

## **CHAPTER 2**

### **REVIEW OF LITERATURE**

This chapter presents the relevant literary work conducted over the year with respect to higher education and its various aspects, makes an attempt to present an account of the theoretical and methodological developments relating to the contribution of education to economic growth and development and critical role of education in human capital formation and the overall development of the society. This chapter highlights the review of literature on the subject so as to point out the gap and provides the rationale of the present study to fill the gap.

#### **2.1 Education and Economic Development**

The role of education in economic development has been recognized ever since the days of Plato. Plato believed that a considerable part of community's wealth must be invested in education so that the citizens of a society may enable themselves to participate actively in the development. The issue of human capital as an input into economic development was raised by Adam Smith in the year 1776. In trying to explain the cause of prosperity of nations he pointed out skill formation and human qualities as an important factor. However, till 1950s, the planning approach generally adopted in different countries was purely growth oriented, with more emphasis on increasing the national income and per capita income. Dissatisfaction with this approach was built up in 1960s due to continuous neglect of social sectors and little importance given to human capital. Subsequently, an era began in which qualitative development of human

resources is considered to be important for fuller utilization of resource and faster development of the country. Knowledge and education, being an integral component of human capital formation, therefore become focus of discussion among scholars and policy makers.

Early attempts to measure the contribution of education to economic growth were made by Schultz (1961) and Denison (1962). Schultz's analysis was based on 'rate of return to Human Capital' approach and Denison's was based on the 'growth accounting' approach. Both of these showed that education contributes directly to the growth of national income by improving the skills and productive capacities of labour force. The 'rate of return approach' adopted by Schultz to measure the contribution of education to economic growth, suggest that, a substantial portion of the rate of growth of output in the US is due to investment in education. The 'growth accounting approach' is based on the concept of an aggregate production function which links output (Y) to the input of physical capital (K) and labour (L). Denison calculated that between 1930 and 1960 about 23% of the rate of growth of output in the US was due to increased education of the labour force.

Early works by Bowman and Anderson (1963), demonstrated a correlation between the level of per capita income and level of educational development. According to them the fact that the rich countries have higher levels of literacy and spend more on education than poor countries means that education is both a cause and a result of economic development. Wheeler (1980) found that on the average the increase in the literacy rate from 20 per cent to 30 per cent causes GDP to increase by 8 per cent to 16 per cent. He considered that general investment has less effect on growth rate when it is not supported by educational investment.

Anit N. Mukherjee (2007) has explained that divergence between the private and social rate of return from education is the rationale for intervention by the state in ensuring equity in opportunity across the population. The so-called 'New Growth Theories' predict that higher levels of schooling and better quality of workforce will lead to an increase in the rate of growth, further strengthening the case for public expenditure on education.

Curle (1964) correlated educational indicators in the mid-1950s and per capita income 1954-59 in 50 countries, and found a correlation coefficient of 0.53 between GNP (Gross National Product) per capita and percentage proportion of GNP invested in education, and 0.64 between GNP per capita and post-primary enrollments. Similarly, Bennet (1967) found in a study on 69 countries, high correlation between GNP per capita and secondary vocational education and low correlation between GNP per capita and general secondary education. He also found that enrolments in vocational education, as a ratio of general secondary education, increased in countries up to a GNP per head level of \$500, and then decline with increase in income levels.

A paper titled *A Model on Knowledge and Endogenous Growth* by Derek H. C. Chen and Hiau Looi Kee, (2005) presents a model of endogenous growth in which the main engine of economic development is knowledge. Using a two sector closed economy model that comprises of a conventional goods producing sector and a research and development sector, the model incorporates two aspects of knowledge: technology and human capital. The model shows that an increase in the growth rate of human capital leads to increase in steady state growth rate of technology and steady

state growth rate of output per capita. In addition, given that the growth rate of human capital is a determinant of the steady state growth rate of per capita income, the prediction of this model provides a channel through which government policies can influence the long term growth rate. The study concluded with the examination of steady state effects of two scenarios that could result from common development oriented policies. The first exercise focuses on education and considers an exogenous increase in the rate of human capital accumulation, which could result from the country experiencing a one-time increase in the number of new schools. In the second scenario, the study examines the role of information and communication technology (ICT) in economic development, by assuming an exogenous one time improvement in the economy's ICT infrastructure. Both exercises show that even one time positive shocks can have long run effects on technological growth, capital accumulation and economic development.

