CHAPTER I

INTRODUCTION

1.1 Background of the Study

Economic development of the any country depends upon increase in peoples' productivity and rise in their incomes. The increase in productivity and incomes will ultimately lead to poverty reduction. Thus, reducing poverty is associated with people's increased access to employment and income generating opportunities. Poor people or low income people have a considerable productive potential which can be mobilized for productive activities thereby creating self-generated employment.

The access to the financial services is an important for raising the incomes of poor and low income people by mobilizing their resources to productive activities. The generation of self-employment in any activities requires investment. However, the accumulation of capital may be difficult for poor and low income people. Under such circumstances, financial institutions can help the poor to find their own capital and invest in employment-generating activities. However, commercial banks and other formal financial institutions fail to provide for the credit needs of poor mainly due to their lending terms and conditions. For example, poor people can't afford the required collateral to get loan from those commercial banks. Nepal's banks or other financial institutions find it difficult to serve small businesses profitably as bank procedures for small business loans are too complex, making such lending unnecessarily long and expensive for both the businesses and the banks (Ferrari, 2011).

Under such circumstances, the need for the informal financial institutions which can provide small scale financial services to low income people arises. Microfinance is one of the alternatives which provide financial services to the communities who have no collateral to offer against the loans they take but have indigenous skills and strong desire to undertake economic activities for self employment and income generation. Ledgerwood (1999) points out that the goals of microfinance institutions are to service the financial needs of un-served or underserved markets

to create employment, reduce poverty, help existing business grow or diversify their activities, empower women or other disadvantaged population groups, and encourage the development of new business. The Case of the Grameen Bank of Bangladesh Microfinance is a popular variety of economic interventions that aim to improve poor people's access to financial technologies.

Nepal is underdeveloped country. The living standards of the people are very poor and more than 40 percent people are under poverty line. They remain largely excluded from access to sustainable financial services (Hansen, 2011). Financial needs of people are fulfilled through informal money lender or traditional informal cooperative movements such as Parma, Dhikuti, Guthi and Dharma Bhakari etc which have been existed in Nepalese societies. However, they charge higher interest rate and lack of loan security exists in these loan providers as they operate without fulfilling legal procedures.

Saving and Credit Cooperative Societies (SACCOS) help those who have no access to the financial services of formal financial institutions. The SACCOS are member owned controlled and capitalized institutions for the providing saving and credit services to their members. SACCOS play vital roles to improve the living standard of the people by reducing the negative impact of local money lenders in the area they operate in. They collect savings from members and lend to the members for their profit making activities.

The objective of SACCOS of providing financial services to low income group will meet sustainably if SACCOS can achieve a good financial performance. Gingrich (2004) has studied performance of community based SACCOS in Nepal and found that most SACCOS in Nepal are successful because of their strong financial performance which include reliance on member savings and control of administration costs. Even though Saving and Credit Cooperatives (SACCOS) mentioned in our study tries to achieve their objectives to improve the living standard of middle and lower class people by providing facilities of saving and credit, education and training, there are some major problems behind to achieve them.

This study examines and compares the financial performance of two SACCOS in Bhaktapur District of Nepal and their ability to provide financial services. Two selected SACCOS of

Bhaktapur District are Shankhadhar SACCOS and Sahayogi SACCOS. Despite same purpose and coverage area, these two SACCOS are performing differently. Therefore, this study focuses on comparison of SACCOS's saving and credit policies such as loan provision, loan collection, member's participation, their management and operation etc. Similarly, the performances of SACCOS are examined through PEARL monitoring system and financial ratios are compared among selected SACCOS. The financial indicators of PEARLS monitoring system of each SACCOS are compared to find their operational efficiencies.

1.2 Statement of Problems

Even though Saving and Credit Cooperatives (SACCOS) mentioned in our study tries to achieve their objectives to improve the living standard of middle and lower class people by providing facilities of saving and credit, education and training, there are some major problems behind to achieve them. Saving and credit institutions in several countries have reveled that the majority of those have encountered serious loan recovery problems. Beside these, weak organizational structure, lack of proper management, insufficient member participation, lack of inter relationship among co-operatives, less participation of women, weak information and planning within the co-operative are some other problems of co-operatives.

The majority of members and their administrators' area lack of understanding the various issues connected with the processes by which the particular form of cooperative operates. Most of the people involved in more than one SACCOS without the sound knowledge about it. Besides that, people get membership in co-operative not to be actively participate but only to fulfill their need of money lending only. As a result, they become passive once their requirement has been fulfilled. In most cases, the SACCOS fail to increase deposit and loan flow due to lack of proper planning and strategy implementation. People wish to deposit their saving in that co-operative, where interest rate is high and want to lend money with low interest rate. In this regards, the competition among SACCOS increases the interest rate on deposit and decreases the interest rate on the loan. The greatest interest rate risk occurs when the interest rate on deposit goes up faster than the institution can or is willing to adjust its lending rates. The gap between the interest rate on deposit and interest earned on loans and investments can sometimes very less. The interest

cost is considered to be low since it doesn't be able to cover 100% of the operating costs. But for the members this cost is considered to be high since the interest they receive on their saving is very less than the interest they pay on loans. This in turn discourages member's motive to deposit as well as to borrow. Therefore, the saving and credit policies of SACCOS and their effects are to be thoroughly studied.

In most cases, the members of the SACCOS cooperatives, including their administrators and board members are unaware and unable to comprehend the financial problems in SACCOS. It may cause the financial loss to the members and adversely affect the member confidence. Therefore, the evaluation of performance of SACCOS is required to find out the existing financial problems and attract the attention of management to resolve such problems timely.

Therefore, this research tried to study the problems in SACCOS by addressing the following questions:

- Which types of saving and credit policy are adopting in co-operatives?
- What is the existing loan provision? What is the member's participation in co-operative activities?
- What are the loan collection procedures of these cooperatives and the impact on the members?
- What are the major financial performance indicators of SACCOS?

1.3 Objectives of study

The main goal of this study is to analyze policies adopted by SACCOS and evaluate their performance by using PEARLS monitoring system. The specific objective of this study has been outlined as follows:

- To compare and analyze the credit and saving policies of co-operatives.
- To study and compare existing loan provision and the collection procedures adopted by the cooperatives and its impact on the members.
- To evaluate the financial performance of the SACCOS by using PEARLS monitoring system

1.4 Significance of the Study

The significances of this study are to shed light on the problems of Credit and Saving Cooperatives by comparative study of saving and credit policies adopted by two representative SACCOS in Bhaktapur District of Nepal and their impact on the performance of SACCOS. The performances of SACCOS are studied by PEARLS monitoring system. And this study suggests possible solution measures to deal with the problems in SACCOS based on comparative performance study.

1.5 Limitations of the Study

There are some limitations on this study. This can be pointed out as follows:

- The study will only carry out in Bhaktapur district. Basically it is micro level study and may not present the whole country.
- It is only focused on saving and credit co-operatives.
- The study depends on annual report and reliability or responses of respondent.

1.6 Organization of Thesis

The whole study has been divided into six chapters. They are as follows:

Chapter 1: Introduction: As described above, it mainly contains the background of the co-operatives and situation of saving and credit co-operatives, objectives, problems, significant and limitations.

Chapter 2: Review of Literature: This chapter presents the analysis of historical studying from books, articles, research reports, thesis reports etc and various published and unpublished documents of the related societies.

Chapter 3: Research Methodology: In chapter three it mainly covers research methodology in which it covers introduction, research design, data collection, nature and sources of data presentation, tool of data analysis, and method of analysis.

Chapter 4 Comparative Study of Policies of SACCOS: This chapter compares the saving and credit policies of adopted by two SACCOSs in Bhaktapur district. The Answers of semi-structural questionnaire obtained from employee of SACCOSs were used to compare SACCOS policies such as sources of capital, the loan processing procedures, loan collection and monitoring, saving systems etc.

Chapter 5: Comparative Analysis of Performance of SACCOS: This chapter examines the performance of Shankhadhar SACCOS and Sahayogi SACCOS in the framework of PEARLS by using publicly available financial data such as annual reports and the ledger of Shankhadhar and Sahayogi SACCOS.

Chapter 6: Conclusion and Recommendation: This chapter summarizes the conclusion drawn from analysis of the saving and credit policies of SACCOSs and the outcomes from the performance analysis of SACCOS by PEARLS system. Finally, the recommendations for further improvement were made at the end of this chapter.

CHAPTER II

LITERATURE REVIEW

2.1 Socio-Economic Context of Nepal

2.1.1 Geography and Population

Nepal is a land locked country sandwiched between China in the north and India in other three directions. Its altitude ranges from 70 meters to 8,848 meters from the mean sea level. The country stretches from East to West with a mean length of 885 km and north to south with a mean width of 193 km. The country has a total of 147,181 square kilometer area. Geographically, the country is divided into three ecological zones, the high mountains and Himalayas in the north, the hills and small mountains in the middle and the Terai (plains) in the south. Administratively, the country is broadly divided into five development regions - eastern, central, western, mid-western and far-western development regions. The five development regions have 14 zones and 75 districts.

The population census of 2001 indicated an annual growth rate of 2.25% and on this basis the total population has been estimated to have reached to 28.6 million in 2011 (CBS, 2011). According to the National Living Standards Survey (2004), the country has 52.8% economically active population (15-59 years) and the average household size is 5.3 (CBS, 2011).

Table 2-1: Nepal Population Growth

Year	**Rural population growth (%)**	**Urban population growth (%)**	**Total population (million)**
1981	14.0	1.0	15.0
1991	16.8	1.7	18.5
2001	19.5	3.2	22.7
2011*	22.7	5.7	28.6
Annual growth Rate	**1.7%**	**6.6%**	**2.25%**
Source: CBS, 2011 (www.cbs.gov.np) *Note: *Estimated projection based on Census 2001 by the Central Bureau of Statistics*			

The average population density in urban areas in Nepal was 985 persons per km^2 compared to 136 persons per km^2 for rural areas. However, the urban densities in Kathmandu valley are more than 10 times the density of other urban areas.

Table 2-2: Regional Population Densities in 2001

Regions	Population	Percentage	Area (km^2)	Density (per km^2)
Hill/Mountains	576,024	2.5%	1047	550
Terai	1,263, 781	5.6%	1,158	1,092
Kathmandu Valley	995,966	4.4%	97	10,265
Urban Total	3,227,879	14.2%	3,276	985
Rural Total	19,509,055	85.8%	143,905	136
Source: CBS, 2011 (www.cbs.gov.np)				

2.1.2 Macroeconomic Situation

At the current prices, the annual per capital income in 2008-09 stood at US $ 484. Economy of Nepal is still heavily dependent on agriculture, which accounts for about 40% of the Gross Domestic Products (GDP). More than 73% of economically active populations are dependent on agriculture and related activities for their livelihood. Agriculture, tourism, hydropower and forestry are the major areas for broad-based development of the country.

Table 2-3: Macroeconomic Indicators

Particulars	2006/07	2007/08 R	2008/09 P
Annual Change in nominal per-capita GDP (%)	8.89	9.93	14.73
Annual change in real per-capita GDP (%)	1.43	3.39	2.26
Per Capita GDP (USD)	391	468	473
Per Capita GNI (USD)	395	473	484
Gross domestic saving as % of GDP	9.87	11.21	8
Gross national saving as % of GDP	28.61	31.53	32.31

2.1.3 Poverty Situation

Nepal is one of the poorest countries in the South Asia region and in the world. According to Nepal Living Standards Survey (NLSS) 2003/04, Taking Rs. 7,696 as the average national poverty line, 30.9% of the population of Nepal falls below the poverty line. During the last eight years, the people living below the absolute poverty line, has fallen to 31 percent from 42 percent (Table 2-4). In the urban areas people under poverty line has declined by 12 percentage points, while in the rural areas it has declined only by 8.65 percentage points making the overall reduction of people below poverty line by 10.91 percentage points (Table 2-4).

However, the Gini coefficient, which measures the inequality in income distribution, has reached to 0.41 in FY 2003/04 from 0.34 in FY 1995/96 (MFI Nepal, 2009). This implies a sharp increase in the income of the rich people as compared to the poor people. The Gini coefficient between geographical regions (accessible and remote areas) and between various castes and ethnic groups has also grown bigger (MFI Nepal, 2009).

Table 2-4: Change in Poverty between 1995/96 and 2003/04

Poverty	**Population below the poverty line (1995/96)**	**Population below the poverty line (2003/04)**	**Poverty Decrease %**
Nepal (overall)	41.8%	30.9%	26%
Rural	43.3%	34.6%	20%
Urban	21.6%	9.6%	56%
Source: Nepal Living Standards Survey (NLSS), 2003/2004 (www.cbs.gov.np)			

2.2 Socio-Economic Context of Bhaktapur

Bhaktapur is around 13 km east of Kathmandu, the capital of Nepal and is the smallest district of Nepal. It occupies an area of around 119 km² at an altitude of 1,401 meters above sea-level. Bhaktapur district consists of two municipalities Bhaktapur Municipality and Madhyapur Thimi Municipality, and 16 village development committees (VDCs). The population census of 2001 indicated total population of Bhaktapur as 225,461 (about 1895 person/sq.km) at an annual growth rate of 2.68% and on this basis the total population has been estimated to have reached to about 300,000 in 2011 (CBS, 2011). Urban population of Bhaktapur accounts 53% of total population. According to the Central Bureau of Statistics (2001), the district has 57% economically active population (15-59 years) and the average household size is 5.47.

