Efficiency and Sustainability analysis of Savings & Credit Cooperative Societies in Nepal

(A Case study of Daunnedevi SACCOS and Hatemalo SACCOS)

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Thesis Submitted to:
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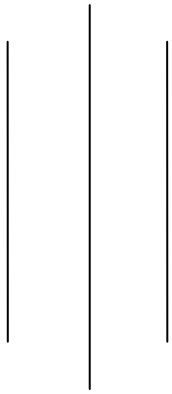

In a partial fulfillment of the requirement in degree of
Masters in Business Study (MBS)
Kathmandu, Nepal
2010

RECOMMENDATION

This is to certify that the Thesis

Submitted by:

SAMITA MAHARJAN

Entitled:

A STUDY ON EFFICIENCY & SUSTAINABILITY ANALYSIS OF SAVINGS & CREDIT COOPERATIVE SOCIETIES IN NEPAL

(A case study of Daunnedevi SACCOS and Hatemalo SACCOS)

has been prepared as approved by this Department in the prescribed format of the Faculty of Management. This thesis is forwarded for examination.

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VIVA-VOCE SHEET

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A Study on Efficiency and Sustainability Analysis of Savings & Credit Cooperative Societies in Nepal

(A case study of Daunnedevi SACCOS and Hatemalo SACCOS)

and found the thesis to be original work of the student and written

according to the

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Masters of Business Studies (M.B.S.)

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I hereby, confess that the work done in this "Efficiency and Sustainability analysis of Savings and Credit Cooperatives in Nepal under the frame work of PEARLS analysis" (A case study on Daunnedevi SACCOS and Hatemalo SACCOS), is my original done, which is a partial requirement of the Masters degree in Business Study under the supervision of Ms. Snehalata Kafle and Mr. Krishna Acharya of Shankar Dev Campus.

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ACKNOWLEDGEMENT

This study is mainly focused on efficiency and sustainability analysis of the cooperatives in Nepal with reference to Hatemalo SACCOS and Daunnedevi SACCOS.

This thesis work would not simply come out without help of many people to whom I want to express my sincere gratitude. I would like to express my first and foremost gratitude to my respected supervisors Mr. Krishna Acharya and Ms. Snehalata Kafle for their guidance, suggestions and insights. My thanks also goes to the library and all other staffs of Shanker Dev College for their help at needed time.

Similarly I wish to express my great appreciation to Mr. Jagadish Tiwari and Mr. Naresh Nepal (Program officer and Senior Program officer respectively for CMF) for their great insights, perspectives, guidance about the microfinance and PEARLS analysis mechanism. I also would like to express my gratitude to the Resource Center of CMF; Bhatbhateni for providing me required reference materials for review and literature portion.

I am grateful to Ms. Hira Shahi (Manager-Daunnedevi SACCOS) and Ms. Shanti Gurung (Acting Chairperson-Hatemalo SACCOS) for their great cooperation and assistance during the thesis work.

Finally I would like to give credit of this study to my friends Hasana Dangol and Anuj Shrestha for their constructive criticism, guidance and inputs to complete and making this study much more qualitative.

Samita Maharjan
Researcher

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ABBREVIATIONS

BASEL:	Basel Committee for Banking Supervision, Bank for International Settlement, Switzerland, BASEL
CAMEL:	Capital Adequacy, Assets Quality, Management, Earnings, Liquidity & Fundings and Sensitivity of Market Risk
CB:	Commercial Banks
CECI:	Centre for International Studies and Cooperation
CMF:	Center for Microfinance
DB:	Development Banks
DD SACCOS:	Daunne Devi Savings and Credit Society
DOC:	Department of Cooperatives
FI:	Financial Institutions
FINGOS:	Financial Intermediary NGOs
INGOS:	International Non Government Organizations
M-CRIL:	Micro Credit Rating International Ltd.
MFDB:	Microfinance Development Bank
MFI:	Microfinance Institutions
MIFAN:	Micro Finance Association Nepal
MIX:	Microfinance Information Exchange
NEFSCUN:	Nepal Federation of Savings & Credit Co-Operative Unions Ltd.
NGO:	Non Government Organization
NRB:	Nepal Rastra Bank
NUBL:	Nirdhan Utthan Bank Limited
P.E.:	Profitability Ratio
PEARLS:	Protection, Efficiency, Asset Quality, Rate of Interest, Liquidity & Sign of Growth
PGBB:	Purwanchal Grameen Bikash Bank
RMDC:	Rural Microfinance Development Centre Ltd.
RSRF:	Rural Self Reliance Fund, NRB
SACCOS:	Savings and Credit Cooperative Society

SCCS:	Savings and Credit Cooperative Society
SDC:	Swiss Agency for Development and Co-operation, Nepal
SEEP:	Small Enterprise Education Promotion Network
SFCL:	Small Farmers Cooperative Ltd.
TNA:	Training Need Assessment
WOCCU:	World Council Credit Union

Chapter – 1

Introduction

1.1 Background

Microfinance or micro credit simply means small loans provided to an individuals or a group of individuals where as microfinance institution refer to the flow of small credit according to needs of a grass root people through rural credit intermediaries. The main target groups of rural credit intermediaries are the poorest of the poor community in the country. Throughout the world, there is various formal and informal credit institutions has been established for credit delivery. Such models are in the forms of Associations, Bank guarantee, Community banking, Cooperatives, Grameen replications, Groups, Individuals, Intermediaries, and NGOs etc. The methods of formations and operations of these models may vary each other but the major goal of all of the models are same as to create a source and access to finance and ultimately to raise the economic status of the target groups.

For one fifth of the humanity ie. a billion of people worldwide, a daily reality is an abject, chronic and grim poverty they are tolerating. In this context also microfinance has been one of the few effective tools in poverty alleviation over the past 30 years. The practice of giving poor very small loans to start a small business has been turned one of the very few unambiguous success stories in the long, frustrating fight against Third World Poverty.

Broadly microfinance sector in Nepal can be divided into two sectors. Institutional sector and community based sector. Under the institutional sector, there are CBs, DBs, rural development banks, Cooperative societies, saving and credit groups. In addition to this there also exists more traditional credit groups, which are the informal credit intermediaries and yet they are playing very significant role in rural micro credits in Nepal. These kinds of microfinance activities fall in to the community based sector.

With reference to the various studies conducted by different government and non government organizations, Nepalese microfinance sector is reaching 37 % of its potential market with the access only in concentrated accessible areas and virtually no or limited

access in inaccessible areas like hills and mountain regions. The study has concluded that expansion of microfinance services to a large number of un-served and under-served micro-entrepreneurs and poor households who live in remote districts is still a challenge.

1.2 Brief definition of Cooperative

Cooperative is a business organization in which different individuals are voluntarily involved for the sake of social upliftment and security of the members on the basis of human norms, values and equality. The main objective of the cooperative is to make economically strong its members by implementing various development activities and micro enterprises and also to make the society free from so-called informal financial intermediaries like *Jamindars* and *Sahu Mahajans.* They suck the poor. To be the cooperative there should be unity in the objective of all the members and also it would be professional and logistic. All the members are equally responsible for the operation and establishment of cooperative society. Every member has equal democratic rights irrespective from the number of shares they purchases.

Since cooperatives are community based independent business organizations, through its business activities it can develop economic, social and cultural status of the members. Eventually, people could overcome from sucking nature of the private and multinational companies and its monopoly. Since the 1980s, decade world has been entered into the globalization and privatization. This created turmoil to the small, medium and low capitalists, entrepreneurs, farmers, business man, artists, professionals and the consumers. In this case cooperatives have been able to flow its small amounts to the needed peoples which would help them to initiate the small business and enterprises. Being a land lock country Nepal is not locked from the opportunities available in the natural and cultural sectors. Thus, cooperatives can play a vital role in raising the per capita income of the country via micro credit and enterprises development.

Since cooperatives are formulated for the mutual development of members and institutions, it should last for the long term with more effectively to serve the poor. For the same purpose and to follow the principal of the cooperative federation like

'Democratic Control by Members' a timely surveillance and supervisions are very important.

1.3 Cooperative Movement in Nepal

Nepal is one of the least developed countries in the world, a country with the highest annual population growth rate and the lowest Human Development Index rank among the SAARC countries. Both formal and informal microfinance institutions (MFIs) in Nepal are providing financial services to generate income through creating job opportunities for the low income families. The history of Cooperative Society in Nepal is 1956 AD aback with the government incorporation of Bakhan Saving and Credit Cooperative Ltd. in Rapti Valley, Chitwan. The Thirty-Years Panchayat regime also attempted to promote cooperatives by enforcing the cooperative Act, 1959 (2016 BS) and Cooperative Regulation, 1961 (2018 BS).

Later in 1963, the cooperative bank was established to provide financial services to the credit cooperatives. Thereafter, several credit cooperatives and the ward/village committees were established to extend credit at the grassroots level along with a national level institution, ie. Land Reform Savings Corporation. Thus, 1956-1970 is the beginning phase of formal microfinance in Nepal. Actually, microfinance as a key strategy for poverty alleviation, was started in Nepal since 1974 when the country's central bank, the Nepal Rastra Bank (NRB) gave direction to major commercial banks for lending five percent of their total deposit liabilities to "small sector' in order to increase production and employment in rural area.

Nevertheless, cooperatives became burdensome to the government for some extent due to the weak management. Later on, after the restoration of democracy, government considered cooperatives as an effective tool in poverty alleviation. It also enforced new cooperative act, 1991 (2048 BS) and cooperative regulation 1992 (2049 BS).

Table 1 Number of cooperatives registered till Chaitra 2065

Working Area	No. of Cooperatives	Percentage
Savings and Credit	5162	40.82 %
Multipurpose	2978	23.55 %
Milk	1603	12.68 %
Agriculture	1736	13.73 %
Electricity	257	2.03 %
Others	273	2.16 %
Fruit and Vegetable	123	0.97 %
Consumer's	201	1.59 %
Science and Technology	83	0.66 %
Coffee	73	0.58 %
Health	41	0.32 %
Tea	48	0.38 %
Herbal	38	0.30 %
Bee	30	0.24 %
Total	**12646**	**100 %**

Source: Department of Cooperative website

The microfinance service in Nepal was started with the establishment of 13 saving and credit cooperative and government initiated the first approach to inject the rural credit. Basically, cooperatives were formulized with the enactment of the cooperative act 1959 and in 1971 the cooperative registration program was launched in an effort to strengthen

and improve the operation of the cooperative. The cooperative movement has dramatically been changed by the enactment of Cooperative Act, 1992. As of FY 2065 Chaitra there are altogether 12646 cooperatives has been registered, and among them saving and credit cooperatives is highest with 5162 number (40.82 %), followed by multipurpose cooperatives societies 2978 (23.555%). The agricultural cooperatives ranks third in number with 1736 (13.73%), where as milk producer's cooperatives are forth with 1603 (12.68%). There are other cooperatives like consumer's cooperatives, coffee cooperative, health cooperative, electricity cooperative, herbal cooperative, tea cooperative etc. Among these various cooperatives the savings and credit cooperatives, multipurpose, agriculture and the milk producer's cooperatives are found to be the most effective contributors of the cash flow in rural finance in Nepal.

Currently there are 15 microfinance development banks in the country which provide credit facilities to 547,435 poor people. As many as 381,392 people are served by 45 FINGOS, SACCOS has the highest number of clients-it serves 714,516 people through 5161 institutions. SFCL caters to 145419 clients through 225 SFCL units. Thus, the total number of people who have been able to avail of microfinance facilities has reached 1,788,762-1,387,043 females and 401,719 males. As of today, 6.3 percent of the total population of Nepal is served by the microfinance facility which is 20 percent of the population living below the poverty line. MFIs are spread over 55 districts of the country most of which lie in the Terai region. Almost all the 20 districts which are not catered to by MFIs are in the hilly and mountainous regions. That is because population settlement is scattered in such regions and MFIs do not see business viability in those areas as the operation cost rise tremendously once the settlement of clients is not homogeneous. Indeed, the current state of 80 percent of the poor lacking access to microfinance and 20 districts being untouched by the service is a huge opportunity for MFIs to expand their client base and outreach.

Profile of the selected SACCOS:

1.4 Hatemalo Savings and Credit Cooperatives Society Ltd.

1.4.1 Introduction

Hatemalo SACCOS is located in Maharajgunj, Kathmandu. It started providing services from the year 2057 (2000) and was registered in the year 2058(2001). Currently it has 1534 members including 23 Dalits, 960 Janajati and 551 others. Share capital of the institution for the FY 2065/66 is Rs. 20, 72,500. The membership policy requires new members to have been recommended or introduced by former members and that the women should be close proximity of the organization. Any women fulfilling such criteria can be a member of the institution.

It has written annual and future plans. Every year it holds an annual general meeting with high volume of the members in attendance. Daily transactions are kept and management prepares a monthly report, which is then revised by the Board members. The cash is handled securely and deposited in the bank. The arrears rate is also less than 2% for the entire portfolio. It has never done any financial analysis of the institution but expecting to do in near future as currently they don't have enough ideas regarding that.

Hatemalo SACCOS has been selected for this thesis work due to the following some reasons:

- This cooperative is entirely ruled by women.
- It has significant growth in the number of members and its capital.
- It is involved in different development projects.
- This Cooperative has been able to serve the grass root being established in the urban area.
- This Cooperative is always eager to introduce a new product which is benefited to its member and the poor.

1.4.2 Products Offered

It has made its own policy to promote micro enterprise and for this purpose it provides one year long loans at the rate of 15% interest for the activities like: pashmina production, poultry farming, cow farming, incense stick and candle manufacturing. It currently has launched a Pension Savings and providing different types of savings such as compulsory savings with 7% interest, term deposit with 6% interest, child savings with 10% interest and daily savings with 5%. Furthermore, it is providing loans for foreign employment and interested in micro insurance. All in all, there is demand for the services provided by the institution and it is prepared to dedicate professional staffs for more services.

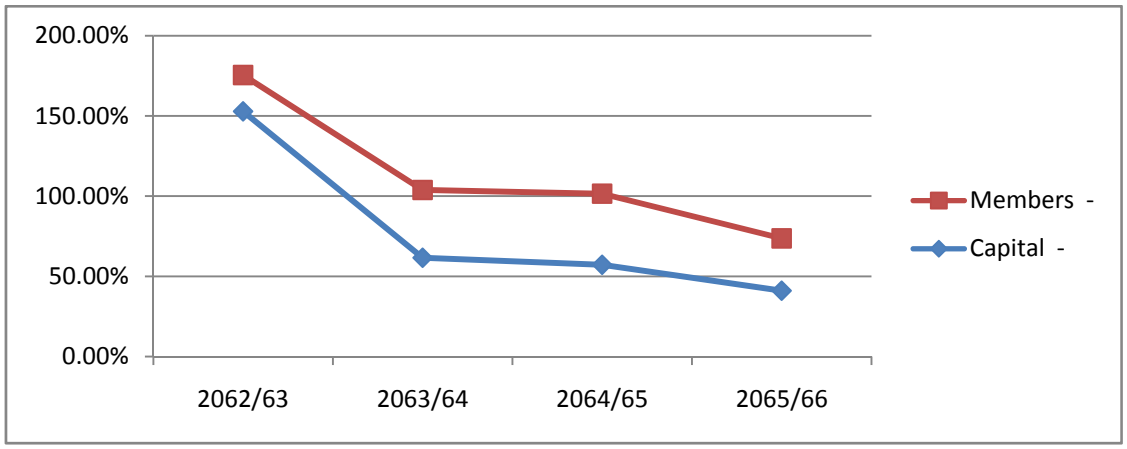
1.4.3 Number of Members and Share Capital in Hatemalo SACCOS

Any Savings and Credit Cooperatives are formed by voluntarily involved group of members. For day to day activities and long term sustainability of the organization number of its members plays very essential role. As there is no doubt that without capital nothing can be done in any organization, and in cooperatives the main source of the fund or capital is its members. Hence the correlation between number of members and the share capital would be always positive. The position of share capital and number of members for Hatemalo is as follows.

Table 2

Year	Number	Percentage	Capital	Percentage
2061/62	460	-	228600	-
062/63	564	22.61 %	578100	152.89 %
2063/64	802	42.20 %	934400	61.63 %
2064/65	1157	44.26 %	1469400	57.26 %
2065/66	1534	32.58 %	2072500	41.06 %

Figure 1



The above Table-1 and Figure-1 shows an increasing trend in the Share capital and number of shares but in descending order. That means number of share and capital has been increasing throughout the years but the percentage of growth is declining. The highest percentage growth in number of share members is in FY2064/65 with 44.26 % where as lowest is in FY2062/63 with 22.61 %. Similarly, the highest percentage growth of Share Capital is in FY2062/63 with 152.89 % and lowest is in FY2065/66 with 41.06 %. This is only satisfactory growth for Hatemalo SACCOS there is need for the ascending order growth.