Kodrat Wibowo in the paper *Human Capital Improvement: the Key for the Success of Economic Development* aims to suggest the strategies in developing human capital of less developed countries with education and knowledge as basic inputs. Cobb Douglas production function has been used to describe the relationship between human resources, economic growth, technology and education. The paper reviewed the educational policies that had been adopted by less developed countries to boost the economic development between 1960s and 1970s, Number of factors have been pointed out for the failure of education policies in these countries in the past. Two levels of policies have been suggested in the paper to make education more relevant to fulfill the needs of less developed countries. The external and internal policies suggested in this paper to improve the human

resource through the educational system are: External Policies includes enhancing the standards of living, adjusting imbalances, signals and incentives, changing the export-led strategy, developing new technologies by investing in the research and development program, improving the policy and business environments, ensuring two-way information flows, and controlling the international employment's migration. The internal policies are educational budgets, re-orientation of higher education, enhancing the partnerships between academic institutions and the private sector.

## **2.2 Returns to Education**

The purpose of paper by George Psacharopoulos (1982) is to take a close look at the socio-economic rationale for higher-education provision in developing countries. This is done by reviewing the costs and benefits associated with investment in higher education as a whole and especially in different post-secondary subjects. Particular attention is paid to the possible existence of returns to scale from university expansion, and a distinction is made between the incidence and the duration of graduate unemployment. The author compiled cost and higher-education enrollment data for 83 countries comprised of 58 developing countries, 18 developed countries (as a control group) and 7 oil producing countries. The information related to cost and benefits of university education was pull together to arrive at some social efficiency measure of higher education. The analysis established that that the economic returns to higher education as a whole are at least of the same order of magnitude as the returns to other forms of investment. The author argues against the provision of vocational training within formal educational institutions for the purpose of promoting economic development. In fact general education should be thought of as a

prerequisite for technical education and that the later should be provided more efficiently on the job rather than in the school. Author calls for an annual monitoring of labor market performance by the recent students of particular types of schools so that policymaker can provide for a truly balanced educational system.

Gerard Postiglione (2009) in the paper *Education impact study: The global recession and the capacity of colleges and universities to serve vulnerable populations in Asia* studied the experience of higher education in selected developing countries of Asia during financial slow down. Cases of China, Mangolia and Vietnam have been discussed in detail to study the economic shocks and higher educational reforms. During the 1980s, countries in Asia that borrowed from the World Bank and the IMF were instructed to cut back on government spending, including that for higher education. However, the global recession of 2008, runs counter to this trend. The paper highlights the importance of the global recession as an opportunity for new thinking about comprehensive reform in education. The longer the higher education institutions continue to under-perform, the greater will be the negative impact on the economy. The paper argues that any further delay of substantial reforms in the governance of higher education during recession runs the risk of a long term handicap to global competitiveness and sustained hardship for underserved vulnerable populations. The paper suggests that there is a new urgency to identify and remedy deficiencies with fresh approaches and innovative policy options in the higher education system of the country. There is a need to intensify the support for community based vocational and technical education that can react quickly to rapid changes in the job market. Special emphasis should be

given on up gradation of research institutes where practitioners from public, private and academic sectors work together to connect theory and practice.

Rao & Datta reiterates the importance of education for human capital formation in his paper and analyzed the education - productivity earning connection at the level of the firm. The model postulates that education, work experience and formal training determine workers' productivity at the workforce. The study includes performance rating as an intervening variable, although it attempts to incorporate the effects of other variable (motivation, regularity etc.). A recursive model was employed for empirical analysis and ordinary least square technique has been used for estimation. Data of 1802 full time male workers, working in one of the large multinational engineering firms in the Indian private sector have been taken. The results of this empirical analysis, while supporting the human capital approach to earnings determination, shows that traditional simple human capital variables (e.g. years of formal education and experience on the job) do not necessarily determine performance variations on the job. It also emphasizes the importance of in-firm and off the job training to upgrade the workers skills. The paper finally draws attention to the fact that in the present era of competition where the gap between skills required to the existing ones is constantly growing, new human capital in the form of continuous in firm and off-the-job training to upgrade workers skills is therefore imperative.

