

**NEPAL LIBRARY AND INFORMATION CONSORTIUM (NELIC)  
IN FACILITATING ACCESS TO E-RESOURCES**

**A Thesis**

**Submitted to the**

**Central Department of Library and Information Science**

**for the Fulfillment of the Requirements for the**

**Master's Degree in Library and Information Science**

**Sumbitted by**

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## **LETTER OF RECOMMENDATION**

This is to certify that the thesis submitted by Meena Tamang entitled “**NEPAL LIBRARY AND INFORMATION CONSORTIUM (NELIC) IN FACILITATING ACCESS TO E-RESOURCES**” is an original work prepared under my supervision and guidance. I recommend this thesis for final approval and acceptance.

Date: October, 2015

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**Dr. Madhusudan Karki**

(Thesis Supervisor)

## **LETTER OF ACCEPTANCE**

The thesis entitled “**NEPAL LIBRARY AND INFORMATION CONSORTIUM (NELIC) IN FACILITATING ACCESS TO E-RESOURCES**” prepared and submitted by Meena Tamang in partial fulfillment of the requirements for the Master’s Degree in Library and Information Science is hereby accepted and approved.

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Date: October, 2015

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## ABSTRACT

The thesis entitled **“Nepal Library and Information Consortium (NeLIC) in facilitating access to e-resources”** has been carried out to find out role of NeLIC in providing access to scholarly e-resources for the fulfillment of scholarly information needs of the library users. NeLIC provides access to scholarly e-resources to its member libraries. But no research has been carried out with regarding to NeLIC and its e-resources service. Review of ten different national and international literatures related to this topic has been done. Cases of different library consortia were studied. The major objectives of this study are: to point out the importance of library consortium, to find out whether the scholarly information needs of users are fulfilled or not, to obtain valuable opinions and suggestions from the librarians and users, to find out which resources are being able to fulfill information need of users.

A set of questionnaire was distributed to the library users of seven member libraries of NeLIC. The librarians/information service providers were interviewed. The data collected from the library users and librarians has been analyzed and presented with the tables and charts. Simple statistical tools were used for the analysis of data.

The major findings of this research are: JSTOR is nominated as the most appropriate e-resource by most of the library users, most of the users have commented that the e-resources available through NeLIC are useful but not sufficient, library users have demanded for addition of more e-resources related to management, development studies, Research Gate, etc. Various suggestions were made for the better e-resources service and better performance of NeLIC. Various recommendations were made like NeLIC should subscribe e-books as well, NeLIC should hire full time staffs so that they can devote their full concentration for the development of NeLIC, NeLIC should subscribe more e-resources related to management, science and technology, NeLIC should conduct different trainings related to accessing information through e-resources.

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## **DEDICATION**

**Dedicated to**

**My Parents**

**for**

**love, support and encouragement**

## **PREFACE**

There is a great impact of technology in every field. It has made drastic change in the society. Even library and information service sector could not be apart from the technological developments. Because of this, new disciplines like digital library, knowledge management, virtual library, etc. has been emerged in the field of library and information service. Traditional libraries have been changed to modern/virtual libraries. So, librarians/information service providers are transferring them from traditional librarians to ICT knowledgeable librarians. Traditional information sources are gradually changing to e-resources.

This research is mainly concerned with e-resources and their easy accessibility through library consortium. Library consortium is also involved in other activities related to information service but it is primarily focusing on the subscribing of e-resources with cost sharing. This has made the libraries and educational institutions easy to provide access to a wide range of renowned e-resources to their users.

In Nepal, NeLIC is advocating for this being solo library consortium. The major objective of NeLIC is to help provide libraries and educational institutions with educational information services in Nepal, including access to journal databases and other electronic resources. So, this research is focus on the role of NeLIC in providing access to e-resources.

This research reflects the e-resources using habit of library users. The trend of accessing information sources has been changed from printed form to electronic or digital form. Users' demand also changed with the development of ICT. This study tries to find how the users are benefitted by the e-resources subscribed by NeLIC, whether they are satisfied from the service or not. This research is focusing on e-resources service of NeLIC and its impact on the information demand of the users.

This research contains different chapters which describes different sections of the whole research process.



The first chapter is introduction which deals with background information about library consortium and e-resources. It also deals with the problem of the study, objectives of the study, research questions, significance of the study, scope and limitations of the study, definition of the terms and organization of the study.

The second chapter is literature review which deals with the review of related literatures.

The third chapter is focus of the study.

The fourth chapter is research methodology. Here, the methodology used in order to carry out the study to meet the predefined objectives has been discussed. It deals with research design, population, sampling procedure, data collection procedure and data analysis procedure.

The fifth chapter is analysis and presentation of the data. Collected data has been tabulated and analyzed using different statistical tools.

Finally the sixth concluding chapter attempts finding conclusion and make some recommendations for the further improvement.

Meena Tamang

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## LIST OF ABBREVIATIONS

AGORA: Access to Global Online Research in Agriculture

AICTE: All India Council for Technical Education

AJOL: African Journals Online

ARDI: Access to Research for Development and Innovation

ASA: Acoustical Society of America

IBMS: Institute for Banking and Management Studies

BLCMP: Birmingham Libraries Cooperative Mechanism Project

BS: Bikram Sambat

CALICO: Cape Library Cooperative

CALIS: China Academic Library and Information System

CBUC: Consortium of Academic Libraries of Catalonia

CNAS: Centre for Nepal and Asian Studies

CSIR: Council of Scientific and Industrial Research

DD: Document Delivery

EIFL: Electronic Information for Libraries

E-books: Electronic books

E-journals: Electronic journals

E-resources: Electronic resources

eSAL: Eastern Seaboard Association of Libraries

FORSA: Forum for Resource Sharing in Astronomy

FOSS: Free and Open Source Software

FRELICO: Free State Library and Information Consortium

GAELIC: Gauteng and Environs Library Consortium

HERD: Health Research and Social Development Forum

HINNARI: Health InterNetwork Access for Research Initiative

ICIMOD: International Centre for Integrated Mountain Development

ICMS: Institute of Crisis Management

ICOLC: International Coalition of Library Consortia

ICT: Information and Communication Technology

IIDS: Institute for Integrated Development Studies

INASP: International Network for Availability of Scientific Publications

INDEST: Indian National Digital Library in Engineering Sciences and Technology

INFLIBNET: Information and Library Network

JOL: Journals Online

LELICO: Lesotho Library Consortium

LOC: Library of Congress

MHRD: Ministry of Human Resource Development

MWU: Mid Western University

NCCR: Nepal Centre for Competence in Research

NCED: National Centre for Educational Development



NeLIC: Nepal Library and Information Consortium

NepJOL: Nepal Journals Online

NIC: National Information Centres

NISSAT: National Information System in Science and Technology

OARE: Online Access to Research in the Environment

OCLC: Ohio College Libraries Center

OSA: Optical Society of America

PERI: Programme for Enhancement of Research Information

PNAS: Proceedings of the National Academy of the Sciences

PULINET: Provincial University Library Network

RUSLANet: Regional University and Science Library Advanced Network

SEALS: South East Academic Library System

TU: Tribhuvan University

TUCL: Tribhuvan University Central Library

UGC: University Grant Commission

UK: United Kingdom

# CHAPTER 1

## INTRODUCTION

### *1.1 Background of the Study*

The word library has been derived from Latin word 'Libraria'. The word library is the name of that place where books or other printed and written materials are kept safely (Adhikari, 2012). According to the Oxford English Dictionary, the word library was used in English, as early as 1374 AD, in the sense of being a place where books were kept for reading, study, of reference. By the 19<sup>th</sup> century, a library also remained 'a building, room or set of rooms containing, a collection of books for the use of the public or some portion of it, or the members of society, a public institution or establishment charged with the care of a collection of books (Karki, 2012). Library is an organized collection of information sources and similar resources, made accessible to a defined community for reference or borrowing. A library collection include books and non-book materials like periodicals, newspapers, manuscripts, films, maps, prints, CDs, cassettes, e-books, databases, etc. In earlier times, library was presumed just as a store house for preserving rare books. But nowadays, the concept of library has been changed and it is considered as the centre for acquiring information no matter whatever the source of information is.

Libraries are no longer the warehouse of information, but rather a gateway to the information and knowledge. Availability of information and knowledge is a key to success. Librarian is not merely a collector but rather a gatekeeper of information and knowledge. Traditionally, libraries have been functioning as standalone entities building comprehensive duplicate collections, but now it is in a network of shared resources (Chand and P, 2008).

Information revolution is the marked way in which society becomes an information society from whether it was before – traditional, agricultural or industrial one. The information has become an open phenomenon over which every individual has right to access. Information is such a highly valued commodity that individuals who produce this

are super elites of an information society. The libraries which were earlier known as store houses too have widened their scope by accommodating the users to get information from all corners of the world. Information revolution has made libraries around the world to adopt new philosophies and technologies for their services and also reduce the cost of providing information. It is a greater challenge to libraries to maintain the breadth and lengths of collections irrespective of their nature.

Information is stored or preserved in different sources. The source of information is changing with time. In ancient period, information sources used to be clay tablets, papyrus, parchment, etc. Gradually the information sources changed with the passage of time. With the advent of paper, information was recorded in paper in the form of books, journals, etc. So, information in printed form is one of the most important innovations in the history of library and information society. But with the passage of time, print form also became one of the oldest medium of expression and communications. The print form is subject to decay and destruction and occupies space making the hoarding very difficult to maintain. Hence, arose the need for a technology that could be stored in a small place and be available at any time and any corner. In this age, the information seekers do not only rely on the printed information sources but seek information in digital format. With the development of information technology, information is recorded in digital form rather than in printed form. With the introduction of Internet and Intranet, it was no longer considered practical to move to place to have access to information sources. There is no need for the information seekers to visit library or information centre. With the continuous development in information and communication technology, the libraries and information centres have started to become paperless. Users have access to information sitting in one corner of the world. So, nowadays, users are having access to information in digital format in their desktop, laptop and other devices. That is why users' expectation of having instant access to information from any location at any time has been gradually fulfilled.

In today's world, Internet plays a vital role in the dissemination of information from whole around the world within few seconds. Internet is a global library since it collects and organizes unlimited resources to provide necessary information to information

seekers. The resources available through Internet are called online resources. They are sometime called e-resources (Aryal, 2008).

Electronic resources refer to those materials that require computer access whether through personal computer, mainframe, or handheld mobile devices. They may be accessed remotely via the Internet or locally. Some of the most frequently encountered types of e-resources are:

- E-journals
- E-books
- Full-text (aggregated databases)
- Indexing and abstracting databases, reference databases (biographies, dictionaries, directories, encyclopedias, etc.)
- Numeric and statistical databases
- E-images
- E-audio/visual resources (LOC web site)

Electronic resources form one of the many formats that the library collects to support its universal collections. There are different types of e-resources from where we can retrieve information. E-journals and e-books are in high demand nowadays and are highly used by scholars, researchers, lecturers, professors, students, etc. E-resources like JSTOR, Project Muse, Emerald, Oxford University Journals, Cambridge Journals, Wiley Online Library, EBSCOHost, etc. are widely used worldwide. These e-resources contain peer reviewed journals and e-books covering wide range of subjects.

The information seekers are demanding electronic resources rather than printed resources. So, acquiring and management of e-resources is a challenging task for libraries and information centres. Digital technology has revolutionized education and created new opportunities to share information, to communicate and to learn. However, billions of people around the world are still unable to reap the benefits due to factors such as the high subscription costs of electronic scholarly content and legal barriers to accessing, using and sharing information, or because they do not have access to technology (EIFL web site).

Electronic resources are in high demand in present days. Scholarly online e-resources are archived and managed by different publishers and institutions. It needs good technological knowledge as well as other technological infrastructures. So, the subscription cost of these e-resources is increasing day by day. That is why it is nearly impossible to subscribe e-resources individually by any institution. So, acquiring scholarly e-resources is one of the greatest challenge for libraries and other educational and research institutions.

The social system is organized on the basis of cooperative principles. Cooperation is an important feature of public life. Cooperation means people working together with common interest and intention. Enhanced user services and greater satisfaction of users' wants and needs must be a principal reason for any sort of cooperative activity among libraries. Libraries all over the world recognize that they can no longer endeavor to own all the materials that their users' need or want, and that sharing is necessary in order to achieve maximum reader satisfaction. Cooperation in terms of resource sharing and collection development is one of the ways to satisfy the users' demand. Cooperation is an essential facet of modern library management in most of the countries. Library cooperation developed from sharing of union catalogue information.

For the sharing of books and other information sources, cooperation between the libraries was started. Library cooperation goes back to 1880s and is a long standing tenet of the profession. Collaboration is strongly rooted in most of our current activities. Even Harvard University has stated that no library is big enough or rich enough to go it alone anymore (Horton, 2015). So, it is not possible for one library or information centre to hold the full stock of information resources or to procure all information, which may be in demand by its users. Even not a single library or information centre can meet the thrust of knowledge of all users from its holdings. To solve this problem, library cooperation started long ago, such as interlibrary loan, document delivery, library networks, etc. At present, the more accepted system of resource sharing is formation of library consortia.

Groups of collaborating libraries are called cooperatives, networks, collectives, alliances, partnerships as well as consortia. The term library consortium has been common in library literature for about 50 years. A library consortium is any local, regional, or

national cooperative association of libraries that provides for the systematic and effective coordination of the resources of school, public, academic, and special libraries and information centers, for providing services to the clientele of such libraries (Horton, 2015). The primary purpose of establishing a library consortium is to share physical resources including books and periodicals among members. However, the mode of cooperation has gone under transformation with infusion of new information technology from print-based environment to digital environment. With the advent of e-resources, the concept of library consortium has been mooted mainly for acquisition of e-journals. Library consortia are basically formed to use resource sharing as a means of dealing with increased demand for materials and increased cost for information products. Through consortia, libraries are coordinating their purchasing to provide the best quality and quantity of materials to their clientele at a lower cost (Rao, 2006). So, nowadays, library consortia are focused on purchasing and sharing of electronic resources rather than other form of resources. As the resources that are procured today through consortium are mainly e-resources, it has become possible for the users to access and download the required materials without even going through the elaborate process of inter library lending (Bedi, 2008). Today libraries participate in local, state, regional consortial purchasing plans that have grown to include national and international offerings (Baker, 2000). Forming of library consortia is a recent trend in library and information society for acquiring information resources mainly e-resources. It has been practicing worldwide either the country is developed, developing or under developed.

Forming of library consortia is a very important practice in the field of library and information service. However, along with many advantages there are also disadvantages of library consortia. Some advantages and disadvantages are listed below:

Advantages:

- Shared access to information sources
- Site wide access for all involved
- Smaller libraries can benefit
- Possible global impact

- Common interface to resources
- Possible ability to attract foreign investment
- Ability to achieve goals

Disadvantages:

- Duplication of effort
- Reduced buying power
- Confusion for libraries, vendors and patrons
- Diffusion of financial resources
- Diffusion of human resources (Maghaddam and Talawar, 2009).

Library consortia from all over the world gather to make a group consisting of many library consortia named as International Coalition of Library Consortia (ICOLC). It is an informal, self-organized group of library consortia from around the world. It currently comprises approximately 200 library consortia in North and South America, Europe, Australia, Asia, and Africa. The member consortia serve all types and sizes of libraries. ICOLC has been in existence since 1996. ICOLC supports participating consortia by facilitating discussion on issues of common interest. It conducts meetings twice a year which is dedicated in keeping participating consortia informed about new electronic information providers and vendors, and other issues of importance to directors, governing boards, and libraries of consortia. From time to time ICOLC also issues statements regarding to topics which affect libraries and library consortia (ICOLC web site).

The formation of library consortium is not totally a new concept. It is a form of library cooperation with some added concepts. The actual history of library cooperation cannot be pointed out. However, formation of library consortium started in the mid nineties. Use of the term consortium became established in the North American library lexicon in the 1960s and indicates forms of structured cooperation focused primarily on resource sharing and cost reduction. In some European countries, use of the term in library contexts has very remote origins. For instance in Italy, the word 'consorzio' has been used in public libraries throughout the twentieth century (Drake, 2003). Similarly, library consortia have been established in different parts of the world with the passage of time.

At present, it is one of the most important concepts of library cooperation that plays significant role in providing access to information sources mainly e-resources along with advocating different issues related to library and information to the member libraries in different corners of the world.

In Nepal, libraries have been established since ancient time. In ancient Nepal, the information sources mainly related with religions were stored in temples, bihars, monasteries, etc. So, temples, bihars, monasteries can be called as the ancient form of today's libraries (Adhikari, 2065). Some attempts were made after the unification of Nepal by Prithivi Narayan Shah to preserve sources of information. But, due to geo-political isolation for nearly two centuries since the foundation of 'Great Nepal' by Prithivi Narayan Shah, the country remained largely unaffected by the achievement made in library and information sectors elsewhere throughout the world (Karki, 2012). During the regime of King Girvan Yuddha Bikram Shah in 1869, Kedar Nath Pandit was nominated as librarian or caretaker of collection of important books called as 'Pustak Chitai Tahabil'. The 'Pustak Chitai Tahabil' is considered as the first legally established library of Nepal. Taking that day as reference, library day is celebrated on Bhadra 15 every year in Nepal. Establishing libraries were considered illegal during the Rana regime and people attempting to establish libraries and make people aware were punished. But, inspite of cruel Rana regime, some libraries were established during that period. Development of libraries began after the restoration of democracy in Nepal in 2007 BS.

Books, journals, etc are the major sources of information which are managed in the library. With the development of information and communication technology and with the transformation of printed materials into digital and electronic resources, libraries in Nepal also started accessing e-resources. HINNARI is the first e-resource/online journal database accessed in Nepal. The tradition of using e-resources in Nepalese libraries began with the implementation of Programme for the Enhancement of Research Information (PERI) under the International Network for the Availability for Scientific Publication (INASP) in 2002. PERI is a program to support capacity building in the research sector in developing and emerging countries by strengthening the production, access and dissemination of information and knowledge. The PERI has been implemented in more



than 50 countries to reduce digital divide between the developing and developed countries. Tribhuvan University was nominated as the national coordinating agency for INASP/PERI in 2003. After implementation of PERI Nepalese researchers, scientists, students, graduates, professors and scholars had access to full text database of world's 25,000 high quality scientific journals. The PERI programme was free to Nepal from 2003-2009 because INASP rose funding from donors to provide free access to Nepal.

Another most useful e-resource is JSTOR which is started to access in Nepal since 2004. JSTOR is founded to build trusted digital archives for scholarship. It is a not-for-profit organization dedicated to helping the scholarly community to discover, use, and build upon a wide range of intellectual content in a trusted digital archive. Social Science Baha was the solo institution which provided access to JSTOR database. The FORD Foundation had supported for the participation fee. Social Science Baha provided the online access facility to its users and allow them to download required articles (Aryal, 2008).

It became impossible to get financial assistance from helping institution always. Because of the high subscription rate of e-resources, it became difficult for Nepalese libraries to have access to e-resources. So, information service providers from different libraries and educational institutions gathered to have solution for the problem. There were several discussions about collaboratively subscribing these online e-resources with cost sharing. As the result, concept of forming library consortium was developed. Therefore, on 10 December 2009, Nepal Library and Information Consortium (NeLIC) was established as a non-profit organization under the Social Organisations Registration Act 2043. This consortium was formed with the joint effort of leading Nepali libraries and educational institutions.

### *1.2 Statement of the Problem*

Information as a power resource has been recognized as an important assets for national development. It is now universally accepted that information plays an important role in a country's socio-economic progress. Library and information sector is the core and focal

point for information services (Karki, 2012). Information is the vital component for the development of society. Good and reliable information is essential for the effective operation and decision making at all levels (Kaye, 1995).