1.5 Daunnedevi Savings and Credit Cooperative Society Ltd

1.5.1 Introduction

Daunnedevi SACCOS is located in Makar, VDC Bardaghat, Nawalparashi district. In fiscal year 2039/40 when Nepal government introduced a women development program in Nepal which also incorporated the Nawalparashi district. To grab the same opportunity, women from Nawalparashi formed a group in Rajahar VDC war no. 1, and started a new journey of their life. Later on it expanded the working area to Makar VDC. The program inspired women to engage with the group, get loans from NRB to involve in various training programs and also to form the Unit Committees by themselves.

In this way Daunnedevi SACCOS started its services in 2046 BS (1999) and was registered in 2056 (1999).

The Cooperative is centrally located and now has its own building. There are 946 members made up of 4545 households of their working area. Among them 21.14% Dalits, 21.14% Janajati and 57.27 % other group caste. To be the member of this MFI, membership policy demands that they should be married women within the cooperative working area and holding Nepali citizenship. This cooperative is promoted by Mahila Bikash (a government project for women development).

The main objective of this cooperative behind its establishment was to increase members earning capacity and protect people who are suffering from natural calamities. There were many positive changes happened to the members after the registration of Daunnedevi SACCOS.

Women showed personality development greater confidence and increased interest in depositing money, no matter how small it is. They are also getting more confidence to start the micro enterprises and borrow the needed money from cooperative.

Dauunedevi SACCOS also receives external support from Nepal Pariwar Niyojan (Family Planning) for maternal welfare and IIDS for construction of new buildings. One of the strong part of this cooperative is that it has low member dropout rate and there exists a plan for future membership expansion. This model is based on federation model.

Daunnedevi SACCOS has been selected for this thesis work due to the following some reasons:

- It has a sound business protocol.
- It is located outside the valley and entirely owed by women.
- It is engaged in various income generating activities for its members.
- It has been able to win different prizes in good governance of the organization.
- It is involving in different development projects, especially for the women.
- It has significant growth in the number of members.

1.5.2 Products Offered

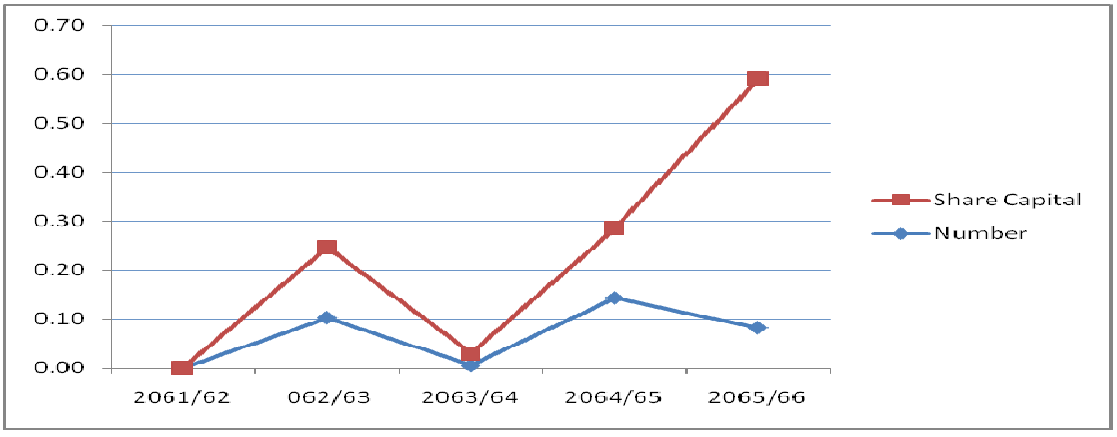
Currently, it provides a variety of savings and loans options. Savings products include regular savings with 9%, fixed deposits with 10%, and child savings with 8% interest rate. It shows willingness toward the product diversification. It has been providing a wide array of loan products with 15% interest rate for the productive sector, emergencies, foreign employment, social activities and consumption. It also has been providing loans for micro enterprises, which last 6 months with 18% interest rate for goat, pig poultry, cow and buffalo farming . Furthermore it also provides loans for foreign employment.

1.5.3 Share Capital and Number of Members for Daunnedevi SACCOS

Table 3

Year	Number	Percentage	Capital	Percentage
2061/62	679	-	312800	-
062/63	749	10.31	356800	14.07
2063/64	753	0.53	365300	2.38
2064/65	861	14.34	417200	14.21
2065/66	932	8.25	629400	50.86

Figure 2



The above table-2 and figure-2 shows ups and downs in the percentage of number of shares and share capital, though the number of shares and share capital is increasing trend for Dauunedevi SACCOS. Regarding number of share members, its increased by 10.31% in FY2062/63 and declined by 0.53 % in FY2063/64, again it increases in FY 2064/65 by 14.34 % and declines to 6.25 % in FY 2065/66. Similarly, the share capital is increased by 14.07% in FY2062/63 which declined to 2.38% in FY2063/64, there after it increased dramatically for the FY2064/65 and FY 2065/66 up to 14.21% and 50.86 % respectively. This figure and table data shows the reasonable growth in Share Capital but there is need to improve in number of share members.

1.6 Statement of the Study

As poverty has been a common problem to many countries all over the world, microfinance has been internationally recognized as a key tool for poverty alleviation and integrated into the development agenda. Over the world many developing countries are experiencing the micro credit and micro enterprises through which billions of poor over the world are serving. Even in Nepal many cooperatives emerges as a microfinance institutions, over a year but among them only few cooperatives could survive for the long terms. It is because of the lack of proper guidelines and monitoring/surveillances. For any cooperative viability and sustainability is the must to serve to poor at long term.

Therefore, "Efficiency and Sustainability analysis of the Cooperatives in Nepal under PEARLS Analysis" lets us know about the health position of the selected MFIs and provide proper guidelines for the further improvement. It also allows us to do comparative data analysis between the two selected cooperatives on the ground of PEARLS analysis.

This Study will also able to answer some of the questions related to financial viability and sustainability of the selected cooperatives.

- Are the saving deposits of the member clienteles are in safe position?
- How viable and sustainable are the financial structure of institutions?

- What are the liquidity position, rate of return, assets quality and delinquency rate as of the total portfolio of the institutions?
- Whether the growth of institution is reliable etc.

1.7 Importance of the study

There is no doubt that microfinance has been emerging as one of the effective tool for poverty alleviation in all the over the world. There are numerous examples available of the positive impacts on poverty reduction as a result of microfinance services. Hence being a part of microfinance, Cooperatives could do lot more to reduce poverty especially in the developing countries like Nepal. In spite of that, there are only few cooperatives exists which are more capable, efficient and could sustain for long term for the development and expansion of the microfinance services to targeted clients in the country.

Financial viability and sustainability obtained through efficient financial structure and growth of the institution. This study will be significant to the management for their decision making as well as to the shareholders, depositors, prospective customers, investors, policy formulators who are concerned with Nepalese MFIs.

1.8 Objective of the Study

The major objectives of the study are as follows:

- To evaluate the effectiveness and sustainability of the selected cooperatives
- To understand the concept of PEARLS analysis as a tool for financial health checkup of the Cooperatives in Nepal.
- To do comparative analysis between Hatemalo Savings and Credit Cooperative Society Ltd. and Daunnedevi Savings and Credit Cooperative Society Ltd.
- To examine the major problems of MFIs.
- To recommend the possible measures for their improvement.

1.9 Limitation of the Study

This thesis work has been conducted under partial fulfillment of MBS degree. So it would have some limitations of its own kind. Some of them are as follows:

- Though the study talks about the efficient and sustainability of the cooperatives in Nepal, only two cooperatives has been selected for the study due to the lack of time and resources.
- There was not complete information available for the proper data analysis, hence only possible ratios has been conducted in the report.

- This study covers only the span of five years 2061/62 to 2055/56.

1.10 Organization of the study

Basically, the study has been organized into five chapters. They are as follows:

Chapter 1: Introduction

This chapter contains introduction of the study. It also includes general background, statement of the study, importance of the study, objective of the study and limitation of the study.

Chapter 2: Review of Literature

This chapter contains the review of related reports and articles, review of related case studies, thesis etc**.** It is divided into four captions (1) Conceptual Review of Financial Analysis, (2) Policy and Regulatory issues in Microfinance (3) Challenges to Cooperatives in Nepal (4) Review of Research articles and thesis.

Chapter 3: Research Methodology

This chapter explains the methodologies used for the research work to find out the targeted results. It includes research design, population and sample, source of data, data collection procedures and analysis tools.

Chapter 4: Data Presentation and Analysis

It deals with presentation and analysis of collected secondary data by using various statistical tools. It also analyzes the PEARLS ratios of the selected SACCOS. Eventually this chapter presents the major findings of the data analysis procedures.

Chapter 5: Summary, Conclusion and Recommendation

This chapter includes the summary and conclusion of the study. It also provides recommendations to the selected SACCOS.

Chapter - 2

Review of Literature

This chapter is about reviewing the relevant literatures. The study is done on the basis of available information from libraries, selected institutions and the relevant websites.

The concerned literatures for this thesis are books, research articles, journals dissertations and websites. This chapter deals with the literatures relevant to the study.

Basically this chapter includes following four captions.

1. Conceptual Review of Financial Analysis

2. Policy and Regulatory issues in Microfinance

3. Challenges to Cooperatives in Nepal

4. Review of Research articles and thesis

2.1 Conceptual Review of Financial Analysis

Financial analysis is the process of identifying the financial strengths and weaknesses of the institutions by properly establishing relationship between the items of Balance Sheet and Profit & Loss A/C. Apparently, the financial health analysis of any institution is based on the key figures contained in the financial statements and the significant relationships that exist between them. It is undertaken by various interest groups of a firm and the nature of analysis differs depending on the purpose of the analyst. Management of the institution is generally interested in every aspect of the financial analysis because they have overall responsibility of maintaining efficient and effective utilization of resources and sound financial position for the sustainability of the institution.

Basically financial analysis may of two type's viz. Vertical Analysis and Horizontal Analysis. When financial statements like Balance Sheet or Profit & Loss A/C of the certain period are analyzed, this is called vertical analysis. Since this analysis measures a

position of the business at a point of time, it is also known as static analysis. Whereas, Horizontal analysis, series of statements relating to a number of years are reviewed and analyzed. It is also known as a dynamic analysis because it measures the change of position or trend of the business over a number of years.

This study is also based on Horizontal analysis. All in all, there are three basic steps included for doing financial analysis of selected SACCOS.

- Collection of the information through its staff members.
- Arrangement of the selected information in a way to calculate the relevant ratios under PEARLS analysis.
- Interpretation and drawings of inferences and conclusions.
- Comparative analysis between the selected two SACCOS.

2.1.1 A Short Glimpse of PEARLS

In modern scenario, for many instances, management of cooperatives has been decamped with the saving of poor. In Nepal out of thousand cooperatives there are only few cooperatives exists which are under the jurisdiction of monitoring authority Nepal Rastra Bank. At present NRB does the offsite and onsite supervision of cooperatives licensed for limited banking services (there is only 16 cooperatives exists in the country which are registered under NRB). It regulates and supervises the cooperatives under its jurisdiction, such as monitoring in, minimum core capital, capital funds, limit of funds collection, minimum cash reserve, minimum capital liquid assets, classification of loans and advances and loan loss reserve, limit of single borrowers, used for other financial institutions. It has adapted CAMEL as rating system to evaluate the financial institutions except micro finance. NRB has not included in micro finance industry, according to NRB 2006. Hence, it implies it is using the same rating system doesn't evaluate the financial structure of the Balance Sheet and it consider the growth rate of the total assets. Hence, the World Council Credit Unions Inc. (WOCCU) has been using PEARL Technique from 1990 to monitor the performance of the credit unions and check up their financial health.

In this thesis work the financial health check up of Hatemalo Women Savings and Credit Cooperative Ltd and Daunnedevi Women Savings and Credit Cooperative Ltd will be conducted in the framework of the PEARLS.

2.1.2 A Rationale of Regular Health Check-up for SACCOS

Merely established financial institutions are not responsible for the poverty alleviation of any country, rather those financial institutions which can truly facilitate the country people by delivering reasonable loan and accepting deposits. As like, the human being needs to check their health regularly to be fit against the unforeseen health problems, financial institutions also needs their regular health checkup so that it can assure its clienteles regarding their investment.

The regular health check-up is the very crucial task not only for the savings and credit cooperatives but also for any financial institutions (FIs) to maintain the confidence of organization in financial system of country and to protect the interest of depositors, lenders, shareholders/members and other stakeholders. The importance of sound financial health of the FIs has increased wisely after the international financial turmoil of the second half of 1990. International monetary authorities such as International Monetary Fund and the World Bank have underpinned the need of healthy financial sector to build up the confidence of private sector in the liberalized financial system and therefore they have directed their member countries to conduct the regular health check-up of FIs through onsite and offsite supervision. The World Bank and Asian Development Banks are supporting the projects which are running for reforming process of the financial sector of different countries. In Nepal, the World Bank is constantly providing the technical and financial support to re engineering Nepal Rastra Bank. *Nepal Bank Ltd and Rastriya Banijya Bank (NRB 2005).*

The Health of any financial sector depends on the health of individual FIs. In addition, individual FIs health counts on the myriad macro and micro factors. Political stability, real sector growth, economic condition, socio-cultural factors and Technologies are vital. However, an effect of these macro variables may vary from one individual FI to another.

Therefore, health of any FI should be checked up regularly to know the intensity of such affect.

Basically health of an individual FI is a function of multiple factors. Such as Quality of its Assets, Liquidity Position, Capital Foundation, Management Quality, Market Sensitivity, Growth, Financial Structure, Earnings etc. All these factors adversely affect the different type of risk to an individual FF, if they are not managed in sustainable manner. Such as credit interest rate, liquidity, market, off Balance sheet, foreign exchange, sovereign, technology, operational, insolvency etc. Financial Health check up of an individual institution should be made regularly to detect the adverse of these risks on the institutions. Deep inside, micro-prudential indicator such as capital adequacy, asset quality, management soundness, earnings and profitability, liquidity, sensitivity to market risk and market based indicators like market price of financial instruments, credit ratings are used as indicators of the sound health of an individual FI.(Evan and Others 2000). In addition, sound financial structure and sustainable growth rate also are considered as good indicators of any FIs. Financial Health Check up is required for particularly for saving and credit cooperatives to find out the financial problems and attract the attention of management to resolves to such problem because financial health may threaten the safety and soundness of the Cooperatives.

It may cause the financial tools to the members and adversely affect the members' confidence in saving credit cooperatives and system as a whole. Therefore, regular financial health check up of such cooperatives should be conducted to find out the severed problems and solve them before they are getting worst to safety and soundness to the organization which may cause the financial loss to the members and adversely affect the members' confidence and the entire cooperatives system.

2.1.3 Theoretical perception of PEARLS Framework

Internationally, there are many sets of financial ratios exist to evaluate the performance and check up financial health of FIs. Among them CAMEL Framework- developed by regulatory authority of the US Banks, which is the common method used for evaluating the soundness of FIs. On the consensus of a group comprising Micro rate (a rating agency

specializing in micro finance). Inter American Development Bank, the consultative group to assist the poorest. United States Agency for International Development and two other rating agencies, MCRIL and PlaNet Rating, developed a set of commonly used performance indicators for MFIs. This Set of performance indicators fall into the four main categories-profitability, efficiency and productivity asset quality's portfolio quality, financial management (Staufferbering and others 2003). This sort of indicator is commonly known as PEAF. CAMEL is not an appropriate tool for MFIs due to earlier mentioned reason. Similarly, PEAF also doesn't consider the growth rate of the total assets. Whereas, PEARLS system evacuates deficiencies of both CAMELS and PEAF by incorporating the growth & financial structure related indicators. This is the reason why WOCCO & its member countries are using this method to monitor, supervise & Check up the financial health of MFIs like Credit Unions & Cooperatives. In addition, MFIs also are using PEARLs as a managerial tool to monitor & improve their performance.

The acronym of PEARLS stands for Protection, Effective, Financial, Structure Assets Quality, Rates of Return and Costs, liquidity and signs of Growth.

a) **Protection (P):** The first component of PEARLS – Protection refers to the Safety of the money of member-clients of MFIs and it is remarkable that every client should be a member. Basically in any MFIs, anybody else can open the saving account and borrow the money only after receiving membership of the cooperatives. Hence in this regard, every member is the client and every client is the member of a particular cooperative. Unless and until potential member-client do not feel secure their investment. Protection to the saving of members-clients can be done by providing adequate protection to assets. So, the basic principle of the new credit union model is adequate protection of assets. Protection can be provided by making adequate allowances for loan losses.

