

# **CHAPTER – I**

## **INTRODUCTION**

### **1.1 INTRODUCTION**

Technological development in the library electronic resources during the 20<sup>th</sup> century was intended to make access to resources more direct, convenient and timely for the user. The implementation of electronic resources makes the library as a growing organism and libraries needed to adapt process and reorganize staff repeatedly to accommodate the changes inherent in the use of constantly changing environment. All human beings are seekers of knowledge and knowledge is a person's range of information, gained either by experience or through learning. Knowledge of anything is gained by seeking information about it and a seeker has his/her way of going about getting the information needed depending on the purpose for which it is required. Sources of information have increased over the years and there are many ways open to the seeker to get at it. The act of seeking information is dependent on the kind of person who is after it and the purpose for which that person engages himself in that quest for information.

In the 21<sup>st</sup> century knowledge race, there are many significant advantages that make India prominent. Libraries constitute an integral part of education as they are the repositories of knowledge. The primary objective of the library is to organize and provide access to information. This objective will never change but the format and methods that are used will change dramatically, providing new opportunities and challenges. Higher education, scholarship, technology and economics which are all interrelated, play an important role in understanding the needs of libraries. Faculty

and scholars will no longer have to come physically to the library for information, users will no longer be limited with what a library has but to what it can provide.

## **1.2 IMPACT OF ICT ON LIBRARIES**

The digital resources available in the library play a prominent role in facilitating access to required information to the users in an expeditious manner. The digital resources can be used of by any kind of users through online access via internet or authentication method at any time by comfortably sitting at home or office. However, it is imperative that one should be familiar with the use and exploitation of digital resources for one's quicker and effective usage. E-resources can be used for efficient retrieval. Thus, e-resources in a library play a significant role in academic libraries as they are mostly tuned for the promotion of academic excellence and research. E- Resources like CDROM database, E-journals, E-books, Internet resources, etc are slowly replacing the importance and usage of print media.

We are in the age of internet society where information technology in addition to its use in all sphere of human activity has been used extensively to record, store and disseminate information in digital form. IT has almost converted the world into a global village. The revolution in the IT sector is influencing information industries also. Libraries are also changing into advanced technological level to meet the demand on them. The advances in networking and communication technology have made the information services available to the users on their desktop. Before 1990's it was very difficult to find resources for research and related information. But now a day this cyber world provides plenty of facilities, (like search engine for each site, search by key terms) to access to information for the satisfaction of user community.

### **1.3 ELECTRONIC INFORMATION RESOURCES (EIR)**

The electronic information resources must support the university or any kind of institutions curricular and research development. So the researcher target to identify the expected level of used electronic resources. Electronic information resources provides current and updated equivalent with print materials. The search engine and web browser been user - friendly and it provides online tutorials, help menu and other usage guidance. Search engines be a flexible include command search, index and title browsing, etc.

In the age of Information technology, most of the libraries were slowly changed to digital environment using the different types of electronic information resources. The different types of electronic resources were available in different university libraries, such that; Databases For Individual Subject, Indexes, Electronic Books and text, Electronic Journals, E-Magazines, E-Maps, E-Thesis, E- Newspaper, E-Bibliographic Databases, Library Catalogue, Reference Sources, Statistical sources, Sound recordings, Image Database and subject gateways.

### **1.4 EDUCATION SYSTEM IN INDIAN UNIVERSITITES**

The word University is derived from the Latin word "*universitas magistrorum et scholarium*", roughly meaning "community of teachers and scholars". The University is essentially an intellectual arena and a place for the cross fertilization of ideas where the boundaries of knowledge are being perpetually extended. A university is an institution of higher education and research, which grants academic degrees in a variety of subjects.

