Chapter 6
A plan of Public Library System in Bhutan

6.1 Introduction

The main objective of the study of public library system in Bhutan is to reach the library service to all the nook and corner of the country. A public library is an organization established, supported and funded by the community, either through local, regional or national government or through some other form of community organization. It provides access to knowledge, information and works of the imagination through a range of resources and services and is equally available to all members of the community regardless of race, nationality, age, gender, religion, language, disability, economic and employment status and educational attainment.

The primary purposes of the public library are to provide resources and services in a variety of media to meet the needs of individuals and groups for education, information and personal development including recreation and leisure. They have an important role in the development and maintenance of a democratic society by giving the individual access to a wide and varied range of knowledge, ideas and opinions.

The user group for the public libraries consists of varieties of peoples with the varieties of needs. It includes children, youth, middle age, old age people, different kinds of professionals like farmers, teachers, lawyers, doctors, engineers, physically and visually challenged persons and so on. No single library can fulfill the needs of the whole community, because as Ganesh Bhattacharya said, “No Library is Self Sufficient”. On the other hand, we find “information explosion”, that is the production of information is going in a rapid speed. This means that demands are there, information sources are also available. To meet these two concepts, instead of a single public library, a public library system will serve better. The public library system will include the programmes like resource sharing, inter library loan and networking is absolutely needed to serve the patrons beyond its wall.
The hierarchy of Public Library System in India exists as follows:

Fig 6.1: The hierarchy of the PLS of India:

- Minister In-charge PLs
- Library Council
- Directorate of PLs
- State Central Library (SCL) (Maintained by State Govt)
- Divisional Libraries (One in each Revenue Division) Maintained by State Govt
- State Central Library (SCL) (Maintained by State Govt)
- District Central Library (DCL) (Maintained by LLA)
- Branches of DCL in each Town
- Block Central Library (BCL) of Rural Areas
- Village Libraries as BCL

(Jain: 1998: 26)

The factors leading to the library cooperation and resource sharing among libraries and information centres, automation and networking are:

- Ever increasing amount of information which is in terms of information explosion finds unavailability and non-accessibility of essential information and knowledge.
- The different forms of the universe of knowledge like multidisciplinary and interdisciplinary subjects.
• Ever increasing new formats of books other than the traditional printed books like microfilms, microfiches, CDs, DVDs, online virtual sources, etc.
• The increasing cost of print and non-print reading materials.
• Budget constrains which is hampering the efforts of libraries to provide adequate services to the users.
• Ever increasing research and development activities, ever increasing user needs, demands, expectations, and the complexity of queries.
• Need of relevant techniques to retrieve the information from the storage of library collection.
• The exploitation of computer, information technology in library is viewed as a significant technique for grappling with the growing problem of providing basic library services.
• Any library can preserve only a fraction of the collection of human knowledge. It is not at all possible to collect and organize all information sources available all over the world, even in a specific field.
• To utilize the new technologies like computers and communications, there is a need of subject experts.
• To provide effective quality services to the users and to save the status in the competitive world.

To overcome these problems, implementation of library cooperation and networking is a solution. The effect of computer and telecommunication converts the world into an electronic village. Information becomes the life blood of the society and an important resource for national development. The effective use of information is a vital component for efficient government. The main objective of the library is to provide access to the relevant information in a short possible time. In the era of information explosion, one side the information becomes very costly and other side, the growing demands of the patrons and the declining levels of finance makes very crucial situation to the libraries. The only solution for all these problems is resource sharing through cooperation, inter library loan and networking.

To ensure nationwide cooperation, legislation and strategic plans should be well defined. A systematic plan will bring all public libraries of different districts (dzongkhags) and taluks (gewoks) together under one roof. This integrated Public library system should be
under the management of National Library, Thimphu. The public library system of Bhutan should be supported on the agreed standards which will enable the government to provide vital information service.

