CHAPTER 1
INTRODUCTION

1.1 Study Area

Libraries are the essential organs of the modern society. Now-a-days, the libraries become the information resource centers to keep the man with an up-to-date knowledge.

A library is a collection of information, sources, resources, and services: it is organized for use and maintained by a public body, or an institution, or an individual. In the more traditional sense, a library is a collection of books. In modern libraries, the books include manuscripts, print and non-print or e-books, published and unpublished sources of information. Manuscripts are the works written entirely by hand. Printed sources are books, periodicals, reference books like dictionaries, encyclopaedias, directories, manuals, handbooks, yearbooks, thesis & dissertations, bibliographies, guides to literature. Non-print materials are microfilms, audio and video cassettes, CDs, DVDs, computer software, online databases, including e-books and e-journals. At present, the libraries are understood as extending beyond the physical walls of a building, by including material accessible by electronic means, and by providing the assistance of librarians in navigating and analyzing tremendous amounts of knowledge with a variety of digital tools.

The mission of a library is to collect, organize, preserve, and provide access to knowledge and information. In fulfilling this mission, libraries preserve a valuable record of culture that can be passed down to succeeding generations. Libraries are an essential link in this communication between the past, present, and future. Whether the cultural record is contained in books or in electronic formats, libraries ensure that the record is preserved and made available for later use. Libraries provide people with access to the information they need to work, play, learn, and govern.

According to the kinds of sources and the user group, the libraries may be divided as various types such as academic libraries, public libraries, special libraries and the national libraries.
**Academic library** is a library that is an integral part of a school, college, university or any other academic institutions administered to meet the information and research needs of its students, faculties and staff.

**Public Libraries (PLs)** are the first form of libraries; A library or library system that provides unrestricted access to library resources and services free of charge to all the residents of a given community, district, or geographic region, supported wholly or in part by public funds. Because public libraries have a broader mandate than academic and special libraries, they must develop their collections to reflect diversity.

**Special Library** is a library established and funded by a commercial firm, private association, government agency, nonprofit organization or special interest group to meet the information needs of its employees, members, or staff in accordance with the organization’s mission and goals. The scope of the collection is usually limited to the interests of its host organization.

**National Library (NL)** is a library designated and funded by a national government to serve the nation by maintaining a comprehensive collection of the published and unpublished literary output of the nation as a whole, including publications of the government itself. Most national libraries are also responsible for compiling national bibliography and some also serve as the legal depository for works protected by copyright in their country. Mostly the National libraries are reference libraries and not for circulation.

Public Library (PL) as known to every one is the peoples’ university since it is an educational institution open to all- male or female, child and young or adult, rich or poor. Public libraries are a world-wide phenomenon. There is no age limit, no entrance requirements other than the desire to learn, no query on progress and the individual can begin at one’s own level and will progress at one’s own speed.

Public Libraries (PLs) are the libraries that are provided through public funding for public use and for the public good. PLs make use of materials in printed, audiovisual and electronic formats in order to collect, preserve, organize, retrieve, disseminate and communicate information, ideas and the creative product of the human imagination.
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.

Robert Welch (1963) rightly points out about the PL services in his speech at the opening ceremony of a study and research center for high school students and a meeting room for small groups in the Richards Memorial Library of North Attleboro Massachusetts: "For the majority of people the quickest and easiest access to the world's best thought is the public library, with its wealth of material."

http://www.sailsinc.org/northattleboro/mansfield%20history.PDF

Public Library has been acknowledged to be an indispensable part of the society. Public Library is playing a vital role to promote the social, economic, cultural, historical, scientific and technical knowledge among the society at large. It is the treasure house of the cultural history of mankind. A country can be valued by its cultural heritage and the knowledge bank. Public Library is the information resource pool, by which the richness of the country can be valued. It is of national importance.

The Public library system is the study of the various levels of public libraries, their divisions, existing under the networked environment for the purpose of service the society. No one can neglect the services of PLs. Even a layman or illiterate may gain knowledge from PLs. Understanding the importance of public library system (PLS), the study of "Public library system in Bhutan: a systematic approach for future developments" has been taken for research.

1.2: Significance of Public Libraries & Public Library System

1.2.1 Public Libraries

Public library is a vibrant part of the community, a meeting place, a place to go for education, for knowledge, for information, for entertainment, and for cultural activity. It reflects the changing and diverse interests of the community as well as its history. Their existences are to encourage the individuals for the active use of leisure time.
In 1956, **Dr. S. R. Ranganathan** conceived a concept of true public library (PL). According to him, a public library should satisfy the following conditions:

- A public library should be supported by public funds, i.e. by State tax and / or the local rate;

- It should be open to general public without any restriction except on grounds of sanity and public health;

- Its book selection should be determined by the needs of the public;

- It should be in intimate touch with the public and

- It should enjoy a legal status.