At the current prices, the annual per capita income in 2008-09 stood at US $ 1862 (CBS District Profile, 2001). Economy of Nepal is still heavily dependent on agriculture, which accounts for about 40% of the Gross Domestic Products (GDP). About 65% of economically active populations are dependent on agriculture and related activities for their livelihood. Remaining 31% are engaged with Industry and commerce, 3% are in service sector.

According to MDG progress report, UNDP, Nepal, about 5 % of the proportion of population of Bhaktapur lives with less than 1$ per day is 5.4 and the proportion of population falls below the

national poverty line is about 8.8%. However, poverty gap ratio which measures depth of poverty – how far individuals are below poverty line – was found to be 32.7. This indicates that although there are fewer individuals below poverty line in Bhaktapur, there are some individuals who are far below the poverty line there (MDG Progress Report, 2011).

2.3 Financial Service Providers

In developing countries, financial service providers can be classified into formal, semiformal, and informal sectors. The distinction between formal, semi formal and informal sector is based primarily on whether these sector are bounded by governments' regulation and supervision. Table 2-5 indicates the wide range of operators that can be found in each group (FAO, 1995).

Table 2-5: Providers of Financial Intermediation Services

Formal sector	*Semiformal sector*	*Informal sector*
Central bank Banks • Commercial banks • Merchant banks • Savings banks • Rural banks • Postal savings banks • Labor banks • Cooperative banks Development banks • State-owned • Private Other nonbank institutions • Finance companies • Term-lending institutions Building societies & credit unions Contractual savings institutions • Pension funds • Insurance companies Markets • Stocks and Bonds	Savings and credit cooperatives Multipurpose Cooperatives Credit unions *Banques populaires* Cooperative quasi-banks Employee savings funds Village banks Development projects Registered self-help groups and savings clubs Nongovernmental organizations (NGOs)	Savings associations Combined savings and credit associations—rotating savings and credit associations and variants Informal financial firms Indigenous bankers Finance companies Investment companies Nonregistered self-help groups Individual moneylenders Commercial Noncommercial (friends, neighbors, relatives) Traders and shopkeepers NGOs

Source: Food and Agriculture Organization 1995.

2.3.1 Formal Financial Sector

Formal financial institutions are chartered by the government and are subject to banking regulations and supervision (Ledgerwood, 1999). They include public and private banks, insurance firms, and finance companies. The formal sector includes various kinds of banks (commercial, development, specialized, regional, cooperative), insurance companies, social security schemes, pension funds, and in some countries, capital markets. The formal sector is largely urban based and organized primarily to supply the financial needs of the modern sector.

The formal financial sector in Nepal includes the following institutions: Nepal Rastra Bank (NRB), commercial banks, development banks, and finance companies. The NRB was established in 1956 and is Nepal's central bank and is responsible for regulating and supervising country's financial institutions. The following Table 2-6 depicts the types and number of financial institution licensed by NRB by mid January 2011 (NRB[1], 2011) and the financial institutions are classified into A, B, C, D and none according to capital size.

2.3.2 Semiformal Financial Sector

According to Ledgerwood (1999), *Semiformal institutions are not regulated by banking* authorities but are usually licensed and supervised other government agencies. Examples are credit unions and cooperative banks, which are often supervised by a bureau in charge of cooperatives. NGOs are sometimes considered part of the semiformal sector, because they are often legally registered entities that are subject to some form of supervision or reporting requirements. Semiformal institutions provide products and services that fall somewhere between those offered by formal sec-tor and informal sector institutions. In many countries semiformal institutions often receive donor or government support (Ledgerwood, 1999). Saving and Credit Cooperatives (SACCO), Microfinance Credit Development Bank, Non Governmental Organizations (NGOs) etc. licensed by NRB with limited banking activities can be classified into Semiformal financial sector.

2.3.3 Informal Financial Sector

Informal financial intermediaries operate outside the structure of government regulation and supervision. They include local moneylenders, pawnbrokers, self-help groups, and NGOs, as

well as the savings of family members who contribute to the microenterprise. Often they do not comply with common bookkeeping standards and are not reflected in official statistics on the depth and breadth of the national financial sector. Often loans are granted without formal collateral on the basis of familiarity with the borrower. Social sanctions within a family, a village, or a religious community substitute for legal enforcement (Ledgerwood, 1999).

Table 2-6: Number of Financial Institutions

Type of institutions	Number of institutions
Commercial Banks (A grade)	30
Development Banks (B grade)	87
Finance Companies (C grade)	79
Micro-Finance Development Banks (MDBs) (D grade)	21
Savings and Credit Cooperatives – limited Banking Activities	15
NGOs (Financial Intermediaries) – involved in microfinance operation	45
Total	**277**
Source: Banking and Financial Statistics No. 56, Nepal Rastra Bank, January, 2011	

Nepalese informal financial sector includes either individual lenders such as landlords, merchants, farmer-lenders, goldsmiths, pawnbrokers, friends, and relatives or group informal institutions like dhukuti, dharam bhakari, and guthi. Informal lenders provide credit without procedural complexities and have flexibility regarding repayments and collateral, which does not exist in informal sector (ADB and NRB, 1994). Traditional rotating credit groups such as dhukuties, dharam, bhakari, guthies, etc. are well established and widespread in Nepal and represent a truly local and indigenous response to credit needs. There are over 20,000 informal community-based organisations, such as self-help groups and rotating savings and credit associations (ROSCAs), moneylenders, traders, friends and relatives. Friends and families are the main providers of informal loans in both urban and rural areas; they provide 84.4% and 60.5% of total informal loans respectively (RMDP, 2009).

2.4 Microfinance Sector

2.4.1 Definition

The term microfinance refers to the provision of financial services such as saving and credit to poor and low-income households who do not have access to commercial banks. Ledgerwood

(1999) states in her Microfinance Handbook, published by the World Bank, that the term microfinance refers to the provision of financial services (generally savings and credit) to low-income clients. The clients are often identified as traders, street vendors, small farmers, service providers (hairdressers, rickshaw drivers), and artisans and small producers, such as blacksmiths and seamstresses. She points out that many such clients have a stable source of income since they have multiple sources of income. Although they are poor, they are generally not considered to be "the poorest of the poor".

The Asian Development Bank (ADB) defines microfinance as the provision of a broad range of financial services such as deposits, loans, payment services, money transfers, and insurance to poor and low-income households and their micro-enterprises (ADB 2000, p.6). The ADB definition includes low income households as well as those below the poverty line since there are a significant number of low-income households that are not below the poverty line, but have limited access to financial services, especially in rural areas.

Robinson (2001) points out that the term microfinance refers to "small-scale financial services, primarily credit and savings, provided to people who farm or fish or herd; who operate small enterprises or micro-enterprises where goods are produced, recycled, repaired, or sold; who provide services; who work for wages and commissions; who gain income from renting out small amounts of land, vehicles, draft animals, or machinery and tools; and other individuals and groups at the local levels of developing countries, both rural and urban area."

2.4.2 Microfinance Definition in Nepal

Microfinance is viewed in Nepal as the provision of a broad range of financial services to poor and low income households such as micro-savings, loans, payments/or money transfers and micro-insurance. Microfinance products in the country are micro-credit, medium & small enterprise credit, group savings, project loan and micro-insurance (NRB and CECI, 2008). The institutional definition of micro-credit in Nepal is the following:

- Nepal Rastral Bank (NRB), Central Bank in its regulation defines the loan up to Rs. 60,000 by Micro-finance Development Bank (MFDB) as micro-credit.

- Rural Self Reliance Fund (RSRF) recognizes loan up to Rs. 60,000 per borrower given to the deprived sector as micro-credit and a group loan up to Rs. 150,000 given to the members on joint liability for project loans.

2.5 History of Microfinance Sector in Nepal

Rural credit in Nepal began in 1956 with the opening of Credit Cooperatives in Chitwan Valley to provide loans to the re-settlers coming from different parts of the country. The government through the creation of the Cooperative Development Fund (CDF) arranged some credit support to the resettlers through those cooperatives. In 1963, the government established the Cooperative Bank, which was later converted into the Agricultural Development Bank Nepal (ADBN) in 1968 (RMDC, 2009).

The Cooperatives faced problems of shortage of fund for credit disbursement to their members on the one hand and misappropriation of borrowed fund for personal uses by some of their officials on the other. Thereafter, the government introduced the Cooperative Revitalization Program in 1971. It authorized the Agricultural Development Bank Nepal to run cooperatives under its guidance and management (RMDC, 2009). Poverty alleviation rural development programs were initiated through the Small Farmers Development Programs (SFDP) on a pilot basis in 1975 by ADBN. On the basis of the success of these programs, the SFDP was transferred into SFCLs (Small Farmers Cooperative Limited), which were managed by the farmers themselves (NRB and CECI, 2008) in 1993/94. ADBN had also introduced women centered programs, mainly Production Credit for Rural Women (PCRW), through IFAD fund in 1982 for the uplifting of the economic status of low income rural women.

The Nepal Rastra Bank (NRB) initiated Small Sector Lending in 1974 directing the commercial banks (CBs) to invest 5% of their deposit balance in Small Sector, which was later designated as the "Priority Sector Lending" in 1976. The NRB subsequently initiated "Intensive Banking Program" (IBP) in 1981 to boost up PSL lending to the low income group and required CBs to raise PSL to 8% of CBs' loans and advances, which was further raised to 12% in 1989 (RMDC, 2009). The main contributors of PSL were two states controlled commercial banks namely Nepal Bank Ltd. (NBL) and the Rastriya Banijya Bank (RBB).

The National Co-op Development Board (NCDB) was established under the NCDB Act of 1992 and composed of Government representatives and people having experience and knowledge about the co-operative movement. The cooperative movement got momentum since government enacted a new Cooperative Act in 1992 to ease promotion and development of cooperatives as a vehicle of economic development in the rural areas. The government also emphasized the role of cooperatives for extending credit facilities and other services to the rural people in its Eight National Plan (Münkner and Shrestha, 1998).

Two Gramin Bikas Banks (GBBs) were established in 1992 replicating the Grameen Bank model of Banglades. In the meantime, two NGOs – the Nirdhan and the Centre for Self-help Development (CSD) also launched microfinance programs replicating Grameen model in 1993 and 1994 respectively (RMDC, 2009)..

The financial Intermediaries Act was enacted in 1998 to regulate and legalize the financial intermediaries NGOs (FINGOs) on carrying out microfinance activities. With the enforcement of this Act, two FINGOs, Nirdhan, and the Centre for Self-Help Development (CSD) also got registered under this Act (RMDC, 2009).

In order to avail small wholesale funds to cooperatives and NGOs providing loans to the low income groups, Government established Rural Self Reliance Fund (RSRF) in 1991 contributing Rs. 20 million from the government. The government with the assistance from ADBN and NRB also established the Rural Microfinance Development Centre Limited (RMDC) in 1998, to provide larger wholesale loans to MFIs through implementation of the ADB assisted Rural Microfinance Project (RMP). The government had also instituted another wholesaler, the Sana Kisan Bikas Bank Limited (SKBBL) in 2001 to provide wholesale funds to the Small Farmers Cooperative Limited (SFCL) in 2001. With all these initiatives and efforts microfinance has gained a new momentum as an industry (RMDC, 2008).

In 2004, the government introduced the Banks and Financial Institutions Ordinance (which was converted into an Act in 2006) which has a provision of licensing microfinance banks also as

class 'D' banks (RMDC, 2008). Total numbers of MFIs are 9 MDBs, 47 FI-NGOs, 2957 SACCOS and 205 SFCLs as of July 16, 2006 (Dhakal, 2007).

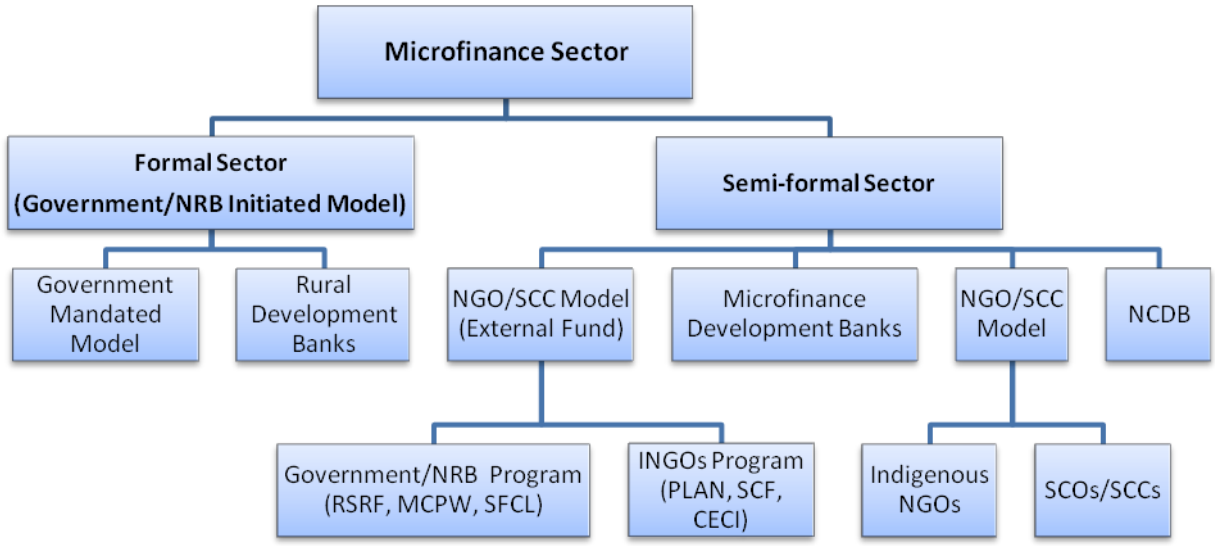
2.6 Models of Nepalese Microfinance

Nepalese microfinance sector can be classified as formal and semi-formal (Figure 2-1). Formal sector is initiated by government/NRB to provide financial services to the rural poor. NRB provides capital to NGOs and RRDBs for on lending through the Rural Self-Reliance Fund. The ADBN operates the Small Farmer's Development Program and the Institutional Development Program. The Nepal Bank Ltd (NBL) and the Rastriya Banijya Bank (RBB participate in the Intensive Banking Program of the NRB and provide micro-loans to clients of the Production Credit for Rural Women project. Also, Regional Rural Development Banks (RRDB), or Grameen Bikas Banks (GBBs) provide credit and saving in rural areas. The Banks each have paid-up capital of Rs 60 million provided by HMG and the Nepal Rastra Bank (75%) and by selected commercial banks (25%.) (DEPROSC-Nepal and Ledgerwood, 1997).