6.2 A plan of Public Library System for Bhutan

The Public Library System of Bhutan should start with the National Library as a central node of the system. The National Library should connect with the libraries of all dzongkhags. The systematic planning of the PLS of Bhutan can begin in the year 2010, the first phase can take place from 2010 to 2015. In this first phase the creation of all Dzongkhag libraries should be finished with the network of all these libraries. A well established Dzongkhag Public Library (DPL) is needed for all twenty dzongkhags. Minimum four or five computers should be given to all the dzongkhag libraries, in which one has to be a server, one for database management (data entry operations) and the third one for circulation and the fourth & fifth system is for OPAC service. As per the census data, Thimphu, Chukha and Samtse cover more than 30% of the population of the country. Considering the over population, it is necessary to provide the additional branch libraries in these three dzongkhags. Within this first phase at least 50% of the gewogs should have public libraries, with the sufficient collection of books and other relevant materials.

In the second phase of the planning for the PLS of Bhutan can be taken place from 2016 to 2020. In this phase all the remaining 50% of all blocks / taluks (gewogs) should have the public libraries, all the villages should be facilitated with public libraries and if not possible mobile libraries have to be organized. In the third phase i.e. the last phase all villages in which the population is more than 200 persons have to have public libraries. The major portion of Bhutan, saying 72.5 percent of the kingdom is covered with forests and 10 percent with round the year snow and glaciers. Hence, the population density is very low in Bhutan, eg: in Gasa district the population density is less than one per sq. km, considering these kinds of geographical factors of country, it is necessary to establish the public libraries even if the population is around 200 persons.

It is necessary to provide the mobile library facilities wherever the village libraries can not be opened due to the lack of basic infrastructure like roads, transport and so on. The
Royal government of Bhutan should take strong steps to make the public libraries under the integrated library system with the agreed policies and standards, from the very beginning of the system. It is better to provide digital library services or internet facilities for the places where even the mobile libraries is not possible to serve.

To facilitate the mobile libraries, all the dzongkhag libraries should be give sufficient number of vehicles and the book collection exclusively for this purpose. The books allotted for mobile libraries should not be used in the dzongkhag libraries at any cost. More localized books have to be included with the literature of traditional culture and ethics in the form of folk tales to motivate the rural public. Special collection should be given to attract children and women. It is necessary to have adequate number of newspapers and magazines in the mobile libraries. These mobile libraries should visit at least once in a week to the allocated village in its region. Adequate number of staff should be appointed for the maintenance of mobile libraries. The librarians appointed for the mobile libraries must be able to speak in the local languages of the region he/she to be visited. The hierarchy of all the above said public libraries can be made as follows:

Pic 6.2 Proposed hierarchy of the PLS of Bhutan
6.2.1 Public Library Legislation: Guidelines

The essential factor to develop and maintain the public libraries is finance. Even though public libraries is serving at free of cost, they are mainly running by the public funds only. The collection of funds for the public libraries is in the form of library cess (library tax). This library cess should be collected on the basis of legislation. Considering the complexity to design public library legislation, UNESCO has produced guidelines which might be used to introduce new legislation in countries that might need it. The document prepared for UNESCO by Frank M. Gardner which lays down a series of principles for the formulation of public library law which have been used with success by many framers of legislation. The general necessary legal provisions emphasized in Gardner’s study were the following:

• Areas of Basic Concern
  o Use of the libraries should be free and open to all.
  o The materials to be provided and the services to be given should be specified.
  o The administrative unit should be responsible for the entire territory of the area served, whether national, regional or local.
  o There should be an independent body charged with the duty of advising on the implementation of the legislation. This should come under the national government department named to be responsible for public library development.

• Powers of the Central Authority
  o It should be able to make services compulsory.
  o It should have powers of inspection, should set standards and have a staff to carry out its supervisory functions.
  o It should make regulations on all matters affecting public libraries
  o It should enable local authorities to make regulations, should provide guidance and assist in their elaboration.
• **Financial Provisions**
  
  - The central government should provide financial assistance by way of grants, both for regular and for specific and experimental purpose.
  - The local authority should be empowered to levy relevant taxes. The library authority should have the power to raise money for capital expenditures.