The universe of knowledge is growing day by day. Millions of information is being exploded time to time. Thousands of literatures are being published daily. The sources of information have been gradually changing from printed to digital or electronic resources. With the development of information and communication technology, e-resources emerged as source of information and now it has become the most demanding source of information. There are different types of e-resources containing e-journals, e-books, etc available worldwide. From acquiring information sources to properly managing is a long process which takes a lot of time as well as need much financial investment. But, due to different barriers like lack of adequate budget, time constraints and technological infrastructure, it is very difficult for one library to acquire and manage e-resources. This problem is more severe in developing countries like Nepal where people have to face many problems to get the accurate information with minimum cost. So, the importance of library consortium has been felt and people from different libraries/information centres and educational institutions gathered to establish a library consortium which will work for the betterment of library services for providing mainly e-resources for the libraries and educational institutions in Nepal. That consortium was established on December 10, 2009 and named as Nepal Library and Information Consortium (NeLIC). NeLIC is actively working from the date of its establishment to help provide educational information services in Nepal including access to online journal databases and electronic resources. The members of NeLIC are increasing and it is providing them with electronic resources. However, no research or study has been carried out to find out its performance, whether the member libraries are benefited or facing problems, whether the information need of users are fulfilled or not, whether NeLIC is able to provide electronic resources according to need of users or more resources has to be subscribed according to their demand, whether member libraries/institutions are facing technical problem during accessing electronic resources or not? What are the barriers for the better performance of NeLIC? What are the responses from member libraries/institutions and its users towards

the services of NeLIC? Are there any comments or suggestions for the better performance of NeLIC? What are the challenges faced by NeLIC?

### *1.3 Objectives of the Study*

#### *General Objectives*

The general objective of this research is to introduce NeLIC and find out its role in facilitating access of e-resources to the libraries/information centres and educational institutions of Nepal.

#### *Specific Objectives*

The specific objectives of this research are as follows:

- a. To elaborate the concept of library consortium.
- b. To introduce Nepal Library and Information Consortium (NeLIC).
- c. To point out the importance of consortium for the libraries/information centres and educational institutions.
- d. To identify the benefits which are obtained by the member libraries and institutions of NeLIC.
- e. To find out whether the scholarly information need of the users are fulfilled by using the electronic resources accessed through the membership of NeLIC or not.
- f. To obtain valuable opinions and suggestions from the librarians/information service providers and users.
- g. To find out which e-resources are mostly being accessed by the users.
- h. To find out which e-resources fulfill the users' information need.
- i. To find out whether there is demand of more e-resources.
- j. To find out which e-resources are to be added in future according to the demand of users.

#### *1.4 Research questions*

The research is based on the following questions related to NeLIC:

- a. What is the importance of library consortium in developing countries like Nepal?
- b. How is the e-resources service provided by NeLIC?
- c. What are the benefits obtained by member libraries/institutions after being member of NeLIC?
- d. Which e-resources are preferred by the users to access?
- e. Is the information need of users fulfilled by using those e-resources?
- f. Is there any demand for adding more electronic databases?
- g. What are the challenges faced by NeLIC?
- h. What are the steps to be taken by NeLIC to subscribe more e-resources and better service in future?

#### *1.5 Significance of the Study*

Online storage and retrieval of information is a technique to organize and disseminate or retrieve information in electronic medium. Different e-journals, e-books, etc are forms of e-resources. Full text of these journals or books can be downloaded from anywhere around the world through Internet. So, it makes the information easily available and saves time of the users as well. Nowadays, the online resources are subscribed through library consortium with cost sharing.

In context of Nepal, NeLIC is the first library consortium working for providing access to e-resources and other libraries services to the libraries and other educational institutions. No research has been done in the topic library consortium till date. This research helps to find out the importance of library consortium in the context of developing countries like Nepal. Since this study is focused on the e-resources accessed through NeLIC, it lets us to know how much these e-resources are being used by the users and which e-resources are preferred by the users. It helps us to find out whether other e-resources are needed to subscribe through NeLIC or not. It helps the administrative committee of NeLIC to find out its drawbacks and find out the appropriate ways to overcome these drawbacks so that

NeLIC can perform much more efficiently and effectively in future. Overall, this study helps us to know the performance of NeLIC in providing information services focusing on e-resources.

### *1.6 Scope and Limitations of the Study*

NeLIC is actively working for providing access to e-resources to Nepali libraries and educational institutions. It also works in areas like open access, free and open source software (FOSS) and intellectual property. This study is focused only on e-resources rather than other areas. So, this study will not cover other activities of NeLIC.

The members of NeLIC are increasing gradually. The libraries/educational institutions selected for this research are only those libraries which have become member before the starting time of thesis. Members of NeLIC are from Kathmandu valley as well as other parts of Nepal. Because of time value, only libraries/educational institutions located in Kathmandu valley are selected for the research.

This research will not give detailed information about administrative activities of NeLIC. It only focuses on the e-resources service provided by it.

### *1.7 Definition of the Terms*

#### *Information*

Information is the product of human brain in action. It may be abstract or concrete when an individual begin to think, a variety of image and sensation flash across his mind. It is the essential ingredient of any control system.

#### *Library*

Library is an organized collection of information sources and similar services made accessible for defined community for referencing or borrowing. It is the trinity of.

Library is a social institution thus it helps in the development of the society. It is the trinity of three things i.e. staffs, users and collection.

#### *Library cooperation*

The creation and operation of equitable, that is mutually fair, collaborative arrangements between libraries and information providers which enhance the common good through making information available to all potential users which is more valuable to the user and/or is of lower cost to the collaborating providers.

#### *Library network*

A library network is a cooperative library organization that usually consists of a formal arrangement whereby materials, information, and services provided by a variety of types of libraries and other organizations are made available to all members.

#### *Library consortium*

A library consortium is any local, regional, or national cooperative association of libraries that provides for the systematic and effective coordination of the resources of school, public, academic, and special libraries and information centers, for improving services to the clientele of such libraries (Horton, 2015).

#### *E-resources*

The electronic resources such as e-journals, e-books, newsletter, etc. available in the digital format which can be accessed online directly through the Internet with the help of computer, mainframe or handheld mobile devices are called as e-resources.

#### *E-journals*

Scholarly and peer reviewed journals that can be accessed from anywhere electronically through the Internet. It could be available free of cost or as part of paid service.

#### *E-books*

An e-book is book in digital format which is readable on computers or other electronic devices. It can be in any form and most common being PDF. An e-book contains texts as well as images.

#### *Open access*

Open access is the name of the revolutionary kind of access unencumbered by a motive of financial gain, are free to provide to their readers. Open access literature is digital, online, free of charge and free of most copyright and licensing restrictions (Suber, 2012).

#### *Free and open source software (FOSS)*

Free and open source software is collaboratively built software that is shared by developers and users and can be ‘freely’ downloaded with or without the source code for use, modification and further distribution (Sowe, & Samoladas, 2007).

#### *Intellectual property*

Intellectual property refers to the fruits or product of human creativity, including literature, advertising slogans, songs, or new inventions. Thus, property that is the result of thought, namely intellectual activity, is called intellectual property (Bouchoux, 2009).

### *1.8 Organization of the Study*

This chapter has been organized into following chapters:

The first chapter deals with the introduction which includes background of the study, statement of problem, objectives of the study, research questions, significance of the study, scope and limitations of the study, definition of the terms and organization of the study itself.

The second chapter is review of literature. Different books, journals, articles, websites, past researches, etc. have been collected during the study.

The third chapter is focus of the study.

The fourth chapter is research methodology. Here, the methodology used in order to carry out the research to meet the predefined objectives has been discussed. This chapter has been divided into different subheadings like: research design, population, sampling procedure, data collection procedure and data analysis procedure.

The fifth chapter deals with the analysis, presentation and interpretation of the data. In this chapter data collected during the study have been tabulated and analyzed with detail interpretation.

The sixth chapter is the final chapter and it deals with summaries, conclusions and recommendations. At last bibliography, appendix and curriculum vitae are listed.



## CHAPTER 2

### REVIEW OF THE LITERATURE

A review of literature for a research project serves essentially the same purpose as a road map and travel plan for a journey. Both provide a base of information on which to carry out the respective endeavors. Literature is all information in printed or oral form that is available on topic of research interest (Adams and Schvaneveldt, 1985). Review of literature is an essential part of all studies. It is a way to discover what other research in the area of our problem has uncovered. A critical review of the literature helps the researcher to develop a thorough understanding and insight into previous research works that relates to the present study. The purpose of literature review is to find out what research studies have been conducted in one's chosen field of study, and what remains to be done (Wolff and Pant, 2005).

According to a training course material published on website of INASP entitled 'introduction to e-resource management', an electronic resource is any information source that can only be accessed using a computer. It may be electronic version of print or may be electronic version only. There are many benefits of e-resources. They are as follows:

- Current (very current contents)
- Easy and efficient retrieval process
- Sharing of resources (can be accessed by many at the same time)
- Easy to access related items
- Easy to browse
- Saves time for both user and staff
- No cataloguing (MARC records are part of the package)
- Economic (subscribe or purchase in packages)
- Enhanced security (no loses, no mutilation)
- Easy to monitor and evaluate usage (publishers provide usage statistics)

- Access to publishers' added benefits (training, advanced search tools, friendly platforms, alerts, etc)
- Fun

The benefits listed above enhance access to quality content which leads to more and better research output.

Wonsik Shim and Charles R McClure in their article 'Data needs and use of electronic resources and services at academic research libraries' have said that research libraries have been increasing their acquisition of electronic information resources. Statistics estimate that in 1999-2000 research libraries spent on average 12.9 percent of their materials budget on electronic resources, a sharp increase from a mere 3.6 percent in 1992-93. The working definition of networked services is those electronic information resources and/or services that users access electronically via a computing network, (1) from on-site in the library (2) remote to the library, but from a campus facility, or (3) remote from the library and campus. Examples of networked resources include local, regional, and statewide library hosted or authored websites and library-licensed databases (e.g., ScienceDirect, EBSCOHost, JSTOR, ProjectMuse).

Prakash Chand and Nishy P in their article 'Strengthening R & D information systems through library consortium: a case of CSIR laboratories' have stated that concept of library consortium gained in the second half of nineties. The factors that have evolved this phenomenon are the discovery of mutual interests of publishers and libraries. A library consortium is a collective activity to provide shared expertise, access to new electronic and print resources, professional development and new sources of funds. Another definition of library consortium could be the coming together of libraries to achieve a common goal that is beyond what an individual library could achieve on its own. They have stated that library consortium evolve as the result of different steps in the field of library and information science. These different steps are:

Library cooperation



Inter library loan



Document delivery



Library networks



Library consortium

Nthabiseng Taole and Archie L Dick in their article ‘Implementing a common library system for the Lesotho Library Consortium’ has stated that library consortia have been established in several parts of the world. An increasing demand for information and the inability of libraries to have all resources on site have necessitated resource sharing. Library consortia have started to appear in African countries also. In spite of many challenges and barriers, there has been a steady increase in the number of collaborative partnerships among African libraries. The fastest growth has occurred in the Southern African region, especially in the Republic of South Africa where there are currently five academic library consortia. Similar initiatives are found in Botswana, Swaziland and Zimbabwe. In Lesotho, librarians came together in 2003 to establish Lesotho Library Consortium (LELICO). The consortium’s member libraries are of several types. They include small special libraries, a national library that also serves as a public library, and academic libraries. This shows that establishing library consortium is also being practice in Africa.

N. Laxman Rao in his article ‘Knowledge-sharing activities in India’ has stated as follows: Libraries in India are striving to provide necessary and relevant information to their users. Limited resources have been one main barrier to satisfying the growing informational needs of the users. Now, the Indian libraries are planning various methods of resource sharing to help meet information demands. Resource-sharing activities in Indian libraries can be grouped broadly into four categories:

- a. Establishment of National Information System in Science and Technology (NISSAT) National Information Centres (NIC)
- b. Library consortia
- c. Document delivery service (DD)
- d. Interlibrary cooperation

Consortia in India have undergone a transformation with this infusion of new information technology and the movement from a print-based environment to a digital environment. Library consortia are basically formed to use resource sharing as a means of dealing with increased demand for materials and increased cost for information products. Through consortia, libraries are coordinating their purchasing to provide the best quality and quantity of materials to their clientele at a lower cost. Consortium programs not only contribute e-resources at discounted rates, but also help to make them available on users' desktops. The INDEST consortium was formed in 2003 on the recommendation of an expert group. In addition to a financial contribution of Rs 200 million by the Ministry of Human Resource Development (MHRD), the All India Council for Technical Education (AICTE) also contributed Rs 37.5 to this consortia project for purchase of e-resources. The policy of this consortium is open ended. That is why, any institution can join the consortium. Many government institutions and other educational institutions have joined as members. Many other library consortia are formed in India at present.

Golnessa Galyani Moghaddam and V. G. Talawar in their article 'Library consortia in developing countries: an overview has stated as follows: Library consortia refers to cooperation, coordination and collaboration between, and among libraries for the purpose of sharing information sources. Library consortium is not a new concept. Early examples, from the late 1960s include the development of the Ohio College Libraries Center (OCLC) as a regional computer system for 54 Ohio College libraries to share their resources and to reduce costs, and the Birmingham Libraries Cooperative Mechanism Project (BLCMP) in the UK. However consortia were not really common until the 1980s. The main driving forces for collaboration among libraries, especially academic libraries, has been the increase in numbers of publications and the rise in the cost of publications as well as the decline in library budgets. Historically the common form of library

cooperation was the sharing of union catalogue information, storage facilities, collection development and human resources at local, national and regional levels in the US. Later other countries also ventured into cooperative efforts. In the period between 1980 and 1990 many libraries in Western countries were involved with library automation, coupled with the increased use of computers in bibliographic processing activities and database searching. There was a need to share expertise on library automation and this was considered as a possible reason to move toward library consortia in the 1980s. Some library consortia in different countries are:

- a. Thailand – PULINET
- b. China – China Academic Library and Information System (CALIS)
- c. Spain – Consortium of Academic Libraries of Catalonia (CBUC)
- d. South Africa – Cape Library Cooperative (CALICO), Gauteng and Environs Library Consortium (GAELIC), Free State Library and Information Consortium (FRELICO), Eastern Seaboard Association Libraries (eSAL), South East Academic Library System (SEALS)
- e. Russia – Regional University and Science Library Advanced Network (RUSLANet)
- f. India – UGC: InfoNet e-journals consortium and INFLIBNET, Council of Scientific and Industrial Research (CSIR) Consortium, Indian National Digital Library in Science and Technology (INDEST) Consortium, Forum for Resource Sharing in Astronomy (FORSA) Consortium.

They have also stated that libraries in developing countries have been working on consortia at national, regional and international level. However, some barriers such as poor technological and communication infrastructure, inadequate finances, culture and context, attitudes toward consortia and multiple efforts are reported to be limitations of consortia activities in developing countries.

In an article entitled ‘Library consortia come of age’ it is stated that although cooperation among libraries has been an international tradition for decades, the phenomenal growth of consortia over the past decade clearly has been fueled by the rapid transformation made possible through technology. Today, many libraries are already a part of one of more

consortia, and those that are not rapidly taking steps to develop these strategic partnerships with other libraries. Although the consortium movement initially was most pronounced in academic libraries, today public, school and even corporate libraries are exploring new ways to provide shared services and to reduce their costs through consortial purchasing.

Jagadish Aryal in his thesis entitled 'Usage of online resources in library with reference to JSTOR and PERI' has stated as follows: Technological development made drastic change in the society. Latest development of the information technology expanded the scope of information science emerging new discipline such as digital library, knowledge management, etc. With the use of Internet, resource sharing became easier. Vast amount of information in the form of journals, books, conference papers, as well as various important articles can be found in the Internet. Various non-profit organizations as well as commercial publishers publish e-books and e-journals which can be read directly online through the Internet. The users prefer to get quick accessible online media rather than wasting time in turning over the printed books which are hard to retrieve. Due to quick retrieval, easy to copy and convenience to store made maximum use of online resources. He has made research to find out the utilization of the online resources with reference to JSTOR and PERI Online Resources. The major findings of his research are as follows:

- a. As the e-resource is the result of technological development and due to the change in generation the new generation and youth are mostly interested to use this facilities rather than the old generation.
- b. Most of the users visit library for both purpose, to use online resources as well as to read books. Most of the users prefer scholar journal articles rather than other.
- c. JSTOR is the most popular online journal database while HINNARI is the least popular among them. Some of the other popular databases are Blackwell Synergy, EBSCO, Emerald, Oxford Journals Online and Cambridge Journals.
- d. Most of the users know the benefit of JSTOR as well as PERI. They pointed that there are vast amount of journal articles and materials found. They are authentic, easy to get research articles as well as abstracts of latest and old international

scholarly journals. Since it provides different search techniques, it is easy and fast in retrieving the required articles and those can be downloaded.

- e. JSTOR as well as PERI resources are found very important.

Sagar Raj Subedi in his thesis entitled 'PERI e-resources used in Educational and Research Institutions of Nepal' has stated that libraries attempt to meet the needs of a diverse and complex group of users, who have wide ranging interests and complex sets of demand. Historically, the fundamental aim of libraries was to formulate a philosophy of intellectual freedom and to provide access to a finite amount of print information. Over the course of the last decade, very valuable sources of information have become available on the Internet and through other electronic databases, and libraries are currently playing a very different role from before. Not only do libraries continue to collect and provide access to printed materials, but also they have to manage the ever-increasing amounts of electronic resources. Information exchanges, as a crucial element in the development process, is both a tool and a resources for development practitioners worldwide. The increasing demand for information for accelerating the whole development processes at all levels has necessitates the need of promoting networking in different fields of human activities. The remote access to electronic databases has formed the basis of an international information services industry for several decades.

Programme for Enhancement of Research Information (PERI) has contributed a lot for the accessing of e-resources in Nepal. PERI is a programme to support capacity building in the research sector in developing and transitional countries by strengthening the production, access and dissemination of information and knowledge. In 1999/2000 International Network for the Availability of Scientific Publication (INASP) was approached by research partners and librarians of Africa, Asia, Latin America and the New Independent States to assist them in the design and implementation of programme of complementary activities to support information and communication technologies (ICT). PERI began as a pilot program in 2001 in six African countries which quickly grew in which includes eight countries. PERI was implemented in Nepal in 2003. Tribhuvan University Central Library (TUCL) was nominated as the national coordinating agency. Danish government has helped to implement the PERI programme

by providing £ 25,000 each year from 2004-2005. INASP rose funding from different donors to provide free access to Nepal from 2003-2009. Different e-resources accessed through PERI programme are as follows:

- Annual Reviews
- Blackwell Publishing
- Beech Tree Publications
- CAB Compedia
- The Cochrane Library
- Cambridge Journals Online
- EBSCO
- Emerald Group Publishing Limited
- Institute of Physics Publishing
- Mary Ann Liebert Inc
- National Academy Press
- Oxford Journals
- Springer



## CHAPTER 3

### FOCUS OF THE STUDY

Establishment of consortium is a newly practice in library and information service sector in the context of Nepal. The concept was developed for working collaboratively for the development and betterment of library sector and information services in Nepal. The provision and dissemination of world's renowned scholarly e-resources to the Nepali libraries and educational institutions are the major reasons behind the establishment of NeLIC. It is the first library consortium in Nepal. So, the study is focused on NeLIC and its role in providing access to e-resources.

#### *3.1 Nepal Library and Information Consortium (NeLIC)*

The concept of establishing library consortium was initiated by Social Science Baha along with other libraries and institutions. For the easy accessibility of scholarly e-resources to Nepali libraries and institutions, different institutions came forward with this concept. Several meetings were conducted among TUCL, Social Science Baha, Pokhara University, Kathmandu University, University Grants Commission and other different libraries/institutions to discuss the issue of forming library consortium in Nepal. After several discussions, library consortium with the name Nepal Library and Information Consortium (NeLIC) was established. At the time of its establishment, libraries and institutions like TUCL, Social Science Baha, Pokhara University, Kathmandu University, UGC, ICIMOD, Martin Chautari, HealthNet Nepal, Madan Puraskar Pustakalaya, Ullens School and other some libraries were associated with NeLIC.

Nepal Library and Information Consortium (NeLIC), is established by a group of institutions with the idea of facilitating access to electronic resources to Nepali educational institutions. It is established on 10 December, 2009, as a non-profit organisation under the Social Organisations Registration Act 2034. It is established with the objective of becoming the nodal body to help provide educational information

services in Nepal, including journal databases and other electronic resources. NeLIC is an initiation towards the access of online resources and library development in Nepal. NeLIC is a platform for Nepalese library which plays significant role for the promotion of Nepalese libraries by supporting and encouraging member libraries to get access to online scholarly resources.

### *3.1.1 Objectives*

The main objective of NeLIC is the provision and dissemination of information in digital format. In order to fulfill these objectives, NeLIC:

- Helps libraries, research institutions and education service providers in delivering library and information services effectively and efficiently through the use of information and communications technology (ICT).
- Helps provide access to electronic databases to the widest possible group of users.
- Tries to achieve cost effectiveness for members by providing the maximum quantity, the best quality and the widest variety of information resources.
- Promotes the deployment of appropriate ICT technologies, with particular emphasis on free and open source software (FOSS) among members, and facilitates training and availability of ICT expertise; and
- Promotes fruitful interaction and inter-dependability by developing standards among member institutions.

