CHAPTER 1
INTRODUCTION

1.1 INTRODUCTION

In any education system, libraries play a crucial role to support the objectives of the organization through its information support. It acts as ‘information support local server or host mechanism’ in the educational environment of the institution just like a computer servers providing access to various applications. The use of Computer technology in the university libraries of India has created a platform to network its physical, intellectual and expertise to be delivered through a single platform. UGC has realized the networking aspect of university libraries and as a result it has taken the decision to establish INFLIBNET. In Indian context, INFLIBNET is the basic academic library network meant for Colleges, Universities or other similar equivalent Research and Development Institutions. It is due to UGC’s efforts in the field of library modernization, INFLIBNET was established in 1988 which became functional in 1991. It became autonomous Inter-University centre of UGC in 1996.

Since its establishment, the INFLIBNET Centre has been trying to modernize the university Library system and services. It has brought a revolution in the field of library in general and academic library in particular. Without the establishment of INFLIBNET Centre, the concept of Computer and networking system in the university libraries might be a highly challenging task. As discussed with many LIS professional regarding the INFLIBNET, they express the view that “INFLIBNET Centre is the backbone of academic libraries”.

1.2 CONCEPT OF IMPACT AND MODERNIZATION

The new Lexicon Websters dictionary of the English language defines impact as a clash or collision imparting forces. It is an impression made by a person, thing or idea (Cayne, 1987). Advanced Oxford Learners Dictionary defines impact as a Strong impression or effect on something (Hornby, 1996).
According to Stokes and Others, Impact is always a change which one might consider it as positive, but it is not always correct. They also stress that impact always cannot be measured. From their analysis on Impact it is clear that Impact connotes different things to different people at different time and there is no any common definition of Impact. (Stokes, Hovade, McLaughlin & Rosqueta, 2014)

So, after studying the various literature, the researcher comes to a conclusion that Impact is a result which is made by something by someone. The result may be positive, negative. The impact is an output which depends very much on the kind of input that has been added during the process. The term impact may be defined in various ways based by someone based on the psychology of one’s mindset and the level of knowledge or expertise that has been retained by someone to understand the niche of the entire process of the system.

The New Encyclopedia Britannica defines the concept of Modernization as “Modernization is a continuous and open ended process. Modernity must be understood, in part at least, against the background what went before”. It also adds that Modernization has two phases: one phase is development up to a level and the second Phase breeds discontent due to rising high expectations (Safra & Aguilar-Cauz, 2007). According to the analysis of the researcher, Modernization is a process of change or transformation. For example, Analogue system is converted into digital system as far as the process of modernization is concerned.

1.3 INFLIBNET ACTIVITIES IN BRIEF

INFLIBNET Centre has picked up the libraries from the ground level. In the university Library system, the centre has been trying to cover the journey of the university libraries with that of development in the field of Computer technology, network technology, Data Management, Information Sharing.

Following are the main activities/services which have been provided to the University libraries by the INFLIBNET centre -

a. Library Automation (Since 1991)

b. Financial assistance through UGC (Since 1991)

   i. Under UGC-INFLIBNET Library Automation
ii. Under Shodhganga Programme

c. Human Resource Development Programme (Since 1991)
   i. Regular Training, Special Training, Seminar, Conferences, Workshops

d. Union Catalogue of University Libraries (Since 1994)
   i. Books,
   ii. Theses and
   iii. Serials.

e. UGC INFONET Network Connectivity (Since 2002)
   (Presently the network has been merged with NKN)

   (Previously UGC-Infonet Digital Library Consortium)
   i. E-Books,
   ii. E-Journals and
   iii. E-Databases

g. DDS through J-Gate.
   (previously JCCC).

h. Open Access Initiatives
   i. Shodhganga: a reservoir of Indian Theses.
   ii. Shodhgangotri for PhD Synopsis

1.4 BACKGROUND OF THE STUDY

The study “Impact of INFLIBNET in the Modernization of University libraries in India with special reference to North Eastern region” has originated from the point of view that university libraries of North Eastern region of India had already been provided a lot of help and assistance from INFLIBNET and that it continues to do the same to them since its establishment right from developing infrastructure, in managing automated house-keeping operations & services, e-resources specially the e-journals, digitization of Thesis and Dissertations and above all HRD development. All these libraries have signed a number of MoU’s with INFLIBNET and so a study is required to understand the detailed picture of the level of usage of INFLIBNET assistance in the University Libraries of the North Eastern region. The previous researcher who carried out research on INFLIBNET basically confined the research on INFLIBNET to providing initial level services and
many new aspects like Shodhganga, usage of e-Journals, use of Document Delivery Services (DDS), Human Resource Development (HRD) under INFLIBNET, improvement of bandwidth, reflection of INFLIBNET E-Resources in research productivity etc had not been included in the study. In addition to this, the previous research had remained confined to INFLIBNET level and so a need has arisen to measure the role of INFLIBNET facilities at the University level Library services. The previous study was conducted in Uttar Pradesh in 2005 where environment is completely different from the North Eastern region of India (NER) (Upadhyay, 2005).