• **Nationwide Library Networks**
  
  - There should be provision for a mechanism for cooperation and inter-lending.
  - There should be provision for the joint running of services, in co-operation with other agencies.
  - Library services should be provided to various agencies, community centres, hospitals, etc.
  - Institutionally owned libraries should be able to be integrated into the general public library system. (Gardner: 1978)

6.2.2 Essential Factors

The essential factors of the public libraries or any other type of libraries are books, staff and the user group. The book includes all type of reading materials or information source whether it is printed format or electronic / digital format. Without qualified librarians the collection of books is just like a food without any server. Finally the most essential factor is the patron. If there is no user, the library will just be a store house without any usage.

• **Standards for book collections**

The following proposed standards relate to book collections. Local and financial circumstances could lead to variations in these proposed standards. Where resources are severely limited these may be regarded as target figures and medium and long-term strategies should be developed to work towards achieving these standards in the future.

*As a general guide an established book collection should be between 1.5 to 2.5 books per capita*
*The minimum stock level for the smallest service point should not be less than 2500 books. (Gill: 2001: 56)*

In the smallest collections materials for children, adult fiction and adult nonfiction may be provided in equal proportions. In larger collections the percentage of non-fiction titles will tend to increase. These ratios can vary according to the needs of the local community and the role of the public library. Relevant collections to serve the needs of young adults should be developed. Where the library has a strong educational role this is likely to be reflected in the composition of the stock.

- **Establishment phase**

A basic collection should be established in new libraries to serve the needs of the general population within the catchment's area. A sufficient range and depth of resources to meet general needs should be the aim at this stage rather than comprehensive coverage. The interlibrary loan system should be at its peak utilization during this phase to supplement the developing collections.

In some countries materials from a national or provincial centre are used to supplement the local stock.

*Ideally a new library should be established with a minimum base stock of 1.0 book per capita. (Gill: 2001: 58)*

Where this is not achievable a modest growth plan should be implemented to establish this minimum base stock over a period of three years. Access to electronic information sources should also be included in this phase of development.

- **Consolidation phase**

The objective under this phase is to achieve growth in the stock size, range and depth. Special conditions of the population are taken into account and collections developed to meet the more in-depth needs of the population served. The book discard factor comes into play and the collection growth rate decreases as discards begin to offset acquisitions.
A growth to 2.0 books per capita would be a modest target over a three year period. (Gill: 2001: 58)

- Acquisition and discard rates

For general book stock in an established library service the following acquisition rates may be applied:

<table>
<thead>
<tr>
<th>Population</th>
<th>Books per capita per annum</th>
<th>Books per 1000 population per annum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 25 000</td>
<td>0.25</td>
<td>250</td>
</tr>
<tr>
<td>25 000–50 000</td>
<td>0.225</td>
<td>225</td>
</tr>
<tr>
<td>50 000+</td>
<td>0.2</td>
<td>200</td>
</tr>
</tbody>
</table>

The following examples suggest the size of book stock for communities of different sizes.

**Scenario 1**
- Established library service serving 100 000 population
- Median book stock of 200 000 volumes
- Annual acquisition rate of 20 000 volumes

**Scenario 2**
- Established library service serving 50 000 population
- Median book stock of 100 000 volumes
- Annual acquisition rate of 11 250 volumes

**Scenario 3**
- Established library service serving 20 000 population
- Median book stock of 40 000 volumes
- Annual acquisition rate of 5000 volumes. (Gill: 2001: 59)

- Small libraries and mobile libraries

The general acquisition rates would be inadequate to meet the needs of small libraries and mobile libraries where stock numbers are limited. All libraries require a certain minimum stock in order to provide a sufficient range of books from which users may make their selection. The acquisition rate of 250 books per 1000 population may not be relevant in
the smallest service points, where physical limitations may reduce stock levels below the minimum recommended level of 2500 volumes. In these cases the acquisition rates, renewal rates or exchange rates should be based upon the collection size rather than the population served, and be in the order of 100% or more per annum. An efficient interlibrary loan system is essential in these situations. (Gill: 2001: 60)

- **Special collections**

General acquisition and discard rates may not be relevant to some parts of the collection or to particular special collections or where special circumstances prevail. In these cases the collection policy must reflect the special needs. Particular examples of these exceptions are:

- indigenous resources – the public library has a role in maintaining and promoting collections of resources related to the culture of indigenous people and ensuring access to them

- local history resources – material relating to the history of the locality should be actively collected, preserved and made available