The semi-formal models are either government mandated programs or are initiated by NGOs, Cooperatives and Micro-finance banks as shown in Figure 2-1. The major government-mandated models are Intensive Banking Program (IBP) developed by NRB in 1974 mandating commercial banks (including joint venture banks and state-owned banks) to lend a percentage of their outstanding portfolios to priority sectors, the Small Farmers Development Program (SFDP) developed by the ADB/N, the Production Credit for Rural Women (PCRW) project implemented by Ministry of Local Development (MLD) in 1984 with NBL and RBB, and UNICEF as their partners, specifically targeted to women (DEPROSC-Nepal and Ledgerwood, 1997).

NGOs/SCCs that receive external funds are either government programs or INGO programs. Government Programs are Rural Self-Reliance Fund (RSRF) established in 1990 maintained by the NRB, Micro Credit Project for Women (MCPW) funded by the Asian Development Bank (ADB) and administered by WDD of MLD, and Institutional Development Program (IDP) established in 1994 by ADBN which later converted into organizations called Small Farmers Cooperative Ltd. (SFCL) (DEPROSC-Nepal and Ledgerwood, 1997).

INGOs such as Centre for International Studies and Cooperation (CECI), have been actively supporting local NGOs/SACCOS provide funds for financial activities and technical assistances (DEPROSC-Nepal and Ledgerwood, 1997). Indigenous NGO and SACCOS that have internal funds provide financial services within their villages or inter village level. Indigenous NGOs/SACCOS are financially sustainable since they utilize their own funds and cover their minimal operating costs. Nirdhan and the Centre for Self-Help Development (CSD), and five government owned Regional Rural Development Banks (RRDBs), or Grameen Bikas Banks (GBBs.)



Source: NRB and CECI, 2008

. Figure 2-1: Microfinance Sectors in Nepal

2.7 Cooperatives Movements

2.7.1 Definition, Types and Principles of Cooperatives

International Coopearative Alliance (ICA, 2011) has defined Cooperative as "a co-operative is an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically controlled enterprise". A cooperative may also be defined as a business owned and controlled equally by the people who use its services or by the people who work there (Wikipedia, 2011). All active members create the general body, which elects the Board of Directors. The Board appoints its paid employees to run the cooperative.

The fundamental objective of a cooperative is not "to maximize the profits" as in a capitalist company, nor to act initially like "actor of a social change" as in the non-profit-making associations, but "to maximize the benefit which the members users can obtain from their commercial transactions with the cooperative."

The co-operative model can be applied to any business activity such as agriculture, fisheries, consumer and financial services, housing, healthcare, transport, education, production etc. Some of common types of cooperatives are as follows:

- **Housing cooperative:** A housing cooperative is a legal mechanism for ownership of housing.
- **Utility cooperative:** A utility cooperative is a type of consumers' cooperative that is tasked with the delivery of a public utility such as electricity, water or telecommunications services to its members.
- **Agricultural cooperative:** Agricultural cooperatives or farmers' cooperatives are cooperatives where farmers pool their resources for mutual economic benefit.
- **Saving and Credit cooperative:** Saving and credit cooperative provide financial services as banks

The International Cooperative Alliance has approved the following seven fundamental characteristics to be Cooperatives (ICA, 2011):

- Voluntary and Open Membership
- Democratic Member Control
- Member Economic Participation
- Autonomy and Independence
- Education, Training and Information
- Co-operation among Co-operatives
- Concern for Community

2.7.2 History of Cooperatives in Nepal

The Co-operatives movement began in Nepal in 1954 when a Department of Co-operatives (DOC) was established within the Ministry of Planning, Development and Agriculture (DOC, 2011). The first co-operatives formed in Nepal were co-operative credit societies with unlimited

liability created in the Chitwan District as part of a flood relief and resettlement programme in 1954. They got legal recognition after the enactment of Cooperative Societies Act 1959. A Land Reform Act came into force in 1964 including a compulsory savings scheme, according to which farmers had to save a portion of their crop. The co-operative programme was integrated into the land reform programme (Munkner and Shrestha, 1997).

In 1963, the government established the Cooperative Bank under Co-operative Bank Act of 1963, which later was merged into the Agricultural Development Bank, Nepal in 1968. Rural based cooperatives were established mainly to distribute loans for agricultural inputs to farmers. These cooperatives were initially managed by the members and supervised by the Department of Cooperatives. Later, in 1973 the government decided to hand over the management of these cooperatives to the Agricultural Development Bank Nepal (ADBN).

The guided co-operative programme worked on the assumption that co-operatives could not function properly if the members were in control. Therefore, it was decided that the management should be taken over by staff of the DOC and later of the ADBN. The role of members diminished and public support decreased. Co-operatives were perceived by many as Government offices. Providing managers and paying their salaries was intended as important assistance to co-operatives but had the effect of alienating members from "their" co-operatives (Munkner and Shrestha, 1997).

In 1976, 'Sajha Program' was launched and the Cooperatives were renamed as 'Sajha Societies'. The compulsory savings collected under the Land Reform Program were converted into the share capital of the Sajha Societies. The NRB study in 1983/84 found that most of the cooperatives were running at losses and over 75% of the outstanding loan was overdue for more than 1 year (RMDC, 2008). Under the Sajha Programme many people were made members against their will, when their compulsory savings during the Land Reform Programme were converted into co-operative shares. They were also not allowed to manage the co-operatives of which they were made members, because the members of the management committees or boards were ex-officio political workers of persons nominated to serve on the committees, while the responsibility for the management was with the ADBN. This resulted in the dominance of rich and powerful

people and hurt the image of co-operatives in the eyes of ordinary co-operators and the public (Munkner and Shrestha, 1997).

After the restoration of multiparty democracy, a National Co-operative Development Board was constituted and in 1992 a new Co-operatives Societies Act promulgated which recognizes the democratic character of co-operatives and ensures their operational autonomy. The Sajha Societies Act was replaced by the **Cooperative Act 1992.** Under this Act, a group of 25 persons from a community can form a cooperative by registering it with the Department of Cooperatives, Ministry of Agriculture and Cooperatives (RMDC, 2008). Co-operatives are now expected to grow and to expand their activities according to their own plans.

The SACCOS generally emerged spontaneously but were sometimes assisted by local or international NGOs. The SACCOS do not come under the regulatory framework of the Nepal Rastra Bank (NRB). However, SACCOS that have been granted licensed from NRB for limited banking services have been providing services to non-members as well. They come under NRB's regulation and supervision.

2.7.3 Institutes Working for Development of Cooperatives in Nepal

The National Planning Commission (NPC) and the Ministry of Agriculture and Cooperatives (MOAC) that are responsible for policy formulation, program approval and progress monitoring at the national level. Other major national players in the field of cooperatives in program planning and implementation are Department of Cooperatives (DOC), National Cooperative Development Board (NCDB), and National Cooperative Federation (NCF).

a. Department of Cooperatives (DOC)

The Department of Cooperatives (DOC) was established as early as 1953. In accordance with the Cooperative Act of 1992 (amended in 2000), and Cooperative Bylaws 1993, the DOC seeks to achieve the objective of registration, supervision, regulation, monitoring and promotion of cooperative societies/unions within the framework of the cooperative principles put forward by the International Cooperative Alliance (ICA).

b. National Cooperative Development Board (NCDB)

The National Cooperative Development Board (NCDB) was created in 1992 as a permanent national organization. NCDB carries out the formulation and implementation of necessary policies for the development of cooperatives, provide grand/subsidy for cooperative societies/unions, technical support and researches on cooperatives etc. The Minister or State Minister of Agriculture and Cooperatives chairs the Executive Committee of the Board. The Board has 23 members.

c. National Cooperative Federation (NCF)

The National Cooperative Federation of Nepal (NCF) is an umbrella organization of all the central and district level cooperative unions. It was established in June 1993. It is a member of the International Cooperative Alliance (ICA). Its objectives are to promote and develop cooperative unions/societies, to support economic and social programs, to assist in improving management within cooperative unions/societies, and (d) to provide leadership in the cooperative movement. The NCF board has an elected Chairperson and 23-members as Board of Directors. The composition of the Federation Board is thus more representative of its member organizations that select their representatives democratically through election.

2.7.4 Outreach of Cooperatives in Nepal

There are 11,302 cooperatives in operation as of April 2008 (Table 2-7). Out of this 4,432 (39%) are savings and credit cooperatives, 2,808 (25%) multipurpose cooperatives, 1561 (14%) are dairy cooperatives, and 1497 (13%) are agriculture cooperatives. These four make a total of 10,298 cooperatives representing 91% of the total number of cooperatives. Other cooperatives are Electricity, Vegetables and Fruit, Science and Technology, Tea, Coffee, Health, Bee Keeping, Herbal etc. The total savings from the members stands at Rs. 29,001 million. A total of Rs.29, 873 million has been disbursed and Rs.10, 261million has been collected back from the borrowers. However, it is very difficult to segregate what proportion of these figures comes under microfinance definition, since many of the SACCOS do lend loans of bigger size to their members exceeding the limit prescribed by the Nepal Rastra Bank (NRB) under its definition of microfinance. These cooperatives have a total of capital amount of Rs. 3,384 million. The total

savings from the members stands at Rs. 28,527 million. A total of Rs.29, 873 million has been disbursed and Rs.10, 261million has been collected back from the borrowers (DOC, 2008).

Table 2-7: Status of Four Major Cooperatives in Nepal (Amount in Rs'000)

Type of cooperative	**Number**	**Capital Amount**	**Savings Amount**	**Disbursement Amount**	**Recovery Amount**
Savings Credit	4432	1932163	15730573	19958973	7369896
Multipurpose	2808	1229011	12018810	8109640	2065560
Dairy	1561	49096	60315	61583	120739
Agriculture	1497	173803	717468	1488126	581313
Total	10,298	3384073	28527166	29618322	10137508
Source: Department of Cooperative, April 2008					

2.8 Saving and Credit Cooperatives (SACCOS)

Credit and Saving Cooperatives (SACCOS) are user-owned and controlled financial intermediaries which principal services are saving and credit. SACCOS provide the same financial services as banks but are considered nonprofit organizations and adhere to cooperative principles. SACCOS also give other services like money transfers, payments services and insurance. Members typically share a "common bond" (i.e., geography, employer) and may join together to form second-tier associations.

The SACCOS as financial institutions originated in Germany in the nineteenth century. The two organs of SACCOS are the general assembly and the management committee. The committee is assigned by the general assembly and has to promote and oversee that banking operations run smoothly. Employees are hired for everyday administration and management tasks. SACCOS typically start with equity contributions from their members. They may also mobilize deposits and sometimes also depend on external funds. SACCOS depend on the management committees to analyze loan requests and to grant and recover loans.

2.8.1 Characteristics of SACCOS

- It enables members to save their money on a regular basis, or according to their needs at a higher interest rate than that obtainable at any other type of financial institution.
- It grants loans to its members at lower interest rate than that at other, commercial financial institution.

- The operating expenses are maintained at lower than the differential between Interest paid on saving and interest charged on credit in order to ensure that the interest paid on members' savings will be higher than that available elsewhere and that the interest on loans granted to them will be lower.
- To protect itself against these uncertainties, the cooperative marginally increase the amount collected to cover its annual expenses.
- The Interest on Share Capital is paid as remuneration to shared capital in a cooperative.

(Source: www.coopgalor.com)

2.8.2 Role of Saving and Credit Cooperatives

SACCOS have played a significant role as financial intermediaries in developing countries. SACCOS have shown how effective they are in mobilizing deposits from thousands of members, mostly coming from the low and middle income classes. They have grown to a reliable alternative to informal moneylenders in various communities. What is even more important is that they have given thousands of small savers accessible deposit facilities. They have succeeded in creation of a separate system of sustainable financial intermediation for low and middle income classes. The following are the main roles played by SACCOS:

- SACCOS play a significant role in the provision of financial services to the poor (target groups). They provide savings and credit and investment opportunities to individuals, institutions and group members.
- SACCOS help teach people how to earn money profitably, how to spend it intelligently for the benefit of members and their community.
- SACCOS provide institutional development which is a major factor in financial development.
- SACCOS bring institutional financial services to rural areas which are not offered generally by the formal financial sector.
- SACCOS show people how to avoid the pitfalls of money mismanagement

Based on his study in five Asian countries (India, Bangladesh, Thailand, Indonesia, and Philippines), Ghate (1992b, pp. 16-17) suggested that the commercial banks are better suited to the needs of large and medium-scale industry, and organized trade and commerce. But they have failed to serve the needs of low-income people in the rural areas in developing countries, such as micro and small entrepreneurs, small traders, and poor borrowers generally. Ghate (1992b, p.17)

identifies at least two comparative advantages of microfinance institutions in serving the low-income people in the rural areas in developing countries, namely the flexibility of their credit procedure, and the provision of small and short duration loans.

