CHAPTER - I

INTRODUCTION
1.0 INTRODUCTION

For the development of human society and the nation there is a need of multifocal effects of government as well as individuals at different levels from local, regional, national and international in the area of education. Education as an instrument of social change focuses mainly on individual behavior. It shapes economic development of a nation. The quality of planning and programmes framed for better ends depends upon the quality of existing human resources in the respective areas which are generated in the academic institutes having adequate information sources and services. According to UNESCO (1998) report, "Learning: the Treasure Within" popularly referred to as the Dollar's Report, visualize four functions for the Universities- "to prepare students for research and teaching, to provide highly specialised training courses oriented to the needs of societies, to be open to all in order to faster lifelong education in its widest sense and to strive for international cooperation". The report emphasizes that education for all, throughout life, has to be founded on four pillars of learning – to know, to do, to live together and to be. Clearly education goes beyond generating knowledge and applying it for the development of the society. Its objective has to be all round human development. To this, Bacon said, "knowledge is power" it means, the accumulation of facts about material and men in data, which properly organized became information. The rigorous training of gathering information and processing for some purposeful end product leads to human knowledge. Power on the other hand is much more then the ability to enforce certain intentions in the face of resistance stated Tayler (1986). It is remarkable to note what Swami Vivekananda said about education, "Education is not the amount of information that is put into your brain and runs right there, undigested, all your life. We must have life building, man making, character making and assimilation of ideas. If you have assimilated five ideas and made them your life and character, you have more education than anyone who has got by heart a whole library or information center".

In the developing world, the educational progress of the past two three decades has been achieved by introducing new method, plans and projects in their countries time to time. As per the World Education Forum –EFA 2000 (Education Forum Assessment, 2003): The number of children not enrolled in school decreased from an estimated 127 million in 1990 to 113 million in 1998. The net enrolment ratio in primary education worldwide
increased from 80 to 84 percent. At the end of the 1990s developing countries as a whole had achieved a net enrolment of 80 percent. The overall adult literacy rate has increased to 85 percent for men and 74 percent for women, though the levels of illiteracy still remain unacceptably high. Nearly two-thirds of the world’s illiterates continue to be women although in percentage terms the situation has improved in South Asia from 32 percent in 1990 to 40 percent in 2000. About three-quarters of the world’s illiterate are lives in E-9 Countries: India (which accommodates a third), China, Pakistan, Bangladesh, Nigeria, Indonesia, Brazil, Egypt and Mexico. If “Education and Information for All “ to be achieved, breakthroughs must take place in these countries. Even though they share a number of challenges because of their physical size, large populations, and vast rural and remote areas, yet, developments in science, technology, information, communications and education etc. complied with the inherent economic potential of these countries present dramatic opportunities to meet these challenges. “Education is a cornerstone of economic growth and social development and a principal means of improving the welfare of individual “, according to World Bank (1990) To this, Theodore W Schultz said, “education contributes to economic and social development. It contributes to economic development through increased national income and individual earning.”

1.1 INFORMATION AND KNOWLEDGE

We are living in an information or knowledge society; education will be perceived as a value in itself, which will continually be assessed by this society. The relationship among education, knowledge and information are unidirectional, where education contributes to information and information develop knowledge, then knowledge contributes to further education. The knowledge society of the twenty-first century can only be built through education and information. Information and knowledge are two sides of a single coin. Information is simply data-raw material and like a news report that you listen to and passively absorb, but can't do anything about. On the other hand knowledge is an understanding of information and requires work on your part. Knowledge places information in a broader context of things like history, processes, people, comparisons of data, and so on. Acquiring knowledge takes effort; you have to dig deeper into information to turn it into knowledge. The developed countries are more educative due to their information system. They are very egger towards new information and knowledge. In the United States of America, more than 46% GNP and 53% of labor income is related to
information knowledge and communication stated by Hanna (1991). In OECD countries, the information sector alone accounts for one third to one half of GDP and of employment. According to Wellisch (1997) by the year 2000, this sector is expected to grow to 60% of the European community GDP. Parallel to this phenomenon, similar situation is being witnessed in other developing countries with most of their activities being related to information.

1.1.1 Information Society

With the march of time, information has become the central focus of human living, The new dimensions and spheres of telecommunications, television, telemetric, computer related IR techniques along with digital technologies, publishing firms, radio, satellite communication, etc. are at cross roads. The people engaged on other sectors like agriculture, industry, research and development, bureaucracy, journalism, entertainment are running after information of one kind or other. Their jobs are based on information ideas and information technology. They used to perform the tasks, which normally involve collecting, processing, storing, disseminating and using information in several forms for different purposes. These activities that consider information as the central theme materially affect individuals, organization, societies economic value to the present society. In other words, this emerging phenomenon is rooted in the concept of information changes in the process of social evolution with three different stages in which the role of information is the mainstay. In the agrarian society, the bit of information put to the minds of the formers brought radical changes in the pattern of agrarians process, products and methods of farming so that, the emerging changes in the livelihood of people could be felt. The second stage is that of an industrial society where information is primarily considered to be the main spirit behind the growth and development of an industrial world. In the words of noted futurist, Alvin Toffler (1970), the post industrial society is information society in which the striking changes are dramatically arrived directly affecting people and organizations in their workplace, at home, and their behavioral patterns.

Thus, information as the saying goes is power for the overall development of the society. So, the roles of library and information center have great importance to the present society. The primary objective of libraries is to store, organize and disseminate to information. This objective will never change, although the format and the methods that are
used can change dramatically, providing new opportunities and challenges to the users of it. Higher education, scholarship, technology and economics, which are all interrelated, play an important role in understanding the needs of libraries. Here, the term “technology” refers to computer technology, communications technology, and information technology. A librarian who is aware of all of these three technologies can face the challenges of the new millennium. Like their colleagues everywhere, library professionals in India, particularly those serving high-tech institutions are already subject to various challenges. The introduction of computers was a challenge to all librarians. New technology may call for organizational change in the traditional library. Librarians may have to function more like consulting information engineers than as the traditional, passive custodians of information and dispensers of documents moving from a collection-centered model to one that is access- and service-oriented. Ranganathan’s (1957) fifth law of library science tells us about the ever-growing nature of libraries. To support this growth libraries and information center should study the various angles of information.

1.1.2 The Concept of Information

Libraries are repositories of information sources and play an important role in the organization it serves. The access to information is available through print, non-print, or micro and macro format resources. Our images of information affect the way we are able to think about the world we live in, because nothing can move without information and it’s processing. Our place in history, our economy, the socio-political processes and other hopes for future are all understood in term of information. The broad subject matter of information science combines the concept of information in their appropriate theoretical and practical contexts so that a praise understanding of the concept can be attempted at along with its need and utility. Library information and documentation center have always been concerned with the concept of information and knowledge, as these constitute their basic stock-in trade. The information is a social process and can be defined in relation to its needs. The librarians and information scientists are not so much engrossed to see with universal definitions of information as they were with supplying relevant information to those who seek them.

However, the impact of information is so diverse that, the term information is very often confused and understood in its relation to certain other associated concepts such as
data, fact, observation, intelligence, skill, knowledge, experience, wisdom etc. Although, these terms have their own etymological and implicational differences with information, the meaning and operational uses are more understood in information terms due to strong ties of interrelationship among them. However, these terms—data, information and knowledge appear to be more synonymous, in spite of their differences in meaning. By a simple explanation, their meaning can be well differentiated. Data are symbolic surrogates that represent people, objects, events and concepts in terms of words, numbers, symbols, etc. For example, scientific data in laboratory experiments, social data on population, price index, trade statistics. Etc. Information is an aggregate of facts and processed data that is communicated in a meaningful term. Examples, results of laboratory investigation, stock exchange information, news of national and international events, etc. On the other hand knowledge is consolidated and structured information in concrete form or a phenomenon of mind. However, these terms are so inextricably interwoven that in common parlance they seem to be synonymous. It is necessary to comprehend the usage of these words for understanding varied purposes, its meaning and definitions.

1.1.3 Meaning of Information

The meaning of information is widely used; scholars, scientists and people are all over world have wide range of ideas as regards to information. Even dictionaries seem to differ. The term information has been derived from two Latin words “information” and “informer”. Both the terms convey the same meaning of giving shape to something and forming a pattern. Cambridge International Dictionary of English says informs means “to tell (someone) about particular facts“ or “information mean knowledge about something, esp. facts and news”. The Oxford English Dictionary defines it as:

1. Knowledge derived from study, experience, or instruction.
2. Knowledge of specific events or situations that has been gathered or received by communication; intelligence or news.
3. A collection of facts or data: statistical information.
4. The act of informing or the condition of being informed; communication of knowledge: Safety instructions are provided for the information of our passengers.

Information in Shannon communication theory (1940): It is instructive to review the
origins of the notion of information, in Shannon's mathematical theory of communication. The classical derivation of entropy as the measure of information -- in Shannon's paper as well in a section below -- has remarkably nothing to do with the meaning. Shannon himself cautioned against confusing a signal with what it signifies: "The fundamental problem of communication is that of reproducing at one point either exactly or approximately a message selected at another point. Frequently the messages have meaning; that is, they refer to or are correlated according to some system with certain physical or conceptual entities. These semantic aspects of communication are irrelevant to the engineering problem. The significant aspect is that the actual message is one selected from a set of possible messages".

As Hollend (1972) pointed out - "Information" appears in Shannon's theory only to the degree that the successful communication of information may lead to statistical correlations between the behaviors of two systems. Any such correlation must presumably reflect some common causal influence upon these systems, but communication theory is emphatically not a theory of causal influence; nor is it a theory of knowledge or meaning. Rather, it is a purely probabilistic theory concerned with those statistical phenomena, which are relevant to the following two fundamental problems, [of data storage and of transmission of messages over noisy communication channels.

Can "information" act by itself, without a material agent? The end of Buchanan's (1997) article is cusses this question. We have seen that a message in isolation from a messenger and a receiver means nothing. If understanding of a message always requires a material agent, then information does not have an independent existence, let alone an independent operation.

In information science the concept of information is defined in many different ways. In the following are definitions, which have through the cognitive approach relations with the modern conception of learning. In the cognitive viewpoint of information science Belkin and Huczynski (1977) define: "the information associated with a text is the generator's modified (by purpose, intent, knowledge of recipient's state of knowledge) conceptual structure which underlines the surface structure (e.g. language) of that text". Definition is subsequently elaborated by Ingwersen (1995) as information being "the result of a transformation of the generator's cognitive structures (by internationality, model of the
recipients' state of knowledge, and in the form of signs), and "on the other hand information is something-a structure- which, when perceived, may affect and transform the recipient's state of knowledge". According to Dervin & Nilan (1986), information is seen as "something constructed by human beings".