   According to the WOCCU model, protection against loan losses against loan losses is deemed adequate if a cooperative has sufficient provision to cover 100 percent of all loans delinquent for more than one year and 35 percent of all loans delinquent for 1-12 months. In Nepal, cooperatives licensed for limited banking services-collection of saving and lending the money, should have 1 percent of pass loan (Loans and

advances not past due and past due for maximum 3 months), 25 percent of substandard loan (loans and advances past due 3 months to 9 months), 50 percent of doubtful debt (loans and advances past due 9 months to 1 year) and 100 percent of bad debt (loans and advances past due more than 1 year) for loan loss provision (NRB 2002).

But thousand of saving and credit cooperatives are out of the jurisdiction of NRB. So, most of the cooperatives do not have loan loss provision as per this directive. Inadequate loan loss provision results in two undesirable results-inflated asset value and fictitious earnings. Loan loss provision is deducted from gross loan portfolio for accounting reporting. So, inadequate loan provision means deduction of less loan loss provision expense from gross loan portfolio and overstatement of the value of assets in the balance sheet. Loan loss provision expense is charged off to profit and loss account. Less loan loss provision expense charged to profit and loss account means the reported net income is overstated. Thus inadequate loan loss provision inflates the asset value, overstates the earnings and risks the savings of members. In brief, saving is inadequately protected if loan provision is inadequate. The PEARLS system evaluates the adequacy of protection afforded to the cooperatives by comparing the loan loss provision to amount of loan at risk. In this system loan loss provision is considered as the first line of defense against non-performing assets.

b) **Effective Financial Structure (E):** Likewise, the second component of the PEARLS is Effective Financial Structure which determines growth potential earnings capacity and overall financial strength of MFIs. Generally, financial structure refers to the composition of different sources of resources. Unhealthy financial structure hinders the growth, and weakens the earnings capacity and financial strength of FIs. It may lead MFIs to the verge of liquidation or force the management to run away and cause the management to lose the confidence of member-clients. Healthy financial structure is one facet of the financial structure and effective use of the resources is another one. So, PEARLS system measures the effective financial structure in both financing of resources and effective use of the resources of MFIs. Hence, the ratios of different types of assets to total assets and

different types of liabilities to total assets are worked out to measure the effective financial structure of MFIs.

According to the PEARLS system, investment in net loan, liquid assets, financial assets, and non-financial investments should be in the range of 70-80 percent, 20 percent, 10 percent and zero percent of total assets respectively. This implies that MFIs should not invest in non-financial assets such as supermarkets, pharmacies, residential housing development etc. Financing of total assets with saving deposits, borrowed funds and member share capital should not exceed 80 percent, 5 percent, 20 percent of total assets respectively. Institutional capital should be at least 10 percent of total assets of MFIs.

Institutional capital comprises of regulatory reserves, other reserves, monetary donations/grants, and undivided earnings. In the case of cooperatives the ownership share capital is not included in the institutional capital. Share capital can be withdrawal upon the termination of the membership and in some cases it is used to secure the loan. The ratio of institutional capital to total assets measures the capital adequacy of MFIs. At least it should not come down below 10 percent of total assets (WOCCU 2002). But in our country, capital adequacy is measured in term of the percent of core capital and total capital on risk adjusted assets of cooperatives (NRB 2002). As stated earlier, this is in the same line of other FIs.

All in all an MFI's financial structure is said effective when assets financed by saving deposits generate sufficient income to pay market interest rates on savings, cover operating costs, and maintain capital adequacy.

c) **Asset Quality (A):** Quality of the assets affects the earning power of the MFIs. Investment in non-earning assets and increase in assets at risk decreases the earning capacity of the cooperative, which also decreases the institutional capital and eventually lead to the liquidation. PEARLS uses some formulas to calculate the delinquency ratio, non-earning assets ratio, financing of non-earning assets ratio to identify the impact of non-earnings assets. Delinquency ratio measures the delinquency rate of the total loan portfolio. It is the most important indicator for the

quality of assets. Higher the delinquency ratio higher will be risk to the member-client savings. This ratio should not exceed 5 percent of the total gross loan portfolio. The second indicator of asset quality measures the percentage of investment of MFIs in non-earning assets. Sometimes MFIs have to invest their funds in such assets to improve their physical image and attract the new member-clients. In the long run, they can attract more new member-clients, increase the member share capital and saving deposits, and finally increase the total assets. But increase in the non-earning assets should be temporary. The higher the ratio, the more difficult to generate sufficient earnings to cover the operating cost of the MFIs and distribute the dividend to their members. Hence, MFIs should maintain the minimum level of their investment in non-earning assets.

d) **Rate of Return (R):** Basically, this component of the PEARLS system evaluates different yields on the investment. It also measures efficiency of management in terms of controlling of operating costs. Management can rank the different components of investments by comparing the yields and identify the problem area of operational cost of MFIs. The indicators of this component are mainly categorized into two sections, one is indicators relating to rates of return and another is relating to the operational costs. The indicator of fist category measures return on the different components of investment like loan portfolio, liquid investments, financial investments, non-financial investments and return on total assets whereas second indicator measures the rate of return on operating cost, gross income margin and net profits.

e) **Liquidity (L):** It is very obvious that maintaining the high liquidity adversely affects the profitability of any MFIs because of its low rate of return. Generally, investment in liquid assets yields very low rate of return. Some of the liquid assets such as cash on hand and current accounts/call accounts yields nothing at all. Therefore, every MFIs needs to maintain the proper balance between liquidity and profitability. Basically, liquidity implies the cash requirement for possible withdrawals of saving deposits in MFIs. But it may be beyond the control of the management of MFIs. So, the management of liquidity has turned out more

complicated in MFIs. It should maintain adequate liquidity reserves for its sound financial health. In this regard, PEARLS system analyzes the liquidity of MFIs from two perspectives: Total liquidity reserves and idle liquid funds. In first perception, the adequacy of cash reserves to satisfy deposit withdrawal requests is measured. Whereas second perception measures the adequacy of the reserve maintained by MFIs which is the requirement of regulatory authority. Basically, PEARLS system uses two ratios- liquidity reserve to saving deposit and non-earning liquid assets to total assets. According to the WOCCU model, MFIs should maintain 10 percent liquidity reserve of the saving deposit and have non-earning assets less than 1 percent of total assets.

f) **Sign of Growth (S):** Eventually, PEARLS system links the growth to profitability and other key areas like, total assets, loan, liquid investment, financial investment, saving deposits, external credit, member share capital, institutional capital and number of members. Growth in total assets brings about the improvements in many key ratios. Growth rate should be more than inflation rate. Loan portfolio is the most important assets of MFIs therefore; growth in total loan should keep the same pace of the growth in the total assets. Growth in saving deposits affects the growth in loan portfolio and total assets, which affects other key areas of MFIs respectively. But high growth in saving deposits may turn out burdensome if MFI is not able to mobilize the deposits to profitable investment.

The WOCCU model is deemphasizing the member share capital. But some cooperatives may not able to promote the saving deposits. Such MFIs are highly dependent on member capital. So, high growth rate in share capital reflects the weak marketing program. Growth in institutional capital reflects the profitability of MFIs. It is difficult in adding to institutional capital for and MFI with low earning. Constant growth rate or declining growth rate indicates a problem with earnings.

2.2 Policy and Regulatory issues of Microfinance in the country

The term regulation can be defined or understood by many terms according to their various purposes for establishment. Regulations in banking and finance broadly can be referred as, "Binding rules governing the conduct of legal entities and individuals, whether they are adapted by a legislative body (laws) or an executive body (regulations)." (CGAP, 2003) Regulation could be further explained as self-regulation prudential, non-prudential and enabling regulations.

- **Self-regulation:** Regulation and or supervision of a legal body that is effectively controlled by the entities being regulated or supervised in a predetermined rating systems or tools (PEARLS rating system is applied by many Micro-finance Institutions as self-regulation norms in many countries)

- **Prudential Regulation:** Such regulations aimed to protect the financial system as a whole as well by protecting the financial safety of small deposits in individual institutions. Most of the prudential regulations stem from BASEL principles and CAMELS rating, which maybe burdensome to smaller Micro-finance Institutions and in Regulations, especially those who do not take public deposits.

- **Non-Prudential Regulations:** Outside Central Bank purview- regulations maintained by various mechanisms by different entities e.g. government body, industry association, audit firms, disclosures, rating tools etc. In this context, many believe that Micro-finance portfolio covering around 2 percent in average of total financial asset does not pose safety soundness risk in financial system and thus may not require prudential regulations.

- **Enabling Regulations:** Regulations having positive outlook, allowing Micro-Finance Institution's easy entry and involve in new activities are considered as enabling or promoting regulations.

The issues in regulation and supervision, worldwide, are moving around some key factors such as; deposit taking/non-deposit taking, smaller/large MFIs, outreach volume, donor funded, commercial fund accessed MFIs and rating services availability etc. In most of

the available literature member's saving (savings against total loan used), saving in limited amount and borrowing from apex institutions, are considered as the practices which do not need of prudential regulations and supervision.

At present Micro-finance Institutions in Nepal are subject to regulations such as, establishment criterions, prudential and non-prudential regulations (some could be termed as enabling as well) for different types of Micro-finance Institutions such as; CBs, MFDBs, SACCOs, FINGOs and some others.

2. 2. 1 Registration Norms for SACCOS

i. There should be at least 25 persons to organize a co-operative society. All Corporative societies are not necessarily Micro-Finance Institutions. Some of them may focus on micro-finance for targeted groups. In either case registration requirement is the same. Some of the norms are as follows:

ii. Members of co-operative society could be individuals, firms, international co-operative alliance member institutions (maximum 20 percent of paid-up share) as mentioned in the co-operative Act.

iii. Single shareholding limit is set at maximum of 20 percent.

iv. Voting right is "one member one vote" and not on the basis of number of share, as per principles of co-operatives.

v. SACCOS can issue and sell share to members and new members on the basis of 'open to all' principles at all time.

vi. At present Department of co-operative has restricted registration of SACCOS in municipalities' areas (can open only with Department permission) but open in all Village Development Committees. (*Source: Unified Directives-2066 issued by NRB)*

2.2.2 Regulations of Savings and Credit Co-operative Societies

SACCOS are registered as per Co-operative Act, 1992 and can operate as per the act, rules and bylaws. By definition all Savings and Credit Co-operative Societies are not Micro Finance Institutions. Many of them have adopted micro finance principles and practices in their operation. There are no separate regulations for such co-operatives. Some of Saving and Credit Co-operatives (19 out of 3000) are also received limited banking license from Nepal Rastra Bank but only a few of them are involved in micro-finance. Even then Nepal Rastra Bank regulations are also not specific to micro finance SACCOS.

SACCOS, worldwide, are governed by 7 principles of co-operatives and international practices of Credit Unions. They are supposed to be autonomous institutions governed democratically by their member.

Nepal has experienced some bitter experience in co-operative field. During last 5 years almost over 100 co-operatives have vanished with member's money estimated to be significant amount. There are co-operatives even today abusing co-operative principles and acting as financial institution without appropriate regulation and absence of prudential supervision. This has created negative impact in the functioning of sound co-operatives.

As per co-operative Act some general regulations governing co-operatives are as follows;

i. Registration: At least 25 persons residing in the prescribed geographical areas and having consensus of applying principles of co-operatives can apply for registration. Currently registration of SCCS in municipalities has been restricted until further notice.

ii. Bylaws to be made as per Act and Rules.

iii. Annual General Meeting of the shareholders has to be conducted within 6 month of the year ended.

iv. Board of Director has to be appointed for a maximum of 5 years by Annual General Meeting (members 5-11) Audit Committee (1 co-coordinator and 2 members) must be formed and other sub-committees can be formed as per bylaws.

v. SCCS can generate resource by way issuing share to individuals, members and other agencies, foreign co-operatives (alliance with international co-operation alliance)- maximum 20 percent to all categories, accepting savings from members and issuing debt instrument with approval of government.

vi. Principles of one member one vote apply as against company practice of one share one vote.

vii. Co-operatives can accept saving and provide loans to members and if they want to perform other banking activities with members they need Nepal Rastra Bank approval.

viii. Co-operatives need to transfer one fourth of the surplus (profit) to the reserve fund and designated amount to the funds as per bylaws. They can distribute a maximum 15 percent dividend to shareholders from the net surplus.

ix. Co-operatives can be merged or separated as per the law.

x. Co-operatives are subject to supervision by registrar or designated person.

xi. National Federation of Saving and Credit Co-operatives (NEFSCUN) members are asked to follow PEARLS disclosure and measures to rectify each rating outcome in the Annual General Meeting.

vii. Nepal Rastra Bank regulated SACCOS can mobilize resource up to 10 times of their share capital, has to maintain cash reserve of 0.5 percent and liquid asset of 7 percent, subject to single obligor limit of 10 percent, loan loss provision similar to Bank and Financial Institutions and corporate governance regulations. As against principle of co-operatives Nepal Rastra bank has barred co-operative to buy each other's share. It was done after finding irregularity of artificial

equal amount share transaction without cash involvement with the aim of deceiving the purpose of regulation and also of self-regulation and discipline. (*Source: Unified Directives-2066 issued by NRB)*

2.2.3 Some current policy issues in MFIs

i. **Weak institutional capacity of MFIs.** Huge capacity building need is evident for large number of scattered MFIs. Therefore managing fund and developing an effective delivery mechanism is a prominent issue to be addressed.

ii. **Financial health of SACCOS.** They need to be strengthened as viable and self sustainable MFIs.

iii. **Lack of effective MIS.** Most of the MFIs operate on manual system and lack efficiency.

iv. Though CBs are lending at very low rate, RSRF is providing at very cheap effective rate, most of the qualified cooperatives are still could not be benefited from the wholesale loan and grants due to the lack of proper supervision and hard and tough rules by the regulation.

v. **Vulnerable security situation.** This is well understood at looking the current situation. The improvement in the situation will have a very expansionary effect on MF development.

vi. **Limited credit absorption capacity of MFI clients.** Loan absorption capacity of Nepalese MFI clients is very low. This can be evidenced by the average loan size of Rs. 12 – 13 thousand only even if NRB has set a limit of Rs. 60,000/- for MF and Rs. 1, 50,000/- for micro- enterprise loan.

vii. **Co-operative sector policy.** Co-operative sector policy has yet to be formulated to promote MF best practices. This sector also needs strengthening in the area of regulation and supervision mechanism.

viii. **Tax policy of the government.** MFIs are taxed as per corporate tax policy and are not receiving concessionary treatment. These institutions are working in difficult conditions, operate on very low profitability situation, serve the poor and help government's vision of reducing poverty. Therefore they need to be treated differently than business corporate houses. Taxation policy could accommodate some taxation areas i.e.

- Corporate tax
- Dividend tax on MFI share
- Corporate or individual donation to MFI revolving and capacity building fund.

Bank/ co-operative transaction: Recently banks were resisted in transaction with co-operative societies. NRB has facilitated such transaction with concern now. As co-operative societies are functioning at the community level it is always appropriate for BFIs to work with them in rural and micro- finance. It is up to the bank to manage credit risks with them. NRB and DOC needs to provide policy and institutional framework such as credit rating, implementation of PEARL rating, regulation and supervision and other matters. *(Source: Resource paper presented in Microfinance Summit Nepal 2008, CMF Nepal)*

2.3 Challenges to the Cooperatives in Nepal

- **Outreach:** To include and serve rural and remote households living in hill and Terai areas has been always a great challenge to the cooperatives in Nepal. Combined comprehensive micro finance services (ie. Saving, Credit, Remittance, Insurance, Transfer and Other Support) is not sufficient as half fulfilled task. The main problem in providing the complete poor is overlap of services by the institutions to the same clients. Hence when government calculates the number of serviced clients by the MFIs, usually there used to be the higher number of clients than the actual poor in the country. Therefore, quality and quantity of services in a cost effective manner which sustain service

providers and satisfy service receivers has been remained a tough task to the most of the cooperatives in Nepal.

- **Regulatory Issues :** Numbers of instances has been experienced in microfinance sector when it comes to the support from government that in several pertinent issues such as to evaluate these financial institutions, facilitate for integration with development partners so as to create working environment and contribute more towards reducing poverty and empowering women communities. Even lack of supporting programs (such as insurances, incentives to work in rural and remote areas etc) from government side hinders the expansion with depth and breadth of microfinance services outreach in inaccessible parts of Nepal. Government should organize frequent monitoring and surveillance programs to the cooperatives so that their activities will be more transparent and they could be competitive and sustained in financial market.