- libraries in communities with a high proportion of particular groups, e.g., children, retired people, young adults, indigenous peoples, ethnic minorities or unemployed people should reflect the needs of these groups in their collections and services

- reference collections – older reference material may need to be retained to provide historical data for research. (Gill: 2001: 60)

- **Human Resources**

The categories of staff are the minimum requirements in public libraries are qualified librarians, library assistants, specialist staff and support staff.
• **Qualified Librarians**

The qualified librarians are professional staff who have undertaken a course of study in librarianship and information studies to degree or post-graduate level. A librarian designs, plans, organizes, implements, manages and evaluates library and information services and systems to meet the needs of the users of library and information services in the community. This will include collection development, the organization and exploitation of resources, the provision of advice and assistance to users in finding and using information and the development of systems that will facilitate access to the library’s resources. Qualified librarians will have regular contact with members of the community that they serve. In order to fulfill its functions staff with expertise in specific areas, for example, children’s librarians, information officers and reference librarians should form part of the professional team.

The following is a list of some of the duties of the qualified librarian. This list is not exhaustive nor is it likely that the qualified librarian will undertake all these activities simultaneously:

- analysing the resource and information needs of the community
- formulating and implementing policies for service development
- planning services to the public and participating in their delivery
- retrieving and presenting information
- answering reference and information enquiries using appropriate material
- assisting users in the use of library resources and information
- developing services to meet the needs of special groups, e.g., children
- creating and maintaining databases to meet the needs of the library and its users
- designing library and information services and systems to meet the needs of the public
- developing acquisition policies and systems for library resources
- managing and administering library and information systems
- cataloguing and classification of library materials
- promoting library services
- evaluating library services and systems and measuring their performance
- selecting, evaluating, managing and training staff
- budgeting
• strategic planning
• participation in planning the design and layout of new and refurbished libraries and of mobile libraries
• keeping up-to-date with current developments in librarianship and information services including the relevant technologies. (Gill: 2001: 63)

• Other Library Staff:

The other library staff comprise of library assistants, specialist staff and supporting staff. The duties of the library assistant include routine circulation functions and operational library tasks such as shelving, shelf-checking, processing library materials, data entry, filing, secretarial support and basic level reader enquiry work. Library assistants are the staff the public will come into contact with most frequently. It is essential, therefore, that they should have a high level of interpersonal and communication skills and receive appropriate training.

Large public library services may employ specialist staff to carry out specific functions, for example, computer system managers, administrative, financial, training and marketing staff. Specialist staff may have a qualification in their subject area rather than in librarianship.

Support staff include caretakers, cleaners, drivers and security staff. They carry out important functions, which contribute to the smooth operation of the library service. They should be regarded as an integral part of the library’s staff.

• The composition of the staff

The composition of the staff should, as far as possible, reflect the make-up of the population it serves. Where, for example, there is a significant number of people from a particular ethnic group within the community, the library staff should include members of that group. This demonstrates that the library is a service for all members of the local community and will help to attract users from all sections of the public.
The IFLA / UNESCO guidelines for the recommendations of staffing and their training needs are as follows:

- One full-time equivalent member of staff for 2500 population
- One-third of staff (excluding support staff) should be qualified librarians.
- 0.5%–1% of the total library budget should be earmarked for training purposes.

(Gill: 2001: 66-67)

The librarians require regular training programmes to keep them up-to-date. The Royal University of Bhutan (RUB) can come forward to start library and Information Science programme which will provide a qualified and competitive human resources to all kinds of libraries in the country.

- Potential Users

To be successful in fulfilling its goals the public library service must be fully accessible to all its potential users. Any limitation of access, whether deliberate or accidental, will reduce the ability of the public library to fully achieve its primary role of meeting the library and information needs of the community it serves. The following are important elements in delivering an effective public library service:

- identifying potential users
- analysing users’ needs
- developing services to groups and individuals
- introducing customer care policies
- promoting user education
- co-operating and sharing resources
- developing electronic networks
- ensuring access to services
- providing library buildings.
• **Identifying potential users**

The public library has to aim to serve all citizens and groups. An individual is never too young or too old to use a library. The public library has the following potential target groups:

- People at all ages and at all stages of life: children, young adults and adults.
- Individuals and groups of people with special needs:
  — people from different cultures and ethnic groups including indigenous people
  — people with disabilities, e.g., blind and partially sighted, hearing impaired
  — housebound people and institutionally confined people, e.g., in hospitals, prisons.