A. M. Nalla Gounden (1967) in his paper has treated education as a form of investment. He has made no attempt to measure the contribution of education to economic growth. Educational expenditures constitute a sizeable drain on the economy and since current plans call for further increases in these expenditures, a number of critical resource-allocation

problems arise. At present, India's educational expenditures are substantial and have been rising rapidly. This paper had made an effort to explore the relationship between the cost and benefits of educational investment in India. Internal rates of return to investment in education in India for the year 1960-61 are estimated and compared with Professor A. C. Harberger's estimate of the rates of return to physical capital. 'Net' education capital formation during the period 1950-51 to 1960-61 is also estimated at 1960-61 prices and compared with physical capital formation during the same period. Net education capital formation over a period of time can be measured by deducting losses resulting because of death, emigration, depreciation, etc. from the gross investment over the same period. The study indicates that education is not an attractive form of investment when compared with physical capital. Since the rate of return of physical capital is higher than that of education, relatively more emphasis on physical capital investment is necessary to accelerate the growth of the economy. This will, in turn, provide an expected capability for supporting needed educational investment. Within the educational system, primary education is the most attractive and collegiate nonprofessional education the least attractive form of investment. The rates of return are lower to literacy than to primary education, which implies that dropouts are not economically as productive as completion. This suggests that quality of education should be improved and wastage and stagnation reduced.

### **2.3 Investment on Education**

Issue related to finances and public expenditure on education is another grey area and needs special attention. Nicholas Barr (2006) in his paper explores the instruments which policy makers can use to expand educational



opportunities. The paper works outwards from the economic theory. At the outset, the paper establishes three core propositions that underpin analysis in higher education finance in developed economies and thus offers principles on which developing countries should have their eye in the medium term, as fiscal and institutional capacity grow. The paper discusses the good lessons as well as bad lessons from developed countries for policy design in developing countries. The study also focuses on issues related to tuition fees and loans and discusses the institutional prerequisite that are necessary if a loan system is to be implemented effectively. At the end, the paper suggests feasible policy option for higher education in developing countries keeping in mind the fiscal and institutional constraints. The study explores financial, information and education measures that policy makers can use for improving the higher education system in the country. An important message is that policy makers should consider higher education policies not in isolation, but from a life-cycle perspective that includes earlier education.

Jandhyala B. G. Tilak (1994) examined the growth and investment in education in the last two or three decades and analysed the contribution of education to development. Jandhyala B. G. Tilak and N. V. Varghese (1991) in their paper has made an attempt to analyze the present pattern of funding higher education in India and to discuss the desirability and feasibility of various alternative methods of funding the same. Higher education in India is basically a state funded sector. But as higher education benefits not only society at large, but also individuals specifically, and as it attracts relatively more privileged sections of the society, there is a rationale for shifting the financial burden to the individual domain from the social domain. Author argues that given the resource constraints and equity considerations, financing higher education mostly from the general tax

revenue may not be a desirable policy in the long run. Accordingly, author discussed some of the alternative policy choices, including financing higher education from the public exchequer, student loans, graduate tax, student fees, and the role of the private sector. Among the available alternatives, it is argued that a discriminatory pricing mechanism would be relatively more efficient and equitable. While given the socio-economic and political realities, the government has to continue to bear a large responsibility for funding higher education, instead of relying on a single form of funding, efforts should be made to evolve a model of funding that provides a mix of the various methods. He also argued that fee and subsidy policies need to make distinctions across various layers and forms of higher education.

In the paper *The relationship between public expenditure and status of education in India: An Input Output Approach* written by Deepa Rawat and S. S. Chauhan (2007) tries to establish a relationship between the government expenditure on education and the economy as a whole. Input-output method has been used to analyze the outcome of public spending on education and focuses on the development of education system in the country. Plan expenditure data of Central and State Government for the period 1951 to 2001-02 has been used for the purpose. The data has been clubbed into three groups, merging 1951-52 to 1965-66 into first group, 1966-67 to 1984-85 into second group and 1985-86 to 2001-02 into third group. The study observes that the status of university education in India is unsatisfactory. India ranks as low as eighty first in the world in terms of proportion of public expenditure on education to GDP and also has one of the lowest public expenditure on higher education per student in the world, US \$ 406. The share of higher education in total planned resources has declined continuously since fourth five year plan. The analysis suggests that

public expenditure on secondary and higher education should be increased along with the expenditure on primary education. The gap in requirements should be filled up by involving the private sector with proper safeguards. A highly empowered regulatory framework is required to monitor the working of the private sector in education.

