CHAPTER - I
INTRODUCTION

1.1   General Background

Nepal is widely recognized as a land of diversity due to high degree of physical and cultural differences within short geographical distances. The topographic elevation increases from below 100 meters in the Terai belt on the south to over 8,800 meters in the Himalayan Mountain on the north. The extreme altitudinal difference has contributed to the variation in culture, education, use of modern technology, economic status, and availability of health service and living standard of people. The rural people are far behind in these matters than the urban people.

Even today a large part of the country remains inaccessible by modern transport and communications; essential goods and information cannot reach remote areas in a timely manner. The most remote and poorest districts have an additional burden. They have to depend on outside economies, paying two to three times more for essential goods. The costs of medicines and other basic necessities are often beyond the means of the poor in remote regions.

Nepal's economic development has been severely constrained by geographic, topological and socio-cultural factors including: its landlocked position, limited natural resources, rapid population growth, heavy dependence on traditional agriculture and an increasing reliance on foreign assistance. A high though declining rate of population growth has exerted heavy pressure on the country's limited natural resources, resulting in deforestation, soil erosion and pollution of water sources.

The rapid rate of urbanization during the past two decades has created unprecedented pressure on Kathmandu and a number of cities in the Terai. Apart from the obvious health issues, the main problems are inadequate infrastructure and services, increase in slum and squatter settlements, a decline in the quality of the environment and social conflicts due to overcrowding.

Mortality and morbidity rates especially among women and children are alarmingly high. Acute preventable childhood diseases, complications of child birth, nutritional disorders and endemic diseases such as malaria, tuberculosis, leprosy, STDs, rabies, vector borne diseases continue to prevail at a high rate. Determinants of such conditions are associated with pervasive poverty, low literacy rates, poor mass education, rough terrain and difficult communications, low levels of hygiene and sanitary facilities, and limited availability of safe drinking water. These problems are further exacerbated by under-utilization of resources; shortages of adequately trained personnel; underdeveloped infrastructure; poor public sector management; and weak intra- and inter-sectoral co-ordination.

Information Technology (IT) is an effective tool in catalyzing the economic activity, in efficient governance and in developing human resource. World economics have, therefore, made significant investments in it and successfully integrated it with the development process, thereby reaping the benefits to the society. IT has significantly enhanced the capabilities in collecting, processing, and distributing information. Therefore, nowadays, almost all the sectors are using IT to store, analyze and publish their data.

Nepal's journey towards ICT has started with the use of computer, IBM 1401 that was in rent to process census data in 1972. Later government purchased the machine for further data processing in the Bureau of Statistics and established a separate organization called Electronic Data Processing Center (EDPC) in 1995, which after 6 years converted to National Computer Center (NCC). 980 onwards many private computer companies were established who either started giving computer training, or started giving consultancy services or started developing management information systems for different organizations.

During the seventies more upper management recognized the importance of IS and the flexibility it was bring to business. The TELEX became the standard of information transfer and the mainframe computer became the standard for database creation. As the need for organized and easy access to data became apparent, information based businesses began moving the mainframes from under the marketing management to its own department.

1.1.1 Introduction to Community Learning Center

A community Learning Center is a Local Education Institute outside the formal education system, for villages or urban areas usually set up and managed by local people to provide various learning opportunities for community development and improvement of people's quality of life." The definition has important implications. Learning Centers play a key role in personal and societal development. They are an effective mechanism for empowering individuals and promoting community development. They achieve this providing opportunity for all members of society to engage in lifelong learning.

The CLC could function as the venue for education and training activities, for community information and resource services, for community development, coordination and networking. The main idea is that a CLC is a revolving mechanism, which could aim at empowerment, social transformation and quality of life through lifelong learning, resource mobilization and social action. The activities should be flexible, participatory and allow for leadership to emerge from any member of the community, while support mechanisms are also made available through strengthened coordination, networking and partnership.

Learning Centers would tend to have the following characteristics:
- They cater for lifelong learning
- They reach out to the community
- They promote the development of a community
- Their programs are responsive to and reflective of the needs and aspirations of members of the community
- They draw their mandate from the community and serve the community

1.1.2 Community Learning Center and Management Information System

A CLC-MIS performs all the task like A management information system is an organized information and documentation service that systematically collects, stores, processes, analyzes, reports and disseminates information and data. Information management functions, specifically with information and data related to the CLCs. It is to be noted that the CLC-MIS can operate within a CLC, as well as at the district,

provincial and central levels. Together these levels form an information network that facilitates the flow and shared use of information on CLCs.

This information flow allows a CLC to better plan, manage and coordinate its programmes. The same is true for exchanging related information, experiences, expertise and learning resources. Thus, the main purpose for developing a CLC-MIS is to establish a systematic collection, dissemination and use of relevant and reliable information about CLC activities, resources and results.

Community learning centres (CLCs) continue to multiply and spread into more geographical areas. To cater to the learning needs of local children, youth and adults who hope to acquire new knowledge, competencies and skills, CLCs are increasingly being established by local governments, community bodies and/or non-governmental organizations. CLCs can offer tremendous opportunities for spreading literacy, arning and training among children, youth and adults in local communities. By focusing on grassroot-level human development, CLCs can contribute to sustainable community development, and to improving local conditions.

However, CLCs still face issues concerning the relevance and quality of the learning services they provide, as well as inadequate community participation in these services. Much of society does not yet know what community learning centres can offer, nor do communities fully utilize the learning opportunities offered through CLCs. In addition, many CLCs operate in isolation, and lack information and resources to improve their capability and quality. This is caused by such factors as bad transportation, inaccessibility and difficult geographic conditions; high costs and limited budgets; inadequate skills in organizing and managing learning programmes; and lack of public awareness, community participation and support.
To address these challenges, CLCs must have strong information management procedures and outreach communication with local communities, as well as with other development partners at all levels. In this way, CLCs can generate awareness of, participation in and support for their activities. These actions are also necessary in order to increase CLCs responsiveness and accountability. Within each CLC, a more systematic collection and use of information can equally help to strengthen its programme efficiency, effectiveness and outcomes. Most important of all, a CLC

management information system (CLC - MIS) can be used to help the CLC manager, management committee members, and facilitators to 'learn' and to regularly take action to improve CLC management and programme delivery.

In recent years, with the growth of the internet and the transition to information and knowledge-based societies, we have become more and more conscious of the importance of learning and knowledge as a basis for individual, community, economic and social development. Community information and technology centres have always contributed, in one way or another, to this process. In recent years, however, a number of community learning centres have been established with the specific purpose of providing a variety of learning opportunities that can empower people within a community and improve their quality of life (*UNESCO,* 2006a). While these centres are mainly concerned with education, they have some characteristics in common with the other centres that are considered by this report. UNESCO has done much to foster the development of community learning centres under its Asia-Pacific Programme of Education for All. The centres reflect a recognition of the importance of non-formal, lifelong learning and the development of skills.

The centres provide support for children and young people moving through the formal education system, but they also make significant provision for adult and continuing learners. Community learning centres are increasingly initiated by community-based organisations and supported by a wide range of national, regional and local government agencies, particularly education ministries, and by UNESCO.

1.2   Focus of the Study

The focus of study concentrates on the implementation of MIS strategies in the organization with the following motives or objectives (in short term and long term) to be fulfilled. The focus of the study covers the functions of the CLC-MIS as listed below:

) Proper initiation in CLC management, planning, scheduling and tracking the progress in documented form.

⟩ Especially this study focus on how to convert the manual system to computerized system of CLC.

1.3   Statement of the Problems

A Problem Definition is a precise statement of the question or issue that is to be investigated. Problem definition is the most critical step in the research process. It is considered the most critical to the success of the investigation. If the problem is stated vaguely, or if the wrong problem is defined, then the rest of the research is completely useless.

    i.   The research problem is difficult to predict the nature of the perspective learners of CLC.

    ii.   What is the effectiveness use of Management Information System for CLC?

    iii.   What is the technical structure of Management Information System for CLC?

1.4   Objectives of the Study

An objective is intent, communicated by a statement describing the plan of the researcher in clear, measurable terms. This is done so that the researcher has a clear understanding of exactly which variables to investigate and what data type he or she is dealing with. An objective may also clearly indicate the study design and the statistics involved. The formulation of objectives will help to focus the study, avoid collection of data that are not strictly necessary for understanding and solving the problem one has identified, organize the study in clearly defined parts and phases, get a clear understanding of what data type is involved and get an idea of an appropriate study design.

The main objective of this study is to study "**USE OF MIS FOR COMMUNITY LEARNING CENTERS (CLC)**, the computerized system helps to manage teaching and learning activities through:

- To help in the development of the livelihood of citizens through the programmes and projects of the alternative learning system;
- To strengthen and broaden community links for mutual support;
- To identify the nature of learners of participants of CLC

- To develop the capability of those who lead the community.
- To analysis increase volume of the students at CLC
- To suggest a new system with new modules for the benefits of CLC
- To develop conceptual framework of CLC-MIS

The objectives of the CLCs imply that they target communities with a large proportion of members in need of livelihood training assistance. By this definition, not all communities in the country are expected to need their own Community Learning Centre.

1.5   Significance of the Study

The study of the CLC through MIS provides the clear roadmap for Community Learning Centers. The paper focuses on the implement of MIS for CLS improves the scenerio and process for learning centers.

In the Asia-Pacific region, the Community Learning Centre (CLC) has emerged as a viable model for the delivery of basic literacy and lifelong learning opportunities for adolescents and adults. The UNESCO CLC Project was launched in 1998 within the framework of the Asia-Pacific Program of Education for All (APPEAL). The CLC has served as a local venue for communities, adults, youth and children of all ages to engage in all forms of learning, through literacy and continuing education programmes. It has functioned as a mechanism to facilitate learning and to enable participants to acquire the knowledge and the skills essential for human development. As of 2009, UNESCO's CLC programmes have been introduced in more than 23 countries throughout the Asia-Pacific region. The central feature of the CLC model is the emphasis laid on active community involvement in designing the organizational structure, formulating the curriculum and delivering the programmes. As the APPEAL CLC Project progressed, the national governments in the respective countries became important partners in promoting the idea of contextualized implementation of national policies and programmes through adult learning contributing to personal as well as community development. In some countries, well established non-governmental organizations took leadership roles in giving shape to the concept and operations. Also, as the concept and operations evolved within the

framework of Education for All, it attracted active support from international (external) development partners. Thus the CLCs, though locally designed and managed, have attracted multiple partners and stakeholders in their implementation and sustenance in terms of technical and financial support.

The interaction of community ownership and external intervention, therefore, lead to a range of interesting questions concerning their relationship and, eventually, the most important issue of the sustainability of CLCs. The questions include:

- How can these two aspects be balanced to make CLCs effective and sustainable?
- To what extent has the CLC succeeded in mobilizing and involving community members in its design and operations?
- Does the community that a CLC serves really feel a sense of ownership?
- What are the challenges and difficulties encountered in CLC ownership?
- What is the impact of the involvement of external agencies on sustainability of CLCs?
- Is there a balance between local community ownership and the involvement of external agencies?
- Does the relationship contribute to enhancing the sustainability of the CLCs?

These are complex questions demanding empirical investigation into the actual experience of establishing and running CLCs. UNESCO decided to carry out the research with partners.

Seven countries are involved in this study, namely Bangladesh, Indonesia, Kazakhstan, Nepal, Pakistan, Philippines and Thailand. The specific objectives of the studies are:

a. To analyze the nature and means of community participation and identify good practices or models of CLCs which demonstrate community ownership;

b. To study the state of balance between community involvement and external support and intervention, and the implications for the sustainability of CLCs; and

c. To identify key issues in community participation and ownership, and explore effective strategies for future action at regional, national and CLC levels.

1.6 Limitations of the Study

During the study, various limitations were listed in the proposed system. The reasons and scope of the limitations are described. Since the proposed system used an operating environment which is saleable with the context of sharing of information over the web, it has been observed that the system is bulky in size and compression of source has not been optimized. Further, the design level complexity of the proposed system was not elaborately studied, that makes the system yet to be explored to full extent and further modules integrated or divided from relevance.

Despite attempts to make the system store enough information, slack attempts in some core modules defined later has still remained vague. The provided data are some time in confidential so unable to present. Some information are confidential so unable to present to this study. People are not understand language properly and not want to share the things which they know.

1.7 Organization the of Study

This study has been divided into five chapters.

CHPATER I: Introduction

The first chapter of this Study is devoted to introduction of the MIS and CLC. That contains background, objectives of the study, methodologies used, and limitations of the Study.

CHPATER II: Review of Literature

The second chapter is Literature Review that studies theories and practices. Conceptual Framework gives overall concept; review from books, journals and previous thesis; studies books, journals and thesis done in the relating subject are the main components of this chapter.

CHPATER III: Research Methodology

The third chapter is Research Methodology. It has shown the Research Design, Sources of Research Data, Data Collection Technique, Data Processing Methods, Tools used for Data Analysis.

CHPATER IV: System Analysis, Design and Data Presentation

The fourth chapter contains the System Analysis, Design and Data Presentation. This chapter explain Organization structure, Sources of information, DFD of existing system, Analysis of existing technology, Limitation of existing system, Major finding of the existing system, Input database and output design, Technical Infrastructure and Major Findings.

CHPATER V: Summary, Conclusion and Recommendation

The last chapter of the study is Summary, Conclusion and Recommendation. It consists Summary of the dissertation, the conclusion made by the researcher from findings of the research and the recommendations of the researcher for the implementation of CLC in Nepal.

CHAPTER - II
REVIEW OF LITERATURE

This chapter emphasizes on the importance of reference of supporting information that were processed in the duration of the study. A case study can be barely initiated without the review of relevant, appropriate and enough information related to the topic of study. While careful measures were taken to make sure that correct and relevant information have been sorted out and used during the study, enough information through various references and earlier research documents on similar topics was reviewed.

A literature review is the process of locating, obtaining, reading and evaluating the research literature in the area of interest. The purpose is to develop some expertise in area, to see what new contributions can be made, and to receive some idea for developing a research design. (Pant and Wolff, 2005, p.39)

Review of literature is an essential part of all studies. It is a way to discover what other research in the area of our problem has uncovered. A critical review of the literature helps the researcher to develop a thorough understanding and insight into previous research works that relates to the present study. It is also a way to avoid investigating problems that have already been definitely answered.

The primary purpose of literature review is, thus, to find out what research studies have been conducted in one's chosen field of study, and what remains to be done. (Pant and Wolff, 2005, p.39)

2.1 Conceptual Review

Management Information Systems is the application of information technology to support business, educational and services activities. Management information systems are those systems that allow managers, educators and servers to make decisions for the successful operation of businesses, services and education. Management information systems consist of computer resources, people, and procedures used in the modern business, enterprise, colleges, universities, community

learning centres, tele-centres, etc.

In most general terminology, it is a computer-based system that transforms data into information useful in the support of decision making. MIS can be classified as performing three functions:

- To generate reports. For example, financial statements, performance reports needed for routine or non-routine purposes.
- To answer what-if questions asked by management.
- To support decision making. This type of MIS is appropriately called "Decision Support System (DSS)". DSS attempts to integrate the decision maker, the data base, and the quantitative models being used.

Though mostly observed and generally accepted as computer based systems, management information systems do not necessarily have to be computerized. Today, the need for an effective management information system is of primary concern to the business organization. Managers use MIS operations for all phases of management, including planning, organizing, directing, and controlling. (*McLeod; 1995: 214)*

2.1.1 Concept of MIS

The MIS has more than one definition, some of which are given below:

- The MIS is defined as a system which provides information support for decision-making in the organization.
- The MIS is defined as an integrated system of man and machine for providing the information to support the operations, the management and the decision-making function in the organization.
- The MIS is defined as a system based on the database of the organization evolved for the purpose of providing information to the people in the organization.
- The MIS is defined as a computer-based information system.

Though there are a number of definitions all of them converge on a single point, i.e. the MIS is a system that support the decision-making function of the organization. The difference lies in defining the elements of MIS. However, in today's world, the MIS is a computerized business processing system generating information for the

people in the organization to meet the information needs for decision-making to achieve the corporate objective of the organization

The scope and purpose of MIS is better understood if each part of them is defined individually, thus

Management

Management has been define in process or activities that describe what managers do in the operation for their organization plan, organize, initiate and control operations. They plan by setting strategies and goals and selecting the best course of action to achieve the goals. They organize the necessary tasks for the operational plan, set these tasks up into homogenous groups and assign authority delegation; they control the performance standards and avoiding deviation from standard.

Information

Data must be distinguished from information and the distinction is clear and important for present purpose. Data are facts and figures that are not currently being used in a decision-making process and usually are taken from the historical records that are recorded and filled without immediate intent to retrieve for decision-making.

Information consists of data that have been retrieved, processed or otherwise used for information or interference purpose, argument or as a basis forecasting or decision-making regarding any business unit. Information is knowledge that one derives from facts for effective functioning of systems placed in the right context with the purpose of reducing uncertainty regarding the alternative courses of action as they are based on description and measurement of attributes of various entities associated with the enterprise.

System

The system can be described as a set of elements joined together for a common objective. A subsystem is a part of a larger system with which one is concerned. All systems for our purpose the organization is the system and the parts (divisions, departments, functions, unit etc) are the subsystem.

The system concept of MIS is, therefore one of optimizing the output of the organization by connecting the operating subsystems through the medium of information exchange.

2.1.2 Processes of MIS

The actual MIS process relates to:

- Collection
- Organization
- Distribution
- Storage of wide information
- Managerial control and analysis of data

Hence MIS focuses on:

- Organization-wide information
- Decision-making process
- Managerial control and analysis
- Computer-based system

2.1.3 CLC

The concept and status of Community Learning Centers to provide a deeper understanding of the different perspectives of CLCs in Nepal.

2.1.3.1 Definition of Learning Centers

The term learning communities is used variously within the literature, often without explicit definition. Two major uses can be discerned. The first focuses on the human element of communities, and the profits that accrue from building on the synergies of individuals in common locations or with common interests as they work towards sharing understandings, skills and knowledge for shared purposes. The second is focused on curricular structures (i.e. an inanimate structure) as the means to developing 'deeper' learning of (implied) pre-determined curricular content.