Any public library that does not satisfy all these conditions is a pseudo public library. *(Vide Dr. S. R. Ranganathan’s talk at Delhi All India Radio Station in the year 1956 as published in AIR selections, April 1956, The Publication Division, Ministry of Information and Broadcasting, Government of India.)*

The public library, if it is to achieve its fullest role in the society, is not passively to make books available when needed by a potential reader, but actively to stimulate the use of books. Whenever we talk about any kind of library we can’t forget Dr. S. R. Ranganathan’s philosophy of five laws of Library science. In particular, “Every reader his or her book” and “Every book its reader”, the second and the third laws respectively mean to communicate the importance of public libraries.

**India, Advisory Committee on Libraries with Dr. A.P. Sinha (1957)** as Chairman has defined Public Library as a Library:

- which is financed for most part out of public funds;

- which is intended as an auxiliary educational institution providing a means of self education which is endless;

- which houses learning materials giving reliable information freely and without partiality or prejudice on as wide variety of subjects as will satisfy the interests of readers.
The Public Library Service: IFLA/UNESCO guidelines defines, 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. (Gill: 2001: 1)

The Public Library is the local centre of information, making all kinds of knowledge and information readily available to its users.

The services of the public library are provided on the basis of equality of access for all, regardless of age, race, sex, religion, nationality, language or social status. Specific services and materials must be provided for those who cannot, for whatever reason, use the regular services and materials, for example linguistic minorities, people with disabilities or people in hospital or prison.

All age groups must find material relevant to their needs. Collections and services have to include all types of appropriate media and modern technologies as well as traditional materials. High quality and relevance to local needs and conditions are fundamental. Material must reflect current trends and the evolution of society, as well as the memory of human endeavour and imagination. Collections and services should not be subject to any form of ideological, political or religious censorship, nor commercial pressure.

The objectives of public library as enunciated by Dr. S. R. Ranganathan (1967) are as follows:

- To help the lifelong self education of one and all,
- To furnish up-to-date facts and information to one and all,
- To distribute in an unbiased and balanced way all shades of recorded views and thoughts to one and all as a help in the discharge of their political functions in respect of local, national and international affairs,
- To contribute to productivity drive by informing top management of the latest trends in diverse enterprises by plugging back into the minds of researchers, scientists and technicians every piece of relevant new thought promptly and pin-pointedly,
• To provide one and all a harmless and elevating use of leisure,
• To preserve the literary remains of humanity for posterity, as vehicles of culture and as a source material for ante-quatrain research, and
• To work for the continued social well-being as the agency in charge of all socialized recorded thoughts.

According to the standards for public libraries formed by ALA, the objectives of PLs are:
• To assist people to contribute to the growth of knowledge to make such use of knowledge as will promote personal and social well-being
• To develop their creative and spiritual capabilities to be more capable in their daily occupations to discharge political and social obligations to become better members of home and community
• To keep pace with progress in all fields of knowledge and to educate themselves continually. (American Library Association, 1966)

In 1949, UNESCO issued a manifesto on the purpose of the public library. It was revised in 1972 and the third version published on 1994. The Manifesto is recognized as the very important document for public libraries throughout the world. It provides the guiding principles for the creation and operations of the public libraries worldwide.

IFLA/UNESCO Public Library Manifesto (1994)

Freedom, prosperity and the development of society and of individuals are fundamental human values. They will only be attained through the ability of well-informed citizens to exercise their democratic rights and to play an active role in society. Constructive participation and the development of democracy depend on satisfactory education as well as on free and unlimited access to knowledge, thought, culture and information.

The public library, the local gateway to knowledge, provides a basic condition for lifelong learning, independent decision-making and cultural development of the individual and social groups.
This Manifesto proclaims UNESCO's belief in the public library as a living force for education, culture and information, and as an essential agent for the fostering of peace and spiritual welfare through the minds of men and women.

UNESCO therefore encourages national and local governments to support and actively engage in the development of public libraries.

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• Missions of the Public Library

The following key missions which relates to information, literacy, education and culture should be at the core of public library services:

1. creating and strengthening reading habits in children from an early age;
2. supporting both individual and self conducted education as well as formal education at all levels;
3. providing opportunities for personal creative development;
4. stimulating the imagination and creativity of children and young people;
5. promoting awareness of cultural heritage, appreciation of the arts, scientific achievements and innovations;
6. providing access to cultural expressions of all performing arts;
7. fostering inter-cultural dialogue and favouring cultural diversity;
8. supporting the oral tradition;
9. ensuring access for citizens to all sorts of community information;
10. providing adequate information services to local enterprises, associations and interest groups;
11. facilitating the development of information and computer literacy skills;
12. supporting and participating in literacy activities and programmes for all age groups, and initiating such activities if necessary.

• Funding, legislation and networks

The public library shall in principle be free of charge. The public library is the responsibility of local and national authorities. It must be supported by specific legislation and financed by national and local governments. It has to be an essential component of any long-term strategy for culture, information provision, literacy and education. To ensure nationwide library coordination and cooperation, legislation and strategic plans must also define and promote a national library network based on agreed standards of service.

The public library network must be designed in relation to national, regional, research and special libraries as well as libraries in schools, colleges and universities.

• Operation and management

A clear policy must be formulated, defining objectives, priorities and services in relation to the local community needs. The public library has to be organized effectively and professional standards of operation must be maintained.

