Chapter 3

RESEARCH METHODOLOGY

3.0 INTRODUCTION

The term research is composed of two words "re" and "search" which mean to search again. It is a careful investigation to understand or re-examine the facts or to search for new facts or to modify older ones in any branch of knowledge. It is also used to describe an entire collection of information about a particular subject, but it is in general used by the students of higher schools. Research in common parlance refers to search for knowledge; one can also define research as a scientific and systematic search for pertinent information on a specific topic. Some people consider research as a movement, a movement from the unknown to known. It is actually a voyage of discovery. Research is an endeavour to discover, develop and verify knowledge in universe.

The chapter deals with the research methodology used to carry out the research forward. Survey research of method has been used to collect the data where questionnaire, interview and observation tools are applied in the research. Random sampling technique is used while distributing the questionnaire. The above methods are explained broadly in the following.

3.1 RESEARCH METHOD

Survey method is employed to collect the information from the librarians and users. Structured questionnaires are adopted, modified and designed for the university library users and librarians. All the selected universities are personally visited to collect data by using the data collection tools like questionnaire, interview and observation.

3.2 RESEARCH POPULATION AND SIZE

Questionnaires were distributed in the ten selected university libraries of Assam, as the Assam Don Bosco University have their three separate university campus libraries namely Assam Don Bosco University Azara campus, Assam Don Bosco University, Sonapur campus and Assam Don Bosco University, Kharghuli campus the study collected and analyzed the data separately from each of them as separate university. Thus, with these, the study covered twelve university libraries in total.

Fifty questionnaires were distributed among the users of each university among the sample population and one questionnaire each distributed to each university librarians. All total six hundred questionnaires were distributed among the users and twelve separate questionnaires were distributed among the librarians of twelve university libraries.

3.3 DATA COLLECTION TOOLS AND TECHNIQUES

Following are the data collection tools used for collecting data from the sample population:

- i. Questionnaire: The questionnaire has been used as a primary tool to collect data for this research, which has been personally distributed among the sample. The questionnaire has been adopted and modified from Dharani Agrapu "Collection Management of Electronic Information Resources: An Analytical Study of Selected University Libraries in Andhra Pradesh". Questionnaire has been prepared separately for both the library user and librarian.
- **ii. Interview:** In addition to the questionnaire, interview has been also conducted to collect the data from the sample. In some case physical interview has been conducted face-to-face and in some other cases telephonic interview has been also conducted.
- iii. Observation: Data has been also collected by observing the libraries minutely, where movement of the users and attitude of the professionals has been observed

The responses were analyzed for frequencies, relevance and cross tabulation by using IBM SPSS software package version 24 and Microsoft Excel.

3.4 AREA OF THE STUDY

The study area is under the jurisdiction of state of Assam. The universities are categorized as central, state, open and private.

The names of the different universities in Assam are as follows:

A. Central Universities of Assam:

- 1. Assam University, Silchar, year of established 1994
- 2. Tezpur University, Tezpur, year of established 1994

B. State Universities of Assam:

- 3. Assam Agricultural University, Jorhat, year of established 1969
- 4. Assam Rajiv Gandhi University of Co-Operative Management, Sivasagar, year of established 2012
- 5. Assam Science & Technology University, Jalukbari, year of established 2010
- 6. Assam Women's University, Jorhat, year of established 2013
- 7. Bodoland University, Kokrajhar, year of established 2009
- 8. Cotton College State University, Panbazar, Guwahati, year of established 2017
- 9. Dibrugarh University, Dibrugarh, year of established 1965
- 10. Gauhati University, Guwahati, year of established 1948
- Kumar Bhaskar Varma Sanskrit & Ancient Studies University, Nalbari, year of established 2011
- 12. National Law University & Judicial Academy, Ulubari, Guwahati, year of established 2010
- 13. Srimanta Sankardeva University of Health Sciences, Bhangagarh, Guwahati, year of established 2009

C. Open University of Assam:

14. Krishna Kanta Handiqui State Open University, Rani, Patgaon, Guwahati, year of established 2006

D. Private Universities of Assam:

- 15. Assam Don Bosco University, Azara, Guwahati, year of established 2009
- 16. Assam Down Town University, Panikhaiti, Guwahati, year of established 2010
- 17. Mahapurusa Srimanta Sankardeva Viswavidyalaya, Nagaon, year of established 2014
- 18. Kaziranga University, Jorhat, year of established 2012