Figure 2.1

A Common Purpose of CLC linked to Promote Lifelong Learning
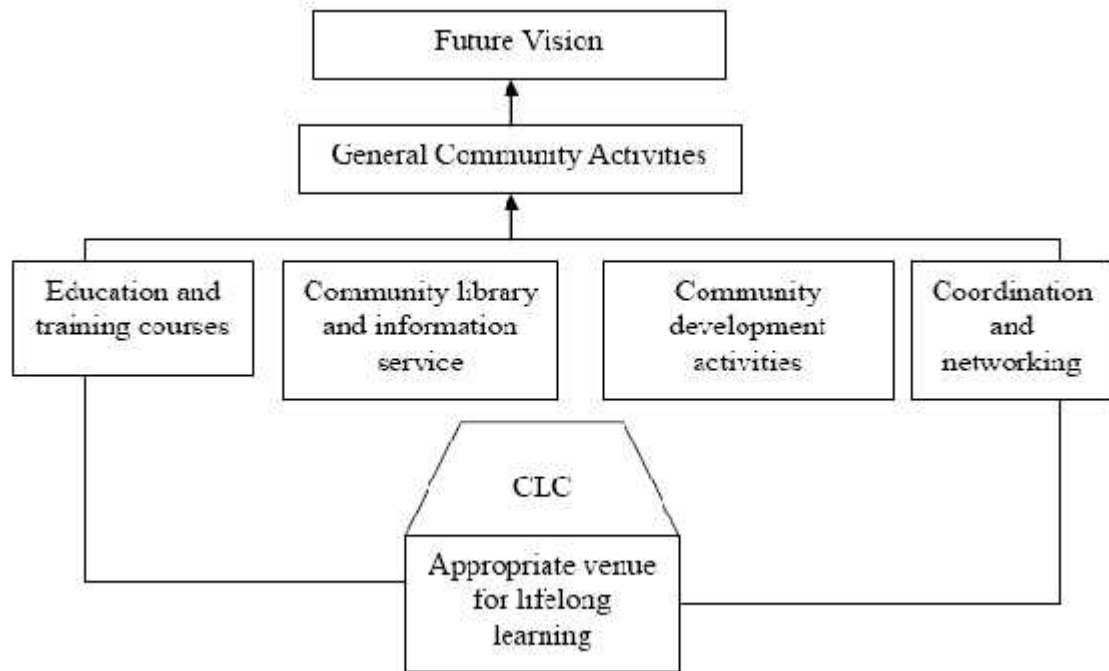
2.1.3.2 History of CLC

Historically, the American federal government had little involvement with after-school programs. Prior to the mid-1990s, after-school structured activities were primarily community based (Halpern, as cited in Gayl, 2004). For example, local institutions such as the YMCA and Boy Scouts of America provided a place for children to grow and develop during the after-school hours (Gayl, 2004). Thus, traditionally, after-school time was seen as a concern and responsibility of the community (Gayl, 2004). However, two major shifts brought the issue of after-school programs into the national limelight.

First, as more women began to enter the workforce in the second half of the 21st century, parents struggled to find the "precarious balance between work and family" and expressed concerns about the safety of their children after the end of the school day (Gayl, 2004, p. 1). To gather more data, the U.S. Department of Education and the U.S. Department of Justice commissioned a comprehensive report on after-school programs, titled *Safe and Smart: Making After-School Hours Work for Kids* (1998). It found that while "…more than 28 million school age children have parents who work

outside the home…an estimated five to seven million, and up to as many as 15 million 'latch-key children' return to an empty home after-school"

(Pederson, de Kanter, Bobo, Weinig & Noeth, 1998, p,1), After-school programs offered a nice alternative to an empty house or the dangerous streets; students could be in safe and enriching environments (Pederson et. al, 1998). There was clearly a need for adult-supervised activities during non-school hours because between 1987 and 1999, the percentage of public schools offering "extended-day" programs (which include before- and after-school programs) more than tripled, from about 16 to 47 percent (DeAngelis and Rossi, 1997; National Center for Education Statistics, 2002, as cited in Mathematica, 2005).

The Evolution of 21st Century Community Learning Centers: Working to Meet the Holistic Needs of America's Students 3 Second, the publication of the 1984 *Nation At Risk* report increased the "…intense society-wide focus on boosting academic achievement for all K-12 students" (Gayl, 2004, p,1).

The concern of safety after-school coincided with the growing accountability movement in the United States, which focused on improving students' academic achievement. Before the 1990s, some schools used a portion of their Title 1 funding to support "extended learning opportunities for low-income students" but there was no federal program in place to directly fund after-school initiatives (Chambers, ieberman, Parriah, Kaleba, Van Campen & Stullich et al., as cited in Gayl, 2004). States, on the other hand, were looking to create "…extra learning supports to help children achieve" (Gayl, 2004, p.2). For example, Gayl (2004) sites the 3:00 project, a statewide, after-school initiative started in Georgia in 1994. The program had three main goals: to provide a safe space after-school, to encourage community collaboration, and improve academic success (Gayl, 2004). These three elements became fundamental centerpieces of the philosophy behind 21st Century Community Learning Centers (Gayl, 2004).

2.1.3.3 CLC Process

We can mention the CLC Process as:

1. **Industry Connect :** Meet the industries to convey project vision and objectives and determine staffing requirements, in terms of number and skills; Determine the numbers required and the frequency of requirement ; Select a target area based on the volume of industry requirement; Establish formal processes between TNI and industries for mid-course internships and hiring of CLC students; Set up a best fit contractual relationship with each industry that includes sponsoring a specific number, accommodating visits and internships, and hiring the student at the end of the course.

2. **NGO Connect:** Identify the NGO working in the community; Liaise with the NGO working in the proposed area of implementation to assist with community mobilization and identification of a suitable venue; Create a collaborative work arrangement for Community mobilization.

3. **Research:** Carry out extensive and continuous research for industry data with regard to sector and demand in each sector; Research the area/industry to determine skill requirements and acceptance towards target students; Carry out research on slum demographics; Analyze data from feedback on faculty, students, industry and student-employee.

4. **Student Connect:** Select students through an assessment test and enroll students; Administer pre-test to gauge profile and existing skill level ; Train students as per the identified needs of the industry ; Give students exposure to the industry environment; Assessments to gauge student progress; Using the data to provide additional support where required; Handhold the students to facilitate placement; Keep in touch with the students after placement; Mentor and monitoring students to prevent drop outs; Conduct course end exams and providing certificates to successful students; Compare start data and end data of every student to determine increase in knowledge and skills use in methodology to monitor and support students, post placement, for ensuring retention.

5. **CLC Setup & Operations:** Assess the identified venue for CLC setup in terms of available space, security, approach and maintainability; Purchase/procure and setup hardware/software/furniture/peripherals; Set up arrangements for regular maintenance and troubleshooting; Hire the centre staff ; Hire personnel to carry out the setup and for repairs, whenever required; Ensure that the operational model is self-sustainable – determining fees that can be charged from the students, selling the proposition to local industry and so on.

6. **Faculty & Courseware:** Hire and train faculty; Monitor/evaluate faculty performance; Determine course curriculum based on the industry selected ; Create course design/curriculum and developing training content; Train the trainers on the teaching methodology; Impart training to the learners, classroom as well as through internships; Test the students regularly to determine progress; Make changes to the content based on student/faculty feedback; Conduct course exams and providing certificates to successful students.

2.1.4 Overview of CLC in Asian Countries
2.1.4.1 CLC in Bangladesh

The government of Bangladesh attaches importance to primary education and NFE. Some recent efforts include organizational and administrative measures to strengthen programme implementation. This is in line with the National EFA Plan of Action (NPA) formulated in 1995 and incorporating the ideas of the Jomtien World Conference (1990). Following the Dakar World Education Forum 2000, the government undertook preparation of a new plan of action (NPA-2) for the period 2002 to 2015.

Literacy has improved significantly in the past twenty-five years. In 1981 the adult literacy in the country was 23.8 percent and in 2002 it stood at 41 percent. According to some estimates, about 10 percent were semi-literate. In a study conducted by Education Watch (2000)1, the estimated literacy rate among the country's female population aged 15 years and above was 35.8 percent and the corresponding figure for the males was 47.3 percent. The figure was 37.5 percent for rural and 62.3 percent for

the urban adult population. The age specific literacy rate of the population showed that it was the highest for the age group 15-19 years (64.2 percent) and lowest for children 5-9 years (1.7 percent).

The literacy status of the population manifests large disparities in terms of gender, socio-economic attributes and geography. The urban-rural gap is very high and the disparity is most pronounced for disadvantaged girls and women. Clearly, much more effort is needed if literacy is seen as a means of overcoming socio-economic divisions and promoting social mobility.

Government efforts are insufficient to meet the education demands of all levels, as well as of all types including training in life skills. Literacy intervention programmes of NGOs increased notably in the country from the mid-1980s. They address roblems of literacy and education mainly of children who lack access to formal schooling or were dropouts from the system and adult illiterates requiring both literacy and training in livelihood trades. Several bilateral and multilateral donors support these programmes.

Poverty is cited at all levels in the education system as one of the major barriers hindering progress towards universal access to education. Research by Education Watch (1999) found that 23 percent children are not enrolled in school and out of it 79 percent were poor. While among the enrolled, the poor constituted 66 percent. The study also found that children from economically disadvantaged families enrol in fewer numbers, attend infrequently, dropout more and underachieve. The need for children to work, the poor understanding of illiterate parents about the value of education and their limited capacity to support the schooling of their children, contribute to an inability or unwillingness to ensure enrolment at school. Accordingly, emphasis has been placed in the PEDP (Primary Education Development Programme) on measures to address these barriers.

2.1.4.2 CLC in Indonesia

In Indonesia, non-formal education programmes for this focus are Learning Package A and Learning Package B, and their counterparts within the formal streams, i.e. the secular and religious primary and junior secondary schools. These non-formal

education alternatives are set to have a five percent share in providing 7 to 15 year old children with basic education. The non-formal education programme which is the single programme in Indonesia is the functional literacy programme. The government provides generous support for institutions which provide these programmes to achieve universal basic education and to eradicate illiteracy.

Those non-formal programmes are available through CLCs or independent programmes. The main difference between a CLC and an independent programme is trivial: a CLC offers various programmes while an independent programme may offer one programme only. The logic behind this is simple: how it could be called a centre" if it only offers one programme? CLCs may choose to offer any non-formal education programmes. No government rule applies to the types of non-formal education programmes offered by any CLC in the country. So it is an independent programme. Historically, non-formal education offered two main programmes, literacy and family welfare education. Literacy education was offered through Learning Package A which served illiterate adults. Upon finishing the 100 modules of this package, the reviously illiterate adults were considered as finishing primary education. The family welfare education programme offers knowledge and skills needed by women as house-keepers and mothers, such as simple food processing skills and child rearing skills. Unfortunately, at a later period, this particular education programme was administered by another party at the national level, having been taken out of the education ministry. When the Government of Indonesia promulgated mandatory basic education in 1994, Learning Package A was transferred from adult education into children's education, i.e. the non-formal alternative for primary school. Literacy education was then transferred into its new name, functional literacy, and it has had new learning materials since then. Upon the granting of primary school equivalency, Learning Package A was then followed by Learning Package B, equivalent to junior secondary school, and Learning Package C several years later.

The skills cultivation portion of the family welfare education evolved into three programmes, namely vocational skill training courses, internships, and income generating programmes. Vocational skill training courses at the CLCs provide various skills, from food production to computer skills, in the mode of more structured vocational courses. Internship programmes provide various skills in the mode of less

structured vocational skill. Where both the previous modes merely offered the skills to produce goods and services, the income generating programme provides both the skills necessary to produce goods and services, and simple marketing principles as well.

2.1.4.3 CLC in Kazakasthan

Education is a key component in assessing human development. With this in mind, Kazakhstan stresses the significance of education in the Strategic Plan for Kazakhstan Development. Equally important is this focus on education in the "Strategy-2030" document. A number of laws and legislative documents demonstrate the aspiration of Kazakhstan in building a democratic, politically and economically stable society, where education plays a key role.

Examples of this priority are demonstrated in the following laws: Law on Education, Law on Higher Education, Law on Child's Rights in Kazakhstan, Law on Family Villages and on Houses for Adolescents, Legislation "On Social and Medical Correction Help for Children with Limited Ability", and the State programme "Rural Schools" to mention just a few such documents. The legislative framework provides an opportunity for development of all levels of education in the public and private sectors, and in formal and non-formal education. The current state of the education system is characterized by low quality at all levels. It lags behind the demands of the market economy and it does not fully integrate the priorities accepted by civilized societies.

There are seven CLCs currently operating in Kazakhstan. The following information is based on the project materials of the supervising NGO. The project of setting up CLCs was done in three stages. During the first stage the supervising NGO studied the education needs of the local population and how to deliver services to them. Using questionnnaires and round table discussions respondents identified their priorities. In order of importance they are elementary computer skills, knowledge of the law, language education, knowledge of entrepreunership, and sport. This needs analaysis was also done for foreign donors to guide them on the establishment of CLCs.

The study clearly shows the respondents' desire for practical, applicable education. People understand that education creates the foundation for career development.

2.1.4.4 CLC in Pakasthan

The picture of illiteracy in Pakistan is grim. At present, the adult literacy rate is estimated to be 54 percent (male 66 percent, female 42 percent). Although successive governments have announced various programmes to promote literacy, they have been unable to do this because of political, social and cultural constraints. Official statistics released by the Federal Education Ministry of Pakistan give a desperate picture of education for all. The enrolment at primary level is already very low, but 50 percent of those who do enrol drop out in the very early years of schooling. In a country with a low literacy rate, where more than 57 million people are living below the poverty line, it is essential to make more provisions for adult literacy. In the past and present, the governments made efforts to eradicate illiteracy but there are a number of challenges. The progress in the literacy rates is minimum. One of challenge is the relapse into illiteracy after the basic literacy programmes. For the retention of newly acquired literacy skills and for further learning, there is need for an extensive institutionalized continuing education programme. Such a learning opportunity should be easily available to those who want a better life for themselves and their communities.

2.1.4.5 CLC in Philippine

Among countries in ASEAN, the Philippines has one of the highest literacy rates, second only to Thailand. In the 2003 Functional Literacy Education and Mass Media Survey (FLEMMS), basic literacy was recorded at 94 percent; females have a slightly higher rate, at 94.3 percent than males at 92.6 percent.

Despite the provisions for the chance to achieve basic education for all, including free and compulsory primary and free secondary education, many children fall through the cracks. The reported cohort survival rate in the primary level (grade 1 to 6) in school year 2005-2006 was 58 percent. Thus only six out of every 10 grade 1 entrants completed grade 6. At secondary school, cohort survival rate in the school year 2003-2004 was 51 percent, when reckoned from grade 1, but relatively higher at 75 percent if reckoned from first year high school. These figures imply that most of the dropping

out occurs in the primary grades, which in turn suggests that dropouts at such an early stage in their schooling may then lapse to illiteracy. The incomplete schooling of a significant segment of the population is reflected in the functional literacy rates. While simple literacy as recorded in the 2003 FLEMMS was a high 94 percent, functional literacy measured as the ability to read, write and compute is 84 percent, 82 percent for males and 86 percent for females. Moreover, if the ability to comprehend is included in the functional literacy measure, the rate drops further to 66 percent, 63 percent for males and 69 percent for females. The FLEMMS also showed that functional literacy was lower among the poor (7 out of 10 aged 10-64) than the non-poor (9 out of 10).

Opportunities to pursue learning outside of the formal education system are accessible. According to the 2003 FLEMMS, of the estimated 51 million population aged 15 and over, 9.7 million or 19 percent reported having attended non-formal training of some sort. About four out of 10 persons who have ever attended any training reported taking part in a livelihood training programme, attesting to the significance of this learning need among the population. The overall high literacy rates in the country are reflected in the low proportion whose training was in functional or basic literacy.

The Philippine government has long recognized the necessity to address the learning needs of Filipino citizens who are unable to avail themselves fully of the opportunities for formal education that the country's public education system provides. The Bureau of Non-formal Education under the Department of Education was designed pecifically to respond to the problem of illiteracy among those who are unable to gain literacy skills in the formal system. In particular it addresses the learning needs of marginalized groups including the deprived and underserved citizens.

The Bureau of Alternative Learning Systems (BALS) has as its functions:
- Address the needs of the marginalized groups of the population, including the deprived, depressed and underserved citizens;
- Coordinate with various agencies for skills development to enhance and ensure continuing employability, efficiency, productivity, and competitiveness in the labour market;

- Ensure the expansion of access to educational opportunities for citizens of different interests, capabilities, demographic characteristics, and socioeconomic origins and status; and

- Promote certification and accreditation of alternative learning programmes, both formal and informal in nature, for basic education. The BALS embarked on a programme to establish Community Learning Centres in barangays (the smallest political unit in the country) as part of its project for providing continuing education in an alternative learning environment. In the Primer on Community Learning Centres issued by the Staff Development Division of the BALS, a Community Learning Centre is defined as a local institution or centre of learning managed by local people. It provides opportunities for the acquisition of knowledge and skills that will help in the development and improvement of livelihood in less developed localities.

The criteria for selection of barangays where CLCs may be established are: the socioeconomic profile of the area, the level of literacy, support from the local government and other public organizations, support from private organizations/NGOs, and accessibility to the members of the community.

The two phases for establishing CLCs are Planning and Implementation: Planning

- Community mobilization/ information dissemination/drumming up interest;
- Community planning;
- Preparation of plans of action Implementation
- Execution of plans;
- Monitoring;
- Evaluation of programmes/drawing up of lessons learned.

Based on the latest available data from the department of Education BALS, there is a recorded total of 522 CLCs organized under the BALS network. These are found in 15 of the 17 administrative regions in the country. CLC in Thailand First are the CLCs which receive major government support but are also organized and run by local people. The four main Thai government organizations involved in the CLC Project are: the Department of Non-Formal Education, the Department of Community Development, and the Office of the Prime Minister and the Office of the Rajabhat University Council. These agencies have either contributed funding support for

specific projects, or provided technical support for activities such as occupational training. Each CLC also seeks and receives support within its own community from private donors, businesses and members of the community. The concept of Community Learning Centres of the Office of the Non-Formal Education Commission, ONFEC, was developed out of a village reading centre initiative, which began in 1998. The pilot CLC project in Thailand was launched in September 2000 with support from UNESCO. The pilot project was supported financially by UNDP and implemented in cooperation with government agencies. Since 2001, UNESCO has collaborated with the Princess Sirindhorn's Foundation for the Development of Children and Youth in renovating existing CLCs under the Foundation's Mae Fa Luang Project, which targets hill-tribe children and youth in remote districts of Northern Thailand. The UNESCO-supported CLC project has further supported the Office of the Non-Formal Education Commission (ONFEC) in strengthening the existing CLC mechanism and network in Thailand, particularly at the grassroots level. The CLC operations assessment reveals that one of the major problems is that the operating committee selected by people in the community is unable to run the CLCs efficiently due to (1) the committees' lack of knowledge and understanding in organizing non-formal education activities, (2) which was compounded by the committees' inadequate financial support from Tambon Administration Organizations, as well as (3) the centres' management continuity is interrupted by changes in committee members, and (4) many centres do not reflect the needs of people in the community. As a result, people do not support the centre's activities.