Taylor (1991) defines information behaviour as the product of certain elements of the information use environment. The elements are: "The assumptions, formally learned or not, made by a defined set of people concerning the nature of their work. .The kinds and structure of the problems deemed important and typical by this set of people. The constraints and opportunities of typical environments within which any group or subgroup of this set of people operates and works. The conscious, and perhaps unconscious, assumptions made as to what constitutes a solution, or, better said, a resolution of problems, and what makes information useful and valuable in their contexts." Based on the definition he believes that the information behaviour of different groups of people also is different.

According to Cronin (1981) the concept of information as we use it in everyday English in the sense knowledge communicated plays a central role in today's society. The concept became particularly predominant since end of World War II with the widespread use of computer networks. The rise of information science in the middle fifties is a testimony of this. For a science like information science, it is of course important how its fundamental terms are defined, and in IS as in other fields the problem of how to define information is often raised. This review is an attempt to overview the present status of the information concept in information science with a view also to interdisciplinary trends.

1.1.4 Sources of Information

The sources of information may be formal or informal. The line between formal and informal sources is difficult to draw, a reasonable approximation might be that formal sources are susceptible of use by a number of people not necessarily at the same time, while informal sources operate on an individual interpersonal basis stated by Ford (1973), Moreover, the formal sources are continuously increasing. Even unpublished sources are becoming increasingly important to scholars. Occasions will arise, especially in a special library or a university library, when a user would require information without precondition about the form of document. In such a situation, what matters is the finding of information, not the
sources as per Kaur (1997), however; it is needed to affirm from which source the information in need can be had. So, it is important to know the various forms of information. From earliest times to the present day, it is the inherent attitude of man to preserve his thoughts and ideas for the future generations form through a variety of ways like: bone, clay metal, wiz, wood, papyrus, leather, parchment, paper, film, plastic, and magnetic tape and finally in optical disc. Behind their attempt to preserve these materials for posterity, they have only one intention, to keep their ideas alive and provide the same as information for further generations to come. Libraries have played a major role not only in accelerating the use of these different types of materials for information dissemination but also studying these materials and developing more sophisticated technology for longer, faster and effective use. A better knowledge of information sources helps one to develop the right approach to collection and retrieval of information in a library setting so that information contents in these materials are better exploited and effectively utilized by the users in need. Information is pervasive and available everywhere whatever form one may say. For one’s communication convenience it can be better considered as sources with different types. Sources are the means by which ideas, opinions, facts and thoughts are communicated Users are very often confused with the numerous sources of information available to them. The problem that is often encountered by a user is, how to select from the myriad sources, the library professionals can solve the information that is of most valuable to him etc.

Therefore, the role of library professional dealing with a lot of information products in a library or information center, is always desirable to group them into convenient classes in accordance with certain logical attributes. These attributes can be the publication process, target group, physical media, nature of presentation, information contents, purpose of use, scope of treatment, period of information etc. There are some most important library exports have given some classification method to arrange the information sources in a library in a most convenient ways, like; Ranganathan’s (1964) Grouping is emphasizes by the physical characteristics of the documents with chronological order of their development like:-conventional-books and periodicals, neo-conventional-standards and patents, non-conventional – microfilm, audio, video and meta-documents-direct records unmediated by human mind. Hanson’s (1996) grouping is based on primary documents - books, journals, patents, and theses. And secondary document- abstracting, indexing bibliographies, reviews etc. Thus, Honson grouping is an improvement over the previous one and seems to satisfy the users and library professionals. Denis Grogan classification is based on primary- books,
periodicals reports, conference proceeding, patents, files studies etc., secondary- indexing abstracting reviews encyclopedia, dictionaries, etc. And tertiary- yearbook, directories, bibliographies, guide etc. This type of classification of information sources by Denis Grogan appears to be more pragmatic as it logically identifies the information characteristics of the documents. Guha (1983) has described his division of documents as per the demarcation made by S. R. Ranganathan, Hanson and Grogan.

In classificatory terms, information content and its uses are more valued than that of its physical media. According to these groupings, primary sources of information are those documents, which have independent existence, containing new and original information or the reflection of new ideas, observation, and experiments. An article in a journal is the new and original contribution of the author/contributor. Again primary document can be attributed to the publication process in which it is first published. A research monograph is the original thought content/outcome of research project of a researcher which has never been published earlier and which takes the shape of a book form for the first time. Here, secondary is used in the sense of immediately derived from something original, primary or basic, It can be cited that indexing and abstracting services are publications containing bibliographical details of the articles, with or without annotations derived from primary journals, are considered secondary publications. However, the term tertiary is used in the sense of occurring in or being in a third stage. These types of documents are usually compilations drawn from primary or secondary sources, organized and arranged according to a definite plant. Essentially, these are to aid searchers in using primary and secondary sources. Among this group are various sources like guides, directories, bibliographies that all lead to other sources of information. All these source of information are great significant in the hand of users if libraries have its true librarian. The true librarian is one who is competitive, assertive, cooperative, willing to compromise and who is equipped with technical and managerial competencies. In short, librarians must unite to withstand the revolutions that will occur in the information and communication fields. Technology alone cannot help bring about the required changes. Attitudes, practices, and policies need to change, if libraries in Indian academic area are to truly benefit themselves and their community of users by the application of new technologies. So, the objective of the academic libraries will never change, although the format and the methods that are used can change dramatically, providing new opportunities and challenges. The paradigm shift from stand-alone libraries to library and information networks, available via the Internet, can provide end-users with a seamless
connection to Internet-based services. Moreover, we are surrounded by automated, digital, and virtual libraries as well as by networked data, specialized networks, and library networks. Multimedia and the Internet have further made the job of library and information professionals more challenging specially in the field of education and research. The development of new technology also makes direct access to information easier for users from anywhere in the globe. In India the educational system, information technology and various economics, which is all interrelated, can, play an important role to bring the nation towards a developed country within 2020 as our Prime Minister’s declared on the eve of Indian’s Independence Day at Red Fort 2004. Hence, we have to re-organize our total educational system with the present demand.

1.2 EDUCATION SCENARIO IN INDIA

The origin of the Indian education comes from thousands of years ago. When great scholars used to teach through the scriptures. A variety of subjects such as philosophy, religion, medicine, literature, drama and arts, astrology, mathematics and sociology were taught and masterpieces on these subjects have been written. Under the Buddhist influence, education was available to virtually everyone who wanted it and some world famous institutions arose out of the monasteries, such as, Nalanda, Vikramshila and Takshashila (now in Pakistan). Nalanda is especially noteworthy, flourishing from 5th to 13th century AD. It had at one time about ten thousand resident students and teachers on its roll, which included Chinese, Sri Lankan, Korean and other international scholars. During the 11th century, the Muslims established elementary and secondary schools, "Madrasahs" or colleges and even universities at cities like Delhi, Lucknow and Allahabad, using Arabic mostly as the medium of instruction. During the mediaeval period, there was excellent interaction between Indian and Islamic traditions in all fields of knowledge, like theology, religion, philosophy, fine arts, painting, architecture, mathematics, medicine and astronomy etc.

The modern Indian education system dates back to pre-Independence days when for the first time a separate Department was created in 1910 to look after education. However, soon after India achieved its Independence on 15th August, 1947, a full-fledged Ministry of Education was established on 29th August 1947. The nomenclature and responsibilities of the Education Department has undergone changes from time to time since Independence. At
Present the Ministry has three Departments namely: Department of Secondary Education and Higher Education, Department of Elementary Education and Literacy and Department of Women and Child Development.

Government of India has been providing various programmes for the educational development of the people since independence: Article 45 of our constitution, which enjoins the govt. to provide free and compulsory education up to the secondary level (children unto 14 year) within ten years, but the census count of 1961 placed only 28% of the total population of India as literate and 60% of the same age group could not have primary education. However, the Government of India doesn’t stop, on its contrary it provide, planned expenditure on education since the First Five Year Plan, as per the MHRD 2002/2003 report the total public expenditure on education during last five years (in percentage of GDP) are: 3.85%(1998/99), 4.25%(1999/00), 4.30%(2000/01), 4.02%(2001/02) and 3.98%(2002/03) published on 10th December, in The New Indian Express (2003). There are special provision for total literate in India like: Operation Blackboard, District Primary Education Programme, Education Guarantee Scheme, “Education for All “(1993), and “Sarva Shiksha Abhiyan”(2002). Sarva Shiksha Abhiyan has been launched in partnership with the states. The programme is an effort towards recognition of the need for improving the performance of the school system through a community owned approach and ensuring quality elementary education in a mission mode to all children in the age group of 6-14 years by 2010. Despite dismal performance in the field of education, it is worth recording that during 1991-2001, literacy rates improved remarkably from 52.21 percent in 1991 to 65.38 percent in 2001, the female literacy rate also increased significantly from 39.29% to 54.16%. At the turn of the twenty first century India has the dubious distinction of being one of the least literate countries in the world. About 50 percent of the total illiterate people in the world live in India, every third illiterate in the world is an Indian. However, it is really gratifying to record that at the time as 2001 Census the absolute number of illiterates recorded a decline for the first time in the history of Indian Censuses. The absolute number of illiterates declined from 328 million in 1991 to 296 million in 2001, Census of India (2001).
1.2.1 Higher Education in India

Higher Education System in Indian Universities and specialized institutes are the centers for higher learning in India. The studies and disciplines cover a wide range of subjects from poetry to computer engineering to space research. Most of the universities and higher centers of learning and research are autonomous in function. A good number of universities have a federal structure composed of affiliated colleges on one tier and the university departments on the other. The affiliated colleges teach, in general, undergraduate courses, whereas the university departments conduct postgraduate teaching and advanced research. The university decides the criteria of admission into colleges and coordinates the first-degree examination in the undergraduate programmes and award of degree. Some other types of universities teach both undergraduate and postgraduate courses in general disciplines as well as in technical and professional courses. There are no affiliated colleges attached to them. There is a third category of universities and institutions where technical and professional courses are taught at undergraduate and postgraduate levels. Names like Indian Institute of Technology, Birla Institute of Technology, All India Institute of Medical Sciences, Indian Forest Research Institute, Indian Veterinary Research Institute can be quoted. Some institutes only offer postgraduate and research courses such as Indian Agricultural Research Institute and Post Graduate Institute of Medical Research.

