Chapter – I

INTRODUCTION

1.0 AN OVERVIEW

As the human civilization shows libraries have been an essential component of the civilized society. Library came into being to serve the needs of the society. Their forms, characters, purposes, functions and services have been determined by the needs of the society served by them. They have responded to these needs to the best of their efforts. These needs have been diverse in nature, which have grown out of varied conditions existing in a society from period to period. Thus social, intellectual, cultural and economic environment has played an important role in the growth and development of libraries (Kumar 1996). The primary objectives and functions of the library are to, acquire information resources, process them and retrieve the same for the purpose of user’s reading, study and reference. Libraries have been in existence since ancient times, but as a separate field of study is witnessed in the second half of the 19th century. With the knowledge explosion in the 20th century, handling of information by information professionals became a very difficult task. With the invention of Information Technology (IT), Information and Communication Technology (ICT) the generation is experiencing a science and technology era, due to advancement of science and technology, and now libraries are using various types of technology to aid the services they render. New technological advances affect the information handling in the libraries and information centers. The impacts of new
technologies are felt by libraries on every aspects: such as housekeeping operations, collection development, information processing, storage and retrieval of information, information exchange besides providing efficient and accurate services, controlling the rapid growth of information, enabling to provide new services, facilitating co-operation and accommodating increased work load and finally things have gone into a sea change. Computing technology, communication technology and mass storage technology are some of the areas of continuous development that has reshaped the way that libraries access, retrieve, store, manipulate and disseminate information to the users. Information explosion and ICT lead library to advances in a very unique way and means in collecting, organizing, and retrieving information that changed the focus of libraries to more modern, and enabling to handle large amount of literature in every field of knowledge. The same have changed manually operated system to automated system at various institutions and organizations all over the world.

Due to technological advancements, particularly information technology the present era or generation is experiencing tremendous transformation in the service of today’s modern library services and operations. The influence of ICT has been witnessed in almost all walks life in today’s modern world and libraries are not exception to them. Application of ICTs and Computerization of library and information centre has been a slogan, move and put up by every right thinking information professionals all over the world. Therefore, library scenario has been drastically changed in terms of collection, organization and services. ICT has brought tremendous changes in the process of transmission and
management, particularly in the present day library services. Also user’s demands and attitude, information seeking behavior of user as such has dynamically been changed. They want relevant, authentic information very quickly within a single place at their hand. This concept has posed challenges for library professionals for quick delivery of library services and information. This development in library field has brought the idea of Library Automation (Bhanja and Barik 2009). According to ALA Glossary “Information Technology is the application of computers and other technologies to the acquisition, organization, storage, retrieval and dissemination of Information”. The introduction of computer in the library has revolutionized information processing and delivery techniques. The use of computers is increasing day by day in library services to provide information more expeditiously and exhaustively to cumbersome housekeeping operations. In the traditional libraries users have to spend more time for searching a small piece of information and for that they have to depend mainly on the library professional or library staff. As to avoid inconveniences, the need arises for centralization of sources of information as well as to hasten the work; information technology and computers are being used for day-to-day housekeeping activity of the library. So the traditional libraries are in the process of automation, which saves the time of the end users and the automated libraries are in the process of digitization so that they will be able to achieve the goals and objectives of the library that is to satisfy the end users. Library automation has become a global phenomenon today. It has also a history of about half a century. The technologies have been reached to the state of Manipur and libraries of the
state have also come forward to go for automation. Without automation the libraries in the modern ICT driven knowledge society will remain as a monument and will not be able to serve the users effectively. Being a hilly border state in the North Eastern corner of the country and facing problems of transport and communication, and backwardness of the region, the state of affairs of the library systems in Manipur too obviously has a number of problems. However there are also prospects on the other hand as discussed. Keeping this is view, the study attempts to assess the status of library automation in Manipur emphasizing upon the problems and prospects.

1.1 \textbf{STATEMENT OF THE PROBLEM}

The present study has been taken up to study the problems and prospects of library automation in the state of Manipur. All types of libraries at various levels are in existence in the state, even though the automation work of libraries have started since last about six decades in the country, the scenario of automation of libraries is not satisfactory at all. There are various problems for not automating the library system in the state, but there are also on the other hand, lots of prospects for the same. The different types of libraries at various levels in the state are under different nature of organizations. As such, problems associated with the process of automation of the libraries varies from library to library and organization to organization. Lack of technological knowledge on the part of the library professionals working in these libraries, shortage of fund and minimum infrastructural requirements, lack of positive attitude of the authority
concerned, etc. have been considered as the major hurdles towards automation of the libraries in the state. On the other hand, availability of softwares including open source softwares for automation with training package, reduced cost of hardwares increased awareness on the part of the professionals as well as authorities concerned, availability of trained manpower to engage in the process, etc. are same of the prospects towards this end. The actual situation prevailing in the state in this context, however, needs to be ascertained. Keeping this in view, the study has been taken up to ascertain the problems associated with the automation of library systems and to understand what the prospects are for the same at the same time. Hence, the problem under study has been stated as “Problems and Prospects of Library Automation in Manipur”.