### *3.1.2 Partners of NeLIC*

As part of its strategy to meet the goals, NeLIC forms partnerships with national and international organizations and networks. NeLIC has already become associated with two major international initiatives that provide support to developing countries with electronic resource accession as well as other technical and non-technical support.

### *3.1.2.1 Electronic Information for Libraries (EIFL)*

EIFL is a not-for-profit organization that works with libraries to enable access to knowledge in developing and transition economy countries in Africa, Asia Pacific, Europe and Latin America. In a highly digital world, the activities of EIFL help people to access and use information for education, learning, research and sustainable community development. Vision of EIFL is a world in which all people have the knowledge they need to achieve their full potential.

EIFL has been working in Nepal since 2008. It supported the establishment of the NeLIC. Through partnership with EIFL, NeLIC is providing libraries in Nepal with access to a wide range of scholarly e-resources. In Nepal, EIFL has supported national open access awareness raising and advocacy workshops which resulted in the launch of the central open access repository in Nepal. EIFL has also engaged with public libraries in Nepal resulting in an innovative pilot project that is helping libraries meet the information needs of their communities. (EIFL web site).

### *3.1.2.2 International Network for the Availability of Scientific Publications (INASP)*

INASP is an international charity working with a global network of partners to improve access, production and use of research information and knowledge so that countries are equipped to solve their development challenges. PERI is a program within INASP which worked to strengthen research and knowledge systems in developing countries with the aim of having research information inform social and economic development. INASP has been working with Nepal since 2002. In Nepal, PERI was launched and has been implemented in 2003 as a part of INASP. Tribhuvan University (TU) was nominated as the national coordinating agency and Krishna Mani Bhandary as country coordinator for INASP/PERI in 2003. After implementation of PERI, Nepalese researchers, scientists, students, graduates, professors, scholars had access to full text database of world's 25,000 high quality scientific journals. The e-resources under the PERI were free to Nepal from 2003-2009 since INASP rose funding from donors to provide free access to Nepal. After

the establishment of NeLIC, it established partnership with INASP for accessing e-resources.

INASP negotiates with international publishers to secure national licenses on behalf of Nepal, for free or significantly discounted online access to journals and books. This is managed by Tribhuvan University Central Library (TUCL) and the Nepal Library and Information Consortium (NeLIC). INASP supports training in a range of areas related to digital information management and library consortium development. It supports local research dissemination through the Journals Online (JOL) projects in Africa, Asia and Latin America. This includes hosting online peer reviewed journals plus running training courses on strengthening the quality of local journals. The JOLs provide a cost effective and secure forum for online journals, which gives them greater online visibility and discovery. Journals from Nepal are included on NepJOL (INASP web site). So, at present Tribhuvan University and NeLIC are the national coordinating agencies of INASP in Nepal.

### *3.1.3 Other activities*

Along with the main function of subscribing e-resources for its members, NeLIC is involved in different other activities. Following are some of the areas of its focus:

- Open Access

Open access means unrestricted online access to peer reviewed scholarly journal articles, research papers, book chapters, scholarly monographs, theses, etc. Open access is the name of the revolutionary kind of access unencumbered by a motive of financial gain, are free to provide to their readers. Open access literature is digital, online, free of charge and free of most copyright and licensing restrictions. By open access to the literature means free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these literatures. The only constraint is on reproduction and distribution, and the only role for copyright in this domain should be to give authors control over the integrity of their work and the right to be properly

acknowledged and cited. NeLIC is also advocating for open access in Nepal. NeLIC plans to work towards building a network of open repositories and open access journals; providing training and advice on open access policies and practices; and empowers library professionals, scientists and scholars, educators and students to become open access advocates. NeLIC has established open access repository called as Central Open Access Repository. NeLIC is also involved in conducting different programmes related to open access.

- Free and open source software (FOSS)

FOSS is collaboratively built software that is shared by developers and users and can be 'freely' downloaded with or without the source code for use, modification and further distribution. It is computer software that can be classified as both free software and open-source software. That is, anyone is freely licensed to use, copy, study, and change the software in any way, and the source code is openly shared so that people are encouraged to voluntarily improve the design of the software (Wikipedia). There are various types of FOSS for libraries. Some of them are: CDS/ISIS, WinISIS, Koha, Evergreen, NewGenLib, OpenBiblio, etc. NeLIC advocates the use of Free and Open Source Software (FOSS) in libraries. Through this programme, NeLIC aims to raise awareness and understanding of FOSS in Nepal. NeLIC have conducted programme for making libraries and educational institutions aware about wide use of free and open source software.

- Intellectual property

Intellectual property refers to the fruits or product of human creativity, including literature, advertising slogans, songs, or new inventions. Thus, property that is the result of thought, namely intellectual activity, is called intellectual property (Bouchoux, 2009). Intellectual property and copyright issues are likely to gain greater importance in the years to come. NeLIC aims to take the lead role to protect and promote the interests of libraries on copyright and intellectual property issues with librarians becoming activists for fair and balanced copyright laws as well as leaders in promoting access to knowledge in the digital age.

### *3.1.4 Administration*

NeLIC is an independent organization with a general body and an executive committee comprising the following:

- Chair: Janardan Dhungana (Tribhuvan University Central Library)
- Vice-Chair: Yogesh Sitaula (Apex College)
- Secretary: Deepak Thapa (Social Science Baha)
- Treasurer: Prabin Paudel (Madan Puraskar Pustakalaya)
- Member: Anil Jha (International Centre for Integrated Mountain Development)
- Member Prem Adhikari (Kathmandu University School of Education)
- Member Rabin Shrestha (Institute of Banking and Management Studies)

The secretariat of NeLIC is housed at Social Science Baha. The staffs of Social Science Baha are voluntarily working for NeLIC. NeLIC charges nominal fees to its member institutions for membership and subscription of e-resources in the form of one time registration and annual renewal fees. All the cost needed for the subscription of e-resources from different publishers is managed from the amount collected from the member institutions. NeLIC conducts different seminars, workshops, programmes, etc. related to different issues of library and information service sector. The cost needed for conducting these programmes are also managed from the collected membership fees from the member institutions. The overall cost for its management and operation are being managed from the collected amount from its member institutions.

### *3.1.5 Benefits to the members*

- All the member institutions are eligible for the access to free resources.
- They can get free access to all the resources except some subscribed resources.
- Interested member institution can share the cost of subscription to get access to the selected subscribed resources.

NeLIC has established partnership with different institutions for acquiring e-resources. Following e-resources are available through negotiations with different partner institutions.

#### *3.1.5.1 Resources through INASP*

- Acoustical Society of America (ASA): <http://scitation.aip.org/JASA>
- African Journals Online (AJOL): <http://www.ajol.info>
- American Institute of Physics: <http://www.aip.org/pubs/>
- Annual Reviews: <http://arjournals.annualreviews.org/>
- Cambridge Journals Online: <http://journals.cambridge.org>
- Cochrane Library: <http://www.thecochranelibrary.com>
- EBSCO Host Research Databases: <https://www.ebscohost.com/>
- Edinburgh University: Press <http://www.eupjournals.com>
- Geological Society: <http://www.lyellcollection.org/>
- Mary Ann Liebert, Inc.: <http://www.liebertonline.com/>
- Palgrave Macmillan Journals: <http://www.palgrave-journals.com/pal>
- OECD iLibrary: <http://www.oecd-ilibrary.org/>
- OSA – Optical Society of America: <http://www.opticsinfobase.org/>
- Oxford Journals (OUP): <http://www.oxfordjournals.org/>
- Palgrave Macmillan Journals: <http://www.palgrave-journals.com>
- Policy Press Journals: <http://www.ingentaconnect.com/content/tpp>
- University of California Press: <http://www.ucpress.edu/>

- University of Chicago Press: <http://www.journals.uchicago.edu>

#### *3.1.5.2 Resources through EIFL*

- BioOne: <http://www.bioone.org>
- Edward Elgar Publishing: <http://www.e-elgar.com/>
- IMF eLibrary: <http://www.elibrary.imf.org/>
- Intellect Journals: <http://www.intellectbooks.co.uk/journals>
- New England Journal of Medicine: <http://www.nejm.org>
- Oxford Journals Collection: <http://www.oxfordjournals.org>
- Oxford Textbook of Medicine: <http://otm.oxfordmedicine.com/contents.dtl>
- Pediatric Neurology Briefs: <http://www.pediatricneurologybriefs.com/>
- Royal Society Journals Collection: <http://royalsocietypublishing.org/journals>

#### *3.1.5.3 Resources through other initiative*

- HINARI : Access to one of the world's largest collections of biomedical and health literature. More than 8,000 information resources (in 30 different languages).
- AGORA : Access to an outstanding digital library collection of 1900 journals in the fields of food, agriculture, environmental science and related social sciences.
- OARE : Access to one of the world's largest collections of environmental science research. Over 4,150 peer reviewed titles owned and published by over 350 prestigious publishing houses and scholarly societies.
- ARDI : The Access to Research for Development and Innovation (ARDI) program is coordinated by the World Intellectual Property Organization together with its partners in the publishing industry with the aim to increase the availability of scientific and technical information in developing countries. By improving access to scholarly literature from diverse fields of science and technology



scientific and technical information in developing countries. By improving access to scholarly literature from diverse fields of science and technology.

#### *3.1.5.4 Subscribed resources*

- Project MUSE

Project MUSE provides online access to over 500 full-text journals from 70 publishers in humanities and social sciences. MUSE pricing meets library needs around the world. For subscribing Project Muse, member institutions need to pay extra amount along with annual membership fee. The total cost charged by Project Muse is divided to the member institutions who subscribed it. So, each individual institution has to pay minimum cost based on cost sharing. More the number of member institutions subscribing Project Muse, less the subscribing cost for individual institution. For the year 2015, total cost for Nepal is \$1433. This cost is shared by six member institutions. So, NeLIC has charged Rs. 25000 for individual institution for the year 2015.

- JSTOR

Access to full-text journal articles available at online archive of high quality, interdisciplinary content to support scholarship and teaching from over 1900 important scholarly journals in 48 disciplines. Along with e-journals, e-books are also available in JSTOR. The subscription rate for JSTOR is very high. However, any libraries/institutions from Nepal can subscribe JSTOR paying \$500. This cost is even less for the members institutions of NeLIC which costs approximately \$300. NeLIC has made agreement with JSTOR, that the member institutions who wish to subscribe JSTOR should select an e-book package which contains 32 e-books. JSTOR charges cost according to the e-books package selected by the member institutions of NeLIC. Access to e-journals is provided free of cost after paying for e-book package. During annual renewal, member institutions need to select e-book package every year. So, the number of e-books access increases by 32 e-books yearly.

### *3.1.5.5 Open access resources*

- Directory of Open Access Journals: <http://www.doaj.org>
- Directory of Open Access Books: <http://www.doabooks.org>
- Many other available open access resources and repositories

NeLIC has conducted different programmes for the development of library and information sector in Nepal. Below are the major activities/programmes conducted by NeLIC:

- NeLIC has conducted a workshop on “Open Access: maximizing research quality and impact” in 2009.
- In 2009, another workshop on “Meeting the FOSS Challenge in Kathmandu” was also conducted.
- In 2012, “Central Open Access Repository” was established. It is one of the major activities of NeLIC. With support from EIFL, a single web portal has been created by NeLIC where anyone (institution or individual) can archive their work (article, research report, books, presentations, etc.) and anyone can get access to the contents of this repository.
- In 2014, NeLIC and Open Access Nepal jointly organized programme on ‘open access’ during the world open access week. Conference papers were presented by different library professionals during the first day. Another day was workshop where interactions and discussions on the topic ‘open access’ were conducted among the participants

### *3.1.6 Central Open Access Repository in Nepal*

It is an information portal containing research papers, book chapters, thesis, research reports, etc., related to Nepal which can be accessed openly or freely without paying any fee from any corner of the world. It is the first attempt to start the culture of open access

repository to the important information sources. A lot of research has been generated in Nepal by academia as well as development organisations, especially multilateral institutions and a few large government and non-government organisations. However, these reports are neither widely disseminated nor easily accessible even when their content is high utility to other researchers and practitioners. Research papers presented in seminars and conferences organized by organizations and institutions often do not get published or archived, even though these papers tend to be comprehensive in their coverage of specific thematic areas. Nepali researchers writing on Nepal contribute scholarly articles to international journals and book chapters both at national and international levels. But these articles/chapters are not accessible to the general researchers in Nepal due to their unavailability locally and/or due to their high cost of accessing them. So, NeLIC established central open access repository where individual as well as organizations/ institutions can archive their published and unpublished works and can make them accessible to anyone openly or free of cost.

The Central Open Access Repository in Nepal is an Internet based digital archive that proposes to collect, preserve, and disseminate the Nepal-related intellectual outputs of institutions as well as individuals such as journal articles, research reports and conference papers. The repository is run by NeLIC. This repository is established with the support of EIFL, the Rome-based organization that works to promote the open exchange of scholarship. The repository archives all kinds of research, including papers presented at conferences and workshops, working papers and policy briefs. It also archives grey literature since much of this kind of information tends to disappear over the years. It also collects published and unpublished articles from the scholars.

### *3.1.7 Members of NeLIC*

Following institutions are the members of NeLIC:

1. Ace Institute of Management, Kathmandu
2. Apex College, Kathmandu
3. Central Department of Sociology/Anthropology, TU, Kathmandu

4. Centre for Nepal and Asian Studies (CNAS), Tribhuvan University, Kathmandu
5. Centre for Excellence for PhD Studies, Kathmandu
6. CG Institute of Management
7. DAV College of Management, Lalitpur
8. Excel International College, Kathmandu
9. Global College of Management, Kathmandu
10. Health Research and Social Development Forum (Herd), Kathmandu
11. Healthnet Nepal, Kathmandu
12. Institute for Integrated Development Studies (IIDS), Kathmandu
13. Institute for Social and Environmental Transition- Nepal, Kathmandu
14. Institute for Banking and Management Studies (IBMS), Lalitpur
15. Institute of Crisis Management (ICMS)
16. International Centre for Integrated Mountain Development (ICIMOD), Lalitpur
17. Kailali Multiple Campus, Dhangadi
18. Kathmandu College of Management, Lalitpur
19. Kathmandu University Central Library, Dhulikhel
20. Kathmandu University School of Arts, Lalitpur
21. Kathmandu University School of Education, Lalitpur
22. Kings College, Kathmandu
23. Kshitiz International College, Butwal
24. Lalitpur Engineering College, Lalitpur
25. Little Angels' College, Lalitpur
26. Lumbini Banijya Campus, Butwal
27. Madan Puraskar Pustakalaya, Lalitpur
28. Martin Chautari, Kathmandu
29. Mid-Western University (MWU)
30. National Centre for Educational Development (NCED), Bhaktapur
31. National Labour Academy, Kathmandu
32. Nepa School of Social Sciences and Humanities, Kathmandu
33. Nepal Administrative Staff College, Lalitpur
34. Nepal Centre for Competence in Research (NCCR), Lalitpur

35. Nepal Commerce Campus, Kathmandu
36. Nepal National Library, Lalitpur
37. Pokhara University Central Library, Pokhara
38. Rato Bangala School, Lalitpur
39. Samata Foundation, Lalitpur
40. School of Management, Tribhuvan University, Kathmandu
41. Shree Siddhartha Multiple Campus, Mahendranagar, Kanchanpur
42. Siddhartha Gautam Buddha Campus, Butwal
43. Social Science Baha, Kathmandu
44. Thames International College, Kathmandu
45. The British College, Kathmandu
46. Tribhuvan University Central Library, Kathmandu
47. Ullens School, Lalitpur
48. Uniglobe Higher Secondary School, Kathmandu
49. Universal College, Kathmandu

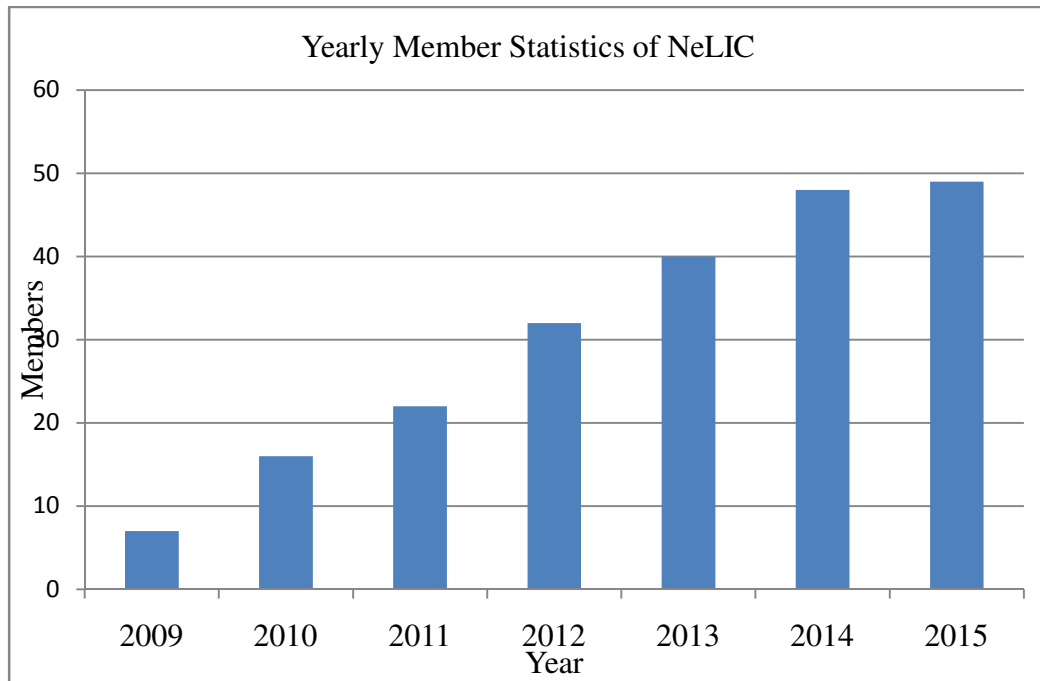
The year wise statistics of members of NeLIC is shown in the table below:

Table 1: Yearly Member Statistics of NeLIC

Year	Total number of members
2009	7
2010	16
2011	22
2012	32
2013	40
2014	48
2015	49

Source: internal record of NeLIC

Figure 1: Yearly member statistics of NeLIC



### *3.1.8 Members included in this study*

Among different member institutions of NeLIC, seven member libraries/institutions are included in this study. It means 14.3% of the total members of NeLIC is included in this study. The libraries/educational institutions included are as follows:

1. Ace Institute of Management, New Baneshwor, Kathmandu
2. International Centre for Integrated Mountain Development (ICIMOD), Lalitpur
3. Little Angels' College, Lalitpur
4. Martin Chautari, Kathmandu
5. Social Science Baha, Kathmandu
6. Tribhuvan University Central Library (TUCL), Kathmandu
7. Ullens School, Lalitpur

## CHAPTER 4

### RESEARCH METHODOLOGY

This chapter deals with research approaches and methods adopted in this study. The main focus is the role of NeLIC in providing access to e-resources. The research design and population sampling procedure are described below. The data collection techniques and procedures as well as data analysis techniques are also described in detail.

#### *4.1 Introduction*

Simply the term research means search again and again. Research is the human activity based on intellectual investigation and aimed at discovering, interpreting, and revising human knowledge on different aspects. Research is a systematic and organized effort to investigate a specific problem that needs a solution. This process of investigation involves a series of well-thought-out activities of gathering, recording, analyzing and interpreting the data with the purpose of finding answers to the problem (Wolff & Pant, 2005). Research has become an important aspect of human activity. Knowledge grows and develops through research. It generates new ideas, knowledge which can be used for different purposes. It helps to build knowledge, develop policies, support decision making and solve problems. The term methodology refers to the system or a way of doing something. The use of technique or a system of doing research is called as research methodology. It describes the methods and process which will be applied in the entire process of the study.

#### *4.2 Research design*

A research design is the plan, structure, and strategy of investigation conceived so as to obtain answers to research questions and to control variance (Kerlinger, 1973). It is a systematic plan to coordinate research to ensure the efficient use of resources and to guide the research according to scientific methods. First, study area and the target

population are identified and appropriate sample is chosen. According to research question, the questionnaire is set. The questionnaire is distributed to the library users to fill up and librarian or information service providers are interviewed. The collected questionnaire is coded and data are presented in tabular and chart form and analyzed to achieve the objectives of the study.