2.9 PEARLS Monitoring System

Every organization's success or failure specially depends on their performance. Many different financial ratios and techniques have been promoted for evaluating performance of financial institutions worldwide, but few have been consolidated into an evaluation program that is capable of measuring the system as a whole. Initially, the World Council of Credit Unions (WOCCU) tried to adapt the US CAMEL ranking system to the credit unions in Guatemala. Since CAMEL is basically supervisory tool, WOCCU was looking for a tool that would evaluate the financial structure of the balance sheet and also credit union mangers would able to monitor growth of total assets. Therefore, the PEARLS system was designed and implemented with Guatemalan credit unions by WOCCU in the late 1980s (Evans, 1997). The PEARLS was designed first as a management tool, and later became an effective supervisory mechanism.

The PEARLS is a system of 44 financial ratios which the World Council of Credit Unions (WOCCU) employs to provide a detailed picture of credit union operations. The PEARLS stands for **P**rotection**, E**ffective Financial Structure, **A**sset Quality, **R**ates of Return, **L**iquidity, and **S**igns of Growth. It is very useful method to analyze the internal efficiency and financial performance of the organization. In essence, it is also very strong technique of SWOT (Strength, Weakness, Opportunity and Threats) analysis. Besides that, it is the business planning tool to create strategic plans that help to improve performance of an organization. It also offers a strategic business-planning tool to help managers implement change. PEARLS Ratios would facilitate the regulatory framework that would measure the performance of the co-operative System. Basically, it helps to analyze the financial performance of SACCOS in scientific way.

2.9.1 P = Protection

The primary goal of evaluating the Protection indicators is to ensure that the financial institution provides depositors a safe place to save their money. Provisions for loan losses are the first line of defense against unexpected losses to the institution. The Protection Indicators (Table 2-8)

evaluates the adequacy of protection afforded to the credit union by comparing the allowance for loan losses to loan delinquency (WOCCU, 2011).

Table 2-8: Protection Indicators of PEARLS Monitoring System

PEARL	Description	Goal
P1	Allowance for Loan Losses / Allowances Required for Loans Delinquent >12 months	**100%**
P2	Net Allowance for Loan Losses / Allowances Required for Loans Delinquent less than 12 months	**35%**
P3	Total Charge-Off of Delinquent Loans >12 months	**100%**
P4	Annual Loan Charge-offs	**Minimal**
P5	Accumulated Loan Recoveries/Accumulated Loan Charge-offs	**100%**
P6	Solvency	**>= 100%**

2.9.2 E = Effective Financial Structure

The financial structure is the most important variable that affects growth, profitability and efficiency. The Effective Financial Structure area of PEARLS focuses on an institution's sources of funds (savings, shares, external credit and institutional capital) and its uses of funds (loans, liquid investments, financial investments and non-earning assets). The effective financial structure component (Table 2-9) measures assets, liabilities and capital, and recommends an "ideal" structure for credit unions (WOCCU, 2011).

Table 2-9: Effective Financial Structure Indicators of PEARLS Monitoring System

PEARL	Description	Goal
E1	Net Loans/Total Assets	**70-80%**
E2	Liquid Investments / Total Assets	**Max 20%**
E3	Financial Investments / Total Assets	**Max 10%**
E4	Non-Financial Investments / Total Assets	**0%**
E5	Savings Deposits / Total Assets	**70-80%**
E6	External Credit / Total Assets	**Max 5%**
E7	Member Share Capital / Total Assets	**10-20%**
E8	Institutional Capital / Total Assets	**Min 10%**
E9	Net Institutional Capital/ Total Assets	**Same as E8**

2.9.3 A = Asset Quality

Asset Quality is the main variable that affects institutional profitability. An excess of defaulted or delayed repayment of loans and high percentages of other non-earning assets have negative

effects on credit union earnings because these assets are not earning income. Assest Quality indicators of PEARLS monitoring systems are as shown in Table 2-10.

Table 2-10: Asset Quality Indicators of PEARLS Monitoring System

PEARL	Description	Goal
A1	Total Loan Delinquency / Gross Loan Portfolio	**<=5%**
A2	Non-Earning Assets / Total Assets	**<=5%**
A3	Net Institutional & Transitory Capital + Non Interest-Bearing Liabilities / Non-earning Assets	**>200%**

2.9.4 R = Rates of Return and Costs

The Rates of Return and Costs indicators (Table 2-11) monitor the return earned on each type of asset (use of funds) and the cost of each type of liability (source of funds). The rate of return and cost affect the growth rate of the institution. The PEARLS system segregates all of the essential components of net earnings to help management calculate investment yields and evaluate operating expenses (WOCCU, 2011).

Table 2-11: Rates of Return and Costs Indicators of PEARLS Monitoring System

PEARL	Description	Goal
R1	Net Loan Income / Average Net Loan Portfolio	**Entrepreneurial Rate**
R2	Total Liquid Investment Income / Average Liquid Investments	**Market Rates**
R3	Total Financial Investment Income / Average Financial Investments	**Market Rates**
R4	Total Non-Financial Investment Income / Average Non-Financial Investments	**Greater than R1**
R5	Total Interest Cost on Savings Deposits / Average Savings Deposits	**Market Rates >Inflation**
R6	Total Interest Cost on External Credit / Average External Credit	**Market Rates**
R7	Total Interest (Dividend) Cost on Shares / Average Member Shares	**Market Rates >= R5**
R8	Total Gross Income Margin / Average Total Assets	**Variable - Linked to R9, R11, R12**
R9	Total Operating Expenses / Avg. Total Assets	**5%**
R10	Total Loan Loss Provision Expense / Average Total Assets	**Dependent on Delinquent Loans**
R11	Non-Recurring Income or Expense / Average Total Assets	**Minimal**
R12	Net Income / Average Total Assets	**Linked to E9**

2.9.5 L = Liquidity

Liquidity refers to the cash needed for withdrawals. The liquidity indicators (Table 2-12) reveal if the credit union is administering its cash to meet deposit withdrawal requests and liquidity reserve requirements while, at the same time, minimizing the amount of idle funds (Evans, 1997).

Table 2-12: Liquidity Indicators of PEARLS Monitoring System

PEARL	Description	Goal
L1	S.T Investments + Liquid Assets - S.T. Payables / Savings Deposits	**Min 15%**
L2	Liquidity Reserves / Savings Deposits	**10%**
L3	Non-Earning Liquid Assets / Total Assets	**<1%**

2.9.6 S = Signs of Growth

Signs of Growth indicators (Table 2-13) reflect member-client satisfaction, appropriateness of product offerings and financial strength (WOCCU, 2011). Growth directly affects an institution's financial structure and requires close monitoring to maintain balance.

Table 2-13: Signs of Growth Indicators of PEARLS Monitoring System

PEARL	Description	Goal
S1	Growth in Loans to Members	**Dependent on E1**
S2	Growth in Liquid Investments	**Dependent on E2**
S3	Growth in Financial Investments	**Dependent on E3**
S4	Growth in Non-Financial Investments	**Dependent on E4**
S5	Growth in Savings Deposits	**Dependent on E5**
S6	Growth in External Credit	**Dependent on E6**
S7	Growth in Share Capital	**Dependent on E7**
S8	Growth in Institutional Capital	**Dependent on E8**
S9	Growth in Net Institutional Capital	**Dependent on E9**
S10	Growth in Membership	**>12%**
S11	Growth in Total Assets	**>Inflation**

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

3.1 Research Strategy

The case study approach is considered for this research. A case study from a research strategy point of view may be defined as an empirical inquiry that investigates a phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident (Wikipedia, 2011). A case study approach has been considered as data collection could be easily done because of easy access to SACCOS's records and key persons of SACCOS. It will also be less expensive in terms of finances to use a case study in this research and less time consuming. The result and finding could also be representative result for whole study area. By analyzing the operation methods of sampled SACCOS and their performance in study area, it will be feasible to apply the findings to other SACCOS in the study are.

3.2 Study Area and Selection of Case

The study was conducted and limited to Bhaktapur District of Nepal. Even though it is the smallest district of Nepal the population rate is high. The total population of the district is 225,461 (2058 B.S.). Out of that 50.92% are male and 49.08% are female. Most of the people depend on agriculture. Besides that, some are service holder, officer, businessmen, workers etc. With the change in business environment thinking of people are changing and people are involving in co-operative activities. Therefore, numbers of co-operatives are increasing day by day. Currently the number of cooperatives established in the district has reached around 528. Among them 427 are saving & credit, 37 are Multi-purpose, 35 are Dairy and 29 are other co-operatives.

Out of the existing several SACCOS in the district, two are selected randomly for this research purpose. The selection of a case for study is always a crucial step in the case study. The cases are selected based on availability of data and accessibility to data for research purpose. Since the objective of the research is to assess the policies and performance of SACCOS, this study tries to

select well performing SACCOS to moderately performing SACCOS so that it would be able to find the reason behind success and failure of SACCOS.

Two selected SACCOS are namely Sankhadhar Savings and Credit Cooperative Society and Sahayogi Savings and Credit Cooperative Society from Sankhadhar Chowk, Thimi, Bhaktapur and Balkumari -14, Thimi, Bhaktapur respectively. Sankhadhar SACCOS has total 9 staffs including CEO, Manager/Loan officer, Accountant/Office Assistant, two Cashiers, four Market Representatives. Similarly, Sahayogi SACCOS has total 5 staffs of which one CEO, One Accountant, two Cashiers and one Marketing Representatives. One Officer of each SACCOS, who are assumed to have detail knowledge about saving and credit information are selected purposively for interview and to fill the questionnaires distributed.

3.3 Types and Sources of Data

This study is based on quantitative data and qualitative data. In the fieldworks, quantitative data were collected from secondary sources (e.g. published data, unpublished documents, and financial reports, websites) and qualitative data were collected from primary sources through interviews with stakeholders of the SACCOS by using a semi-structured questionnaire. The quantitative data are mainly used for assessing the performance of the SACCOS. The qualitative data are used to analysis business plans and operation of the SACCOS unit being studied. The semi-structured questionnaires are used to interview interviewee's explanations on SACCOS business plan and operation.

An interview is conducted with credit officers of the selected SACCOS using semi-structured questionnaires (Appendix A) so as to find out the loan processing procedures, evaluation criteria, collection procedure, loan supervision, repayment problems and enforcement conditions. This study also reviewed SACCOS's operational manuals, supervision manuals, lending policy manuals, monthly reports, ledger cards, account controls, general ledgers and other related literature to obtain secondary data.

The dataset used as the basis for calculation and analysis of performance indicators are mainly based on financial reports of the selected SACCOS. The data from income statements includes

operating income, operational cost (expenses), labor cost (salary), net income (profit), and provision for loan losses. From balance statements, it is possible to ascertain the total assets, current assets (loan outstanding and credit default), fixed assets, client savings, client time deposits, capital, and equity. In addition, other related data such as the number of client data (including members, borrowers, savers etc.) are also obtained from records of SACCOS. The data on population and Regional Gross Domestic Product (GDP) of Bhaktapur district and its Municipalities and Village Development Committees sub-districts from the Central Bureau of Statistics of Nepal are also used in this analysis.

3.4 Methods of Data Collection

Data required for this research were collected by employing multiple methods of data collections i.e. interviews with the stakeholders of SACCOS, by using structured questionnaire and collection of archival documents (published and unpublished documents). Questionnaires that contain both open and closed ended questions are prepared and distributed to staff members of the cooperatives selected randomly. Secondary data were collected by the researcher's field visit to the SACCOS for obtaining archival documents. The fieldwork of this study is conducted in two parts. During first part of fieldwork, two SACCOS namely Sankhadhar SACCOS of Sankhadhar Chowk, Thimi and Sahayogi SACCOS of Balkumari – 14, Thimi were visited. Archival documents were also studied from websites of Nepal Rastra Bank, Centre Bureau of Statistics Nepal, Department of Cooperatives, National Cooperative Development Board (NCDB, National Cooperative Federation of Nepal (NCF) etc.

The second fieldwork has conducted to complete the data required and to get more information through interviews with the managers of the SACCOS by using questionnaires in Appendix A. Interviewees were selected through a purposive sampling strategy, which combined the targeting of individuals who were strategically important to the SACCOS.

3.5 Methods of Data Analysis

The raw data are analyzed, presented, and interpreted to give solutions for the research problem. Some of the data are summarized, cross tabulated and presented in tables and graphs using

Microsoft Excel Software Package. Percentages for these data are calculated in order to facilitate the analysis and to make it presentable for the readers.

3.5.1 Comparative Study and Analysis of Policies of SACCOS

The Questionnaire responses from respondents of all two SACCOS are entered into Microsoft Excel software and analysis of data carried out. Data collected are cross tabulated to show the frequency and percentages of different variables involved in the survey. The questionnaire responses from all two SACCOS are presented into tabular as well as graphical forms for easy comparison of their policies. The saving and credit policies are compared among two SACCOS to find out the reason behind success and failure of SACCOS.