As resources are limited in even the wealthiest society it is not always possible to serve all users to the same level. The library must establish priorities based on an analysis of user needs and related to their access to alternative services.

• **Analyzing needs within the community**

It is important to establish who uses and who does not use the library service. It is also necessary to collect and analyse data that identifies those needs of individuals and groups within the community that can be met by the public library.

• **Services to users**

The public library must provide services based on an analysis of the library and information needs of the local community. In planning services, clear priorities must be established and a strategy be developed for service provision in the medium to long term. Services should be developed for identified target groups and only provided if such groups exist in the local community. The services of the library should not be subject to any form of ideological, political, religious or commercial pressure. Services must be able to adjust and develop to reflect changes in society, for example, variations in family structures, employment patterns, demographic changes, cultural diversity and methods of communication. They should take account of traditional cultures as well as new
technologies, for example, support for oral methods of communication as well as making use of information and communication technology..

- **Service provision**

Public libraries provide a range of services, both within the library and in the community, to satisfy their users’ needs. The library should facilitate access to its services for all, including those who have difficulty reading print. The following services, which should be easily accessible to the user in a variety of formats and media, should be provided:

- loan of books and other media
- provision of books and other materials for use in the library
- information services using print and electronic media
- readers’ advisory services including reservation services
- community information services
- user education including support for literacy programmes
- programming and events.

This is not an exhaustive list but an indication of some of the key services of the public library. The range and depth of provision will depend on the size of the library and the community it serves. Every library should aim to be an active participant in one or more networks, which will give the user access to a wide range of material, however small the access point. Service provision should not be confined to the library building but also taken direct to the user where access to the library is not possible. In providing services, both within the library and beyond, use should be made of information and communications technology as well as the printed word.

- **Information services**

The rapid development of information technology has brought a vast amount of information within reach of all those with access to electronic media. Information provision has always been a key role of the public library and the ways in which information can be collected, accessed and presented have changed radically in recent years. The public library has a number of roles in providing information:
• providing access to information at all levels
• collecting information about the local community and making it readily accessible, often in co-operation with other organizations
• training people of all ages in the use of information and the associated technology
• guiding users to the appropriate information sources
• providing opportunities for disabled people to have independent access to information
• acting as a gateway to the information world by making it accessible to all, thus helping to bridge the gap between ‘the information rich’ and ‘the information poor’.

The dramatic development of the Internet has been largely unstructured and uncontrolled. The vast amount of information that can be accessed via the Internet is of variable quality and accuracy and a key role of the librarian is to guide users to accurate information sources, which will meet their requirements.

• Customer care

The policies and procedures of the library should be based on the needs and convenience of the users and not for the convenience of the organization and its staff. Quality services can only be delivered if the library is sensitive to the needs of its users and shapes its services to meet those needs. Satisfied users are the best advocates of the library service. The public library should have a positive policy of customer care. This means ensuring that in all policy planning, design of libraries and of systems, preparation of operational procedures and drafting of information and publicity material, a positive effect on the user should be a prime objective. The following actions should be elements in a customer care policy:

• the image projected by all libraries must be neutral and objective
• staff should be courteous, friendly, respectful and helpful at all times
• there should be a regular programme of staff training in customer care
• all staff should receive basic awareness training on how to deal with people with disabilities or from ethnic minorities
• jargon should be avoided in all forms of communication, verbal and written
• staff should have a friendly and informative telephone manner
• methods of communication with the users must be provided, e.g., billboards, bulletins, website
• library services should be properly planned, adequately prepared and reliable
• the design of the library should be as convenient and inviting as possible
• opening hours should be convenient for the users
• open public access catalogues should be available on the Internet so that the user can access services from home and outside opening hours
• there should be efficient renewal and reservation services
• services should be delivered beyond the library building when users' needs require it
• users should receive a response in the shortest possible time; letters and other forms of communication should be answered promptly and courteously
• when resources allow, good quality electronic equipment should be provided in the library including special equipment for the partially sighted and hearing impaired

(Gill: 2001: 25-35)

6.3 Cooperation & Resource Sharing among Public Libraries

6.3.1 Cooperation

Cooperation amongst the libraries and the library communities is very old concept and could be traced to 200 B.C. when Alexandria library shared its resources with Paragamum library. Over the years the library cooperation has taken a big leap.