Cooperation with relevant partners - for example, user groups and other professionals at local, regional, national as well as international level - has to be ensured.
Services have to be physically accessible to all members of the community. This requires well situated library buildings, good reading and study facilities, as well as relevant technologies and sufficient opening hours convenient to the users. It equally implies outreach services for those unable to visit the library.

The library services must be adapted to the different needs of communities in rural and urban areas. The librarian is an active intermediary between users and resources. Professional and continuing education of the librarian is indispensable to ensure adequate services. Outreach and user education programmes have to be provided to help users benefit from all the resources.

- Implementing the Manifesto

Decision makers at national and local levels and the library community at large, around the world, are hereby urged to implement the principles expressed in this Manifesto.

_The Manifesto is prepared in cooperation with the International Federation of Library Associations and Institutions (IFLA)._ 

1.2.2 Public Library System (PLS)

Generally the word "system" is the study of the set of components which are working for a common purpose. The word "system" is a group of independent but interrelated elements comprising a unified whole; "a vast system of production and distribution and consumption keep the country going."

A system is an assemblage of inter-related elements comprising a unified whole. From the Latin and Greek, the term "system" meant to combine, to set up, to place together. A subsystem is a system which is part of another system. A system typically consists of components (or elements) which are connected together in order to facilitate the flow of information, matter or energy. (http://en.wikipedia.org/wiki/System)
System is a collection of components organized to accomplish a specific function or set of functions. (IEEE STD: 610.12)

System is a group of interacting, interrelated, or interdependent elements or parts that function together as a whole to accomplish a common goal.

The PLs may range in size from one-room facilities in sparsely populated rural areas to large multi-branch systems that serve millions of people in urban areas. The cooperation or network among the PLs is acknowledged as Public Library System. The public library systems generally maintain a large central library in the downtown area as well as several smaller branches—known as neighborhood or community libraries—in the various neighborhoods of the city and this central library will also provide services to rural areas of their communities with bookmobiles, which are trucks, trailers, vans, or buses equipped to serve as traveling lending libraries.

According to Dr. S.R. Ranganathan, PLS means an integrated nationwide network of public libraries giving free library and information services to one and all of the citizens—literate or illiterate, rich or poor, rural or urban. (Ranganathan: 1972) Earlier public libraries were considered as independent single units under the government. The concept of PLS was presented in the Model Library Act by Dr. S. R. Ranganathan at the first All Asia Educational Conference held in Banares in 1930. This concept emphasizes that PLS at different levels should be interlinked so as to form part of a system or network. Such PLS can be compared with a large irrigation system. It needs a hand-work with a costly dam and a large number of distributaries and sub-distributaries through which water can reach every bit of land. The traditional independent libraries on the other hand resemble more the wells and tanks which have served mankind for ages, but they have limited and dwindling use in modern times. In 1950, the report submitted to the Union Government of India, Dr. S. R. Ranganathan stressed that the public library development should be planned on the basis of library systems rather than on unitary basis. (Ranganathan: 1950)

Dr. S. R. Ranganathan believes that the PLS is the only possible neutral agency give unbiased political, economical and industrial information to enable voters to form their own judgment in helping the progress of the country and in keeping vigilance over the performance of the government. The only source for finance to run public libraries is
public fund. Therefore providing library service to illiterates and neo-literates are described as a new function of the Public Library System. (Ranganathan: 1990: 105)

The concept of public library system offers infinite possibilities because:

- It is a cooperative and organic structure in which every unit, however small or rich as the whole system;
- It has larger funds which allow for a balanced and even development of public library service over larger areas; irrespective of local variations or imbalances in financial support;
- It is comparatively more economical; and
- It can provide library services more efficiently and effectively because it can permit the services based on modern concepts and approved standards. (Mangala, 1986)

Public Library system is a network of libraries interwoven with personal or private collections to the highest act based or executively established State and National Libraries. In the PLS, all the member libraries are interdependent for some functions and services.

Public library system is a network of public libraries working together within a region. For example, in India the public library system is organized as the combinations of the National Library, State Central Library and City or District Central Library, City Branch Library, Rural Central Library, Rural Branch Libraries, Librachaines (Mobile Libraries as termed by Dr. S. R. Ranganathan) and Delivery Stations. The Local Library Authority will control over the PLs.

Reading print and electronic documents whether for business or pleasure, is fundamental for any society in the modern world. It is the foundation of democracy, capacity building, and modernization. It is an important method for development as it offers visions and dreams, learning, skills and a creative impetus to the individual. In order to protect the world against ignorance, disease and poverty access to information via public libraries is very essential. This implies the need of a systematic network of Public library system in any country.
1.3 Systematic planning for Public Libraries

It is important before step into the systematic planning for PLs, to seek the relevant answers to the queries such as... What are the national and local community objectives and how can the public library service support them? Who are the actual and potential library users in the areas and what can be deduced about their specific needs? What is the geographic, social and economic situation as seen from the viewpoints of history, the present day and the likely future? How does the population divide into particular communities and what are their special needs? What is the state of organization of the book trade and are there problems of book supply in the national language or of imported material in world languages? While answering these queries, the basic factors can be identified for the systematic planning for the PLs are environmental factors, essential preconditions and infrastructural elements. Every library or information system is an open system and, as such, interacts constantly with its environment. A thorough study of the environmental (or 'background') factors which influence the establishment of library and information systems is thus an essential prerequisite of effective planning for their development. Such a study is as important for the indigenous planner as for the external consultant; precisely because he is on his home ground, the local planner may consider a systematic study of the local environment superfluous and thus overlook important but unobtrusive influences and their effects.