Out of eighteen university libraries of Assam the eight university libraries are excluded from the study due to their recent establishment and lack of infrastructure and resources. Some of them are considerably older but lack of resources. Twelve selected university libraries have been covered in the study with two separate campuses of Assam Don Bosco university libraries. Following are the university libraries considered for the study:

A. Central Universities of Assam:

- 1. Assam University, Silchar, year of established 1994
- 2. Tezpur University, Tezpur, year of established 1994

B. State Universities of Assam:

- 3. Assam Agricultural University, Jorhat, year of established 1969
- 4. Bodoland University, Kokrajhar, year of established 2009
- 5. Dibrugarh University, Dibrugarh, year of established 1965
- 6. Gauhati University, Guwahati, year of established 1948

C. Open University of Assam:

7. Krishna Kanta Handiqui State Open University, Rani, Patgaon, Guwahati, year of established 2006

D. Private Universities of Assam:

- 8. Assam Down Town University, Panikhaiti, Guwahati, year of established 2010
- 9. Kaziranga University, Jorhat, year of established 2012

Assam Don Bosco University has their three separate university campus libraries which are;

- 10. Assam Don Bosco University, Azara campus, Guwahati, year of established 2009
- 11. Assam Don Bosco University, Sonapur campus, Guwahati, year of established 2009
- 12. Assam Don Bosco University, Kharghuli campus, Guwahati, year of established 2010

Universities not considered for the study

Following are the universities which are not considered for the study:

- 1. Assam Rajiv Gandhi University of Co-Operative Management, Sivasagar, year of established 2012
- Assam Science & Technology University, Jalukbari, year of established
 2010
- 3. Assam Women's University, Jorhat, year of established 2013
- 4. Cotton College State University, Panbazar, Guwahati, year of established 2017
- 5. Kumar Bhaskar Varma Sanskrit & Ancient Studies University, Nalbari, year of established 2011
- National Law University & Judicial Academy, Ulubari, Guwahati, year of established 2010
- 7. Srimanta Sankardeva University of Health Sciences, Bhangagarh, Guwahati, year of established 2009
- 8. Mahapurusa Srimanta Sankardeva Viswavidyalaya, Nagaon, year of established 2014

3.5 FORMULA AND INSTRUMENTS

The data has been analyzed in two aspects; Librarian's analysis and User's analysis. Following are the instruments and formula used to analyze the data collected from the responses (Librarians and Users).

3.5.1 Librarian's Data Analysis

The data collected from the librarians are directly tabulated and compared among the university libraries considered for the study. Data has been also converted into percentage where it is required.

3.5.2 User's Data Analysis

The user data has been analyzed by converting the responses into percentage (%) and the results are compared among themselves. The Weighted Mean Score and Rank method of statistics are also used to analyze the data received in various aspects of the response. The calculation has been done by considering weightage to the different levels of priorities (Priority1, Priority 2 and Priority 3) and satisfaction level (Very good, Good, Satisfactory and Poor) from the highest to the lowest. The highest level of priority (Priority 1) is assigned weightage 3, Priority 2 is assigned weightage 2 and Priority 3 is assigned weightage 1; and in the context of satisfaction level Very good is assigned weightage 4, Good is assigned weightage 3, Satisfactory is assigned weightage 2 and Poor is assigned weightage 1.

3.6 CALCULATION

The calculation has been done in following ways:

Weighted Mean Score for priority

 $= \frac{(Priority\ 1 \times 3 + Priority\ 2 \times 2 + Priority\ 3 \times 1)}{Total\ response\ from\ respective\ library}$

Weighted Mean Score for satisfaction level

 $= \frac{(\text{Very good} \times 4 + \text{Good} \times 3 + \text{Satisfactory} \times 2 + \text{Poor} \times 1)}{\text{Total response from respective library}}$

Later on the result of the weighted mean scores are ranked for interpretation and interpreted the ranking from highest to the lowest.

3.7 CONCLUSION

The scope of research methodology is wider than that of research method. For understanding the research problem thoroughly, the method and tools has been selected depending on the requirement of the study rather than the convenience.

Research method refers to the technique which can be adopted to explore the nature of the world that surrounds us. On the contrary, survey method has been found out as best suited method for the study and questionnaire is the primary tool to collect data.