India has large higher education system. Indian Universities constitute one of the largest educational systems in the world. Indian university libraries are now focusing their attention on the inevitable impact of ICT on their operations in an effort to keep pace with the developments in education, and Information communication Technology. The growth rate of educational institutions in India was very slow before independence in 1947, but now it has one of the largest higher education systems in world. Now there are 543 universities, including 18 central universities, 275 state universities, 96 deemed universities, 13 national importance institutions, 136 research institutes, 5 institutions established under state legislature act, along with 16,885 colleges that provide education in all disciplines. The number of teachers is nearly half a million, with about one hundred thousand students enrolled in higher education.

Multiple and varied challenges like information explosion, IT revolution, Internet evolution, shrinking library budgets, escalating prices of documents, high level of user expectations and availability of information resources in diverse media make the existence and functioning of libraries complex. It is in this complex and dynamic environment that IT offers a wide range of opportunities and solutions to overcome the major challenges. The rapid advances in modern technologies have improved the capabilities of storage, processing, retrieval, repacking, communicating, sharing and managing the explosive growth of information effectively and economically in libraries to a large extent. In using the e-library resources, users has lack of skill in locating and retrieval of information, which impede its effective use. In view of the transition stage from the print media to electronic media, information seeking pattern of users particularly research scholars are likely to change.

## **1.5 PROFILE OF THE KERALA STATE**

Kerala is located in the south-west corner of Indian peninsular between 8018 and 12084 North latitude. The State is bounded by Western Ghats in the East, the Arabian Sea in the West, Tamil Nadu in the South and Karnataka in the North. Total land area is 38,863 sq. km. According to 1991 census, total population in the State is 290.99 lakhs with density per sq. km. as 749 The State has been divided into 14 Districts spreading over 21 Revenue divisions, 63 Taluks and 1453 Revenue Villages. There are 14 District Panchayats, 152 Block Panchayats, 978 Grama Panchayats, 60 Municipalities, 5 Corporations and 1 Township. Kerala is the melting pot of many cultures and civilizations - native as well as foreign and hence consists of a rich heritage. The decentralization of powers to Local self-government Institutions has culminated in the formulation of policy and implementation of developmental works at the grass roots level by the local administration departments. Thus the power is vested in the Director of Panchayat and Director of Municipal Administration who constitute the two field departments.

The Local self-government Institutions (LSGIs) functions as the third tier of Government subsequent to the 74th Amendment to the Constitution of India. LSGIs have been meaningfully empowered and play a prominent role in Kerala where they have been vested with massive transfer of resources as well as administrative powers. The developmental programmes are identified and implemented through Grama Sabhas. Thus the LSGIs have emerged as effective agencies for the implementation of developmental programmes by closely following the grass roots level approach and Participatory Planning.

The State is divided into 14 revenue districts: Thiruvananthapuram, Kollam, Alappuzha, Pathanamthitta, Kottayam, Idukki, Ernakulam, Thrissur, Palakkad, Malappuram, Kozhikode, Wayanadu, Kannur and Kasaragod. This division is for smooth administrative functioning. The districts in South Kerala namely, Thiruvananthapuram, Kollam, Alappuzha, Pathanamthitta, and Kottayam have gained prominence by virtue of its geographical, historical and cultural similarities. The districts owe its name to the important town or city in a particular district, the exception being Wayanad district. After the renaming in 1990 some districts and their towns were renamed like Thiruvananthapuram (formerly known as Trivandrum), Kollam (Quilon), Alappuzha (Alleppey), Thrissur (Trichur or Thrishivaperur), Palakkad (Palghat), Kozhikode (Calicut) and Kannur (Cannanore).

The District Collector, an officer from Indian Administrative Service (IAS) of Kerala cadre is appointed by the State Government of Kerala to govern a district. The various Departments of the State Government and its offices in the district level ensures the functioning of the district administration. The executive leader of the district administration is the District Collector and the District Officers of the various Departments in the district render technical advice to him in the discharge of his duties.