Educational Expenditure needs of large Indian states: A Normative View by Allen Roy, B. Kamaiah and M. Govinda Rao (2000) attempts to estimate the normative expenditure levels with regard to the expenditure on education for fifteen large Indian states for the fiscal year 1997-98. To get reliable estimates for the expenditure functions, cross section data pertaining to fifteen different states are pooled for six years from 1992-93 to 1997-98. A comparative analysis of the normative and the actual expenditure levels has been made with the objective of classifying states on the basis of the relative emphasis laid on the provision of education. Expenditure on education is categorized into three heads: primary, secondary and higher education. The findings of the study are consistent with the maintained hypothesis that rich states spend more and poor states spend less as far as social sectors are concerned. As per the results, Gujarat and Maharashtra are leading in case of primary education and Andhra Pradesh and Punjab spend substantially more on secondary and higher education. Poor states like Uttar Pradesh and Bihar are far behind the normative level for all the three heads of education. The paper suggested that actual spending on educational services in low income states is found to be lower than their needs. The existing fiscal equalization mechanism has not been effective in offsetting the revenue and cost disabilities of the poorer states in India.

V. N. Kothari (2002) in his paper identifies the practical consequences of introducing a higher fee structure and spells out the rationale for public

expenditure on higher education. The education sector faces a severe resource crisis which could be tackled by introducing higher fees. However, possibly the higher education sector would shrink in size, if a self financing approach is introduced as enrollment of girls, students from poor and disadvantaged classes would decline because of financial disability. The paper further discusses the trends and issue of public expenditure incurred on higher education in India. The paper also sets out the rationale for providing government support for maintaining the quality of human capital in the economy. At the end, the role of public expenditure on higher education is emphasized as a means to maintain adequate supply of educated manpower and to facilitate social integration across the deprived population. The author suggested that a possible fee structure could be introduced so that the majority of the students are able to pay fees and for others who are not in a position to pay, a mechanism could be introduced for fee waiver facility or provision of financial aid.

#### **2.4 Higher education in India**

Attempts have been made by number of scholars to present the current scenario of higher education in India, status of quality and future prospects. Suranjan Das (2007) has restricted his paper to study the scenario in the higher education of India and highlighting attainments and analyzing the challenges it is facing, especially in the context of globalizations. The author has analyzed the steps and approach under taken by the different government at centre for the betterment of education system in lieu of globalization. In terms of national spending on social welfare the Indian record is consistently low irrespective of political parties in power. Author emphasize on the liberal approach to higher education at a time when we are

faced with the threat from resource crunch and religious sectarianism. We need to provide the Indian youth with equitable access to higher education, ensure quality and accountability in Higher education and make Higher education relevant in the present context shaped as it is by the force of globalization. This is particularly important if we are keen to utilize the demographic dividend of 54 per cent of the country's population living below the age of 25 years. India is in a unique position of tapping the untapped human capital through proper investment of resources that will surely contribute to the conversion of India to 'an intellectual and economic powerhouse. Author suggests many immediate steps to improve the scenario of higher education in India like to strike a balance between quality and quantity, diversification of courses at the undergraduate and post-graduate levels. Also, there is need to address the dichotomy in the developmental pattern of federal/central and state/provincial universities and streamlining the Open and Distance learning methods. The practitioners of higher education in India have to remain conscious of the negative socio-cultural impact of globalization. Globalization has made our lives easier in many respects. But culturally and socially, we are becoming victims of a consumerist and individualistic culture, which in the long run may put our nation in a subordinate position. We should keep our windows wide open to allow the wind of change to enter, but we cannot allow the external wind to uproot the foundation of our house.

The paper *Education Scenario and needs in India: Building a perspective for 2025* written by Suman Sachdeva observes the trends in different levels of education from post independence period to the present scenario. The trends revealed that the country has witnessed significant growth from post independence period to now, the overall performance of

education sector is not as satisfactory. There are gaps existing with respect to enrolment and attendance at all levels. The country has the dubious distinction of having the largest number of illiterates and out of school children in the world. Different set of policies and programmes adopted by the country from time to time has also been discussed by the author. Special attention has been given to National Policy on Education and Plan of Action (1992). The paper also highlighted the envisaged progress in terms of targets set according to government policy and pronouncements along with the gaps that exist in the attainment of these targets. Considering the present requirements and the existing gaps, projections were made for the year 2025 to better understand the educational scenario, requirements and goals in future. At the end the author concluded that the government's capacity to pay for education is limited. Thus, there is a need to explore private and other source of investments. It has been established beyond doubt that beside its social and cultural dimension, education is also an economic and political investment yielding long term benefits. It is therefore not only justifiable but also desirable to focus on this investment in order to gain maximum benefit. Steps would have to be initiated to fill all the existing vacancies of the teachers through a time bound manner. At the end, paper discusses several other strategies to achieve the said goal by 2025 at every level of education.