The principal environmental factors to be considered in such a study are briefly described below. The importance of each will vary from one country, locality or institution to another, but most of them will be found to have some influence on the systematic development of public library system at all levels.

1.3.1 Environmental factors:

- Geography and Climate:

The facts of geography and climate in a given situation may appear to be self-evident. Their effects on the planning of the library system may be less so, and thus require systematic, if sometimes brief, analysis.

The geography of a country or region is one of the most fundamental influences on library
development dictating as it so often does, the pattern of human settlement the nature and extent of the transport and communications network and, to some extent, the climate itself - all of which, in turn, directly affect the planning of library development. The kind of library system needed to serve the population of a scattered group of islands in the South Pacific, for example, will be different in many respects from that required by a compact city-state such as Singapore or Hong Kong, or a large, relatively sparsely-populated country like Sudan. The combination of geography and climate, producing, for example, the annual flooding of a quarter of the land area of Bangladesh, may have even more direct effects on the operation and use of libraries, whilst climate alone, in terms of the characteristic ranges of temperature, humidity and precipitation experienced in an area, also has direct consequences on, for example, the design of library buildings.

- **History and politics**

Libraries, as social institutions, must inevitably reflect their social and political environment, which is itself a reflection of historical events. A thorough knowledge of the main historical events, particularly of recent times, and an understanding of their influence on the current political situation, is therefore essential to the library development planner, as is an appreciation of the current political situation itself. In the last analysis, the provision of support for library development is a political issue, and such support is more likely to be forthcoming if development plans are formulated in such a way as to reflect current political thinking and to respond to the spirit of the times.

In this respect, the indigenous planner has the advantage of an intimate and lifelong acquaintance with the historical and political background and a thorough familiarity with the workings of the political system and the main issues in current political thought. The external consultant, by contrast, has the advantage of objectivity and perhaps acquaintance with other political situations which enables him to see possibilities which the indigenous planner may overlook. In either case, planners must, whilst trying to formulate their proposals so as to win political support, beware of linking them too closely with the political philosophy or programme of any particular political party or other group, in order to minimize the effects of any changes which may take place in the balance of political power.
• **Cultural and social factors**

Closely allied with historical and political factors, but less subject, perhaps, to sudden and violent change, are the cultural and social factors which characterize a particular society and have considerable influence on attitudes towards libraries, reading, communication and information which in turn may be of crucial importance, both in shaping plans for library development and in ensuring their acceptance by the population at large.

Many factors must be taken into account by the library planner in considering the nature of the society which his plans are intended to serve, and the relative importance of different factors will vary considerably from one society to another. Among those likely to be of particular importance are language - including the numbers and types of languages spoken and social attitudes towards members of different language groups - religion, social customs and traditions - including the position of women in society - and attitudes towards literature and other art forms and media of expression. The planner will need to study existing social institutions and programmes and here again, the indigenous planner will have a more intimate first-hand acquaintance with the social and cultural background as against the external consultant's greater objectivity.

• **Administrative factors**

Libraries almost invariably form part of some larger unit of administration, whether it is a national government, a university or a primary school. An understanding of the existing administrative structure at the appropriate level is essential if proposals for the development of library services within that structure are to be capable of being implemented with a minimum of disruption which is, in most cases, an essential prerequisite to their acceptance.

At the level of national planning, the planner will need information on the structure of central and local government, the role of para-statal organizations, the relationships which exist between official agencies of different kinds and their respective responsibilities and powers. Such information is often surprisingly difficult to obtain, not least because, in many countries, the administrative structure is itself in process of development and undergoing constant change, and it is by no means uncommon for major changes in, for example, the relationship between central and local government, to undergo radical
modification whilst a library development plan is actually being prepared.

• Population

Libraries exist to serve people. A clear picture of the distribution and principal characteristics of the population in the community to be served is therefore essential to the planning of library development.

At this stage, the planner should be concerned with the population as a whole; the identification and description of the estimated potential user population comes later. Very often, estimates of the potential user population have to be produced by the library planner himself from more general population data, so it is important to obtain as much information as possible on the size of the population, its growth rate, geographical distribution including, where applicable, urban/rural distribution - and distribution by age, sex, educational level, language, literacy, occupation, ethnic group, nationality and so forth. Reliable projections of the anticipated future growth of the population are of vital importance, though not always readily available.

• Economic factors

Library and information services cost money. At the same time, they may have an important direct or indirect contribution to make to the economic development of a country or a community. It is therefore important for the library development planner to obtain information on the economic development of various industries, the principal sources of wealth and finance, existing patterns of expenditure and appropriate economic indicators such as the national average income, Gross Domestic Product, and so forth.