#### *4.3 Population of the Study*

A population is any group of individuals that have one or more characteristics in common. The population of the study was the users and librarians of seven member libraries/institutions of NeLIC which are included in this study. Different types of libraries like university libraries, school libraries, college libraries, special libraries which are members of NeLIC are selected and library users as well as librarians of these libraries makes the population for this research . Books or printed information sources are important aspect of library. This research does not deal with printed or other form of information sources. It only deals with the use of e-resources. So, only the users who use e-resources and e-resources service providers/librarians of the concerned libraries/institutions were the targeted population of this study.

#### *4.4 Sampling*

Purposive or judgmental sampling procedure was used for the study. All together seven libraries were considered as sample for the study. It is hoped that the sample selected for the study represent all member libraries/institutions of NeLIC.

#### *4.5 Data collection procedure*

Data was collected through questionnaire and interview. Questionnaire was distributed to the users of sampled member libraries/institutions. The librarian or information service providers related to e-resources were interviewed. The questions were both open ended



and close ended type. Most of the questionnaires were given hand to hand and some were sent through e-mail. Equal number of questionnaire was distributed to the seven member libraries. All together forty two questionnaires were distributed to the users. Among them thirty two questionnaires were responded i.e. only 76.19% of questionnaire was responded or filled up. Among six questionnaires distributed to each member libraries/institutions, 2 questionnaires (4.76%) from Ace Institute of Management, 2 questionnaires (4.76%) from ICIMOD, 5 questionnaires (11.9%) from Little Angels' College, 6 questionnaires (14.29%) from Martin Chautari, 6 questionnaires (14.29%) from Social Science Baha, 6 questionnaires (14.29%) from TUCL and 5 questionnaires (11.9%) from Ullens School were responded making all together 76.19% of the total questionnaires responded.

Set of questions was asked during interview with the librarians/information service providers and the interview was recorded. The library users and librarians of the concerned libraries are respondents of the questionnaires.

#### *4.6 Data analysis procedure*

The data in the form of questionnaire have been collected, edited, coded, tabulated and classified for data analysis. The answers from the respondents were analyzed and data were interpreted in the tabular form. Results were presented in the form of conclusion. Some recommendations were presented for the solution of the problem.

## CHAPTER 5

### ANALYSIS, PRESENTATION AND INTERPRETATION OF THE FINDINGS

It is one of the most important steps in the research process. The purpose of analyzing the data is to change it from an unprocessed form to an understandable presentation. The collected data need to be aggregated into a form that presents the summary of answers from respondents. The analysis of data consists of organizing, tabulating, performing statistical analysis and drawing inferences. The presentation of data is the basic organization and classification of the data for analysis. Different types of data require different methods of summary and presentation.

Data were collected from seven libraries/institutions which are member of NeLIC. They are: Ace Institute of management, ICIMOD, Little Angels' College, Martin Chautari, Social Science Baha, Tribhuvan University Central Library and Ullens School. All the libraries are situated in the Kathmandu valley. The users and librarians from these libraries responded well to the research questions. These responses were analyzed against the questions and presented in the form of tables and diagrams. As there were two types of questionnaires, the presentation has been divided into two parts. First part consists of the responses from the users and second part consists of responses from the librarians. Questions asked during the interview with librarians were also analyzed. It is hoped that the findings are sufficiently and correctly tabulated and presented.

#### *5.1 Responses from users*

In this part, the questionnaire is analyzed in two different stages. Questions regarding general information like age, sex, etc., of the users are analyzed in the first stage. Questions regarding use of library and e-resources are analyzed in the second stage.

##### *5.1.1 General introduction*

###### *5.1.1.1 Age Distribution of Respondents*

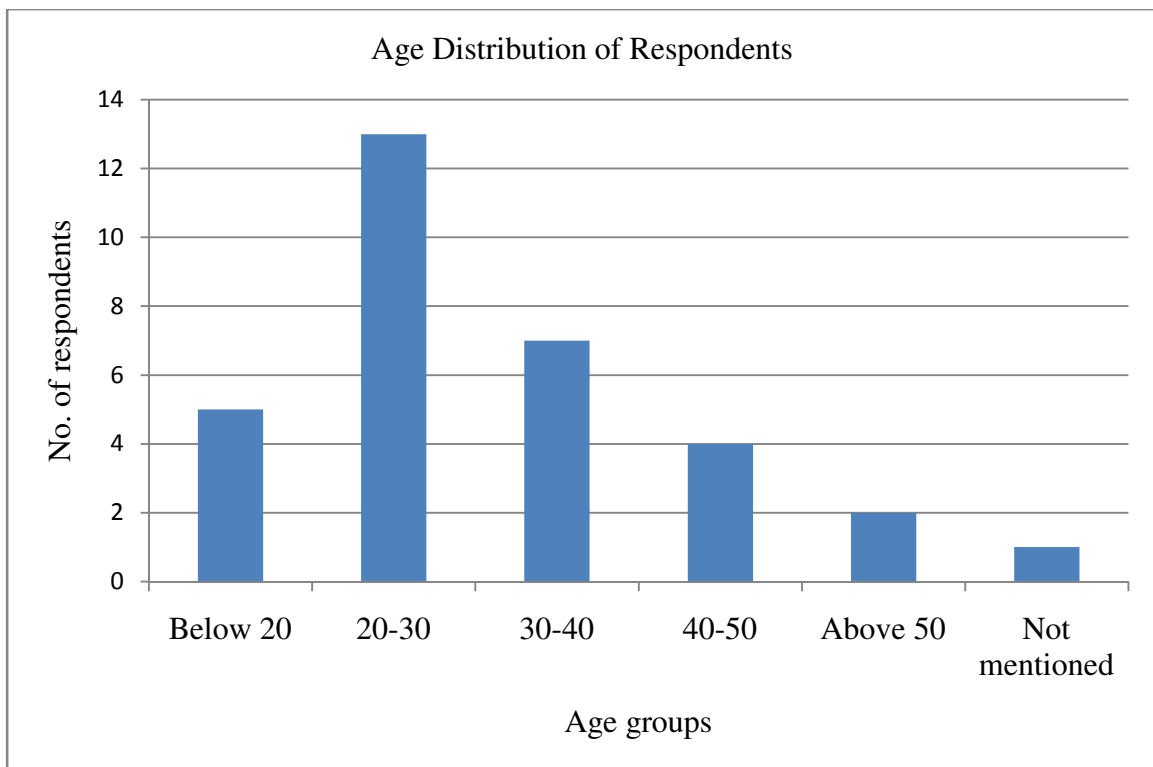
This question was asked to know the age of the respondents. The age distribution of the respondents is shown in the following table:

Table 2: Age Distribution of Respondents

Age groups	No. of respondents	Percentage (%)
Below 20	5	15.63
20-30	13	40.63
30-40	7	21.88
40-50	4	12.5
Above 50	2	6.25
Not mentioned	1	3.13
Total	32	100

Source: field survey

Figure 2



Among 32 respondents, 5 of them are below 20 years i.e. 15.63% of the total respondents, 13 of them are of age group 20-30 years i.e. 40.63% of the respondents, 7 of them are of age group 30-40 years i.e. 21.88% of the total respondents, 4 of them are of age group 40-50 years i.e. 12.5% of the total respondents, 2 of them are above 50 years i.e. 6.25% of the total respondents, 1 of them has not mentioned age group i.e. 3.13% of the total respondents.

From the above statistics, it can be said that library users of age group 20-30 years use the library (e-resources) most. It may be because library users of this age group are mostly students, young researchers, etc. Students need to visit library and access e-resources for completing their different project works, thesis etc, as part of their academic course. Researchers also need to visit library and access e-resources for conducting their research. They may have visited library and access e-resources for other purposes also.

#### *5.1.1.2 Sex Distribution of Respondents*

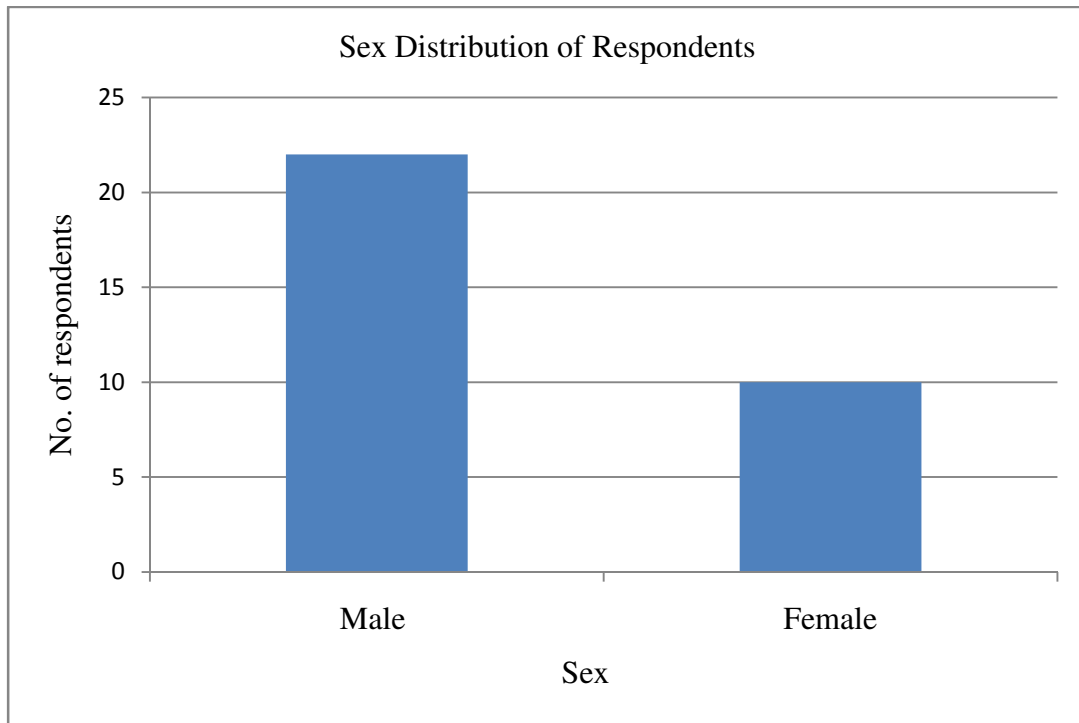
Next question was asked about the sex of the respondents. This question was asked to know either male or female access the library (e-resources) most. The sex distribution of the respondents is as follows:

Table 3: Sex Distribution of Respondents

Sex	No. of respondents	Percentage
Male	22	68.75
Female	10	31.25
Total	32	100

Source: field survey

Figure 3



Among 42 respondents, 22 of them are male i.e. 68.75% of the total respondents and 10 of them are of female i.e. 31.25% are female.

In our country, the habit of visiting libraries for accessing information is still lacking in case of women as compared to men. The major reason behind it is that women's access to higher education is still not equal to men.

### *5.1.2 Group B: Users' Understanding Regarding to E-resources and Consortium*

#### *5.1.2.1 Professional Status of Respondents*

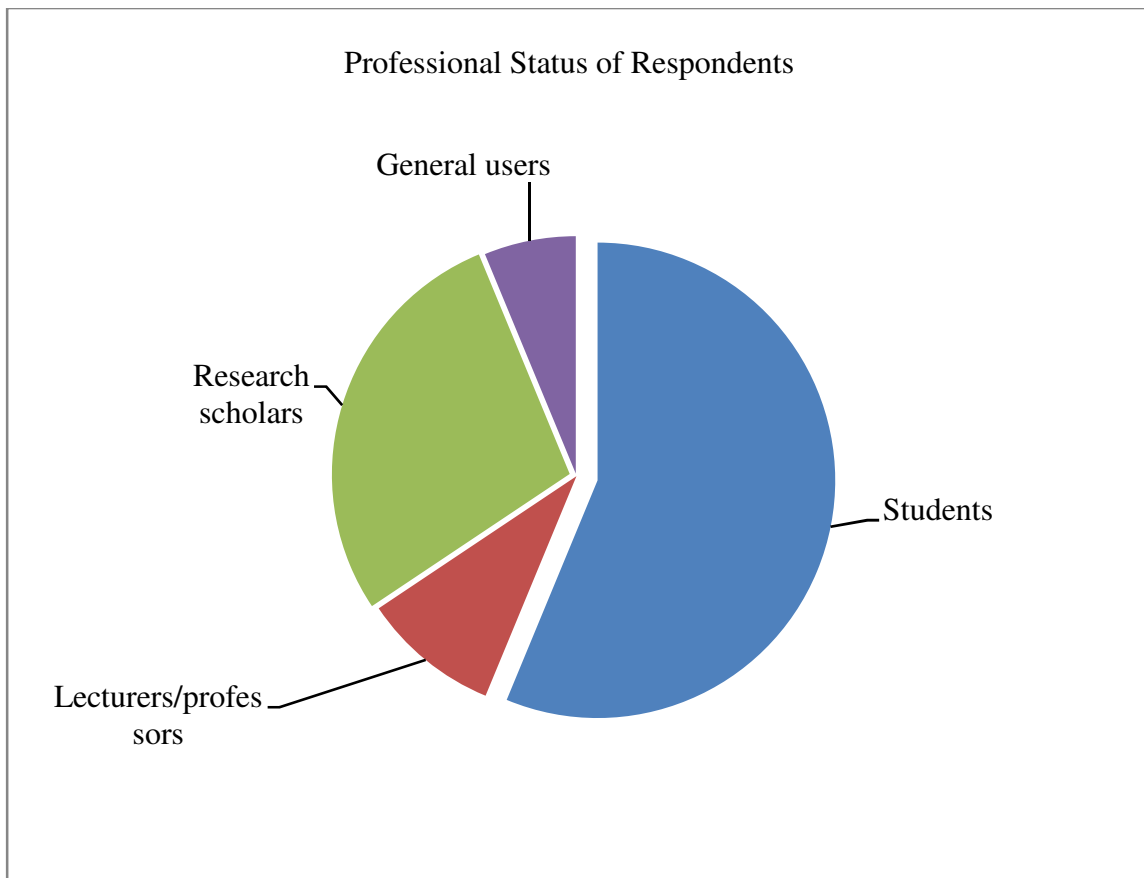
Question was asked to the respondents asking them in what type of library users, they want to rank themselves. Different categories like students, lecturers/professors, research scholars, general users and others were provided for ranking themselves. Another option was provided to rank themselves other than the options provided if they wanted. Following is the statistics of respondent status:

Table 4: Professional Status of Respondents

Status of respondents	No. of respondents	Percentage
Students	18	56.25
Lecturers/professors	3	9.37
Research scholars	9	28.13
General users	2	6.25
Others	0	0
Total	32	100

Source: field survey

Figure 4



Among total 32 respondents, 18 ranked themselves as students i.e. 56.25% of the total respondents, 3 of them ranked themselves as lecturers/professors i.e. 9.37% of the total respondents, 9 of them ranked themselves as research scholars i.e. 28.13% of the total population, 2 respondents ranked themselves as general users i.e. 6.25% of the total population.

From above statistics, it is clear that most of the library users are students. Students need to visit to library as well as need to use online resources for their study and for their thesis and other research works. After students, research scholars come to the second position. Use of library materials is very essential for their research or study. So, research scholars visit libraries. Few respondents are lecturers/professors, and general users.

#### *5.1.2.2 Subject of Interest or Related Field of the Respondents.*

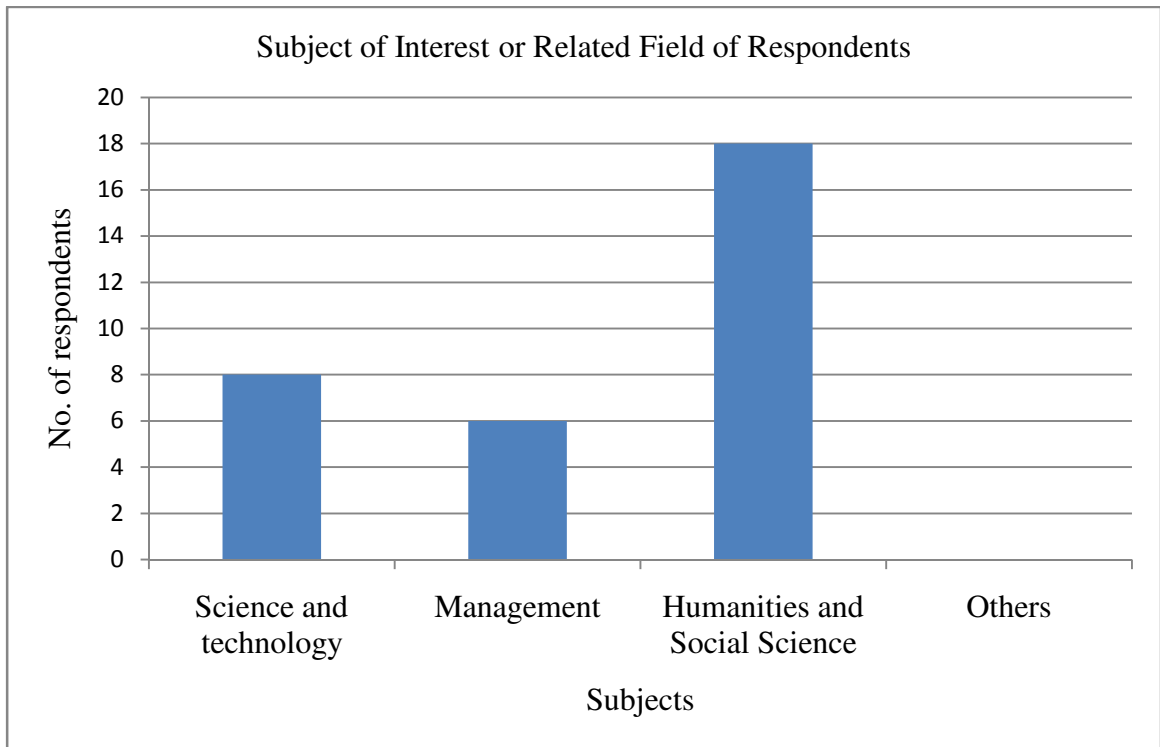
Respondents were asked about their subject of interest or related field. Options were provided as science and technology, management, humanities and social sciences, others. Below is the statistics related to subject of interest or related fields:

Table 5: Subject of Interest or Related Field of Respondents

Subjects/related fields	No. of respondents	Percentage (%)
Science and technology	8	25
Management	6	18.75
Humanities and social sciences	18	56.25
Others	0	0
Total	32	100

Source: field survey

Figure 5



Among total 32 respondents, 8 are from science and technology field i.e. 25%, 6 are from management field i.e. 18.75%, 18 are from humanities and social sciences field i.e. 56.25%.

From the above statistics, it can be concluded that most of the respondents are from social sciences and humanities field. Most people are involved in research and study of social sciences. It may be a reason for having more respondents from the field of humanities and social sciences.

#### *5.1.2.3 Sources of Information Respondents Prefer to Use*

This question was asked to the respondents to find out what the library users prefer to use as sources of information. Two options were provided as general search engines (Google, Yahoo, etc.) and scholarly electronic databases (JSTOR, Project Muse, Emerald, Oxford journals, etc.). Following is the responses from the respondents:

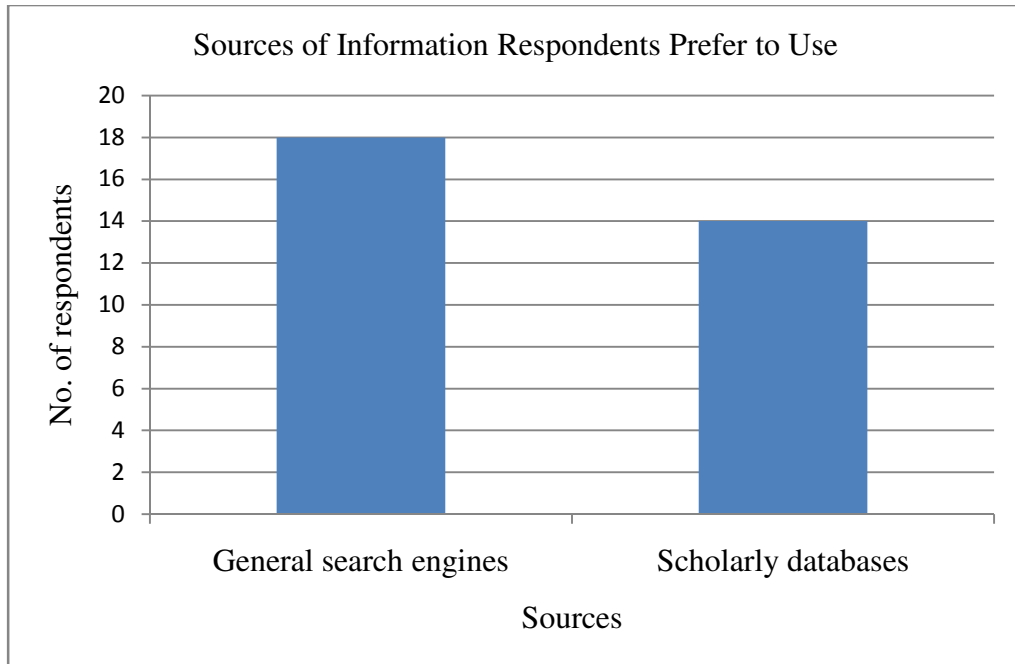


Table 6: Sources of Information Respondents Prefer to Use

Source of information	No. of respondents	Percentage (%)
General search engines	18	56.25
Scholarly databases	14	43.75
Total	32	100

Source: field survey

Figure 6



18 respondents among total 32 respondents i.e. 56.25% prefer to use general search engines and 14 among total 32 respondents i.e. 43.75% prefer to use scholarly electronic databases.