Honourable Justice B. P. Jeevan Reddy (2008) at Dr. C. D. Deshmukh Memorial Lecture on *The State of Higher Education in India* has expressed his thoughts on the higher education, its importance and factors necessary for achieving excellence. While speaking about the importance of primary as well as free and compulsory education to all the children in India, he explained the constitutional provisions for Education viz. Article 45, 41 and

21. The subject of education is placed in the concurrent list of Constitution, but Central government is just discharging its responsibilities by allocating funds. It is equally obligation of the government to take active steps to promote quality education. Author further emphasizes the importance of higher education in the era of globalization. He further explained several factors which are necessary for achieving excellence and to retain it. These factors are discipline and devotion to learning among teachers and students, university autonomy, adequate finances, question of reservation and the need for Universities to generate adequate sources of income on their own. He concluded the lecture by comparing the higher education scenario with public sector industries and services. There is a need to self-financing educational institutions and private universities with greater autonomy. Unless the existing public institutions of higher education deliver meaning justify their existence and their role they may go the way the inefficient and loss making public sector enterprises are going.

The objective of the paper by Deepa Shankar titled Education System Performance among Indian States is to measure the relative efficiency of public education systems to improve educational outcomes. The paper, at the outset, gives a brief description of the education policies and current education scenario in the country. In the paper, attempt was made to bring in the levels of performance and the determinants of performance by estimating a semi-parametric model of the education production process using a two stage process. In the first stage, the output efficiency score for each unit is estimated using the mathematical programming approach known as DEA, relating education inputs to outputs. In the second stage, these efficiency scores are explained using regression analysis. The analysis shows that not all states with better outcomes are efficient states. Similarly,

not all states that seem to be efficient are better off states in terms of education. States like Chhattisgarh, Goa and Karnataka registered improved efficiency changes during the decades. In these states, for the given inputs, the state could improve their outcome with respect to enrolment and completion rates. On the other hand, in states like Bihar, Jharkhand, Madhya Pradesh and Rajasthan the outcome levels are so poor that there is no scope for improvement with the current level of inputs. The analysis suggested that for these laggard states, it is important that adequate inputs are created either by investing more finances in education sector by the states or using the existing centrally sponsored schemes better. Given their limited scope for improvement in the current level of inputs and investments, it is important to increase allocations for education sector until the desirable outcomes are arrived.

The Study *For the Elites* by Economic and Political Weekly (2010) tries to find out the major feature of Foreign Education Bill and its impact on the present university education system in India. By allowing the entry of universities from abroad, India will be in danger of setting up elite versus non elite system in the university education. Foreign Universities will attract faculties with better salaries and students from families that can afford to pay high fees for obtaining a foreign degree. The public university system will be neglected in due course of time and it might create a two university system in the country. The study concluded with the suggestion that government should continue to increase public spending on higher education which is currently only 0.37 per cent of GDP.

The paper *Progress in Participation in Tertiary Education in India from 1983 to 2004* by Mehtabul Azam and Andreas Blom (2008) examines the attainment and access of tertiary (higher) education in India over the past



two decades (1983-2004). This paper draws data from the Employment and Unemployment Schedule, of National Sample Survey Organization (NSSO), to understand the basic trends in attainment and access over time. Three indicators viz. Educational Attainment Rate (EAR), Gross Enrollment Ratio (GER) and Transition Rate have been used to measure attainment and participation. The major findings of the paper are that there has been considerable progress in attainment and participation; however, they remain low. Important gaps exist in enrollment between rich and poor, rural and urban areas, men and women, disadvantaged groups and the general population, and states. Analysis of transition rates from secondary education to tertiary education and regression analysis indicate that inequality in tertiary education between disadvantaged groups and the general population is explained by low completion rates of secondary education. The author concluded with the suggestion that India has tremendous potential to make tertiary education an engine for equal social and economic progress, but it requires concerted and targeted efforts based on facts. The policy challenge for India is to expand tertiary education, while at the same time making it more inclusive. An equitable expansion of secondary education is necessary for fundamental improvement in equity in tertiary education; in particular for low-income families, girls, Muslims, disadvantaged groups (SCs, STs, and OBCs), and rural areas. There is a clear need to improve the transition to tertiary education for students belonging to low and middle-income families, and thus bring more low and middle-income students to universities and colleges. There is a need to scale up financial assistance to low and middle-income families through education loan programs, and perhaps a highly targeted scholarship program exclusively for poor families.