## **1.6 HIGHER EDUCATION IN KERALA**

Higher Education means education in a college or University which is pursued after successfully completing a course of study in a high school or secondary school. Ever since the formation of the State, Kerala had always understood the scope and role of education and hence the state has a long and chequered history of education,

both in general and higher education. The beginnings of formal and institutionalized education at all levels had seen a spurt in Kerala long before its acceptance by other states of India. While the literacy rate of the country remained 62% as per the 2001 census, with 89.8%, Kerala retained its position on the top as the most literate state in India. Thus the State occupies a unique place in the educational map of India which is not merely the result of a sudden spurt of activity in the field of education in recent times but a culmination of enlightened policies followed by its rulers from early days and the aftermath intellectual pursuits of the people spread over several centuries.

The meaning of Higher Education in the current society assumes a wide array of roles that ranges from being a basic ingredient for its successful functioning to a mechanism capable of weaving the multitude of distinctly different threads that can create a better future. . The central and state governments in India have been allocating considerable share of their resources in the field of education considering the importance of education in nation building and economic development, along with governments around the world. However, upon closer examination we can find that the educational development in India is lopsided with substantial inter-regional differences, policy shifts and prominent disparities between communities/sections of the society where some enjoy a disproportionate advantage over the others. The following table presents the list of Universities in the state of Kerala.

## 1.7 UNIVERSITIES IN KERALA

Universities	Location	Type	Founded
Cochin University of Science & Tech.	Ernakulam	Multidisciplinary	1971
Kannur University	Kannur	Multidisciplinary	1997
Kerala Agricultural University	Thrissur	Agri. & Engg.	1972
Kerala Univ. of Fisheries & Ocean Studies	Kochi	Fisheries	2011
Kerala University of Health Sciences	Thrissur	Health	2011
Kerala Veterinary and Animal Sciences Uni.	Wayanad	Animal Sciences	2011
Mahatma Gandhi University	Kottayam	Multidisciplinary	1983
Sree Sankaracharya University of Sanskrit	Kalady	Sanskrit & Vedic Studies	1994
University of Calicut	Malappuram	Multidisciplinary	1968
University of Kerala	Trivandrum	Multidisciplinary	1937
National Uni. of Advanced Legal Studies	Kochi	Legal education	2009

Besides Government Departments, the activities of Government of Kerala is spread over several other Government Institutions such as Commissions, Autonomous Bodies, Cultural Institutions, Public Sector Undertakings, Welfare Fund Boards, Co-operative Organisations, Development Authorities, Universities etc.

## 1.8 USE OF E-RESOURCES IN LIBRARIES

The Internet e-resources in transforming the library system and as well the way in which we view information sources. It has made simple and speedy purchase of information sources like books, journals and electronic publications. Many publishers catalogue tools like “Books in Prints” as well as forms for ordering

documents are available on the Internet. Librarians can search the current publication on the area of activity and the user can browse any topic of interest existing in any part of the world and get response within seconds. The Librarians need quick access to book, journals and electronic publications. Internet access is the simple and efficient method for access and updating the documentation and interface of catalogue of all libraries.

The availability of e-resources have made a tremendous impact and dependency on the researchers and the students alike and paved way to the development of novel methods of scholarly communication. The advent of e-resources has brought about a significant transformation in their approach and the way they seek information and the methods they employ for research and learning activities. E-resources are appreciated to be less expensive and easily accessible thus provide a gamut of new course material and acts as a powerful supplement to the traditional ways of study and learning. It has been now facilitating electronic communication, exchanges of ideas and collaboration in search globally replacing the print media. E-resources can be accessed for the latest development in one's area of research at an amazing speed. It also plays a significant role in distance education, conferencing and thus transforming the academicians as facilitators providing guidance, to students and steering observations. The internet therefore has metamorphosed itself by providing an excellent academic environment where the research community can perform their activities in a effective manner. Hence, it is essential apart from others the research students can have excellent opportunities to use Internet based e-resources for various purposes such as information access, communication, scientific correspondence, publication of research reports and

interactive session with other researchers and students in the field. Thus it is essential to have access and good knowledge about Internet technology apart from other IT competencies, Databases and web resources.

