CHAPTER-1
INTRODUCTION

Education is the key parameter in the growth strategy of any developing nation and has rightly been accorded an honoured place in the society. Education is not only an instrument of enhancing efficiency but also an effective tool of augmenting and widening demographic participation and upgrading the overall quality of individual and society.Education is a powerful instrument in the process of overcoming inequalities, accelerating social transformation and achievement of economic progress. It can effectively establish a new social order based on freedom, equality and justice and hence education is considered as a catalyst of social change. (Govinda, 1995). Education improves functional and analytical ability and thereby opens up opportunities for individuals and also groups to achieve greater access to labour markets and livelihoods. A better educated labour force is essential if we are to meet the labor supply requirements of faster growth. Education is not only an instrument of enhancing efficiency but is also an effective tool of widening and augmenting democratic participation and upgrading the overall quality of individual and societal life. (Bhong and Shinde, 2011).

The provision of education creates private benefits that go to the students and the student's family. The educated and skilled individual is able to earn higher wages than the uneducated and unskilled workers. The educated worker is less likely to be frequently unemployed and is more likely to find a job that is intellectually rewarding. The provision of education also creates spillover benefits to society.According to Gunnar Myrdal (1972), the basic element in human development is education. In the premise of the interlocking circle of development, economists observed that to improve economic and social life a man must improve his education. According to National Human Development Report (2001), the process of educational attainment has an impact on all aspects of life.

Significance of higher education:

Higher education is a critical pillar of human development and is considered to be the key factor in initiating and accelerating the process of national development. The core mission of higher education is to educate, to train, to undertake research and to create human resource. It provides not only the high level skills necessary for labour markets, but also the training essential for teachers, doctors, engineers, civil servants, scientists, entrepreneurs and other professionals. In the words of Jean Dreze and AmartyaSen (1995), “Higher education is one of the most important inputs that influence the all round development of any nation, especially in the field of economic, political, social, cultural and spiritual. It enables people to ‘build up their capabilities’ thereby broadening which in turn is the primary end and principal means of development”. According to Tilak (2005) the externalities of higher education are indeed immense and they have profound positive effect on economic growth. Baum,et al. (2010) have shown that earning abachelor’s degree will result in significant increase in lifetime earnings overhaving only a high school diploma.

Higher education sector is in sharp focus as acquisition of knowledge and multiple and relevant skills can alone propel the blossoming of man power, which will rejuvenate the State in terms of social and economic growth. (Syed Menartey Begum,2010).It is noted that higher education institutions play an important role in setting the academic standard for primary and secondary education. They are responsible for not only providing the specializedhuman capital in order to corner the gains from globalization, but also for research and development, training inside the country and provision of policy advice. As such United Nations Educational Scientific and Cultural Organization (2000) stated that 'Higher Education is no longer a luxury; it is essential tonational, social and economic development'.

Higher education is a powerful tool to build knowledge and to bring in a paradigm shift in the information based society.The Millennium Development Goals of the United Nations (MDGs, 2002) considers knowledge as the prime mover of development in the new millennium. Access to knowledge can possibly be achieved through enrolment in the higher educational institutions. Higher educational institutions provide the required trained and educated manpower to run and develop important programmes leading to maintenance, growth and development of a nation. (RajuNarayanaSwamy, 2011).

The significance of higher education is more pronounced in the era of globalization as higher educational institutions have been both the agent and objects

of globalization. As such, globalization has increased the demand for new skills and specialized knowledge, the absorption of which requires the availability of a well trained and highly educated cadre of workers. International mobility, global comparison, bench marking, etc., has gained lot of importance in policy making, with regard to higher education. Foreign institutions are entering the country in a big way taking advantage of differential and excessive demand for higher education. The globalization has ushered in new choices as well opportunities. The choices are in terms of variety of new courses available to the students. The opportunities are in terms of more challenging jobs to the skilled individuals. (Scott, 1998).

Higher education in India:

Higher education assumes special significance in the context of transitional society like India which has to face multifaceted developmental challenges. In India higher education is the chief instrument to ensure the upward mobility of the people and the advancement of the country and it is an important sector for the growth and development of human resource which can take responsibility for social, economic and scientific development of the country. (Komow, 2012). In the emerging scenario of knowledge based society of 21st century, higher education become a crucial issue in creating skilled and knowledgeable human resources to meet the forthcoming challenges of the new economic reforms.