The object, at this stage, is to obtain a general picture of the economic situation and the prospects for economic development, partly in order to be better able to assess the prospects for adequate financial support for library development and partly to identify opportunities for library and information services to contribute to economic development, for example, through providing better services to a key industry.
• Transport and telecommunications

An essential characteristic of an effective library or information system is its ability to collect information - whether in documentary or other form - store it and make it available to those who need it at the right time and in the right place. A thorough knowledge of the facilities for transporting documents, for transmitting non-documentary information or for enabling users to gain access to collections of documents or other sources of information, is thus of vital importance to the library development planner.

The planner must seek to obtain a clear picture of the extent and relative efficiency of the road, rail, air and water transport systems, the telephone, telex and postal systems and any other means of communication and transport available in the locality. The condition of roads, the extent to which services may be interrupted by bad weather, the numbers and locations of communities not served by the existing network, and their populations, should all be studied, as also should the relative costs of using the various methods.

A careful study of the telecommunications system has become of particular importance in recent years with the increasing use of telephone lines for data transmission in computerized information networks. In many countries, the quality of the telephone system and its extent and general efficiency still preclude the introduction of such facilities on any scale. In some countries, it is easier for an individual library or information system in a capital or other major city to establish a satellite link with an international information network than to transmit data, or even verbal messages, to other libraries in the same country.

The extent of the telephone system, in terms of the number and locations of instruments, has become of even greater significance with the development of viewdata or teletex systems. Such systems are still in their infancy even in the developed countries, but clearly offer, at least in theory, possibilities for the developing countries which cannot be ignored, particularly in the preparation of long-term plans for nation-wide library and information systems. The telephone system is only one element in a viewdata system, however; the number and distribution of television receivers is as important as the number and distribution of telephones, and the publishing element, in terms of the creation and maintenance of databases for use in the system is also of vital importance. The telecommunications system as a means of transmitting information is an 'essential...
precondition' for computerized information network.

- **Mass communications and entertainment**

In communities where illiteracy is widespread, libraries as such can serve only a limited proportion of the population, though they may provide suitable venues for other activities designed to attract the non-reading public. The information needs of illiterates may be better served by radio and television broadcasting, among other means. But in order to assess the possibilities and establish clearly defined roles in information provision for library services on the one hand and broadcasting services on the other, it is necessary to obtain a clear picture of the existing situation in the field of broadcasting.

From the technical point of view, information is required on the numbers and locations of broadcasting and transmitting stations of various types, on their capacity and range and on the numbers of receivers of different types in various parts of the country. From the social and political point of view, it is necessary to establish who is ultimately responsible for broadcasting from each station, which members of the community own receivers and what arrangements exist for those who do not own receivers to watch and listen to broadcasts — for example, on radio or television sets installed in community centres and the like. From the point of view of communications, it is necessary to study the kinds of programmes which are produced and the kinds which people prefer to watch.

Some of these considerations must also be taken into account in considering the possible introduction of viewdata systems. These rely on television receiving sets to display the information transmitted over the telephone lines, so their effectiveness depends to a large extent on the existence, in juxtaposition, of adequate numbers of telephones and television receivers which can be made available, at least intermittently, for this purpose.

The relevance of other forms of entertainment like cinema, radio, television, etc., to the library development planning lies largely in the extent to which they reflect the ways in which people prefer to spend their leisure.
• Education and research

There can be few library or information systems which make no contribution to education or research, and still fewer - if, indeed, there are any - which are not affected, in their operations or in the use made of their services, by the educational system or research activities of the communities they serve. In the case of systems specifically designed to serve the needs of education and research, a very detailed knowledge of this sector is indispensable to their development; but the planning of library and information systems of any kind requires at least a general knowledge of the present situation in this field.

The general structure of the educational system, the educational ladder and the relative importance at each level of the public and private sectors should be studied, along with the details of specific educational programmes (e.g. literacy campaigns) and general educational policy. Detailed statistics on the numbers of students and teachers at all levels of education are needed, partly in order to assess the levels of school and college library provision required, where this is an element in the plan, and partly to establish the proportion of the estimated potential user population for library services in general which is accounted for by this clearly identifiable group. Statistics on drop-out rates, enrolment ratios and educational expenditure are also required, and it is also necessary, where efforts are being made to establish an accurate figure for the estimated potential user population, to establish the age in primary school at which children may be assumed to have become permanently literate. The numbers and distribution of schools of different types at different levels should also be established.

As regards research, general information on the organization of research in all fields should be supplemented by statistics on the numbers and distribution of research workers in these fields, particular attention being paid to distinguishing between those employed in the higher education sector and those working in other parts of the public sector and in the private sector. Information on research expenditure will also be required.

• Existing plans and policies

Planning for library development, whether at the national or at some lower level, normally takes place within a framework of general planning relating to the country, locality, institution or other appropriate area of application. It is therefore essential for the library
planner to study both past and present plans at this more general level, and the policies on which they are based, in order to ensure that his own plans fit into the overall framework.