## **1.9 E-SERVICES IN HIGHER ACADEMIC LIBRARIES**

Libraries can be divided on the basis of the use of e-resources as follows:-

- Libraries devoid of printed materials and support staff where it functions fully on e-resources.
- Traditional libraries that are gradually being transformed to e-form

With the onslaught of e-resources the roles of cataloguers where they constantly attempt to provide enhanced access to new sources have also drastically changed. They are available as process books, CD-ROMs, computer discs and multi-format items. Large library OPACs spread across the globe helps save time and efforts of library staff in the classification and cataloguing of books. This further brings down duplication of technical processing of data. After scanning the documents the request for Inter-Library Loan (ILL) can be sent via e-mail and the photocopies may be sent by post, fax, or via e-mail. The library professionals are equipped to provide reference and information services by accessing and searching on-line catalogues of other libraries, even downloading a lot of available information in e-mail and get them transferred through e-mail.

### **1.9.1 REMOTE INFORMATION SERVICES**

A variety of information sources and services can be accessed over the Web either on payment of subscription/license fee. These include Springer journals, Elsevier journals, Science Direct, Academic Press and databases of Scifiner, Web of

Science, and Scopus. Most sophisticated use of the Internet is to mount internal publication like newsletters, reports and staff publications, on the Web server and provide accessible formats and it provides access to the table of contents with or without full text search support.

### **1.9.2 E-DOCUMENT DELIVERY**

As compared with electronic publications, the actual application of electronic document delivery has basically no difference from its hard-copy equivalent. However, increasing client expectation and decreasing resources warrant for networking and resource sharing. Electronic document delivery can be used to maintain adequate and rapid access to resources not held locally, in an era of rising costs and declining budgets. The major issue that affects electronic document delivery is that it needs to minimize the time delay between request and delivery to be useful. Library clients shall be satisfied only when electronic document delivery methods take less time than traditional hard-copy delivery. The other issue to be resolved in this area is the impact that copyright of the materials that are 'born digital'. JCCC, DELNET, British and American Council Library resources are some of this kind.

### **1.10 NEED AND SIGNIFICANCE OF THE STUDY**

The main objective of this study is to analyze dependency of teachers and research scholars on E-Resources, the perceived impact of the e-resources on the academic efficiency and problems faced by them while using the e – resources. The research scholars are exposed to an array of e-resources through internet. They should be able to differentiate between useful and useless information and should be able to access the needed information effectively and efficiently.

This modern information society, the user community has been demanding, pinpointed, exhaustive and expeditious information. To cater to the information needs of the researcher's libraries require accessibility to a variety of information sources, particularly the digital information in addition to the print documents. There is a need to study the usage of E - resources by university students, scholars and teachers in various universities of Kerala.

For long librarians have been studying user needs to improve the service of libraries to be responsive to the needs of their users. Information seeking is a process of looking for, making a search for collection of documents/books/articles and identify those that deal with the subject the user, the one searching for information, is interested in. There are systems designed to facilitate literature searching but the primary objective is the study of the users of libraries, the seekers of information and how they go about it, their behaviour while engaged in that search. With the knowledge gained of the information seeking behaviour of any specific group of users, libraries with the aid of computers promote new modes of search with potential to enhance the process of search.

The present study is at the 'micro level' and the seekers of information are the post-graduate students, research scholars and teachers of the selected Universities of Kerala. They generally search for information/literature to follow up their classroom lectures, to prepare for discussions and seminars on specific issues and of course, to write up assignments and project reports. They might also look for information in general and subjects of special interest to them. They might also be preparing for competitive examinations in search of a fruitful career.

They have in the present day not only physical libraries but the internet which provides both scholars and students easy and quick access to electronic information resources located all over the globe. If academic libraries as information providers wish to retain their pivotal role in their university setting they must gain knowledge of information seeking by their academic communities to provide quality services and access to relevant information, training and resources. Developing modules of how students and academics search for information is one of the ways of understanding it.