From above statistics, it can be concluded that most of the library users prefer to use general search engines. Easily availability of these search engines through the Internet everywhere and availability of scholarly electronic databases only in libraries and information centres may be the reason behind it.

#### 5.1.2.4 Familiarity with Scholarly E-resources.

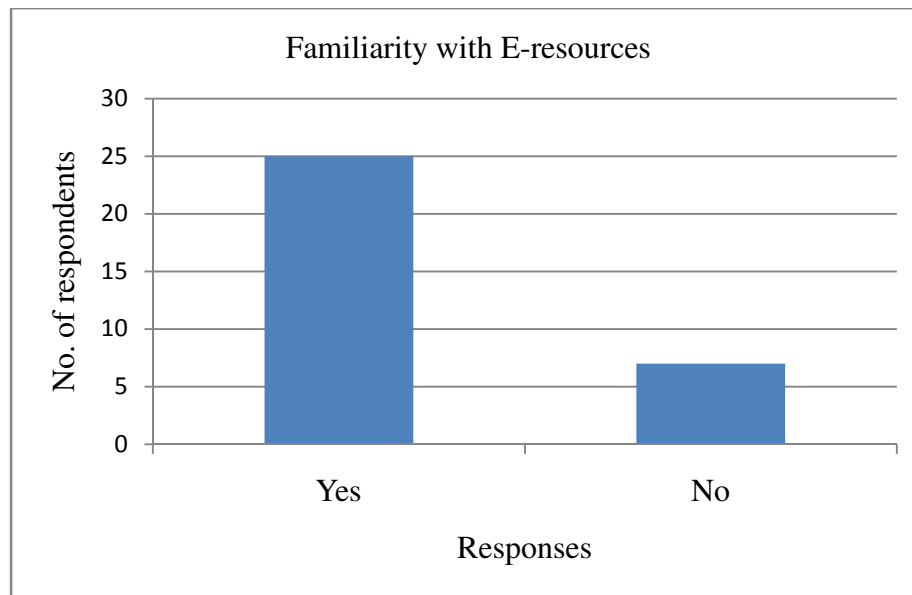
This question was asked to find out the familiarity of respondents with the scholarly electronic databases/resources. The responses from the respondents are as follows:

Table 7: Familiarity with E-resources

Responses	No. of respondents	Percentage (%)
Yes	25	78.13
No	7	21.87
Total	32	100

Source: field survey

Figure 7



Among 32 respondents, 25 of them are familiar with the e-resources which is 78.13% of the respondents and 7 of the respondents are not familiar with e-resources which is 21.87% of the respondents.

From the above statistics, it can be concluded that most of the respondents are familiar with e-resources. Only some of the respondents are not familiar with the e-resources.

### 5.1.2.5 Frequency of E-resources Use

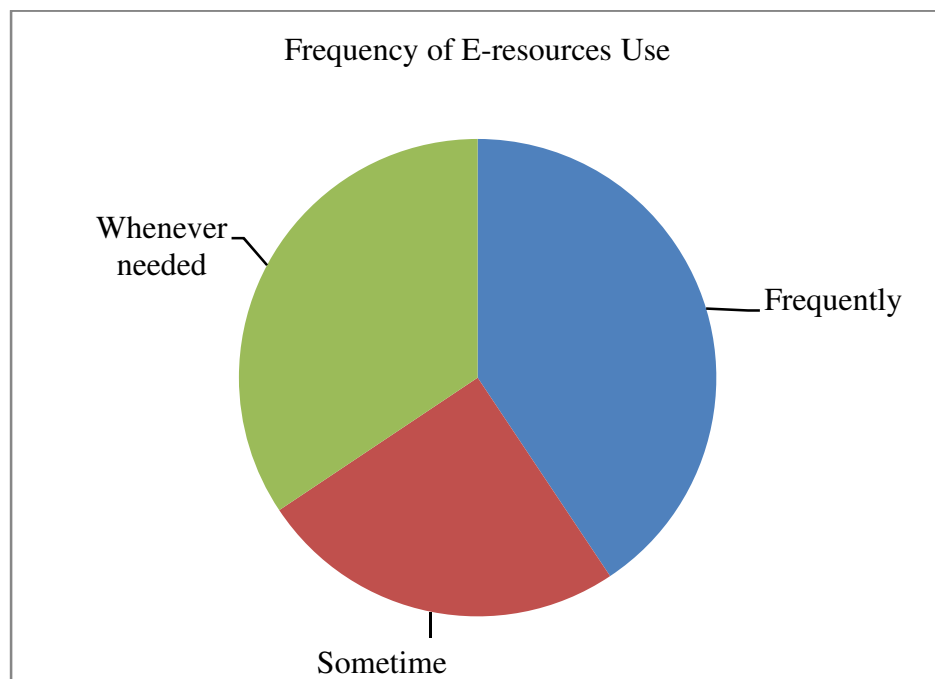
Library users were asked about the frequency of the use of scholarly electronic resources. They have to choose among four options such as frequently, sometime, whenever needed and never. The responses from the respondents are as follows:

Table 8: Frequency of E-resources Use

Frequency of e-resources use	No. of respondents	Percentage (%)
Frequently	13	40.63
Sometime	8	25
Whenever needed	11	34.37
Never	0	0
Total	32	100

Source: field survey

Figure 8



Among total 32 respondents, 13 respondents use the electronic resources frequently i.e. 40.63% of the respondents, 8 respondents use electronic resources sometime i.e. 25% of the respondents, 11 respondents use electronic resources whenever needed i.e. 34.37% of the respondents.

It can be said that most respondents use the electronic resources frequently for fulfilling their information needs. After that, some respondents use electronic resources whenever needed to them and least respondents use electronic resources sometime.

#### 5.1.2.6 Information about the Word Library Consortium

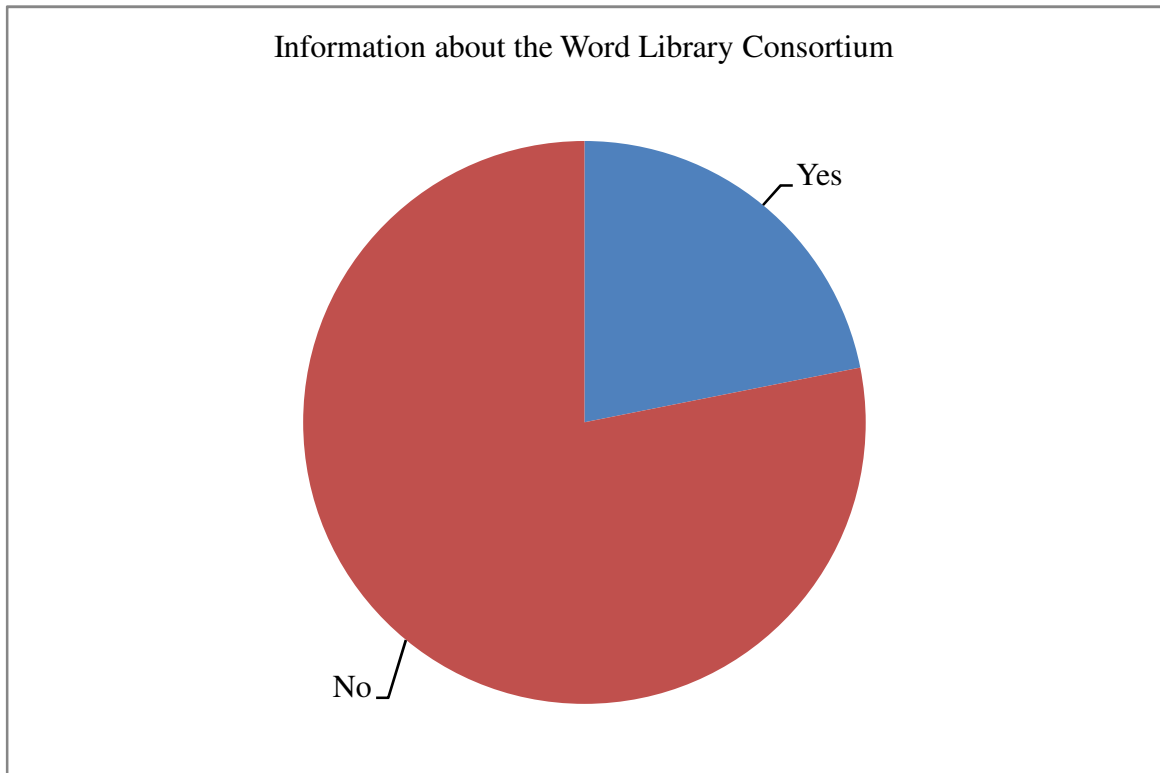
Library users were asked whether they know the word library consortium or not. Two options were provided i.e. yes or no. The responses from the library users are as follows:

Table 9: Information about the Word Library consortium

Responses	No. of respondents	Percentage (%)
Yes	7	21.88
No	25	78.12
Total	32	100

Source: field survey

Figure 9



Among total 32 respondents, 7 respondents know about the word 'library consortium' which is 21.88% of the total respondents. 25 of the respondents have selected 'no' to the question i.e. they do not know about the library consortium which is 78.12% of the respondents.

From above statistics, it can be said that most of the users do not know about library consortium. Only some of the users know about library consortium and they have described the term library consortium.

Respondents have given the definition of library consortium as follows:

- Library consortium is a collective action of some libraries for acquiring electronic resources through collective initiative in a subsidized rate.
- It is a group of libraries who share resources
- Library consortium means an organization of libraries which design and plan libraries development programmes.
- Library consortium is a group of libraries working in coordination with each other

- Library consortium is one of the institutions for the development of libraries in Nepal to share its resources as far as possible.
- Library consortium is a sort of organization which helps to access different databases.
- Library consortium is an association, union and collection of resources for the readers.

#### 5.1.2.7 Familiarity with E-resources Acquiring Procedure

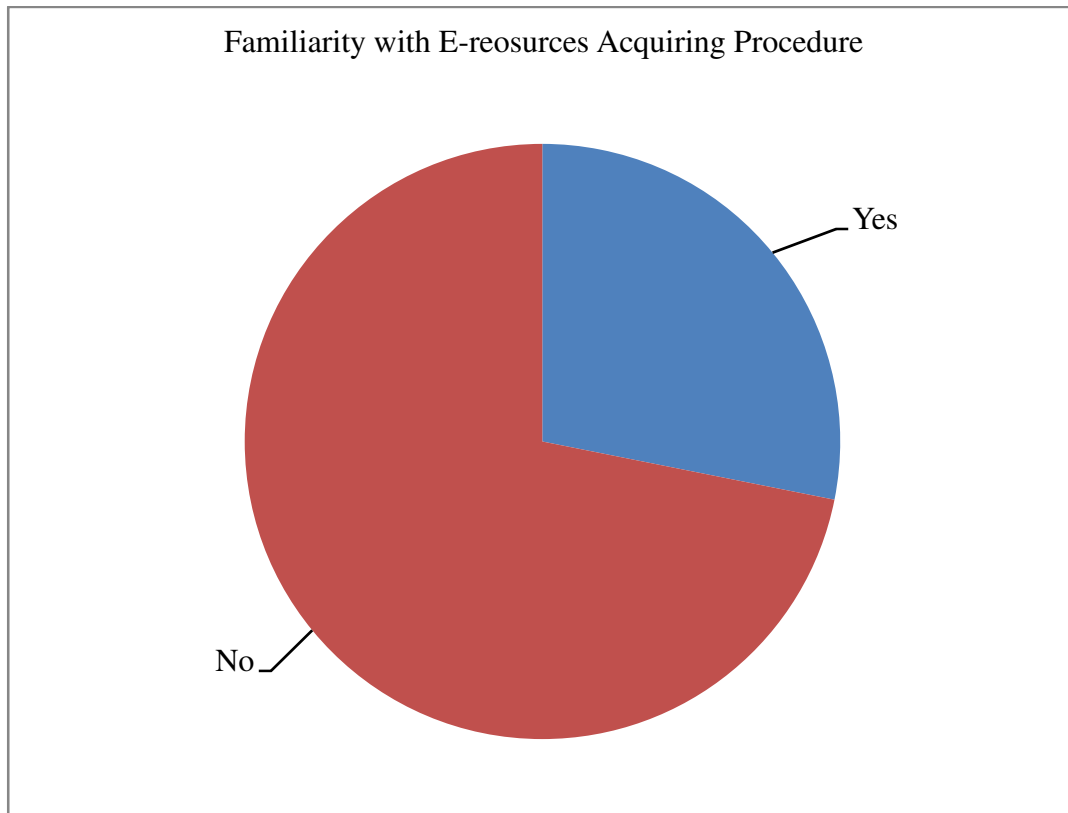
Library users were asked whether they are familiar with the electronic resources acquiring procedure of the library or not. The responses from the respondents are as follows:

Table 10: Familiarity with E-resources Acquiring Procedure

Familiarity	No. of respondents	Percentage (%)
Yes	9	28.13
No	23	71.87
Total	32	100

Source: field survey

Figure 10



Among total 32 respondents, 9 respondents are familiar with the electronic resources acquiring procedure i.e. 28.13% of the respondents, 23 respondents are not familiar with the electronic resources acquiring procedure i.e. 71.87% of the respondents.

From the above statistics, it can be said that most of the users are not familiar with the electronic resources acquiring procedure of the library. They do not know how e-resources are acquired by the library.

#### *5.1.2.8 Policy Used for the Acquisition of E- resources*

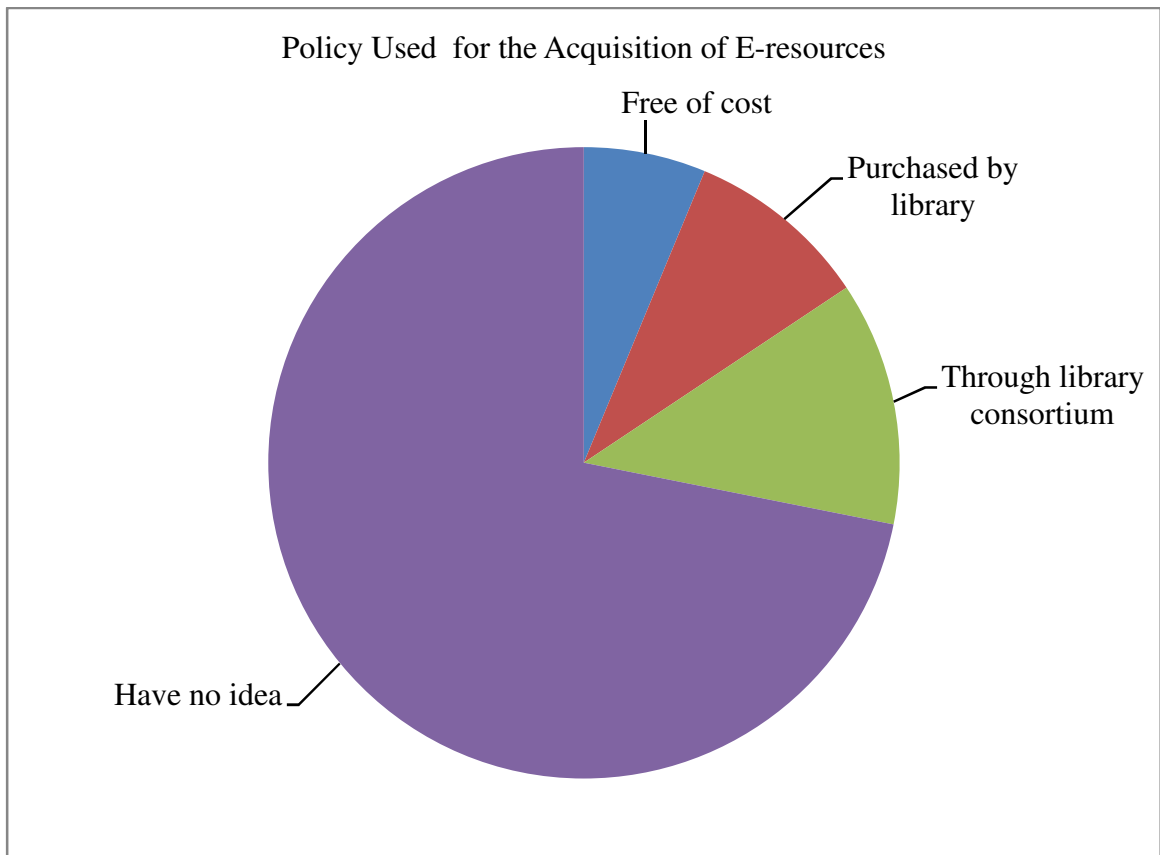
In this question, respondents were asked about the policy that the library has been using for the acquisition of electronic resources. Respondents were given four options which as acquired free of cost, purchased by the library, acquired through the library consortium or have no idea. The responses from the respondents are as follows:

Table 11: Policy Used for the Acquisition of E-resources

Policy of acquisition	No. of respondents	Percentage (%)
Free of cost	2	6.25
Purchased by the library	3	9.38
Through library consortium	4	12.5
Have no idea	23	71.87
Total	32	100

Source: field survey

Figure 11





Among total 32 respondents, 2 of them have selected acquired free of cost i.e. 6.25% of the respondents, 3 of the respondents have selected purchased by the library i.e. 9.38% of the respondents, 4 of the respondents have selected acquired through the library consortium i.e. 12.5 % of the respondents and 23 of the respondents have selected have no idea i.e. 71.87% of the respondents.

From the above statistics, it can be concluded that majority of the respondents do not know about the policy that is being used by the library for acquiring of the electronic resources. Only few of the respondents know that these electronic resources are being acquired through the library consortium. It might be because the users are not interested about the sources of these resources. They are only concerned with the fulfillment of their information needs.