In 2004, ONFEC set policies and strategies to encourage community members to take part in planning educational activities that respond to the community's needs, integrating real life with education, exploiting networks and social capital to enhance resource sharing and the use of technology to increase learning efficiency.

2.1.4.6 CLC in Thailand

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2.1.4.7 CLC in Nepal

Considering the needs of illiterate poor people, the scope of the literacy programme and out-of-school programme for children was expanded to cover not only knowledge and skills in reading, writing and calculation, but also the use of literacy and new knowledge to solve daily problems regarding health, family welfare and acquiring new skills and more income.

This requires promoting empowerment and capacity-building of the local people. But the processes of empowerment and capacity-building through the traditional school system were not suitable. Therefore, people's institutions, which can offer literacy, post literacy and general education combined with vocational education relevant to the day-to-day life of the poor in rural areas is necessary. Thus the Community Learning Centre (CLC) was found to be the most appropriate institution because local people themselves establish and manage them. They decide on the content, methods and modus operandi of CLCs that suit their needs and aspirations. In Nepal, CLCs are gradually increasing in number following the initiative of the Government, NGOs and the UNESCO Country Office. The total number of CLCs in operation is 215 (NFEC supports 156, UNESCO supports 25, and NFE-NRC supports 34), most of which are located in the rural setting (as of 2009).

The Tenth Plan of Nepal (2002-2007) accepted CLCs as effective and locally sustainable institutions for continuing education. The plan envisaged using the physical facilities of local primary schools so that quite a large number of CLCs could be opened. The target was to establish 205 CLCs within the plan period, in each and every electoral constituency. It also stated in the plan that local bodies would be entrusted with the job of running CLCs.

Similarly, the Education for All: National Plan of Action (2004-2009) has underlined the importance of CLCs as the alternative strategy of learning for empowerment. The document also reiterates the Tenth Plan's emphasis on expanding the number of CLCs with more impetus on promoting coordination between CLCs and various other development organizations working at the local level. The Three-Year Interim Plan (2007-09) also reiterated this commitment and the CLC's role for expanding NFE in the country. The plan has the target for establishing 129 CLCs in the remaining

electoral constituencies within the plan period. Furthermore, it also stated that the programme will stress enhancing skills and increasing income levels of disadvantaged and marginalized communities. Incorporating the concept of CLCs in these plans and in the Education for All: National Plan of Action is, of course, an indication that the government has recognized CLCs as effective means of localized learning. To provide the momentum needed, NFEC developed a CLC operational manual with the support of NFEC, UNESCO Kathmandu and NRC-NFE. The guidelines were prepared to implement the policy of NFE through Community Learning Centres. The guidelines assume that the CLC is an organization which provides functional education to children, youth and adults to help individuals and communities develop. The school curriculum is directed by the central government, whereas the curriculum in CLCs is decided by the local people themselves. The CLC is expected to be set up and managed by the local people according to their needs and aspirations. The guidelines specify the objectives of the CLCs as providing basic education for all, disseminating development information to the people in the community, developing the necessary manpower to carry out developmental work in the community, and working as a link-agency between development agencies and the local people.

During discussions, NFEC staff members maintained that the establishment of a CLC in each electoral constituency could not help achieve their goals. A VEP-based CLC was conceptualized and this concept has already been implemented. At present, NFEC is extending its support to develop Village Education Plans (VEP) in 300 VDCs of 20 districts. Once the VEPs are prepared, NFEC encourages establishing CLCs in those villages. Moreover, CLCs will also be established in each ward of municipalities. From the beginning the government has not worked to frame a comprehensive national CLC policy. CLCs have been deprived of having a national legal framework. This stands as a major impediment in the institutionalization of CLCs. However, NFEC considered this problem and moved to incorporate the provision of CLCs in ongoing amendments to the Education Act. With these amendments, CLCs will become autonomous community organizations that can make contact with other organizations, make agreements and conduct activities independently, rather than at present being considered part of NFEC.

The Community Learning Center (CLC) is a community owned institution outside the formal education system set up and managed by community people to provide educational and learning opportunities to the local community people for the development of community and improvement of the life of the local people. Non-Formal Education Center has established CLCs across the country as one of the approaches of the non-formal education programs. The CLC is made responsible to plan and implement non-formal education programs in the community level. This approach in the country was started in 2002 with the establishment of 5 Community Learning Centers (CLCs) as the pilot program with the financial and technical support of UNESCO, Kathmandu. The 10th five year plan stipulates that 205 CLCs, one for each electoral constitution, will be established with the financial and technical support of the government of Nepal. Now 166 CLCs have already been established and being operated. In addition, other CLCs are also in operation with the financial support of UNESCO-Kathmandu and NRC-NFE. Remaining 39 CLCs will be established within the last year of 10th five year plan. The significance of CLCs can be summed up by looking at the following remarks that can be derived from discussion made so far:

2.1.6 CLC-MIS

2.1.6.1 Concept of CLC-MIS

A management information system is organized information and documentation service that systematically collects, stores, processes, analyzes reports and disseminates information and data. In Step 1, data are collected. In Step 2, they are stored and processed, either in paper records or through a computer. In Step 3, analysis is carried out to show salient results, which are then used to improve activities before they are diffused to the relevant information users in Step 4.

Figure 2.2

How a Management System Works
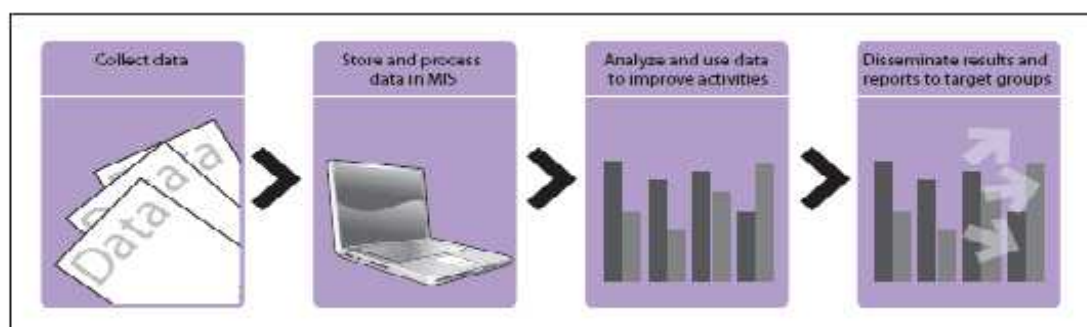
2.1.5.2 Importance of CLC-MIS

A CLC-MIS performs all the above information management functions, specifically with information and data related to the CLCs. It is to be noted that the CLC-MIS can operate within a CLC, as well as at the district, provincial and central levels. Together these levels form an information network that facilitates the flow and shared use of information on CLCs.

This information flow allows a CLC to better plan, manage and coordinate its programmes. The same is true for exchanging related information, experiences, expertise and learning resources.

Thus, the main purpose for developing a CLC-MIS is to establish a systematic collection, dissemination and use of relevant and reliable information about CLC activities, resources and results.

2.1.5.3 Functions of CLC-MIS

We can mention the functions of the CLC-MIS are as below:

Policy-making

Sound policy-making at the national level (including at the Ministry of Education) depends on the availability of relevant and reliable information. For example, a good understanding of the distribution of learning needs and of CLC activities within a country can help to assess how such needs are being met; where there are existing gaps, issues, priorities; and what kinds of policies and legislation will need to be adopted and implemented.

Equally important will be a continuous stream of feedback about policy implementation, especially regarding how local governments and partner agencies enact policies that provide resource support to CLCs and mobilize community participation. Feedback from local communities and CLCs regarding the relevance, quality and impact of the learning programmes can further influence policies, as well. Related CLC information can also help policymakers to establish standards and norms for improving the performance of CLCs and raising the quality of facilitators/managers.

Planning and Management

Information is key to effective planning and efficient management of individual CLCs and of CLC networks, as a whole. Information collected, stored and analyzed under the CLC-MIS can be directly utilized by the CLC manager for both day-to-day operations and forward planning. Secondly, CLCs can derive summary information from the CLC-MIS that can, in turn, inform higher education administrators to aid in policy-making, planning, coordination and government resource allocation.

Knowing where potential learners are and what they need to learn, and the factors that may affect their learning, are essential to designing programmes that closely respond to their needs. Using such knowledge when planning a learning programme, CLC managers can get a clear idea about how much financial, human and material resources will be required, as well as what other prerequisites and conditions should be fulfilled. This information will also illuminate what kind of partnerships and initial actions will be needed in order to mobilize resources and bring together the right conditions for launching a learning programme.

From the start of the learning programme through to its completion, the facilitator(s) together with the CLC manager must closely monitor learners' participation and progress in order to ensure that all (if not most) of the learning resources are available and utilized. They must also monitor to identify issues and solve problems that may arise during programme implementation. Finally, they will need to gather information about the number of learners who have or have not successfully completed the learning programme, together with student feedback evaluations that address the relevance and quality of the programme.

Such evaluations can provide insightful lessons learned that will be useful in planning and managing future programmes. All these actions require systematic information gathering, analysis and use within CLCs.

It is through the CLC-MIS that systematic reporting of information from the CLCs can be established. In turn, this reporting enables higher levels of the educational administration to better plan and coordinate actions to promote CLC networks; ensure

proper management in responding to local learning needs; and offer support in meeting national quality standards.

Information-sharing

As highlighted above, promoting information-sharing is a major function of the CLC-MIS. This is particularly important for individual CLCs, which need to be in frequent contact and communication with the local community in order to know about their learning needs, to inform them about past and upcoming programmes, to mobilize their active participation and support, and to gather feedback on the quality of programmes organized by the CLC. A functional CLC will also regularly inform and maintain close relationships with relevant branches of the local government, local organizations, business enterprises and other stakeholders with a view to generating their support. A key task of the CLC manager is to continuously communicate with local facilitators and other suppliers of learning resources about on-going and upcoming programmes so as to solicit their collaboration.

Networking

CLC-MIS networking creates a supportive system that facilitates direct sharing of information and, hence, of ideas, experiences and resources. Through the CLC-MIS, many CLC managers and facilitators can learn about the existence of innovative programme ideas and experiences from other CLCs. They can follow up by directly contacting other CLCs in order to exchange salient experiences and knowhow in programme design, delivery, management and evaluation. Coordinated joint efforts may also develop among some CLCs to organize similar programmes. In such joint efforts, they may share their learning resources and become more cost-effective. Similar sharing of learning resources may also develop through networking with local schools and professional bodies.

2.1.5.4 Benefits of CLC-MIS

After establishment of the CLC the society, country or individual can be benefited by different ways like:

⟩ Information Sharing within the CLCs

⟩ Linkage between CLCs

〕 Development of appropriated policies

〕 Establish good programmes

〕 Promotion of local programs and products

〕 Evaluation and planning of existing resources, etc

These benefits can be shown by below figure.

Figure 2.3

Benefits of CLC-MIS
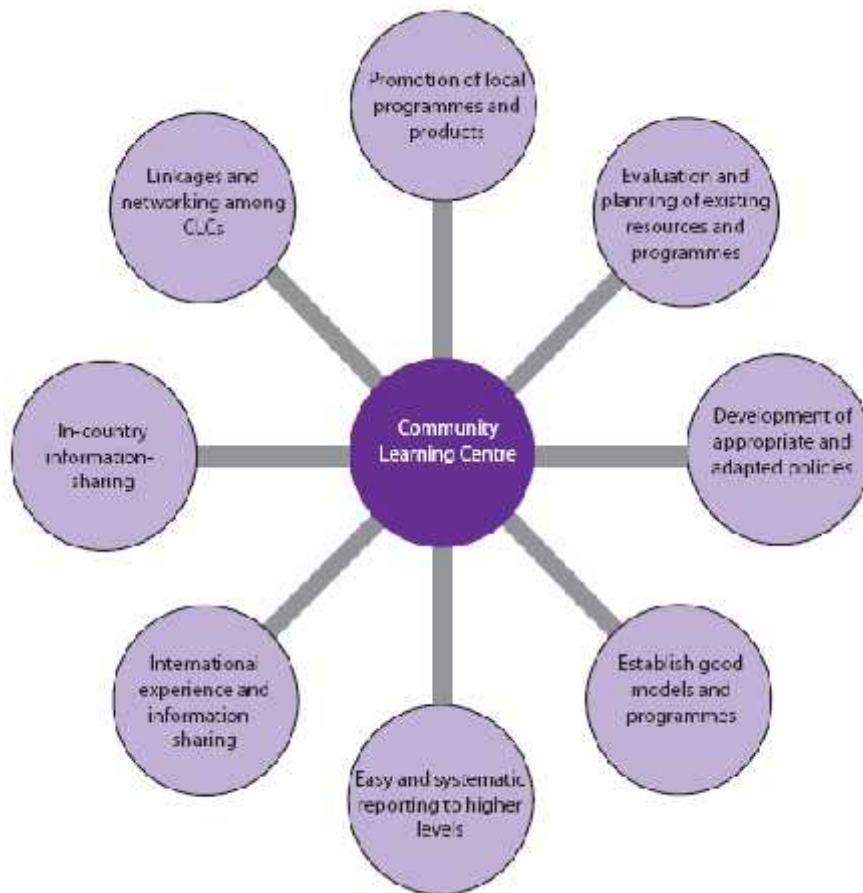
2.1.5.5 Working Model of CLC and DLC

The working modes describe how the community learning center and distance learning center works. This model also describes the working model of IT industry. It means how the industry helps to prompt the courses of CLC. This process can be shown by the following figure.

Figure 2.4

The Overall Representation of the Working of a CLC
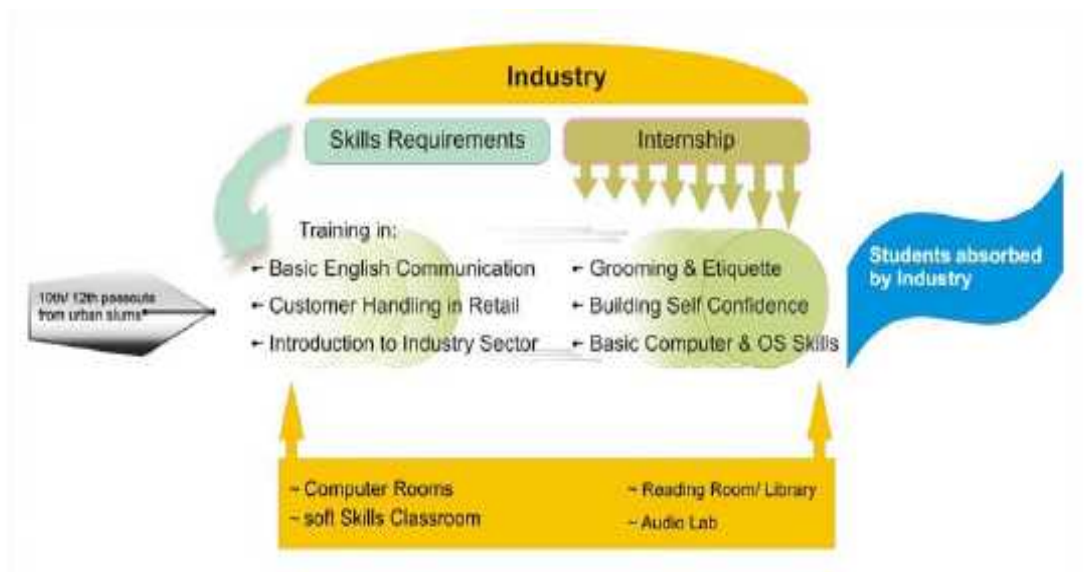
[Source: Developing Talent for Global Readiness – Model District Learning Center (DLC). A Project report by The NIIT Institute (TNI), 2008.]

Figure 2.4

Model used for DLC

[Source: Developing Talent for Global Readiness – Model District Learning Center (DLC). A Project report by The NIIT Institute (TNI), 2008.]

Figure 2.5

Model used for a CLC

[Source: Developing Talent for Global Readiness – Model District Learning Center (DLC). A Project report by The NIIT Institute (TNI), 2008.]

2.2 Review of Journals/Articles

Besides, existing documents of community learning centre that respondent directly visited, the below mention resources also viewed.

Sue Kilpatrick, Margaret Barrett and Tammy Jones (2003), Published on article "*Defining Learning Communities*", The term learning communities is used variously within the literature, often without explicit definition. Two major uses can be discerned. The first focuses on the human element of communities, and the profits that accrue from building on the synergies of individuals in common locations or with common interests as they work towards sharing understandings, skills and knowledge for shared purposes. The second is focused on curricular structures (i.e. an inanimate structure) as the means to developing 'deeper' learning of (implied) pre-determined curricular content.

Developing Management Information Systems for Community Learning Centres: A Guidebook, Bangkok: UNESCO Bangkok, 2009, "Community learning centres (CLCs) continue to multiply and spread into more geographical areas. To cater to the learning needs of local children, youth and adults who hope to acquire new knowledge, competencies and skills, CLCs are increasingly being established by local

governments, community bodies and/or non-governmental organizations. CLCs can offer tremendous opportunities for spreading literacy, learning and training among children, youth and adults in local communities. By focusing on grassroot-level human development, CLCs can contribute to sustainable community development, and to improving local conditions."

Developing Management Information Systems for Community Learning Centres: A Guidebook, Bangkok: UNESCO Bangkok, 2010, Community-based programmes have a long history in many countries pre-dating the introduction of compulsory universal education, not to mention the commencement of the UNESCO supported CLC programme. Successful experiences along with implementation difficulties in these long-running programmes have been reported on by various agencies including Governments, NGOs, research institutions and the like. All the countries in this study report on the evolution of the present CLCs from community-based programmes such as those in mosques, to donor originated and supported community development and the formal provision of non-formal education (NFE). In some cases the legacy of the prior institutions remains. This is most evident in situations where the original purpose of literacy education is still regarded as the prime function of CLCs.