- **Unhealthy Competition:** Healthy competition is an inevitable for smooth and sound development of any sector. It is felt in recent days that due to the excessive growth in cooperatives and other financial institutions like finance companies, microfinance development banks, development banks, commercial bank etc, the competition between financial institutions becoming more complex and unhealthy. Lack of supporting environment and coordination between government agencies and microfinance institutions also been a reason for duplication in the working area and clients, especially in limited areas where more institutions work with the same clients. However, effort still seems to be made from government/NRB side as well as close coordination between the players of microfinance sector to avoid such unhealthy competition. Basically, from the cooperative business point of view healthy competition with proper coordination is required to create efficient services.

- **Resource Constraints:** Very few cooperatives are working in hill, rural and Terai areas and most of them are facing shortage of credit funds. Nepal Rastra Bank's Rural Self Reliance Fund (RSRF) aims to promote local NGOs cooperatives and institutions, which is still far below from its performance. Four

FINGOs have received credit funds from RSRF out of total 334 recipient institutions by mid-July 2008. Average size of outstanding credit fund to all 334 institutions stood at NRs. 272,455, which shows that this is much less to meet the expenditure of the recipient institutions.

- Out of three per cent of deprived sector credit funds which comes to around NRs. 12 billion, NRs. 4 billion was allocated to youth employment program has led to make the another limitation to working for MFIs. It is felt that youth employment scheme is an essential, but it needs fund from different windows rather than the same RSRF with the main concern of not making any distortion in the microfinance sector. One of the concerns is observed that commercial/ development banks seem investing in import-based consumer goods. This should be regulated by government/NRB authority. Such practice never allows rural economy to receive fund for mobilizing local resources and create more self-employment opportunities at local levels.
- Due to changes in cost of raw materials and labor, need of micro credit in this sector is insufficient. At present institutions are getting funds of short term nature from banks. To finance medium term enterprises like- low cost housing, alternative energy equipments, and cottage industries, credit fund of larger loan for scale up and comparatively higher investment is necessary.
- It is felt that micro credit defined by banks and neighboring countries should be included as credit ceilings for the institutions.
- Similarly, the graduated clients who have attained proficiency in managing enterprises of higher scale credit amount should be increased. To meet all these needs, it is strongly felt that there is a need to increase 3 per cent of deprived sector fund to 5%, which will make the commercial and development banks responsible to the rural and poor societies.

- **Lack of proper knowledge:** It is very hard to sustain any organization without having more skilled employees and employers in the liberal market. Hence the proper knowledge of its area is very essential to the concern personnel as well as to its promoters. There are many examples exists in the country that cooperatives

which registered without having proper knowledge are slipped away very soon. For that context also staffs and the promoter are needed to have plenty of knowledge regarding its area and scope. It is also required to go through the high competition with the other MFIs.

- **Less effort from government:**
  - The government should define its role to support micro finance sector, attention seems required with serious attention.
  - Human resource development in micro finance is a critical need for which government, Nepal Rastra bank and Institutions must work jointly.
  - The risk fund and insurance funds are necessary to cover natural and physical hazards faced by clients and financial institutions.
  - Micro credit insurance is a burning issue and a need to be managed by institutions, the government, support organizations and insurers. Due to lack of credit insurance, clients and institutions face loss of property and loan amounts causing loss of asset and income to the poor households.
  - Also some funds for developing infrastructure (software, training to staff) of the institutions that serve in rural and hill areas are necessary.

- **Management challenges**

Some of the following critical challenges are facing by Cooperatives in Nepal.

- Well educated, efficient and trained staff is quite deficient.
- Lack of institutions doing monitoring and supervision of financial institutions and guide them for appropriate linkages and supports.
- Most of the staffs and management team from cooperatives lack the technical knowhow.

2.4 Review of Research Articles

- **CECI (Nov 2008)**, a report prepared on Sahakarya project which was implemented by the Centre for International Studies and Cooperation (CECI). It is integrated community based development project implemented in partnership with 22 NGOs and over 1300 CBOs in five hill districts of Nepal.

  The main objective of the project was to build Self Reliant Communities in the Hills of Nepal and the objective of the report/publication is to reflect the qualitative impact of those achievements on the lives of the people. To highlight what the community members, government officials, NGO partners and others felt, saw, and experienced through the implementation of the project and as a result of the activities. The case studies presented in this publication were collected in June and July of 2008, through individual interviews, focus group discussions, and casual conversion in all five project districts.

  The sustainability and improvements are measured or judged through various individual interviews and through best practices of the project implemented areas. Throughout the project area the lives of people have improved both economically and socially, as expressed through improved health and more inclusive decision making processes in organizations, in their communities, and in their lives have improved, particularly for the poor, women, and the excluded groups. They have more money, they eat better food, their children are in school, women are involved in making decisions both at home and in the communities are cleaner, and they feel more capable and confident about their future. Basically this project worked under the three major components, Community Health Development, Economic Development and Institutional Development. The report also therefore divided its findings into these three categories and included the best practices accordingly.

- **CMF (December 2000)**, a research on "Risk and Vulnerability of Rural Women in Nepal" was conducted to develop and test a methodology for providing insurance services to rural women in Nepal through community-based savings and credit organizations. The Center for Microfinance (CMF) and Canadian Center for International

Studies and Cooperation (CECI) carried out the pilot project in coordination with a local women-owned Savings and Credit Cooperatives.

The main objective of the study is to improve understanding of the major risks facing rural women in Nepal; current mechanisms that they use to protect against risk ahead of time and cope with losses afterwards; and the relative effectiveness of these mechanisms. The findings were targeted to inform the design of appropriate insurance products and other financial services to reduce the vulnerability of rural Nepalese women. The aim of developing insurance services for rural women is to reduce their vulnerability, improve their rural livelihoods, and promote women's empowerment.

According to the report, generally rural women and their families rely largely on individual saving and borrowing strategies rather than group-based strategies to mitigate and cope with risks. They use a mix of formal and informal financing sources; borrowing from Savings and Credit Cooperatives, family and friends, and money lenders; joining rotating credit and savings groups; and savings groups; and savings in various places and forms. These strategies do not work equally well for everyone. For many poor families, borrowing places long term economic stress on their household and increases their vulnerability to other risks. For others, the money provided does not cover the full loss or is not available on a timely basis. Borrowing from the same source does not work for repeated risk; and borrowing from multiple sources can cause a snowball effect of indebtedness. Cooperative Savings and Credit Organizations and other micro-finance institutional are playing an important role in reducing the vulnerability of rural women by providing accessible and lower cost savings and credit services. But they also recognize the need to further strengthening client risk management strategies and area considering options for formal group based insurance products.

Few rural Nepali women have previously experience with formal insurance schemes. Nevertheless, for some key risks they express willingness to trade off the uncertainly of a large loss with the certainty of making small, regular insurance payments. The each found key areas of interest to include life insurance; livestock insurance (including coverage of small livestock) and coverage for maternity related expenses.

- **CMF/SDC (August 2002)**, a research on "Review of Micro-Finance Service in the Hills of Nepal" is a desk top research on work done to develop appropriate micro finance models that can be offered to poor people in the hills of Nepal.

  This study proposes to review the Micro finance-financial product and services, currently being implemented in Nepal. I attempted to analyze their strengths and weaknesses, assess the models in the light of required modification, amalgamate or propose completely new model which could be cost-effective for delivering institutions and accessible to the people in need of such services living in the Hills and Mountains of Nepal. This study also focuses on micro financial services and not on small and medium-enterprise finance, but it also attempts to identify the need of micro enterprise sector, which is the basic foundation of development of cottage, small and medium enterprise in the long sum.

  The methodology adopted to conduct this study was desk-top review. This involved reviewing the existing material related to MF services in Nepal through libraries, internet, different books, journals, seminar papers, policy document, review documents etc.

  This desk top study only has been able to accumulate most of the work that has been done in this sector but the models proposed needs to be more specific. There is also a need of an appropriate model or models of MF services in the hills and mountains of Nepal and study more on what is already prevalent and why the services are not being successful.

2.5 Review of Thesis

- **Shrestha (2009),** a thesis work on "Financial Performance Analysis and Social Impact Assessment of Microfinance Institutions" (a case study of Nirdhan Utthan Bank Limited, Rupendehi District) was prepared by MBS student of Shanker Dev Campus as a partial requirement to her degree. The main objective of the thesis is to assess the financial performance of Nirdhan Utthan Bank Limited and its impact in the socio-economic status of the lives of target population or clients. The specific objectives of the study are;

- Analyze NUBL's financial management, profitability ratio, profit quality
- Efficiency and productivity
- To examine the achievement of bank's social objective to change the socio economic situation of poor and disadvantaged people.

The collected data were analyzed by both qualitative and quantitative methods. Basically, the secondary data has been analyzed by using financial or statistical tool (financial management, profitability, efficiency and productivity and profit quality). The various forms of raw data have been converted and standardized into tabulated format. Similarly, each summary of section's analysis and some of the primary data have been presented in diagrams. Diagrams used in this study are mainly simple diagram and pie chart.

This study examines the financial performance of NUBL and its impact of microfinance program on the socio economic status of rural women. The researcher has used the financial performance of NUBL and its impact of microfinance program on the social economic status of rural women. The study has covered five years data from 2004 to 2008 of NUBL and also the opinion of NUBL members about the impact of NUBL works. The required financial data and information have been collected from the Balance Sheet and Profit and Loss accounts of the bank. The data extracted from annual reports have been processed and interpreted considering the requirement of the study. The data are divided into four sections;

- Financial Management
- Profitability
- Efficiency and Productivity and
- Portfolio Quality.

Financial Management assures that there is enough liquidity to meet and MFIs obligations to disburse loans to its borrowers and to repay loans to its creditors. The importance of adequate liquidity, and hence of financial management, grows further if the FI has mobilized savings from depositors. Similarly, Profitability indicators such as return on equity and return on assets, tend to summarize performance in all areas of the company. The efficiency and productivity indicators are performance measures that show

how well the institutions streamline its operations. Productivity indicators reflect the amount of output per unit o input, while efficiency indicators also take into account the cost of the inputs and /or the price of outputs. Other hand, measurement of the portfolio quality is very crucial for Microfinance Institutions because the largest source of risk for nay financial institutions resides in its loan portfolio. It helped to measure condition and quality of portfolio.

In analysis of financial management ratio, NUBL has strong capacity to fulfill its liquidity as it has maintained the margin twice much higher. This might lead institution toward non-productive and unforeseen losses due to forfeit in opportunity cost. The better efficiency and utilization of the resources will be achieved if the result is stable rather than in fluctuating trend. Therefore, NUBL should need to be strong in monitoring and evaluation area. More income generation related trainings need to be provided to the group members so that they can best utilize of loan and raise more income/profit. As some of the group members opined that some training was not worth taking as they were not useful. Therefore, Training Need Assessment (TNA) should be undertaken to identify the needs or gaps of members. Following TNA, only relevant trainings should be provided. The research also identified the need of regular and sufficient monitoring of staffs and the borrowers.

- **Guragain P.A. (2008)**, in his dissertation entitled "Profitability Analysis in Microfinance Institutions "(with reference to Sahara Nepal Savings & Credit Cooperative Institution Ltd. Jhapa) the major objectives are:
    - Understand the concept of profitability and its application in microfinance institutions
    - Analyze savings, returns on assets, return on equity, yield on portfolio, Operational Self-Sufficiency (OSS) and other key ratios applied in MFIs
    - Examine the major problems of MFIs
    - And finally recommend possible measures for further improvement.

  Financial viability and sustainability obtained through Profit Planning is an essential thing to effectively run the business and serve the target groups. Liquidity Ratios, Efficiency Ratios, Productivity Ratios, Portfolio Quality Ratios and Profitability Ratios

etc help to make rational decision making. Profitability analysis acquaints us with financial and portfolio analysis tools so that we can properly assess our organization's financial status and accordingly can make appropriate decisions, prepare plans and strategies to better the organization's health and attain sustainability in the future. Well established system, manuals for operation, effective monitoring and follow up system, effective communication and coordination system, business culture and professionalism, committed, honest ad dynamic leadership etc. are major essentials for the sound health of a MFI. Profitability ratios calculated in this thesis work to measure operating efficiency are ROA, ROE, YOP, OSS, Drop-Out ratio etc.

Sahara Nepal is providing loans to the women of the poor households on group guarantee and without physical collateral. It has been providing microfinance services to 11043 poor women in 44 VDCs of Jhapa district. It has received a series of trainings and on-site consultancy services from RMDC in order to improve its microfinance operation smoothly. It has 9 branches, 33 staffs, 309 centers in its service delivery system. Up to the F.Y. 2006/07, it has received Rs. 3,72,51,000 as loan from RMDC and its outstanding portfolio in the same years is Rs. 5.60,69,116 whereas Operational Self-Sufficiency is an average of 103.6%

- **Aryal (2006),** conducted research on "Impact of Micro finance Program of Paschimanchal Grameen Bikash Bank on the status of rural women (A case study of Bayarghar Unit Office, Syangja) with a major objectives are;
    - To examine the past and present performance of microfinance program of (PGBB) in terms of providing financial assistance to target groups
    - To determine the impact of microfinance on women's economic and social empowerment.

The study found that PGBB's income only was just enough to meet its financial and operational expenses with a low ROA. However, the overall profit of the bank was good on account of the interest earned on its large amount of deposit with commercial banks and financial companies. There is an evidence of impact on the household income compared to the base year. However PGBB clientele's findings suggested that income of the member clients had been increased due to the participation in various programs

organized by the bank. An access to savings and credit services to the women strengthen the decision making power for them and also the investment in women's economic activity will improve her empowerment opportunities. A women gains more respect and plays more active role in the family and community through microfinance program. It provides her with greater empowerment and increased self-confidence. A woman becomes more involved in society as a member of women's organizations, professional associates and political parties adding her contribution to collective decision making. It is interesting that the thesis has compared finding of the PGBB with NUBL in terms of financial performance as well as in the area of social impact.

Chapter - 3

Research Methodology

Apparently, this chapter includes research methodology adopted for the study, which deals with research design, population and sample, sources and types of data, data gathering procedure, method of analysis (or tools and techniques of analysis).

3.1 Research Design

A research design is simply means a framework or plan for the study that provide guidelines to collect and analyze the data. This study is basically based on descriptive research design. Descriptive research is a fact finding operation searching for adequate information. It is a type of survey which is generally conducted to assess opinions, behaviors and characteristics of given population and to describe the situation and event occurring at present. Since this study is conducted for the efficiency and sustainability analysis of the selected cooperatives, descriptive or analytical research design has been followed for the study.

3.2 Population and Sample

Number of cooperatives registered in Nepal is the population for this study, among them Hatemalo SACCOS and Daunnedevi SACCOS has been selected as sample for the evaluation. Similarly, audit report of six years (beginning from FY2061 to 2066) is selected for the study purpose.

3.3 Sources and Types of Data

Eventually this study is based on secondary data. So the major sources and types of data are in collected through following sources:

- Audit report of Hatemalo SACCOS and Daunnedevi SACCOS
- Bulletins and Reports periodically published by various government bodies.
- Other published materials like newspapers, journals, magazines text books etc.

- Relevant websites to the cooperatives and microfinance

Besides primary data, some other information's has been collected via discussion with the staffs and board members of the selected institutions.

3.4 Data Gathering Instruments and Procedures

Basically, this study is based on secondary data, obtained from various sources mentioned above. Besides, a detailed review of literature has been conducted in order to collect relevant data and information. Such review materials are mainly collected from the related websites, Centre for Microfinance's library and other books and journals. Apart from this, some useful data, facts, and figures are also obtained from staffs and shareholders of the institutions, microfinance consultants via some discussion with them. Such data, information, facts and figures have been preceded by editing, tabulating, calculating prior to their analysis in order to obtain proper results and shown in the form of ratios, percentages, simple averages, graphs etc. for clear presentation.

3.5 Methods

3.5.1 Financial Method: Financial analysis is an art of interpreting financial statement and indicators it requires managers to look at past performances, analyze, and use the lessons learned to make today's decisions without analysis, creating financial statements is an accounting exercise. In addition to ratio analysis several ways are available to use financial statements and ratios to learn more about on MFI's performance.