There are three principle levels of qualifications within the higher education system in the country. These are: Bachelor / Undergraduate level, Master's / Post-graduate level and Doctoral / Pre-doctoral level. Diploma courses are also available at the undergraduate and postgraduate level. At the undergraduate level, it varies between one to three years in length; postgraduate diplomas are normally awarded after one year's study. Bachelor's degree in arts, commerce and sciences is three years of education (after 12 years of school education). In some places there are honors and special courses available. These are not necessarily longer in duration but indicate greater depth of study. Bachelor degree in professional field of study in agriculture, dentistry, engineering, pharmacy, technology and veterinary medicine generally take four years, while architecture and medicine, it takes five and five and a half years respectively. There are other bachelor degrees in education, journalism and librarianship that are second degrees. Bachelor's degree in law can either be taken as an integrated degree lasting five years or three-year course as a second degree. Master's degree is normally of two-year duration. It could be coursework based without
thesis or research alone. Admission to postgraduate programmes in engineering and technology is done on the basis of Graduate Aptitude Test in Engineering or Combined Medical Test respectively. A pre-doctoral programme - Master of Philosophy (M.Phil.) is taken after completion of the Master's Degree. This can either be completely research based or can include course work as well. Ph.D. is awarded two year after the M.Phil. or three years after the Master's degree. Students are expected to write a substantial thesis based on original research, generally takes longer. There are three types of institutions engaged in importing higher education on different courses viz,. Unitary Universities, Affiliating Universities and Deemed Universities and also Government of India has passed a bill to set up private Self Financing Universities, not requiring any financial support from the government, according to Website (http://www.ntu.edu.sg/sci/is/resgrps-14.htm#Anc_ISP7) education India.

The Ministry of Human Resource Development, Govt. of India, estimates that at the beginning of the year 1999-2000, the total number of students enrolled in the universities and colleges was 74.18 lakh - 12.25 lakh in university departments and 61.93 lakh in the affiliated colleges. Eighty per cent of the total enrollment was concentrated in the three faculties of Arts (40 per cent), Sciences (20 per cent) and Commerce (20 per cent) while the remaining 20 per cent was absorbed by the professional faculties. Enrollment at the degree level was 65.20 lakh (87.9 per cent), at the PG level 7.25 lakh (9.8 per cent) and the remaining at research and diploma/certificate levels. The strength of the faculty went to 3.42 lakh this year. Out of the 76,587 teachers in the university department, 17, 385 are professors, 27,188 are readers/associate professors, 30,558 are lecturers and the rest are tutors/Demonstrators. In the affiliated colleges the number of senior teachers are 71,588, the number of lecturers 1,89,309 and the rest are tutors/demonstrators. The enrollment of women students in the year 1999-2000 was 25.74 lakh at the graduate and post-graduate levels. This accounts for 34 per cent of the total enrollment. The enrollment of women students was the highest in Kerala (53.8 per cent) and lowest in Bihar (19 per cent). Eighty-Seven per cent of the total women enrolled were in the non-professional faculties of Arts, Commerce and Science and 13 per cent professional faculties. MHRD Annual Report (1999-2000).

The National Policy on Education, 1986, with modifications undertaken in 1992, proposed that in the near future, the main emphasis would be on the consolidation of, and
expansion of facilities in, existing institutions. Autonomous colleges would be helped to
develop in large numbers until the affiliating system is replaced by a freer and more creative
association of universities with colleges. Autonomy and freedom would be accompanied by
accountability. Besides, courses and programmes would be redesigned to meet the demands
of specialization better and state level planning and coordination of higher education would
be done through councils of higher education and the UGC and these councils would
develop co-coordinative methods to keep a watch on these standards. The teaching
methodology would be technologically advanced and the teacher’s performance would be
systematically assessed. A suitable mechanism would be set up by the UGC for
coordinating research in universities, particularly thrust areas of science and technology.

Despite all the efforts by the UGC and the Government over a period of time, on
observes that there has been a decline in the standards especially because of increase in
innumerable colleges. In addition, Science education in colleges and universities too is
undergoing a decline owing to non-availability of modern laboratory equipment and lack of
connectivity of syllabi with dynamics of job market. Another is the lack of accountability,
both of teachers and students. There is also a concern regarding the most dissipate character
of the graduates that the universities are turning out every year and the high level of
unemployment that prevails among them. Nevertheless, a university degree or diploma
continues to be a requirement for most jobs and consequently, the college and university
continues to be a crowded the students aiming to get a degree or a diploma. It is very
important to improve the quality of higher education as well as streamline the system itself.
According to Arvind Panagaria a professor of economics (Maryland) advocates three
mutually reinforcing reforms- private entry, greater autonomy, increased tuition fees – to
alleviate the quantitative and qualitative crisis in University education in India, published in
The Economics Times (2002), 23rd October.

Thus, India has the third largest scientific and technical manpower in the world.
There are also more than 36 million educated unemployed. Consequently, it is felt that there
is an excess supply for graduates and the university system can do with a reduction in size.
The reality is that in India, per thousand of population, the number of graduates, engineers,
doctors, etc. is one of the lowest in the world and also their average quality is suspect. This
is a result of both poor quality of instructions and the migration of the cream to greener
pastures abroad (Brain Drain). The engineering graduates remaining behind in the country
do not go in for research and development, but join management schools and civil services in large numbers. The challenges before the country are innumerable. There has been a phenomenal proliferation of University and Higher Education in the country since Independence. The higher education system has been a twelve-fold increase in the number of universities and twenty-two-fold increase in the number of college since independence. There are now 185 universities, 42 deemed to be universities and five institutions established through State and Central legislation, and nearly 11,100 colleges in the country in addition to the unrecognized institutions in the higher education sector.

1.2.2 Main Agencies in Higher Education

The Government of India established University Grants Commission (UGC) by an Act of Parliament in 1956. It discharges the Constitutional mandate of coordination, determination, and maintenance of standards of teaching, examination and research in the field of University and Higher Education. UGC serves as a vital link between the Union and State Governments and the institutions of higher learning. It monitors developments in the field of collegiate and university education; disburses grants to the universities and colleges; advises Central and State Governments on the measures necessary for the improvement of university education; and frames regulations such as those on the minimum standards of instruction. University Grants Commission (UGC) is responsible for coordination, determination and maintenance of standards, release of grants.

Central Government is responsible for major policy relating to higher education in the country. It provides grants to the UGC and establishes central universities in the country. The Central Government is also responsible for declaration of Educational Institutions as 'Deemed to be University' on the recommendation of the UGC. Some of the State Governments are also responsible for establishment of State Universities and colleges, and provide plan grants for their development and non-plan grants for their maintenance. The coordination and cooperation between the Union and the States is brought about in the field of education through the Central Advisory Board of Education (CABE). Special Constitutional responsibility of the Central Government on the: Education as mentioned in the 'Concurrent list' subject to Entry 66 in the Union List of the Constitution. This gives exclusive Legislative Power to the Central Govt. for co-ordination and determination of standards in Institutions of higher education or research and scientific and technical
National Policy on Education (NPE), 1986, a scheme to provide career orientation to education at the first-degree level was launched in 1994-95. Under the scheme, a university / college could introduce one to three vocational courses in 35 identified subjects. In 1986 (NPE), a scheme of autonomous colleges was promoted to develop and propose new courses of study to the university for approval. They are fully responsible for conduct of examination. It has been proposed that the programme of autonomous colleges would be fully central Govt. for 5 years and fund would be made available for the purpose to the UGC. However the assistance expenditure would be met by the existing system of usual resources. Currently, more than 138 colleges have been functioning as autonomous colleges in eight states in the country. NPE–(updated 1992) states that the new policy will lay special emphasis on the removal of disparities and to equalize educational opportunity by attending to the specific needs of those who have been denied equality so far (Para 1 NPE 1992). The objectives specified in the NPE are in the best interests of a democratic society and for the first time “equality” is prioritized over other gender, race, religion, region or cast together with an improvement of quality.

National Assessment and Accreditation Council (NAAC): To improve the quality of higher education several schemes like Faculty Development Programme, University Leadership Programme, National Eligibility Test, Academic Staff College, Autonomous College and National Assessment and Accreditation Council have been launched by UGC. National Assessment and Accreditation Council (NAAC) has been set up as autonomous affiliate of the University Grants Commission (UGC) under the provisions of the UGC Act., to evaluate the qualitative merit of the higher education. These schemes have been in operation for quite some time now. But the success is not remarkable. This is due to half-hearted and ritualistic implementation. Though higher education is not coming under fundamental right is considered to be essential for the cultural, social and economic development of the nation, it is necessary to improve the infrastructure in our academic institutions, create facilities, adopt a more flexible academic structure, introduce major academic reforms, gather market information and adopt other measures that will make Indian education attractive to others.

Indira Gandhi National Open University (IGNOU): Established in 1985 for
introduction and promotion of Open University and distance education system. Major objectives include widening of access to higher education. It offered 43 programmes during 1998. Total number of students registered for various programmes was 1,63,000. Students' Supports Services in 1998 consist of 19 Regional Centres and 346 Study Centres. IGNOU programmes telecast on Doordarshan Network six days a week. Its jurisdiction is through out the country. It can set up Study Centres outside the country. This was allowed vide amendment of the IGNOU Act in 1997. Distance Education Council (DEC) under IGNOU has the responsibility for coordination and maintenance of standards in open and distance education system in the country.

Technical Education is a crucial component of human resource development with great potential for adding value to products and services and contributing to the national economy. Five Year Plans have laid great emphasis on the development of technical education. During the past five decades, there has been a phenomenal expansion of technical education sector in the country. Apart from the Government Sector, private and voluntary organizations were involved in setting up of Technical and Management Institutes in the expansion of the system. From 43 Diploma level Polytechnics with an intake of 3,400 students at the time of independence, the number has grown to 1,128 Polytechnics with the intake of 1.90 lakh students in 1997. Similarly, the number of Degree level institutions and the corresponding intake figure rose from 38 and 2,940 in 1947 to 552 and 1.36 lakh in 1997. Today, 185 institutions conduct Post Graduate courses in Engineering and Technology with an annual intake capacity of 16,800. Facilities for doctoral studies in Engineering, Technology and Applied Sciences have also been created in a number of technical institutions.