Indian higher education has a long history with universities like Nalanda and Takshashila dating back to several centuries. The system of higher education now existing in India was originally implanted by the British rulers in the mid 19th century to serve the colonial economic, political and administrative interests and in particular, to consolidate and maintain their dominance in the country. The major objective of higher education then was to turn out people who can support the colonial administrations. After attaining independence in 1947, India had a close look at the objectives of higher education in the context of it's own national development needs. The University Education Commission (1948-49), under the Chairmanship of Dr.S. Radhakrishnan, gave the foundations for the future of Indian higher education. The report of the Education Commission (1964-66) under the Chairmanship of Dr. D.S. Kothari symbolized the relationship between education and national development. Higher education in India is passing through a phase of unprecedented expansion, marked by an explosion in the volume of students, a

substantial expansion in the number of institutions and a quantum jump in the level of public funding. The enormity of the challenge of providing equal opportunities for quality higher education to ever-growing number of students is also a historic opportunity for correcting sectoral and social imbalances, crossing international benchmarks of excellence and extending the frontiers of knowledge. (RenuBatra, 2011).

India is a nation of young people. Out of a population of above 1.2 billion in 2011, 672 million people were in the age group 15 to 59 years, which is usually treated as the “working age population”. It is predicted that India will see a sharp decline in the dependency ratio over the next 30 years, which will constitute a major ‘demographic dividend’ for India. In the year 2011, 511 million of population of the country was in age group of 18-23 years. (Report of Ministry of Human Resource Development, 2011-12).

The Human Development index for the year 2014 ranked India at 135, one of the lowest among the League of Nations.(Human Development Index. Wikipedia.Com). India has been ranked 120 in adult literacy rate. It indicates that we require more institutions to address the issues of accessibility and we need to provide higher education at an affordable cost also. (RajuNarayanaSwamy, 2012). As such, higher education was recognized as a powerful instrument of socioeconomic advancement of the society in general and a vehicle for upward social mobility for deprived and marginalized sections in particular. (Chauhan, 2011).

Realizing the importance of higher education, the Government of India has increased the outlay on higher education from Rs.23,120 million in 1990-91 to Rs. 95,620 million in 2004-05 at current prices with an annual growth rate of 12.3 percent. However, the proportion of Gross Domestic Product allocated to higher education has sharply declined from 0.46 percent in 1990-91 to 0.34 percent in 2004-05. (www. ugc.in.)

India has the third largest higher education system in the World, next only to China and the United States. India made intensive efforts to improve access to higher education and it grew rapidly after independence. The Government supported higher education by setting up universities and colleges. At the time of independence of India, there were only 20 universities and 500 colleges in the country with 2.1 lakhs students in higher education. In 2011, the numbers are increased by 29 times in the case of the universities, 71 times in the case of colleges and the

studentsenrolment has gone up by 97 times in the formal system of higher education in comparison to the figures at the time of independence. The total enrolment in the higher education system increased from 0.17 million in 1950-51 to 14.86 million in 2009-10 and to 25 million in 2011-12. In relative terms the gross enrolment ratio in higher education increased from 0.7 percent in 1950-51, to 13.00 percent in 2009-10 and to 20.4 percent in 2011-12. Total enrolment at higher education level increased at an average annual growth rate of 9.50 percent. (Report of Ministry of Human Resource Development, 2011-12).

Though enrolment in higher education has been rising steadily the enrolment rate has continued to remain low compared even to some of the developing countries of Asia and Latin America. The present gross enrolment ratio (GER) in higher education is still very low as compared to the World's average of 23.2 percent and it is extremely low as compared to the average of 54.6 percent for the developed countries and 36.3 percent for the countries in transition. The gap when compared with the average of advanced countries is very large. The average enrolment in higher education in Canada is 88 percent, followed by USA with 80.9 percent, Australia with 79.8 percent, United Kingdom with 52 percent and France with 50 percent in 2010. (Deepti Gupta and Navneet Gupta, 2012).

Now, the Government of India has set the target of achieving 30 percent gross enrolment ratio in higher education by 2020. Various new initiatives are being taken by the Government to increase the gross enrolment ratio. A lot of thought has since been generated towards the emerging concerns of higher education. New thrust areas were identified; new institutions were established and the whole directions of development were redefined. Greater attention was given to scientific and technological education and research as well as professional education and training. The nation has embarked upon initiating a number of development linked strategies for promotion of higher education. The latestof theseinclude the setting of the 'National Knowledge Commission'[1](NKC), 'The committee to Advise on Renovation and rejuvenation of Higher Education'[2] with Yash Pal as Chairman and the Conclave of Vice-Chancellors and other forums of educationists. (Report of Ministry of Human Resource Development, 2010-11).