In this thesis work the collected data and information has been arranged and interpreted in proper form viz. the tool of PEARLS analysis technique. Financial ratios, calculated and interpreted in this study are given below with their indicators and respective formulas and meanings.

i P (Protection):

Selected Indicators	Formula	Minimum Standards (Target or Goal)
P1	Loan Loss Provision for loan delinquency > 12 months / Outstanding balance of these loan	**100 %**
P2	Loan Loss Provision for loan delinquency <12 months / Outstanding balance of these loan	Minimum of 35% of delinquent loan from 2-12 months
P3	Net value of Assets/ Total Shares and Deposits	≥ 111%

ii. E (Efficiency):

Selected Indicators	Formula	Minimum Standards (Target or Goal)
E1	Net loan /Total Assets	**60-80 %** **(country specific)**
E3	Financial Investment / Total Assets	≤ 2%
E5	Savings & Deposit / Total Assets	70-80%
E6	External Borrowings / Total Assets	0-5%
E7	Share Capital / Total Assets	≤ 20%
E8	Institutional Capital / Total Assets	≥ 10%
E9	Net Institutional Capital / Total Assets	≥ 10%

iii. A (Asset Quality):

Selected Indicators	Formula	Minimum Standards (Target or Goal)
A1	Total Loan Delinquency / Total Assets	≤ 5%
A2	Non Earning Assets / Total Assets	≤ 5%
A3	Zero cost fund / Non Earning assets	≥ 200%

iv. R (Rates of Return & Costs):

Selected Indicators	Formula	Minimum Standards (Target or Goal)
R1	Net Loan Income / Average Net Loan	Entrepreneurial Rate
R5	Interest cost on Savings / Average Savings	Market Rates > Inflation
R9	Operating Cost / Average Total Assets	≤ 5%
R12	Net Income / Average Total Assets	ˆE9=10%

v. L (Liquidity):

Selected Indicators	Formula	Minimum Standards (Target or Goal)
L1	Liquid Assets -ST payables / Total Deposits	15-20%
L2	Liquidity Fund/Savings	10%

vi. S (Sign of Growth):

Selected Indicators	Formula	Minimum Standards (Target or Goal)
S1	Growth in Net Loans	Dependent on E1 = 70-80%
S5	Growth in Savings Deposits	Dependent on E5=70-80%
S6	Growth in External Credit	Dependent on E6=0-5%
S7	Growth in Member Shares	Dependent on E7 = ($\leq$ 20%)
S8	Growth in Institutional Capital	Dependent on E8 $\geq$ 10%
S9	Growth in Net Institutional Capital	Dependent on E9 $\geq$ 10%
S10	Growth in Membership	$\geq$ 15%
S11	Growth in Total Assets	> Inflation + 10%

3.5.2 Statistical Methods

I. **Arithmetic mean (Average):** Arithmetic mean also known as 'the mean' or 'average' as most popular and widely use measure of central tendency. Arithmetic mean represents the entire data by a single value. It also provides the gist and gives the bird's eye view of the huge mass of a widely numerical data. It is calculated as follows:

$$\overline{X} = \frac{\sum X}{n}$$

Where, $\overline{X}$ = Arithmetic Mean (Average)

$\sum X$ = Summation of X variable

N = Number of X variables

II. **Trend Analysis:** The study of any data over a long period of time enables us to have a general idea about the pattern of the behavior of the phenomenon under consideration. The best method for performing trend analysis is to either compare the current period to previous period of the same length, such as the previous and the current quarter or to annualize the indicators for the current period and compare the annualized indicators to the previous year.

The basic formulas for determining the change in an account is as follows:

y = a + bx

Where,

y = dependent variables

a = y-intercept

b = Slope of the trend line or annual increment

x = deviation from some convenient time period

III. **Correlation Analysis:** Of the several mathematical methods of measuring correlation, the Karl Pearson's Method, popularly known as Pearson's Coefficient of Correlations, is most widely used in practice. The formula for computing Pearsonian Correlation Coefficient using direct method is as follows:

$$r = \frac{n\sum xy - \sum x \sum y}{\sqrt{n\sum x^2 - (\sum x)^2}\ \sqrt{n\sum y^2 - (\sum y)^2}}$$

Here,

N = Number of pairs of x and y observed,

X = Value of x variable

Y = Value of y variable

r = Pearsonian correlation coefficient

IV. Probable Error: After computing the correlation coefficient the next step is to find the extent to which it is dependable. Probable error of correlation coefficient, usually denoted by P.E. (r) is and old measure of testing the reliability of an observed value of correlation coefficient in so far as it depends upon the conditions of random sampling.

If r is the observed correlation coefficient in a sample of n pairs of observations then its standard error, usually denoted by S.E. (r) is given by:

Probable error of the correlation coefficient is given by:

P.E. = $0.6745 \times$ S.E. (r)

$$= 0.6745 \times \frac{1-r^2}{\sqrt{n}}$$

The reason for taking the factor 0.6745 is that in a normal distribution 50% of the observations lie in the range $\mu \pm 0.6745\sigma$, where μ is the mean and σ is Standard Deviation.

Chapter - 4

Data Presentation and Analysis

This chapter deals with the presentation, analysis and interpretation of relevant and available data of Hatemalo SACCOS and Daunnedevi SACCOS in order to fulfill the objectives of this study. To obtain best result, the data have been analyzed according to the research methodology as mentioned in Third Chapter.

4.1 Financial Analysis

This study is conducted to analyze the financial performance of Hatemalo SACCOS and Daunnedevi SACCOS through the calculation and interpretation of various financial ratios as follows:

4.1.1 Financial analysis of Hatemalo SACCOS

PEARLS ratio analysis:

Table - 4

P=Protection								
Indicator	**Formulas**	**Std**	**2061/ 62**	**2062/ 63**	**2063/ 64**	**2064/ 65**	**2065/ 66**	**Average**
P1	Allowances for loan loss/Delinquency > 12 months	100%	43.54	0.00	83.31	8.30	71.45	41.32
P2	Net allowances for loan/Delinquency 1-12 months	35%	92.63	0	35.71	34.02	104.74	53.42
P6	Net value of Assets/ Total Shares and Deposits	≥ 111%	115.46	112.31	114.45	115.08	112.95	114.05

Source: Worked out from the data extracted from annual audit report of Hatemalo SACCOS.

The WOCCU model prescribed that any credit union should provide 100 percent allowances for loan past due for more than one year. P1 is less than 100 percent in all fiscal years. This implies that Hatemalo has not sufficient provision to cover bad debt losses. The provisions are much fluctuated throughout the time span. It is 43.54% in FY 2061/62 and highest 83.31 % in FY 2063/64. Likewise 8.30% and 71.45 % for the FY 2064/65 and 2065/66 respectively. However the average P1 ratio is 41.32% which is far less than its standard.

The standard for P2 is 35 % as the provision required for loan past due for one to twelve months. As per above table Hatemalo is maintaining moderate level provisions for loan delinquency up to twelve months. It is 92.63 % in FY 2061/62, Zero in FY 2062/63, 104.74% in FY 2065/66 and accurate in FY 2063/64 and FY 2064/65 which is 35.71 % and 34.02 % respectively.

P6 measures the ratio between net value of assets and totals shares & deposits. According to the WOCCU model it should be more than or equals to 111 %. This ratio shows a positive result for Hatemalo. It is 115.46%, in FY 2061/62 , 112.31 % in FY 2062/63. Likewise 114.45%, 115.08% and 112.95% for the FY 2063/64, 64/65, 65/66 respectively. Simlarly average ratio is also within the standard which is very satisfactory.

Table - 5

E=Efficiency								
Indicator	**Formulas**	**Standard**	**2061/62**	**2062/63**	**2063/64**	**2064/65**	**2065/66**	**Average**
E1	Net Loan / Total Assets	70-80%	92.22	93.95	92.53	93.86	88.19	92.15
E3	Financial Investment / Total Assets	≤ 2%	0.57	0.23	0.11	0.06	0.04	0.20
E5	Savings & Deposit / Total Assets	70-80%	73.69	75.77	77.12	77.69	79.65	76.78
E6	Borrowings / Total Assets	0-5 %	0.00	0.09	1.62	0.93	0.63	0.66

E7	Share Capital / Total Assets	≤ 20%	12.93	13.27	10.25	9.20	8.89	10.91
E8	Institutional Capital / Total Assets	≥ 10%	6.73	5.15	4.45	6.22	4.91	5.49
E9	Net Institutional Capital / Total Assets	≥ 10%	5.62	4.63	4.15	6.04	4.71	5.03

Source: Worked out from the data extracted from annual audit report of Hatemalo SACCOS.

This component of PEARLS focuses on the effective management of sources and uses of funds of MFIs. E1 measures the net loan percentage on total assets and the WOCCU standard for E1 is 70-80 % (country specific). Since the net loan of Hatemalo is lies between 94 % to 88 % it is satisfactory result, because in Nepal especially the cooperatives in rural areas or formed by women it is said that up to 95 % of its total assets is possible to invest as loan. The standard for E3 is less than or equals to 2 percentage, ie. financial investment should be less than or equals to 2 percent of total assets. According to above table # 4, E3 for the selected five years is less than 2 %, which means it is okay to have such ratios but it could still raise its financial investment up to 2% if possible. E5 measures the portion of savings and deposits on total assets. It is said that E3 ratio should lie between 70-80% and for Hatemalo it seems to be perfect throughout the selected five fiscal years. All E5 ratios in five years are between 70-80%, ie not less than 70% nor more than 80%.

The WOCCU standard for E6 is 0-5%. This ratio measures the percentage of external borrowings on total assets. The above table shows 0% in FY 2061/62, 0.09% in FY 2062/63 and 1.62, 0.93, and 0.63 percentage for FY 2063/64, 64/65 and 65/66 respectively. It implies that Hatemalo didn't borrowed from outside the organization for year FY 2061/62 and from FY 2062/63 it started to borrow from outside but very less than 5% of the total assets.

The share capital ratio on total assets measures by E7 and the standard is less than or equals to 20%. The E7 ratios for FY 2061/62 to 2065/66 is 12.93 %, 13.27 %, 10.25 %, 9.20 % and 8.89 % respectively. All the ratios are less than 20% so it can still raise its

capital up to 20 %. The institutional capital includes all legal reserves and surplus created for the accumulated of net income or from capital donation. It is the second defense to absorb the unexpected losses. In above table the institutional capital refers to the general reserve and net institutional capital means general reserve after the adjustment of other reserves. The E8 and E9 ratios of Hatemalo lies within the WOCCU benchmark in all five fiscal years.

All in all out of seven efficiency ratios only four average ratios (E3, E5, E6 and E7) are within the standard.

Table - 6

A=Assets Quality								
Indicator	**Formulas**	**Standard**	**2061/62**	**2062/63**	**2063/64**	**2064/65**	**2065/66**	**Average**
A1	Total Loan Delinquency / Total Assets	≤ 5%	0.84	0.52	7.64	2.41	1.96	2.68
A2	Non Earning Assets / Total Assets	≤ 5%	5.72	3.22	3.70	2.65	1.02	3.26
A3	zero cost fund / Non Earning assets	≥ 200%	343.66	540.42	388.08	550.65	1211.19	606.80

Source: Worked out from the data extracted from annual audit report of Hatemalo SACCOS.

Asset quality is another indicator of financial health of a cooperative. Loan portfolio occupies the largest proportion in total assets of MFIs. The largest source risk of any FI resides I nits loan portfolio. Thus, risk, in case of a FI, largely depends on the quality of loan portfolio. Basically WOCCU has designed 3 indicators to measure asset quality of the MFIs. The WOCCU standard for A1 is less than or equals to 5% ie, total loan delinquency in total assets should be less than or equals to 5%. For the FY 2061/62 A1 of Hatemalo is 0.84 %, for FY 2062/63 its 0.52 % and for FY 2064/65 and 65/66 its 2.41 % and 1.96 % respectively. But its more than 5 % ie 7.64 % in FY 2063/64, however after

this fiscal year Hatemalo succeed to reduce the proportion of total loan delinquency to its total assets. According to WOCCU standard the ratio of non earning assets on total assets should not exceed by 5 %. In this regard, Hatemalo has maintained the WOCCU standard for A2 during the FY 2061/62 to FY 2065/66.

Basically, zero cost funds insist the non earning funds. This includes share capital, general reserves and other reserves. Hatemalo maintained the WOCCU benchmark for A3. The A3 ratios in FY 2061/62 to FY 2064/65 is within the standard ie 343.66 %, 640.42%, 388.08% and 550.65% respectively, whereas it risen unexpectedly high in FY 2065/66 ie. 1211.19 %. Nevertheless all the average ratios for Assets Quality are able to meet the WOCCU standard.

Table - 7

R=Rate of Return								
Indicator	**Formulas**	**Standard**	**2061/62**	**2062/63**	**2063/64**	**2064/65**	**2065/66**	**Average**
R1	Net Loan Income / Average Net Loan	Entreprene urial Rate	28.84	27.79	23.98	21.77	17.03	23.89
R5	Interest cost on Savings / Average Savings	Market rate > Inflation	6.29	6.49	6.60	7.15	9.47	7.20
R9	Operating Cost / Average Total Assets	≤ 5%	8.46	7.70	10.05	5.09	6.93	7.65
R12	Net Income / Average Total Assets	E'9 = 10%	0.07	0.15	0.12	0.11	0.11	0.11

Source: Worked out from the data extracted from annual audit report of Hatemalo SACCOS.

The indicators in the components are categorized into two categories: indicators relating to rates of return and operational costs. R1 measures the yield on the loan portfolio. To calculate the R1 ratio, interest income is inclusive to commission, fee ad penalty charges; and exclusive to premium on loan insurance. According to WOCCU model, R1 should be

greater than the entrepreneurial rate. Entrepreneurial return covers interest expenses, cost of operation and administration. In addition, it should earn enough to contribute to capital levels which maintain institutional capital at least 10 percent of total assets. And while looking after the average ratios it's also not very satisfactory as only R1 ratio seems to match its standard and other ratios and averages are beyond its standards.

Table - 8

L=Liquidity								
Indicator	**Formulas**	**Standard**	**2061/62**	**2062/63**	**2063/64**	**2064/65**	**2065/66**	**Average**
L1	Liquid Assets -Short Term payables / Total Deposits	15-20%	0.91	1.15	2.64	3.09	10.43	3.64
L2	Liquidity Fund/Savings	10%	5.51	2.92	4.50	4.21	11.04	5.63

Source: Worked out from the data extracted from annual audit report of Hatemalo SACCOS.

Investment in non-earning liquid assets increases the liquidity position of a cooperative but it does not earn anything. So, investment in such assets should be minimal. According to the WOCCU model the liquid assets after adjusting the short term payables on total deposits should be 15 – 20%, which is measured by L1. An investment of Hatemalo in liquid assets during the study period is not sufficient, however in last fiscal year 2065/66 it seems to meet the WOCCU standard for L1 ie, it invested 10.43 % in liquid assets. The standard liquidity fund on savings is 10%. Hatemalo has maintained 5.51% liquidity fund for the FY 2061/62. it was 2.92%, 4.50%, 4.21% for the FY 2062/63 to 2064/65 respectively. During all these fiscal years the liquidity fund maintained less than standard requirement but for the FY 2065/66 its 11.04% which is slightly more than standard. Hence Hatemalo should try to maintain the standard on liquidity fund.

Table -9

S=Sign of Growth								
Indicator	**Formulas**	**Standard**	**2061/62**	**2062/63**	**2063/64**	**2064/65**	**2065/66**	**Average**
S1	Growth in Net Loans	Dependent on E1 = 70-80%	133.81	150.97	106.00	77.74	37.26	101.16
S5	Growth in Savings Deposits	Dependent on E5=70-80%	126.84	153.32	112.88	76.54	49.76	103.87
S6	Growth in External Credit	Dependent on E6=0-5%	N\A	N\A	3534	N\A	N\A	706.80
S7	Growth in Member Shares	Dependent on E7 = (≤ 20%)	N\A	152.8871	61.6329	57.256	41.04396	62.56
S8	Growth in Institutional Capital	Dependent on E8 ≥ 10%	27.91	102.91	87.25	155.20	14.04	77.46
S10	Growth in Membership	≥ 15%		22.61	42.20	44.26	32.58	28.33
S11	Growth in Total Assets	> Inflation + 10%	118.81	146.35	109.15	75.24	46.08	99.13

Source: Worked out from the data extracted from annual audit report of Hatemalo SACCOS.

According to the above table, the growth in Net Loans is very fluctuating during the time span. It is 133.81% in FY 2061/62, 150.97% in FY 2062/63. Similarly, 106%, 77.74% and 37.26% for the FY 2063/64, 2064/65 and 2065/66 respectively when the standard is 70/80%. Likewise, the standard rate for S5 is also similar to the S1 ratio, but for initial three fiscal years it is more than standard rate and for FY 2065/66 it is far less than its standard, only FY 2064/65 has the perfect value which is 76.54%. Hatemalo SACCOS didn't have any external borrowings until the FY 2063/64. Hence in FY 2061/62 and 2062/63 have not any external borrowings ratios. In FY 2063/64 it is 3534% which is very huge ratio and after onward in FY 2064/65 and 2065/66 it does not have any such borrowings. Hatemalo SACCOS has unexpected high growth in member share in FY

2062/63 where as not available in FY 2061/62, similarly far more values in FY 2063/64 to 2065/66 as its standard. Tough the standard for growth in institutional capital is more than 10%; Hatemalo SACCOS has very high values for S8 ratio. The S10 ratios however are exact to its standard, which is quite satisfactory. The S11 ratios are also far more values thank the WOCCU standard. Average ratios are also does not seems to meet the standard values.