### **1.11 INFORMATION SEEKING BEHAVIOURAL MODEL**

Ellis. D (1999) developed a behavioural model to have a better understanding of the information seeking behaviour of the members of the faculty in the social and physical sciences. The purpose behind the development of Ellis's model was to describe the patterns of information seeking behaviour of his subjects who were social scientists and break the patterns into their basic behavioural characteristics. He later determined that his behavioural mode could also describe the information seeking behaviour of physical scientists.

Combining his research on social scientists and that of his work with his colleague's research on physical scientists Ellis's behavioural model consisted of eight stages. He uses the term 'features' rather than 'stages'. These features are named and defined as starting, chaining, browsing, differentiating, monitoring, extracting, verifying and ending.

- **Starting:** the means employed by the user to begin seeking information, for example, asking some knowledgeable colleague;

- **Chaining:** following footnotes and citations in known material or ‘forward’ chaining from known items through citation indexes;
- **Browsing:** ‘semi-directed or semi-structured searching’;
- **Differentiating:** using known differences in information sources as a way of filtering the amount of information obtained;
- **Monitoring:** keeping up-to-date or current awareness searching;
- **Extracting:** selectively identifying relevant material in an information source;
- **Verifying:** checking the accuracy of information;
- **Ending:** may be defined as ‘tying up loose ends’ through a final search.

Ellis described it as the ‘initial search for information’ which involved finding a key citation to a paper, article or monograph. Then additional information on the subject or additional articles by the same author(s) is needed or wanted. Chaining is following the footnote trail. The seeker follows the trail from citation to citation and creates a chain of footnotes that lead to the needed information. Once a source or ‘area’ that had useful information is found then begins the browsing of the area or source for additional information on the topic of interest. Differentiating is sifting through the discovered sources and filtering out the undesirable resources. Choices are made on each discovered piece of information based on the quality of the document or article. Once the number of sources that meet the information need is found monitoring the field is continued for new developments or additional information. ‘Extracting’ is the sixth and final stage in Ellis’ and initial model. Once the desired source is discovered work is begun ‘to locate material of interest’ through the source. The two additional stages to the model are ‘verifying’ and ‘ending’. In ‘verifying’ the discovered source is checked for errors in data gathering, research

design, statistical calculations, citations and reputation of the author. The social scientists reported that this was only a minor concern to their information seeking behaviour. 'Ending' occurs at the finish of a project when there is a return to the literature for one last review to find any additional sources of information on the topic of interest.

The uniqueness and effectiveness of Ellis's model is that it is based on empirical research and has been tested and validated. Ellis quotes, 'the detailed interrelation or interaction of the features in any individual information seeking pattern will depend on the unique circumstances of the information seeking activities of the person concerned at that particular point of time'. Any set of information seeking activities can be approached and described through Ellis's features as it fits in a large number of empirical situations and is general in nature.

### **1.12 STATEMENT OF THE PROBLEM**

The selected user groups in university libraries of Kerala are expected to utilize the resources of the library of the university as it is their major source of information. Are they making full use of it? When they find that source not adequate to meet their requirements do they make use of the internet? They could encounter problems in their quest either because of their lack of skill in accessing information resources or because they are not at all aware of their existence and availability.

At present situation the universities are enhancing the research and qualities of digital presence through dynamic websites and online systems and including e-learning portals and subject gateways. The university libraries are also gradually and appropriately used web technologies to enable the access to their user community not

only with in the university but also across the campuses. As like, the assessment of conventional and physical library services. The use and relevance of library websites, the E-content and web enabled information services need to be examined, for its impact among the user community. Hence, the present study “USE OF ELECTRONIC INFORMATION RESOURCES IN UNIVERSITY LIBRARIES IN KERALA: A STUDY ON USER POINT OF VIEW” is chosen in order to estimate the advantages and limitations of utilizing web based resources and services particularly in university libraries.