Institutional framework of higher education in India:

The institutional framework of higher education in India consist of universities established by an Act of Parliament (Central universities)[3] or of a State legislature (State universities)[4], Public Universities[5], Deemed Universities[6],Institution of national importance (prestigious institutions awarded the said status by parliament)[7],

1. The Commission was constituted on 13 June 2005, by the then Prime Minister of India, Dr. Manmohan Singh, The commission consisted of 8 members. The Commission was to advise on policy for creating knowledge economy.
2. The committee to adviseon renovation and rejuvenation was setup in 2008.The major recommendation of the commission was the creation of an all-encompassing National Commissionfor Higher Education and Research (NCHER), a constitutional body to replace the existing regulatory bodies including the University Grants Commission, All India Council for Technical Education, National Council for Teacher Education and Distance Education Council
3. A university established or incorporated by a Central Act.
4. A university established or incorporated by a provincial Act or by a State Act.
5. A university established through a State / Central Act by a sponsoring body viz. a society registered under the societies Registration Act 1860, or any corresponding law for the time being in force in a State or a public trust or a company registered under section 25 of the Companies Act, 1956.
6. Institutions which have been accorded the status of a university with authority to award their own degrees through Central Government notification. An Institution deemed to be university refers to a high-performing institution, which has been so declared by Central Government under Section 3 of the University Grants Commission (UGC) Act, 1956.
7. Institution of National Importance (INI) is a status that may be conferred to a publichigher education institution in India by an Act of Parliament, an institution which serves as a pivotal player in developing highly skilled personnel within the specified region of the country/State.

Institutions established by State legislative Act and colleges affiliated to the university (both government-aided and unaided)[8].

In India the number of universities increased from 28 in 1950-51 to 123 in 1980-81, to 266 in 2000-01 and to 523 in 2010-11. Similarly, the number of colleges increased from 578in1950-51to 4738 in 1980-81, to 11,146 in 2000-01 and to 32,974 in 2010-11. As on 31.03.2012, there were 574 university level institutionsincluding 44 Central Universities, 286 StateUniversities, 111 State PrivateUniversities, 129 Deemed Universities and 4 Institutions established under State legislation, 33 Institutes of National importance established under Central legislation and 73 private universities. There were 35,539 degree and post-graduate colleges in 2011-12 coming under the purview of the University Grants Commission and the rest were professional colleges under the purview of the Central Government or other statutory bodies like the AICTE[9], ICAR[10],MCI[11] etc. Of the colleges underUGC

purview,20 percent have been recognized by the University Grants Commission (UGC) under section 2(f) which permits them to receive grants from the UniversityGrants Commission (UGC). The existing colleges and universities in India offers facility of education and training in almost all aspects of intellectual endeavors-arts, humanities, natural, mathematical and social sciences, engineering, medicine, dentistry, agriculture, education, law, commerce, management, music and performing arts, national and foreign languages, culture, communications, etc. (Report of Ministry of Human Resource Development, 2011-12).

8.An institution established or incorporated by a State Legislature Act. colleges affiliated with University/ University level Institutions-Under Section 12A(1)(b), College means any Institution, which provides for a course of study for obtaining any qualification from a university and which, in accordance with the rules and regulations of such university, is recognised as competent to provide for such course of study and present students undergoing such course of study for the examination for the award of such qualification.

9.All India Council for Technical Education (AICTE) was set-up in November 1945 and it is responsible for proper planning and coordinated development of the technical education and management education system in India.

10. The Indian Council of Agricultural Research (ICAR) established in 1929, is an autonomous organisation under the Department of Agricultural Research and Education, Ministry of Agriculture, Government of India. The Council is the apex body for coordinating, guiding and managing research and education in agriculture including horticulture, fisheries and animal sciences.

11. The Medical Council of India (MCI) was established in 1934.The Council grants recognition of medical qualifications, gives accreditation to medical colleges, grants registration to medical practitioners, and monitors medical practice in India.

Disparities in higher education in India:

Inspite of the phenomenal growth of number of universities and colleges in India, there are significant disparities in access to higher education. There exists **State disparity** in the number of students enrolled in higher education and numberof higher educational institutions. The maximum number of colleges recognized so far under Section 2(f) were in the State of Uttar Pradesh (1357), followed by Maharashtra (1115), Karnataka (727) and Andhra Pradesh (540), etc. The maximum number of students had been enrolled in the State of Uttar Pradesh (29.11 lakhs), followed by Maharashtra (24.14 lakhs), Andhra Pradesh (19.98 lakhs), Tamilnadu(18.55 lakhs), etc. and Sikkim State had the lowest enrolment of 12,757 amongst States. (Report of Ministry of Human Resource Development, 2010-11).