4.2 Trend analysis of Hatemalo SACCOS

4.2.1 The following table shows the trend value of Total Loan and Total Deposit of Hatemalo SACCOS.

We have, **y = a + bx**

Where, y = dependent variable

a = Y-intercept

b = slope of trend line or annual growth rate

x = deviation from some convenient time period

Let, the trend line be: y = a+bx

Where, x = Middle year

y = dependent variable, ie Net Loan

$a = \frac{\sum y}{n}$, when $\sum x = 0$

$b = \frac{\sum xy}{\sum x^2}$

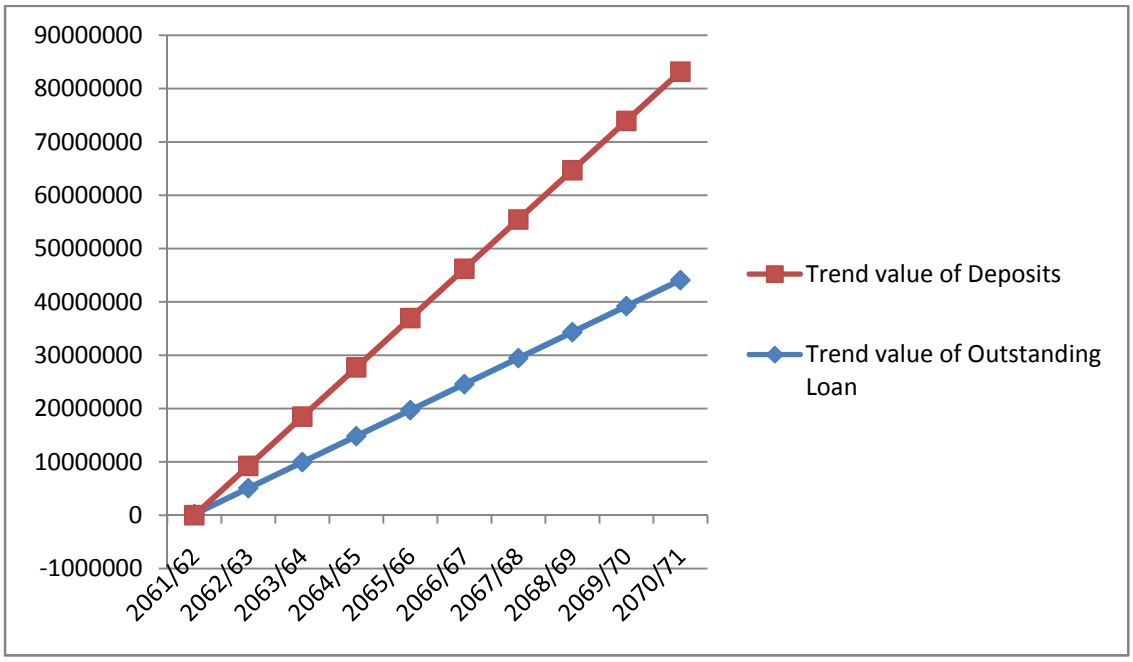
Table – 10 Trend Value for Outstanding Loan and Total Deposit

Year	Original Value of Outstanding Loan	Trend value of Outstanding Loan	Original Value of Deposits	Trend value of Deposits
2061/62	1630856	187869	1303112	-208101
2062/63	4093018	5065226	3301010	4157539
2063/64	8431599	9942583	7027074	8523180
2064/65	14986585	14819940	12405768	12888821
2065/66	20570857	19697297	18578937	17254462
2066/67	-	24574654	-	21620103
2067/68	-	29452011	-	25985744
2068/69	-	34329368	-	30351385
2069/70	-	39206724	-	34717026
2070/71	-	44084081	-	39082667

Calculation as per appendix-1

Figure - 3

Trend for Outstanding loan and Deposit



The trend values for different years can be read from the trend like graph. Alternatively, the average increment in Net loan value is Rs. 4877356.90 a year whereas Deposit value is increasing by Rs. 4365641 per year. From the graph we can see that the estimated (trend) values of Outstanding Loan for FY 2066/67, 2067/68, 2068/69, 2069/70, 2070/71 are Rs. 24574654, Rs. 29452011, Rs. 34329368, Rs. 39206724 and Rs. 44084081 respectively. Similarly, estimated values for Deposit for the same five years are Rs. 21620103, Rs. 25985744, Rs. 30351385, Rs. 34717026 and Rs. 39082667 respectively.

4.2.2 The following table shows the trend value of Net Income and Operating Cost of Hatemalo SACCOS.

Table - 11

Trend Value for Net Income and Operating Cost

Year	Original Value of Net Income	Trend value of Net Income	Original Value of Operating Cost	Trend value of Operating Cost
2061/62	927.32	-108	109041	29980
2062/63	4714.95	4785	254203	361792
2063/64	8134.63	9677	676716	693603
2064/65	13721.8	14569	1065714	1025414
2065/66	20885	19461	1362340	1357225
2066/67	-	24353	-	1689036
2067/68	-	29246	-	2020847
2068/69	-	34138	-	2352658
2069/70	-	39030	-	2684469
2070/71	-	43922	-	3016280

Calculation as per appendix-2

Figure - 4

Trend for Net Income and Operating Cost

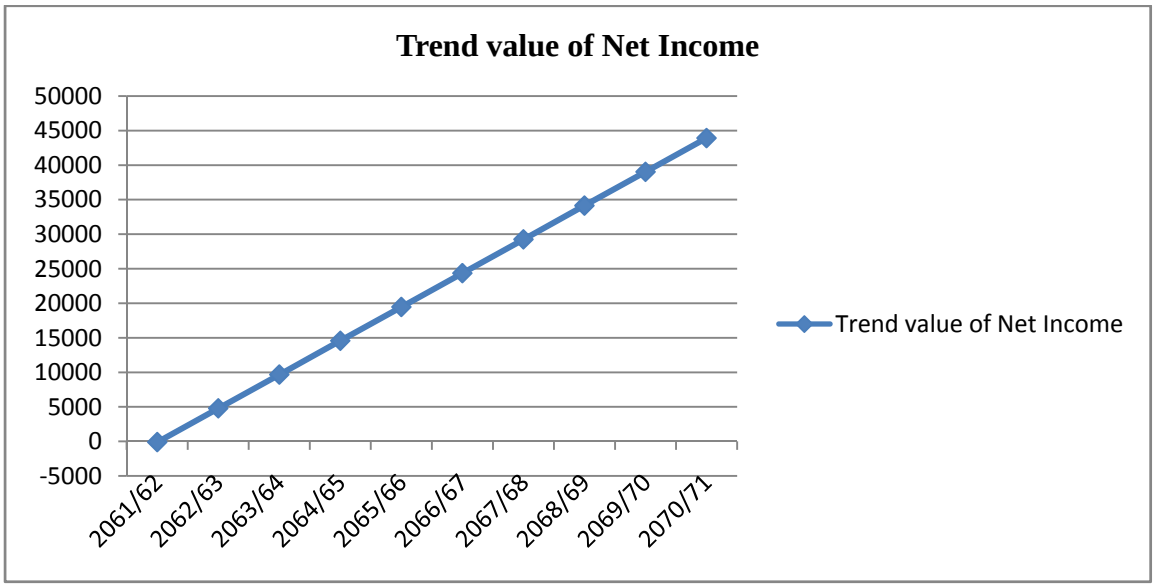
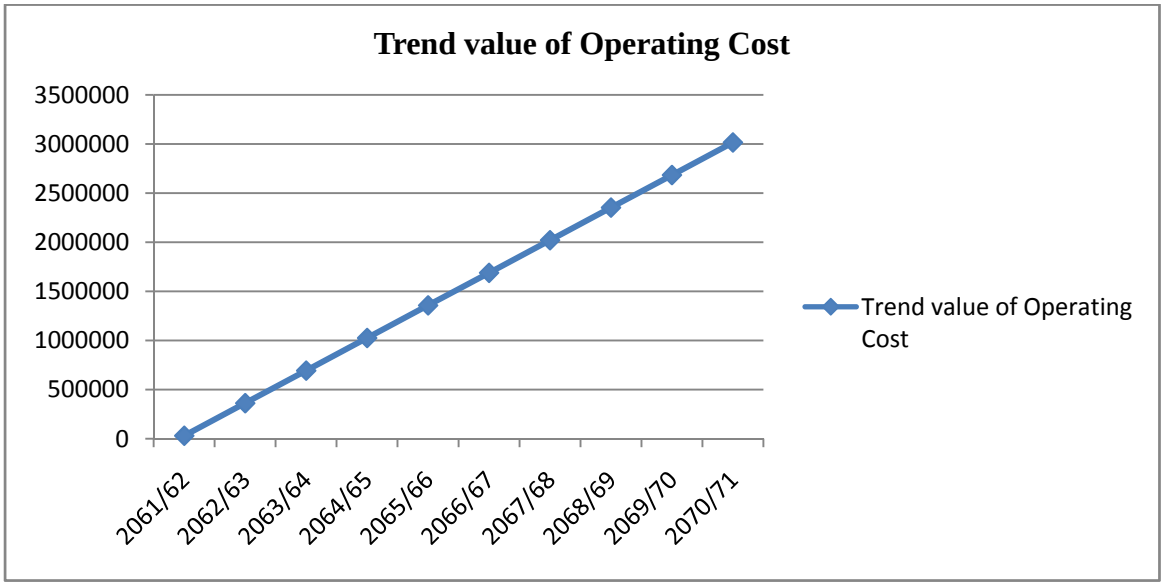


Figure – 5



From the above table and graphs it is clear that the increasing trend value of the Net income and Operating cost has vast different values. The Net Income is increasing by Rs. 4892.221 per annum whereas Operating Cost is increasing by Rs. 331811.1 per annum.

The estimated trend value if Net Income during the FY 2066/67, 2067/68, 2068/69, 2069/70, 2070/71 is Rs. 24353, Rs. 29246, Rs. 34138, Rs. 39030 and Rs. 43922 respectively. Accordingly the estimated trend value for Operating Cost is Rs. 1689036, Rs. 2020847, Rs. 2352658, Rs. 2684469 and Rs. 3016280 respectively throughout the years.

4.3 Calculation of Correlation Coefficient for Hatemalo SACCOS:

The significance of the relationship between tow variables during the study period can be tested by applying Karl Pearsons Correlation Coefficient (r).

4.3.1 Correlation Coefficient between Total Deposit and Total Assets:

Let the Deposit (in 'million Rs.) be denoted by the variable x and Total Assets (in 'million Rs.) be denoted by variable y.

Here we have,

$$r = \frac{n\sum xy - \sum x \sum y}{\sqrt{n\sum x^2 - (\sum x)^2}\ \sqrt{n\sum y^2 - (\sum y)^2}}$$

Where, r = Pearson's Correlation Coefficient

x = Value of Total Deposits

y = Value of Total Assets

n = Number of pairs of X and Y observed

With reference to the appendix-5, r = 0.9999

Therefore Probable Error (P.E.) = $0.6745 \times \frac{1-r^2}{\sqrt{n}}$

$$= 0.6745 \times \frac{1 - 0.9999^2}{\sqrt{5}}$$

$$= 0.0001$$

Here we have,

Correlation Coefficient	**P.E.**	**6 × P.E.**	**Result**
0.9999	0.0001	0.0006	Highly Significant

The correlation coefficient between Total Deposit and Total Assets is + 0.9999 from the above calculation. This means the relation between Deposit and Total Assets has high degree of positive correlation. It also implies that if there is some increment in Total deposit then it will also increase some portion in Total assets and vice versa. Since the r > 6 × P.E. the calculated value of 'r' is highly significant.

4.3.2 Correlation Coefficient calculation of Outstanding Loan and Total Assets:

Let the Total Loan (in 'million Rs.) be denoted by the variable x and Total Assets (in 'million Rs.) be denoted by variable y.

As per the assumptions and with reference to the appendix-5, r = 0.9989

Therefore Probable Error (P.E.) = $0.6745 \times \frac{1 - r^2}{\sqrt{n}}$

$$= 0.6745 \times \frac{1 - 0.9989^2}{\sqrt{5}}$$

$$= 0.0007$$

Here we have,

Correlation Coefficient	**P.E.**	**6 × P.E.**	**Result**
0.9989	0.0007	0.0042	Highly Significant

As like Total Deposit, Outstanding Loan is also positively correlated with Total Assets since the correlation (r) is +0.9989. It also means that if there is some increment in Net Loan then it also increases some portion to the Net Loan, because when Net Loan increases it also increase the Net Income and ultimately increases the Total Assets. Since the 'r' is relatively higher than 6× P.E. the calculated value of 'r' is highly significant.

4.4 Financial analysis of Daunnedevi SACCOS

PEARLS ratio analysis:

Table - 12

P=Protection								
Indicator	**Formulas**	**Standard**	**2061/ 62**	**2062/ 63**	**2063/ 64**	**2064/ 65**	**2065/ 66**	**Average**
P1	Allowances for loan loss/Delinquency > 12 months	100%	N/A	N/A	93.94	41.26	99.32	46.90
P2	Net allowances for loan/Delinquency 1-12 months	35%	N/A	N/A	26.50	22.21	23.86	14.51
P3	Net value of Assets/ Total Shares and Deposits	≥ 111%	137.68	141.26	154.28	143.37	132.43	141.80

Source: Worked out from the data extracted from annual audit report of Daunnedevi SACCOS.

In PEARLS analysis Protection means security of the savings of its members. From the above table it is clear that Daunnedevi SACCOS is not maintaining proper delinquency record during the FY 2061/62 an 2062/63. But after onward in FY 2063/64 it is quite satisfactory since its near to 100% ie 93.94% and in FY 2065/65 is also its 99.32 which is about to 100%, so it is satisfactory reserve maintained by this SACCOS during these fiscal years. But in FY 2064/65 it was only 41.26 %. Similarly, the WOCCU standard for P2 and P3 are 35% and ≥ 111%. For P2 Daunnedevi SACCOS need to improve little

more to meet its standard otherwise its very good in P3 ratio. Whereas, the average ratios for P1, P2 and P3 ratios are 46.90%, 14.51% and 141.80% respectively.

Table - 13

E=Efficiency								
Indicator	**Formulas**	**Standard**	**2061/ 62**	**2062/ 63**	**2063/ 64**	**2064/ 65**	**2065/ 66**	**Average**
E1	Net Loan / Total Assets	70-80%	85.02	85.95	85.27	89.44	92.65	87.67
E3	Financial Investment / Total Assets	≤ 2%	0.03	0.02	0.02	0.01	0.01	0.02
E5	Savings & Deposit / Total Assets	70-80%	56.42	64.92	64.19	59.71	65.18	62.09
E6	External Borrowings / Total Assets	0-5 %	19.34	11.39	14.34	18.34	14.25	15.53
E7	Share Capital / Total Assets	≤ 20%	8.79	7.71	6.60	5.10	4.57	6.55
E8	Institutional Capital / Total Assets	≥ 10%	13.97	13.16	14.91	14.32	14.61	14.19
E9	Net Institutional Capital / Total Assets	≥ 10%	14.19	13.97	13.16	14.91	14.32	14.11

Source: Worked out from the data extracted from annual audit report of Daunnedevi SACCOS.

The financial structure is the most important variable that affects the growth, profitability and efficiency. Financial structure is always changing and requires careful management, especially in case of the rapid growth. Here all the ratios for Efficiency are to maintain good financial structure of the MFI. The proportion of Net Loan and Financial Investment in Total Asset of DD SACCOS is properly maintained throughout the time span. However the Saving collection is still to be improved as it is only in the range of 50% to 65 % whereas standard for that ratio is 70-80%. Accordingly, the external borrowing of the institution is also exceeded from the standard. The share capital is within the standard which is less than 20% but still it could be increased up to 20% as it is far less than its maximum standard. Institutional capital is also very important to recover in the future crisis. The WOCCU standard for E8 is more than 10%, which

measures the Institutional Capital against the Total Assets. It is also well managed by the institution during the five years of time span. Similarly, Net institutional Capital is also within its standard.

Table - 14

A=Assets Quality								
Indicator	**Formulas**	**Standard**	**2061/ 62**	**2062/ 63**	**2063/ 64**	**2064/ 65**	**2065/ 66**	**Average**
A1	Total Loan Delinquency / Total Assets	≤ 5%	N/A	N/A	0.04	0.06	0.06	0.03
A2	Non Earning Assets / Total Assets	≤ 5%	11.90	9.94	8.94	9.24	6.99	9.40
A3	zero cost fund / Non Earning assets	≥ 200%	119.26	140.57	147.27	161.36	204.76	154.64

Source: Worked out from the data extracted from annual audit report of Daunnedevi SACCOS.