Particular attention should be paid to previous or existing plans for library development; where these are extensive, or where their evaluation requires detailed investigation, they may well be given separate, special treatment beyond that given to other environmental factors. An assessment of the effectiveness and extent of implementation of both general and library development plans is essential if previous mistakes leading to under-implementation in the past are to be avoided. Equally important is a thorough study of the existing planning machinery, including the conventions for the submission of projects for any overall plan into which the library development plan is to be incorporated, and the timetable for the preparation and submission of the current plan.

1.3.2 Essential preconditions to library development

There are three essential preconditions must be fulfilled before libraries can operate effectively in any community. There must exist of a body of users, at the planning level, say an Estimated Potential User Population (EPUP), should be the main focus for library or information services, and there must exist of sources of information suitable in terms of adequacy, quality, format, level and language to fulfill the needs of these potential users. The last important factor is the competitive staff for the supply of information to the right information for the right person in a right time.

- Estimated potential user population (EPUP)

An essential characteristic of potential users of libraries is the ability to read. It is true that libraries can play a vital role in supporting literacy campaigns and that it is possible to use some forms of documentary record, particularly audio-visual materials, without being able to read, but the range and variety of opportunities which these materials offer to illiterates, and the amount of information they can convey, are very limited, and it must be recognized that library and information systems are essentially designed to meet the needs of the literate members of society.

A study of the EPUP must therefore begin with an estimate of the existing literate population and projections for its future growth and proceed to a detailed study of the
characteristics and distribution of that population whilst at the same time taking account of activities such as literacy campaigns which are aimed at increasing the literate population. It is important to note that the EPUP is not necessarily, in all circumstances, identical with the literate population. Official literacy statistics frequently relate only to the literate population above a certain age, commonly 10 or 15 years. These must be supplemented by estimates of potential users below this age limit, which the library development planner will frequently have to produce for himself.

To do this, he will need to use educational statistics to establish the school population below the age limit and the numbers of former school students still in the appropriate age group who have dropped out of school after attaining permanent literacy. The planner will also have to decide whether or not to include existing school students who have not yet attained permanent literacy, and pre-school children above a certain age, in his estimates.

These calculations, complex though they may be in many cases, can produce no more than a global figure for the total EPUP which may be useful for overall national planning, but which must be broken down in various ways to be of real value. The simplest breakdown, which can often be derived quite easily from the statistics already used to produce the global figure, is by age-group. This can frequently be combined, again using the same basic statistics, with breakdown by geographical distribution. The significance of breaking down the global figure by sex will depend to some extent on the level of planning being undertaken, and may not be particularly important at the national level unless the position of women in society requires special provision to be made for them.

The global EPUP figure may be broken down in other ways, but the possibilities will depend to a large extent on what basic statistics are available. It is usually possible, for example, to establish what proportion of the EPUP is studying or teaching in educational institutions, with needs which might be met primarily by libraries located in those institutions and who may thus exert considerable influence on the pattern of library development. It is sometimes also possible to establish the numbers of government civil servants other than teachers, most of whom may be presumed to be literate and whose needs, again, might be met to a large extent by libraries located in government departments. Statistics are sometimes available showing the numbers employed in particular occupations, such as medicine or law, which may be presumed to be wholly literate, and these may help to produce a further breakdown of the EPUP into its
component parts as a basis for the planning of library services to meet the needs of such specific groups.

An objective analysis of this kind, suggesting broad areas of user need based primarily on occupational groupings, may be adequate for overall planning on a fairly large scale. Any more detailed planning may require formal user surveys to be carried out to provide the necessary data on specific needs, but such surveys should only be undertaken after the most careful consideration and in the full knowledge of their probable cost and potential limitations.

- Sources of Information:

No matter how large the estimated potential user population may be, it will be impossible to provide a library or information service to meet its needs unless there is availability of the information sources on the right subjects, in the right formats, at the right levels of interest and in the right languages. In a world where talk of 'the information explosion' has become commonplace, it may seem inconceivable that a lack of information could be an obstacle to library development. In many developing countries, however, this is precisely the case. There is, of course, plenty of information available in the world at large, but it frequently does not meet the criteria listed above - that is to say, it is not on subjects which are relevant to local needs, it is available in formats - for example, magnetic tape or disc - which are unsuitable for local use, it is at too high - or too low - a level of interest for the needs of local users, or - and this is often the most important factor - it is not available in local languages.

Factors affecting access to information produced abroad, such as import and exchange controls, shipping costs and delays, international telecommunications facilities and charges and so forth, must be considered and the facilities available for the distribution of both local and foreign information through bookshops, internal telecommunications links and so forth, must also be studied.

The object, at this stage, is to build up a picture of the facilities available for the production and distribution of recorded information other than those provided by existing library and information systems.
An important aspect of the information supply situation is the existence - or absence - of guides to the sources of information which are available. In terms of published output, this involves consideration of the production of bibliographic records of both local and foreign production and the extent to which these records are generally available. Similar consideration should be given to records of other kinds of information sources. Frequently, records of both types will be produced by existing library and information units and due attention should be paid to this fact. The emphasis at this stage, however, is on records of production and not on records of library holdings.