Cooperation and networking in Library and Information System can be defined as "A group of organizations that are formally interconnected or participate with each other for the accomplishment of predetermined objectives and having an organizational structure. Such systems may be functional (eg: acquisition), geographical (eg: local or regional) and / or sectional (eg: Public Libraries)".

Resource Sharing is the activities that result from an agreement, formal or informal, among a group of libraries (usually a consortium or network) to share collections, data, facilities, personnel, etc. for the benefit of their users and to reduce the expense of collection development.
A large number of diversified activities came into the realm of library cooperation including resource sharing, inter library loan, cooperative acquisition, compilation of union catalogue, classification, abstracting and indexing, extension services, education and training to strengthen human resources, orientation programmes, specific literature search, repository storage, referral services, etc. The Library cooperation is evident in all these activities. Murices B. Line grouped the library cooperation activities in four major areas:

- Acquisition of reading materials: Selection, ordering and purchase
- Process of reading materials: classification, cataloguing, indexing and abstracting
- Making them available for consultation and lending, also borrowing from elsewhere
- Storing of the reading materials for present and future use. (Line: 1980: 12)

Overall service to the community is enhanced when libraries develop links for exchanging information, ideas, services and expertise. Such co-operation results in less duplication of service, a combining of resources for maximum effect, and an overall improvement in community services. In addition, individual community members may in some cases be of great assistance in helping the library to carry out special tasks or projects.

The library should establish formal links with other organizations in the local community, for example, schools, cultural institutions such as museums, galleries and archives, literacy programmes, chambers of commerce or boards of trade. The links should be used to co-ordinate the resources and efforts of each partner and thereby jointly improve services to the community.

- Relations with schools

One of the most important institutional relationships for a public library is that with the local schools and the education system in the service area. Types of linkages and/or forms of co-operation include:
• sharing resources
• sharing staff training
• co-operative collection development
• co-operative programming
• co-ordination of electronic services and networks
• co-operation in the development of learning tools
• class visits to the public library
• joint reading and literacy promotion
• programme of web-awareness for children
• sharing of telecommunications and network infrastructures
• jointly arranged authors' visits. (Gill: 2001: 38)

• Book Donation Programmes for Developing Countries:

Many developed countries show interest to promote public libraries in developing countries. Some of the well known organizations are UNESCO, IFLA, ALA and others. At the beginning of the project, the Royal Government of Bhutan can approach the international organizations which are helping to provide public library services for the developing countries. A few examples of organizations which donate the books to public libraries in the developing countries are given below:

The voluntary organization of Room "To Read" a non-profit charitable organization founded by former Microsoft employee John Wood based in San Francisco. It is dedicated to building education infrastructure in developing countries to end the cycle of poverty. To date, Room to Read has established over 5,160 libraries in our partner countries.

<table>
<thead>
<tr>
<th>Name of the Country</th>
<th>Total Thru 2007</th>
<th>2008 (Projected)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>996</td>
<td>123</td>
</tr>
<tr>
<td>India</td>
<td>1530</td>
<td>810</td>
</tr>
<tr>
<td>Laos</td>
<td>362</td>
<td>170</td>
</tr>
<tr>
<td>Nepal</td>
<td>1728</td>
<td>400</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>245</td>
<td>210</td>
</tr>
<tr>
<td>Vietnam</td>
<td>241</td>
<td>110</td>
</tr>
<tr>
<td>South Africa</td>
<td>65</td>
<td>55</td>
</tr>
<tr>
<td>Zambia</td>
<td>-</td>
<td>50</td>
</tr>
</tbody>
</table>

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The Book Aid International in the UK, which ships approximately 700,000 books per year directly to the libraries in developing countries. The International Book Bank (IBB) and Sabre Foundation in the US send shipments totaling more than two million books per year to the partner organizations to redistribution to libraries. (Vincent: 1996: 169)

6.3.2 Resource sharing

Each library collection is in some degree unique. No collection can contain all the materials that the members of its public require. Libraries, therefore, can greatly enhance services to their users by providing them with access to the collections of other libraries. Libraries can participate in resource-sharing schemes at any level, local, regional, national and international, involving libraries of a wide range of organizations with information resources. The library should also make its collection available for loan to other libraries through participation in a network, for example, in a union catalogue or in a local network of information providers, such as schools, colleges and universities.