A paper by Neeraj Hatekar (2009) on *Changing Higher Education Scenario in India*, explains the recent initiatives taken by Ministry of Human Resource Development to upgrade higher education system in the country. The paper asserts that all these initiatives will definitely bring quality and greater accessibility of higher education. A serious set of problems is likely to emerge at the level of state universities. The success of the new central universities and the proposed national universities will come at the cost of the state universities which cater to the majority of students in the country. Majority of State Universities are suffering from the problems of large number of vacant positions, massive doses of bureaucratic and government interference, old and archaic pedagogical methods, outdated finance procedures in securing and utilizing research funding, among other substantial weaknesses. By taking the case of Mumbai University, one of the oldest universities in India, the paper tries to point out the major problems faced by these universities. This paper concluded with the warning that since the State universities still caters to the largest number of students in the higher education system, the decline of these universities will be a massive blow to higher education in the country. At the end, author suggests that there is an urgent need to strengthen the state education system by addressing its manifest weaknesses. Substantial improvement is required in syllabus designing as well as methodological improvement in pedagogy. Initiatives should be taken in tune with national and central universities to attract quality faculty at state level also. The Central government must also take care of financing aspect. This article proposes that postgraduate teaching and research in State Universities will have to be taken care by the Central government to ensure its survival and robust growth

Despite, its impressive growth, higher education in India could maintain only a very small base of quality institutions at the top. Standards of the majority of the institutions are poor and declining. Entry to the small number of quality institutions is very competitive giving rise to high stake entrance tests and a flourishing private tuition industry. Emergence of private providers and increase in tuition fees in public institutions without any substantial programme for students' financial aid has made higher education beyond the reach of the poor (Pawan Agarwal, 2006).

In the paper *The Giants Awake: Higher Education Systems in China and India* by Philip G. Altbach (2009), author highlights issues related higher education in India and China. Higher education system in China and India are already among the worlds largest and they are major exporters of students to other countries. The study attempts to make a comparative assessment of higher education system in these two countries, the challenges being faced, their educationally rich historical background and the prospects for higher education in both countries. For higher education systems, history plays a role in the present. Both countries have largely not taken advantage of their extraordinary rich indigenous intellectual and academic traditions. However, China has made considerable progress with its top institutions and India has illustrated with the Indian Institute of Technology and a few other institution that high standards are possible. Yet, significant quality problems and other related issues exist in less selective colleges and universities in both countries. The paper concludes with the suggestion that economic future of both countries depends on a better educated workforce. A complex and diversified higher education system that includes some world class universities is needed for further economic development of both countries. An effective quality assurance system can help to ensure standards. The

system will probably become more stratified, with small number of research universities at the top and very large number of high quality colleges and universities at the bottom.

Rohan Mukherjee (2008) in his paper presents an overview of the contemporary issues and challenges of Indian higher education, and looks in particular at ways in which potential foreign participants can legitimately play a role in the sector. The Indian system of higher education is in a state of decline, primarily due to the adverse effects of its regulatory structure. The participation of foreign universities, while not a panacea for all of the system's ailments, offers an avenue for easing some of the pressures building up within it. This paper does not seek to make a case for increased foreign participation, but presumes it to be a medium-term outcome of the process of India's integration into the global economy. Author discusses important systemic challenges (access, equity, quality) and argues that these problems stem from the lack of public investment and a flawed regulatory structure, resulting in the rapid and unregulated growth of private provision. The paper attempts to show that there has been an increasing dissonance in the government's view of foreign institutions. This signals a growing public debate that can be successfully leveraged by potential entrants. Author concludes by briefly suggesting that in the final analysis, meaningful foreign participation hinges on the regulatory system's ability to successfully balance two conflicting objectives - building a world-class educational system, and ensuring that education remains a non-commercial activity that embodies national values and priorities. Fostering the right kind of foreign participation will depend on understanding that the tension between these two objectives is not of a zero-sum nature. Regulators need to realize that it is possible to have aggregate gains that promote both objectives without

trading away anything except a degree of control over the system, which in its current state is highly controlled and inflexible. On the part of foreign institutions, it is prudent to be sensitive to local conditions and the objectives of education provision in a given context, and above all to accept a degree of control over institutional autonomy in order to benefit from longer-term involvement. Also, foreign or private investment is by no means a panacea for the ills of the Indian higher education system but it can certainly contribute to a sector currently in dire need of improvement.