3.5.2 Comparative Analysis of Performance SACCOS

The calculation and analysis of performance indicators are mainly based on financial reports of the selected SACCOS. PEARLS monitoring system is used for performance evaluation of SACCOS. PEARLS stand for **P**rotection**, E**ffective Financial Structure, **A**sset Quality, **R**ates of Return, **L**iquidity, and **S**igns of Growth. The PEARLS is a system of 44 financial ratios which the World Council of Credit Unions (WOCCU) employs to provide a detailed picture of credit union operations (WOCCU, 2011). It is very useful method to analyze the internal efficiency and financial performance of the organization. However, this study has considered only 11 financial ratios which are most commonly applied among SACCOS for performance evaluation purpose in study area. The selected financial ratios are mentioned in following sub sections below.

i) Protection: The primary goal of evaluating the Protection indicators (Table 3-1) is to ensure that the financial institution provides depositors a safe place to save their money. Provisions for loan losses are the first line of defense against unexpected losses to the institution (WOCCU, 2011).

Table 3-1: Calculation of Protection Indicators

Pearls	Objectives	Descriptions	Goal
P_1	Loan losses provision for delinquent loans above 12 months	Loan losses provision fund / Delinquent loans above 12 months × 100	100%

Pearls	Objectives	Descriptions	Goal
P_2	Loan losses provision for delinquent loans less than 12 months	Loan losses provision fund(-) Loan losses provision for delinquent loans above 12 months / Delinquent loans above 12 months × 100	35%
P_3	Loan losses provision for delinquent loans	Loan losses provision fund(-) Loan losses provision for delinquent loans above 12 months (-) Loan losses provision for delinquent loans less than 12 months / Delinquent loans above 12 months × 100	1%

ii) Effective Financial Structure: The financial structure is the most important variable that affects growth, profitability and efficiency. The Effective Financial Structure area of PEARLS focuses on an institution's sources of funds (savings, shares, external credit and institutional capital) and its uses of funds (loans, liquid investments, financial investments and non-earning assets). The following Table 3-2 shows the effective financial structure indicators considered for this study.

Table 3-2: Calculation of Effective Financial Structure Indicators

Pearls	Objectives	Description	Goal
E_1	Loan investment ratio on total loan	Loan investment (-) Loan losses provision fund / Total assets × 100	70-80 %
E_5	Deposit ratio on total assets	Total Deposit / Total assets × 100	70-80 %
E_6	External borrowing ratio on total assets	External borrowing / Total assets × 100	Max 5 %
E_7	Share capital ratio on total assets	Share capital / Total assets × 100	10-20 %
E_8	Institutional capital ratio on total assets	Institutional capital / Total assets × 100	10-20 %

iii) Assets Quality: Asset Quality is the main variable that affects institutional profitability. An excess of defaulted or delayed repayment of loans and high percentages of other non-earning assets have negative effects on credit union earnings because these assets are not earning income. The following Table 3-3 shows the assets quality indicators considered for this study.

Table 3-3: Calculation of Assets Quality Indicators

Pearls	Objectives	Description	Goal
A_1	Delinquent loans ratio	Total delinquent loan / Total loan investment × 100	Max 5 %

Pearls	Objectives	Description	Goal
A_2	Non-earnings ratio on total assets	Non-earnings ratio / Total assets × 100	Max 5 %

iv) Rate of Return: The Rates of Return and Costs indicators (Table 3-4) monitor the return earned on each type of asset (use of funds) and the cost of each type of liability (source of funds). The rate of return and cost affect the growth rate of the institution.

Table 3-4: Calculation of Rate of Return Indicators

Pearls	Objectives	Description	Goal
R_1	Interest income ratio	Interest income / Average loan × 100	Market Rate
R_5	Interest cost on deposit & external borrowing ratio	Interest cot on deposit & external borrowing ratio / Average deposit & external borrowing × 100	Enough to maintain market rate & Inflation rate
R_7	Dividend ratio on share capital	Dividend cost / Average share capital × 100	More than Inflation or 15%
R_8	Gross income ratio on total assets	Interest income (+) other income (-) interest expenses / Average total assets × 100	Enough to increase institutional capital after expenses
R_9	Operational cost ratio on total cost	Total operating cost / Average total assets × 100	5%
R_{12}	Total income	total income / Average total assets × 100	10%

v) Liquidity: Liquidity refers to the cash needed for withdrawals. The liquidity indicators reveal if the credit union is administering its cash to meet deposit withdrawal requests and liquidity reserve requirements while, at the same time, minimizing the amount of idle funds. The following Table 3-5 shows the Liquidity indicators considered for this study.

Table 3-5: Calculation of Liquidity Indicators

Pearls	Objectives	Description	Goal
L_1	Liquidity ratio	Liquidity reserve (-) short time payable / Total Deposit × 100	15%
L_2	Cash ratio	Cash in hand / Total assets × 100	max 1%

vi) Sign of Growth: Signs of Growth reflect member-client satisfaction, appropriateness of product offerings and financial strength. Growth directly affects an institution's financial

structure and requires close monitoring to maintain balance. Sign of growth indicators considered for this study are shown in Table 3-6.

Table 3-6: Sign of Growth Indicators

Pearls	Objectives	Description	Goal
S_{10}	Membership growth ratio	This year's total member (-) Last year's total member / Last year's total member × 100	Min. 12%
S_{11}	Assets growth ratio	This year's total assets (-) Last year's total assets / Last year's total assets × 100	Min. 25% > Inflation

CHAPTER IV

COMPARATIVE STUDY AND ANALYSIS OF POLICIES OF SACCOS

To analyze the saving and credit policies of SACCOSs in Bhaktapur district, two SACCOSs were selected. An interview was held with credit officers of the selected SACCOS by using semi structured questionnaire (ref. APPENDIX A) so as to find out sources of capital, the loan processing procedures, loan collection and monitoring, saving systems etc. The following sections summarize the saving and credit policies adopted by SACCOS.

4.1 Number of Members

Sankhadar SACCOS was established on 2064 Kartik 19 with 30 founding members. Currently it has 1459 member in total among them 494 active borrowers (Table 4-1). Sahayogi SACCOS was founded on 2064 Kartik 19 with its 25 founding members. Currently it has 611 members in total among them 120 active borrowers (Table 4-1).

The members of Shankhadhar SACCOS have increased enormously from the time of establishment up to now compare to Sahayogi SACCOS (Table 4-1). Despite short period of establishment, it's the large increase in members could be due to the widespread connection of promoter share holders, strong advertisement campaign, possibility of borrowing loan just after 7 days of membership, introduction of new schemes such as doubling the principle in 6 years, introduction of daily basis interest scheme on Saving at Thimi etc.

Table 4-1: Numbers of SACCOS Members

Name of SACCOS	Date of Establishment	Nos. of Founding Members	Nos. of Present Members	Nos. of Staff	Nos. of Active Borrowers
Sankhadar	2064	30	1459	9	494
Sahayogi	2050	25	611	5	120

4.2 Requirements to be a Member

To be member of both SACCOSs, the person should have Nepali citizenship and live within the working area of SACCOS. Person should buy minimum 1 share value of Rs 100 and pay Entrance fee and Membership fee as shown in Table 4-2. Entrance fee of Sahayogi SACCOS is more than Shankhadhar. Additionally, person should open any type of saving account. The members with share amount exceeding Rs. 10,000 are required to save Rs. 200 per month regularly. Unable to deposit compulsory saving amount by member within first week of month in Sankhadar results penalty of Rs 10. If saving due exceeds a month, late fee of Rs 15 is charged. Sahayogi does not take any late fee for compulsory saving.

Table 4-2: Requirements to be a Member

Criteria	Shankhadhar	Sahayogi
Minimum Nos. of Share	1	1
Minimum Share Amount	Rs. 100	Rs. 100
Entrance Fee	Rs. 50	Rs. 100
Membership Fee	Rs. 100	Rs. 100
Compulsory Saving Criteria	Rs. 200 per month for member with share amount more than Rs.10, 000.	Rs. 200 per month for member with share amount more than Rs.10, 000.
Fine	Unable to deposit monthly saving result fine of Rs. 10. If exceeds a month fine of 15	Not available

4.3 Financial Services Provided by SACCOS

Saving service and Loan service are main financial services provided by both Shankhadhar and Sahayogi SACCOS. Shankhadhar provides commercial purpose loan in order to run the business, a hire and purchase loan, education and health loan, share purchase loan etc. However, Sahayogi provides only commercial purpose loan. At Shankhadhar SACCOS, 80% of the total loans are commercial purpose loan. Only few people so far has taken a loan for education. The Shankhadhar SACCOS also gives a house loan up to maximum amount of Rs. 100,000. So far only three persons have taken a house loan.

In addition to providing loans the other major activity of the SACCOS is providing a saving service for its members. Both compulsory saving and optional saving services are available in

selected SACCOS. Saving policies of both Shankhadhar and Sahayogi are same except for penalties imposed to the members who are not fulfilling saving criteria. Under compulsory saving policy, members with share amount exceeding Rs. 10,000 are required to save Rs. 200 per month. These compulsory savings are intended to encourage savings by its members and at the same time to create reserve fund for lending. At Shankhadhar SACCOS, unable to save compulsory saving amount within first week of the month results fine of Rs. 10 till end of the month and if saving due exceeds period of a month, Rs. 15 is charged. Sahayogi SACCOS does not have policy of imposing fine on late saving but it sends market representatives to member's home to collect saving amount timely.

4.4 Sources of the SACCOS Capital

Each member of SACCOS is required to buy a share along with entrance fee and membership fee; this is considered as an initial capital or a share capital for the cooperatives. At the end of fiscal year, both SACCOS used to distribute certain amount of its profit to its share holder having share amount greater than Rs. 10,000 as health benefit or festival expenses etc. Amount going to be distributed depends on the amount of share they hold. Majority of the income comes from the interest charged to members while they borrow from the SACCOS.

4.5 Existing Loan Provisions

4.5.1 Loan Size

Loans are provided on individual basis. Loan sizes are based on the borrower performance that is their on-time repayment so as to minimize the risk loan. The size of the loan differentiates from one SACCOS to another. According to the respondents, the loan size for Shankhadhar SACCOS ranges from the minimum amount Rs 5000 up to Rs. 1,500,000. However, upper limit of loan for Sahayogi is Rs 1,000,000 lesser than Shankhadhar. The following Table 4-3 summarizes the minimum, maximum, average, and total loan size provided for the selected cooperatives.

From Table 4-3, while comparing Shankhadhar and Sahayogi, even though, Sahayogi was established before Shankhadhar the total loan size issued for latter one is almost twice higher than the previous one. The reason for the difference is larger numbers of borrowers in

Shankhadhar and the interviewee said that this cooperative was not functioning actively for first several years after establishment.

Table 4-3: Loan Size

SACCOS	Maximum (Rs.)	Average (Rs.)	Minimum (Rs.)	Total Loan (Rs'000)
Shankhadhar	1,500,000	126,854	5,000	61,651
Sahayogi	1,000,000	90,836	5,000	32,883

4.5.2 Loan Assessment Process

One of the major functions of the saving and credit cooperatives is to provide loan to members besides saving. In order to give a loan to members the cooperatives have to assess things to minimize the default risk. Assessing the borrower's purpose of loan and their ability to pay will help the cooperative to be in the safe side.

A person can ask for a loan 7 days after being member in Shankhadhar and has a saving account where as loan can only be issued after a month of being member in Sahayogi. Person should explain the purpose of loan. Generally, the loan assessment processes is based on the amount of loan, purpose of loan, the asset collateral, the borrower's the history of default, personal guarantee and recommendation from marketing representatives about borrower. Depending upon loan size, the loan assessment will be done by manager, loan committee and board meeting. Shankhadhar SACCOS manager can approve loan size up to Rs. 50,000 after assessing the purpose of loan, person's history of default and recommendation from marketing representatives. Loan size greater than Rs. 50,000 and up to Rs. 100,000 is to be approved by Loan committee and loan size greater than Rs. 100,000 need to be put before board meeting for approval. For the case of Sahayogi, loan size less than Rs 100,000 is approved by loan manager and loan size greater than Rs 100,000 is approved by board.

For loan size less than Rs. 100,000, loan is provided upon personal guarantee of other share holder and 10% of loan is kept on hold in borrower's saving account in Shankhadhar (Table 4-4). 10% hold is not applicable to Shareholder with share amount greater than Rs. 10,000. Sahayogi SACCOS does not keep 10% of loan amount as hold on borrower's saving account (Table 4-4).

However, Asset collateral is required for loan size greater than Rs. 100,000. The loan is provided up to 60% of the present value of Asset Collateral.

The assessment of loan takes relatively longer, about 10 days, for Sahayogi than that for Shankhadhar where it takes maximum 5 days (Table 4-4). This could be the one of the reason that resulted large number of borrows at Shankhadhar. During this time the person was interviewed by credit officers as well as credit officers could discuss with marketing representatives and guarantor to confirm purpose of loan and ability to pay the loan on the given amount of time.