1.3 EDUCATION AND SC & ST COMMUNITIES

SC/ST constitute 24.54% of the total population of India, where SC's are 16.46% and ST's constitute 8.08 percent of the total population. Most of these people live on the peripheries of villages in rural India. Except 2 or 3 percent cream layer most of the SC/ST are illiterate. They were considered untouchables before independence. Though unsociability is a crime under the constitution, it is silently practiced. On the other hand Scheduled Tribes live largely on the hills and in the dales of India. They are cut away from the mainstream of life. They are the most backward people with traditional customs and
superstitions. They live hand to mouth with scarce facilities. Most of these people though they have languages of their own, don't have literature and scripts to there languages. Their communication system is still oral. Therefore, Government of India has made some Constitutional provisions relating to the educational development to these communities.

The National Policy on Education-1986 says: “priority will be accorded to opening primary schools, there educational development and welfare in the tribal areas”. The backwardness of st's is total when compared with other communities. Some of the states in which large number of tribal people living are North Eastern States-Arunachal Pradesh, Tripura, Nagaland, Assam and Madya Pradesh , Bihar , Orissa, Mahararastra, Gujarat, Rajasthan and West Bengal. The Tribal communities are characterized by a high percentage of illiteracy. They need on priority, education and mobile libraries with audio-visual materials. They need more and more Bare-Foot Librarians to take information to their doorstep on matters of health, education, agriculture, environment, etc. Community libraries should be established in tribal areas under special plans to bring socio-cultural changes among them. The National policy on Education-1986 laid stress on the education of SC/ST and suggested various measures for improving their position.

1. Due to their backwardness and unfavorable social status, the SC/ST are not in a position to use the village libraries.
2. There are no book deposit centers and mobile libraries in their inhabitations.
3. The SC/ST largely depend on their manual work for their livelihood. Therefore the SC/ST children also drop out from their school education due to pressure of family.
4. They need information on labor, agriculture, health, housing, education etc.
5. The SC/ST were oppressed and suppressed for many centuries. They need social justice. For that the SC/ST should have access to education and information.
6. The areas where the SC/ST live should liberally be provided with Book Deposit Centres, Book Clubs and Mobile Libraries.

Education should be a gift of wings – its rich potential in harmony with the divine order of nature: “Wholeness unites truth, beauty and goodness in one majestic symphony of education “(Marjorie Sykes). To this Jyotiba Phule, who opened the portals of education to the dispossessed and weaker sections of the community once said- “Without education, wisdom was lost, without wisdom, development was lost; without development, wealth was
lost, without wealth the Shudras were ruined". Thus, in the knowledge society of the 21st century, education will be increasingly valued as an end in itself and not as a means to an end, Presentation, (2002). Now in order to underscore the importance of education to the SC/ST, let us begin with by presenting their broad socio-economic profile surveyed by Ministry of HRD (1999) and Census of India (1991). Here we have used terms Scheduled Castes (SCs) and Scheduled Tribes (STs).

Table 1.1: SOCIO-ECONOMIC PROFILE OF SCS, STS & TOTAL POPULATION (ALL INDIA)

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Indicator</th>
<th>SCs</th>
<th>STs</th>
<th>Total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Population (Crore) (Percent)</td>
<td>13.82</td>
<td>06.76</td>
<td>83.86</td>
</tr>
<tr>
<td>2</td>
<td>Literacy (%), Total</td>
<td>37.41</td>
<td>29.60</td>
<td>52.21</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>49.91</td>
<td>40.65</td>
<td>64.13</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>39.29</td>
<td>23.76</td>
<td>39.29</td>
</tr>
<tr>
<td>3</td>
<td>Urbanisation (%)</td>
<td>18.72</td>
<td>07.39</td>
<td>25.73</td>
</tr>
<tr>
<td>4</td>
<td>Agricultural Labourers</td>
<td>48.00</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Cultivators</td>
<td>28.17</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Average Status of Cultivators</td>
<td>Marginal</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Percentage of People below Poverty Line</td>
<td>50.00</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Bonded Labourers</td>
<td>66.00</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Employment (%), Primary Sector</td>
<td>77.11</td>
<td>90.03</td>
<td>67.53</td>
</tr>
<tr>
<td></td>
<td>Secondary Sector</td>
<td>09.83</td>
<td>03.85</td>
<td>11.97</td>
</tr>
<tr>
<td></td>
<td>Tertiary Sector</td>
<td>13.06</td>
<td>06.12</td>
<td>20.50</td>
</tr>
</tbody>
</table>

Note: Information at Sr. Nos. 1, 2, 3 and 9 pertain to the year 1991 and from 4 to 8 pertain to 1987-88. Source: (i) Sarvekshana, vol. XII, No.4, April-June 1999 and (ii) Population Census, 1991

As Table 1 shows, in 1991, population of SCs and that of STs were 13.82 and 6.76 crores, respectively, constituting 16.48 and 8.08 percent, respectively. So far other indicators are concerned, it is observed that total literacy among the SC and ST male population was 37.41 and 29.60 percent respectively; while the average literacy for the country as a whole was 62.21 percent. Again the literacy rates, among SC and ST male population were 49.91 and 40.65 percent, respectively compared to 64.13 percent for the population as a whole. In terms of female literacy rate, the comparative figures were 39.29, 23.76, and 39.29 percent, respectively. This shows that in the area of literacy SC and ST population lags much behind the national average.

Urbanisation is one of the most significant indicators of geographical and economic mobility and therefore over-all economic progress. It is disappointing to observe that in 1991 the rate of urbanization was only 18.72 percent for SCs and as low as 7.39 percent for STs compared to 25.73 percent for the national average. It is further observed that 48
percent of SC population comprised agricultural laborers, while cultivators were barely 28 percent. It is needless to say that generally SC cultivators are 'marginal'. What is worse, 66 percent of the bonded labours in the country belong to SCs.

If we glance at the employment profiles of the SCs and STs vis-à-vis the population as a whole, it could be observed that 77 percent of the SCs and 90 percent of the STs have been employed in the primary sector as against 67.53 percent for the country as a whole. Further, only 9.83 percent of SCs and 3.85 percent of the STs worked in the secondary sector compared to 11.97 percent for the national average. Lastly, 13.06 and 6.12 percent of the SCs and STs worked in the tertiary sector compared to 20.50 percent for the populations as a whole. Representation of SC/ST in central government Services are given in the following table.

Table -1.2: REPRESENTATION OF SC/ST IN CENTRAL GOVERNMENT SERVICES

<table>
<thead>
<tr>
<th>Group</th>
<th>Total</th>
<th>SC</th>
<th>Percent</th>
<th>ST</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (Executive Level)</td>
<td>60067</td>
<td>6155</td>
<td>10.21</td>
<td>1840</td>
<td>3.06</td>
</tr>
<tr>
<td>B (Gazetted Level)</td>
<td>94111</td>
<td>11649</td>
<td>12.38</td>
<td>2840</td>
<td>3.02</td>
</tr>
<tr>
<td>C (Non-Gazetted Level)</td>
<td>1959477</td>
<td>314995</td>
<td>16.08</td>
<td>122903</td>
<td>6.27</td>
</tr>
<tr>
<td>D (including sweepers)</td>
<td>818748</td>
<td>176368</td>
<td>21.54</td>
<td>54931</td>
<td>6.71</td>
</tr>
<tr>
<td>Sweepers</td>
<td>1551137</td>
<td>61149</td>
<td>39.42</td>
<td>12812</td>
<td>8.26</td>
</tr>
<tr>
<td>Total (excluding sweepers)</td>
<td>2932403</td>
<td>509149</td>
<td>17.36</td>
<td>182524</td>
<td>6.22</td>
</tr>
<tr>
<td>Total (including sweeper)</td>
<td>3087540</td>
<td>570296</td>
<td>18.47</td>
<td>195326</td>
<td>6.33</td>
</tr>
</tbody>
</table>


As a result of all these multiple but inter-related factors 50 percent of the total SC population was below poverty line. In view of this, it would be interesting to see the extent of land ownership by SC/ST households. This is because in rural areas ownership of access to land is the single crucial factor that enables one to share the benefits of agricultural development and also serves as a symbol of social prestige. This may be attributed to the nature and features of the tribal economy and should not mislead one to conclude that agriculture as an economic activity is more favorable with the STs compared to the SCs, let alone the non-SC/ST population, quoted by Louis (2003).

Again, the all India scheduled caste and scheduled tribe education was surveyed
during 1999, April and June and found the levels of middle, secondary and higher secondary education among the male as well as female population in both rural and urban areas among the SC/ST population are much lower compared to non-SC/ST population. The percent distribution of Persons of Age 15 years and above by general education for different social groups in India given below-

Table – 1.3: PERCENT DISTRIBUTION OF PERSONS (15+) BY LEVEL OF GENERAL EDUCATION-1999

<table>
<thead>
<tr>
<th>Social Group</th>
<th>Not Literate</th>
<th>Literate unto Primary</th>
<th>Middle</th>
<th>Secondary</th>
<th>Higher secondary</th>
<th>Graduate &amp; above</th>
<th>Not recorded</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Males</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST</td>
<td>58.80</td>
<td>24.50</td>
<td>9.60</td>
<td>4.30</td>
<td>2.10</td>
<td>7.00</td>
<td>-</td>
<td>100.00</td>
</tr>
<tr>
<td>SC</td>
<td>54.20</td>
<td>25.00</td>
<td>11.60</td>
<td>5.50</td>
<td>2.60</td>
<td>1.10</td>
<td>1.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Other</td>
<td>34.90</td>
<td>28.90</td>
<td>17.30</td>
<td>10.50</td>
<td>5.00</td>
<td>3.40</td>
<td>-</td>
<td>100.00</td>
</tr>
<tr>
<td>All</td>
<td>41.10</td>
<td>27.60</td>
<td>15.40</td>
<td>8.90</td>
<td>4.20</td>
<td>2.60</td>
<td>-</td>
<td>100.00</td>
</tr>
<tr>
<td>Rural Females</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST</td>
<td>84.30</td>
<td>10.10</td>
<td>3.50</td>
<td>1.40</td>
<td>4.00</td>
<td>2.00</td>
<td>-</td>
<td>100.00</td>
</tr>
<tr>
<td>SC</td>
<td>82.40</td>
<td>11.60</td>
<td>3.90</td>
<td>1.60</td>
<td>4.00</td>
<td>1.00</td>
<td>-</td>
<td>100.00</td>
</tr>
<tr>
<td>Other</td>
<td>65.50</td>
<td>19.00</td>
<td>8.70</td>
<td>4.40</td>
<td>1.50</td>
<td>7.00</td>
<td>-</td>
<td>100.00</td>
</tr>
<tr>
<td>All</td>
<td>70.80</td>
<td>16.60</td>
<td>7.30</td>
<td>3.60</td>
<td>1.20</td>
<td>5.00</td>
<td>-</td>
<td>100.00</td>
</tr>
<tr>
<td>Urban Males</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST</td>
<td>25.00</td>
<td>27.60</td>
<td>17.10</td>
<td>14.30</td>
<td>7.60</td>
<td>8.00</td>
<td>2.00</td>
<td>100.00</td>
</tr>
<tr>
<td>SC</td>
<td>31.90</td>
<td>29.00</td>
<td>17.80</td>
<td>10.40</td>
<td>6.00</td>
<td>4.80</td>
<td>1.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Other</td>
<td>13.70</td>
<td>22.40</td>
<td>18.60</td>
<td>18.60</td>
<td>11.80</td>
<td>14.80</td>
<td>1.00</td>
<td>100.00</td>
</tr>
<tr>
<td>All</td>
<td>16.20</td>
<td>23.30</td>
<td>18.40</td>
<td>17.50</td>
<td>11.00</td>
<td>13.40</td>
<td>1.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Urban Females</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST</td>
<td>50.50</td>
<td>19.10</td>
<td>13.30</td>
<td>7.90</td>
<td>5.30</td>
<td>3.50</td>
<td>3.00</td>
<td>100.00</td>
</tr>
<tr>
<td>SC</td>
<td>62.00</td>
<td>17.80</td>
<td>10.10</td>
<td>5.50</td>
<td>3.20</td>
<td>1.20</td>
<td>-</td>
<td>100.00</td>
</tr>
<tr>
<td>Other</td>
<td>32.20</td>
<td>22.20</td>
<td>14.90</td>
<td>13.90</td>
<td>7.80</td>
<td>8.90</td>
<td>1.00</td>
<td>100.00</td>
</tr>
<tr>
<td>All</td>
<td>36.30</td>
<td>21.60</td>
<td>14.30</td>
<td>12.70</td>
<td>7.20</td>
<td>7.80</td>
<td>1.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Sarvekshana, vol. XII, No.4, April-June 1999. Govt. of India, New Delhi.