### **1.13 BRIEF RESUME OF THE SUCCEEDING CHAPTERS**

Chapter II deals with the review of related literature and gives a list of various studies related to this investigation.

Chapter III is concerned with research design, gives a detailed account of the objectives, hypothesis, sampling, data collecting and method adopted for the study.

Chapter IV gives a brief description of the universities undertaken for the study.

Chapter V deals with the analysis and interpretation and gives the detail analysis of the data collected and applying the statistical analysis made.

Chapter VI deals with the finding of this analysis, further suggestions and conclusion.

## REFERENCES

- [1] **Carlson, S. (2005).** Scholars note “decay’ of citizens to online references. *The Chronicle of Higher Education*, Available at: <http://chronicle.com/daily/2005/03/2005031402n.html>.
- [2] **Ellis, D. A. (1999).** Behavioural Approach to Information Retrieval System Design. *Journal of Documentation*, 45(3) 171-212.
- [3] **Garner, J., Horwood, L & Sullivan, S. (2001).** The place of e-prints in scholarly information delivery. *Library Management*, 25 (4) 250-6.
- [4] **Hari Krishna Reddy, S. & Karisiddappa, C. R. (1997).** Information Seeking Behaviour of the professional in the field of disabilities with special reference to mental handicap in India. *Annals of Library Science and Documentation*. 44(2), 54-64.
- [5] **Jamali, Hamid R. & David Nicholas. (2008).** Information Seeking Behaviour of Physicists and Astronomers, *Aslib Proceedings* 60(5), 444-462.
- [6] **Jonhson, R. (2002).** Institutional repositories: partnering with faculty to enhance scholarly communication, *D-Lib Magazine*, 8 (11).
- [7] **Kuhlthau, C.C. (1994).** Seeking Meaning: a process approach to library and information services. Norwood, N.J. *Ablex Publishing*.
- [8] **Kuhlthau, C.C. (1991).** Inside the Search Process: Information Seeking from the User’s Perspective. *Journal of the American Society of Information Science*, 42(5) 361-371.
- [9] **Kumar, R.P. (1994).** An Overview of Modern Technologies Applications in Indian Libraries (Brief Communication). *The International information and Library Review*, vol.26, pp.327-339.
- [10] **Lynch, C.A.(2003).** Institutional repositories: essential infrastructure for scholarship in the digital age, *ARL Bimonthly Report*, No.226, available at :[http:// www.arl.org/newsltr/266/ir/html](http://www.arl.org/newsltr/266/ir/html).

- [11] **Mahendra Pratap Singh (2004).** Use of Information Technology in Library and Information Science. *Abhijee publications*, New Delhi, 6-13.
- [12] **Majid, S. & Kassim, G M. (2000).** Information seeking behaviour of International Islamic University Malaysia law Faculty Members. *Malaysian Journal of Library and information science*, 5 (2), 1-17.
- [13] **Oberulu (2003).** Internet access to information resources. *Annual review of information science and technology*. 25, 263-312.
- [14] **Prasad, H.N. (2007).** Information seeking behaviour of physical scientist and social scientist: A report. *Annals of Library and information Studies* 54, 190-194.
- [15] **Srinivasa Ragavan, S. (1999).** Information Needs and Information Seeking Behaviour pattern of Scientists in Biological Sciences in the Academic Universities of Tamilnadu. *Madurai Kamaraj University*.
- [16] **Tepper, T.H. & Beth, K. (2002).** Long-Term retention of electronic theses and dissertation, *College & Research Libraries*, 63 (1) 61-72.
- [17] **Westbrook, Lynn (2003).** Information Needs and Experiences of scholars in Women's Studies: problems and solutions. *College and Research Libraries* 64(3), 192-209.
- [18] **Wilson, T.D. (1999).** Models of Information Behaviour Search. *Journal of Documentation*, 55(3) 249-270.
- [19] **Yoo-Seong Song (2004).** A Comparative Study on Information – Seeking Behaviour of Domestic and International Business Students. *Research Strategies* 20(2) 23-34.