Asset Quality is the main variable that affects institutional profitability. The standard for A1 under PEARLS analysis is less than 5%, but as already mentioned that DD SACCOS had not maintained the delinquency for FY 2061/62 and 2062/63. But after onward it is well maintained during the FY 2063/64 to 2065/66. Non earning assets decrease the opportunity to earn more. Hence the standard for A2 is less than 5% whereas DD SACCOS has Non Earning Assets ratio more than standard throughout the time span. Similarly, Zero cost fund is also improving during the selected fiscal years to meet its standard**.** The average ratio for A1 and A3 satisfies its standard where as the average ratio of A3 is quite more than the standard.

Table - 15

R=Rate of Return								
Indicator	**Formulas**	**Standard**	**2061/62**	**2062/63**	**2063/64**	**2064/65**	**2065/66**	**Average**
R1	Net Loan Income / Average Net Loan	Entrepreneurial Rate (at least 10%)	6.46	6.85	7.37	6.62	6.53	6.77
R5	Interest cost on Savings / Average Savings	Market rate > Inflation	12.56	10.52	11.19	10.27	9.10	10.73
R9	Operating Cost / Average Total Assets	≤ 5%	5.16	6.01	4.68	4.58	3.73	4.83
R12	Net Income / Average Total Assets	E'9 = 10%	0.97	1.35	2.25	1.68	2.39	1.73

Source: Worked out from the data extracted from annual audit report of Daunnedevi SACCOS.

The Rates of Return and Costs indicators monitor the return earned on each type of asset (use of funds) and the cost of each type of liability (source of funds). The WOCCU standard for R1 ratio is equals to the entrepreneurial rate that also means it would be at least 10%, whereas R1 ratios during the selected fiscal years is only around 6 to 7%, which is near to its standard. Operating cost of DD SACCOS seems to be higher than its standard whereas Net Income ratio against the Average Total Assets is lesser than the standard. However R9 average ratios meet the standard.

Table - 16

L=Liquidity								
Indicator	**Formulas**	**Standard**	**2061/62**	**2062/63**	**2063/64**	**2064/65**	**2065/66**	**Average**
L1	Liquid Assets -ST payables / Total Deposits	15-20%	4.68	9.50	1.06	-1.07	0.58	2.95
L2	Liquidity Fund/Savings	10%	7.02	11.58	3.83	1.51	2.79	5.35

Source: Worked out from the data extracted from annual audit report of Daunnedevi SACCOS.

Managing liquidity is an essential component of administering a savings institution. The standard for L1 ratio is 15 to 20%. DD SACCOS has a very low L1 ratio than the standard and also a minus value in the FY 2064/65.Similary, L2 ratio is also not very satisfactory except in FY 2062/63 so as the average ratios. It implies that Daunnedevi SACCOS has to improve in its liquid asset ratios.

Table - 17

S=Sign of Growth								
Indicator	**Formulas**	**Standard**	**2061/62**	**2062/63**	**2063/64**	**2064/65**	**2065/66**	**Average**
S1	Growth in Net Loans	Dependent on E1 = 70-80%	18.92	32.14	38.93	32.19	22.48	28.93
S5	Growth in Savings Deposits	Dependent on E5=70-80%	35.35	31.68	23.22	39.31	30.79	32.07
S6	Growth in External Credit	Dependent on E6=0-5%	(30.75)	67.71	69.43	(0.85)	(28.63)	15.38
S7	Growth in Member Shares	Dependent on E7 = ($\leq$ 20%)	NA	14.07	2.38	14.21	50.86	16.30
S8	Growth in Institutional Capital	Dependent on E8 $\geq$ 10%	15.81	25.43	50.02	22.57	24.56	27.68

S10	Growth in Membership	≥ 15%	NA	10.31	0.53	14.34	8.25	6.69
S11	Growth in Total Assets	> Inflation + 10%	17.63	33.18	32.45	27.62	22.03	26.58

Source: Worked out from the data extracted from annual audit report of Daunnedevi SACCOS.

The sign of growth reflect the member client's satisfaction, appropriateness of product offerings and financial strength. Growth directly affects an institution's financial structure and requires close monitoring to maintain balance. The standard for growth in Net Loans is 70-80% but DD SACCOS have far less growth than its standard. Similarly, S5 rate is also less value than the standard. External credit is negative in FY 2061/62 and suddenly 67.71% and 69.43% FY 2062/63, 2063/64 respectively and again negative 0-5%. It is better to have member share growth less than or equals to zero. Growth in member shares are not available for the FY 2061/62 but it is less than 20% during FY 2062/63 to 2064/65 but it increased up to 50.86% in FY 2065/66. Growth in institutional capital and total assets are within the standard where as growth in membership is less than 15%, which is opposite to its standard.

4.5 Trend Analysis of Daunnedevi SACCOS

4.5.1 The following table shows the trend value of Total Loan and Total Deposit of Daunnedevi SACCOS.

We have, **y = a + bx**

Where, y = dependent variable

a = Y-intercept

b = slope of trend line or annual growth rate

x = deviation from some convenient time period

Let, the trend line be

$y = a+bx$

Where, x = Middle year

y = dependent variable, ie Net Loan

$$a = \frac{\sum y}{n}, \text{ when } \sum x = 0$$

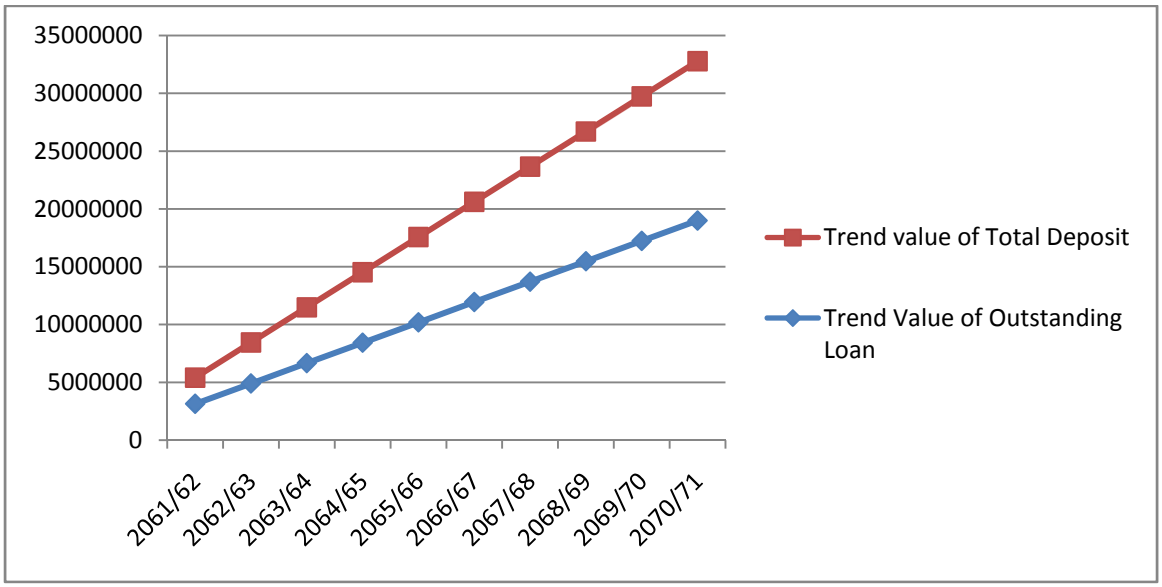
$$b = \frac{\sum xy}{\sum x^2}$$

Table - 18

Year	Original Value of Outstanding Loan	Trend Value of Outstanding Loan	Original Value of Total Deposit	Trend value of Total Deposit
2061/62	3487828	3143435	2634661	2265655
2062/63	4608775	4904711	3469215	3545073
2063/64	6402776	6665987	4274691	4824491
2064/65	8463919	8427263	5955058	6103909
2065/66	10366636	10188539	7788831	7383327
2066/67	-	11949815	-	8662745
2067/68	-	13711091	-	9942163
2068/69	-	15472367	-	11221581
2069/70	-	17233643	-	12500999
2070/71	-	18994919	-	13780417

Calculation as per appendix-3

Figure – 6



According to the above table shows the increasing trend of Total deposit and Net Loan for Daunnedevi SACCO. It is increasing by Rs. 1279418 and Rs. 1761276 per annum respectively. Similarly, the expected values of Total Deposit for FY 2066/67 to 2070/71 are Rs. 8662745, Rs.9942165, Rs. 11221581, Rs. 12500999, and Rs. 13780417 respectively. Likewise expected values of Net Loan for same three fiscal years are Rs. 11949815, Rs. 13711091, Rs. 15472367, Rs. 17233643 and Rs. 18994919 respectively.

4.5.2 The following table shows the trend value of Net Income and Operating Cost

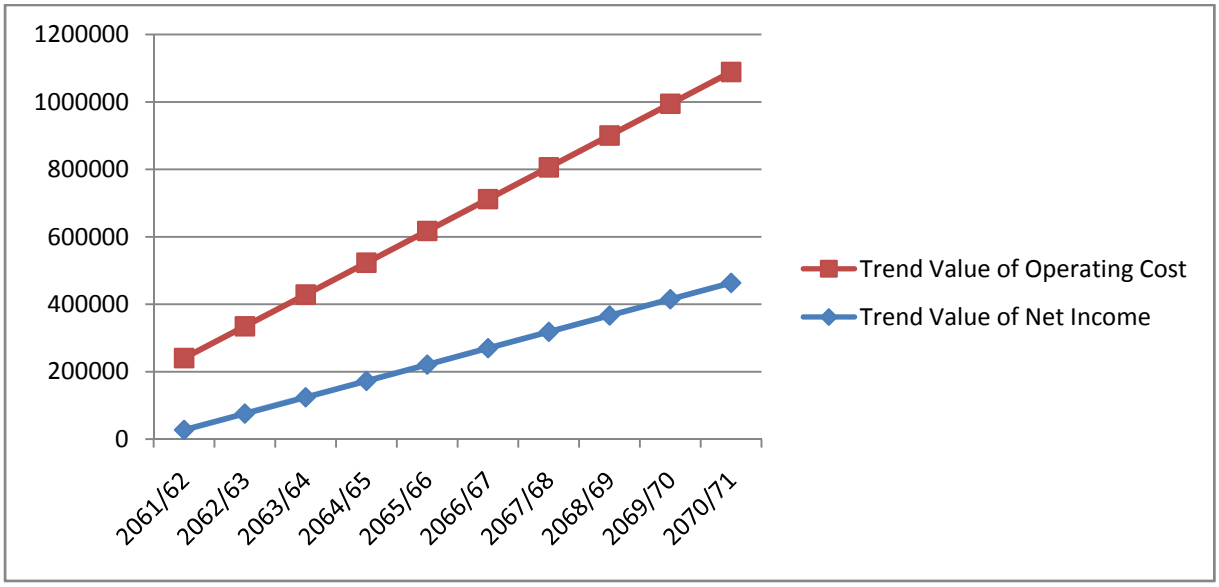
Table – 19

Year	Original Value of Net Income	Trend Value of Net Income	Original Value of Operating Cost	Trend Value of Operating Cost
2061/62	36373	27165	193815	213194
2062/63	63709	75663	284394	258947
2063/64	141402	124161	294078	304701
2064/65	137205	172658	372875	350455
2065/66	242114	221156	378343	396208

2066/67	-	269654	-	441962
2067/68	-	318152	-	487716
2068/69	-	366650	-	533470
2069/70	-	415147	-	579223
2070/71	-	463645	-	624977

Calculation as per appendix-4

Figure - 7



The above table and line graph shows the increasing trend of Operating Cost and Net Income of the Daunnedevi SACCOS. According to the worked out in Appendix # 4 values of ' b' for Operating Cost and Net Income is Rs. 45753.7 and Rs. 48497.80 respectively. This means the Net Income and Operating Cost is increasing as per the respective value of the (b).

4.6 Calculation of Correlation Coefficient for Daunnedevi SACCOS

4.6.1 Correlation Coefficient between Total Deposit and Total Assets

Let the Deposit (in 'million Rs.) be denoted by the variable x and Total Assets (in 'million Rs.) be denoted by variable y.

Here we have,

$$r = \frac{n\sum xy - \sum x \sum y}{\sqrt{n\sum x^2 - (\sum x)^2}\ \sqrt{n\sum y^2 - (\sum y)^2}}$$

Where, r = Pearson's Correlation Coefficient

x = Value of Total Deposits

y = Value of Total Assets

n = Number of pairs of X and Y observed

With reference to the Appendix-6, r = 0.117

Therefore Probable Error (P.E.) = $0.6745 \times \frac{1-r^2}{\sqrt{n}}$

$$= 0.6745 \times \frac{1-0.117^2}{\sqrt{5}}$$

$$= 0.2975$$

Here we have,

Correlation Coefficient	**P.E.**	**6 × P.E.**	**Result**
0.117	0.2975	Calculation not required	Insignificant

From the above calculation the correlation coefficient (r) between Total Deposit and Total Asset is +0.117, which shows the positive relation between the two variables. It implies any amount increment in Total Deposit leads to increase in the Total Assets and vice versa. Since the 'r' is less than P.E. the calculated value of 'r' is insignificant.

4.6.2 Correlation Coefficient calculation for Outstanding Loan and Total Assets

Let the Outstanding Loan (in 'million Rs.) be denoted by the variable x and Total Assets (in 'million Rs.) be denoted by variable y.

By remaining same formula and with reference to the Appendix—6, r = 0.9997

Therefore Probable Error (P.E.) would be, $0.6745 \times \frac{1-r^2}{\sqrt{n}}$

$$= 0.6745 \times \frac{1-0.9997^2}{\sqrt{5}}$$

$$= 0.0001$$

Here we have,

Correlation Coefficient	**P.E.**	**6 × P.E.**	**Result**
0.9997	0.0001	0.0001	Highly Significant

In comparison to the Total Deposit, Net Loan is more positively correlated with Total Assets since the correlation (r) is +.09997. It also means that if there is some increment in Net Loan then it also increases some portion to the Net Loan, because when Net Loan increases it also increase the Net Income and ultimately increases the Total Assets. Since calculated 'r' is comparatively higher than $6 \times$ P.E. the calculated value of 'r' is highly significant.

4.7 Comparative data Analysis

Protection: The main objective of protection ratios calculation is to find out whether the MFI has been maintaining proper delinquency provision or not. Hatemalo SACCOS has maintained the loan loss provision exception to the FY 2062/63 for both delinquencies more than 12 months and up to 12 months. But the Net Value of Assets is exact to the standard required throughout the years. Similarly, Daunnedevi SACCOS is also trying to maintain the delinquency provisions. However it has not maintained such provisions during the FY2061/62 and 2062/63. It has more consistency in P1 and P2 ratios than of the Hatemalo SACCOS. The P3 ratios during the five years are also very satisfactory.

Efficiency: Almost all the Efficiency ratios maintained by Hatemalo SACCOs are lies under its standard. Though the standard for E1 ratio is 70-80% it is accepted to be up to 90-95% in the context of developing countries like Nepal. However E8 and E9 ratios are lesser than its standard so the institutional capital should be little more improved to meet its standard. On the contrary, Daunnedevi has been succeed to meet the standard for E8 and E9 ratios. Likewise, E1 and E2 ratios are also perfect to the standards. But it need to worked little more on its Savings Deposits since it's less than 70% in all the fiscal years. External borrowing of Daunnedevi SACCOS is also exceeding throughout the five years whereas, Share Capital is lesser than its standard.

Asset Quality: All the Assets Quality ratios of Hatemalo SACCOS are very satisfactory. That means Total Delinquency ratio, Non Earning Assets ratio and Zero Cost Funds are within the WOCCU standard. On the contrary, Daunnedevi only has A1 ratio which able to meet the standard. The Non Earning Assets ratios is more than 5% which is the standard for A2, similarly the Zero Cost Fund ratio is lesser than 200% in four fiscal years and it improved in FY 2065/66 being 204.76%. Hence with this calculation Daunnedevi SACCOS need to work little more in its Assets Quality.

Rate of Interest: PEARLS standard for Net Loan Income is equals to the entrepreneurial rate, which indicates the minimum 10% interest rate, and Hatemalo has been showing more than 10% interest rate on its Net Loan Income throughout the years. But it fails to enhance the standards for R5, R9 and R12 ratios. Likewise Daunnedevi SACCOS also

been able to achieve only R5 ratio standard. R1 and R12 ratios are lesser than its standard, whereas R9 ratio is more than 5% standard during the selected years.