Thus, relatively low school attendance rates accompanied by high drop-out rates among the SC/ST children create an unequal opportunity structure and sow the seeds of low ability of the their children to benefit from the available opportunities in the various spheres of the society which ultimately result in socio-economic discrimination. Accordingly, efforts have been made to ensure greater access to the disadvantaged groups by making provisions in the constitutions and special facilities for them, like - free ships, scholarships, hostel facilities and reservation etc.. On 4th may 1999 the state cabinet decided to have 49 percent reservation for SC/ST/OBC in all the disciplines of education i.e. medical, engineering, management, pharmacy etc. (16% for SC, 12% for ST and 21% for OBC) and
in some educational institutions admission qualifications are also relaxed for them. This provisions coupled with the expansion of the system and helped in reducing disparities to some extent among SC/ST and non-SC/ST. For the educational upliftment of Scheduled Castes and Scheduled Tribes, funds are earmarked under Special Component Plan for them and are utilized through different schemes of both the Departments i.e. Department of Elementary Education & Literacy and Department of Secondary & Higher Education. Due to these affirmative actions done by the governments (Centre and State), their percentage of literacy is slowly increasing. This can be seen from the different census records.

<table>
<thead>
<tr>
<th>YEARS</th>
<th>SC</th>
<th>ST</th>
<th>REST OF POPULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1961</td>
<td>10.27</td>
<td>8.54</td>
</tr>
<tr>
<td>2</td>
<td>1971</td>
<td>14.67</td>
<td>11.30</td>
</tr>
<tr>
<td>3</td>
<td>1981</td>
<td>21.38</td>
<td>16.35</td>
</tr>
<tr>
<td>4</td>
<td>1991</td>
<td>37.41</td>
<td>29.60</td>
</tr>
</tbody>
</table>

Sources: Census of India, 1999, New Delhi.

The above literacy percentages showed that a percentage of rest of the population is higher than SC/ST in all the census of India. The percentages level of literacy has been increasing in all the census records. ST literacy are increasing faster than SC, it is perhaps due to more government initiative towards them.

1.3.1 Special Facilities for Educational Advancement of SC/ST Communities

There are Constitutional provisions relating to the educational development to the citizens of India, may be provide under two categories: provisions which are applicable to all the citizens including the Scheduled Castes and Scheduled Tribe, such as Article 45, and Articles which have been specially provided to protect the interest of the SC and ST like Article 15(4) and 46. Articles 15(4) and 46 of the Constitution of India provides special safeguards for the educational development of SC/ST and enable the state to make special provisions for their educational advancement. The directives enshrined in the constitution have been reflected in various Five Year Plans, which have sought to raise the level of education among the SC/ST. Gradually the scope of programmes for educational
development in the various FIVE-YEAR PLAN periods broadened. The National Policy on Education (NPE) 1986 as updated in 1992 lays special emphasis on removal of disparities and equalisation of educational opportunities attending to the specific needs of those who have been denied equality, particularly scheduled castes, scheduled tribes and educationally backward minorities. Some of the important programmes of the Department of Education are:

(i) Norms of opening of primary school has been relaxed to have a primary school within one-kilometer walking distance from habitations having a population of 200 persons.

(ii) Abolition of tuition fee in all states in government schools at least up to Upper Primary level. Most of the states have abolished tuition fee for SC/ST students up to senior secondary level and also provide incentives like textbooks, uniforms, school bags, etc., to these students;

(iii) The major programmes of the Department of Education like Universalisation of Elementary Education, Operation Blackboard, Non-Formal Education, District Primary Education Programme, etc., accord priority to areas of concentration of scheduled castes and scheduled tribes. Lok Jumbish and Shiksha Karmi projects which are community based non-formal education projects have a specific focus on SC/ST inhabited areas;

(iv) Reservation of seats for SCs and STs in Central government institutions of higher education including IITs, Regional Engineering Colleges, Central Universities, Kendriya Vidyalayas and Navodya Vidyalayas, etc. Reservation in universities and colleges and technical institutions apart from relaxation in the minimum qualifying cut off stages for admission. The UGC has established SC/ST Cells in 98 universities including Central Universities with a view to ensuring proper implementation of the reservation policy;

(v) In order to improve the academic skills and linguistic proficiency of students in various subjects and raising their level of comprehension, remedial and special coaching is provided for SC and ST students. IITs have a scheme under which
SC/ST students who marginally fail in the entrance examination are provided one year training and then admitted to the First Year of B. Tech course;

(vi) Out of 43,000 scholarships, 13,000 scholarships are provided to SC/ST students under the scheme of National Scholarship at the secondary stage for talented children from rural areas. Seventy scholarships are exclusively reserved for SCs/STs students under the National Talent Search Scheme;

(vii) Junior Research Fellowship (50 annually), scholarships (25), Research Associateship (20), and Fellowships (50) are awarded by UGC exclusively to SC/ST students;

(viii) The Central Institute of Indian Languages (CIIL) Mysore, prepares textbooks, primers, grammar books, dictionaries, bilingual text books facilitating translation from regional languages, etc., into tribal languages

(ix) University Grants Commission provides relaxation of five percent from 55 percent to 50 percent at the Master's level for appointment as Lecturer for SC/ST candidates. The Commission has also reduced minimum percentage of marks required for appearing in the NET examination to 50 percent at Master's level for SCs/STs.

(x) NCERT prepared/developed/published textbooks in tribal dialects and teaching/learning material in tribal dialects. The Central Institute of Indian Languages (CIIL), Mysore, has worked on 75 tribal and border languages.

Despite last five decades of experiments through the policy of Affirmative Actions, the representation of the Scheduled Castes in higher education remains insignificant. This is a matter of serious concern since higher education is closely linked to higher and better jobs and thereby to higher income and social mobility. Therefore, it is pertinent to understand and analyse their situation at higher level of education.

At the primary education level, though enrolment reflects the diversity in the composition of student population, it does not provide any comparability between the
SC/STs and non-SC/STs. There are disparities among SC/STs in all respects – whether in terms of gender or in terms of urban and rural or regional backgrounds. It is quite heartening to note that, even today, SC/ST men and women are at the bottom of the educational pyramid, despite the repeated claims and counter claims of the government and the political establishment on their efforts to uplift this disadvantaged group. In higher education level, there is no doubt; a considerable improvement has been made in terms of promoting diversity in admissions after the introduction of reservation policy. However, this is not adequate in view of the proportion of SC/ST population still outside the fold of higher education. For instance, the percentage of share of scheduled caste students in higher education is only 7.77 per cent and that of scheduled tribes is 2.33 per cent of the total enrolment in 1996-97 MHRD (1997). This is negligible in terms of the expected levels of enrolment of SC/STs in higher educational institutions. Further, there has been a far lesser participation of SC/STs in prestigious subjects/courses of study, which are in demand for high salaried jobs. In 1996-97, a majority of SC/ST students are enrolled in the arts subjects (56.5 per cent among SCs and 77.7 per cent among STs), followed by science (13.3 per cent among SCs and 8.7 per cent among STs) and commerce (13.2 per cent among SCs and 9.4 per cent among STs) at the undergraduate level. The enrolments at the post-graduate level also show similar signs. The proportion of SC/STs in the professional stream is very low – 7.9 per cent among SCs and 2.1 per cent among STs are in professional courses like engineering and medicine taken together. Therefore, the share of SC/STs in those courses that are market-friendly is far from satisfactory. The emerging areas of software, biotechnology, bio-informatics, etc, are almost beyond the reach of the SC/STs. This is where one has to focus more when the demands for diversity in admissions are made.

Considering their poor socio-economic background and struggle for daily survival with greater dependence on upper castes and being rural based, most of them are deprived of education at primary and elementary level only. This deprivation is supported by their lack of awareness, discrimination, lack of library and information access due to distance, lack of affordability and lack of motivation resulting out of social background. At school front, the poor quality of educational contents, teaching methods, teachers’ and fellow students’ discriminative attitude as well as unattractive atmosphere result in poor enrolment, poor performance and high dropout rate among the children. This leads to creation of imbalances among and between regions, castes and gender. Various studies and survey reports have endorsed these constraints and their consequences. These levels being
preparatory ground for higher education, is crucial to understand and bear in mind when one talks of higher education. It has also seen that due to some effort by the govt., SC & ST and minorities’ community students now getting more interest and opportunities for acquiring their higher degrees in nation-wide, but their information need in the society remain idle. Again, due to information explosion and impact of information technology in the 21\textsuperscript{st} century the role of librarians are also changed towards better services to the clients. Therefore, this is the real time to provide special care and opportunities by the government and academic librarians for the disadvantaged communities, which stresses egalitarianism, social justice and economic development for all sections of society.