In Bangladesh, all community-based institutions are identified as CLCs; in Indonesia, CLCs are of three different types, namely government-based, company-based or community-based; in Kazakhstan, NGOs (there are 3,500 active NGOs out of 5,000 registered) are berated for having little or no knowledge of CLCs; in Nepal, CLCs are regarded as part of NFE; in Pakistan, the CLCs have been developed alongside government-established community-based programmes such as School Management Committees (SMCs) and Citizen Community Boards (CCBs); in the Philippines, CLCs were established as part of the programme of the Bureau of Alternate Learning Systems – a government agency; in Thailand, CLCs are run by the state and by communities. All countries acknowledge the positive role of UNESCO in the development of the "modern" CLC since 1998, without saying it was a totally new concept. It should be noted that UNESCO does fall into the category of an external intervention in CLC development. Across the board, UNESCO has been CLC Focus in Nepal Considering the needs of illiterate poor people, the scope of the literacy programme and out-of-school programme for children was expanded to cover not only knowledge and skills in reading, writing and calculation, but also the use of

literacy and new knowledge to solve daily problems regarding health, family welfare and acquiring new skills and more income. This requires promoting empowerment and capacity-building of the local people. But the processes of empowerment and capacity-building through the traditional school system were not suitable. Therefore, people's institutions, which can offer literacy, post literacy and general education combined with vocational education relevant to the day-to-day life of the poor in rural areas is necessary. Thus the Community Learning Centre (CLC) was found to be the most appropriate institution because local people themselves establish and manage them. They decide on the content, methods and modus operandi of CLCs that suit their needs and aspirations.

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The Three-Year Interim Plan (2007-09) also reiterated this commitment and the CLC's role for expanding NFE in the country. The plan has the target for establishing 129 CLCs in the remaining electoral constituencies within the plan period. Furthermore, it also stated that the programme will stress enhancing skills and increasing income levels of disadvantaged and marginalized communities. Incorporating the concept of CLCs in these plans and in the Education for All:

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2.2.1 The CLCs: A Situational Survey

2.2.1.1 CLC Functions in Nepal

The functions of CLCs in Nepal may be summarized as follows:

- Formal education support centres;
- Non-formal education and lifelong learning*;*
- Political discourse centres;
- Women's forum groups*;*
- Social and culture revitalization*;*
- Microcredit;
- Community's reflection centre/association*;*
- Skills training/vocational education.

2.2.1.2 CLC Programmes

Concerning programmes, NFE policy considers that:

- Programmes will be individually or collectively implemented by CLCs, NGOs, local groups, schools, CBOs and government organizations;
- Programmes related to community needs and education will be implemented;
- Different programmes related to adult or youth life skills will be conducted;
- CLCs will be mobilized for community development, improved production, the promotion and conservation of the cultural heritage, and continuing education.

CLCs have several executing bodies that decide on policy and programmes, and implement their activities. Even though the participation of beneficiaries in these bodies is essential for fostering ownership, the local influential people are the main representatives on these bodies. The composition of CLCs may not be truly representative if the involvement of beneficiaries is low. The current structure of CLCs may promote hierarchical directives and prescriptions in programme development and may ignore the needs and aspirations of people at the periphery. As CLCs' programmes are mostly designed and implemented by the executives of the CLCs, and these executives are influential in their locality, it is hard to say that the needs of the target people will be articulated. Furthermore, CLCs rarely conduct detailed surveys of the target community. So, one can be sceptical whether CLCs satisfy the wants of those most in need. The following is a selection from a list of programmes and activities operated in one CLC in Nepal:

- Saving/Credit groups (income generation activities);
- Adult literacy and post literacy classes;
- Early childhood development;
- Training in electricity, motorcycle repairing, radio/TV repairing, computers, carpentry, mushroom farming, off season vegetable farming, beauty parlour management, banana farming, masonry, bamboo, tools preparation, and cycle repairing;
- Literacy through computers;
- CLC management training;
- Coaching classes in mathematics, English and science.

2.2.1.3 Participation in Activities

NFE policy requires that emphasis will be given to special target groups while establishing new CLCs. This will be the focal point to expand all types of non-formal education. With the mobilization of different individuals and groups, literacy campaigns will be implemented in the community. Women members of groups will be encouraged to manage childcare centers. Taking into consideration community needs, different kinds of development works will be implemented to support the groups, and, with the partnership of the media, will be made available to CLCs. The reasons for the establishment and evolution of CLCs in Nepal are various. Hence participation varies according to the purpose. Some CLCs evolved to address the needs of the local people, and some for preserving and promoting local culture and cultural heritage. Some CLCs were established for women and engaging them in productive work, while others were for income-generation and community development. In the establishment of CLCs, the community took the initiative. However, external agencies like District Education Officers and UNESCO also had a prominent role. Most CLCs are located in accessible areas. As the people living there have relative advantages in terms of their access to information and knowledge, they can take the initiative in the establishment of a CLC. They can make contacts with the DEOs and other agencies. For people living in remote and inaccessible places the opposite is true.

2.2.1.3 The Rise of Community Learning Centers in Nepal

According to Non Formal Education Center, Sanothimi, Government of Nepal, Ministry of Education listed 1505 CLCs exist in Nepal. Among of them I have visited the oldest CLC and nearest CLC from Kathmandu.

Tansipakha Learning Center:

According to Ms. Nanihira Maharjan, a social mobilize of Tansipakha CLC, it was established in 2056 B.S. This Center is running mid of Kathmandu near Chhetrapati. This CLC was declared as literate area in 2062 B.S although this center is providing different types of services to its learners of participants. The daily participants of the learners are 24 and they are allocating 2 shift. The first shift start from 12:00 noon to 2:30 pm and another shift starts from 4:00 pm to 6:00 pm. The total no. of participants on daily basis is 24 and other participants are nearby 60, who are participating for awareness program. This center is providing different types of services like:

- Teaching
- Training
- Women empowerment program
- Beautician
- Cutting
- Awareness Program, etc

This Center has its own Computer System and Internet facility. The computer helps to maintain and manage the data of the participants and Internet services allows to communicate with NFE Centers and Social-mobilizer. The Internet services also helps the participants to know about national and international learning activities.

Dhapashi Learning Center:

This Center was established in 2062 B.S and this is directly connected with Kathmandu Municipality. The total no. of daily participants are 108 and they are getting different services like:

- Learning facility
- Awareness program
- Agricultural training
- Anchoring training

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） Beautician training

） Self dependent program, etc

The learning time for the participants is 10:15 to 2:15. According the social-mobilizer of Dhapasi CLC, this center is funded by Government of Nepal (MOE) and UNESCO. This Center has sufficient furniture and other equipment to run the program. This center has also minimum technical requirement to manage the data and database.

2.3 Review of Thesis

Researcher reviewed some unpublished master degree thesis for identifying variables relevant for research. This works helps to avoid any repetition. Researcher found that majority of the master's degree thesis are concentrated on the in case study approach of commercial banks. Researcher found very few theses on public organizations' information system. Though, researcher realizes that the review of old and new master degree thesis on different organization really useful to carry out this research study.

Acharya (2001) has conducted study entitled "*Implementation of Management Information System in Royal Nepal Airlines Corporation*" (a case study in marketing department). In his master degree thesis he used both primary and secondary data but findings are based on primary data which are collected through observation, questionnaire and interview method. He set following objectives for his research study:

） To present and analyze of existing information system of marketing department.

） To examine the flow of information to co-ordinate and communicate different divisions and units of marketing department.

） To provide recommendation of the basis of major findings that has been drawn out in the research study.

The major finding of the research is:

） Royal Nepal Airlines is one of the complex organizations due to its nature of service and wide area of marketing activities.

） Marketing Department of RNAC has a multidivisional structure but in reality the structure is ambiguous.

） The information system in marketing department is based on traditional paper-based

information and manual filing system. There is manual flow of documents except computerized reservation system of international flight ticket through ABACUS and other CRS software.

) Lack of capable manpower and IT experts to handle sophisticated information technology to maintain proper information system within the department.

) Centralization of authority, manual flow of documents and unnecessary political pressure generally creates obstacle to perform marketing activities smoothly.

) Information announced in Nepali medium through radio Nepal regarding flights schedules by the marketing departments is quite traditional

) Lack of Proper informational infrastructure to communicate with different domestic station causes problems in planning flight schedule.

) Micro computers in each division are not utilized. They are used only to keep records to some extent and used to type material whenever needed in order to submit the report to the department director and CEO

) Information does not flow systematically due to absence of network information from different divisions and units of the marketing department.

) Due to mishandling, misunderstanding and information gap; frequent flight delay, flight cancellations and changes in flight schedules are common.

) Network-based computerized information system is necessary for the systematic flow of information.

) Traditional paper-based information system creates delay in making decisions. It shoul

) It is difficult to implement MIS due to lack of necessary infrastructure of the marketing department of RNAC such as: Lack of equipment & accessories, Lack of technical manpower, Lack of IT experts and Budget for installation of new technology, etc.

Adhikari (2002) has conducted study entitled *"Information Technology in Security Management"*. In his master degree thesis, he considered both primary and secondary data but his thesis result is based on primary data. He used interview, questionnaire and survey method for data collection. As his thesis covered the huge subject area, he chose different class of people as sample like farmer, labor, students etc. He argues that Finding personal information and their location instantaneously is extremely important to take immediate decisions in critical situations of security management. This is the most critical information playing vital role in security management functions, however, need of the security management information is not limited to

these information. Finding the geographical location i.e. address of the person or any object is also critical in the security management. In his research study, he set the following objective:

-) Identify various reasons behind the conflicts and terrorism
-) Study the existing status of IT application in security management in Nepal
-) Identify basic information required for security management purpose
-) Develop MIS and DSS information system models and architectures for the security management information system
-) Develop conceptual DFD and ER models for the proposed SMIS

The major finding of the research is:

-) Most of the public use citizenship card as their ID card. Security personnel as well as the government offices use citizenship card as only reliable ID card which is widely used in public dealing and official dealings
-) The security personnel and government offices ask for citizenship card for the identification purpose but it is not reliable since there is no easy verification mechanism. It is difficult to identify the fake ID cards
-) Maintaining the personal information integrated with address and availability of the same online will be highly useful. This will help to know the real identity and highly discourage the disguising activity of the criminals and terrorists.
-) Joblessness, poverty and ignorance are the major causes behind the terrorism.

Eliminating the root cause and campaigning education program are the major way-out of solving the conflict problems.

-) Many publics agree that because or obscene of real ID card and information, they have to suffer difficulties and claim the lives many times. Citizenship card is used by common publics as ID while the job holders use office ID card instead,
-) Majority of publics have no problem if government maintains personal information to maintain peace make the system transparent however some claims that it is breach of privacy
-) Majority of the public's highly recommend government maintain such information as soon as possible. Some who pay more interest and attention also claim that maintaining such personal information and using it will solve problem of conflict as well as corruption and make administration more transparent and this is the root cause of the conflicts

⟩ The impact of security management information system in the security management will be strategic in nature. The information system will strengthen the planning and controlling

Bhattarai (2003) has conducted study entitled "*Performance of Management Information System in Kumari Bank*". His master degree thesis is fully based on primary data collected through observation, direct communication with respondents and by questionnaire method. In his master degree thesis he argues that most organization spend huge amount of resources in setting up MIS infrastructure but on other hand they have not been able to fully capitalize the benefits of MIS, therefore, he tended to study the utilization of MIS and the factors which affect the performance of MIS. And his objectives for the research study are as following:

⟩ To identify factors affecting performance of MIS.
⟩ To examine the existing situation of software personnel of the bank.
⟩ To study the relation o training of end user in the bank for improvement of the performance of MIS.
⟩ To provide suggestions on the basis of the finding.

The major finding of the research is:

⟩ Majority of the users of the MIS consider MIS to be Important
⟩ Majority of the users of the MIS consider that MIS helps in decision-making.
⟩ Use of MIS is directed more towards extraction of current information rather than historical information.
⟩ MIS is fulfilling the information needs of the users to different degrees of satisfaction. Higher management is less satisfied than the middle management.
⟩ Further improvement in utilization of MIS needs better communication and training between the various stakeholders.
⟩ MIS users are comfortable using the product and have a good understand users are moderately satisfied with the MIS.
⟩ There is ample room to increase the use of MIS.
⟩ The factors which will improve the utilization of MIS are: "Good communication channel", "Training to end user", "Training to software personnel".

Thapa (2003) conducted study entitled *"Future Prospective of Online Banking in Nepal"*. He collected data based on the primary. The primary data were collected from structured interview. The analysis of was presented on the tabular form, simple bar diagram and pie chart. The analysis of data has been done through various ways like percentage, average etc. and concluded that banks in future cannot survive without the support of Information Technology. On his survey he found that only 5% respondents are satisfied with the traditional banking system and rest 95 % want immediate technical improvement in their service system. Respondents feel that the bank should imply online services to provide better facilities to them.

Based on the above conclusions, Thapa gave the following recommendations:

) The bank should developed standard based solutions which consist of open system architecture, with scalability as its main feature for taking care of future volumes in growth.

) The IT industry should closely collaborate with the banking sector in providing such serves at cost-effective prices and should gear itself to meet the requirements of the banking and financial sector with a spirit of co-operation, and partnership in making the banking industry scale the heights of international excellence.

) In order to minimize frauds and security problems, the Central Vigilance Commissioner (CVC) should direct all banks to compulsorily offer Electronic Clearing Services (ECS) to their customers.

Thapa carried out the study with the following objectives:

) To find out opportunities of the online banking in the context of Nepalese commercial bank

) To find out the security threats on online banking system

) To find out the advantages of online banking t the Nepalese people

) To suggest measures to improve the IT policy regarding online banking

Although there are 17 commercial banks in Nepal and all banks have various departments, this study has been confined to Treasury Department of Kumari Bank Ltd. The gap of this study is that the data used are only primary data. The conclusion and recommendation made in this study cannot generalize in other banks.

Research Gap

An effort was made to conduct a resembling study of the topic mentioned and proposed through existing documents and thesis reports. Though a synonymous report was not found, reports with high relevance in the methods to be applied and the documentation process were of great help. There is no similar case study in this field because i am the first person of this study of *"Use of Management Information System for Community Learning Centre)."*

Based on the details withdrawn from the review of existing research documents that have been extracted above, the study on Community Learning Centre (Dhapashi Learning Centre and Kanjipakha Learning Centre) stands different and more explanatory than the rest. The data collection process has been elaborate through scanning multiple resources from and beyond the organization. The tabulation was done using effective methods of MS Excel that have been used for the cost benefit analysis. The precision required in analysis of cost and benefit could not have been successful without proper evaluation of the data collected from secondary sources.

A strong description on the existing system and the core study of the exiting system helped understand the actual causes that make the MIS implementation available incompetent software as a support system. An analytical explanation of the existing system with major criticism withdraws many conclusions in favour of the proposed system and finally explains why, in fact, a newly devised MIS implementation is necessary. While the content management in this documentation has been equally focused upon, the resources based on which the study was performed has been variable and not centralized.

This study is a different then previous study. It may be the first research study of the use of Management Information System for Community Learning Centres.

CHAPTER - III
RESEARCH METHODOLOGY

Research methodology refers to the overall research processes, which a researcher conducts during his or her study. It is the systematic way of solving research problems. It includes all the procedures from theoretical foundation to the collection and analysis of data. At most the data are quantitative the research is based on the scientific models. It is composed of both parts of technical aspect and logical aspect. On the basis of historical data, research is systematic and organizational effort to investigate a specific problem that needs a solution. This process of investigation involves a series of well thought out activities gathering, recording and analyzing and interpreting the data with the purpose of finding answer to the problem (Kothari 2004).

Research can be conducted on the basis of primary as well as secondary data. In this study, some data are primary and some are secondary and those data are analyzed using appropriate tools. In this dissertation, the process of research design, data collection procedure and analysis are described here respectively.

3.1 Research Design

When a particular research has been identified, research problem has defined, and the related literature in the area has been reviewed; the next step is to construct the research design. Choosing an appropriate research design is crucially important to the success of the research project.

By research design, we mean an overall framework or plan for the activities to be undertaken during the course of a research study. The research design serves as a framework for the study, guiding the collection and analysis of the data, the research instruments to be utilized, and the sampling plan to be followed. Specifically speaking, research design describes the general plan for collecting, analyzing and evaluating data after identifying what the researcher wants to know and what has to be dealt with in order to obtain the required information.

The research design is an important part of the study of a particular system. In which there is lot of activities are involved to do an appropriate task.

3.2 Sources of Data

Collecting data is the connecting link to the world of reality for the researcher. The data collection activity consists of taking ordered information from reality and transferring it into some recording system so that it can later be examined and analyzed for patterns. It is from these patterns that social behavior can be understood and predicted. (Pant and Wolff, 2005, p.192)

Data may be obtained from several sources. Each research project has its own data needs and data sources.

3.2.1 Primary Data

Primary data are original data gathered by the researcher for the research project at hand. Thus, these data are collected for meeting the specific objectives of the study. Primary data can be collected through interviews, questionnaires, observations or experiments. (Pant and Wolff, 2005, p.194)

In primary data collection, we collect the data ourselves using methods such as interviews and questionnaires. The key point here is that the data we collect is unique to us and our research and, until we publish, no one else has access to it.

There are many methods of collecting primary data and the main methods include:

- Questionnaires
- Interviews
- Focus group interviews
- Observation
- Case-studies
- Diaries
- Critical incidents
- Portfolios.

3.2.2 Secondary Data

The sources of secondary data can be divided into two groups: internal and external. The internal secondary data are found within the company. Sources of such data include sales information, accounting data and internally generated research reports. External secondary data are collected from sources outside the company. Such

sources may include books, periodicals, published reports, data services, and computer data banks.

Secondary data is data that has already been collected by someone else for a different purpose to ours. For example, this could mean using:

- Data collected by a hotel on its customers through its guest history system
- Data supplied by a marketing organization
- Annual company reports
- Government statistics.

Secondary data sources can be classified as:

- Paper-based sources – books, journals, periodicals, abstracts, indexes, directories, research reports, conference papers, market reports, annual reports, internal records of organizations, newspapers and magazines
- Electronic sources– CD-ROMs, on-line databases, Internet, videos and broadcasts.

The secondary data here is collected by on Internet.

There are various methods of collection of primary and secondary data. The methods that are applied for this study are interview and questionnaire, observation and reviews.

a) Interview

Structured interviews with the concerned authority were conducted. At first, a structured list of question to be asked during the interviews was formulated. Then they were prioritized according to the importance of the question.

b) Questionnaire

A well-structured list of questionnaire is prepared and supplied to the employees of Varun Beverages Pvt.Ltd. and shopkeeper of Pepsi to collect the primary data.

c) Observation

In this course of preparation of study report, researcher frequently visited the organization to collect the information through observation.

d) Review

This method primarily implies the collection of secondary data, which have been already published. Most of the secondary data have been collected from the published material and website of the organization.