- **Staff**

Without adequate numbers of appropriately trained and qualified staff, none of the other elements of the infrastructure can be made effective, nor can the organizational structure be articulated to provide services to users or the technical operations needed to support them. The numbers and types of staff at present employed and the way in which they are deployed within the system must be carefully studied in relation to the deployment of information sources (or 'collections') and to the geographical distribution of the EPUP. Where appropriate, the levels of provision of staff in different categories may also be considered in relation to national or international standards, often expressed in terms of staff: population ratios.

In many situations, the qualifications, abilities and personal qualities of individual members of the staff, particularly at the higher levels, may have to be assessed in relation to their duties and responsibilities, and the extent to which these are recorded in formal job descriptions must be noted. Where deficiencies in the numbers, qualifications or abilities of the existing staff appear, consideration must be given to questions of recruitment, education and training, salaries and conditions of service, in relation both to the needs of the system being studied and to the general manpower situation in the library and information field and in the community as a whole.

The status and conditions of service of library and information workers must be assessed in comparison with those of other groups of workers with similar educational qualifications and responsibilities, and the facilities available, in the locality and elsewhere, for both professional and technician level education and training, must be studied. The activities in all these fields of professional associations of library and
information workers should be given particular attention, since the level of such activity often reflects the general level of morale within these professions.

1.3.3 Infrastructural elements

The infrastructural elements, which comprise the infrastructure of the system, are which permeates the structure and enables it to function, and identified as: finance, legislation, building, furniture and equipment, tools and mechanisms to access the information.

- Finance

Money must be provided from one or more sources to pay for the operations and services of library and information systems and the infrastructural elements which support them. The importance of finance needs no emphasis here; without it, no activity at all can take place; if it is inadequate, activity will be curtailed and development retarded.

It is necessary at this stage to establish, not only the total amount of finance provided, but also the amount provided from different sources and for different purposes. A complete picture of the financial situation is necessary, and this must also include records of existing expenditure. It will be necessary, for planning purposes, to establish unit costs for various types or elements of service, or existing average costs for such items as books, periodicals, mobile libraries, and so forth, and if such information is not already available it will have to be compiled from records of existing expenditure.

The existing level of financial provision may often usefully be expressed in terms of appropriate indicators to facilitate comparison with other systems or with previous periods of time for the same system. Thus, for example, at the national level, total library expenditure may be expressed as a percentage of total educational expenditure or the Gross Domestic Product; at the institutional level, library expenditure in a university may be expressed as a percentage of total university expenditure. Care should be taken in using such indicators for purposes of comparison to ensure that they are truly comparable. If total educational expenditure is used as the basis in one case, for example, it cannot be compared with total public expenditure on education in another; nor can Gross Domestic Product at market prices be used as a basis for comparison with an indicator based on Gross Domestic Product at factor cost. Such care is particularly necessary when
comparing local indicators with foreign ones, or with the few which have been put forward as tentative international standards, since these do not always specify precisely which of several possible base indicators is being used. It may be more satisfactory, in some circumstances, to express library expenditure in terms of expenditure per head of the EPUP or even the total population. This is often more easily understood by those unfamiliar with planning terminology and conventions, and can have greater dramatic impact when attempts are being made to draw attention to very low levels of expenditure.

• Legislation

It is through legislation of some kind that library and information systems obtain their authority to provide services to users. Consideration should be given here, not only to 'library legislation' as such, but also to other legislation affecting library and information systems, such as that relating to employment, censorship, computer security and privacy, copyright and so forth; and the term 'legislation', in this context, should be taken to include all kinds of administrative orders or instructions regulating the establishment and operation of library and information systems.

If this systematic framework is being applied in a study of an individual university or school library, for example, the operations of that library, whilst they may in part be regulated by general library or other legislation at the national or state level, will also be subject to regulation under internal orders and instructions issued by the library's parent institution, and the provisions of these must be studied with equal care.

• Building, Furniture and Equipment

The operation of any library or information system requires a certain minimum of furniture and equipment and this, together with the contents of the information store and staff who maintain it, must be physically accommodated in some way.

It is essential that the conditions under which staff, documents (or other information sources) and users are housed, and with the adequacy of the furniture and equipment provided.
It is therefore require information on library floor areas, the capacities of shelves and other forms of information storage equipment, the numbers and types of readers' seats, and so forth, as well as on the quantities and kinds of equipment, from typewriters to microfilm cameras and computers. Vehicles of various kinds may be considered either under the heading of accommodation, if used, for example, as mobile libraries, or as items of equipment, if used for other purposes. The adequacy of provision under any of these headings may be assessed, if appropriate, in relation to national or international standards. (Parker: 1983: 10-29)

1.4 Hypothesis

The public library system in Bhutan is very limited and area covered is restricted to the capital of the country. The only two existing libraries: one is National Library & Archives of Bhutan (NLAB) and the public library both located in Thimphu are catering a small segment of country's population.