1.5 STATEMENT OF THE PROBLEM

The problems that have been identified by the Scholar for choosing the topic are:

1. INFLIBNET has been supporting the universities in the field of Library automation. Now, the question arises as to apart from the library automation services, how the INFLIBNET is delivering its services for overall upliftment of the university libraries of NER.

2. INFLIBNET has different kinds of HRD programmes. Now, the question arises as to what is the level of participation of the University Libraries of NER in the INFLIBNET HRD programmes.

3. Though, INFLIBNET has accelerated the motion for Resource sharing, it yet to be known how far the University Libraries of the NER have been able to use it and convert the opportunities into their strength remain unanswered.

4. UGC’s INFLIBNET Automation programme proposes the provision of an Information scientist in monitoring the activities of INFLIBNET in the respective university libraries. Initially, the post was contractual and later the respective universities regularized the post. The question arises as to how many universities from the NER have recruited Information Scientists. Today, what are the positive contributions of Information Scientists in handling the INFLIBNET resources provided to universities.

5. INFLIBNET under the schemes of UGC has provided the network connectivity with high bandwidth and introduced the Library Users of NER to
6. It is also important to know the level of increase of research productivity of the Universities of the NER after joining the E-consortium of INFLIBNET.

7. What is the status of the progress of university libraries of the NER as compared to the average progress rate of the Indian university Libraries at the national level. Here progress rate is meant to cover development in terms of Shodhganga programme, use of e-journals and the Union catalogue of INFLIBNET.

1.6 AIMS & OBJECTIVES OF THE STUDY

The study is aimed at investigating various impacts of INFLIBNET programmes in different activities of University libraries of NER. The following are the main objectives for carrying out this study:

1. To identify the development of library automation and the present level of house-keeping works carried out with the help of the ILMS in the university libraries of NER.
2. To know the status of Human Resource Development of universities libraries under INFLIBNET and to measure the level of works of Information Scientist in handling INFLIBNET resources in the university libraries of NER.
3. To know the status of the resource sharing and the contribution of the University Libraries of the NER towards Union Catalog of INFLIBNET
4. To calculate the usage of articles in the universities of NER under the UGC-Infonet Digital Library Consortium.
5. To find out the annual Growth rate (AGR) of the research articles of the universities of NER before and after joining the UGC-Infonet Consortia.
6. To know the status of development work of Shodhganga programme of INFLIBNET in the university libraries of NER.
1.7 THE HYPOTHESIS

The following hypothesis has been formulated on the basis of the personal visit to the different university libraries and the literature survey on the topic.

1. \( H_1 \). The Services of INFLIBNET are having a positive impact on the university libraries of NER

1.8 SCOPE AND LIMITATIONS OF THE STUDY

The area covered under the study is limited to the UGC assisted university libraries of NER. At the time of the initiation of the study in 2012, North Eastern States (as of March 2012) have a total of 34 numbers of universities (list is attached in the Appendix A) consisting of 5 state government universities, 18 state private universities, 10 Central universities and 1 deemed universities (UGC, 2012, para.2). The universities of the NER who are both recognized by UGC under 2(f) and 12(b) are considered for the purpose of the study. Open Learning Universities, private or deemed Universities are excluded from the purview of the study. As Sikkim University has been established in 2007 and so due its recentness of establishment it is excluded from the study. After satisfying all the criteria, total of ten numbers of university libraries are selected for the purpose of the study. The study is limited till the year 2016.

Table 1:1

<table>
<thead>
<tr>
<th>Name of the State</th>
<th>Central University</th>
<th>State University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arunachal Pradesh</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Assam</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Manipur</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Meghalaya</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Mizoram</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Nagaland</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Tripura</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>8</strong></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>

N.B: The list of Institutions which are physically visited by the researcher is attached in the Appendix B.
Only those universities which have joined the different programmes of INFLIBNET: Library Automation, E-Resource Consortium, Network connectivity, Union Catalogue, Shodhganga are considered for the study. Due to the limitations of time and cost, the impact of INFLIBNET is measured only to find out the working level of university libraries of NER after availing the facility of INFLIBNET programme (Library automation, Union Database, E-Resource, ETD) and the library users are not included for the study. Librarian or Librarian (i/c) is basically considered to know the picture of different activities of INFLIBNET. For the HRD programme of INFLIBNET, the recordings of only University Library Officers are taken.