3.2.2 Data Sources for CLC-MIS

Primary data can be directly gathered from respondents through forms, questionnaires, interviews or anecdotes (if heard or observed directly). Secondary data are data not directly obtained from key partners and learners, but indirectly obtained from other local peopleor bodies. Some of these other local bodies that can provide useful data for CLC-MIS are:

a) Schools

b) Health centres

c) Businesses

d) Village councils

e) Agricultural cooperatives

f) Local leaders (head of village, sub-district)

g) Police stations

h) Religious centers (i.e. mosque, church, temple)

i) Local business entrepreneurs

3.2.3 Data Collection Methods

The selection of an appropriate method of collecting data is important because it can have an impact on the relevance and reliability of the information obtained. There are many different methods that can be used to collect data. These include:

a. Gathering data from existing records and information sources

b. Recording data and information on CLC activities

c. Conducting sample surveys of households and learners

d. Interviewing stakeholders and partners

e. Organizing focus group meetings

f. Anecdotes from local events, gatherings and contacts

3.3 Analytical Tools and Technology

Data analysis is a process of gathering, modeling and transforming data with the goal of highlighting useful information, suggesting conclusions and supporting decision making. Data analysis has multiple facets and approaches, encompassing diverse techniques under a variety of names, in different business, science and social science domains. Data analysis is a process that prepares a data model for implementation as a

simple, non-redundant, flexible and adaptable database. The specific technique is called normalization. Normalization is a data analysis technique that organizes data attributes such that they are grouped to formed non-redundant stable, flexible and adaptable entities. Data mining is also a particular data analysis technique that focuses on modeling and knowledge discovery for predictive rather than purely descriptive purposes.

3.3.1   Statistical Software

Statistical software such as Statistica and Microsoft Excel is used to analyze, verified and validate the collected data. As a result we can get valuable result of our research.

3.3.2   Tables and Figures

Table is a presentation of data in column and row form. Tables can be used to present the data and information to make the content clear. Figure usually includes graphs, maps, drawings, charts and other data represented in graphical / pictorial format that is easily understandable.

3.4 Data Analysis Tools and Techniques

The huge data collected from secondary as well as primary sources are sorted and only the related data are considered. They are further examined in relation to the objectives. As per the need of study, the data available are presented in the Flowcharts, Data Flow Diagrams (DFD) and Entity Relation Diagram (ERD), Bar diagram chart.

3.4.1 Flowcharts

A flowchart is a schematic representation of a process. They are commonly used in business/economic presentations to help the audience visualize the content better, or to find flaws in the process. It is the graphical representation of an algorithm. A flowchart Therefore is picture logic to be implemented in a computer program.

Flowchart Objects Symbols

Table 3.1

Symbols used in modelling Flow Chart

S.No.	Symbols	Description
1		This symbol used to represent the start and end of process
2		This symbol is used in flow chart to represent the manual operation
3		This symbol is used to represent the detail procedure in the system.
4		Multiple document required for operation
5		Represent connectors of system
6		Represent input/output of system

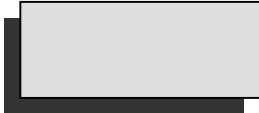*(Source: Adhikary; 2011)*

3.4.2 Data Flow Diagram (DFD)

A data flow diagram (DFD) is a graphical representation of the "flow" of data through an Information system. A data flow diagram can also be used for the visualization of data Processing (structured design). It is common practice for a designer to draw a context-level DFD first, which shows the interaction between the system and outside entities. This context-level DFD is then "exploded" to show more detail of the system being modelled. With a dataflow diagram, users are able to visualize how the system will operate, what the system will accomplish and how the system will be implemented. Dataflow diagram scan be used to provide the end user with a physical idea of where the data they input, ultimately has an effect upon the structure of the whole system from order to dispatch to restock how any system is developed can be determined through a dataflow diagram. A data flow diagram illustrates the processes, data stores, and external entities in a business or other system and the connecting data flows.

The four components of a data flow diagram (DFD) are:
- ʃ External Entities/Terminators/Sources/Sinks (represented by a square or oval)
- ʃ Processes (represented by a circle or rounded rectangle)
- ʃ Data Flows (represented by an arrow)
- ʃ Data Stores (represented by two parallel lines, sometimes connected by a vertical line)

DFD Object Symbol

<div align="center">

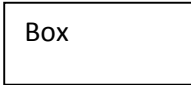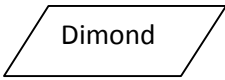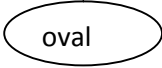**Table: 3.2**

Symbols used in Modelling DFD

</div>
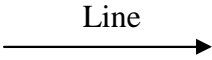
Objects	Symbols	Description
External Entity		It is a person or group, which interacts with the system, something outside the system. It is not a user. e.g., Customer, Supplier, Government Agency, Accounting Department, Human Resources System, etc.
Data Flow		It is the directional movement of data to and from External Entities, the process and Data Stores. In the physical model, when it flows into a data store, it means a write, update, delete etc. Flows out of Data Stores mean read, query, display and select types of transaction.
Data Store		It is a repository of information. In the physical model, this represents a file, table, etc. In the logical model, a data store is an object or entity.
Process (Activity, Function)		Depending on the level of the diagram it may represent the whole system as in a Context (level 0) diagram or a business area, process (activity), function, etc. in lower levels.

(Source: Adhikary; 2011)

3.4.3 Entity Relationship Diagram (ERD)

An entity-relationship (ER) diagram is a specialized graphic that illustrates the Interrelationships between entities in a database. It helps the analyst understand the Organizational system. ER diagrams often use symbols to represent three different types of information. Boxes are commonly used to represent entities. Diamonds are normally used to represent relationships and ovals are used to represent attributes. Both types of symbols representation are discussed in detail below:

Table: 3.3

ERD Object Symbol

S.No	Symbols	Description
1	Box	It is used for entity representation. It contains objects used in relational database
2	Dimond	Diamond represents relationship.
3	oval	The oval or ellipse is used to represent attributes of entities
4	Line	It is used to link attributes to entity sets and entity set to relationship

(Source: Adhikary; 2011)

CHAPTER - IV

SYSTEM ANALYSIS, DESIGN AND DATA PRESENTATION

Data Analysis and Presentation

The purpose of analyzing the data is to change it from an unprocessed form to an understandable presentation i.e. transforming row data into meaningful information. Data analysis is an ongoing process, which may occur throughout the research, with earlier analysis informing later data collection. The analysis of data consists of organizing, tabulating, performing statistical analysis and drawing inferences. The main purpose of such analysis is to obtain answers to the research questions or to test the hypothesis.

4.1 Organization Structure

The organizational structure of the centers is immensely varied. They do, however, share a common characteristic: They are generally very small organizations, and so, typically, they have a very flat structure.

Figure 4.1

Organization Structure of CLC
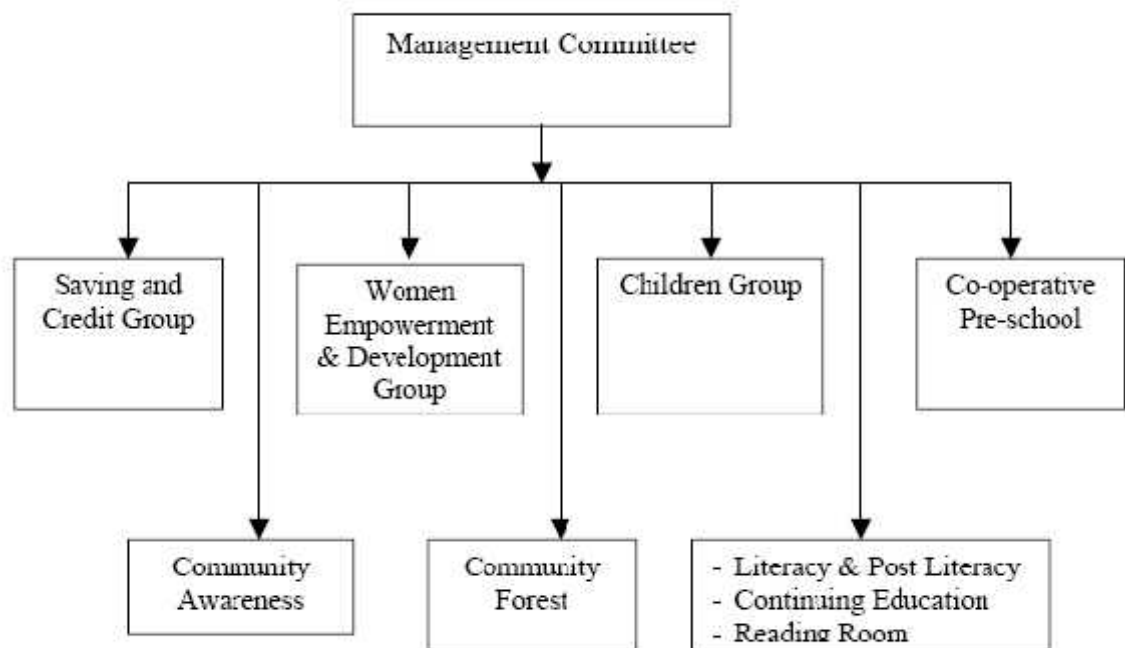
[Source: National Resource Center for Non-Formal Education]

Figure 4.2

Orgnizational Structure of the Office of the Non-Formal Education Commission
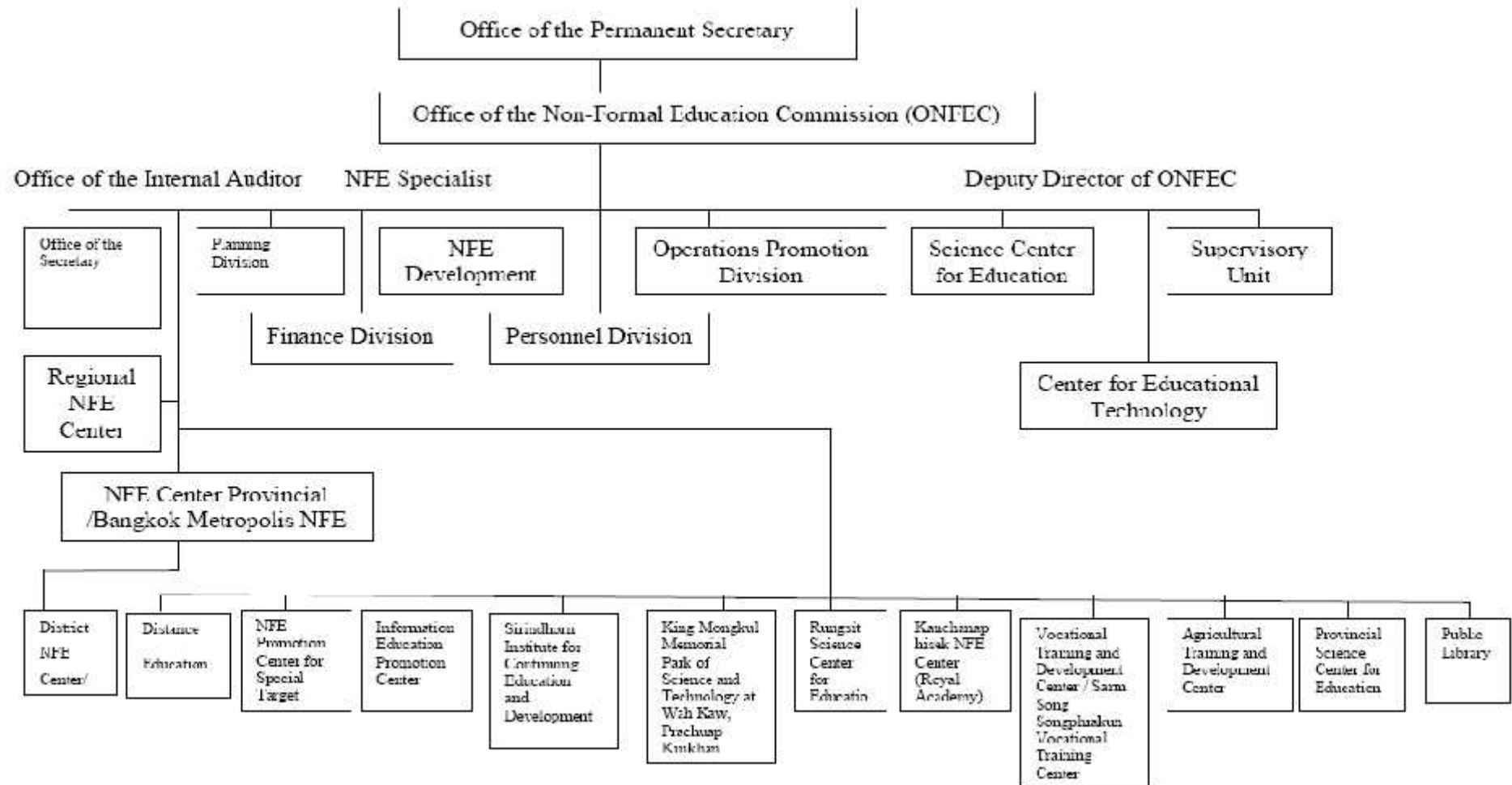
4.2 Hierarchy of Information

Information can be defined as the data, which can be organized and presented so that the decision maker may take the necessary action. In other word, information is the result of processing data. It is clear that information consists of data that has been retrieved, processed or otherwise used, for informative purpose. Information contains an element of surprise, reduces uncertainty and triggers off action. The conversion process of data into decision is shown in the figure below:

Figure 4.3

Data Conversion of CLC
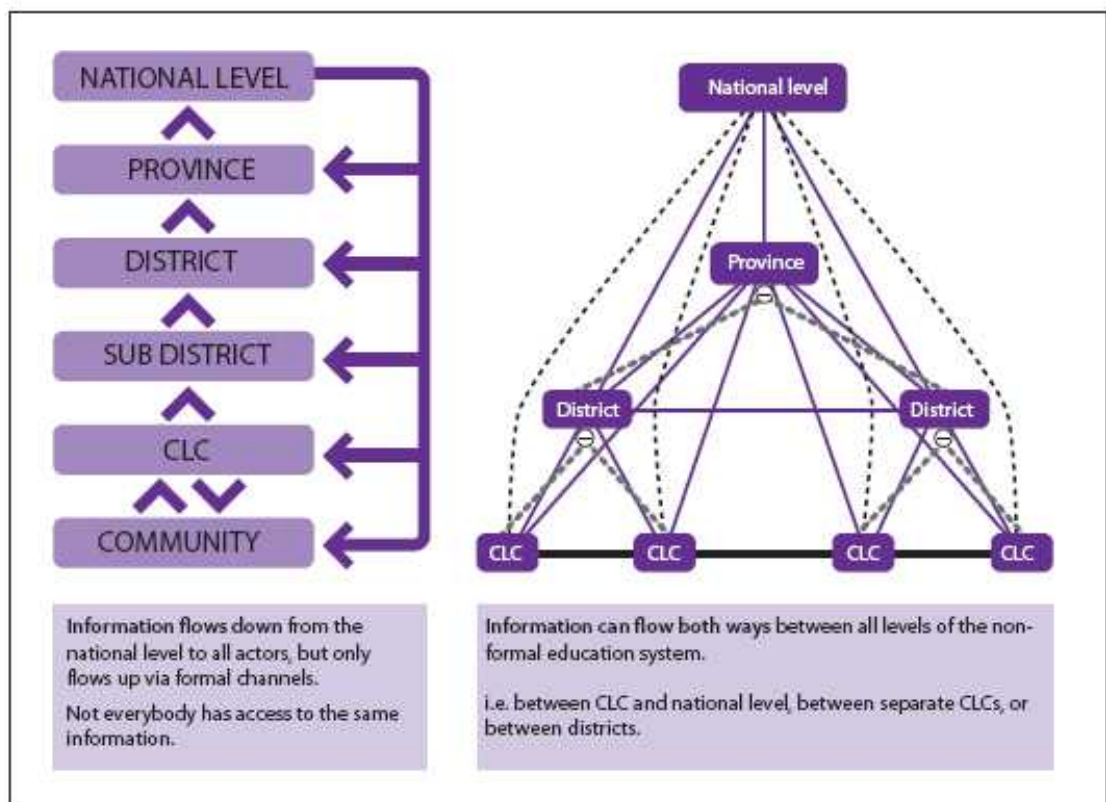
The data can be processed by following process:

Figure 4.4

Data Conversion Process

The study on the thesis statement is based on an individual study of available resources as books, e-books, articles, case studies, news excerpts, with a direct or indirect relation with the scope of the paper as defined. The applied approach includes deep diving into related concepts, breakdown analysis of both theoretical and practical aspects of units involved in the study. An attempt has been made to encompass all possible dimensions in implementing business process re-engineering, the role of information technology in it and the advantages gained, abbreviated or detailed. Multiple references, related forums and accessible soft copy information on the Internet has been used to establish a base of this study and remains the most widely used source of information during the detailed study on the thesis statement.

The study includes no assumptions and no hypothetical statements. Arguments are based on practical truth on implementations of the technology, often supported by case studies with reference to the source of information. The goal of the paper is precisely limited to the advantages of using an optimized information system to introduce radical changes in business processes of the company and the report is based on the detailed study on the thesis statement through the approach mentioned earlier. Ample illustrations and citations are used to support and elucidate the discussion. The method of study remains theoretical.

4.3 Primary Data Analysis

According to Non Formal Education Centre Sanothami Bhaktapur there are 1507 Community Learning Centres in Nepal. Among of them 25 Learning Centres are existing in Kathmandu District. Among 25 Centres, the data is collected on the different basis from Tansipakha CLC (the oldest one Learning centre) and Dhapashi CLC(Connected to Municipality). The data collected from both centres are shown in the below table.

4.3.1 Learning Centres Data

The primary data facilitates the researchers to know how CLC-MIS works and what they think are major factors for a successful Management. The primary data also helps to test empirically the different hypothesis views and opinions concerning Management information system.

Tansipakha CLC

Year wise learners/participants

Table 4.1

Year Wise Participants to Tansipakha CLC

S.No.	Year	No. of Participants
1	2056	66
2	2057	67
3	2058	68
4	2059	70
5	2060	44
6	2061	25
7	2062	24
8	2063	22
9	2069	24

) In 2063 the Tansipakha CLC was declared as area of literate, this one is the first CLC of Nepal.