The qualities of services of these two libraries are also need to be improved. There are no any advanced services; even the photocopying facility is not available. The major part of the reading materials are only books. No periodicals or digital resources are available in these libraries. The growth of these PLs seems to be stagnant.

The awareness of the PL services among the society is very poor and limited number of people is using the library that too only for entertainment. People are visiting the PL or NLAB occasionally.

At the same time if provided good reading environment through public libraries to these people, it will be the effective medium for the growth of the society. PLS for this country definitely will make a positive, vital change in literacy, economic and social growth.

Assuming all these factors are true, the study of PLS in Bhutan has been taken for the systematic approach of future developments.
1.5 Objectives of the study

$ To realize the status of public libraries in Bhutan.
$ To understand the awareness among people on public libraries.
$ To find the ways for establishment of public libraries in different districts (dzongkhags).
$ To analyze importance of mobile library services to reach the public of remote areas.
$ To examine the systematic ways and means for the development of PLS.
$ To study the requirements of the infrastructural facilities for PLS.
$ To know a possible means for automation, networking and the cooperation among the public libraries.
$ To ensure the quality library services to fulfill the needs of the public.

1.6 Methodology

The methodology of the study is a survey-based approach to know the views of the public of all Districts (Dzongkhags). The survey consists of both the focus group interview method and the questionnaire approach. The focused interview may confine the respondent to a discussion of issues with which seeking the conversance, the interviewer has freedom to explore reasons and motives. The questionnaire approach may reveal an authentic record of the given situation.

The project is based on sample survey and the sample is to meet not less than 50 persons in each District (Dzongkhag) (total 20 Dzongkhags) of the whole population of Bhutan. In each dzongkhag, the samples have been collected using simple random sampling method. In this sample, it has been planned to cover some rural as well as urban areas of all Dzongkhags. There is no group on the characteristics like sex, age, literacy, economic group, occupation, etc. The samples might have certainly represented the views of different kinds of people of the country.

To conduct the survey some local people have been used to overcome language barrier. These helpers explained the questionnaires to the individuals about the aim of the survey,
the questions and the technical terminologies and even they filled the questionnaires for those who are illiterate.

Some of the high mountains are always covered with the snow and the temperature will go down to minus degrees. It is very difficult to reach or to tolerate the climate. In such areas the questionnaires have been distributed by post and the responses were received.

Finally all the data were entered in the excel format. The dynamic and very popular mathematical tool of Fuzzy logic, in particular Fuzzy Cognitive Mapping (FCM) has been used to analyze the data.

Besides this survey, some micro literature and macro literature, online sources, discussion with the librarians, library staff and other academicians have also been consulted.

1.7 Limitations:

There are certain limitations for any project. This research work also has some limitations. For this research survey, the questionnaires have been distributed to only Bhutanese. Even if there is any Indians or other Non-Bhutanese living in Bhutan has been treated as temporary residents.

The survey has been taken for minimum fifty persons in each of the twenty districts (dzongkhags). The project is to cover the whole country. As known to all, the entire Bhutan is mountainous. The geographical phenomena, road facilities to travel are not easy to use for any kind of surveys. For example, in the Gasa Dzongkhag, the density of population is less than one person per square kilometer. Except Thimphu, almost in all Dzongkhags the travel facility is hardly only one bus per day. That too the bus will be available at one point to another end and if the people have to travel near the Gewogs or Dzongkhags they have to take some private taxies which are very expensive. Considering all these factors, the sample has to be restricted to that limit.

As the population is very large amount, the sample has been taken using random selection with the criteria of some rural and urban places.
1.8 Chapter Plan:

There are seven chapters in this study. Each chapter starts with an introductory note. The chapters of the study have been planned as follows:

**Chapter one: Introduction** contains the significance of Public Libraries (PLs) & Public Library Systems (PLS) followed by systematic planning of PLs, hypothesis, objectives of the study, methodology, limitations and the chapter plan of the project.

**Chapter two: Review of literature** has a note on PLs in some developing countries and the previous studies on PLs and PLS.

**Chapter three: Bhutan at a glance** contains general note on Bhutan, its districts (dzongkhags) and blocks / taluks (gewogs), languages, literacy & educational system.

**Chapter four: Status of Public Libraries & other Information Mass Media** includes the national library and the public library in Bhutan, monasteries and their book collections, other information mass media like newspapers, periodicals, radio, television, Cinema and Internet services.

**Chapter five: A study of Public Library System in Bhutan (Survey based)** consists of fuzzy set theory, definitions, fuzzy mathematical model, fuzzy cognitive maps (FCM), justification for using FCM model and adaptation of the FCM.

**Chapter six: A plan of Public Library System in Bhutan** presents a plan of PLS for Bhutan, cooperation & resource sharing among PLs, automation & networking of PLs.

**Chapter seven: Conclusion** is having summary, recommendations to the Royal Government of Bhutan and conclusion.

At the end of the project bibliography and references, some important appendices have been added for ready reference which includes the legal deposit act of Bhutan, the glossary of Bhutanese terms used in the project, the questionnaire given to the librarians of national library of Bhutan and public library and the questionnaire used for the public survey.