1.2 OPERATIONAL DEFINITIONS OF THE TERMS

In this section, the operational definitions of the terms used in the statement of the problem have been defined.

1.2.1 Automation

The term mechanization is often used to refer to the simple replacement of human labour by machines, but automation generally implies the integration of machines into a self-governing system. Automation has revolutionized those areas in which it has been introduced, and there is scarcely an aspect of modern life that has been unaffected by it. According to New Encyclopaedia Britannica although the difference between automation and mechanized society is more
clearly apprehended; the introduction of automation has brought about a new and distinct stage in the development of industrial civilization. Automation as per Britannica Reference Encyclopaedia, can be defined as a technology concerned with performing a process by means of programmed commands combined with automatic feedback control to ensure proper execution of the instructions. The resulting system is capable of operating without human intervention”. Also International Encyclopaedia of Information Technology and Library Science, defines automation as the technology concerned with the design and development of progress and system, that minimizes the necessity of human intervention in their operation. ALA Glossary of Library and Information Science considers “automation as the performance of an operation, a series of operations or a process by self-activating, self-controlling or automatic means. Automation implies the use of automatic data processing equipment such as computer order labour saving devices”. So the term ‘automation’ used in the problem is concerned with the automation of the libraries in the state of Manipur.

1.2.2 Library Automation

We can simply say that automation is computer application in the service of library and use of automatic equipments and machines to do work previously done by man. Automation of library operations is gaining momentum because of the availability of digital computers at affordable cost and promise to create database, which is easy to retrieve desired information. The introduction of personal computers for library operations has been bringing new revolutionary
changes and new dimensions in the whole library and information management and services. During the last few decades information technology became major factors on the library scene and added a new dimension. Computer application in the field of Library and Information Science has been one of the major factors attracting the attention of the information professionals throughout the world. With the introduction of computers and ICT tools, libraries are on the threshold of library automation, which will enhance standard library services. Technological innovations in the field of information through computers has opened new horizons to libraries and made new automated services available to users (Seema, 2007). Library automation uses automatic and semi-automatic data processing machines to perform traditional library activities. Although these activities are not necessarily performed in traditional ways, the activities themselves are those traditionally associated with libraries. The rapid growth of literature, specialization in various disciplines and emergence of new and interdisciplinary areas of research has increased the complexity in organization of libraries. This complexity and tremendous pressure of users for better and quality services have forced the librarians to find solution for efficient and effective management of the library (Kumar, 2003). Library Automation means the use of computer (s) and application of information technology in the library. Automation includes mechanization of various processes and their operational as well as the use of machines, equipments, tools etc. in the libraries. The main objectives and functions of the Library whether public, academic, or special are to collect, organize and disseminate information to its users effectively and
efficiently. Therefore, the essential factor for computerization or automation can be summarized as: Information explosion, economic feasibility, routine job, increased in users, speed and accuracy, and storage capacity. Multifold increase in the information output and its usage has made it a problem for the librarians and other information scientists to organise. For organizing the enormous information, manual and conventional methods of information organizing are not adequate. Increased in information has made the cost of publishing and distributing very high, so the whole process has become economically prohibitive. To make economical, use of computers becomes compulsory both for information processing and for sharing the limited resources. The professionals are delisted from doing the routine jobs of filling, sorting, typing and other repetitive functions, so that professionals can serve the user better and at a cheaper cost. As information expands, so does the number of users. There is an increase in number of students and faculties, and researchers in the R & D organizations particularly after the Second World War. Information users and specialization of the information, compelled librarians to develop special methods. The demand for accurate and faster dissemination of information to all users through telecommunication networking was felt. Increased in technology storage devices made it possible to store huge amount of information in a very small and compact media which led to proper utilization of the available space (Afonso, 2004). There are direct and indirect benefits due to which the growth of library automation takes place. The direct benefits include improved efficiency, information integration for better decision making, faster response time to user
queries, etc. The indirect benefits include better library image, improved user goodwill, user satisfaction and so on. To survive as a good library in today’s environments one has to manage future. Managing the future means managing the information and therefore, libraries have to make information technology (IT) an ally, harness its full potential and use it in the best way possible (Kumar, 2003). The library automation helps the library personnel to response in quick time and hence results in satisfied library user. Another advantage of automation is to boost the planning functions, use of latest information technology, improved supplier performance, and better user satisfaction (Jitendra, 2003). Thus, the modern library automation system and information centre facilitate free communication that will be brought and will continue to bring profound changes to the library in terms of both technology and involvement of people. As such the problem in hand considers Library Automation in Manipur in this perspective.