Table 4-4: Loan Assessment Criteria

Criteria	Shankhadhar	Sahayogi
Eligible to get loan	7 days after membership	1 month after membership
Asset Collateral	Required for loan > Rs. 100,000	Required for loan > Rs. 100,000
Approval by	• < Rs. 50,000 by Manager • Rs. 50,000 – Rs. 100,000 by loan committee • > Rs. 100,000 by Board meeting	• < Rs. 100,000 by Manager /loan committee • > Rs. 100,000 by Board meeting
Time for approval	1 day – 5 days	1 day – 10 days
Personal guarantee	Required and should be Shareholder > Rs.10,000	Required and should be Shareholder > Rs.10,000
Saving Criteria	At least person should have saving account of any type. 10% hold	At least person should have saving account of any type. They don't have 10% hold criteria

4.5.3 Lending Interest Rate

The interest rate is charged by considering administrative costs such as salary of employees and other, interest rate charged by other SACCOS, cost of fund etc. The lending interest rate charged by Shankhadhar depends on loan category. Shankhadhar SACCOS charges 13 % interest on fixed and diminishing interest rate type loan. It charges 16% education and health loan, 17% on share purchase loan, 18% on commercial purpose loan, and 18% on hire purchase loan (Table 4-5). If person receive loan from his/her fixed deposit amount, it charges 3% additional interest rate to the interest rate given on fixed deposit saving.

The lending interest rate charged by Sahayogi is 17% on commercial purpose loan. It charges 3% additional interest rate to the interest rate given on fixed deposit saving if person borrows from fixed deposit amount.

According to official in Shankhadhar and Sahayogi, Interest rates charged by them are sufficient to cover its operating costs.

Table 4-5: Lending Interest Rate

SACCOS	Fixed	Education & Health	Hire and Purchase	Commercial Purposes	Share Purchase Loan	Fixed Deposit Receive Loan
Shankhadhar	13%	16%	18%	18%	17%	3%
Sahayogi	-	-	-	17%		2%

4.5.4 Loan Period and Loan Service Charge

Most of the loan has a loan period of one year. The fixed period of one year this cannot be normally extended under any circumstances. Any type of loan applies service charge of 1.5% of principle amount in Shankhadhar SACCOS where as 1% in Sahayogi (Table 4-6).

Table 4-6: Loan Period and Loan Service Charge

SACCOS	Loan Period	Loan Service Charge
Shankhadhar	1 Year	1.5%
Sahayogi	1 Year	1%

4.6 Collection Procedures Adopted by SACCOS

4.6.1 Collection procedures and Degree of Collectivity

A person who has taken a loan from the Shankhadhar has to pay interest each month. There is a manager or loan officer assigned who controls and monitors the collection procedures. The marketing representatives visit borrower's household to collect interest and/or principal to be paid. Marketing representative collects the amounts based on the collection procedures given by the cooperative. Also, borrower him/herself can visit the Shankhadhar SACCOS office to pay the

interest amount monthly. Also, borrower can visit SACCOS at anytime to pay principle amount in installment according to their availability of fund.

From Table 4-7, Shankhadhar SACCOS provides 1% of Interest discount to borrower if they pay monthly interest within a month. For late payment of Interest, late fee at the rate of lending interest rate applies to the interest amount to be paid on daily basis. For late payment of loan, late fee at the rate of 3% of principle for each day and lending interest rate on daily basis applies. If borrower is unable to repay principle amount even after first week of loan due date, additional penalty of 1.5% of principle are charged along with 3% of principle for each late day and lending interest rate on daily basis.

In case of Sahayogi, borrower him/herself has to visit the Sahayogi SACCOS office every month to pay monthly interest amount (Table 4-7). Marketing representatives in Sahayogi only collects saving amount. Also, borrower can visit Sahayogi SACCOS at anytime to pay principle amount in installment according to their availability of fund. From Table 4-7, for late payment of Interest, late fee at the rate of 3% on the interest amount to be paid on daily basis. For late payment of principle, daily late fee of 3% of principle and daily lending interest rate applies.

The collection procedures for both Shankhadhar and Sahayogi are considered to be effective as the default rate for both SACCOS are minimal and acceptable for cooperatives.

Table 4-7: Collection Procedures

SACCOS	Shankhadhar	Sahayogi
Interest to be paid	Every month	Every month
Discount on Interest	1% of Interest if paid within month	-
Late fee on Interest	At the rate of interest rate on Interest to be paid on daily basis	3% on interest to be paid on daily basis
Loan Collection	By marketing representative or borrower	Borrower only
Repayment of Principle	At any time in Installment or full at the end of loan period	At any time in Installment or full at the end of loan period
Default amount	Under Acceptable limit	Under Acceptable limit

4.6.2 Measures to Control Credit Default

Table 4-8 shows several measures implemented to control credit default in both Shankhadhar and Sahayogi SACCOS. Both SACCOS request collateral and collateral substitutes as a guarantee for providing loan size greater than Rs. 100,000. Loan would be provided only up to 60% of asset collateral value. Personal Guarantee is to be presented to obtain loan that does not require collateral for both SACCOS. Shankhadhar SACCOS has additional measure such as restriction on deposit withdrawal from saving account to obtain loan without collateral.

Timely Collection of loan and interest are done by marketing representatives in Shankhadhar to control credit default (Table 4-8).. Sahayogi SACCOS should also implement this measure to control risk of credit default. Addtionally, both SACCOS has provision of financial penalties for late payment as well as other penalties such as refusal to repeat loan, reduce loan size etc. (Table 4-8). Shankhadhar SACCOS can also hold saving account of guarantor in case borrow does not repay loan.

Table 4-8: Measures to Control Credit Default

Control Measures	Shankhadhar	Sahayogi
Timely Collection by Marketing representatives	**Yes**	**-**
Restriction deposit withdrawal from savings	**Yes**	**-**
Requesting collateral and collateral substitutes	**Yes**	**Yes**
Personal Guarantee for loan without Colleteral	**Yes**	**Yes**
Financial penalty: Penalties for late payment	**Yes**	**Yes**
Financial penalty: Refusal to repeat loan	**Yes**	**Yes**
Financial penalty: Reduce to repeat loan amount	**Yes**	**Yes**
Saving Account hold of Guarantor	**Yes**	**-**

4.6.3 Collection Procedures for Default Loan Amount

In Shankhadhar SACCOS, marketing representatives are sent to borrower home to remind about loan maturity date before reaching loan maturity date. At the same time, phone call will be made along to SMS messages to remind loan maturity date. Same procedure will be repeated once again within a week since loan maturity date has passed. A borrower will be charged with a penalty every week at the rate of 1.5% of principle. A written warning letter will be sent to a borrower who is late for a month. A warning letter will also be sent to guarantor along with subsequent phone call. A borrower, who is late with three months, will be visited by loan

manager and are requested to pay loan amount. If a borrower continues on not paying the loan amount for continuously 1 year, the board members would visit his/her house asking the reason for not paying the loan. If the reasons are considered to be satisfying and he/she wants to discontinue, the loan would be deducted from compensated from collateral and the remaining amount would be returned together with the share capital.

Also, Shankhadhar SACCOS can collect default loan amount from borrower's saving account once loan maturity date reached if borrower has saving amount enough amount to pay loan. However, member will be informed before deducting default loan amount from saving account.

In Sahayogi SACCOS, before reaching loan maturity date, phone call will be made. Same procedure will be repeated once again within a week since loan maturity date has passed. A borrower will be charged with a penalty every week at the rate of 1.0% of principle. A borrower, who is late with two weeks, will be visited by loan manager and are requested to pay loan amount.

CHAPTER V

COMPARATIVE ANALYSIS OF PERFORMANCE OF SACCOS

This chapter examines the performance of Shankhadhar SACCOS and Sahayogi SACCOS in the framework of PEARLS by using publicly available financial data such as annual reports and the ledger of Shankhadhar and Sahayogi SACCOS. The calculated values of different components of PEARLS indicate that the performance of Shankhadhar SACCOS is satisfactory where as performance of Sahahayogi SACCOS is not so sound.

5.1 Analysis of Performance of SACCOS

The calculation and analysis of performance indicators are mainly based on financial reports of the selected SACCOS. PEARLS monitoring system is used for performance evaluation of SACCOS. PEARLS stand for **P**rotection**, E**ffective Financial Structure, **A**sset Quality, **R**ates of Return, **L**iquidity, and **S**igns of Growth. The PEARLS is a system of 44 financial ratios which the World Council of Credit Unions (WOCCU) employs to provide a detailed picture of credit union operations (WOCCU, 2011). However, this study is supposed to consider only most commonly applied among SACCOS for performance evaluation purpose in study area.

5.1.1 Protection

In the co-operatives changing business environment, gaining the confidence of the people is very hard. To win the confidence of the depositors and to prevent the financial crisis, the need of protection to saving of the members arises. The primary goal of evaluating the Protection indicators (Table 5-1) is to ensure that the financial institution provides depositors a safe place to save their money. **Provisions for loan losses are the first line of defense against unexpected losses to the institution (WOCCU, 2011).** Protection to the depositors can be provided parting sufficient allowances for loan losses.

According to the DOC any co-operative should provide 100% allowance for loan past due for more than 1 year, 35 % allowance for delinquent loan less than 12 months & 1 % allowance for

total loan issued. In the mentioned Table 5-1, both SACCOS has not provided loan losses provision for delinquent loans 1 months to above 12 months (P1 & P2) as there is no such loans. The indicators measures that members' deposit in both co-operative are safe. Shankhadhar SACCOS has provided only 0.5% loan loss provision for delinquent loan (P3) for first two years which is not enough to bare loan losses. At the starting of the any co-operative, probabilities of loan losses are low. In that assumption, Shankhadhar SACCOS has not provided enough allowance for delinquent loan for first 2 years. There after it has maintained its provision according to requirement. According to mentioned Table 5-1 Sahayogi SACCOS did not allotted the provision for delinquent loan (P3) properly. The Table 5-1 shows that in the years 064/65 & 065/66 its provision is not enough even though it has been operating for many years. Last two years its provision for loan losses (P3) exceeded the range given by DOC.

Table 5-1: Protection Indicators

Protection Indicators			**Shankhadhar SACCOS**				**Sahayogi SACCOS**			
Pearls	**Objectives**	**Goal**	**064/65**	**065/66**	**066/67**	**067/68**	**064/65**	**065/66**	**066/67**	**067/68**
P_1	Loan losses provision for delinquent loans above 12 months	100%	--	--	--	--	--	--	--	--
P_2	Loan losses provision for delinquent loans less than 12 months	35%	--	--	--	--	--	--	--	--
P_3	Loan losses provision for delinquent loans	1%	0.5	0.5	1	1	0.4	0.12	1.07	1.6
Source: Annual Reports of Sankhadhar & Sahayogi SACCOS										

5.1.2 Effective Financial Structure

The financial structure is the most important variable that affects growth, profitability and efficiency. The Effective Financial Structure area of PEARLS focuses on an institution's sources of funds (savings, shares, external credit and institutional capital) and its uses of funds (loans, liquid investments, financial investments and non-earning assets).

The following Table 5-2 shows Shankhadhar SACCOS has invested their funds on loan effectively. In the years 064/65 & 065/66 Shankhadhar SACCOS loan investment E_1 is high in comparison to DOC's range but in 066/67 & 067/68 its loan investment is balanced. If the

SACCOS invest their fund less than the range given, the income will decrease. Again, if the SACCOS invest their fund above the range, the liquidity level will decrease. To maintain this, SACCOS should invest loan between ranges prescribed by DOC, which Shankhadhar SACCOS has done well. Sahayogi SACCOS should slow down their loan flow as it has high loan investment in all given years. They should have the problem about daily transaction or deposit return. Both SACCOS should maintain their deposit ratio by increasing their total assets. External borrowing is nil in Shankhadhar SACCOS which is indicate the effective financial structure. Sahayogi SACCOS has exceeded the range of external borrowing ratio for 2 years. However it has decreased that ratio into null. Share capital ratios of both SACCOS are within the range prescribed by DOC. Institutional capital ratios of the both SACCOS are far below the range. Low level of Institutional capital ratios implies that SACCOS has set aside insufficient reserves and retained low level of earning in the business.

Table 5-2: Effective Financial Structure Indicators

Effective financial structure			**Shankhadhar SACCOS**				**Sahayogi SACCOS**			
Pearls	**Objectives**	**Goal**	**064/ 65**	**065/ 66**	**066/ 67**	**067/ 68**	**064/ 65**	**065/ 66**	**066/ 67**	**067/ 68**
E1	Loan investment ratio on total assets	70-80 %	88	81.6	72.5	79.5	92.6	87.5	87.3	84.2
E5	Deposit ratio on total assets	70-80 %	54.6	72.3	82.4	82.9	56.1	74.5	79.4	82.3
E6	External borrowing ratio on total assets	Max 5 %	0	0	0	0	24.7	12.4	0	0
E7	Share capital ratio on total assets	10-20 %	43.4	25.2	13.2	11.2	17.7	12.5	18.2	14.9
E8	Institutional capital ratio on total assets	10-20 %	0.22	0.21	0.42	1.08	0.39	0.8	0.8	0.81
Source: Annual Reports of Sankhadhar & Sahayogi SACCOS										

5.1.3 Assets quality

Asset Quality is the main variable that affects institutional profitability. An excess of defaulted or delayed repayment of loans and high percentages of other non-earning assets have negative effects on credit union earnings because these assets are not earning income.

The following Table 5-3 shows both SACCOS has no default loan, because in both co-operatives only secured loans were disbursed with personal guarantee, deposit or collateral. Increase in Non-earning assets deteriorates overall profitability of SACCOS. Non-earning assets should not exceed 5 percent of total assets of the co-operative. In the mentioned Table 5-3 below, both SACCOS are within the DOC's given range. But Shankhadhar SACCOS has higher Non-earnings ratio on total assets in comparison to Sahayogi SACCOS. This is because of Shankhadhar's higher investment in office setup and other fixed assets.