1.9 RESEARCH METHODOLOGY AND DESIGN

The Descriptive and Analytical method have been used for this study. Survey method has been applied in order to collect the data.

1.9.1 QUESTIONNAIRE MODEL

Open ended question are designed to know the important facts and figures. Closed ended questions are designed where the researcher has thoroughly reviewed the particular field and derive at presuppose answers.

1.9.2 DESCRIPTION OF SCALES USED IN THE STUDY

I. Likert Scale

Five points Likert scale is used as tool for recording the response of the respondents. The term that denotes the five points scale used in the study are Highly satisfied, Satisfied, Cannot Say, Unsatisfied and Very Highly Unsatisfied. It is used for collecting the response on

a. Satisfaction level on the HRD programme of INFLIBNET.

Strongly Agree, Agree, Uncertain, Disagree and Strongly Disagree are the five other terms used as five points likert scale for collecting the response of:

a. On the 15 statements designed for collecting the feedback on the Impact of INFLIBNET facilities.

Five broad categories of INFLIBNET domain are selected where a total of fifteen statements are framed. The areas where the statements framed are-
i. Feedback on the impact of HRD
ii. Feedback on the impact of UGC-Infonet E-Journal Consortia
iii. Feedback on the impact of IndCat
iv. Feedback on the impact of INFLIBNET supporting Standards and
v. Feedback on the impact of INFLIBNET on Readers

Among the 15 statements, 5 statements are negative statements and rest of them is positive. Negative statements are included to reduce the biasness in recording the response. The researcher has converted all those Negative questions and their ratings into a positive one.

Another five point Likert scale is used for recording the response of the respondents. These scales are as:
Very Good Impact, Good Impact, Moderate Impact, Poor Impact, No Impact.
The area where these scale is used are-
a. Feedback on the Rating of the Information Scientist
b. Overall Impact of INFLIBNET Services

II. Use of Self Designed Scale

In addition to the Likert Scale, a self designed scale assigning five parameters (A1, A2, A3, A4, and A5) is also used for recording the response on-
a. Status of Service Augmentation: Before or After INFLIBNET

III. Definition of the Scales Used

Following are the definition of the scales used in the study
a. Highly Satisfied/ Strongly Agree/Very Good impact:

“Highly Satisfied” implies the highest level of satisfaction level of the respondents beyond that there is no any other probability. “Strongly Agree” implies the absolute level of favoring the questions asked and there is no any further level. Similarly, “Very Good” Impact implies the total satisfactory expectations of the university libraries without any further chances of improvement.
b. Satisfied/Agree/Good Impact

“Satisfied” parameter implies the level of Satisfaction of the respondents into a positive one but there are further chances of improvement. “Agree” parameter is also similar with the previous parameter where the respondents have positively agreed on the statements asked but still there are certain chances of improvement. “Good Impact” also implies the limited positive satisfactory expectation where there are further chances of improvement.

c. Cannot Say/Uncertain/Moderate Impact

“Cannot Scale” implies the neutral point where it is assumed that the respondent is either unaware about the fact or do not like to disclose the fact and maintains a neutral statement. Similarly, “Uncertain” scale is also as similar to its previous scale where the respondents’ behavior is coded as neutral. “Moderate” scale also implies the neutral point resulting an undecided result.

d. Unsatisfied/Disagree/Poor Impact

“Unsatisfied” scale implies that the respondent’s expectations is not fulfilled to certain level and is considered as negative response. Similarly, “Disagree” Scale implies that the respondent is unhappy to a certain level (but not the final level) for the statements asked and is considered as negative. Lastly, the “Poor Impact” implies that there is no contribution and has failed to a limited extent

e. Very Highly Unsatisfied/Strongly Disagree/No Impact

“Very Highly Unsatisfied” implies that the respondent is unsatisfied to its highest degree of unsatisfactory feedback where the total expectation fulfillment is zero. Similarly, “Strongly Disagree” implies the full confident of the respondent in its response where he/she having the expertise knowledge ranks the statement into totally negative (i.e. zero). “No Impact” (0) implies that the parameters selected are totally failed with zero percent (0 %) outcome.