1.2.3 Libraries in Manipur

There are various types of libraries at different levels in Manipur – public, academic and special. They are under different nature of organizations. The public libraries comprise of the state central library, district libraries, branch library of the state central library which are under the Directorate of Art and Culture, Government of Manipur. Also there are libraries run by a sizeable number of voluntary organizations either beneficiary libraries of Raja Rammohon Roy Library Foundation (RRRLF), Kolkata or other libraries not under this scheme. In case of academic libraries, a large size of population is to be taken
into account, which are under schools, colleges and universities of the state. Also there are also special types of libraries in Manipur under various organizations and institutions.

Again, all the three types of libraries under discussion are found to be under various nature of organizations – Central government, State government, Semi-government, Private and Voluntary organizations. They are also under various categories as per their nature of services such as – educational institutions, educational and technical institutions, purely technical institutions, cultural organizations, various government departments, industries, professional bodies, etc. In the present study, all these types of libraries of the state are taken into consideration.

1.2.4 Problems and Prospects in Library Automation

When we talk about library automation, there are also, on the other hand, certain problems and prospects to be dealt with. The general problems in library automation are handling of the situation by the untrained professionals who need to develop skills for the process, lack of fund, shortage of infrastructure and also the reluctant on giving approval by the authority concerned. The influencing power of the LIS professionals is also another factor. ICT gadgets which are useful in automation also require to be seriously taken into account. These problems differ from library to library. The nature of the parent organization is also another factor in this regard. Libraries explored to chalk out possible strategy
and proper planning. This will accelerate the powers of automating the libraries of the state. Regarding prospects we can mention about the availability of such gadgets at the affordable cost, options to more convergent hardware and software, possibility to join training packages, separate budget for automation, availability of professionally trained persons in the market, etc. Being a node of the INFLIBNET Digital Library consortium, the Manipur University has initiated avenues for the academic libraries, particularly of the affiliated colleges towards modernization of their libraries. This has opened new chapter towards automation of the libraries in Manipur. Keeping all these aspects in view, the present study has critically analyzed all the prevailing problems and possible prospects to have completely automated library systems in the state of Manipur.

1.3 OBJECTIVES OF THE STUDY

The objectives of the present study are:

- To survey the existing different types of libraries of Manipur;
- To identify the number of automated libraries in the state;
- To ascertain the stock of the present status of library automation in the state;
- To analyse the problems and prospects of automation of the libraries and their mode of delivery of services in the state; and
- To make suggestions and recommendations through which initiatives can be taken up towards automating libraries of Manipur to provide their services effectively.
1.4 NEED FOR THE STUDY