R. P. Singh (2008) in his paper, *Regional imbalances in Educational Development*, examines the recommendations made by the Education Commission against the backdrop of the nation's unfulfilled desire to become fully literate. The author has given detailed background of the problem related to regional imbalances in educational development citing episodes from print media. He says that for educational progress in India we could consider either adopting a model that is rightly suitable somewhere in the world or evolve one that suits our condition. In either case, it is not possible to think of a single model that could have been successful in our case. The issue of regional imbalances has been brought out in the paper through state wise enrollment figure of boys and girls including SCs and STs at different stages of education in the country. The educational expenditure in different states has also been mentioned. A plan of action proposed in the paper suggests that in the larger interest of the country, each region should be free to strive for its best and to develop its own pace. This will necessarily lead to some inequalities but what is needed is a balancing factor, a deliberate and sustained effort to assist the less advanced areas to come up to at least certain minimum levels so that the gap between them and the advanced areas would be reduced to the minimum. It also suggests that

districts should be adopted as the basic units for educational planning and development. The disparity associated with the education of girls, minorities and disabled children is reduced by adapting appropriate strategies.

On the Economics of Higher Education in India, With Special Reference to Women by Sugeeta Upadhyay, author attempts to explore the relative picture of the higher education system in the pre and post reform India, especially in terms of the participation of women in higher education. The study investigates the role of economic factors in the enrolment decision at the higher education level in India. The study hypothesized that when expenditure on education is considered as investment while the phenomenon 'educated unemployed' remains skewed towards women, the decision to invest on women's higher education does get affected adversely. The hypothesis is based on the facts that investment in higher education is expected to be highly influenced by at least two important parameters namely the 'probability of getting job' and the 'life time earnings'. The analysis shows that both of these parameters are less for educated women than their male counterparts. The study further discusses the enrolment at higher level education with the help of some explanatory variable in the post reform period. The study concludes that the rate of participation of women is in a disadvantaged position in the post reform period. Relatively low possibility of getting job as well as unfavourable prospects of getting life time earnings of different female degree holders at the higher education level acted as a deterrent factor in the enrolment decision for women in the post reform period. The findings of the present study suggest that the measures taken up in the post-reform period which encourage education as a field of profitable investment by the private investors has further worsened the

quality of the education in terms of rate of participation of women. Equal opportunity in education not only serves as a 'basic need' but also ensures that the potential intellectual talent is not lost due to wrong policy action. The effects of equal access to education are difficult to calculate, but not unreasonable to envisage. The mal-distribution of education has both normative and economic consequences.

Higher Education in India: Issues, Concerns and New Directions, a report by University Grants Commission (2003) gives highlights of the discussions of the UGC Golden Jubilee Seminars organized at Eleven Universities in the country during August-November 2003, focusing on addressing different issues and concerns of higher education in India. The higher education system in India has grown in a remarkable way, particularly in the post-independence period, to become one of the largest systems of its kind in the world. However, the system has many issues of concern at present, like financing and management including access, equity and relevance, reorientation of programmes by laying emphasis on health consciousness, values and ethics and quality of higher education together with the assessment of institutions and their accreditation. These issues are important for the country, as it is now engaged in the use of higher education as a powerful tool to build a knowledge-based information society of the 21st Century. Keeping these objectives in mind and on the basis of the proceedings of the seminar, the whole report is categorized into three broad sections viz. (i) Management of Education, (ii) Reorientation of Higher Education, and (iii) Quality Assurance in Higher Education. The issues of public private partnership, governance, access and equity and policy planning for higher education have been addressed extensively in the report. The report emphasizes the need for greater involvement of industries as

partners with educational institution directly for the development of human resources. Creation of national Human Resource Development fund is necessary to tackle the problem of access and equity. This fund may be used to offer financial support to students directly based on the criteria of talent, and financial as well as social backwardness. Number of measures has also been given to improve the evaluation and assessment system.

A report by World Bank titled Higher Education - the Lessons of Experience (1994) examines the main dimensions of the higher education crisis in developing countries and assesses the prospects for successful reform. In exploring strategies and options to improve the performance of higher education systems, it focuses on four main directions for reform: greater differentiation of higher education institutions, including the development of private institutions; diversification of funding sources for public higher education; a redefinition of the role of the state in higher education with greater emphasis on institutional autonomy and accountability; and an emphasis on the importance of policies explicitly designed to give priority to quality and equity objectives. The interrelatedness of academic programs and institutions of higher education has seldom been taken into considerations. Advanced scientific training and research requires strong undergraduate program. High quality instruction in engineering, medicine, agriculture and applied social science is built on sound training in the natural sciences, mathematics and even humanities whose importance to economic development is less obvious and thus less apt to attract support form external agencies. In brief, whole institutions and systems of higher education must be strengthened to produce sustainable improvements. The report also found that World Bank lending for higher education has been most successful. Through a series of complementary



project investments, World Bank has developed a sub-sectoral strategies for intervention. The successful launching and implementation of reforms and innovations is conditioned by the ability of decision makers to build a consensus among the various constituents of the higher education subsector. Cost attainment, cost recovery and internal efficiency reforms must confer tangible benefits to governments and universities and be introduced in the context of more fundamental reforms that affect the autonomy and financing of institutions.