Though the vision of higher education in India is to realize the country's human resource potential to its fullest with equity and inclusion, there exists**gender disparity** in higher education. The number of women students enrolled per hundred men students enrolled was 74 in 2011-12. Access is generally lower for girls as

compared to the boys–the gross enrolment ratio being12.42 per cent for the males and 9.11 per cent for the females. (Report of Ministry of Human Resource Development Report, 2010-11). In absolute numbers, Uttar Pradesh was on the top with 12.01 lakhs women enrolment, followed by Maharashtra(10.60 lakhs) and Tamil Nadu (8.61 lakhs). In terms of percentage, the women enrolment was the highest in Goa (60.31 percent), followed by Kerala (58.62 percent), Meghalaya (54.19 percent) and Himachal Pradesh (51.16 percent). However, Arunachal Pradesh had the lowest enrolment of 36.69 percent. The women enrolment was the highest in the faculty of Arts (41.91 percent), followed by Science (19.17 percent) and Commerce (16.31 percent), constituting 77.39 percent in the three faculties. The remaining 22.61 percent were in various professional faculties. Among professional faculties, the maximum percentage of women enrolment had been in the faculty of Engineering/Technology (11.06 percent). During 2011-12, as many as 284 new women colleges had been established in various States, thus taking the total number of women colleges to 4266. (Report of Ministry of Human Resource Development, 2011-12).

Further, there is significant **disparity in enrolment in higher education between scheduled caste, scheduled tribes and all categories.** While in2011-12, the gross enrolment ratio was about 20.4 percent for Allcategories, the gross enrolment ratio for the scheduled castes was only 11.6 percent and for the scheduled tribes it was 7.7 percent. Thus, the gross enrolment ratio for the scheduled castes/scheduled tribes was three times less compared withAll categories. The females belonging to the lower castes suffer more acutely in accessing higher education than other females. (Report of Ministry of Human Resource Development, 2011-12).

The access to higher education also differs between the **religious groups**. The gross enrolment ratio was the lowest among the Muslims as compared to Hindus and Christians. In the case of religious groups, the Muslim women seem to be facing the most difficult circumstance. The gross enrolment ratio among Muslim females was 5.8 percent as compared to 9.32 percent for Hindu females, 12.7 percent for Sikh females and 16 percent for Christian females. (Report of Ministry of Human Resource Development, 2010-11).

There are perceivable differences in enrolment rates among the **poor and non-poor**(irrespective of their caste, ethnic, religious, or gender backgrounds). The gross enrolment ratio for the poor was 2.21 percent as against 12.36 percent for the non-poor. In the rural and the urban areas, the gross enrolment ratio for the poor stood at 1.40 percent and 4 percent respectively, which was evidently quite low compared with 7.12 percent and 27.15 percent for non-poor respectively. (Report of Ministry of Human Resource Development, 2010-11).

There exists, difference in higher education for different **occupational groups**. Differences in the gross enrolment ratio are also equally evident across occupational groupsin the rural and the urban areas. The gross enrolment ratio was 3 percent for non-farm wage laborers and 1.41 percent for farm wage labourers. Similarly, in the urban areas, the gross enrolment ratio was only 3.26 percent for casual labourers. Thus, both in the rural and the urban areas, the enrolment rates for wage (casual) labourers were the lowest, particularly for the farm wage laborers. (Report of Ministry of Human Resource Development, 2010-11).

There exists **disparity in course wise**enrolment in higher education. Out of the total students enrolled-28.56 million, 34 percent of the students had been in the faculty of arts, followed by science-12 percent and Commerce-14.50 percent, thus constituting 60.50 percent enrolment in just three faculties. While the remaining 39.50 percent enrolment had been in professional faculties. (Report of Ministry of Human Resource Development, 2011-12).

The Eleventh Five Year Plan of India recognized the problem of multiple nature of disparities in enrolment rate and proposed policy measures to enhance their access to higher education. It brought the inclusiveness in higher education at the centre of our higher education policy and Inclusive education essentially requires an increased access to higher education to these multiple groups who suffers from lower access to higher education. Expansion of access by supporting existing institutions, establishing new institutions, supporting State Governments and non-Governmentalorganizations (NGOs) to supplement public efforts are needed for removing regional and other imbalances that exist at present. (Report of Ministry of Human Resource Development, 2010-11).