• Bibliographic records

The library should classify and catalogue its resources according to accepted international or national bibliographic standards. All the member libraries that participate in a resource sharing should follow some standards of international bibliographic formats like MARC 21, CCF, Z39.50, etc. This facilitates their inclusion in wider networks.

• Borrowing from other libraries

In order to meet the information needs of users the library should borrow materials from other libraries both within the same organization and beyond. The library should establish inter-lending policies, which address such issues as:

• lending materials to other public libraries
• the type of materials it is prepared to lend or not to lend
• the length of time for which materials will be lent
• when it will request materials from other libraries
• methods of shipment
• how the costs of the service will be met
6.4 Automation and Networking

Automation and networking are the common features in today’s information environment. The main objective of networking is to facilitate the resource sharing. Simply says, the library network is a distribution system composed of two or more libraries and / or other organizations engaged in a common pattern of information exchange through computers and telecommunication for some well-designed purpose.

6.4.1 Automation

Library automation refers to use of computers, associated peripheral media such as magnetic tapes, disks, optical media etc. and utilization of computer based products and services in the performance of all type of library functions and operations. Computers are capable of introducing a great degree of automation in operations, functions since they are electronic, programmable and are capable to control over the processes being performed.

The utilization of computer and related techniques make the provision to provide the right information to right reader at the right time in a right form in a right personal way. Automation of library activities provides the services very efficiently, rapidly, effectively, adequately and economically. The modern libraries and information center facilitates free communication because access to information has become a fundamental right of the clientele.

The automation is economically feasible and technologically required in modern libraries to cope up with the requirements of new knowledge, the enormous increase in the collection of materials, problems of their acquisition, storage, processing, dissemination and transmission of information. The capabilities of computer associated peripheral media and its application in library activities and services led to a highly significant quantitative and qualitative improvement especially in online technology.

Computers are the most essential machines to run any type of organization, library can not exclude from this factor. In the concept of PLS, the computers are the most important part for the following reasons:
o As Information explosion is going at a rapid speed, manual systems are not sufficient to provide quality services.

o Most of the information sources are produced on digital formats, which need computers to access.

o The storage capacity of the computers will facilitate to handle large number of records and files. To control over the collection of the library, it needs automation.

o Automation is more economy comparing to the manual systems.

o Computers will provide any number of access point, sophisticated search facilities with simple or multiple combination of different fields using Boolean operators.

o Computerization will facilitate to avoid duplication work and to save labour. The automation will make ease of many routine jobs of the library.

o To get desired outputs whether it is standard or custom reports.

o It is speed and accurate. As Dr. S.R. Ranganathan quoted, to provide right information to the right user in right time, automation is the only solution.

o Computers will facilitate in resource sharing through LAN, WAN, MAN or even Internet.

o Automation is very essential to save the prestige of the profession.

• Factors to be govern in Automation

The Automation programme involves the following major steps:
- Computer hardware selection
- Computer software selection
- Standards to support network programme
- Maintenance

It is necessary to analyze very carefully of all advanced features of the computers. It is better to consult some computer engineers for the selection of computer systems. However the librarians should have some basic understanding of computer and its peripherals such as hardware capacity, speed, secondary / virtual memory, size of the screen, keyboards, mouse, modem, speaker, CD / DVD drives to run and burn the discs, etc. It is necessary to select the good system from good firm.
The software selection should support all basic features of the in-house functions of the library, to support international standards to facilitate networking, capacity to manage any amount of huge database files, data conversion tools for export / import on various database systems, capability to be more user-friendly, easy steps to process the data and advanced search facilities, compatible to connect any number of systems at any distances, adaptability / flexibility to suit the public library system of Bhutan, safety to keep limited access to the users and programme assistants and facility to change the settings according to the policy decisions by the librarians and / or system librarians, multiple scripts to support Dzongkha language, performance assessment of the history of the firm in quality services, support to the customers, after sale services, warranty, cost- benefit for not adding the indirect cost to the software, extra taxes, installations and training.