The above mention data can be represented as:

i.   Column Chart

Figure 4.5

Column Chart for Year Wise Participants to Tansipakha CLC
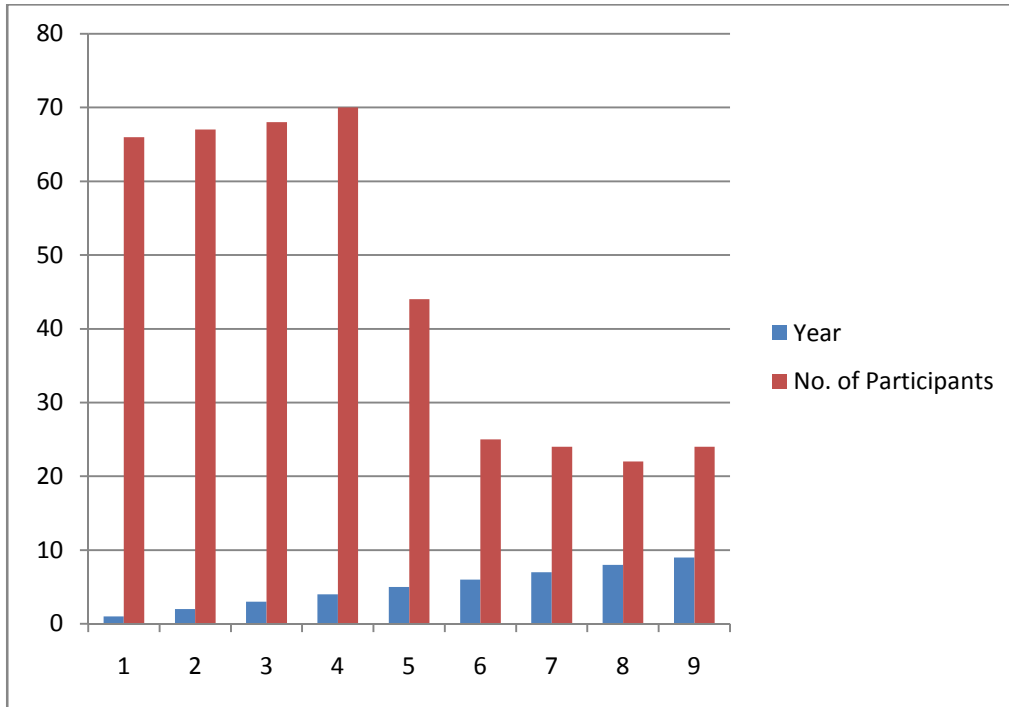
ii.   Bar Chart

Figure 4.6

Bar Chart for Year Wise Participants to Tansipakha CLC
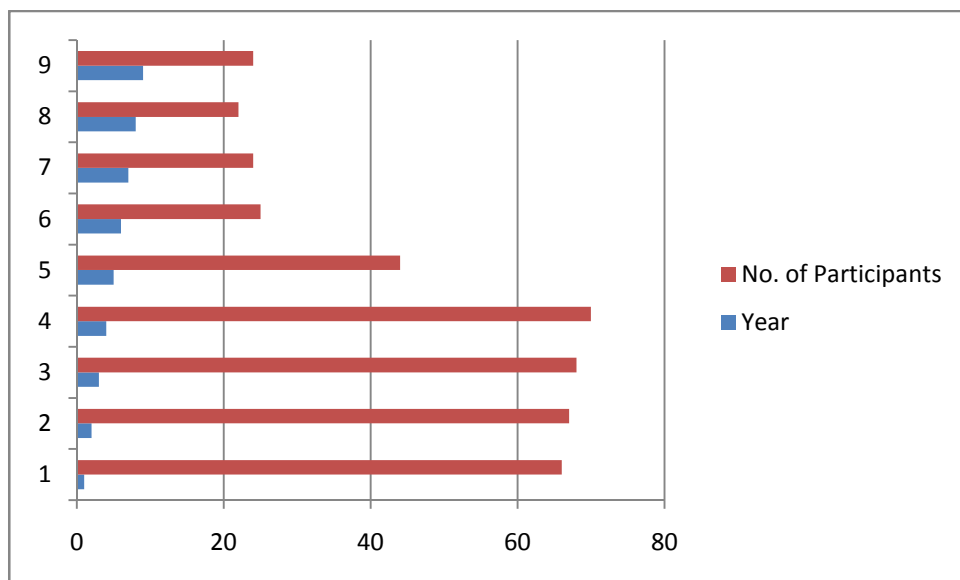
iii. Pie Chart

Figure 4.7

Pie Chart for Year Wise Participants to Tansipakha CLC
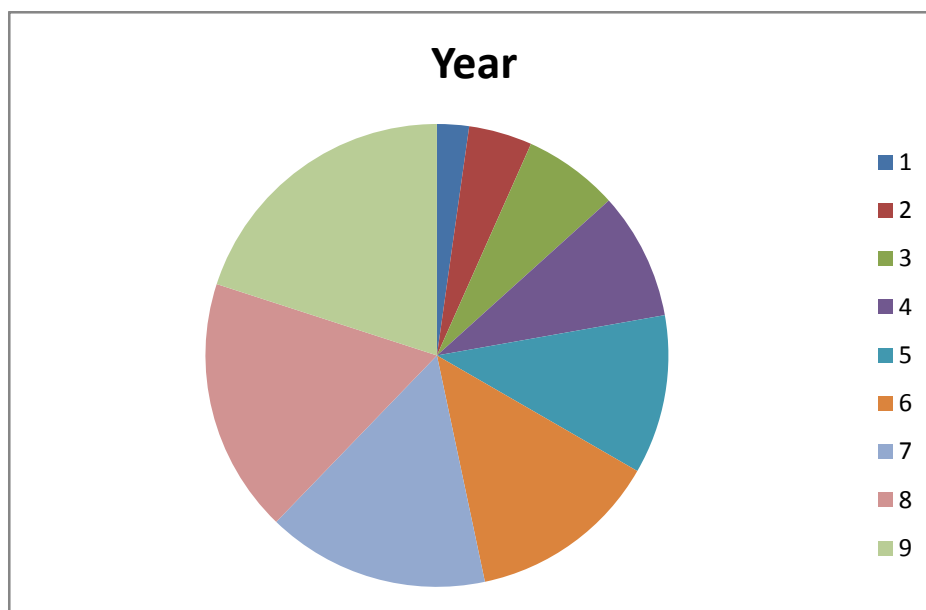
Services provided by Tansipakha CLC are listed below:

i. Teaching

ii. Training

iii. Women movement for social activities

iv. Beautician

v. Tailoring

vi. Candle

vii. Women Awareness Program

Dhapashi CLC

The total number of participants of Dhapashi CLC can be listed below:

Table 4.2

Current Participants of Dhapashi CLC

S.No.	Gender	No. of Participants
1	Male	15
2	Female	93
	Total	108

The above mention data can be represented as:

i.   Column Chart

Figure 4.8

Column Chart for Current Participants of Dhapasi CLC
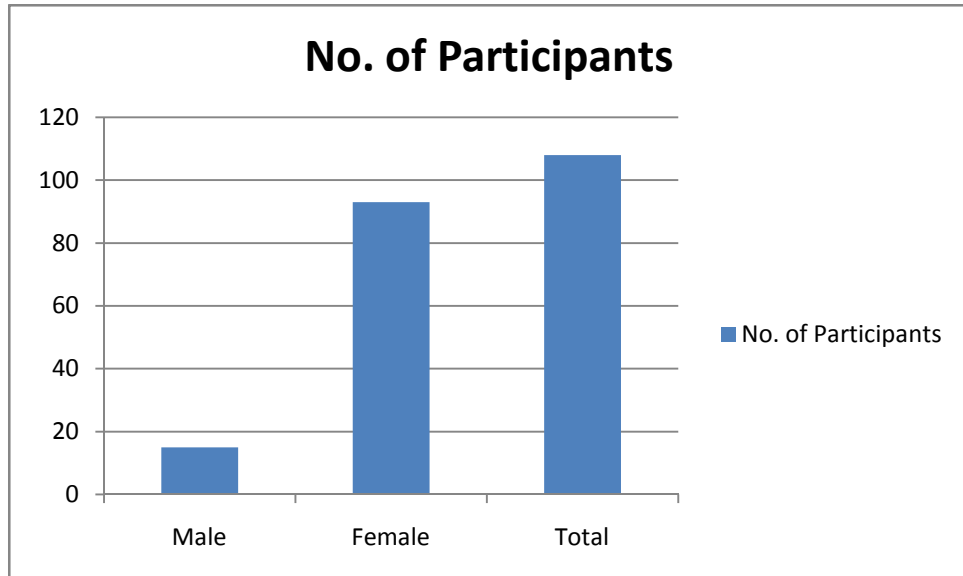
ii.   Bar Chart

Figure 4.9

Bar Chart for Current Participants of Dhapasi CLC
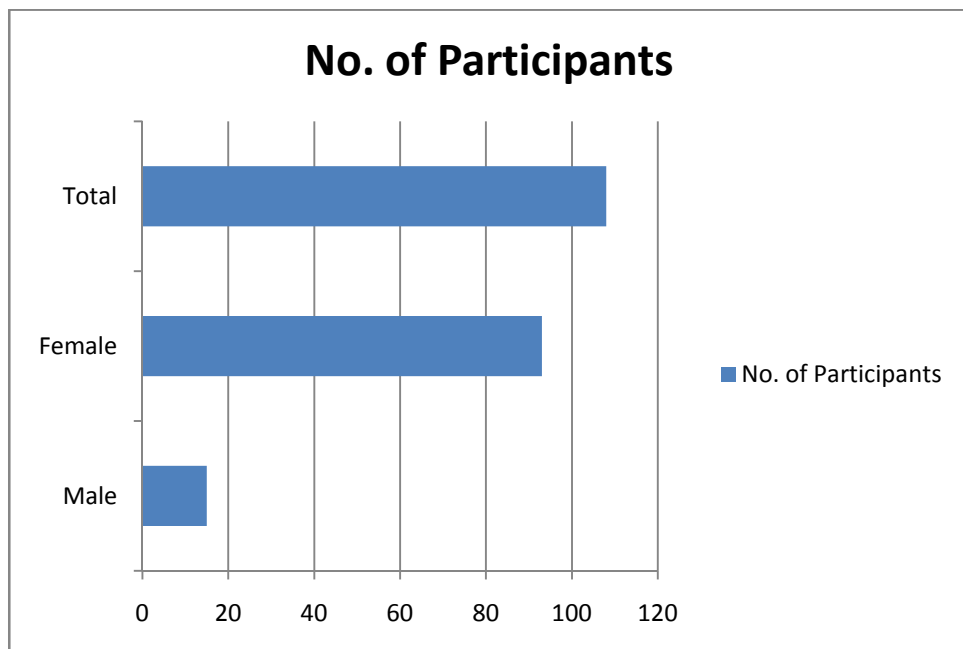
iii.   Pie Chart

Figure 4.10

Pie Chart for Current Participants of Dhapasi CLC

No. of Participants

- ■ Male
- ■ Female
- ■ Total
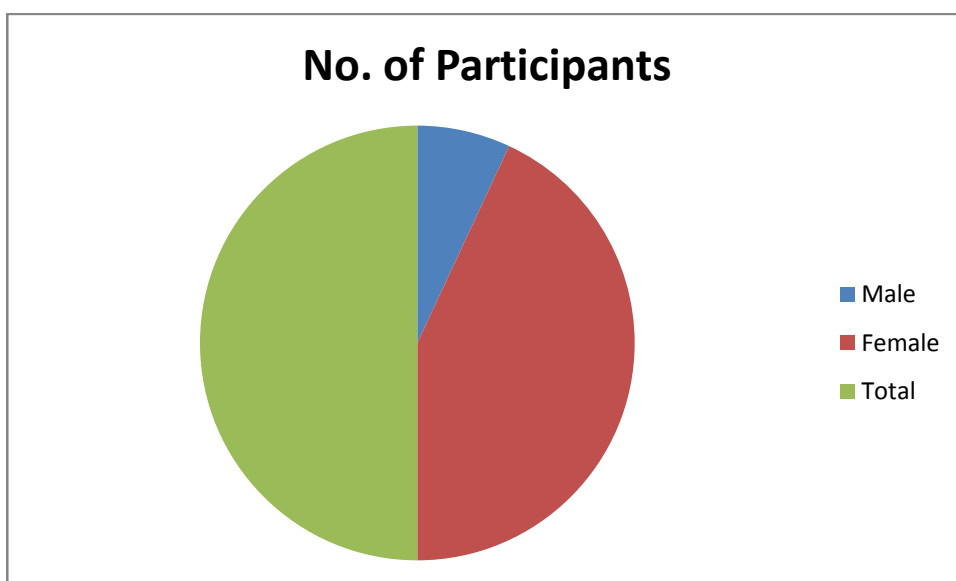
Services provided by Dhapasi CLC are listed below:

i.   Teaching

ii.   Awareness

iii.   Agriculture Fertilizer

iv.   Anchoring

v.   Beautician

vi.   Self Dependent Program

vii.   Candle

Hence We can say that the no. of participants to Community Learning Centres are growing up. The services provided by the Centres is too appreciated. Due to that services the life style of the participants is growing up as well as they are changing them as social.

4.4 System Design

4.4.1 Functional Design of CLC-MIS

Figure 4.11

Functions of CLC-MIS

Input (Preparation: what you need)	Process (Action: how to do it)	Output (What we get)
Data on: • Local population and learning needs • CLC activities • Human resources • Financial resources • Existing local learning resources • Policies and regulations • Network partners • Local group activities	Actions to: • Review, modify, and complement CLC-MIS record-keeping tools in line with national reporting formats • Systematically collect and store data • Tabulate data • Analyze data • Validate data • Update and upgrade data	Information about: • Tables, graphs and reports showing CLC performance indicators and analysis • Descriptive list of past, present and upcoming CLC programmes • List of CLC facilitators • List of learning/training materials • List of equipment and facilities • Financial summaries • Analytical reviews of CLCs, learning programmes, performance and budget, population, programmes, facilitators, learners, etc • Network partners and agencies

4.4.2 Information Distribution Process

Activities that should be conducted for the CLC to disseminate information to the local community include:

Step 1: Extracting information from the CLC-MIS on community conditions: local potential, local problems, community behaviour, daily activities and their impact, demography (by age and sex), education (number of illiterates, number of students, number of drop outs), local economy and skilled manpower needs, etc.

Step 2: Ensuring that the analysis and results are factually based on data collected and stored at the CLC-MIS, and are directly relevant to the problems and needs of the

community. Such results may include assessed implications of the following for learning and community development

Step 3: Presenting the results in simple and easy-to-understand ways, such as in leaflets, on wallpaper, in books, handbooks and in PowerPoint slides to be presented during local events. Efforts may be made to encourage such community events to be held at the CLC so as to showcase the CLC and its activities. This will help to raise community awareness, support and participation.

Step 4: One should not forget to use the CLC-MIS's data collection capacity to closely monitor and evaluate the results of CLC information dissemination activities.

Figure 4.12

Information Distribution Process of CLC-MIS

4.4.3 DFD for Community Learning Centres

Data flow diagrams illustrate how data is processed by a system in terms of inputs and outputs. It is a graphical representation of the "flow" of data through an information system. A data flow diagram can also be used for the visualization of data processing. Dataflow diagrams can be used to provide the end user with a physical idea of where the data they input, ultimately has an effect upon the structure of the whole system. They show the flow of data from external entities into the system, showed how the data moved from one process to another, as well as its logical storage

Figure 4.13

DFD for CLC-MIS
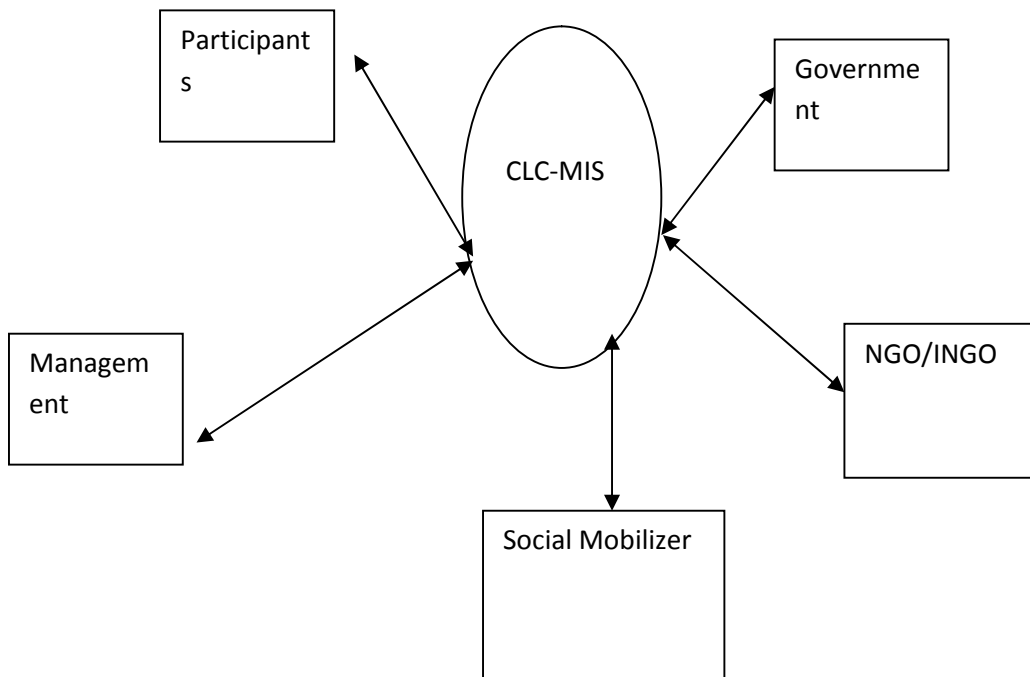
4.4.3.1 Context Diagram:

A context diagram is a data flow diagram, with only one massive central process that has everything inside the scope of the system. It shows how the system will receive and send data flows to the external entities involved. It is the basic data flow diagram of the scope of an organizational system that shows the system boundaries, external entities that interact with the system, and the major information flows between the entities and the system

Figure 4.14

Context Diagram of CLC-MIS
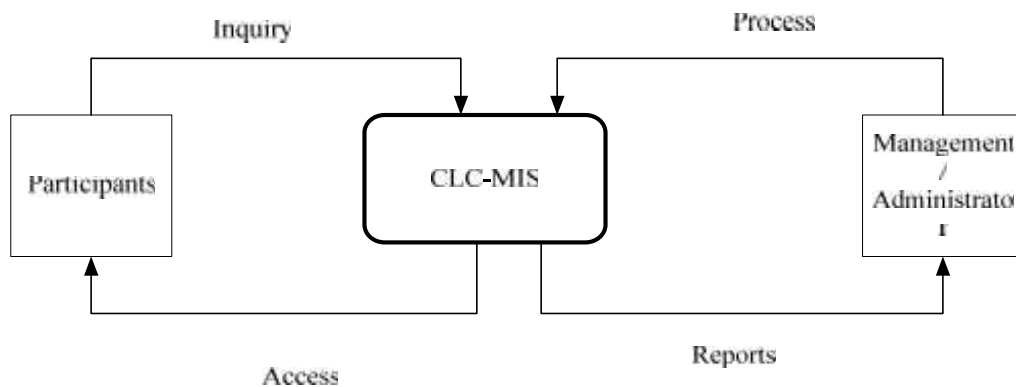
4.5   New System Based Data Presentation

4.5.1   CLC Roles and Activities

The CLC Roles and Activities of Community Learning Centers can be shown by the following figure.