#### *5.1.2.9 Information about NeLIC*

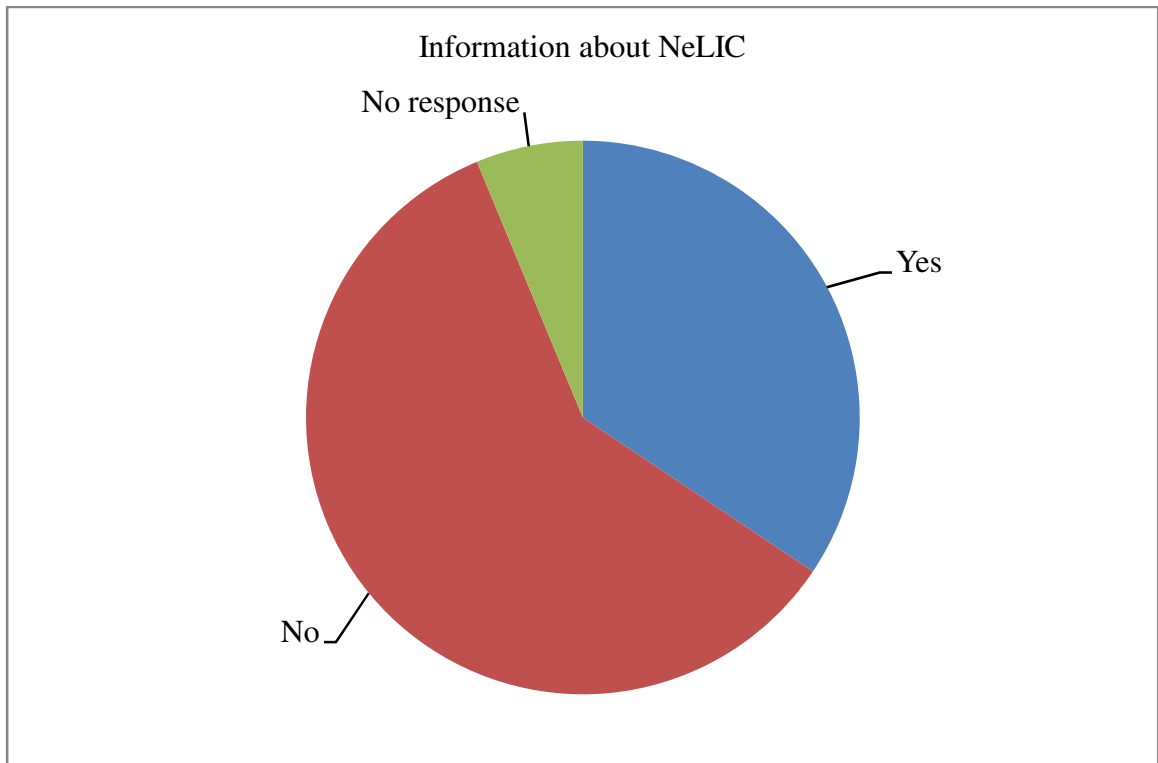
In this question, respondents were asked whether they have heard about or have information about NeLIC. Users have to choose among yes or no. The responses from the respondents are as follows:

Table 12: Information about NeLIC

Information about NeLIC	No. of respondents	Percentage (%)
Yes	11	34.38
No	19	59.37
No response	2	6.25
Total	32	100

Source: field survey

Figure 12



Out of total 32 respondents, 11 respondents have replied 'yes' i.e. 34.38% of the total population, 19 respondents have replied 'no' i.e. 59.37% of the respondents and 2 respondents have not shown any response to the question i.e. 6.25% of the respondents.

From this statistics, it can be said that most of the respondents do not know or have no information about NeLIC.

#### *5.1.2.10 Membership of Libraries with NeLIC*

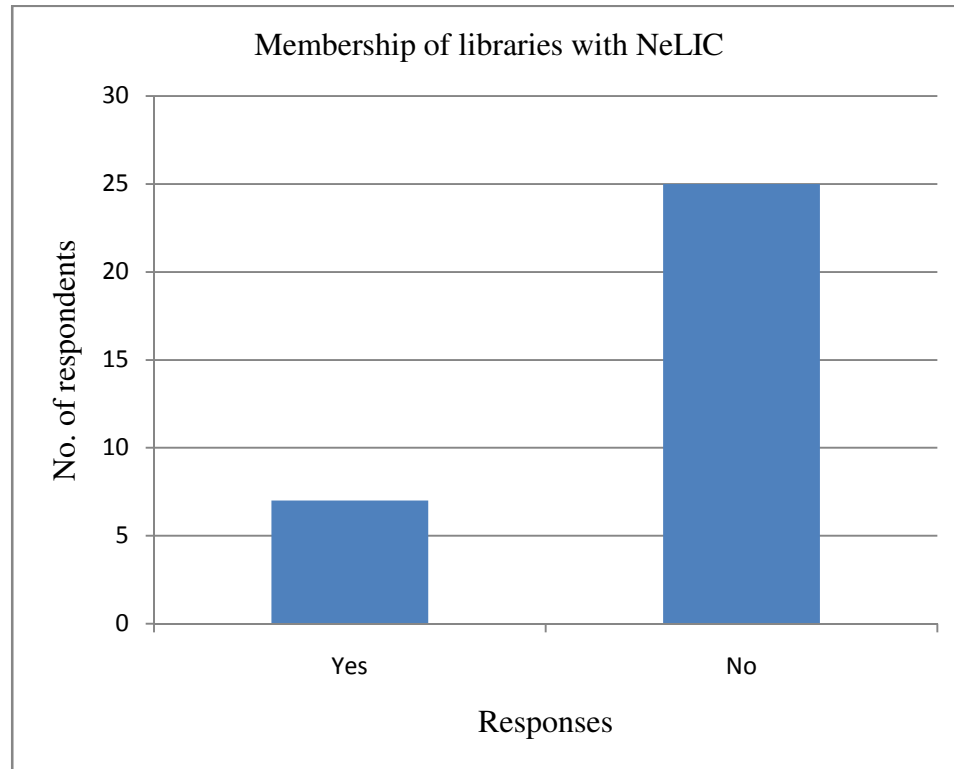
Respondents were asked whether they know about the membership of the libraries/institutions with NeLIC or not. The responses from the users are as follows:

Table 13: Membership of libraries with NeLIC

Membership	No. of respondents	Percentage (%)
Yes	7	21.88
No	25	78.12
Total	32	100

Source: field survey

Figure 13



Among total 32 respondents, 7 of them have replied ‘yes’ to the question i.e. 21.88% of the total respondents and 25 of them have replied ‘no’ to the question i.e. 78.12% of the total population.

It can be observed that most of the respondents do not know about the membership of the concerned libraries/institutions with NeLIC. It might be because of the reason that library

users show interest to the fulfillment of their information needs from wherever the information has been acquired by the library.

#### *5.1.2.11 E-resources Respondents Using to Fulfill Information Need*

A list of electronic databases/resources was provided which can be accessed by the users of the member libraries of NeLIC. Users need to select from the list which electronic databases/resources they are using for fulfilling their information needs. Users have selected different electronic resources that are being used by them. They have selected a wide range of resources. They are as follows:

JSTOR

Project Muse

Oxford Journals

African Journals Online

IMF eLibrary

University of Chicago Press

American Institute of Physics

Annual Reviews

Edinburgh University Press

Geological society

NPG-Palgrave Macmillan Journals

OSA-Optical society of America

Policy Press Journals

Acoustical Society of America (ASA)

Oxford Textbook of Medicine

Royal Society Journals Collection

Pediatric Neurology Briefs

Intellect Journal Collection

BioOne

Cochrane University

NPG-Nature

New England Journal of Medicine

#### *5.1.2.12 Fulfillment of Information Need*

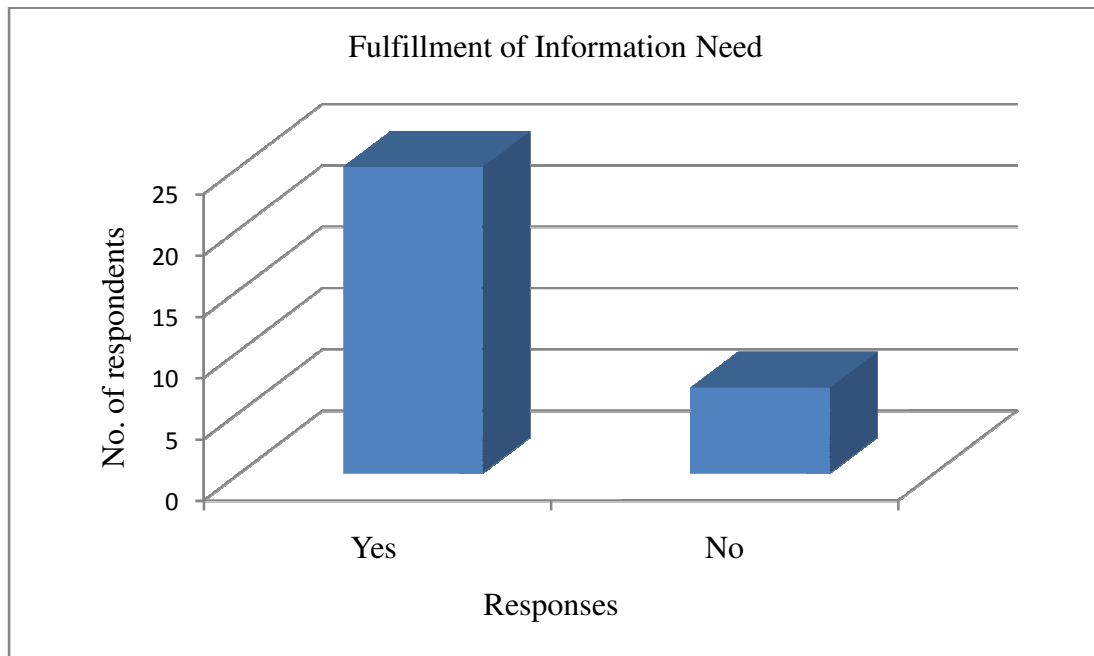
In this question, library users were asked whether these e-resources are able to fulfill their information needs or not. The responses from them are as follows:

Table 14: Fulfillment of Information Need

Fulfillment of information need	No. of respondents	Percentage (%)
Yes	25	78.13
No	7	21.87
Total	32	100

Source: field survey

Figure 14



From above statistics, 25 of the respondents among total 32 respondents have replied yes which is 78.13% of the total respondents. 7 of them have replied no which is 21.87% of the total respondents.

Majority of the respondents have replied that their information need is fulfilled by using e resources available through NeLIC. Only few of them have replied no. From this it can be said that NeLIC is somehow able to provide e-resources to the users which fulfill their information needs.

#### *5.1.2.13 Views/Comments on E-resources*

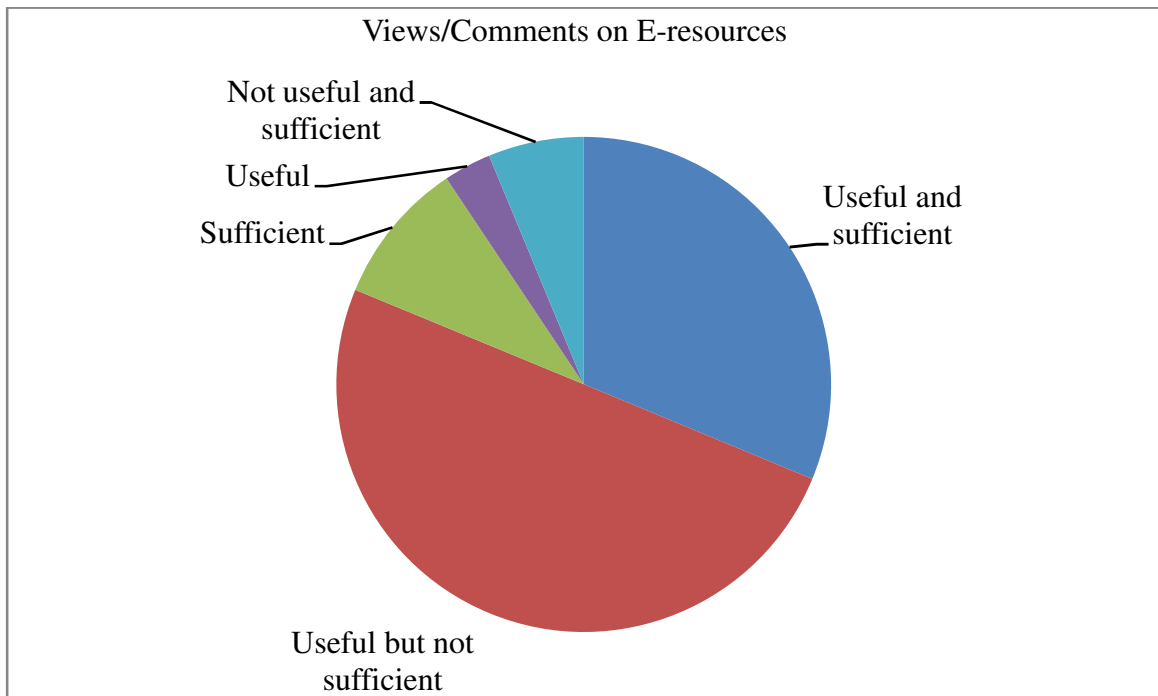
In this question, respondents were asked about their view or comment on the electronic resources available in the concerned library/institution. Different four options were provided for selection as useful and sufficient, useful but not sufficient, sufficient, useful, not useful and sufficient. The main objective of asking this question is to know the views about the available electronic resources. The responses from the users are as follows:

Table 15: Views/Comments on E-resources

Views/comments	No. of respondents	Percentage (%)
Useful and sufficient	10	31.25
Useful but not sufficient	16	50
Sufficient	3	9.38
Useful	1	3.12
Not useful and sufficient	2	6.25
Total	32	100

Source: field survey

Figure 15



Among 32 respondents, 10 respondents have replied useful and sufficient i.e. 31.25% of the total respondents, 16 of them have replied useful but not sufficient i.e. 50% of the

respondents, 3 of the respondents have replied sufficient i.e. 9.38% of the respondents, 1 of the respondents has replied useful i.e. 3.12% of the total respondents, 2 of the respondents have replied not useful and not sufficient i.e. 6.25% of the total respondents.

Majority of the respondents have replied useful but not sufficient for this question. After that useful and sufficient, sufficient, not useful and sufficient, useful are replied by the respondents. From this it can be said that most users have found the e-resources useful but the available e-resources are not sufficient for fulfilling their information needs. The information needs of the library users are not completely fulfilled.

#### 5.1.2.14 Most Appropriate E-resource

The respondents were asked about the most appropriate e-resources for their study/research. The respondents have mentioned the most appropriate e-resources. The responses from the users are as follows:

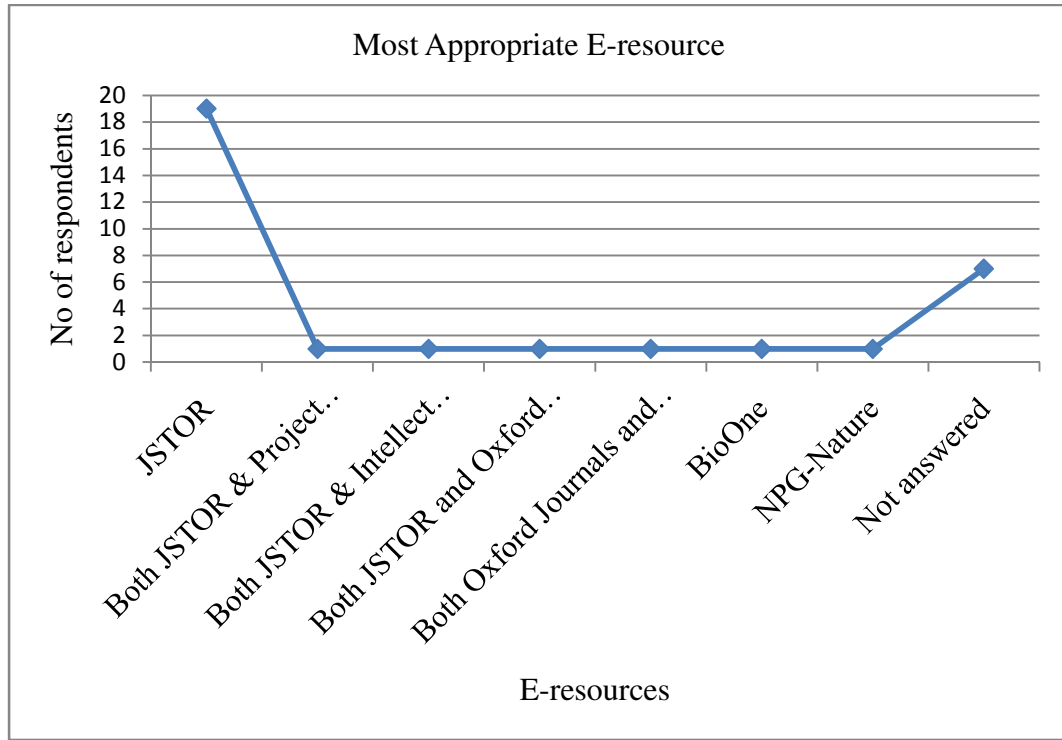
Table 16: Most Appropriate E-resource

Most appropriate E-resources	No. of respondents	Percentage (%)
JSTOR	19	59.37
Both JSTOR and Project Muse	1	3.13
Both JSTOR and Intellect Journal Collection	1	3.13
Both JSTOR and Oxford Journals	1	3.13
Both Oxford Journals and Project Muse	1	3.13
BioOne	1	3.13
NPG-Nature	1	3.13
Not answered	7	21.87
Total	32	100

Source: field survey



Figure 16



Among 32 respondents, 19 of them have mentioned JSTOR as the most appropriate e-resource which is 59.37% of the respondents. 1 of them have mentioned both JSTOR and Project Muse as the most appropriate e-resource which is 3.13% of the respondents, 1 of them have mentioned both JSTOR and Intellect Journal Collection as the most appropriate e-resource which is 3.13% of the respondents, 1 of them have mentioned both JSTOR and Oxford Journals as the most appropriate e-resource which is 3.13% of the respondents, 1 of the respondents have mentioned both Oxford Journals and Project Muse as the most appropriate e-resource which is 3.13% of the respondents, 1 of the respondents have mentioned BioOne as the most appropriate e-resource which is 3.13% of the respondents, 1 of them have mentioned NPG-Nature as the most appropriate e-resource which is 3.13% of the respondents, 7 of them have not answered the question which is 21.87% of the respondents.

From the above statistics, it is observed that majority of the users have mentioned JSTOR as the most appropriate e-resource for fulfilling their information need. From this it can be said that JSTOR is more popular in comparison to other e-resources. Since JSTOR

covers wide range of subjects, the library users may have chosen it as the most appropriate e-resource among others.

5.1.2.15. Addition of E-resources.

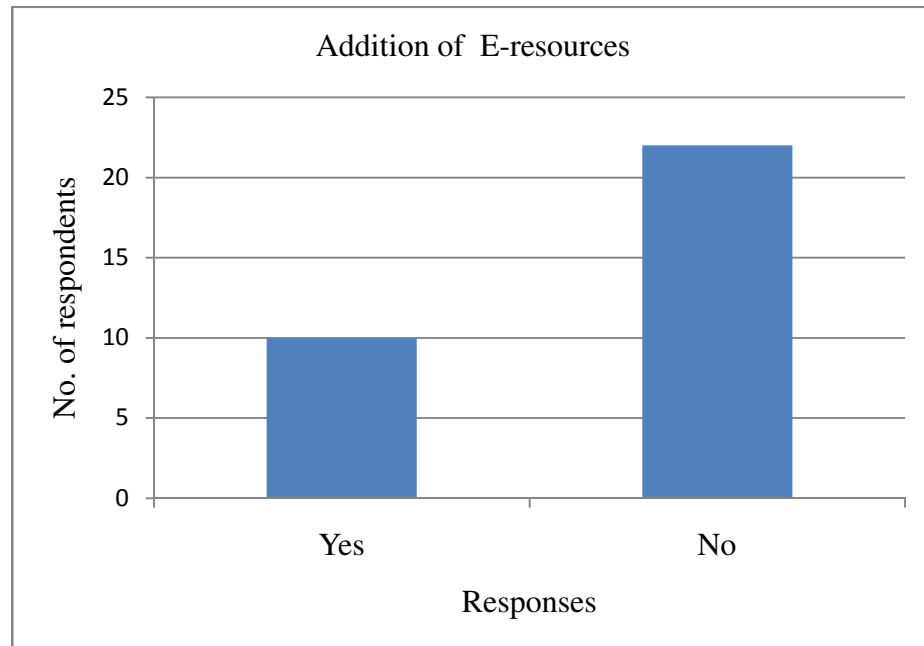
Respondents were asked whether they wanted to ask for adding new e-resources or not. The responses from the users are as follows:

Table 17: Addition of E-resources

Addition of e-resources	No. of respondents	Percentage (%)
Yes	10	31.25
No	22	68.75
Total	32	100

Source: field survey

Figure 17



Among 32 respondents, 10 of them have suggested for addition of e-resources i.e. 31.25% of the respondents, 22 of them have not suggested for the addition of e-resources i.e. 68.75% of the respondents.