1.4 LIBRARY AND INFORMATION CENTRES AND USER NEEDS OF SC/ST

We are living in an information society, so the role of the library and information center has been increasing in manifolds. Right to information is also the basic needs of every individual with other needs. Therefore, the duty of library professional is to facilitate information to all its users and non-user, because non-users are generally the backward people i.e. the SC/ST communities. They are the major drawback of the national development and can be more informative by the use of their library. Library is therefore the essence of the overall development of the SC/ST communities. No activity or programme and profession, what so ever its nature and extent, can flourish without the essence of information of some kind or other. Thus, Libraries have played a major role not only accelerating the use of different types of library and information resources for information dissemination but also participated in national development programma. Library and Information Center should educate the SC/ST students, all about the library and its services, its collection and development, uses of different technology etc. Studying these services and developmental activities the SC/ST student can be interested to use the library within their spire and can use more sophisticated technology for faster and effective use. A better knowledge of information sources helps one to develop right approach to collection and collection and retrieval of information in a library so that information contents in these materials are better exploited and effectively utilized by the users to meet their needs. Libraries are repositories of information sources and play an important role in the organization it serves. The access to information is available through print, non-print or micro macro format resources. Our images of information affect the way we are able to think about the world we live in, because nothing can move without information and its
processing. Our place in history, our economy, the social political processes and other hopes for future are all understood in term of information. Library, information and documentation center have always been concerned with the concept of information and knowledge, as these constitute their basic stock in trade. The information is a social process and can be defined in relation to its needs. The librarians and information scientists are not so much engrossed to see with universal definitions of data, information or knowledge as they were with supplying relevant information, data or knowledge to those who seek them without making any distinction between them.

The Academic library sector comprises school and college and the university libraries. While evolving a vision for university libraries for the millennium, the main focus should be on the role of the existing university library in addressing the national issues. At the end of the 20th century, college and university libraries face enormous challenges and opportunities. As campuses move into the information age, the mission and role of the library is being redefined. While the amount of information libraries need to acquire continues to increase, the resources available to do so are insufficient. Moreover, administrators need to assess the relationship between the library and users as both fights for limited resources. The growing universe of print-based publications and digital documents on the one hand, and the declining universe of library budgets on the other, can be handled confidently by adopting certain strategies, such as by developing critical thinking skills, as well as promoting information literacy at large. In the near future, users should expect timely access to quality information. This information must be accurate, relevant, comprehensive, and engaging. This can be done successfully by incorporating end-user education and training components, in the academic libraries developing continuing professional education and training programs for the library and information professionals, as well as the end-users will have to develop learning attitude and network related competence to us by the information and communication technologies.

Every person needs to know today to be a full-fledged, competent and literate member of the information society? As we witness not only the saturation of our daily lives with information organized and transmitted via information technology, but the way in which public issues and social life increasingly are affected by information-technology issues - from intellectual property to privacy and the structure of work to entertainment, art and fantasy life - the issue of what it means to be information-literate becomes more acute
for our whole society. Thus, information is one of the fundamental resources indispensable for development in all the vital spheres of the life of the civilized society. It is this realization, which has been argali responsible to inspire and encourage today the appropriately directed development initiatives at the national level all over the world. National development is the ultimate goal of any nation; it may be developed or developing. India is being a developing nation; it should bring its disadvantaged people high, where this group covers about 24% SC/ST (160 million SC and 80 million ST) population in all. Among them 60% SC and 90% ST lived in rural villages, without having proper food, clothing, education, health and housing they are not aware about the governmental developmental activities, on the other hand government is spending lot of money on their name to rise up their standard of living and educate them to be informative.

An examination of the socio-economic profile of the SC/ST shows that there has been no marked improvement in their social condition even after five decades of our independence. There are numbers of special provisions time to time from government departments. For there development since our independent but the SC/ST are unable to receive all these developmental inputs. They are not conscious about governmental plans policies programmes for them. However, the nature and extent of government expenditure on them are still not satisfactory. Among them those are coming out for their higher study, coming from the deprived homes and disadvantaged environment, find it difficult to compete with those coming from socially, educationally and economically advantaged position in the society. The poor levels of education between the SC and ST have been a great impediment in promoting educational consciousness and capacity building. Centuries old multiplicity of factors have systematically kept them deprived of there due share of development. Therefore, for weaker sections education is an important input not only for their socio-economic development but also for their capacity-building so as to meet the future challenge. According to an estimation of National Sample Survey (NSS) during 1993-1994, about 60% of the SC workers in rural areas and more than 30% in urban areas depend on wage employment, their earning were determined by the level of employment and wage rates, and 48% of the SC households were below the poverty line in rural areas, and 50% of the SC in urban areas. Similarly, the economic situation of ST is worse than that of SC, about 96% of the tribal lived in rural areas. 52% of tribal persons in rural area were poor and failed to get minimum food for consumption. Again, their access to the public health services was also much less, due to illiteracy and poverty. In light of this any strategy
of governmental plan policies needs to recognize these inter-linkages between education, poverty and fertility rates among SC/ST. Only improvement of in the education and their economic situation can solve the illiteracy and they can be more informative. So, in educational spear it is the role of the librarian to make them more informative and positive towards library use.

1.4.1 Information Users

Where there is library/information there are users. Users may be different in different libraries; they constitute an inseparable and indispensable part of the library and information system. The emergence of an information organization is due to the very existence of the users. While all the factors responsible for the existence of a library and information system are directed towards proper and effective use by a specific group of users, the central question of library’s effectiveness and efficiency is based on the users and their information needs. It is often remarked that, a library is basically a service institution designed to provide information services to fulfill the information requirement of the community or institution it serve. Libraries are also termed as service enterprises and services will be better if the nature and needs of clientele are known stated by Martin (1976). A shift has, therefore, been developed to emphasize the successful use of the libraries on the basis of information needs of the users.

University library bears the common characteristics of various kinds of library, and its literature and information resources could be shared by the whole society. But it is obvious that university library has some unique characteristics. It's intended for undergraduate’s students, graduates students and the faculty providing services for the teaching and research work of a university. Among them the minority’s community coming from different background of the state suffers a lot due to their socio-economic conditions and educational backwardness and social status. There prevail a backwardness feeling among student’s faculties and scholars in the campus. Therefore, University libraries serving, as the bases for cultivating talented personnel in the campus should have more attraction and special provision for the backward community, it should have special users guide, users education programme for the disadvantaged group. It is observed that a total view of the information user will demand attention to all of these aspects, but a partial view with specialized demands by the minority communities in developing countries needs a
special care. All observers in the developing countries have noted that the minority communities reading are largely utilitarian in the narrow sense.

1.4.2 Information needs and Information Resources

The term 'information need' has been a troublesome one: writers have debated the difference between 'needs' and 'wants', between 'perceived needs' and 'expressed needs', and so on; and, of course, librarians and information workers have always been willing to decide that they know what the user needs, better than the user. However, very little emerges from this debate to guide our actions - in the end, we have to try to anticipate demands upon our services and, therefore, we have to act as if we understand the needs of the information user. Some guidance through the fog of information needs is possible if we understand the nature of the organizations we work in, the type of users and his attitude towards the library resources etc. Library and information services, "are provided on the basis of equality of access for all, regardless of age, race, sex, religion, nationality, language or social status." This basic tenet is dependent upon the qualification that, "specific services and materials must be provided for those who cannot, for whatever reason, use the regular services and materials." However, in seeking to redress the balance of access, disadvantaged i.e. SC/ST users have to be categorized into discrete groups in this way, which effectively intensifies the very barriers that the profession is seeking to break down. It is therefore important to strike a balance between addressing the needs of specific individuals and incorporating these needs into mainstream library and information provision. By the same token, segregating users in this way runs the risk of implying the independence and self-sufficiency of these specific groups. To the contrary, the needs of SC/ST users and their specific needs should be fulfilled.

Again, it is a complex phenomenon appears in the LIS to be ambiguous and heterogeneous in character as it may be information needs of a group of users and information flow from a specific situation/organization are difficult to determine. Again the use of information is so complex that there cannot be a simple system to cope up with the task of effective retrieval without assessing their specific needs. This situation has given rise to the growing concept of information searching and the manner of determining the pattern of searching is said to be considered information seeking behavior. The best way to begin a search for information is to define once information needs. One may need an overview, a
comprehensive search of a topic, a quick reference or fact, or an in-depth treatment. Once you decide what type of information you need, you can select a source that will likely have the information or plan a search strategy that will include several types of sources. There is a wealth of sources available to help the user to locate information.

**Stefano Mizzaro** (1998) offers a model or framework of the senses of relevance in Information Retrieval. His framework has 4 dimensions: information need, component, time and information resources.

a). Information need: He defines the types in terms of the representation in which the need is expressed.

- **RIN** = Real Information Need. The need external to the user, not fully graspable by them.
- **PIN** = Perceived Information Need. The mental representation in the user's mind.
- **EIN** = Expressed Information Need = Request: the need expressed in natural language.
- **FIN** = Formalised Information Need = Query: the need formalised in a machine language.

b). Components: Actually, aspects of the need, or information sub goals are - topic, task and context.

c). Time: Retrieval sessions nowadays typically involve much retrieval. The relevance of an item changes over time: it can fall if the item has already been found; it can rise, if information was found about the "context" that now lets the user recognise its importance for the first time. Thus the relevance of the same document for the same information need often changes during the course of a session.

d). Information resources: The relevance of a document, or its surrogate (summary), or of the information it contains. If a user wants a fact (not a document for its own sake), then a big document with the fact is less relevant than a small document with it because of dilution.
Thus, the concept of 'information need' is central to the study of the user in any of the above contexts and, considering this centrality; it is rather surprising that confusion exists over the definition of the term. However, the problem seems to lay not so much with the lack of a single concept but more than this. It can be variously understood, in the context of user-studies research, as a physical entity or phenomenon (as in the case of questions relating to the number of books read in a year, the number of journals subscribed to, and so on), as the channel of communication through which the data are transferred (as when we speak of the incidence of oral versus written communication), or as the subject data contained in a document or transmitted orally. Information may also be understood as factual data objectively transferred, or as advice or opinions into which value judgments enter.

These multiple uses of the term cause confusion, which lies in the mere association of the two words 'information' and 'need'. This association imbues the combined concept with connotations of a basic 'need' qualitatively similar to other basic 'human needs'. However, if we examine the literature on human needs we-find that it is divided by psychologists into three categories:

- Physiological needs, such as need for food, water, shelter etc,
- Emotional or 'affective' needs, such as the need for attainment, for domination, etc,
- Cognitive needs, such as the need to plan, to learn a skill, etc.