Computerization of library can be termed as the need of the hour in our present age. It is not only to carry out routine library functions, solving the problems faced by the libraries and to make a library productive, but also to achieve the goals of information dissemination to support development in various organizations. Nowadays, the amazing growth of documents especially in the areas of sciences, social sciences and technology in the form of books and non-book materials forced the library planners to utilize new technology for the organization of information and due to heavy influx of documents added new dimension to user’s need. It is only the computers which can ensure improved and quick service. The workflow in the library may be made more rapid more systematic and efficient with the help of the computer. The records in the computerized store are more accurate, more reliable and more accessible than the manually prepared records (Manohar Nanda, 2006). Library automation is very much essential to monitor the rapid growth of information, to link the system into other existing systems for information retrieval, to provide SDI/CAS to the readers either online or through telephone or offline, to provide speedy and accurate service to the users, to save the time of the users, to increase the efficiency of the library staff, and to help in retrieving particular published articles in a journal with its abstract by the information retrieval. User can view the abstract to select his or her required information and the browsing time of the readers can be saved. Also automation helps to avoid duplication of procuring documents, avoid maintenance of duplicate records, register files, etc.; provides
efficient and valuable services, reduces manpower requirements, enables quick access to library collections, and facilitates online search (Dominic and Nirmala, 2002). Library cooperation and resource sharing are possible by developing computer based systems for mutual benefits of different organizations and different libraries. The task of information collection, storage and retrieval become very complicated particularly, in the areas of science and technology because of high rate of increase of information. To handle the tremendous volume of new information, we have to adopt such a system which can control the inflow of the information and reach it to the right users. This is possible only when libraries are automated and controlled by computer aided systems. The need and conveniences of automating the library are many. Information collection, storage and retrieval in a computer aided system are very fast and accurate. The database of a particular library can be accessed from a distance mode in an automated environment. There is a high tendency of publishing reading materials like encyclopedia, dictionary, books and journals in CD-ROM and diskettes. A library without computer cannot make use of such reading materials published in electronic media. Human errors are minimized in computerized library. Library automation also improves the efficiency of the function of the library. It relieves the library staff of the routine repetitive and clerical tasks; provides services that were hitherto not possible; produces a variety of information products and services; and facilitates networking among the different libraries for resource sharing. Therefore, the present work is needed to develop the libraries of Manipur in an automated environment keeping in view the growth of document, users
services, greater efficiency, cooperation and resource sharing, etc to deliver services to fulfill the demands of the users community. Through this study, the present status of automation of different types of libraries of Manipur can be understood and the major problems in automating the same and the prospects in the process, as well, can also be ascertained. In this way suggestions and conclusions can be drawn to have automated system of libraries in the state to render services effectively to meet users complex need. Hence there is a strong need to carry out study on problems and prospects of libraries.

1.5 SIGNIFICANCE OF THE STUDY

The general significance of the study are enumerated below:

- The study is expected to provide a basis for comprehensive information on information and communication technology (ICT) application leading to library automation in the state of Manipur

- Automation status of different libraries in Manipur at different levels can be ascertained and the study will establish the existing gaps in the adoption of ICT in the operation of library in achieving statutory function.

- Problems faced by different libraries in automating their libraries in Manipur can be understood

- The effectiveness and efficiency of the library services of the state can be understood

- The output of study, as expected will serve as a blue print for libraries and can provide a clue towards marching ahead for ICTs application or automation of libraries to handle the exponential growth of knowledge or information explosion, so as to serve the end users in a more effective way.
1.6 SCOPE OF THE STUDY

The present study has been conducted within the purview of the following scopes:

- Related 100 (one hundred) literature has been scanned and reviewed to have a thorough understanding of the area in which the work has been carried out.

- The whole state of Manipur has been taken into account as the geographical area of the study.

- All types of libraries of the state such as academic, public and special libraries under various organizations – Central, State, Semi Government, Private and Voluntary organization have been considered as the population of the study.

- Relevant records, reports and other documents particularly of the institution and libraries covered in the study available till April 2010 have been referred and recorded.

- Data collection using questionnaire has also been done taking into account April 2010 as the base year.

- Data have been collected during October 2010 – March 2013.

1.7 HYPOTHESES

The study has been taken up to test the validity of the following hypotheses:

- Automation is a recent initiative taken up by the libraries in Manipur.

- Most of the libraries in the state are in the initial stage of their automation.

- A very few libraries are fully automated so far due to want of funds, manpower and other ICT based infrastructure.
• Though there are problems in automating the libraries, there are also bright prospects in the future for the same.

• A sound financial support with the initiative of the concerned authorities is essential for automating the libraries so as to make them gateways to the global knowledge resources to serve the users in an effective way.

1.8 CHAPTERISATION

The present work has been organized into six chapters as detailed below:

Chapter – I: Introduction


Chapter – II: Studies on Library Automation: Review of Literature


Chapter – III: Research Methodology

Chapter – IV: Automation Scenario in the Libraries of Manipur


Chapter – V: Problems and Prospects in Library Automation: An Analysis


Chapter – VI: Conclusion


1.9 CONCLUSION

Library automation is found to be a major area of research in the field of Library and Information Science. The scenario has become global. Libraries across the world irrespective of their type and level are in the mood of automating and modernizing the same taking the advantage of the ICTs and their gadgets.

Since the last more than half a century we have been witnessing the initiatives taken up to automate the library system around the world. The current status of library automation, as such, needs to be studied among the libraries of this part of the country. It is in this context that the present study has been taken
up. Due to various reasons the state and entire north eastern region is found to be lagging behind in many respects, library automation being one of them. As such, the study attempts to analyse the major problems being faced in automating the library system. At the same time, the prospects of automation in Manipur is also being discussed in the work, with the expectation to improve upon the library systems and deliver their services effectively in the automated environment. The study is also expected to draw various clues in this regard.

References