Determinants of higher education:

At the household level there are various determinants of higher education. The socio economic characteristics of households, cost of education and various scholarships provided by the Government have significant impact on the enrolment in higher education. Fuller, Manski, and Wise (1982), observed that tuition fees, financial aid and parent'seducation are the major factors influencing university enrolment decision.Leslie and Brinkman (1987) and Heller (1997) noted a negative relationship between tuition fees and college enrolment.Kane and Spizman (1994) and Granderton andSantos (1995) remarked that socio economic statues has a significant influence on college enrolment. According to Ronald Ridker (1997) household income and cost of education are significant determinants of college enrolment and mother's education has a beneficiary effect on college enrolment for poor households than for rich households.Tansel and Bircan (2006) found that households in urban areas and single mothers put more resources toward enrolling their children in colleges. However, Qian and Smyth (2010) remarked that mother's education, father's occupation and familysize have significant impact on enrolment of children in colleges.

Need for the study:

The association between higher education and it's impact on economy is of immense importance to India. In the era of globalization there is increased demand for higher education and we have to make higher education competitive, competent to produce right people in line with the global changes. For the achievement of national goals of development particularly those of the millennium development goals, there is the need to be convinced about the issue of accessibility and equity in higher education. The college students of the twenty-first century are increasingly diverse in terms of race, ethnicity, gender, ability and socio-economic status and it is essential to analyse difference in enrolment in higher education for different groups of people.

Research gap:

In India many research studies -Chandra Gunawardena (2004), Kola Adeyemi and Nelson Akpotu (2004), Harsh Gandhar (2005), Afzal (2008),Chauhan (2011), ManishaMehrotra and Rashmi Joshi (2011), Kamble (2012), Iyabo Abe (2012), etc., were formulated at analyzing the disparity in higher education. Existing studies have

focused on analysingState disparity or social group disparity or rural-urban disparity in higher education.The current study tries to fill this research gap by analysing all the essential disparities in higher education.

In U.S, England, Denmark andPortugal many research studies-Tinklin (2000), John Cheslock (2001) Carla, Raymond, Florax and Piet Rietveld (2003), BogdanSojkin, PawełBartkowiak and AgnieszkaSkuza (2012), Venkatesh and VijayaChandranPillai (2013), Mohanraj (2013), etc., tried to analyze the determinants in higher education. But in India there had been lack of research attempt on analyzing the determinants of higher education. In this direction the current study is a pioneering effort in identifying the household determinants of participation in higher education.Hence the current research study on **'Disparities and determinants of higher education in India'** was formulated with the following **objectives**:

- To examine interStatedisparity in enrolment in higher education and number of higher educational institutions;
- To find out the gender disparity in enrolment in higher education;
- To analyse the social group disparity in enrolment in higher education;
- To examine the rural/urban disparity in enrolment in higher education;
- To identify the determinants of participation in higher education and
- To identify the household determinants of choice of courses and choice of higher educational institutions.

Scope of the study:

The study is related to the analysis of State disparity, gender disparity, social group disparity and rural/urban disparity in higher education. It would help in identifying the constraints affecting women's participation and scheduled caste and scheduled tribes participation in higher education. The study would help to evolve policies and support programmes to increase women's access to higher education and identify the suitable intervention programmes for extending educational opportunities to the rural and remote areas. Further, the study is also related to analyzing the determinants of higher education at the household level. It helps to find out the possible impact of socio demographic characteristics of the family on the enrolment in higher education. The recommendations emanating from the study can form a guideline for taking the decision in higher education planning.

Limitations of the study:

The study combines macro analysis and micro analysis and is subject to certain limitations:

1. The disparities and determinants of higher education are analysed only in terms of enrolment in higher education.
2. At the macro level, the study is confined to selected States and hence adequate care must be examined when generalization is to be made for the whole country.
3. The study is limited to the analysis of State disparity, gender disparity, social group disparity, course wise disparity and rural-urban disparity in enrolment in higher education.
4. The study does not examine intrastate disparity in higher education.
5. Disparity in course wise enrolment is not analysed in rural-urban areas due to lack of required data.
6. The participation in higher education is analysed in terms of enrolment and the determinants of participation are analysed only at the household level.
7. The micro level data is obtained by administering an interview schedule and hence the information given by the respondents is subject to recall bias and
8. The analysis of quality of higher education and rate of return on higher education is beyond the scope of the study.

---------X-------