Figure 4.15

CLC Roles and Activities

4.5.2 Composite of Learning Communities

Figure 4.16

Composite of Learning Communities

A learning	community city region town organisation	is any group of people	connected linked / sharing	by	common	purpose values goals interest practice beliefs geography region	which

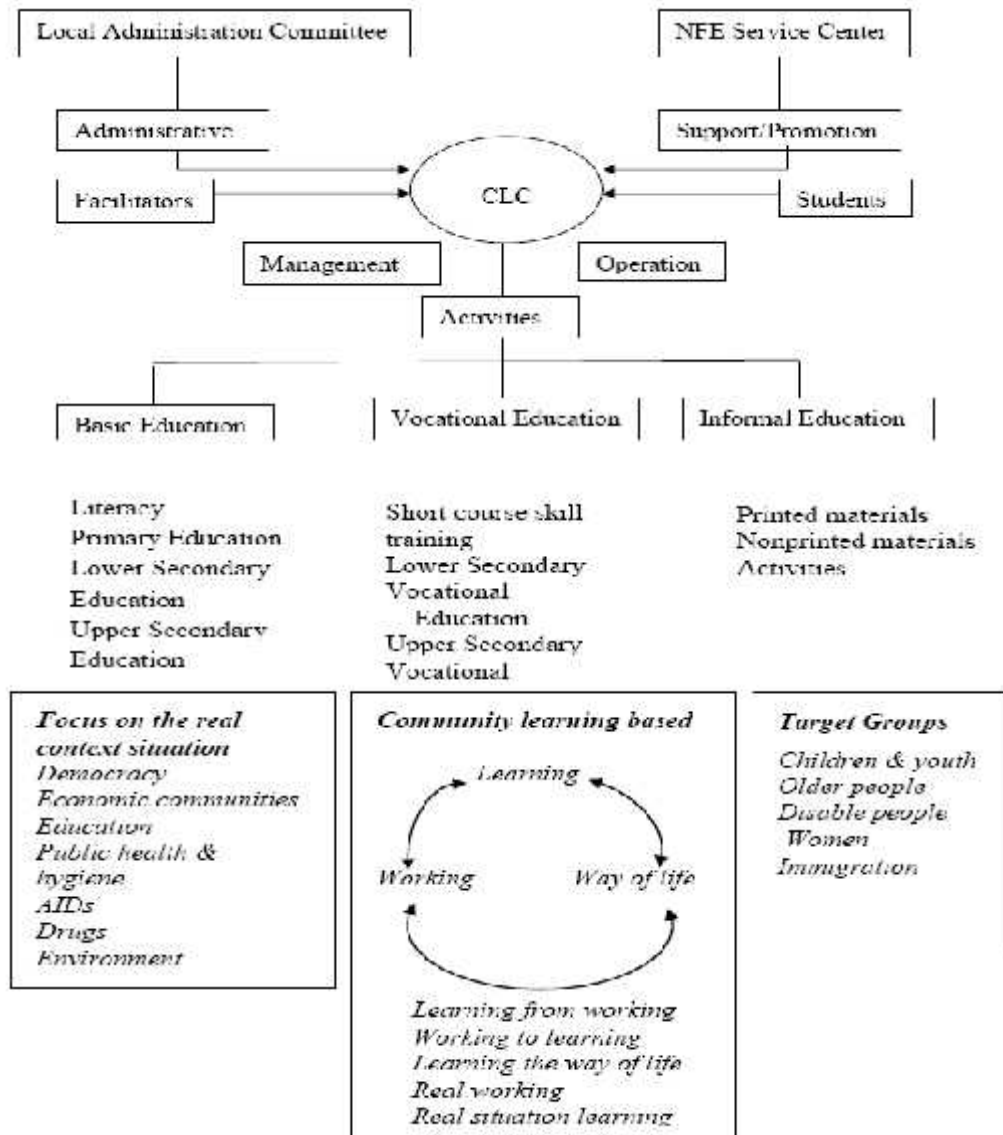| collaborates cooperates reflects goes beyond its statutory boundary/duty uses its strengths uses its social and institutional relationships strives to understand how it is changing creates learning resources addresses learning needs learns from its experiences and those of others draws on its understanding of itself	in order to	create promote develop	[a]	vibrant participative culturally aware economically buoyant socially cohesive regenerative skilled flexible	environment society workers citizens community students	while respecting a variety of	perspectives values life styles

through using by [the]	provision justification active promotion common goals	of	learning opportunities lifelong learning pro active partnerships	to enhance the potential of all	members citizens	that may create new knowledge.

Compiled from: Adult Learning Australia, 2000; DfEE, 1998; Graves, 1992; Kearns, et al., 1999; Landry & Matarasso, 1998; Longworth, 1999; Kilpatrick et al., 2002.

4.5.3 Steps in Setting up CLCs

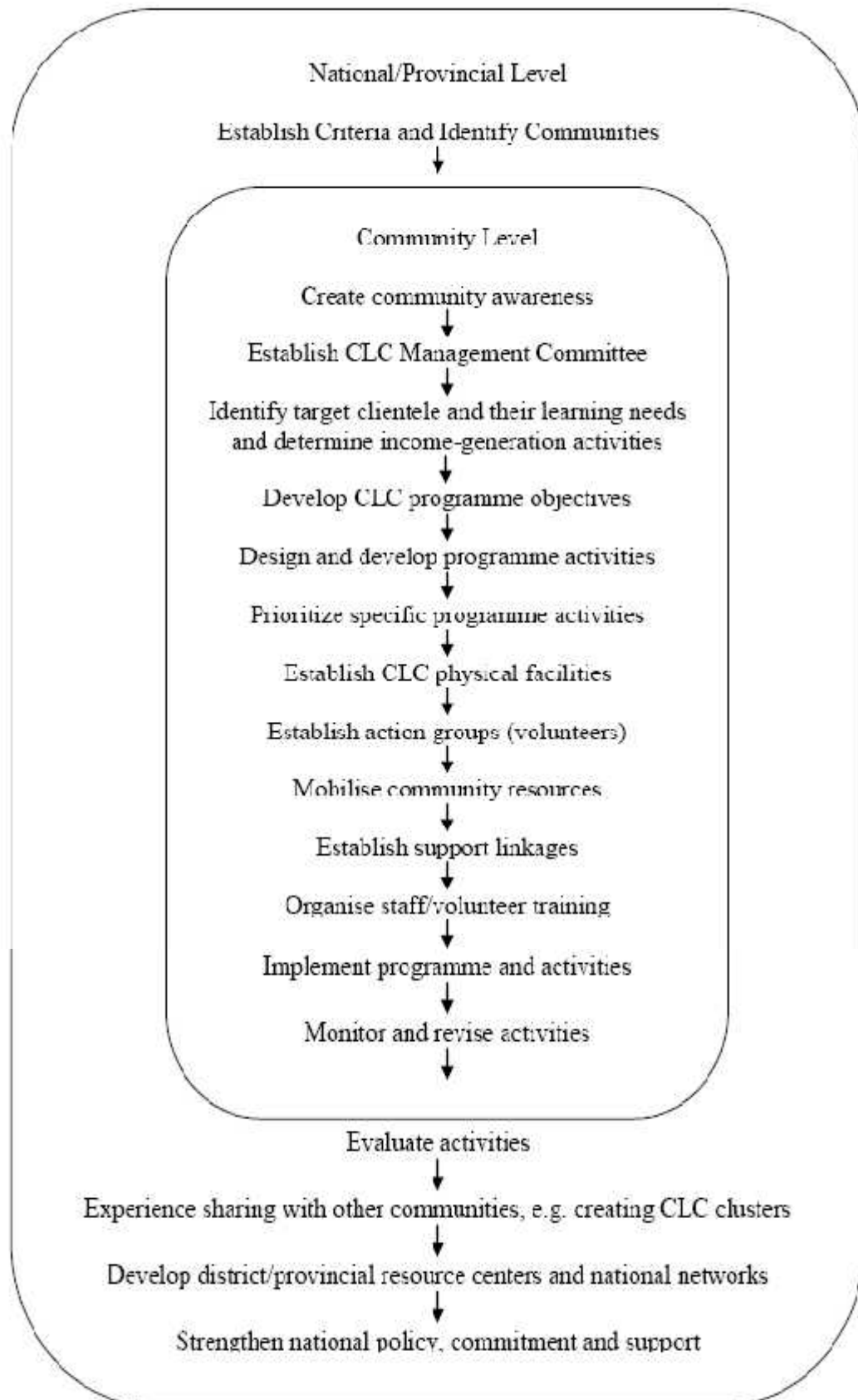The below figure shows the steps to set up the Community Learning Centers

Figure 4.17

Steps in Setting up CLCs

National/Provincial Level

Establish Criteria and Identify Communities

↓

Community Level

Create community awareness

↓

Establish CLC Management Committee

↓

Identify target clientele and their learning needs
and determine income-generation activities

↓

Develop CLC programme objectives

↓

Design and develop programme activities

↓

Prioritize specific programme activities

↓

Establish CLC physical facilities

↓

Establish action groups (volunteers)

↓

Mobilise community resources

↓

Establish support linkages

↓

Organise staff/volunteer training

↓

Implement programme and activities

↓

Monitor and revise activities

↓

Evaluate activities

↓

Experience sharing with other communities, e.g. creating CLC clusters

↓

Develop district/provincial resource centers and national networks

↓

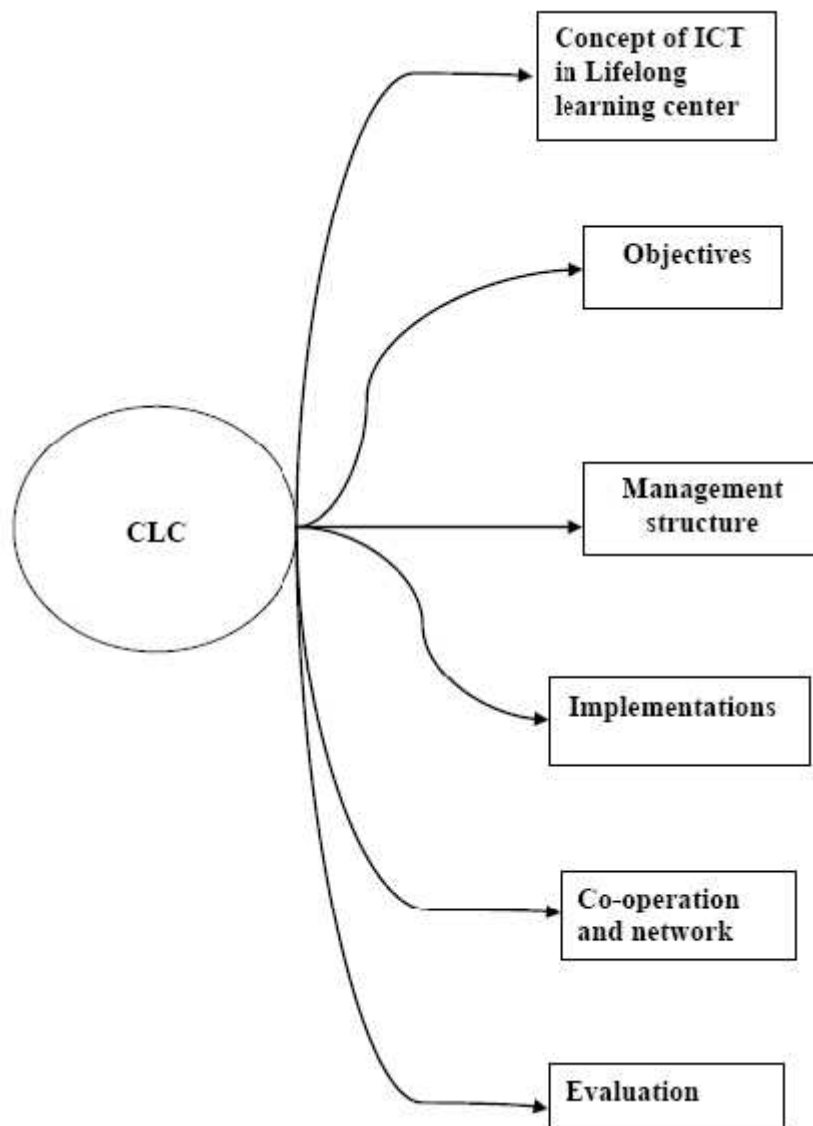Strengthen national policy, commitment and support

4.6 CLC Model

The CLC model is based on the results of the fields which examined the needs of the villagers and their livelihoods. The components of the CLC model, including the concepts of establishing, objectives, management, implementation and evaluation are all represented.
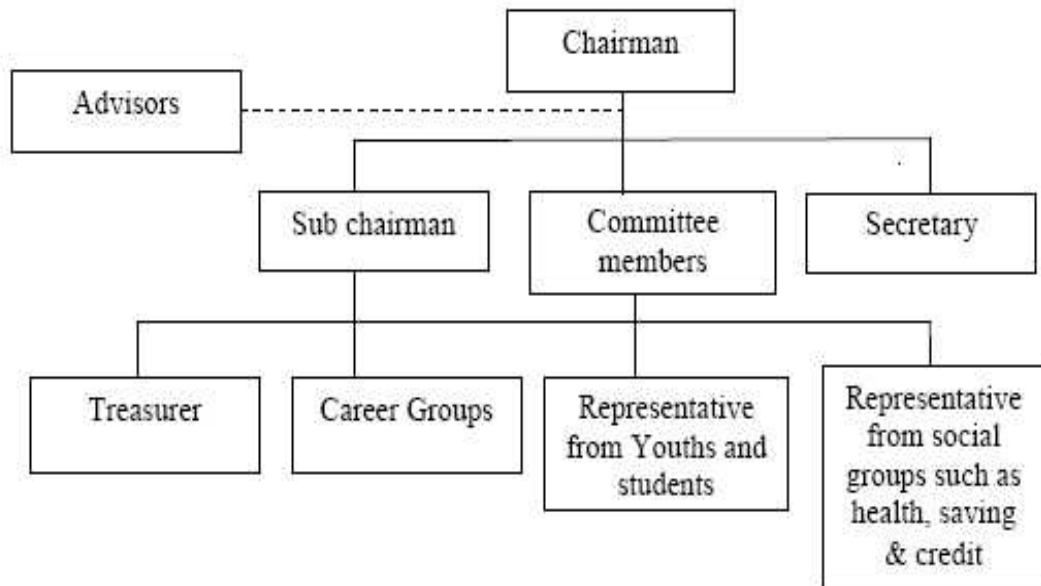
Figure 4.18

CLC Model

4.7   CLC Committee Structure

The CLC committee structure can be described by following figure

Figure 4.19

CLC Committee Structure

The CLC Committee Structure provides the details portfolio to run the Community Learning Centers. In this hierarchy, the chairman is on the top level and the chairman directly advised by the Advisors and then the chairman do manage different types of sum committee, centers secretary, treasurer, career groups etc.

4.8   Strategy for CLC-MIS

Strategy is the determination of the basic goals and objectives of the CLC, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals. CLC strategy development is one of the most important reasons for setting up the CLC-MIS, collecting/analyzing data, and evaluating results. The determination of relevant CLC strategies must be supported by timely and reliable data and accurate analysis so that strategies can be realistically implemented in a way that responds to local community needs.

Figure 4.20

Monitoring and Evaluation Process of CLC-MIS
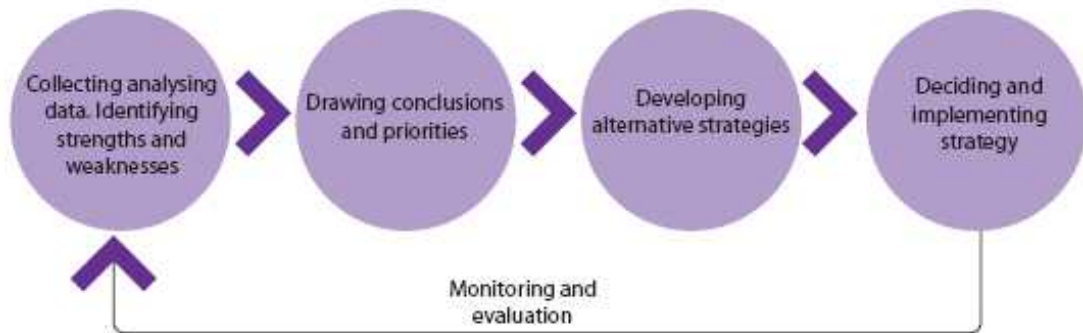
4.9 Limitation of Existing System

The existing system was apparently maintained to focus on crucial information in interest of the management team. But this focus made the existing system overlook crucial aspects in terms of manpower and skill management. This was the main reason why development team often faced frequent change requests and demands for modification the system at periodic intervals. We can mention the limitations of the systems as:

) All centers are suffering from the Infrastructure problem

) There are neither enough teaching material nor office equipments

) There is no computerized system to all learning centers

) They don't have technological environment to learn

4.10 Comparison between New and Existing System

The CLC could function as the venue for education and training activities, for community information and resource services, for community development, coordination and networking. The main idea is that a CLC is a revolving mechanism, which could aim at empowerment, social transformation and quality of life through lifelong learning, resource mobilization and social action. The activities should be flexible, participatory and allow for leadership to emerge from any member of the community, while support mechanisms are also made available through strengthened

coordination, networking and partnership. Hence, we can differentiate the current learning system and community learning system by below mention figure.