1.4.3 Information Seeking Behaviour

Knowledge generated by user studies can help to develop information systems and information services. Information need and information seeking behavior, two of the most important research areas of the user studies, are two complementary concepts, which are affected by many factors. Research results in these areas of user studies indicate that the type of information need and information seeking behavior of scholars are dependent on their community and area of living, and vary from one discipline to another. The disadvantaged group like SC/ST communities are generally developed from a backward areas, where there are limited facilities of library and information services, so they little awareness about its benefit Understanding such behavior help us to design services and products, which would transmit the required information most effectively to the
disadvantaged community. Such different needs in turn may necessitate offering services (e.g. user education) in libraries depending on the discipline users come from. Any information scientist or librarian needs to satisfy its users fast. In order to satisfy this critical task one has to develop a deep understanding the physiological, psychological and social nature of the user and there must be user–librarian interaction based on human behavior, which often remains unpredictable and complex.

Different authors have defined the phrase “Information Seeking Behaviour” variously. According to Krikelas (1983), information seeking behaviour refers to “any activity of an individual that is undertaken to identify a message that satisfies a perceived need”. King Manda(1991) defined information seeking behaviour as a manner in which a user conducts himself in relation to a given information environment. It is therefore regarded as essentially a process of interaction between the user and the rest of the information system.

The general model of information behaviour developed by Wilson can define information behaviour as per Wilson, (1997). According to Wilson a general model of information behaviour needs to include at least the following three elements: "an information need and its drivers, i.e., the factors that give rise to an individual's perception of need; the factors that affect the individual's response to the perception of need; and the processes or actions involved in that response.” Tom Wilson said in ACURIL: Association of Caribbean University, Research and Institutional Libraries. XXV Conference, 1995

Thus, Information needs has no guarantee, that the person who needs the information will take any action to find that information. This is such an obvious statement that it seems, sometimes, to take librarians by surprise. We are all so accustomed to seeking and using information that we find the idea of not looking for information when we need it quite difficult to understand. However, all kinds of barriers to action exist: from simple inertia on the part of the individual to formal organizational barriers to the free flow of information. We must also recognize that information-seeking can be understood in two senses: it is a continuous activity in a generic sense, in that we make sense of the world around us by gathering information, but, for specific purposes it is, for the typical organizational member, a highly spasmodic, event-driven phenomenon. And, often, the driving event is a crisis - either for the individual or for the organization. We cannot
assume, therefore, that people have well-developed formal information-seeking skills. It is more likely that the process has to be re-learnt on each occasion - particularly if those occasions are widely spaced.

These topics are approached from such a variety of perspectives that there are no generally accepted definitions. A review of related literature proves that not only different words used to describe the same concept but also identical terms used to mean different things. The terms information, information need and information seeking behavior are all used in different ways. Within the context of user studies, information has been used "to denote factual data or advice or opinion, a physical object, such as a book or journal, or the channel through which a message is conveyed, for example, oral or written communication" Reid-Smith (1986). Within library and information science, information has been defined as "any stimulus that reduces uncertainty" stated by Krikelas (1983). The term information need has also been used in a variety of ways. Information need is a subjective, relative concept only in the mind of the experiencing individual stated by Wilson and Streatfield, 1981). It has been defined as the "recognition of the existence of uncertainty" according to Krikelas, (1983). Information seeking behavior, which results from the recognition of some need. Wilson, (1981) is defined by Krikelas (1983) "as any activity of an individual that is undertaken to identify a message that satisfies a perceived need. In other words, information seeking begins when someone perceives that the current state of possessed knowledge is less than that needed to deal with some issue (or problem)."

1.5 USERS STUDIES AND THEIR USEFULNESS

"Information user studies have largely focused on what is overt and noticeable. This research goes into the more important latent aspect viz., attitude to information. Working on a sample of social scientists this study presents not only a scale for measuring the attitude towards information, but also examines the personal and organizational attributes influencing the magnitude of attitude. The findings of this research points to the importance of attitudinal measurement in the user research. It seems to have an intrinsic worth, which may go a long way in explaining the observed source use behavior particularly among social scientists. The user resistance could be corrected by providing incentives facilitating, among other things, a change in their attitudinal disposition to information use which in turn has shown to induce overt source use behavior" stated by Julien (1999). The user studies,
information need studies, use studies, information transfer studies, Communication behaviors studies, information seeking, dissemination and utilization studies are closely related terms. Hence the above terminology depends much on the approach and the angle from which one sees. Some motives and purposes of users adopt many ways and means of accessing and searching sources of information. Then they try to acquire information, the user uses or calls upon the sources of information and applies the information to the purposes predetermined, thus leading to satisfaction or dissatisfaction in relation to purposes and needs. In reality these sequentially represented steps are neither discernible nor strictly linear. Though information-seeking behavior in one sense deals with actual seeking to information represented at the stage of means of searching various sources of information. It would be more appropriate to cover other earlier stages and later stages to get a clear picture of the entire sequence.

An overview of the field of user studies by - Wilson,(1981, 1991, 1994, 1999), Dervin (1982;1986), Ellis,(1989,1993) Höglund(1980); Ingwersen (1996) ; Kuhlthau (1989), Belkin (1987) and Ford (1973, 1989) etc. gives examples of theories and models of the information search process . A common trait of the models is the effort to describe information seeking processes and behaviour on a general level and to disregard variation in information seeking. Research on information seeking and use has applied theories from various disciplines e.g. communication (Dervin; Savolainen), sociology (Ellis, Höglund, Wilson), cognitive sciences (Allen, Belkin, Ingwersen). Since, the mid-80's ARIST overviews of use and user studies have paid considerable attention to the cognitive approach . Kuhlthau's model of the information search process is of particular relevance to my study, since it was developed in a learning context. She emphasizes that her model describes the information search process as understood by information seeking of Wilson.

Pitts studied students' (16-17 years old) use of information while they were engaged in a science assignment quoted by Winter & Cameron (1983)). During data collection Pitts discovered that it was impossible to examine the students' use of information without paying attention to other aspects of their learning assignment. She found that students' information seeking and use was one of four identified aspects, or "strands", of learning. Subject matter was another such strand. These strands were constantly intertwined during the students' learning process. Pitts' findings contradict the usual conception of information seeking as a general process, regardless of content according to Ingwersen (1995). On the
contrary, she underlines that students never used their prior knowledge of information seeking in isolation, but always intertwined with prior knowledge from the other three learning strands, e.g. subject matter. These results raise new questions for research on information seeking behaviour.

It is worth observing that the overview of user studies showed a certain discontent among researchers over the large quantity of such studies and the lack of results that might explain or illuminate the problems or be of practical use for the profession.

1.6 BACKGROUND OF THE STUDY

Libraries now appear not only as source of information, but also a temple of learning, where any person can come for acquiring knowledge. Again, it is a way of life for those who devote their profession and valuable time for research and generation of creative and intellectual thoughts. The primary objective of libraries is to organize and provide access to information. This objective will never change, although the format and the methods that are used can change dramatically, providing new opportunities and challenges. Higher education, scholarship, technology and economics, which are all interrelated terms, play an important role in understanding the needs of libraries. At present with the term library information another term technology come to the field, where the term "technology" refers to computer technology, communications technology, and information technology. A librarian who is aware of all of these three technologies can face the new challenges of the millennium, to acquire, process and disseminate its information in scientific way as a whole. Libraries are therefore the outcome of the social change and the bare needs of the development of the country. They represent a major storehouse of human thought content. Their values rest not only on their facility to store information but also on their capability to effectively disseminate it in optimum quality and quantity to any information seeking community without any limitation. It stands as a vital source of information and an educator of the great Indian disadvantaged community. Its effectiveness stands if it can serve the disadvantaged community in a special manner as per their need. The real effectiveness can be achieved if the library can attract the disadvantaged people towards it, for their communal socio-economic development. Therefore, the educational institute libraries should be well equipped from the school level. The role of the library professionals has great importance to understand them as per the situation they are facing for acquiring
particular information within a specific area.

As state differs in size, population, literacy rate, status of books produced in regional language, economic growth, library system also differs from state to state so far as its infrastructure facilities and patterns are concerned. The library scenario is not uniform in the country. A library in Municipal Town in our country is designated as Town Library and one outside Municipal Town as Rural Libraries. Again, the rural libraries in some states form a part of the public library system and in some other states they came under the jurisdiction of Adult Education Department or Public Relation Department. In many parts of the country, including the northeast, rural libraries are established and maintained by local clubs and voluntary organizations. Thus, there are different types of rural libraries prevailing in the different parts of the country. They differ not only in size and nomenclature but also in the type of management and level of financial support even within the same state. The library scenario in the State of Bihar and Orissa is not at all encouraging, there is very little state funding to the library.

Thus the present situations of the local libraries in the backward areas of the country are facing lot of problem due to initiative of govt., budget short, shortage of professional man power and collection development as per the local people where 70% of the disadvantaged communities are living. They’re the needs of the student and teachers are enormous, complex, unlimited and are rapidly increasing day by day. Similarly, the libraries in some of the higher education in our country in very important to give specially service to the SC/ST student/ scholars and teachers for there information need within the campus.

SC/ST’S are generally not conscious about the use of the libraries and its several services for the cause of their study as well as getting important information for the benefit of their community. The factors affecting for this are: availability of special collection for them in the backward areas with trained library professional to teach them about library, its collection and use, they are not using the library due to inferiority completion among other caste, socio-cultural factors also compel them to pass the exam anyhow and earn money to feed their family, poverty and lack of economic resources in the family affect them to show equal with other in the institution and finally governmental planning also failed to motivate them towards their educational development.
The situation in the state of Orissa is not different from the national scene. The basic problems, which bedevil the Indian education system, continue in large measure in Orissa as well. Schismatic social developments and wide economic disparities are cited to explain the malaise that has affected the educational system. While many of the un-accessed children continue to remain out of school, most of the children enrolled in the school grow up in poor and jobless households, deprived of basic needs like health, nutrition, food safety, clean drinking water and housing, here the mother is more often than not illiterate herself, less informed about the value of healthcare, hygiene, child health and nutrition due to absence of effective community health programmes. These out-of-school variables to a large extent have affected learning outcomes and contributed to the high rates of stagnation and dropout, especially between SC/ST’s in the remote areas of Orissa.