The computer hardware, operating systems and the software selection should support the speedy transfer of data and files. The librarians involved in the programme should be very careful in the selection of classification and cataloguing systems, the bibliographic formats and other relevant processes. Finally, its is necessary to maintain the system very carefully with regular vigilance of virus threats, updating the systems, maintenance of up-to-date records, back-ups for all the important files.

6.4.2 Networking

A library network is broadly described as a group of libraries coming together with some agreement of understanding to help each other with a view to satisfying the information needs of their clientele.

UNISIST II working document defines Information Network as “a set of inter-related information systems associated with communication facilities, which are cooperating through more or less formal agreements in order to implement information handling operations to offer better services to the users”.

The National Commission on Libraries & Information Science in its National Programme Document (1975) defines a network as “Two or more libraries engaged in a common pattern of information exchange, through communications for some functional purpose”.

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Public libraries are instruments of equal opportunity and must provide a safety-net against alienation and social exclusion from technological advance by becoming the electronic doorway to information in the digital age. They should enable all citizens to have access to the information that will enable them to manage their lives at the local level, to acquire essential information about the democratic process and to participate positively in an increasingly global society.

The library should provide access to the resources of the library and to those of other libraries and information services through the creation and maintenance of and participation in effective electronic networks at all levels from local to international. This can include participation in community networks, programmes to develop technologically advanced communities and electronic networks linking two or more agencies. They should also be part of national information policies.

A network may fail in the early stages if there is not proper planning or if adequate funds are not available. Moreover, a common memorandum of agreement signed by the participating libraries at the institutional level is essential for the success of a network venture. On a more practical level, catalog data must be in a standard, machine readable form for it to be shared and exchanged. And, finally, a continuous flow of external assistance is crucial for the network's survival. (Bavakutty: 2002: 177)

6.4.3 Network for PLS of Bhutan

There are different kinds of networking systems according to the distance like Personal Area Networks (PAN), Local Area Networks (LAN), Campus Area Networks (CAN), Metropolitan Area Networks (MAN), and Wide Area Networks (WAN). The process of networking of PLs of Bhutan falls under WAN. It is to link two or more computers of the public libraries that are geographically dispersed, using communication facilities such as telephone systems or microwave relays. There are several options available for WAN connectivity.

The topology for PLS of Bhutan has to be a Star network, which is one of the most common computer network topology. In its simplest form, a star network consists of one central switch, hub or computer, which acts as a conduit to transmit messages. The star
topology reduces the chance of network failure by connecting all of the systems to a central node. The following picture 6.3 shows a star topology for the proposed PLS in Bhutan in which the NLAB has been put up as a central hub and the dzongkhag libraries are the nodes. Since the server is maintained at one point, it is necessary to establish the vital computer network system without any interruption like power failure or link failure. Further all the dzongkhag libraries should be linked with the gewog libraries in the second phase of the PLS in Bhutan.

Pic: 6.3: Topology for the proposed PLS of Bhutan

(DzoL: Dzongkhag Library)

• Comments

The Royal government of Bhutan (RGB) has to encourage the public and the private organizations to produce more books. This will help the country to save their cultural and traditional values of the society. In Bhutan, one or two private and / or public organizations are producing the books, among which the centre for Bhutan studies is playing a major role. The collection of more local publications in public libraries will
draw the attention of the public. This will lead to adequate research and development in Bhutan.

The Royal University of Bhutan (RUB) can come forward to start library and Information Science programme which will provide human resources to all kinds of libraries in the country.

In this study an attempt has been made to provide a vital, integrated PLS in Bhutan, for which the necessary basic standards recommended are library legislation, the aspects of cooperation, resource sharing and networking. The plan for a PLS in Bhutan tells the phasewise establishment of public libraries at different regions including Mobile libraries.