The definition of self designed scale is provided along with the corresponding table where the scale has been used.
1.9.3 TOOLS FOR DATA COLLECTIONS

Questionnaire method, schedule method, personal interview and observation are used as the main techniques for collecting the necessary information. Both the closed and open model Librarian questionnaire are prepared and distributed to the Librarians or Librarian (In-charge) of different university libraries of NER. A separate questionnaire is also designed for University library Officers for collecting the data regarding the participation in the HRD programme of INFLIBNET. Details of Questionnaire designed are attached in the Appendix C and Appendix D. Different website, Annual Reports of INFLIBNET and Newsletters of INFLIBNET are also used for collecting the information. Further standard Indexing and Abstracting database, i.e. SCOPUS is used for measuring the growth in research productivity of article publications of the universities in world’s selected reputed Journals. SCOPUS is used due to its coverage of highest number of journals (citation and abstracting) than its competitors (Chadegani, et al., 2013). Much further review on the inclusion of SCOPUS is described in the literature search chapter i.e. Chapter 2 (Chadegani, et al., 2013)

1.9.4 TREATMENT OF DATA

The analysis are prepared on the basis of available information from the questionnaire, personal interview, observation, data collected from websites/Annual reports/Newsletters and databases. Different statistical and graphical tools have been used for the purpose of the data analysis. Data analysis tools like SPSS, Excel are basically used for converting the raw data from one state into another. Mean, Median, Mode and Standard Deviation are applied for data analysis. To derive the correlation between two parameters Pearson Correlation technique is used. Further, to know the significance level of the parameters, t-test is performed in the study.

Graphical methods: Pie-chart, Bar diagram and Line diagram are used for presenting graphically the facts representing in the corresponding Tables.
In the data analysis part, the first two parameters of the Likert Scale are considered as Positive and the last two Parameters are considered as negative and the middle parameter between the positive and negative scales is considered as Neutral.

1.10 CHAPTER PLAN

The entire study has been designed to cover the following six chapters-

Chapter 1 “Introduction” which includes all the methodology used in the study. The chapter identifies the role of INFLIBNET in short. The research methodological areas which are involved includes Research problems, aims and objectives of the study, the Hypotheses, significance of the study, Areas of the research, scope and limitation of the study, definition of the different research tools used and lastly data analysis techniques.

Chapter 2 “Literature Review” which highlights all the important literatures of the previous studies. The documents include both the print and non-print materials. Books, Journals, Newsletters, Annual reports, websites and databases are basically included in the chapter. The prime importance given in the chapter is to focus on all those literature which the researcher has mostly used as citation or has even developed his knowledge on the particular aspect in the research.

Chapter 3 The third chapter “INFLIBNET: a boon for the university libraries” contains an overview of the university libraries before and after INFLIBNET. The infrastructure and the Human resource available with INFLIBNET are also been covered in the chapter. The most important highlight part of the chapter is comparing the INFLIBNET centre with the seven parameters of an ISO standard (ISO 9001:2015) for quality management principles.

Chapter 4 “University Libraries of India and INFLIBNET” provides the statistics on the facilities of INFLIBNET availed by the university libraries of India. The basic difference between this chapter and the previous chapter (Chapter 3) is that the former chapter was limited within the activities of INFLIBNET where it discusses about the importance of INFLIBNET. But this chapter attempts to throw light on the statistical facts and figures relating to the use of different facilities and services of INFLIBNET by the university libraries of India. The chapter also reveals the statistical data of the
university libraries who are the members of INFLIBNET in the different programmes of INFLIBNET.

Chapter 5 “Impact of INFLIBNET in the Modernization of University Libraries of North Eastern Region of India: An Analysis” reveals the impact scenario of the university libraries of NER under the aegis of INFLIBNET. An attempt has been taken by the researcher to reveal the working level of the ten surveyed university libraries where different programmes related to INFLIBNET are carried out. In addition to the comparisons within the university libraries of NER, the researcher has also tried to find out the average working status (increasing/decreasing) of the university libraries of the region with that of the average national level. At the end of the chapter the hypothesis which is formulated in the chapter 1 is tested for its acceptance or its rejection.

Chapter 6 “Findings, Suggestions and Conclusion” gives the summary of the findings according to the objectives of the study. Based on the survey findings and literature analysis, certain suggestions are given for the further development of the university libraries under INFLIBNET. The areas where the researcher understands that a study is important for further research has also been forwarded for the future researchers.

References: After the completion of all the six chapters, references have been arranged in the alphabetical order. APA citation style is used as a citation and referencing method.

CONCLUSION

The present research on the impact of INFLIBNET on the university libraries of NER is an important study. In this regard a humble attempt has been made by the researcher to thoroughly understand the existing position of the university libraries of India in general and university libraries of NER in particular while participating with INFLIBNET programme of UGC. The study is an initiative to identify the progress/regress (if any) of the university libraries of NER under the INFLIBNET. The research questions, objectives are framed after a clear preliminary understanding of the topic.