Chapter 1

Research Design

1.1 Introduction

Libraries are considered as the central hub for the academic and research development of people in general and academic community in particular. Libraries are regarded as the storehouse of knowledge and information. These libraries preserve the great thoughts of the past in different forms and formats of documents for retrieving and disseminating by the future generation. Basically, a library is to perform the jobs of collection, organization, dissemination and preservation of documents irrespective of the users and the reading materials.

The main purpose of a library is to provide and promote relevant information access to the right users in right time by the Library and Information Science (LIS) professionals. Presently the world is in the information age where data information and knowledge are significantly important, interlinked and are increasing tremendously in all aspects of our society. This leads to increase the number of universal knowledge of all the subjects and disciplines. Thus the rate of increasing documents enormously in different forms and formats. The information and knowledge along with the associated technologies are playing major role in all round development of a country and socio-economic development
of any society. At present the libraries are redesigned as the Library and Information Centers (LICs) and also as the Knowledge Resource Centers (KRCs).

The spectacular changes in the Information and Communication Technology (ICT) have led considerable and sensitive effects on all types of small, medium and big Libraries and Information Science in the way of information processed, stored and retrieved. Basically the changes are due to the use of ICT in the Libraries during the past few years. Manually or without applying the ICT and computer technology, it is likely to be impossible for the libraries to organize the huge information and large number of documents properly and retrieve the information competently. These changes have insisted on Library and Information Centers (LICs) to make use of these modern ICT inventions and employed the LIS professionals to learn these technologies for better survival and performance in the job. Trained LIS professional helps and guides the user more effectively and efficiently. The Library and Information Professional needs to handle different professional’s roles in the libraries. The gradual advancement of ICT application and influence of electronic resources in the libraries often force to upgrade the library professionals to cope with the change which leads to increase the job responsibilities.

It is noteworthy that library is an organization where balanced coordination of the activities of library professionals is immensely required for distribution of labour, duty, responsibility, authority and accountability. Similarly, it is also well known to all that library performs a series of activities with its different techniques of skills and tactics. Each
activity carries its own set of responsibilities and the employees are offered appropriate authority to carry out these activities. They are also accountable to the organization through their immediate supervisors for accomplishing their activities according to allotted specifications. Hence, a clear comprehension of their respective duties and responsibilities happen to be a pre-requisite for successful and beneficial utilization of human resources in a library. Job analysis indeed helps the management authorities to realize the goal of an organization.

1.2 Job Analysis

Human Resource Development (HRD) investment is one of the most important, longtime and costly investments in any organization including the libraries. But the task of measuring the return and non return on HRD investment is often left undone mainly by government organization. The process of job analysis is a task for measuring the HRD investment. Job analysis outlines and considers the different aspects of the job properly. Job analysis helps the organization to manage different works efficiently and effectively. Similarly, it also helps the organization to analyse the method and content of duties performed by the professionals and identify the purpose and reason behind the duties and present requirement behind the duties. The main purpose of job analysis is to prepare or modify the existing job description and job specification. Job analysis helps a lot for using human resource to its optimum level and the success of any organization basically depends upon the human resources and their job description and job specification. The measurement is on some trinsic and intrinsic points.
With the information explosion and increasing number of documents day by day and changing format and information sources in the networked environment, information literacy is one of the essential skills to succeed in this digital information environment. At present information literacy is a global phenomenon and has become a crucial issue for the overall development of the society and the country. Information literacy is being recognized as one of the important facets in teaching and learning because it catalyses individuals to engage in a variety of learning system, format and opportunities in optimum ways. Information literacy training and education thus may be interpreted as helping individuals to experience information use differently. The increasing use of information technology in the libraries has compelled the library professionals as well as the users to gain knowledge of information literacy.

Job analysis is one of the important modern concepts and techniques of management practised in different fields of management. Practice of this job analysis improves the confidence of the authority and the team leader upon the subordinate staff and professionals, and helps the authority for decision making policies. In order to handle the library efficiently, it is very important to have an adequate understanding of the different jobs assigned to the different LIS professionals and also the relative job differentials in terms of their level of difficulty, responsibility, knowledge and skill. The task of job analysis involves a careful examination of jobs in order to reveal the tasks performed through the working environment, the responsibilities and the skill required. Formerly, job
analysis was the only way to analyse job, help in human resource management and planning in-service job training programmes.

