutory agencies in their affiliated colleges.

18. **The establishment of neighbourhood campuses/regional centres in the rural areas by the universities would certainly make the higher education more cost effective and accessible to rural students. The experiments of Punjabi University, Patiala during the last couple of years are worth replicating**.

19. **Education of ruralites in the state is sine qua non for shifting the workforce from agriculture to non-agricultural sectors and for reaping the benefits/dividends of changing global economic scenario**. As such, education sector in general and rural education in particular should not be left to the mercy and vagaries of market forces. Public funding and policy intervention along with public-private partnership (in an accountable and transparent manner) are of great necessity. Even the World Bank Reports support the public funding of education.

20. **There is a need to establish a School Education Development and Regulatory Authority** (SERDA) to prevent excessive commercialization and profiteering in the non-aided private schools. This statutory body should regulate the fee structure, service conditions of teachers & non-teaching staff, and profiteering in the non-aided private schools/colleges.

21. **In order to take stock of the ground reality regarding the presence of rural students in other courses, there is a need to conduct such studies in all the degree colleges of the state, and also in the college/institutes affiliated with Punjab Technical University, Baba Farid University of Health Sciences, Rajiv Gandhi National University of Law, Guru Angad Dev University of Veterinary &**

Animal Sciences and Thapar Institute of Engineering and Technology (deemed university).

Appendix - I

QUESTIONNAIRE

Project: Rural Students in Universities of Punjab: An Exploratory Study

(A) University: _____ Regional Centre: _____
Department: _____ Course: _____ Part: _____
Medium of Instruction : _____ Medium of Examination: _____

(B) Student's Name: _____ Father's Name : _____

(C) Age of Student (Years): ____ Sex : Male/Female ____ Caste: ____Religion: _____
Social Category : Gen, SC,BC,OBC, Any other (specify): _____

(D) 1. Permanent Address : Village : _____ P.O.: _____
Tehsil : _____ Distt.: _____
State : _____ Tele (with STD Code) : _____
Nearest City/Town (name and distance) :_____
Distance of Village from University/Regional Centre : _____
2. Location of Village: (a) On Main Road/Link Road(Tick) (b) Distance from Main Road: __
3. Whether you stay in Hostel or Daily Commute : _____
4. If Hostel, then Institutional Hostel/Private Hostel/Paying Guest/Rented Accommodation (Tick)
5(a). If Daily Commute, your present address if it is different from mentioned at D(1) :
_____
(b) Distance traveled to reach institution from present Residence : _____ Kms.
(c) Mode of Traveling : Bus/Train/Personal Vehicle/Any other (specify): _____
(d) Traveling Expenses (Rs. per month) :_____(e) Total Time for Traveling (hours) : ____

(E) In which category you got admission : _____
Gen, SC, BC, Rural, NRI/Industry, Any other, (specify)

(F) Who guided/motivated you to join this course?
Parents/Teachers/Relatives/Friends/Any other (specify) : _____

(G) Do you avail any Fee Concession, if yes, how much (Rs. per Month/Annum): _____

(H) Do you get any Scholarship, if yes, give detail :
Name of Scholarship _____ Amount (Rs. per Month/Annum) _____

(I) Did anyone of your family members (mentioned at 'M') ever get any benefit of Reservation for Admission or Job (give details) : _____

(J) Number of Years Lost (due to failure/illness/gone abroad/left study, etc.) during Study :
(a) Upto matriculation level: _____ (b) During Senior Secondary (+1, +2) : _____
(c) During Graduation: _____ (d) Any other, specify : _____

(K) **Your Educational Attainments** :

Class	Year of Passing	Name of School/College	Marks obtained (%age)	Division
Matriculation				
10+2(Arts/Com/Med Med/Voc/……..)				
Graduate in …… ……				
Postgraduate in …… ……				
Any other (Specify)				

(L) **Information about Schooling of Student** :

		Primary	Middle	High	+2
1	Name and address of School				
2	Government or Private				
3	Situated in your village or ou				
4	If outside village, then locati or urban				
5	If outside village, then distar your home (in Kms)				
6	Stayed in Hostel, (Yes/No)				
7	If yes, for how many years				
8	Medium of Examination				
9	Medium of Instruction				
10	Affiliation (PSEB, CBSE, ar specify)				
11	Monthly Fee (Rs.)				

(M) **Educational Attainment of Family Members** (specify in detail)

1. Father	
2. Mother	
3. Grand Father (Dada)	
4. Grand Mother (Dadi)	
5. Grand Father (Nana)	
6. Grand Mother (Nani)	
7. Elder Brother	
8. Younger Brother	
9. Elder Sister	
10. Younger Sister	
11. Others (specify)	
12	
13	

(N) **Occupation of Family Members** (specify in detail)

	Occupation	Occupation Details
1. Father		
2. Mother		
3. Grand Father (Dada)		
4. Grand Mother (Dadi)		
5. Grand Father (Nana)		
6. Grand Mother (Nani)		
7. Elder Brother		
8. Younger Brother		
9. Elder Sister		
10. Younger Sister		
11. Others :		
12		
13		

(O) Does the Family Own any Land, if yes, how many acres? : _____

(P) Source of income other than Agriculture : _____

(Q) Total Income of Family from all sources : Rs. Per Annum _____

(R) Who bears your study expenditure : Parents/Brother/Sister/any other (specify) : _____

(S) Do you do any part/full time work to finance your study (Yes/No) : _____
If yes, how much you earn (annually) : Rs. _____

(T) Annual Expenditure on your present course of Education (Rs. per annum) :
1. Fee and funds _____ 2. Hostel (fee and funds) : _____ 3. Mess bill _____
4. Books/stationary/photocopy : _____ 5. Telephone/Mobile : _____ 6. Canteen bill : _____
7. Cloths and Garments : _____ 8. Others (specify) : _____

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