From the above statistics, most of the users have not suggested for the addition of e-resources. Only few of them have suggested for the addition of e-resources. Following resources are suggested by the respondents:

- More e-resources related to business studies
- Emerald
- E-resources related to development studies
- Research Gate
- Library Genesis
- PNAS Scientific Research

*5.1.2.16 Views/comments on E-resources Service*

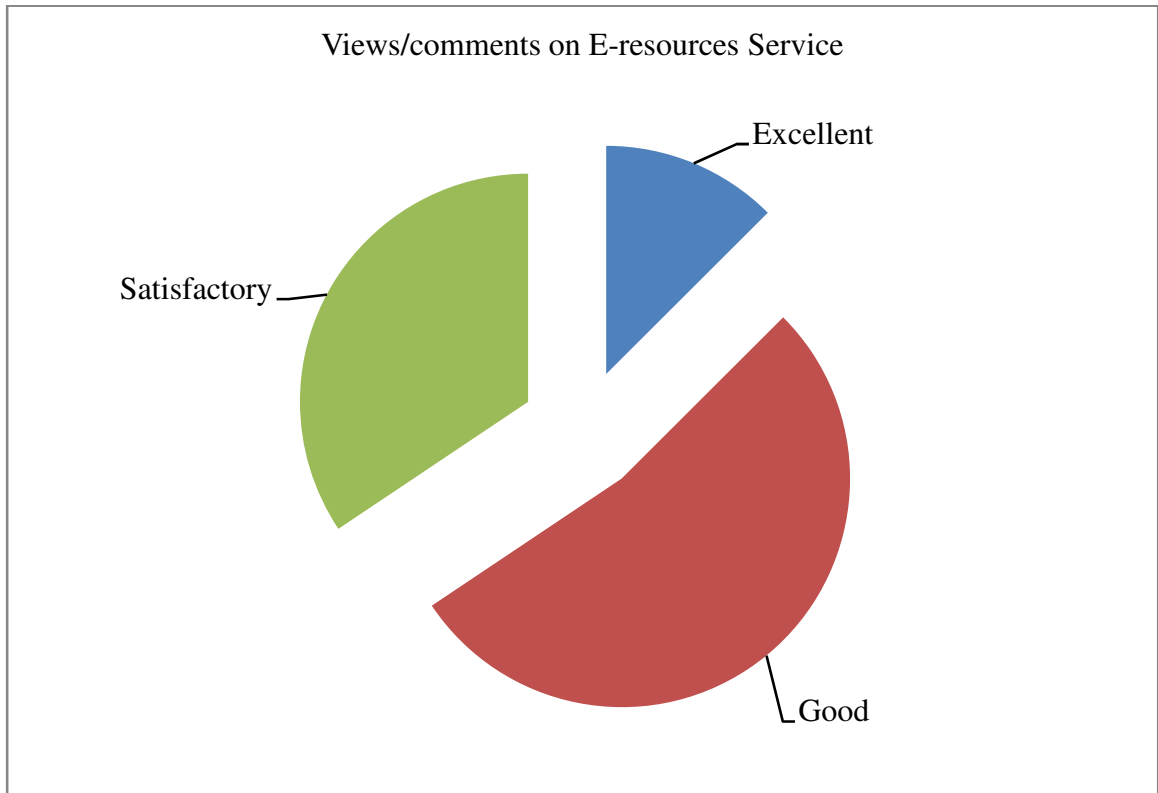
Respondents were asked to rank the e-resources service provided by the library. Respondents were asked to choose among options excellent, good, satisfactory and poor. The responses from the users are as follows:

Table 18: Views/comments on E-resources Service

Rank of service	No. of respondents	Percentage (%)
Excellent	4	12.5
Good	17	53.13
Satisfactory	11	34.37
Poor	0	0
Total	32	100

Source: field survey

Figure 18



Out of 32 respondents, 4 of them have mentioned the e-resources service as excellent i.e. 12.5% of the respondents, 17 of them have answered as good i.e. 53.13% of the respondents, 11 of them have answered as satisfactory i.e. 34.37% of the respondents. None of the respondents have mentioned the service as poor.

From the above statistics, it can be concluded that most of the respondents have mentioned the e-resources service as good. It can be said that the library users are satisfied by the service provided by the library.

#### *5.1.2.17 Visit to Other Libraries*

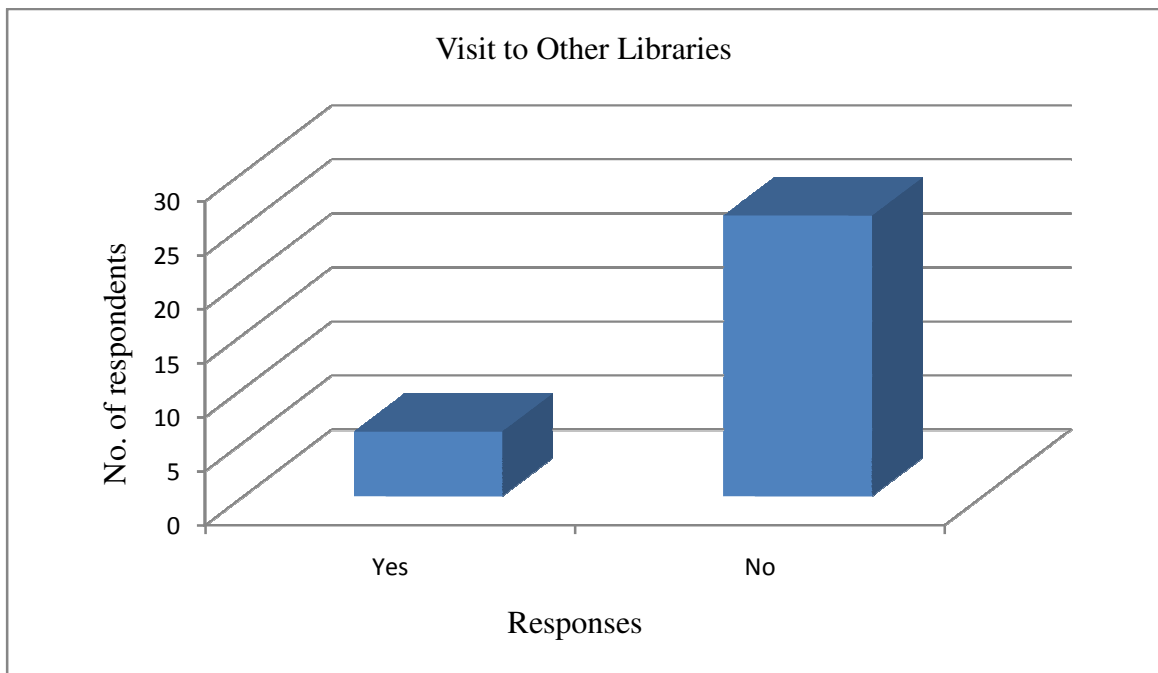
Respondents were asked whether they have visited to other libraries also for accessing to e-resources or not. Their responses are as follows:

Table 19: Visit to Other Libraries

Visit to other libraries	No. of respondents	Percentage (%)
Yes	6	18.75
No	26	81.25
Total	32	100

Source: field survey

Figure 19



Among 32 respondents, 6 of them have visited other libraries for searching e-resources or fulfilling their information needs which is 18.75% of the respondents. Rest of the respondents i.e. 26 respondents out of total 32 have not visited other libraries for accessing e-resources for fulfilling their information needs.

From above statistics, we can say that only least users have visited other libraries for fulfilling their information needs while most of them have not visited other libraries.

Users were asked what difference they found during their visit to other libraries. Among those 6 respondents, 2 of them have answered less electronic resources available, 1 has answered more e-resources available and 1 has replied similar e-resources available.

#### *5.1.2.18 Suggestions from the Respondents*

Respondents were asked for suggestions for the betterment of e-resources service. The suggestions from the respondents are as follows:

- Need to have access of e-books along with e-journals.
- Library staffs should teach basic search techniques to the users.
- There should be mechanism to teach the library users about using such e-resources. These are new technology so regular updates are needed.
- More e-journals and e-books related to commerce and management should be subscribed.
- Library users should be informed about different types of e-resources available in the library.
- Organisations like NeLIC should request publishers to keep e-journals and e-books in open access.

#### *5.2 Responses from Librarians/Information Service Providers*

Librarians/information service providers were interviewed during the data collection for this study. The responses from them are as follows:

##### *5.2.1 Benefits to Member Libraries*

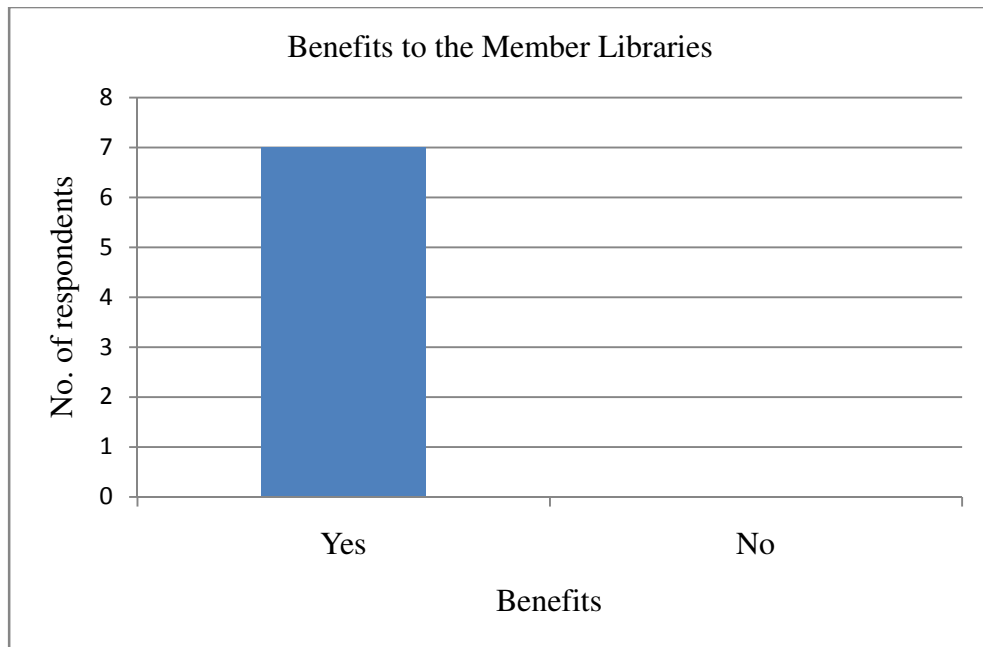
Librarians were asked whether they are benefitted by becoming member with NeLIC or not. If they have benefitted they were asked to mention the benefits they are obtaining. The responses from respondents are as follows:

Table 20: Benefits to Member Libraries

Benefit	No. of respondents	Percentage (%)
Yes	7	100
No	0	0
Total	7	100

Source: field survey

Figure 20



Among total 7 respondents, all of them have replied yes which is 100% of the total respondents.

From above statistics, it can be said that all of the member libraries/institutions are benefitted by becoming member of NeLIC. It may be because they are benefitted by the service provided by the NeLIC.

They were asked to mention how they are benefitted. They are benefitted because of the following reasons:

- They have access to different scholarly e-resources within the premises of their library/institution.
- They are able to fulfill the information need of their users.

### 5.2.2 Usefulness of E-resources

Librarians were asked to mention the usefulness of the e-resources accessed through NeLIC. The main objective of asking this question is to find out the usefulness of e-resources. The responses from them are as follows:

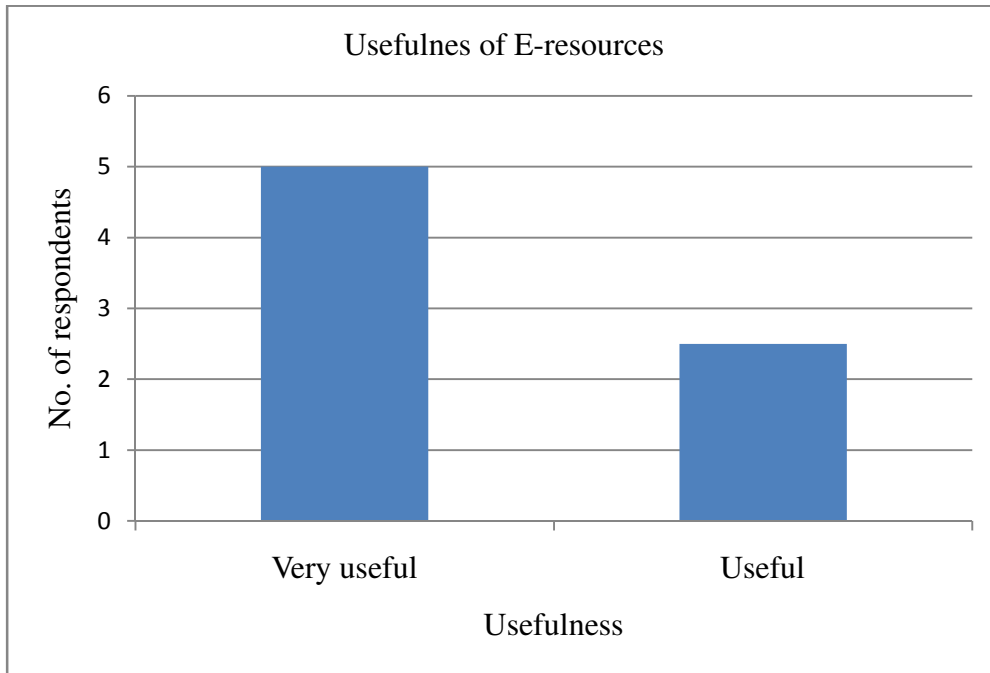
Table 21: Usefulness of E-resources

Usefulness	No. of respondents	Percentage (%)
Very useful	5	71.43
Useful	2	28.57
Not useful	0	0
Total	7	100

Source: field survey



Figure 21



Among total 7 respondents of the interview, 5 of them have commented very useful which is 71.43% of the total respondents and 2 of them have commented useful which is 28.57% of the total respondents.

From above statistics, it can be said that the e-resources subscribed by NeLIC are very useful for the member libraries/institutions. It may be because these e-resources are scholarly and from renowned publishers in wide range of subjects.

### 5.2.3 Satisfaction from E-resources Service Provided by NeLIC

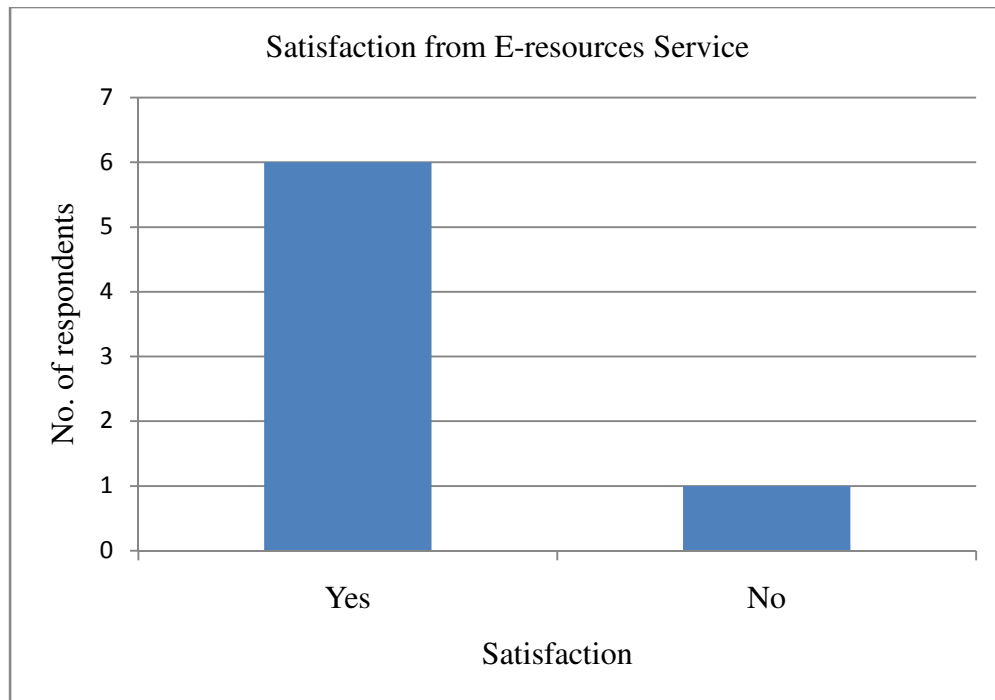
Librarians were asked whether they are satisfied by the service provided by NeLIC or not. The responses from them are as follows:

Table 22: Satisfaction from E-resources Service

Satisfaction	No. of respondents	Percentage (%)
Yes	6	85.72
No	1	14.28
Total	7	100

Source: field survey

Figure 22



Among total 7 respondents, 6 of the respondents are satisfied by the service provided by NeLIC which is 85.72% and 1 of the respondent is not satisfied by the service provided by NeLIC which is 14.28% of the total respondents.

From above statistics, it can be said that most of the librarians are satisfied by the service provided by NeLIC and only few are not satisfied by the service provided by NeLIC. It may be because inspite of many difficulties like lack of full time staffs and other barriers NeLIC is devoted to provide quality service to its member libraries and educational institutions.

#### *5.2.4 Importance of Library Consortium*

Librarians were asked to give their views/comments about the importance of library consortium especially in developing countries like Nepal. The responses from them are as follows:

- The concept of library consortium is important for every country. It is better to do anything in group rather than doing by single organization. It is important to establish library consortium in developing countries like ours where there is no much investment in education, libraries, and purchasing of e-resources. It is good to access e-resources being consortium as medium.
- Some of the e-resources are free to access to countries like Nepal and some e-resources are open access. But it might not free in future. So, in this case consortium is needed for acquiring these e-resources with minimum cost which is affordable to individual libraries/institutions.
- It is very hard to sustain libraries in many countries due to the lack of adequate budget. So, the concept of library consortium is important for country like ours.
- The cost of e-resources is increasing with time. If there is no library consortium to acquire these e-resources, it is nearly impossible for library users to have access to these international scholarly e-resources.
- If we want to acquire e-resources individually, it will cost high. But through consortium, the total cost for the e-resource will be shared among members of consortium. So, the cost will be reduced to individual institution/library through cost sharing.

### *5.2.5 Comments/Suggestions for Better Performance of NeLIC*

Librarians were asked to give their opinions, comments and suggestions for the better performance of NeLIC. The responses from them are as follows:

- NeLIC should hire full time staffs so that they can provide their full concentration for the development of NeLIC.
- NeLIC should visit its member libraries regularly so as to find out the problems they are facing in accessing e-resources.
- Marketing/promotion of NeLIC through social media such as facebook, twitter and by e-mail to other people should be done.
- We should do marketing of library consortium (NeLIC) to academic educational institutions like colleges, schools also to whom becoming member of NeLIC and paying yearly nominal fee for membership is not a big deal.
- Full time staffs should be hired and different working teams like technical team, management team, marketing etc., should be formed.
- Different technical training and workshops should be conducted in regular interval of time to give some technical knowledge for librarians and library users about the e-resources.
- NeLIC should negotiate with other publishers also for accessing other e-resources which are not available at present.
- Regular meetings and seminars should be conducted to inform its member libraries/institutions about its progress and to discuss about its barriers.
- Suggestions from the member libraries should be consider for its better performance.

## CHAPTER 6

### SUMMARY, CONCLUSION AND RECOMMENDATION

#### *6.1 Summary*

Library organizes information in various formats and disseminates it to the people of society. Sources of information are changing with the passage of time. With the advent of information and communication technology, the information sources are changed to digital format. Nowadays, library has been changed to virtual library or library without wall. Library users can access the information sources from any corner of the world with the help of internet. The information seeking behavior of users is also changing with the passage of time. Users prefer to use e-resources rather than information in printed form. So, e-resources are in high demand by the users at present days. There are various renowned scholarly e-resources. Some of the popular e-resources are: JSTOR, Project Muse, Oxford Journals, Cambridge Journals, Emerald, EBSCO Host, etc. E-resources are very important for scholars.

Some of the e-resources are open access which can be acquired freely without any cost. But most of these e-resources are very expensive. Libraries have to do a lot of investment for acquiring them since the subscription rate of scholarly e-resources is very high. It is almost impossible to acquire these e-resources by individual library/information centre. So, cooperation is needed among libraries to acquire them with cost sharing. That is why the concept of library consortium is developed.

Library consortium is a type of cooperation among libraries to work collaboratively for providing information service to the library users. In the beginning, library consortium was established to share physical resources among its member libraries. But, the mode of cooperation has been changed with the advent of information communication technology. With the recent trends of e-resources, library consortium is mainly focusing on acquisition of e-resources with cost sharing along with other activities for the betterment of library sector. Library consortia are established worldwide from mid-nineties. The

popularity of library consortium spread worldwide. So, library consortia are established in many countries of the world. Through library consortium, libraries can advocate for the betterment of library sector and provide library users with most appropriate, reliable and scholarly information which cannot be done by individual library.