Table 5-3: Asset Quality Indicators

Asset Quality			Shankhadhar SACCOS				Sahayogi SACCOS			
Pearls	**Objectives**	**Goal**	**064/65**	**065/66**	**066/67**	**067/68**	**064/65**	**065/66**	**066/67**	**067/68**
A_1	Delinquent loans ratio	Max 5 %	--	--	--	--	--	--	--	--
A_2	Non-earnings ratio on total assets	Max 5 %	1.78	3.17	2.17	1.54	0.37	0.53	0.49	0.25
Source: Annual Reports of Sankhadhar & Sahayogi SACCOS										

5.1.4 Rate of Return

The Rates of Return and Costs indicators (Table 5-4) monitor the return earned on each type of asset (use of funds) and the cost of each type of liability (source of funds). The rate of return and cost affect the growth rate of the institution. The following Table 5-4 shows both SACCOS interest income ratios are increasing. But ratio in Shankhadhar SACCOS exceeds Sahayogi SACCOS. That means Shankhadhar SACCOS collection of loan interest is effective than Sahayogi. Interest cost on deposit & external borrowing in both SACCOS has increased in each year. To stand in the competitive business environment, SACCOS should give interest on deposit demanded in market. It is the main reason to have increment in interest cost. However, if the interest cost ratio is compared between given two SACCOS, Shankhadhar SACCOS interest cost is high which will definitely lessen the income amount of SACCOS. On the contrary, it will also help them to increase deposit. Even though both co-operatives' Gross income ratio is enough to increase institutional capital after expenses, Shankhadhar SACCOS is in better position. It is because, Gross income ratio of Shankhadhar SACCOS is more than Sahayogi SACCOS during the study. Dividend distribution of Shankhadhar SACCOS exceeds the range given by DOC.

However, dividend distribution of Sahayogi SACCOS is not available. We can say that, it's the strategy of advertisement or promotion to stand Shankhadhar SACCOS in better position. Operational cost ratio of Shankhadhar SACCOS is highe than Sahayogi SACCOS and higher than limit specified by DOC according to the Table 5-4. It could be due to Shankhadhar SACCOS organize many social programs (ex Blood donation, appreciation program, Yoga etc.) promotive program (ex Sadasyata abhibridi Kayakram, calendar distribution etc.) training (MC training, co-operative education tour etc) to promote SACCOS. Shankhadhar should try to limit its operating expenses. Total income ratios of both SACCOS are above the range. Shankhadhar SACCOS has higher rate than Sahayogi SACCOS.

Table 5-4: Rate of Return Indicators

Rate of Return Indicators			Shankhadhar SACCOS				Sahayogi SACCOS			
Pearls	**Objectives**	**Goal**	**064/65**	**065/66**	**066/67**	**067/68**	**064/65**	**065/66**	**066/67**	**067/68**
R_1	Interest income ratio	Market Rate	--	10	14.6	16.1	--	5.57	12	12.1
R_5	Interest cost on deposit & external borrowing ratio	Enough to maintain market rate & Inflation rate	--	7.61	9.16	11	--	5.15	9.58	9.89
R_7	Dividend ratio on share capital	More than Inflation or 15%	--	10	18	20	--			
R_8	Gross income ratio on total assets	Enough to increase institutional capital after expenses	--	6.34	7.73	6.94	--	3.97	6.42	4.66
R_9	Operational cost ratio on total cost	5%	--	5.39	5.71	5.12	--	3.63	5.61	3.1
R_{12}	Total income	10%	--	11.5	15.0	16.1	--	7.52	13.9	12.7
Source: Annual Reports of Sankhadhar & Sahayogi SACCOS										

5.1.5 Liquidity

Liquidity refers to the cash needed for withdrawals. The liquidity indicators reveal if the credit union is administering its cash to meet deposit withdrawal requests and liquidity reserve requirements while, at the same time, minimizing the amount of idle funds. The following Table 5-5 shows the Liquidity indicators considered for this study. Rate of liquidity of both SACCOS exceed the goal given by DOC. If the liquidity ratio becomes high, loan investment of SACCOS

should increase. So, both SACCOS should increase loan investment. In the case of cash ratio, Shankhadhar SACCOS has higher ratio than Sahayogi SACCOS. This is because the SACCOS have higher cash transaction. Sahayogi SACCOS cash ratio's position is also more than maximum limit value specified by DOC except in the year 066/67. This means SACCOS failed to manage the cash and it may fail to satisfy the deposit withdrawal request and can come across problem in running the SACCOS.

Table 5-5: Liquidity Indicators

Liquidity Indicators			Shankhadhar SACCOS				Sahayogi SACCOS			
Pearls	**Objectives**	**Goal**	**064/65**	**065/66**	**066/67**	**067/68**	**064/65**	**065/66**	**066/67**	**067/68**
L_1	Liquidity ratio	15%	15.8	19.6	25.81	18.2	10.3	15.6	14	16.7
L_2	Cash ratio	Max 1%	9.28	5.43	4.633	3.09	5.33	5.89	0.5	1.41
Source: Annual Reports of Sankhadhar & Sahayogi SACCOS										

5.1.6 Sign of Growth

Signs of Growth reflect member-client satisfaction, appropriateness of product offerings and financial strength. Growth directly affects an institution's financial structure and requires close monitoring to maintain balance.

Sign of growth indicators considered membership growth ratio and assets growth ratio according to DOC. The Table 5-6 below shows that membership growth ratio in both Shankhadhar SACCOS and Sahayogi SACCOS are far above the goal fixed by DOC. Shankhadhar SACCOS membership growth ratio is higher than Sahayogi for year 066/67 and 067/68 because this SACCOS regularly involves in different social and cultural programs which helps to promote the organization. Shankhadhar SACCOS also organize various kinds of program by itself. Assets growth ratio measure the year-to-date growth of Total Assets. Asset growth ratio of both Shankhadhar SACCOS and Sahayogi is far above the minimum permissible value specified by DOC. Assets growth ratio for Shankhadar is higher on 066/67 due to increase in deposit

collection, and investment increase. The asset growth rate also exceeded inflation rate each year for both SACCOS.

Table 5-6: Sign of Growth Indicators

Sign of Growth Indicators			Shankhadhar SACCOS				Sahayogi SACCOS			
Pearls	**Objectives**	**Goal**	**064/ 65**	**065/ 66**	**066/ 67**	**067/ 68**	**064/ 65**	**065/ 66**	**066/ 67**	**067/ 68**
S_{10}	Membership growth ratio	Min. 12%		44	73.46	48		86.3	45.6	47.2
S_{11}	Assets growth ratio	Min. 25% > Inflation		146	156.1	63.1		256	78.9	90.9
Source: Annual Reports of Sankhadhar & Sahayogi SACCOS										

CHAPTER VI

CONCLUSION AND RECOMMENDATION

This chapter summarizes the conclusion drawn from analysis of the saving and credit policies of SACCOSs in Bhaktapur district. Also, it has briefed the outcomes from the performance analysis of SACCOS by PEARLS system. Finally, the recommendations for further improvement were made at the end of this chapter.

6.1 Conclusion

The conclusion of this thesis has been divided into two sub sections as follows.

6.1.1 Comparative Study and Analysis of Policies of SACCOS

Shankhadhar SACCOS have increased its members enormously despite its short period of establishment than Sahayogi and their similar criteria to become member. It's the large increase in members could be due to the widespread connection of promoter share holders, strong advertisement campaign, possibility of borrowing loan just after 7 days of membership, introduction of new schemes such as doubling the principle in 6 years, introduction of first ever daily interest scheme on Saving account at Thimi etc.

Even though Sahayogi was established before Shankhadhar the total loan size issued for latter one is almost twice higher than the previous one. The reason for the difference is larger numbers of borrowers in Shankhadhar and the interviewee said that this cooperative was not functioning actively for first several years after establishment.

Shankhadhar can provide loan to a person 7 days after being member where as Sahayogi needs one month. Depending upon loan size, loan is approved by loan manager (less than Rs 50,000), loan committee (Rs 50,000 – 100, 000) or board (More than Rs 100, 000) in Shankhadhar. Sahayogi does not have loan committee. Loan is size less than Rs 100,000 is approved by loan manager and more than Rs 100,000 is approved by board. The assessment of loan takes

relatively longer, about 10 days in Sahayogi than 5 days in Shankhadhar. The interest rate is charged by considering administrative costs, Interest rate charged by other SACCOS, cost of fund etc. According to official in Shankhadhar and Sahayogi, Interest rates charged by them are sufficient to cover its operating costs.

Sankhadhar SACCOS sends the marketing representatives to borrower's household to collect interest and/or principal to be paid or borrower him/herself visit the office to pay interest and/or principle. In case of Sahayogi, borrower him/herself has to visit the Sahayogi SACCOS office every month to pay monthly interest amount. Marketing representatives in Sahayogi only collects saving amount. The collection procedures for both Shankhadhar and Sahayogi are considered to be effective as the default rate for both SACCOS are minimal and acceptable for cooperatives. Provision of financial penalties for late payment, regular collection by market representative, restriction on deposit withdrawal etc could have helped to reduce default amount.

6.1.2 Comparative Analysis of Performance of SACCOS

The calculated values of different components of PEARLS indicate that the performance of Shankhadhar SACCOS is better than the performance of Sahahayogi SACCOS in spite of its short period of establishment of the former. The conclusion from comparative performance analysis by PEARLS method can be summarized as below:

1. Both SACCOS has not provided loan losses provision for delinquent loans 1 months to above 12 months as there is no such loans. For last two years both Shankhadhar and Sahayogi has allotted the provision for delinquent loan properly as first line of defense.

2. Shankhadhar SACCOS has invested their funds on loan effectively. Sahayogi SACCOS should slow down their loan flow as it has high loan investment in all given years. They should have the problem about daily transaction or deposit return. Both SACCOS should maintain their deposit ratio by increasing their total assets. Low level of Institutional capital ratios implies that both SACCOS has set aside insufficient reserves and retained low level of earning in the business.

3. Both SACCOS has no default loan, because in both co-operatives only secured loans were disbursed with personal guarantee, deposit or collateral. Non-earning assets for both SACCOS are within the DOC's given range. But Shankhadhar SACCOS has higher Non-earnings ratio on total assets in comparison to Sahayogi SACCOS.

4. Interest income ratios of both SACCOS higher than market rate. Shankhadhar SACCOS exceeds Sahayogi SACCOS that means Shankhadhar SACCOS collection of loan interest is more effective. To stand in the competitive business environment, both SACCOS have given interest on deposit demanded in market. Even though both co-operatives' Gross income ratio is enough to increase institutional capital after expenses, Shankhadhar SACCOS is in better position. It is because, Gross income ratio of Shankhadhar SACCOS exceed Sahayogi SACCOS during the study. However, operational cost ratio of Shankhadhar SACCOS is high than Sahayogi SACCOS and just above the limit. It should adopt measures to control operating expenses in future.

5. Since Rate of liquidity of both SACCOS exceeds the goal given by DOC, they should increase loan investment. Both Sankhadhar and Sahayogi has higher cash ratio than maximum limit specified by DOC except in the year 066/67 for Sahayogi. It means SACCOS failed to manage the cash and it may fail to satisfy the deposit withdrawal request and can come across problem in running the SACCOS.

6. The signs of growth of both variables show that it has achieved desirable growth during the study period. The membership growth ratio and asset growth ratio of both Shankhadhar SACCOS and Sahayogi SACCOS are above the minimum value specified by DOC.

6.2 Recommendations

Based on the findings, the following recommendations are made by the researcher:

Interest rate on loan investment & interest rate given to fixed deposit should be different according to time period. SACCOS should have clear in its policies, rules and regulations. For

example interest calculation method on loan & deposit, Membership criteria, working area etc should be cleared. Loan is very sensitive part of any SACCOS. Managing loan criteria, its interest rate, collection procedure etc are complicated. So SACCOS should separate credit department or credit manager to control credit & decrease the default loan. In case of loan, if the principal amount is paid before the maturity period certain discount should be given. For the proper utilization of loan investment, SACCOS should inspect and monitor the debtors regularly.

Most of the people in this area have no co-operative knowledge. Different program should be lunch to spread the knowledge about co-operative. SACCOS should promote various skillful training to its members, staffs as well as other people which help them to create self employment. Women's participation should be increased through different schemes specifically directed to women.

Co-ordination between board member, sub committees, manager and staff will increase the work efficiency of SACCOS. Hence, it is necessary to have effective co-ordination between them. To increase the membership door to door program should lunch.

PEARLS analysis is effective tool to analyze the performance of any SACCOS. So, Board member, subcommittee, managers & staff should have knowledge about PEARLS analysis. SACCOS should organize workshop to educate its staff, subcommittee and if possible to the board member as well.