Lots of well known apex organizations use job analysis for their important decision making process as such as recruitment process, selection process, promotion process and transfer of staff, performance review and appraisal, manpower planning, the design of training programmes and organizational analysis. Every job analysis process is different as it varies depending upon the use and aim because it is to be designed for specific purposes.

At present, the situation of libraries is changing with ICT application along with the job description and job specification. Changing nature of libraries in the way of services offered, information gathered, stored, retrieved and disseminated has become very vital. Modern ICT enabled sources and services have increased the need and practice of job analysis. Job analysis is regarded as the procedural method of collecting information about the duties, responsibilities, necessary skills, outcomes, work environment, situational prospects of a particular job. Job analysis requires maximum possible data to bring together a job description and job specification which is the recurrent result of job analysis. Apart from this, recruiting procedures, position, postings and advertisements, performance development planning within the performance of management system are also included as additional outcome of job analysis. In job analysis the important aspect is that it conducts special analysis of the job but not of the person. Here vital data might be gathered from the working incumbents through a wide variety of ways viz. interviews, questionnaires etc. but
the outcome of the concerned analysis is indeed a description or specifications of the particular profession, not a description of the person who possesses the job.

There are numbers of definitions put forward by different experts regarding the concept of job analysis. However, only a few rational definitions are mentioned for straightforward comprehension and discussion.

a) “A process used to identify the important tasks of a job and the essential competencies an individual should possess to satisfactorily perform the job.” (State of Colorado, 2002, http://www.colorado.gov/dpa/dhr/select/docs/jobanal).

b) “A wide variety of systematic procedures for examining, documenting, and drawing inferences about work activities, worker attributes, and work context.” (Sackett & Laczo, 2003, p. 21).

1.3 Statement of the Problem

The present and the future library professionals are to be extensively dependent upon the expertise of using ICT application. The ever changing and upgraded work environment have forced the library professionals to make extensive use and get trained with the technology side by side the traditional library services for the users.

Most of the science and technology (S & T) institutes of Assam are governed by State government, Central government and Private sector under the aegis of organizations like
UGC and AICTE. Therefore the tasks of job analysis are purely done with the help of UGC & AICTE guidelines. Accordingly the state government also does the same procedure with the guideline of UGC & AICTE. All jobs in an institute are different in nature and cadre. Most of the jobs of library are heterogeneous in nature. Some of them are enjoying UGC pay scale and some of them are getting state Commission pay Calculator (CPC) pay scale. So, the job analysis among the science and technology institutes is very difficult for the government agencies. Generally, most of the S & T libraries of Assam are having only one professional to a minimum zero/nil professional. Therefore only one professional has to take all the responsibilities of the library. The lack of manpower hampers the library service a lot and the different important duties are performed by the non professional library staff. Further, most of the tasks are continuous and time consuming. Mostly the services directly depend on the fund allocation for resource/collection development. When the minimum infrastructure facility is intended to be developed, the library professionals need to keep update of the latest technology.

Since the concept the traditional library has undergone many changes with their functioning, organization, management and services from time to time, the libraries are therefore directly related to the users and the documents which are stored in the library for the future. These documents are the sources of information. But due to the modernization of libraries in the way of using computer and related technology to perform different jobs of various natures and extensive use of ICT tools, the library professionals need to be trained accordingly to cope up with the modern technologies. The Libraries are now in the
transitional mode and both conventional libraries and modern libraries like LICs and KRCs are using modern technology for the users. Thus the society is availing maximum benefits of the services of the library establishments mainly because of use of ICT devices.

ICT has also changed the form and format along with the platform available of the documents, both the traditional printed and electronic documents. The technology has changed the sources of information in wide way. The statement of job analysis is a readily available vital tool and source of information about the different LIS Professionals in terms of knowledge, skill, and competency essential for the particular job and ability required by administrator. This type of investigation is also a part of a larger program of studies designed to review and renew the curriculum and syllabus of Library and Information Science (LIS) and related other courses along with the government policies to rule. All the resources, computers, automation equipments and all other ICT tools used are unproductive except human resources. A trained, intelligent, imaginative and devoted LIS professional helps the users in better way.