Although the overall literacy rate in Orissa (63.6%) almost approximates to the national literacy rate (65.30%) of the Census - 2000, the gender disparity in Orissa is alarming. The literacy rates for SC is 36% and ST is 22%. Education is the most important thrust areas for the socio-economic development of SCs and STs. The government has undertaken various measures to improve the educational status of these communities. But their developments are very slow. The present study undertaken by me in the state has therefore became important and its outcome would be more or less a replica for the other states as well as for the whole SC/ST communities in India.

1.7 STATEMENT OF THE PROBLEM

The study entitled “Information needs of SC & ST students, scholars and faculty members of the Autonomous Colleges and Universities of Orissa: a study” is a topic of great significance and interest not only to the scholars of Library and Information Science (LIS) but also to the information society as a whole. It is also most significance to the SC/STs in particular, who occupy 24% of the population of the nation. Thus the real development of a country depends on its development of the weaker section of the people.

There are various studies have been conducted by the information and library people in their respective fields, but study on “Information needs of SC & ST students, scholars and faculty members of the Autonomous Colleges and Universities of Orissa “ is totally new for the library professionals. There may be different studies on SC/ST for their socio-
economic development or for planning in the state or for the nation, or there may be various projects undertaken by the government or voluntary organization for socio-cultural activates, way of living and economic condition etc. This area of study is found to be the most useful in a successful and challenging career in the library and information science. In addition to this, the present study also intends to identify the status and position of SC/ST in Orissa, their socio-economic condition, their educational attainment, their professionalism, and the available information resources so as to assess the future needs. In the process of making an overview of the SC/ST students and professionals in Orissa, the present study also aims to highlight some of the Key issues of there unemployment, illiteracy, poverty, health, dropout, weakness etc. This in fact would help to identify the factors responsible for the above problems in the state with other attributes to assess the problems for a better development of the community as a whole.

1.8 SCOPE OF THE STUDY

The scope of any research is to limit the investigation for a precise, specific and time bound manner. Therefore, my study is a form of users study designed to bring within its confines only to the SC/ST student, researchers and faculties of autonomous colleges and universities in Orissa only. It also based on their information needs, information seeking behavior, their approach to varied information sources, their awareness towards information systems and services, their attitude towards present-day information technology in the libraries, their attention to the existing library facilities available to them in the state, their reading habits in the university libraries and college libraries etc. The aim is to know how information becomes an effective factor for the development of the SC/ST in the state. But a survey of literature revealed that the area like factures which hinder information needs of SC/ST student, research scholars and faculties did not receive due importance in LIS research. in Orissa. Hence, present study is undertaken.

1.9 PURPOSE OF THE PRESENT STUDY

Recognizing the role of education as an effective mean for bringing about changes in SC/ST in their socio-economic and social cultural conditions the government has been extending various special educational facilities and incentives from one decade to another, it has failed to take cognizance of the caste wise and region wise disparities in the matter of
educational facilities and achievements. As a result the differentials in educational attainment and access to education have also continued to perpetuate. In fact the educational progress of the SC/ST suffers from two major deficiencies—first they lag very much behind the rest of the population in their educational achievement, and secondly among them some groups have made for more rapid progress than others. As a result several inter and intra-caste and inter and intra-state differentials have given rise to a separate class among them. The present study, perhaps for the first time has undertaken on information needs of SC/ST in higher educational level, in the state of Orissa, to identifies the various problems related to information consciousness and suggests measures to bring about an all round educational development as well as library information development in the state.

1.10 HYPOTHESIS OF THE STUDY

This type of study in the State of Orissa will provide a great achievement for the SC/ST students, scholars and faculties to know their drawbacks in the educational backwardness since last five decades of governmental report and create a consciousness to prepare them to compete with others. Again, the researchers think this study will help the planners in the state and librarians in the libraries to plan accordingly and provide right information in right time to the right person. However, hypotheses formulated for the present study are as follows:

1. That due to poor socio-economic condition they are unable to receive developmental inputs of the government as well as access to proper information in time.
2. They are not aware about the library collections and its various usefulness, they only want to pass the exam and get a job.
3. They have no purchasing capacity to have their relevant document for their study, so, it is evident that the dropout rates of ST at primary, middle and secondary stages are higher than SC, so the number of SC in higher education is more than ST. It is more in female than male.
4. They are not conscious about the technological education like medical, engineering and managerial courses, simple they want to do any theoretical degree diploma etc.
5. The government expenditure on education and health services in real terms are still not satisfactory, and not implemented properly.
6. SC/ST are not visiting library frequently, they are not aware about the new arrivals
on their subject, they do not meet the librarian regarding any references they need.

1.11 LIMITATIONS & EXPECTATIONS OF THE STUDY

Several studies have established the phenomenon of particular caste(s) in each state and region dominating the educational opportunities. However, this phenomenon of the dominance of particular castes has been thoroughly neglected by scholars. It requires a thorough empirical probe as to what factors are responsible for such a situation. So far, studies have made indirect references to these phenomena. Our intention is to try and probe into this phenomenon in the state of Orissa which is considered to be one of the most backward state and undeveloped, having majority of illiterate dolita community live in village, as far as the educational progress of them is concerned it is my duty to find out what are the problems they lacking, and what are their information needs.

To the best of our knowledge this is the first time such a research has been conducted in Orissa. Most of our findings are very similar to those obtained at universities abroad (USA and UK). The various library and information Scholars like: Ellis, Allen, Wilson, Skelton, Styvendaele, Lindholm-Romantschuk and Warner etc. Leading us to the conclusion that regardless of nationality, information seeking behavior is largely dependent on the type users and their different disciplines. As it was pointed out earlier, the insistence of scholars to conduct their own searches despite difficulties encountered can be dealt with through a user education program tailored to the needs of each discipline. This program should involve the usage of secondary sources such as books, journals, abstracts/indexes and databases. It is suggested that such searches should be a cooperative effort between the librarian and the SC/ST student/scholar so that both sides can contribute their own expertise to the solution of the problem. It is also suggest that such programs should be tailored to the needs of each discipline; keeping in mind the different channels and sources available to him. It also follows those librarians running such a program should gain the necessary expertise prior to undertaking such a project. Since in our state electronic search devices are of recent origin, a small pilot program prior to launching a full-scale user education program is highly recommends. In conclusion, while rendering their services librarians should keep in mind the varying needs of each discipline and should retain a degree of elasticity to deal with newly arising needs and situations.
1.12 DIFFICULTIES AND CONSTRAINTS

The researcher has faced a lot of difficulties and constraints during the course of this investigation and very interesting to carry out this work due to his special interest to know various aspects of scheduled caste and scheduled tribe community in Orissa as well as India. In the course of distribution and collection of questionnaire from the respondents, belonging to different educational institutions of Orissa, the investigator had face a great loss of time, energy and money by visiting the SC/ST students scholars and teachers frequently and deputing representatives to them at given intervals, reminding repeatedly through several letters, phonically, for getting back the whole questionnaire from the respondents.

The investigator had also faced equal problems for collecting literature on the subjects from national basis as well as local basis like: INSDOC, NASSDOC, Ministry of HRD, UGC, SC/ST Commissioner, etc. The investigator also visited local (state) offices like—Directorate of Higher Education, DPI office, Dept. of Education Govt. of Orissa, Secretariat, Bureau of Statistics, H&TW depts. SC/STRTI, CENSUS Office, SC/ST Commissioners (State), Directorate of SC/ST R& TI and Xavier’s Institute of Management Library, NISWASS Library, NKCS Library, libraries of different Universities in Orissa, Libraries of Autonomous Colleges Libraries and also contacted some special libraries of national and international basis.

In the process of the investigation the investigator had also referred the INTERNET (WebPages) sources for reviews, with some databases like LISA and other s. But unfortunately there was no such exclusive work done by the library and information science professionals/scholars on the information needs of SC/ST students/scholars/ teachers anywhere. These constraints to some extent have affected the results of the study notwithstanding to the best of efforts made by the investigator. However against all adds, the present work was done with the active, positive and ungrudging support of the Research Supervisor who has done everything possible to complete the work in the scheduled time frame.
1.13 CHAPTER PLAN

Keeping the scope and objectives of this investigation in view, the chapters of this thesis comprising of seven chapters as follows:

CHAPTER-1: Introduction deals with Introduction about education, information and knowledge, information society, its concept, meaning, sources etc. and Indian education system: its origin, agencies, higher education, status, role of education for SC/ST community, special provisions/ facilities for SC/ST. Then, we deal with libraries and information centers, its various users needs (including the disadvantaged group), seeking behaviour, different users studies and its usefulness, aim and objectives, scope, limitations of the study also mentioned.

CHAPTER- II : The State of the Art Review describes: methodologies used in earlier studies, research trends in users studies, need based user studies - in general, in information field, in educational field and seeking behaviour of student, scholars and faculties etc. mentioned. Users studies on SC/ST student, scholars or faculties and research gaps and rationale for the present study are also given.

CHAPTER- III: Research Context and Frame Work of the study deals with the objectives, Orissa's education scenario, scheduled caste and scheduled tribe education - their welfare provisions, education development programme, education at higher level, academic library system in Orissa and LIS for SC/ST communities in the academic environment in Orissa etc. are given. Then, methodology of the study, design and universe of sample, the pilot study, database, questionnaire and limitations of the study etc. highlighted.

CHAPTER- IV: This chapter deals with the analysis and finding of the primary and secondary data of the present study. It consists of two sections: primary data analysis and secondary data analysis. The secondary section deals with the introduction: educational statistics of Orissa, different higher educational institutions, scheduled caste and scheduled tribe percentages in higher education, academic status of institutions under study, status of the academic libraries in Orissa and finding of the secondary data. Analysis and findings of primary data gives the district wise academic institutions under study, institution wise distributions of respondents, analysis of personal data of the respondents, their academic
and social need, information needs and seeking behaviour etc. and lastly, summary and findings of the primary data also highlighted.

CHAPTER- V: This chapter presents a model (OALNET) for networking within the academic institutions of Orissa for the larger interests of the SC/ST communities. Orissa Academic Libraries Network (OALNET)- deals with factors influencing networking the libraries of Orissa, why networking in academic libraries of Orissa, what are the requirements etc. The proposed network based on its objectives, membership, important features and concluding observations

CHAPTER- VI: This chapter presents about conclusions and suggestion.

CHAPTER-VII: Gives bibliographical sources of information and other references in this study.

APPENDIX: Presents the complete questionnaire distributed to the 500 selected students/faculties/ research scholars of the 8 universities and 13 autonomous colleges in Orissa.