REFERENCES

- ADB (2000). Finance for the Poor: Microfinance Development Strategy. Manila, Asian Development Bank.
- ADB and NRB, (1994), "Nepal Rural Credit Review Final Report Volume 1 (Summary Report)", Kathmandu.
- CBS[1] (2001), www.cbs.gov.np (accessed on June 11, 2011)
- CBS[2] (2001), District Profile Bhaktapur, Nepal, Central Bureau of Statistics, Nepal www.cbs.gov.np (accessed on June 11, 2011)
- DEPROSC-Nepal and Ledgerwood, J. (1997), Critical Issues in Nepal's Microfinance Circumstances, Development Project Service Centre (DEPROSC-Nepal) and Micro Finance International, Canda.
- Dhakal, N. H. (2007), Towards Expanding the Frontier of Microfinance Services in Nepal, International Conference on Rural Finance, Rome, Italy (*http://www.ruralfinance.org/details/ru/?no_cache=1&srec=11776&tdet=training&tdet2=COUNTRY_STUDIES&tdet3=2*, Accessed on August, 2011)
- DOC (2011), Department of Co-operative, Ministry of Agriculture and Cooperatives http://www.deoc.gov.np, (Accessed on August, 2011)
- Evans, A.C. (1997), A Tool for Financial Stabilisation, Monitoring and Evaluation, Nexus magazine, Number 37, June 1997, (http://www.caledonia.org.uk/papers/PEARLS.doc, Accessed on December 03, 2011)
- ICA (2011) International Cooperative Alliance, http://www.ica.coop/coop/index.html (Accessed on August, 2011)
- Ledgerwood, J. (1999). Microfinance Handbook: An Institutional and Financial Perspective. Washington, D.C., The World Bank.
- MDG Progress Report, 2011, Millennium Development Goal Progress Report for Five District: A Brief Summary on the Current Status of the MDG Indicators, United Nations Development Program (UNDP), Nepal. www.undp.org.np/pdf/MDGProgressReportsEN.pdf (accessed on September 14, 2011)

- MFI Nepal, 2009, Microfinance Industry Report Nepal, The Banking with the Poor Network www.bwtp.org/files/MF_Industry_Nepal_ELECTRONIC.pdf (accessed on June 11, 2011)
- Munkner, H.H and Shrestha, M. P. (1998) Development of "Modern" Co-operatives in Nepal, Co-op Dialogue, Vol. 8, No. 2, July-Sept, 1998, pp.13-23 (Available in electronic format by the International Co-operative Alliance (ICA) *http://www.uwcc.wisc.edu/icic/orgs/ica/struc/Regional-Offices1/Regional-Office-for-Asia-and-Pacific1/Asia--Co-op-Dialogue--Vol--8--No--2--19981/5.html*)
- NLSS (2003/2004), Nepal Living Standard Survery 2003/2004, Central Bureau of Statistics, www.cbs.gov.np (accessed on June 11, 2011)
- NRB[1] (2011), Banking and Financial Statistics No. 56, Nepal Rastra Bank, Kathmandu, Nepal
- NRB and CECI (2008) Micro-financing towards Empowerment of Disadvantaged Groups in Nepal: Innovations and Practices, Nepal Rastra Bank (NRB) and *SAHAKARYA* Project, Centre for International Studies and Cooperation (CECI), Kathmandu, Nepal
- RMDC (2009), State of Microfinance in Nepal, Rural Microfinance Development Centre Ltd, Putalisadak, Kathmandu Nepal
- Robinson, M. S. (2001), The Microfinance Revolution: Sustainable Finance for the Poor. Washington, D.C., The World Bank.
- Wikipedia (2011), Wikipedia, The Free Encyclopedia, http://en.wikipedia.org/wiki/Cooperative (Accessed on August, 2011)
- WOCCU (2011), World Council of Credit Unions, http://www.woccu.org/bestpractices/pearls/aboutpearls (Accessed on December, 2011)

APPENDIX A

Questionnaire Sample

Tribhuvan University
Faculty of Commerce
Nepal Commerce Campus
Master of Business Studies

I am undertaking a research A Comparative Study of Policies and Performance of Credit and Saving Cooperatives in Bhaktapur District, Nepal. I have prepared a questioner to help me gather the pertinent information from the randomly selected employees of the cooperative. Utmost care will be taken for confidentiality of the information you have provided.

Thank you for your cooperation,

I. Profile:
1. Name of your Cooperative:

II. General Questions
1. When was your cooperative established?

2. How many members does your cooperative have?

3. What are the major requirements to be a member of your cooperative?
Ans:

4. Indicate the position, qualification and numbers of Staff in your cooperative.

Position	**Numbers**	**Qualification**	**Training if any**

5. What was the source of your cooperative capital at the start up?
Ans:

6. How many active borrowers does your cooperative currently have?

7. What types of financial services does your cooperative give to its clients?

□ _ _ _ _ _ _ _ _ _ _ □ _ _ _ _ _ _ _ _ _ _ □ _ _ _ _ _ _ _ _ _ _

□ _ _ _ _ _ _ _ _ _ _

Loan type

III. Loan Provision Procedures

8. What are the assessment variables of borrowers to provide loan?

□ _ _ _ _ _ _ _ _ _ _ □ _ _ _ _ _ _ _ _ _ _ □ _ _ _ _ _ _ _ _ _ _

□ _ _ _ _ _ _ _ _ _ _ □ _ _ _ _ _ _ _ _ _ _ □ _ _ _ _ _ _ _ _ _ _

9. How much is the loan size you provide to your clients

	Maximum	*Average*	*Minimum*
a. Individual loan	**……**	**……**	**……**
b. Group loan	**……**	**……**	**……**

10. How long is your credit period?

	Maximum	*Minimum*
1. Individual loan	……..	……..
2. Group loan	……..	……..

11. How much is the minimum, maximum and average lending interest rate charged by the cooperative?

Ans:_____
_____

12. What is your lending interest rate:

Ans:_____
_____

13. Is the lending interest income enough to cover the cooperative's major costs? **……**

14. If your answer to **Q. No. 13** was no, is there any planned solution set for the problem?

Ans:_____
_____
_____

15. What are your considerable factors to determine the lending interest rate?

- **Competition**
- **Cost of fund**
- **Administrative cost**
- Others (specify) _____

IV. Collection Procedures

16. On average, how many of your client's repay on or before the due date?
Ans: _____
_____
.

17. Is there any incentive (benefit) provided to those members who paid their total loan amount on or before the maturity date?

- **Yes**
- **No**

18. If your answer was yes for **Q. No. 17**, what are the incentives (benefits)?
Ans: _____
_____
_____
_____

19. What are the major loan collection procedures?
Ans: **……..**

V. Default

20. What measures does your institution take to control credit default?

- Restriction deposit withdrawal from savings
- Requesting collateral and collateral substitutes
- Sanctions (penalties) for late payment
- Other (specify) _____

21. If you have selected Penalty for late payment to the above question NO. **20**, which of the following penalty applied in your cooperative?

- Financial penalty
- Refusal repeat loan
- Reduce the repeat loan amount

22. From the experience of your cooperative, what are the possible and major factors leading to late payment and default by borrowers?
Ans: _____
_____

23. What are the procedures to collect default loan amounts?
Ans _____
_____

24. 31. What are the practical challenges you have faced in your operation with regard to saving and credit?
Ans: _____
_____

APPENDIX B

PEARLS'S RATIOS CALCULATION

1. P = PROTECTION

P_1 = Allowance for loan losses to allowances required for loans delinquent > 12 months

$$P_1 = \frac{a}{b*c} \quad \text{..... (B.1)}$$

Where,

a. Allowance for Loan Losses (Balance Sheet)
b. Percentage of allowances required for covering loans that are more than 12 months delinquent.
c. Outstanding all loans delinquent more than 12 months

P_2 = Net allowance for loan losses / allowances required for loans delinquent less than 12 months

$$P_2 = \frac{(a-b)}{c} \quad \text{..... (B.2)}$$

Where,

a. Total Allowance for Loan Losses
b. Allowances used for covering Loans that are more than 12 months delinquent
c. Total of all Delinquent Loans outstanding from 1-12 months

P_3 = Total write-off delinquent loan to Delinquent Loans > 12 months

$$P_3 = \frac{a}{b} \quad \text{..... (B.3)}$$

Where

a = total write-off delinquent loan
b = loan delinquent > 1 year

2. E= EFFECTIVE FINANCIAL STRUCTURE

E_1 = Net Loan to Total Assets Ratio

$$E_1 = \frac{(a-b)}{c} \quad \text{..... (B.4)}$$

Where,

a = Total Gross Loan Portfolio Outstanding
b = Total Allowance for loan losses
c = Total Assets

E_2 = Saving Deposits to Total Assets Ratio

$$E_5 = \frac{a}{c} \quad \text{….. (B.5)}$$

Where,

a = Total Saving Deposits
c = Total Assets

E_6 = External Credit to Total Assets Ratio

$$E_6 = \frac{a}{c} \quad \text{….. (B.6)}$$

Where,

a = external credit
c = total assets

E7 = Member Share Capital to Total Assets Ratio

$$E_7 = \frac{a}{c} \quad \text{….. (B.7)}$$

Where

a = Member share capital
c = total assets

E_8 = Institutional Capital to Total Assets Ratio

$$E_8 = \frac{a}{c} \quad \text{….. (B.8)}$$

Where

a = institutional capital
c = total assets

E_9 = Net Institutional Capital to Total Assets Ratio

$$E_9 = \frac{[(a+b)-(c+0.35(d)+e]}{f} \quad \text{….. (B.9)}$$

Where

a = Institutional Capital
b = Allowances for Risk Assets
d = Outstanding Loans Delinquent greater than 12 months.
e = Outstanding Loans Delinquent from 1 to 12 months.
f = Problem Assets (Losses that will be liquidated)
c = Total Assets

3. A=ASSET QUALITY

A_1 = Total Loan Delinquency to Total Loan Portfolio

$$A_1 = \frac{a}{b} \quad \text{….. (B.10)}$$

Where

a = total delinquent loan (loan past due for one month and more than one month)
b = total loan portfolio

A_2 = Total Non-earning Assets to Total Assets Ratio

$$A_2 = \frac{a}{b} \quad \text{….. (B.11)}$$

Where,
a = total non-earning assets, and it is given by (B.11a)
b = total assets

Total non-earning assets is,

$$a = c + d + e + f + g + h \quad \text{….. (B.11a)}$$

Where,

c = cash on hand
d = non-interest bearing monetary checking account
e = account receivables
f = Assets in liquidation
g = fixed assets (land and building, equipment etc.)
h = prepaid expenses and other deferrals

4. R: RATES OF RETURN AND COSTS

R_1 = Net Loan Income to Average Net Loan Ratio

$$R_1 = \frac{a-b}{\left(\frac{(c+d)}{2}\right)} \quad \text{….. (B.12)}$$

Where

a = total loan income (including commission, fees and penalty interest)
b = insurance premium paid on loans
c = net loan portfolio as of current year-end
d = net loan portfolio as of last year-end

R5 = Total Interest Cost on Saving Deposits to Average Saving Deposits Ratio

$$R_5 = \frac{(a+b+c)}{\left(\frac{(d+e)}{2}\right)} \quad \text{….. (B.13)}$$

Where

a = Total Interest Paid on Savings Deposits
b = Total insurance premium paid on Savings Deposits
c = Total Taxes paid by Credit Union on Savings Deposit Interest
d = Total Savings Deposits as of Current year-end.
e = Total Savings Deposits as of Last year-end.

R6 = Total Interest Cost on External Credit to Average External Credit Ratio

$$R_6 = \frac{a}{\left(\frac{(b+c)}{2}\right)} \quad \text{….. (B.14)}$$

Where

a = total interest paid on external credit (borrowed funds)
b = total external credits (borrowed funds) as of current year-end
c = total external credits (borrowed funds) as of last year-end

R7: Total Dividend on Share Capital to Average Member Share Capital Ratio

$$R_7 = \frac{(a+b+c)}{\left\{\frac{(d+e)}{2}\right\}} \quad \text{….. (B.15)}$$

Where

a = total dividend paid on member shares
b = total insurance premium paid on member share capital
c = total taxes paid by MFI on dividend on share
d = total member share capital as of current year-end
e = total member share capital as of last year-end

R8: Gross Margin to Average Total Assets Ratio

$$R_8 = \frac{\{(a+b+c+d+e)-(f+g+h)\}}{\left\{\frac{(i+j)}{2}\right\}} \quad \text{….. (B.16)}$$

Where

a = Loan Interest Income
b = Liquid Investment Income
c = Financial Investment Income
d = Non-Financial Investment Income
e = Other Income
f = Interest Cost of Savings Deposits
g = Dividend or Interest Cost of Member Shares
h = Interest Cost of Borrowed Funds
i = Total Assets as of Current Year-end
j = Total Assets as of Last Year-end

R12 = Net Income to Average Total Assets Ratio

$$R_{12} = \frac{a}{\left(\frac{(b+c)}{2}\right)} \quad \text{….. (B.17)}$$

Where

a = net income after dividend
b = total assets as of current year-end
c = total assets as of last year-end

5. L: LIQUIDITY

L1 = Liquid Investment + Liquid Assets - Short-term Payables to Total Saving Deposits Ratio

$$L_1 = \frac{(a+b-c)}{d} \quad \text{….. (B.18)}$$

Where

a = total earning liquid investment
b = total non-earning liquid investment
c = total short-term payables < 30 days
d = total saving deposits

L2 = Liquid Reserve to Total Saving Deposits Ratio

$$L_2 = \frac{(a+b)}{c} \quad \text{….. (B.19)}$$

Where

a = total earning liquid reserves
b = total non-earning liquid reserves
c = total saving deposits

6. S: SIGN OF GROWTH

S10 = Growth in Members

$$S_{10} = \left\{\left(\frac{a}{b}\right) - 1\right\} \times 100 \quad \text{….. (B.20)}$$

Where

a = total members as of current year-end
b = total members as of last year-end

S11 = Growth in Total Assets

$$S_{11} = \left\{\left(\frac{a}{b}\right) - 1\right\} \times 100 \quad \text{….. (B.21)}$$

Where

a = total assets as of current year-end
b = total assets as of last year-end