In Nepal, the importance of library consortium was felt and representatives from libraries and information centres gathered to discuss the need and importance of library consortium. After having several meetings, first library consortium was established in Nepal and name was given as Nepal Library and Information Consortium (NeLIC). It was established on 10 December, 2009, as a non-profit organization under the Social Organisations Registration Act 2034. Since then a number of libraries and educational institutions have joined NeLIC as its member. Members of NeLIC have reached up to 48 till April, 2015. The members are increasing yearly and NeLIC is gaining popularity among library community in Nepal. The main objective of NeLIC is to help providing educational information services in Nepal including journal databases and other electronic resources. Along with main objective of providing access to e-resources, it is also involved in helping libraries, research institutions and educational institutions in delivering library and information services effectively and efficiently through the use of ICT. It also advocates for different components of library such as open access, FOSS, intellectual property, etc. It conducts different programmes, seminars related to open access, FOSS, intellectual property.

For acquiring e-resources and providing access to its member libraries, NeLIC has established partnership with EIFL, INASP, JSTOR, Project Muse, and other many different initiatives. Many of the e-resources are access freely after becoming member of NeLIC but some e-resources like JSTOR, Project Muse are subscribed only by interested member libraries and institutions. For subscribing JSTOR and Project Muse, extra amount is needed to be paid by its members. Many different libraries have become member of NeLIC such as university libraries, college libraries, public libraries, research libraries, National Library.

The major objective of NeLIC is to help libraries and educational institutions in providing access to scholarly e-resources to their library users. The role of NeLIC in

providing access to e-resources and fulfilling information needs of users is studied in this research. Since the study is focused on only e-resources, other sources of information in the libraries are not included in this study. The e-resources accessing behavior of library users are studied. Based upon the answers given by librarians/information service providers and library users, summary of major findings of the research are as follows:

1. Majority of the library users of age group 20-30 use e-resources. It may be because users of this age group are familiar with technological developments and are interested to acquire information sources in electronic format rather than in printed format. So, library users of this age group i.e. youths are mostly interested to e-resources as compared to other age groups.
2. There is majority of male library users in accessing e-resources rather than female users. It may be due to the reason that women's access to higher education is still not equal as compared to men and their habit of using libraries and e-resources is less as compared to men.
3. Most of the library users who access e-resources are students. Students need to prepare different project works and prepare thesis as part of their education system. They visit library and access e-resources for completing their research work. So, there is majority of students who access e-resources as compared to other professional group of users. Professional group who uses e-resources least are general users.
4. Users from different disciplines access e-resources for fulfilling their information need. However according to this research, users from humanities and social sciences use e-resources the most and users from management use e-resources least.
5. E-resources are very important for education, research, etc. However, users prefer to use general search engines as compared to scholarly e-resources. It may be because these general search engines are easily accessible at any place having Internet connection. So, most of them prefer general search engines to scholarly databases (e-resources).
6. When users were asked about their familiarity with e-resources, majority of the library users have replied that they are familiar with e-resources. It may be

because these e-resources are very important sources of information for their study, research, etc. and e-resources contain informations which are appropriate for their study/research.

7. Users were asked about the frequency of using e-resources. According to their reply, most of the users use e-resources frequently and least of the library users use e-resources whenever needed. It may be because e-resources contain scholarly information which is very essential and important for the study/research of the library users.
8. Library users were asked whether they know about the library consortium or not. Majority of the users do not know about the word 'library consortium'. Only few of them know about library consortium. It may be because library users are only concerned about the sources of information (books, journals, newspapers, audio-video materials) rather than other terminologies of library and information science sector.
9. Majority of the library users do not know about the e-resources acquiring procedure. It may be because users only focus on the sources of information rather than how they are acquired by the library.
10. Users were asked about the policy the library may be using for acquisition of e-resources. Most of the users have said that they have no idea about the policy used by the library for acquisition of e-resources. Some of the users have replied that e-resources are acquired through library consortium. This may be because library users only want to fulfill their information need and are not concerned with the e-resources acquiring procedure of the library.
11. When the users were asked whether they know about the NeLIC or not, most of the users have replied that they do not have any information regarding to NeLIC.
12. When users were asked whether they know about the membership of the concerned libraries with NeLIC or not, most of the users have replied that they do not know about the membership of the library with NeLIC.
13. Library users were asked to give comment over e-resources available in the concerned libraries. Majority of the respondents have commented that the e-resources available in the concerned libraries are useful but not sufficient. This



may be because the information need of library users are not properly fulfilled so they might be demanding more e-resources for fulfilling their information need.

14. Library users were asked about the most appropriate e-resources for them. Most of the users have said that JSTOR is the most appropriate e-resources for their study/research. This may be because JSTOR contains highly scholar journals in a wide range of subjects. So, JSTOR is nominated by majority of the respondents as the most appropriate e-resource.
15. Majority of the users have not suggested for adding more e-resources. Only few of them have suggested for adding more e-resources. Respondents have suggested for adding e-resources like Emerald, Research Gate, Library Genesis, PNAS Scientific Research and other e-resources related to business studies, development studies, etc.
16. Majority of the library users have commented 'good' over the e-resources service provided by the concerned libraries. Only few of them have commented as excellent and satisfactory. None of them have commented as poor. It may be because the library users are satisfied by the e-resources service provided by the library.
17. When library users were asked whether they have visited other libraries for accessing e-resources or not, most of the users have replied that they have not visited other libraries for accessing e-resources. It may be because they are satisfied by the e-resources service provided by the concerned libraries.
18. Respondents have given their suggestions regarding to e-resources service as: library should have access to e-books along with e-journals, library staffs should teach them basic search techniques, more e-resources related to commerce and management should be subscribed, library users should be informed about different types of e-resources available in the library, NeLIC should request to publishers to keep their publications open access.
19. Librarians were interviewed asking some questions. All of the librarians have replied that they are benefitted by becoming member of NeLIC.

20. Librarians were asked to mention the usefulness of e-resources accessed through NeLIC. Majority of them have answered very useful to the e-resources available. Some have replied useful to the e-resources available.
21. Librarians were asked whether they are satisfied by the e-resources service provided by NeLIC. Most of them have replied that they are satisfied with the service provided by NeLIC. While some of them have replied that they are not satisfied with the service provided by NeLIC.
22. Librarians were asked to give their views/comments regarding to importance of library consortium in developing countries like Nepal. They have told that the concept of library consortium is very important in countries like Nepal where there is very hard for libraries to sustain due to lack of adequate budget. If there is no library consortium, libraries and educational/research institutions will not be able to acquire e-resources individually.
23. Librarians have given some suggestions to NeLIC for its better performance like NeLIC should hire full time staffs so that staffs can provide their full concentration for the further development of NeLIC, staffs of NeLIC should visit member libraries regularly so as to find out the problems they are facing in accessing e-resources, marketing/promotion of NeLIC should be done through social media or by direct contact, different training and workshops should be conducted in regular interval of time, regular meetings should be conducted to discuss its achievements, barriers, etc.

## *6.2 Conclusions*

E-resources are in high demand nowadays by the library users and information seekers. E-resources are gradually replacing the printed materials in library. Books, journals, articles, reports, conference papers, etc which are available online are called e-resources. It is also called as online resources. E-resources are very important for the research and study. There is no any doubt regarding the usefulness of e-resources. They help for the quality education and research. They are most important for the academic purposes. Vast amount of information ever emerged can be found online within a second. Modern library

users do not wish to go to specific place for accessing information. They want to access information sitting in one corner of the world through the Internet. So, traditional libraries are gradually converting to modern or virtual libraries. However because of the high subscription rate of e-resources, it is very hard for libraries and educational institutions to acquire them. So, the concept of cooperation between libraries was developed to collaboratively acquire e-resources with cost sharing. So, becoming member of library consortium is beneficial to all libraries and educational institutions.

In Nepal, NeLIC is actively working as library consortium from the date of its establishment in 2009. There is no doubt that its member libraries are benefitted from its services. Through the partnership with different organizations and publishers, it has been providing different e-resources in different disciplines. The main partners of NeLIC are EIFL and INASP along with JSTOR, Project Muse. Through this partnership, scholarly e-resources like JSTOR, Project Muse, Oxford Journals, etc are being accessed. Students, researchers, professors, policy makers, and other general users are highly benefitted from the service of NeLIC. E-resources subscribed through NeLIC are highly scholar, renowned and very useful to academicians, researchers, students and all information seekers.

The members of NeLIC are increasing day by day and it is gaining more popularity. Public libraries, university libraries, research libraries, national library and other academic libraries are member of NeLIC. It is the solo organization which works for the development of libraries and information sector providing access to scholarly e-resources.

Along with e-resources service, NeLIC is actively working by advocating different issues like open access, FOSS, intellectual property and copyright. It has conducted different seminars, conferences relating to different issues. Establishment of open access repository is an important movement in libraries and information sector in Nepal. Theses, reports, research papers, conference papers, etc. related to Nepal are included in this repository.

Being library consortium a very beneficial and important organization, it is important to support it from different sectors of society as well as country. In coming days, we must work for making sustain this concept. Finally, we can conclude that library consortium is very much essential and important for every country whether it is developed, developing or underdeveloped. It is even much more essential in country like Nepal. E-resources subscribed by NeLIC are very much useful for the users. So, users are highly benefitted by the service provided by it. NeLIC has played an important role in providing e-resources to the libraries and educational institutions in Nepal. However there are many barriers and difficulties to run NeLIC. There are many things to do to run and manage NeLIC effectively and efficiently. In coming days, every library professionals should work collaboratively for the betterment of library and information service sector and take NeLIC to the higher level.

There are different challenges faced by NeLIC. According to the interview with the librarians, following challenges of NeLIC were found out:

- Although NeLIC is an independent organization, there are no full time staffs of NeLIC. The staffs of Social Science Baha are voluntarily working for NeLIC. So, lack of permanent staffs is a challenge faced by NeLIC.
- There is lack of proper knowledge of ICT in librarians/information service providers of member libraries. So, they face difficulties in accessing the e-resources. So, lack of knowledge of ICT is another challenge.
- The whole operation of NeLIC is being run by the membership fee collected from the member institutions. There are no other sources of income of NeLIC. So due to financial constrains, NeLIC is facing difficulties in subscribing more e-resources.
- There is diverse type of member libraries. University libraries, college libraries, public libraries, research libraries, national libraries, etc. are member of NeLIC. So, due to this diversity it is difficult for NeLIC to choose e-resources which will satisfy all its member libraries/institutions.

### *6.3 Recommendations*

Based on the study and research, following recommendations have been made for the better use of e-resources subscribed through NeLIC and better performance of NeLIC:

1. Present concept of library is the libraries without wall. So, information should be available from any corner of the world without any obstacles. Every library should be networked in global society through the Internet.
2. In Nepal, cooperation among libraries has been started with the establishment of NeLIC. But only few libraries and educational institutes have become member. So, every library and educational institution should be involved in it.
3. E-resources contain very recent and nascent information. From the statistics of this study, it was found that library users prefer to use general search engines than scholarly e-resources. So, users should be informed about the importance of e-resources and encourage them to use them in greater extent.
4. Library users should be informed about how these e-resources being accessed in the library and how to access information through them by different orientation programmes. They should be informed how much library has to invest to acquire these e-resources so that library users can be encouraged to use them in greater extent in proper way.
5. NeLIC is focusing on e-journals at present days. Along with e-journals, e-books also should be subscribed.
6. NeLIC has to pay a lot of money for the subscription of e-resources. Always paying great amount can make the organization hard to sustain. So, it should request publishers to keep some of their publications in open access so that anyone can access them freely without paying any cost.
7. E-resources are most useful to the researchers, policy makers, and professors. But the statistics showed that the percentage of use by them is low as compared to students. It may be due to the lack of publicity and awareness of the e-resources. So, different activities for the publicity and promotion of the e-resources like awareness programmes and users training should be conducted.

8. Users prefer to use general search engines rather than scholarly e-resources. It might be because of the availability of e-resources only in libraries and educational institutions. For greater use of e-resources, access should be provided from anywhere instead of only providing access in the library. For this, users can be provided with users ID and login password for the access.
9. From the above statistics, there is no uniformity in using e-resources among different disciplines. Users from humanities and social sciences use e-resources more than users from other disciplines. It may be due to the unavailability of more e-resources in other disciplines other than humanities and social sciences. Hence, e-resources from all disciplines should be included so that users from all disciplines are benefitted.
10. Many users are not familiar with the e-resources available in the library. Hence, different trainings and workshops should be conducted frequently to inform users about the e-resources available, procedure of searching the information need and inform users how these e-resources are acquired by the library.
11. NeLIC is an independent organization. So, it should hire full time staffs so that they can provide full concentration for the development of NeLIC. Different committee like management committee, technical committee, marketing committees are needed to be formed.
12. As some member libraries are not satisfied by the service provided by NeLIC, it should visit its member libraries and find out the problems they are facing in accessing e-resources. NeLIC should provide necessary guidelines for solving the problems.
13. Promotion and marketing of NeLIC should be done using social media like facebook, twitter, etc. or by direct contact through e-mail.
14. We should do marketing of NeLIC to academic institutions like colleges, schools, universities, research libraries to whom paying yearly nominal fee is not a big deal.
15. The members of NeLIC should be increased through publicity so that much fund will be collected from more members it will be easy for the organization to sustain.

16. NeLIC should conduct meetings, seminars regularly among its members so that it can inform all its members about the achievements, problems of the organization can be known by all its members.
17. E-resources are very important for the libraries, universities and other educational institutions. So, it should be included as part of the educational system. Government should also make necessary policies and provide necessary grants to the organization.
18. NeLIC should negotiate with many publishers and other library consortia for accessing those e-resources which are not available at present time.
19. NeLIC should ask for its member libraries to give their opinions, suggestions for the better performance in the coming days.
20. Other different aspects of NeLIC are not included in this study. So, other aspects like cost-benefit analysis, dissemination procedures, marketing, etc. are needed to be studied to know the overall status of NeLIC and to do further developments.

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**APPENDIX 1**

**QUESTIONNAIRE**

Dear respondents,

As part of my master’s degree thesis entitled “Nepal Library and Information Consortium (NeLIC) in facilitating access to e-resources”, I am going to carry out data collection from the users of different member libraries/institutions of NeLIC. This research is focused on finding out the importance of consortium and to find out whether NeLIC is able to fulfill the information need or not of the users and also to get valuable opinions and suggestions from the users. Your responses will be of great value for my research and it will be kept confidential. I hope you will help me in conducting this research.

**GROUP A: USER’S PERSONAL INFORMATION**

- a. Name (Optional): .....
- b. Age: .....
- c. Sex : Male  Female
- d. Qualification: .....
- e. Profession: .....
- f. Name of the library/institution: .....:.....

.....

**GROUP B: USER’S UNDERSTANDING REGARDING TO ELECTRONIC RESOURCES AND CONSORTIUM**

- 1. In what type of user do you want to rank yourself?
  - a. Student
  - b. Lecturers/professors
  - c. Research scholars
  - d. General user
  - e. If any other, please specify.....

2. Which is your subject of interest or related field?
  - a. Science and technology
  - b. Management
  - c. Humanities and social sciences
  - d. If other, please specify  
 .....
  
3. Which type of electronic source of information you mostly prefer to use?
  - a. General search engines (Google, Yahoo, etc)
  - b. Scholarly databases (JSTOR, Oxford journals, Project muse, Emerald, etc)
  
4. If you use general search engines, do they fulfill your scholarly information need?
  - a. Yes
  - b. No
  
5. Are you familiar with scholarly electronic resources?
  - a. Yes
  - b. No
  
6. How frequently do you use electronic resources?
  - a. Frequently
  - b. Sometime
  - c. Whenever needed
  - d. Never
  
7. Do you know the word library consortium?
  - a. Yes
  - b. No

If yes, what is the meaning of library consortium (explain in one sentence).

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8. Are you familiar with electronic resources acquiring procedure?
  - a. Yes
  - b. No
  
9. Which policy might have been used for the acquisition of electronic resources?
  - a. Acquired free of cost
  - b. Purchased by the library
  - c. Acquired through the library consortium
  - d. Have no idea.
  
10. Have you heard about Nepal Library and Information Consortium (NeLIC)?
  - a. Yes
  - b. No
  
11. Do you know about the membership of this library/institution with NeLIC?
  - a. Yes
  - b. No
  
12. Among the below e-resources which can be accessed through NeLIC, select the e-resources that you are using for fulfilling your information need.
 

<ol style="list-style-type: none"> <li>a. JSTOR</li> <li>b. Project muse</li> <li>c. Oxford journals</li> <li>d. BioOne</li> <li>e. Oxford Textbook of Medicine</li> <li>f. New England Journal of Medicine</li> <li>g. Royal Society Journals Collection</li> <li>h. IMF eLibrary</li> <li>i. Pediatric Neurology Briefs</li> <li>j. Intellect Journal Collection</li> <li>k. Edward Elgar Publishing</li> <li>l. Acoustical Society of America (ASA)</li> </ol>	<ol style="list-style-type: none"> <li>m. African Journals Online (AJOL)</li> <li>n. American Institute of Physics</li> <li>o. Annual Reviews</li> <li>p. Cochrane Library</li> <li>q. Edinburgh University Press</li> <li>r. Geological Society</li> <li>s. Mary Ann Liebert, Inc.</li> <li>t. NPG- Nature</li> <li>u. NPG-Palgrave Macmillan Journals</li> <li>v. OSA – Optical Society of America</li> <li>w. Policy Press Journals</li> <li>x. University of Chicago Press</li> </ol>
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13. Are the electronic resources available in this library/institution able to fulfill your information need?
  - a. Yes
  - b. No

14. What will you comment on the electronic resources available here?

- a. Useful and sufficient
- b. Useful but not sufficient
- c. Sufficient
- d. Useful
- e. Not useful and sufficient

15. Among these electronic resources, which one is the most appropriate for your study/research?

.....

16. Do you want to suggest for adding any other electronic resources?

- a. Yes
- b. No

If yes, please specify:

- a. ....
- b. ....
- c. ....
- d. ....
- e. ....
- f. ....
- g. ....
- h. ....

17. How will you rank the electronic resources service provided by this library?

- a. Excellent
- b. Good
- c. Satisfactory
- d. Poor

18. Have you visited other non-member libraries of NeLIC for finding out the required electronic resources which are not available in one library?

- a. Yes
- b. No

19. What differences did you find?

- a. More electronic resources available.
- b. Not more additional e-resources available.
- c. Less electronic resources available.
- d. Similar e-resources available.

20. What suggestions do you want to give for the betterment of electronic resources service?

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Thank you for your kind cooperation

Meena Tamang

## APPENDIX 2

### QUESTIONNAIRE FOR INTERVIEW WITH LIBRARIANS

1. Is your library/institution benefitted by becoming member with NeLIC?
  - a. Yes
  - b. No
  
2. NeLIC has subscribed various e-resources. How much these e-resources useful for your library/institution.
  
3. Are you satisfied with the e-resources service provided by NeLIC to your library/institution?
  
4. According to you, what is the importance of library consortium for developing countries like Nepal?
  
5. What are the comments/suggestions for NeLIC for the better performance in future days?



### APPENDIX 3

#### CURRICULUM VITAE

Name	Meena Tamang
Date of Birth	1987-06-24 AD (2044-03-10 BS)
Father's Name	Kami Singh Tamang
Mother's Name	Sanu Maya Tamang
Sex	Female
Nationality	Nepali
Marital Status	Married
Permanent Address	Thulo Parsel-04, Kavrepalanchok
Temporary Address	Boudha, Kathmandu
Languages	Tamang, Nepali, English, Hindi
Contact number	9841485894

#### Education

- Master of Library and Information Science  
Central Department of Library and Information  
Science, Tribhuvan University,  
Kirtipur, Kathmandu
- Bachelor of Science  
Amrit Science Campus, Tribhuvan University,  
Lainchour, Kathmandu
- Intermediate of Science  
Amrit Science Campus, Tribhuvan University,  
Lainchour, Kathmandu

- School Leaving Certificate  
Mahendra Bhawan Girls' Higher Secondary School,  
Gyaneshwor, Kathmandu

## **Trainings and other education**

- Basic Computer Training
- Koha/GSDL Training
- Library 2.0 Training
- Library and Information Science Level-3 Training

## **Work experience**

- Working in Social Science Baha as assistant  
librarian since 14 January, 2010

## **Seminar/Conference Participation**

- Participant  
16<sup>th</sup> National Convention on Knowledge, Library  
and Information Networking “Emerging  
Technologies and Innovations in Library Practices”  
(December 10-12, 2013) in Jaipur, India organized  
by Developing Library Network (DELNET), New  
Delhi, India