It is the duty of the university and other government apex body of education like UGC, AICTE to recommend the course and curriculum for the educational institutions like colleges and universities. When curriculum in schools are being organized, it is desirable to analyze as carefully as possible the vocations for which such schools are supposed to prepare men and women, the various occupations within these vocations, and the numerous so-called jobs within each occupation.
Efficient utilisation of resources in terms of money, material and equipment depends upon the efficiency of personnel operating and handling the resources. The employees' perception of management and the relations between management and workers are dependent on the management policies and their bearing on human relations. A statement of management concerning people or formulation of a policy on personnel is thus, required in every organisation. A good personnel policy motivates employees to work hard and produce more; and at the same time helps the management to utilise the human resources to the optimum level. It also establishes harmonious relationships between the management and the workers. An efficient manager, thus, should not only have good personnel policy but to see that these policies are practiced so as to achieve the organisational objectives.

The present comprehensive study on the theme area Job Analysis of Library Professionals in Assam has not yet been done by any author, library professional, or research scholar etc. Besides, the scenario of the libraries particularly S & T institutes of Assam as well as the LIS education has undergone many changes. This changing scenario of libraries and library and information science has led many accessories in terms of collection development, information stored and dissemination. Thus the present study is a sincere attempt and in-depth study of present library professionals in the S & T Institutes which will benefit the library and information science policy makers, educators, practitioners and future perspective students desiring to enroll in library and information science. So, the
proposed study is the need of the hour and hence this research problem has been undertaken. The research output will help to know the present status of the job analysis as well as provide help for improvement and overcome the existing problems among the area of study to some extent.

1.4 Job Analysis of Library Professionals

There are important legal reasons to conduct a job analysis for the library professionals. Any educational Institutions need to base their recruiting, hiring, promotion procedures, demonstrable tasks and other requirements to perform the job in a legally accepted way. Thus a job analysis can help to define these tasks and requirements to ensure that staffing procedures are legally justifiable. A job analysis alone does not provide protection against legal challenges, but it is a crucial component in designing personnel management systems in a library that can withstand legal disputes. Another important reason for conducting a job analysis of library professional is the useful information it provides that directly have impacts for the success of the job position, including, but not limited to (1) comprehensive list of job tasks, (2) identification of skills and competencies that are critical for the successful completion of the job, (3) development of performance standards and rating scales, (4) establishment of career paths for high-performing employees, and (5) identification of training needs. Finally, a job analysis of library professional can provide recruitment and selection procedures that inform successful hiring. A job analysis provides a list of the attributes required to work effectively in the position. The information provided by the job analysis will make the hiring process faster and more efficient because
the library authority will know what to look for in a candidate. Furthermore, retention and productivity can be improved when the employee fits the requirements of the job. Thus a job analysis involves selection procedures that are designed to assess and also to make decisions regarding the competence between candidates and the job requirements.

1.5. Objectives of the Study

The main objectives of the study is to know the existing scenario of library professionals’ job in S & T institutes of Assam and to provide the necessary guidelines for improvement of job. The important objectives of the study are enumerated as follows:

i. To identify different science and technology institutes and their libraries in Assam

ii. To identify the organization and services of science and technology institute libraries of Assam.

iii. To know different LIS professionals’ job position of the science and technology institutes of Assam.

iv. To identify various duties executed by the library professionals’ of science and technology institutes of Assam.

1.6 Scope of the Study

The present study area is intended to make an intensive study of the job analysis of library professionals in the S & T institutes in Assam. The study is also anticipated to analyse the
various services offered by the libraries and the role played by the different library professionals with reference to their development policy, overall library management, user orientation and user demands and needs.

The present study area is in fact a broad one and it is quite difficult for a research scholar to cover all S & T institutes of Assam including all central government, state government, and semi-government, private sector, autonomous and commercial within a limited scheduled time period. Therefore, the S & T institutes having qualified library professionals and functional of libraries of central government, state government and autonomous institutions are covered for the present study.

The present study examines the job analysis of library professionals of S & T institutes within the state of Assam. The scope of the study confines to library professionals of S & T institutes which are located in Assam.