## **2.5 Migration for Education**

Richard Davone in his paper *Diasporas and Development* has produced a study of the role of expatriates in the economic development of home countries. Emigration of skilled labour is a substantial cause of concern for most emerging countries. United States is the major destination for foreign skilled workers. With the help of case studies of different countries he tries to examine the economic effect of skilled emigration for sending countries. China, India and Israel have all experienced investment and/or technology booms over the past decade and there are reports of expatriate leadership in all. The whole study suggests that expatriate mobilization effort for investment might best be focused towards key players of the Diaspora and not on the mass mobilization. The process of key player mobilization of resources would be more efficient than mass Diaspora mobilization networks.

Mark R. Rosenzweig (2006) in his paper, *Higher Education and International Migration in Asia: Brain Circulation* paid attention on the impact of emigration of skilled workers on the returns to educational investment in the low income countries. The study examined the factors that

are responsible for international mobility of students and also the effect of migration on the sending countries. The total number of international students in the world is large. In 2005, UNESCO reports that over two million students were enrolled in tertiary institutions as foreign students. 52.4 per cent of these were from Asian countries; just slightly below the population share of Asia in the world i.e. 56.5 per cent. Five major destinations for the students are U.S.A, United Kingdom, Australia, Japan and Germany. The study developed different mathematical models for clarity of the subject. A simple model of international pricing of skills and schooling location choice is set out to clarify the issues and motivate the subsequent analysis. To measure the global rewards to skill, estimates are drawn of skill prices of nineteen Asian countries. Estimates are also presented of the determinants of distribution of foreign students in USA and of the choices of students of which host country to obtain their schooling. Model is also developed for measurement of stay rate as well as return rates of foreign students and their determinants. The results indicate that increase in the numbers of colleges and universities per-capita on average increases the outflow of students for foreign (post-graduate) training. The most important feature of student mobility is that a large fraction of students schooled abroad return to their home country, more so students from Asian countries. The rates of return of foreign-trained students are lower for low-wage countries. Such countries have larger domestic populations of foreign-trained graduates, because they export more students, compared with high-wage sending countries. The incidence of subsidization of foreign students in high-income countries is disproportionate to low-wage countries. Even though low-income countries appear to be net beneficiaries of the international circulation of students, there are two issues related to the

international circulation of students. First, the individual private beneficiaries of foreign schooling are likely to be among the high-income elite within a country. Tuition/travel costs are high for obtaining schooling abroad relative to home and most foreign schooling is self-financed. A second problematical aspect of the outsourcing of higher education is the 20 per cent elite from low-income countries, who are 'captured' by high-income countries. Finally, the study ended with the suggestion that higher-education policies in countries with low skill prices, however, cannot be appropriately formulated without attention to the causes of and returns to the out-migration of students for higher education, and higher-paying jobs. Therefore, educational policies in low income countries need to be attentive to skilled emigration.

Indian's spend nearly \$4 billion annually to send their children abroad for higher studies and technical training while there is no reason for India not emerging as a global hub for higher education and technical training. The real challenge therefore, is to expand capacities in higher education to keep ahead of the curve of rising domestic and global demand (Sanat Kaul, 2006).

## **2.6 Concluding Observation**

After going through all these works, research papers, it is evident that number of studies has been done on the economics of education, its contribution for the development of human capital and finally, the economy of the region. Some scholars have also discussed the global as well as Indian scenario of higher education, problems faced by the sector and the possible strategies to solve the problem. These studies have also pointed out the problem of accessibility as well as the educational institutes among

Indian States. Series of studies on Indian higher education system seriously pointed out Bihar as one of the most educationally backward regions of the country. But, none of the above studies has exclusively worked on the reasons of poor performance, low accessibility and declined quality of higher education system in Bihar. No specific study has been conducted on the problems of out-migrant students of Bihar in the macro perspective, identifying the factors responsible for such out-migration and their source of financing. In a nutshell, no objective and complete treatment of problems of higher education system in Bihar and the related consequences have been undertaken so far. In this background, the present study is first of its kind to understand some of the above discussed problems. It seems that the present study makes an effort to figure out possible solutions and also intended to fill the research gap.