Figure 4.21

Difference between School and CLC
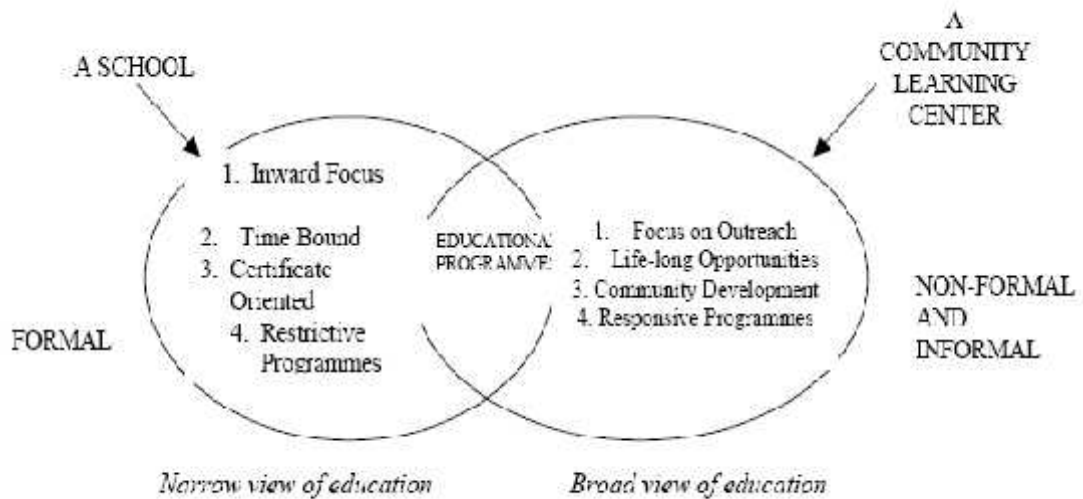
4.11 Application Modeling for CLC-MIS

An operational CLC-MIS that brings together comprehensive data about local learning needs and about the CLC's capacity and performance is crucial to effective planning and management of responsive and effective CLC learning programmes. This effectiveness, in turn, works to mobilize resources from partners and other stakeholders.

Figure 4.22

Application Modeling for CLC-MIS
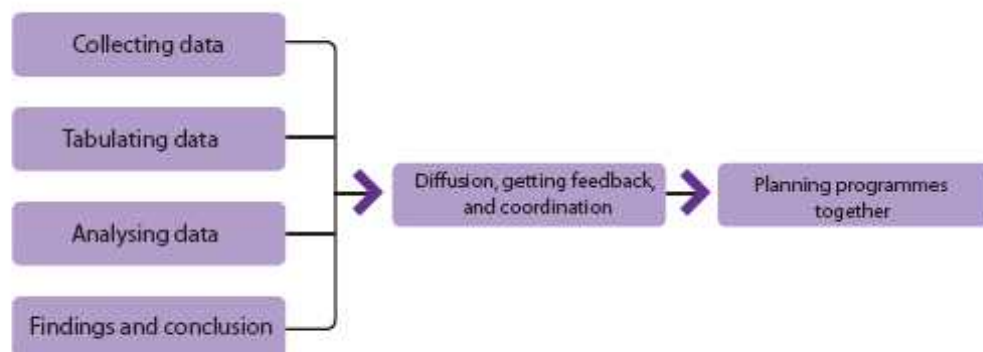
This process can be explained as:

Step 1: By collecting comprehensive data on community conditions and needs, the CLC-MIS can conduct analysis and identify priority areas (and strategies) for programme development. Taking into account the CLC's capacity, a number of such programmes can be selected for detailed planning. Before going into detailed planning, the programme ideas and priority learning programmes should be made known to the local community,and a systematic effort should be made to gather feedback and advice.

Step 2: On the basis of community feedback, the final selection of priority CLC programmes can be made. Detailed planning can begin by fine-tuning programme objectives, contents and methods, and by then estimating programme capacity, timing and resources needed in order to respond to the identified learning needs. A careful review can be made of existing programme schedules at the CLC and the availability of suitable facilitators and learning materials. Other CLCs that have conducted similar programmes may be contacted for their advice and sharing of experiences and learning resources. Stakeholders at local and higher levels will be requested to mobilize funding and other support in kind.

Step 3: Once there are clear and positive answers to the above prerequisites, a detailed programme plan can be prepared which clarifies such issues as when and where the programme will be conducted, who will organize the programme, who will teach the programme, what will be the contents and methods, what kind of learning materials and facilities will be used, and how will resource support be provided, etc.

4.12 Resources Needed to Establish CLC-MIS

4.12.1 Legal Framework

The establishment of a CLC-MIS should be backed by the adoption of government policies that clearly confer a legal status for the CLC-MIS to be an official information and reporting system for a country's community learning centres.

4.12.2 Human Resources

As can be understood from the previous chapters, all persons in a CLC who are involved in collecting, recording, processing, analyzing and/or disseminating data and information contribute to the operations of the CLC-MIS.

The number and skill level of the human resources required to operate the CLC-MIS depend on the scale of a CLC's activities and the amount of data to be handled.

Table 4.3

Basic Competencies Needed for Operating a CLC-MIS

Position	Competencies, experience and / or knowledge
CLC managers / CLC Committee	Programme planning and implementation Needs assessment Monitoring and evaluation Data collection Data management Data analysis Reporting and presentation skills ICT skills Resource mobilization and management Networking Group meeting facilitation
Facilitators and trainers	Needs assessment Training design and facilitation Presentation skills Monitoring and evaluation ICT skills Interview /communication skills
Community leaders	Community needs identification Meeting facilitation

4.12.3 Financial Resources

Financial resources can be mobilized from the local governement, agencies, NGOs, industries, businesses, and community bodies. Face-to-face meetings with them to introduce the benefits of the CLC-MIS can help to increase understanding and develop interest in this and other CLC activities. For example, the CLC-MIS can provide information about past and planned learning programmes that relate to the local economy and skill requirements which fit with business interests and strategies.

In consequence, the CLCs can call for financial support to learning programmes that address these needs.

Other financial resources could come from:

〕 Budget allocated for promoting and implementing government programmes

〕 NGO and donors' project funds

〕 Contributions by learners

〕 Donations

4.12.4 Infrastructure and Material Resources

Infrastructure and material resources needed for the CLC-MIS include:

• Provision of basic facilities: room, furniture, electricity, telephone line

• User guidebook, ICT handbook, training materials

• Other necessary materials: stationery, filing cabinet, calculators

• Reference documentation: policy, rules and regulations, tutorials, etc

• Other CLC-MIS supported equipment: computer, Internet access

4.12.5 Information Resources

Today, information is becoming an increasingly important resource for community development. The CLC-MIS relies on the supply of data and information, and in turn disseminates information to benefit the local community and stakeholders

4.13 Mobilizing Resources for a CLC-MIS

Good coordination and networking among relevant agencies and organizations from central to grassroots levels can help to mobilize resource support for a CLCMIS. The CLC manager and management committee members can actively participate in the process of developing the CLC-MIS, and at the same time advocate and lobby for further financial support and technical assistance from the local bodies to higher levels (e.g. district education authority) up to the central level.

The resource mobilization process will be helped if information and benefits of the CLC-MIS are at the same time disseminated and demonstrated. This is because by improving needs assessments, data collection and analysis, local stakeholders and upper levels in the education system will see the value of the results and, thereby, will encourage overall support for the CLC-MIS.

The following activities can help to mobilize resources for the CLC-MIS:

Nominating a CLC-MIS focal point at the CLC for systematic MIS operations management

     i.   Reporting and feedback. This person should be responsible for assisting the CLC manager in resource mobilization.

     ii.   Creating and publicizing a clear and operational action plan for developing and using the CLC-MIS in the local community.

     iii.   Submitting this action plan to local and higher authorities for feedback, consultation and support.

     iv.   Creating good networking linkages with other agencies, local institutions, schools or other sectors during the developmental stage of the CLC-MIS action plan. This will raise local awareness about the project and may help to encourage local financial or other support.

     v.   Involving community people to raise awareness. This can increase support by encouraging them to participate and help develop the CLC-MIS, for example by actively participating in the data collection either as volunteers or as data suppliers.

4.14 CLC-MIS Capacity-Building

Capacity-building includes training provided to improve the competencies of specific target groups at the CLC, such as managers, data collectors, facilitators or relevant partners. Capacity-building is important for the CLC-MIS because the system must be managed and operated in a systematic and technical manner.

4.14.1 Formal Training

Formal training includes orientation, seminars, and workshops conducted by professional training institutions or government departments offering specific programmes designed to address the MIS training requirements of individuals or organizations. CLCs should actively seek out these training opportunities and send CLC-MIS staff to take part in order to acquire specific competencies needed for developing and implementing the CLC-MIS.

4.14.2 One-on-One Tutorials

One-on-one tutorials, where the trainer and trainee work together intensively face-to-face, are effective in developing or strengthening the capacities of individuals who have difficulties learning in large groups. They can also be used to focus on specific skills that the rest of the group may already have, or if the trainee is expected to pass on the skills to other members of the CLC or community. Generally, for this latter case, it is better if more than one person attends the training so that if one member does not understand one part, the others can help. The participants of this training might include:

- CLC managers
- CLC administrative staff
- Facilitators
- Volunteers

4.14.3 On-the-Job Training

On-the-job training is an activity where participants are in the actual workplace and so can observe and at the same time "learn by doing." The participants of this training can be:

- CLC managers
- CLC administrative staff
- Facilitators
- Volunteers

On-the-job training is very useful for acquiring manual and manipulative CLC-MIS skills, such as collecting data, keeping records, entering data into computer, analyzing, upgrading or updating the data.

4.14.4 Field Visits and Study Tours

Field visits or study tours are important activities to build the capacity of CLC-MIS personnel. These activities can help them to observe and gain more exposure to and experience in CLC-MIS operations by learning about what others have been doing. Based on CLCMIS information from other more advanced CLCs, the CLC manager or management committee can decide on the best place to visit, depending on the

time, costs and specific capacity-building needs. However, the leader of the field visit or study tour should make a decision based on good information and knowledge of the place to be visited, ensuring it contributes significantly to the capacity of the people involved. Careful attention should be paid to the overall cost of the field visit to guarantee that these funds cannot be better utilized in developing other aspects of the CLC-MIS.

4.14.5 Distance Learning

Distance learning means that the learning is not carried out face-to–face, but through correspondence, audio-visual aid, or telecommunication, including the Internet. This is especially convenient for working people who can receive learning materials and study at home by themselves during their spare time. After studying the materials, the learners need to fulfill some tasks as requested and hand in their assignments for evaluation by the trainers/teachers. Many learning resources on MIS and CLC can also be accessed and downloaded from various websites with open courses.

4.14.6 Community Meetings and Information Dissemination

A community meeting is an activity aimed at discussing critical issues, problems, and concerns that need to be discussed with members of the community. The participants can be:

- Community leaders
- Volunteers
- Managers / CLC Committee
- Teachers
- Members of the community
- NFE officers

4.14.7 Information and Communication Technology (ICT)

This type of training is good for human resource development at CLCs, particularly for CLC facilitators, trainers or full-time staff who are called upon to operate the CLC-MIS. It will facilitate data management in a rapid, accurate and effective manner. Many topics can be provided for basic computer training:

Typing skills: Free software can

- Be downloaded at various web links for individual practice.

- Data entry
- Basic MS Office skills such as Word, Excel and PowerPoint: MS Word is needed for documentation and reporting, whereas Excel is used for accurate and automatic calculation of indicators as well as to create charts and graphs for analyzing data. PowerPoint, meanwhile, can be used to present the information in interesting and interactive ways.
- Internet access and information exploration: Lessons should covers creating an e-mail address, using the Internet to search for and research information, and using e-mail and the Internet to share results with other institutions.
- Basic maintenance of hardware and software: CLC staff can run various programmes, such as virus scanning and simple repairs. This kind of task should be done regularly.

4.14.8 Participatory Community Activities

Other kinds of community activities can also facilitate capacity-building for CLC-MIS staff - for example, communication skills, management and understanding of the participatory approach. Such activities require the involvement of community members and the active collaboration of CLC staff and community leaders, as well as partnership with related stakeholders. Local cultural and other community gatherings at stadiums, schools, or religious gathering places can help people to initiate their interest in participating in CLCs and local activities.

4.14.9 Peer Learning

Peer learning is an effective participatory learning or capacity-building technique for CLC-MIS staff. This can be conducted informally in pairs or groups of CLC staff, between CLC staff and the community, or through local wisdom. The learners can discuss their concerns in an open and supportive manner, and also work out recommendations. During the process, they can build on their confidence in operating a CLC-MIS, communication skills and presentation skills. This kind of capacity-building can take place at any time and at any convenient venue (temple, meeting room, households, etc.).

Table 4.5

Planning Capacity-Development

Capacities to be Developed or Strengthened	Competencies Needed	Type of Training	Participants	Resources
Need assessment	Communication skills	Group meeting	CLC managers, facilitators, collectors	
	Group meeting facilitation	Material self-study	CLC managers, facilitators, collectors	
Data collection	Development of tools: forms, questionnaire,		CLC managers, facilitators, collectors	
	Interview skills		CLC managers, facilitators, collectors	
Data entry	Microsoft office: Excel, Word		CLC facilitators/ full-time staff	
	Typing skill		CLC facilitators/ full-time staff	
Data analysis	Development of graphs, charts, tables		CLC manager, facilitators/ full-time staff	
	Summary reporting writing		CLC manager, facilitators/ full-time staff	
	Presentation skills		CLC manager, facilitators/ full-time staff	
	Using software		CLC manager, facilitators/ full-time staff	
Data utilization	How to utilize MIS for different target users		- CLC manager, facilitators, collectors, community - Managers at upper levels - Relevant partners	

[Source: UNESCO Asia Pacific Report 2008]

4.15 Major Finding

We can mention the major finding of the CLC as:

- Identifying the nature of participants
- Classify the different types of natures of the CLCs
- Identifying the impact of the CLC on the society after attending the CLC programs and initiatives.
- To impart literacy and post literacy program to learners especially to out of school girls and illiterates and semi-literate adults.
- To provide continuing education for the improvement of quality of life and income generation capabilities of the villagers.
- To form saving and credit groups and impart skill to undertake individual and group projects for income generation.
- To protect, improve and properly utilize a community forest situated in the community.
- To undertake short term and long term community development programs
- Concept of new system or modify the system
- Analyzing technical structure to establish the CLC- MIS

CHAPTER - V
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

Access to information is important. People need information to develop their potential through education and training, to succeed in business, to enrich their cultural experience, and to take control of their daily lives. Information is a key contributor to the development of individuals and communities.

Over the last 30 or 40 years, a large number of initiatives and projects has been launched in an attempt to overcome the problem of unequal access to information. The specific aim of this study was to provide an analytical comparison of the different types of community centers, telecenters and multimedia centers, and to distil the lessons that can be learned from them. Within this broad aim, the study focused on eight specific issues:

- Policy environment
- Organisational structure
- Management of the operation and its staff
- Programmes and services
- Financing, particularly costs and revenues
- Outputs, outcomes and their impact on the communities and their development
- Factors that determine success and failure
- Sustainability of policy, programmes and finances

Hence we can say that: Community-based information and technology centers have come a long way since the early community libraries of the 1960s. In the years to come, we are likely to see a continuing process of evolution.

The centers of the future are likely to place an even greater emphasis on learning and skills development. The dramatic growth of information on the internet will continue. Furthermore, the information content will be more sophisticated and interactive. The development of e-government and e-commerce could have a profound impact on the lives of people in remote communities. Digital technology will become not just more sophisticated, but cheaper and easier to use. People and communities will want to use the technology for more than just accessing information from the internet. The

question is: Will they do so collectively through the development of community centres?

The experience in developed countries tends to suggest that they may not. As people become more prosperous, and as the equipment and telecommunications become cheaper, they tend to use the equipment in their homes rather than in a community centre. The second factor that influences the answer to this question is the fragility of the centres. Many centres have been established in the last forty years, but very few of them seem to be sustainable in the long term. Unless it becomes possible to develop a model of provision that is self-sustaining in the long term, or it becomes possible to provide long-term support from public funds, a question-mark must remain over the future prospects of community information and technology centres.

5.2 Conclusion

The concept of learning communities draws on a wide body of theory related to learning and sociology. Learning communities have much to recommend them in an increasingly complex world where we cannot expect any one person to have sufficient knowledge and skills to confront the complexities of institutions, our society and individuals and the tasks these face.

They are consistent with a constructivist approach to learning that recognizes the key importance of interactions with others, and the role of social interactions in the construction of values and identity. Learning communities can minimize risks for individuals in the increasingly complex world of the twenty-first century.

Community information and technology centres have been around for a long time. They continue to be established in response to needs within the communities that they serve. They share an underlying purpose, which is to achieve equality of access to information; or, at least, to reduce levels of inequality. The nature and scope of the centres has changed over time as they have responded to changing needs and to changes in the technology of information.

It is not possible to specify a model form of community information and technology centre. The essential characteristic of successful centres is that they reflect the needs of the communities that they serve. As each community is unique, it follows that it is not sensible to adopt a "one size fits all" approach. Indeed, where this has been attempted, the approach has been less than successful (Harris and Rajora, 2006).

5.3 Recommendations

International organizations such as UNESCO and ITU, as well as development agencies, have done much to promote the concept of community information and technology centres. They have provided initial funding for many centres and have supported numerous experimental services that were designed to test different models of service in different types of communities. They have reinforced this by publishing sets of guidance that will help others who wish to develop their own centres.

Despite this good work, the main challenge remains: to convince public bodies to take responsibility for the long-term funding of the centres. The main recommendation of this study, therefore, is that they should begin the process of convincing national and local governments that funding effective community-based information and technology centres is as important as providing other essential services and infrastructure.

As a first step in this process, a study should be launched to establish the true capital and running costs for a range of different centres. A recent UNESCO evaluation of community multimedia centres (Creech et al., 2007) did not address the issue of costs. Likewise, in the present study, it has proven to be very difficult to gather reliable information about costs.

An assessment of the short-, medium- and long-term impacts of the centres on the communities that they serve should be undertaken. As this study recognizes, measuring the impact of community-based information and technology centres in quantitative terms is very difficult. This should not, however, be a cause for inaction. Much can be learned from qualitative studies and from objective assessments by impartial observers.

Once the evidence has been collected, the organizations and agencies concerned (in association with other similar organizations and working through established channels) should lobby and persuade national governments that they have a responsibility to provide long-term funding for centers and agencies that are best placed to provide access to information for all.

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