There are 55 (fifty five) S & T institutes situated in different parts of Assam. Though most of the institutes are having libraries, only few libraries are having professionally qualified library professionals. These institutes are mostly technical, research and development, engineering, academic in nature. Among them some are specialized in one area while some are multidisciplinary in nature which includes physical and applied sciences. The study covers all these institutes. It is found that among the universities of Assam, Tezpur University has the mandate of imparting S & T education. The university is conducting
both bachelor and master degree programme in the field of S & T education. In addition to other S & T institutes as mentioned, Tezpur University is also included for the present study.

A total number of 27 S & T institutes having professionally qualified library professionals have been included for the study. Considering the importance of the rest of the S & T institutes having a library, a brief description is also included for the study. A detailed list of S & T institutes is included in the Annexure III.

1.7 Research Methodology

The methodology of the study is mainly questionnaire method and personal interview with library professionals of S & T institutes of Assam. Various web technology tools e.g. search engines, wikis, blogs, institutional repositories, digital libraries, open access resources along with free based resources etc. are also used. The study is concentrated on the various aspects of library professionals’ job in S & T institutes of Assam. The study is designed to evaluate the data collected from the library professionals. The scope of the study is limited to the S & T institutes of Assam with one minimum permanent library professional.
1.8 Chapter Plan

The complete study has been divided into six chapters for the better understanding including the introduction and conclusion. At the end of the work, bibliography, references and annexure are also incorporated.

Chapter 1: Research Design

In the first chapter, the research design and the subject area of the study have been introduced elaborately where statement of the research problem, research question, objectives of the present study, limitation of the study area, research methodology adopted for the study and lastly the chapter plan of the study are also included.

Chapter 2: Review of Literature

This chapter describes the overall present status of the study area with an assessment of relevant literature found in different sources both micro and macro literature. While conducting the review of literature the whole concept of the study area has been subcategorized in developing the concept within the subject. The APA citation style is followed to cite the literature within the text. The documents have been arranged first according to the subcategory concept and then arranged within each subcategory concept chronologically according to the publication date.
Chapter 3: Science and Technology Institutes in Assam
This chapter demonstrates about the brief history and description of the different S & T institutes located in different parts of Assam. This chapter includes a brief introduction, various facilities and education imparted in those institutes. Further this chapter also includes a brief description of their libraries and the professional staff strength.

Chapter 4: Job Analysis of Library Professionals in Science and Technology Institutes
This chapter describes various aspects of job analysis like kinds of job analysis, uses of job analysis, objectives, advantages, areas of application, job evaluation, job description etc. of the library professionals in S & T institutes.

Chapter 5: Survey and Analysis
For this chapter, a survey has been conducted with two sets of prescribed and structured questionnaire- one for seeking the library related information and data and another for individual library professionals related to job analysis. Collected data are analyzed using different statistical tools and brief interpretations of the whole survey are made thoroughly. This chapter signifies the present status of Job Analysis of Library Professionals in S & T Institutes of Assam.
Chapter 6: Conclusion

Finally the conclusion chapter is prepared at the end of the study. The overall conclusion of the study is based on the summary, findings, recommendation and scope for further research of the study. The fulfillments of the objectives are being included of the study in this chapter. At the end bibliography followed by annexure is appended.

1.9 Summing Up

Before the advent of computer and internet and use of ICT in the libraries the print documents were the main sources of information. The print documents also served and possessed credibility of the task of primary source also. But unfortunately with the help of ICT and computer the digital document has taken the lead regarding the information sources. Thus the library professional has witnessed a paradigm shift and phenomenal change in the job description and job analysis.

Libraries are always have been judged by their resources and services provided by them. But, due to non availability of appropriate library budget, less manpower and heavy work load of library professionals, many libraries have shifted their services to ICT mode along with the collection development and selection of information resources. On the other hand library professionals are also playing a major role in the fulfillment of library achievement by using the aid of modern ICT tools. Whatever we develop and upgrade our existing system, challenges have to be handled by the library professionals. Therefore, any new introduced in the libraries, it is the library professionals’ needs to be met with first. But
most of the times it has been seen that the library professionals are not in a position to utilize the same to its optimum level. There may be so many reasons, but it is the bitter truth.

As the task of job analysis is a very important part of Human Resource Management (HRM) so it is the need of the hour to take proper steps towards the betterment of the entire LIS fraternity. The application of ICT facilitates to provide more precision, valued and expeditious information at the right time to the right user. Thus, it provides the opportunity for libraries to widen the scope of their resources and services to larger number of users and increase their significance within the organization they serve.