Liquidity: Both the SACCOS are failed to meet the WOCCU standard for its liquidity ratios. The standards for L1 and L2 are 15-20% and 10% respectively. However both institutions have far minimum value for L1 and L2 than the standards.

Sign of Growth: In this research total seven ratios are calculated under sign of growth. Among them only three ratios are within the standard in Hatemalo SACCOS. The Institutional Capital growth, Membership growth and Total Assets growth falls within the PEARLS standard. Accordingly, In Daunnedevi SACCOS also only three ratios are able to meet its standard, which are S7, S8 and S11 ratios. Others are beyond the standards. The External Borrowing also very fluctuating during the five years. Likewise Saving deposit and Membership growths are also lesser than its standard.

While we look after the trend analysis, the increasing trend value of Net Loan is Rs. 4877356.90 and of Total Deposit is Rs. 4365641 per annum for the Hatemalo SACCOS. Whereas the Net Income and Operating Cost are increasing by Rs. 4892.22 and Rs. 331811.10 per annum respectively. On the other hand side, Net Loan and Total Deposits are increasing by Rs.1279418 and Rs. 1761276 respectively in Daunnedevi SACCOS whereas the trend values for Operating Cost and Net Income are R.s 45753.7 and Rs. 48497.80 respectively.

The correlation coefficient of Total Deposit and Total Assets is +0.9999 for Hatemalo SACCOS and correlation between Total Deposit and Outstanding loan is 0.9989, which shows the positive relation between the two variables. Similarly, Daunnedevi SACCOS also have the positive correlation between the Total Deposit and Total Assets being +0.117. The correlation coefficient between Total Deposit and Outstanding loan is also +0.9989, which is about to perfectly correlation.

Chapter - 5

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Microfinance is the provision of financial services to low-income clients, including consumers and the self-employed, who traditionally lack access to banking and related facilities. Often people do not have enough money when they suffer the uncertain calamities and also they don't want to save in big financial institutions like banks and finance companies due to various reasons, like hesitation to go to bank to deposit small amount, banks may not accept the small deposits from the people, long procedures, there may not have enough branches at the remote areas etc. In this regards also cooperatives are playing a vital role to uplift the poor in the rural areas of Nepal in comparison to the other financial institutions. However, the institutional capacity of most of the local institutions is very low. Hence, government should come up with better and reliable ideas to help the Savings and Credit Co-Operatives to develop its quality of service and strengthen the financial structure.

Research conducted by various government and non government organizations have been proved that the microfinance practice in Nepal, like elsewhere in the globe, is targeted towards poor women. Similarly the selected two SACCOS, Hatemalo and Daunnedevi are also established to serve the poor through women. Basically, the micro credit programs are endeavoring to replace the efficient working of informal lending system throughout the country. If they cannot compete these systems they will lose their lending business with high overdue loan and high administrative costs. Therefore, they must emphasize mainly on the importance of knowing the clients and meeting their needs in their lending business. For this purpose PEARLS analysis system helps to design appropriate and poor friendly system in the SACCOS.

This study examines financial performance of the Hatemalo SACCOS and Daunnedevi SACCOS under PEARLS standards. In this study financial tools and statistical tools has been used to make this study more effective and informative. The study has covered five years data from FY 2061/62 to 2065/66. The required financial data and information

have been collected from the Balance Sheet and Profit and Loss accounts of the institution. The data extracted from annual audit report have been processed and interpreted considering the requirement of the study.

This study has examine the six parts of the selected SACCOS under PEARLS standard, whereas, P-Protection, E-Efficiency, A-Asset Quality, R-Rate of Return, L-Liquidity and S-Sign of Growth. Though the WOCCU standard has total 46 ratios only reliable and appropriate ratios according to the available data are calculated. For the same reason only 26 ratios has been conducted for both the institutions. Besides that Trend analysis and Correlation calculations also has been done in the report.

5.2 Conclusion

Microfinance can be defined as providing the services like micro savings, micro credit, micro insurance and other support services to the poor to uplift socio-economic condition. It is a powerful instrument of poverty alleviation. Nepal's microfinance sector is governed by the Bank and Financial Institutions Act 2006, Cooperative Act 1991 and Acts for NGOs. Some of the currently existed Micro Finance Institutions in Nepal are:

1. Commercial oriented MFIs such as Regional Grameen Bikash Bank, Microfinance Development Bank (MFDB) and Financial Intermediary NGOs (FINGOs);

2. Community based MFIs such as Savings and Credit Cooperatives (SACCOS), Small Farmer's Cooperative Limited (SFCLs)

3. Apex Institutions namely Rural Microfinance Reliance Fund (RSRF) providing wholesale loan to MFIs.

Financial viability and sustainability obtained through proper data analysis is an essential thing to effectively run any MFIs and serve the target clienteles. Therefore, Protection ratios, Efficiency ratios, Asset Quality ratios, Rate of return ratios, Liquidity ratios and calculation of Sign of Growth etc helps to make rational decision making and future planning for sustainability.

The main objective of this study is to do the efficiency and sustainability analysis of selected institutions. For the same purpose the study has used PEARLS standard, Trend Analysis and the Correlation Coefficients of the variables. From the analysis of the five years figures it is found out that Hatemalo and Daunnedevi SACCOS are able to meet around half percentage of the WOCCU standards. Since both the institutions are in initial stage maintaining the PEARLS standards so it is quite satisfactory to achieve more or less 50% of its requirements in its initial stage. In this way we can say that both institutions are efficient enough for its sustainability and need more improvement to maintain better efficiency.

5.3 Recommendation

On the basis of data analysis, summary, conclusion and finding of the study, following recommendations have been made for the sound and effective operations of the selected Savings and Credit Cooperatives.

5.3.1 Recommendation to the Hatemalo SACCOS

- Though the number of members and its capital is in increasing trend, growth rates are in decreasing trend. Hence it should work little more on these two factors.
- The net value of assets against total shares and deposits are satisfactory but delinquency reserve for delinquencies occurred (more and less than 12 months) are insufficient. Hence Hatemalo SACCOS should work on delinquency reserves to assure the savings deposit of its clienteles.
- The institutional capital and net institutional capital reserves are also less than standard requirement, so improvement should be done in these reserves.
- The operating cost is little more than the way it should be and net income is also less than requirement. Hence, some improvement is required in net income and operating cost should be minimized.
- Liquid assets and its fund should be increased.
- Growth in net loan and savings deposit in FY 2065/66 is less than the required standard. Hence Hatemalo SACCOS should increase its loan amount and deposit collection as well.

5.3.2 Recommendation to the Daunnedevi SACCOS

- The Net Value of Assets against Total Shares and Deposit ratio is perfectly maintained but as like Hatemalo SACCOS it also needs to work on delinquency ratios.
- Savings and Deposit ratio on Total Assets is slightly less than the standard so Daunnedevi SACCOS should increase its member's savings to maintain the required loan investment and to upgrade the institution as a whole.
- The external borrowing of the DD SACCOS seems to be likely constant over the five years. However it's still more than the requirement, so it should reduce its external borrowings up to 0-5% as following to the standard.
- The Non Earning Assets on Total Assets is comparatively more than its standard requirement, so DD SACCOS need to reduce its investment in Non Earning Assets, as it should only be up to 5% or less.
- The average interest rate on Net Loan Income of the institution is only 6.77%. Whereas, WOCCU standard says it should not be less than 10%. Hence DD SACCOS should increase its interest rate on Net Loan Income at least up to 10%.
- Net income of the institution is far less than the requirement. The Net Income ratio should be at least 10% on its Average Total Assets.
- Liquid assets and its funds maintained by the institution is also far less than standard, so it need to increase its liquid assets up to 15-20% and fund should be maintained up to 10%.
- Growth in Net loan, Savings Deposits, External Credit and Membership all are in less than the standards. Hence DD SACCOS should work on these captions to upgrade them till the standard requirement fulfilled.

5.3.3 General Recommendations

Beside the specific recommendations following some suggestions should be added to both selected SACCOS:

- Assess educational needs in terms of skilled members, officers and staffs.
- Upgrade office facilities.

- Establish clear internal control procedures that foster the confidence of the members regarding the security of their deposits.
- Involve staffs and members in different trainings.
- Promote micro-enterprise development to the member clienteles and its families.
- Develop savings and loan products by their own as per the requirement of the people in their working areas.
- Provide best services and win faith from all the members and stakeholders.

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Appendix - 1

Trend value calculation of Outstanding loan for Hatemalo SACCOS:

Year (X)	Outstanding loan (y)	x = X – Middle year	X^2	xy
2061/62	1630856	-2	4	-3261712
2062/63	4093018	-1	1	-4093018
2063/64	8431599	0	0	0
2064/65	14986585	1	1	14986585
2065/66	20570857	2	4	41141714
n=5	**Σy=49712915**		$\sum x^2$**=10**	**Σxy=48773569**

Where we have,

a = $\frac{\Sigma y}{n} = \frac{9712915}{5}$ = **9942583**

b = $\frac{\Sigma xy}{\Sigma x^2} = \frac{48773569}{10}$ = **4877356.90**

Putting the value of a & b in equation: y = a+bx

For FY 2061/62, y = 9942583 + 4877356.90 ×-2 = 187869.2

For FY 2062/63, y = 9942583 + 4877356.90 ×-1 = 5065226

For FY 2063/64, y = 9942583 + 4877356.90 × 0 = 9942583

For FY 2064/65, y = 9942583 + 4877356.90 ×1 = 14819940

For FY 2065/66, y = 9942583 + 4877356.90 × 2 = 19697297

For FY 2066/67, y = 9942583 + 4877356.90 × 3 = 24574654

For FY 2067/68, y = 9942583 + 4877356.90 × 4 = 29452011

For FY 2068/69, y = 9942583 + 4877356.90 × 5 = 34329368

For FY 2069/70, y = 9942583 + 4877356.90 × 6 = 39206724

For FY 2070/71, y = 9942583 + 4877356.90 × 7 = 44084081

Trend value calculation for Total Deposit:

Year (X)	Deposits (y)	x = X – Middle year	x^2	xy
2062	1303112	-2	4	-2606224
2063	3301010	-1	1	-3301010
2064	7027074	0	0	0
2065	12405768	1	1	12405768
2066	18578937	2	4	37157874
n=5	**Σy = 42615902**		**$\sum x^2$ = 10**	**Σxy = 43656409**

Where we have,

a = $\frac{\Sigma y}{n} = \frac{42615902}{5}$ = **8523180**

b = $\frac{\Sigma xy}{\Sigma x^2} = \frac{43656409}{10}$ = **4365641**

Putting the value of a & b in equation: y = a+bx

For FY 2061/62, y = 8523180 + 4365641 ×-2 = -208101

For FY 2062/63, y = 8523180 + 4365641 ×-1 = 4157539

For FY 2063/64, y = 8523180 + 4365641 × 0 = 8523180

For FY 2064/65, y = 8523180 + 4365641 ×1 = 12888821

For FY 2065/66, y = 8523180 + 4365641 × 2 = 17254462

For FY 2066/67, y = 8523180 + 4365641 × 3 = 21620103

For FY 2067/68, y = 8523180 + 4365641 × 4 = 25985744

For FY 2068/69, y = 8523180 + 4365641 × 5 = 30351385

For FY 2069/70, y = 8523180 + 4365641 × 6 = 34717026

For FY 2070/71, y = 8523180 + 4365641 × 7 = 39082667

Appendix-2

Trend value calculation for Net Income:

Year (X)	Net Income(y)	x = X – Middle year	X^2	xy
2062	927.32	-2	4	-1854.64
2063	4714.95	-1	1	-4714.95
2064	8134.63	0	0	0
2065	13721.8	1	1	13721.8
2066	20885	2	4	41770
n=5	**Σy=48383.7**	0	$\sum x^2$**=10**	**Σxy=48922.21**

Where we have,

a = $\frac{\Sigma y}{n} = \frac{48383.7}{5}$ = **9676.74**

b = $\frac{\Sigma xy}{\Sigma x^2} = \frac{48922.21}{10}$ = **4892.221**

Putting the value of a & b in equation: y = a+bx

For FY 2061/62, y = 9676.74 + 4892.221 ×-2 = -108

For FY 2062/63, y = 9676.74 + 4892.221 ×-1 = 4785

For FY 2063/64, y = 9676.74 + 4892.221 × 0 = 9677

For FY 2064/65, y = 9676.74 + 4892.221 ×1 = 14569

For FY 2065/66, y = 9676.74 + 4892.221 × 2 = 19461

For FY 2066/67, y = 9676.74 + 4892.221 × 3 = 24353

For FY 2067/68, y = 9676.74 + 4892.221 × 4 =29246

For FY 2068/69, y = 9676.74 + 4892.221 × 5 = 34138

For FY 2069/70, y = 9676.74 + 4892.221 × 6 = 39030

For FY 2070/71, y = 9676.74 + 4892.221 × 7 = 43922

Trend value calculation for Operating Cost:

Year (X)	Operating Cost (y)	x = X – Middle year	X^2	xy
2062	109040.5	-2	4	-218081
2063	254202.5	-1	1	-254203
2064	676715.75	0	0	0
2065	1065714.46	1	1	1065714
2066	1362340	2	4	2724680
n=5	**Σy =3468013.21**		$\sum x^2$**=10**	**Σxy =3318111**

Where we have,

a = $\frac{\Sigma y}{n} = \frac{3468013.21}{5}$ = **693602.64**

b = $\frac{\Sigma xy}{\Sigma x^2} = \frac{3318111}{10}$ = **331811.1**

Putting the value of a & b in equation: y = a+bx

For FY 2061/62, y = 693602.64 + 331811 ×-2 = 29980

For FY 2062/63, y = 693602.64 + 331811 ×-1 = 361792

For FY 2063/64, y = 693602.64 + 331811 × 0 = 693603

For FY 2064/65, y = 693602.64 + 331811 ×1 = 1025414

For FY 2065/66, y = 693602.64 + 331811 × 2 = 1357225

For FY 2066/67, y = 693602.64 + 331811 × 3 = 1689036

For FY 2067/68, y = 693602.64 + 331811 × 4 = 2020847

For FY 2068/69, y = 693602.64 + 3318111 × 5 = 2352658

For FY 2069/70, y = 693602.64 + 331811 × 6 = 2684469

For FY 2070/71, y = 693602.64 + 331811 × 7 = 3016280

Appendix-3

Trend value Calculation of Outstanding loan for Daunnedevi SACCOS:

year (X)	Net Loan (Y)	x = X – Middle year	X^2	xy
2062	3487828	-2	4	-6975656
2063	4608775	-1	1	-4608775
2064	6402776	0	0	0
2065	8463919	1	1	8463919
2066	10366636	2	4	20733272
N = 5	**Σy = 33329934**	**0**	$\sum x^2$**=10**	**Σxy = 17612760**

Where we have,

a = $\frac{\Sigma y}{n} = \frac{33329934}{5}$ = **6665986.8**

b = $\frac{\Sigma xy}{\Sigma x^2} = \frac{17612760}{10}$ = **1761276**

Putting the value of a & b in equation: y = a+bx

For FY 2061/62, y = 6665986.8 + 1761276 ×-2 = 3143435

For FY 2062/63, y = 6665986.8 + 1761276 ×-1 = 4904711

For FY 2063/64, y = 6665986.8 + 1761276 × 0 = 6665987

For FY 2064/65, y = 6665986.8 + 1761276 ×1 = 8427263

For FY 2065/66, y = 6665986.8 + 1761276 × 2 =10188539

For FY 2066/67, y = 6665986.8 + 1761276 × 3 =11949815

For FY 2067/68, y = 6665986.8 + 1761276 × 4 =13711091

For FY 2068/69, y = 6665986.8 + 1761276 × 5 =15472367

For FY 2069/70, y = 6665986.8 + 1761276 × 6 = 17233643

For FY 20670/71, y = 6665986.8 + 1761276 × 7 =18994919

Trend value calculation for Total Deposit:

year (X)	Total Deposit (Y)	x = X – Middle year	X^2	xy
2062	2634661	-2	4	-5269322
2063	3469215	-1	1	-3469215
2064	4274691	0	0	0
2065	5955058	1	1	5955058
2066	7788831	2	4	15577662
N = 5	**Σy = 24122456**	**0**	**$\sum x^2$= 10**	**Σxy = 12794183**

Where we have,

a = $\frac{\Sigma y}{n} = \frac{24122456}{5}$ = **4824491.2**

b = $\frac{\Sigma xy}{\Sigma x^2} = \frac{12794183}{10}$ = **1279418**

Putting the value of a & b in equation: y = a+bx

For FY 2061/62, y = 4824491.2 + 1279418 ×-2 = 2265655

For FY 2062/63, y = 4824491.2 + 1279418 ×-1 = 3545073

For FY 2063/64, y = 4824491.2 + 1279418 × 0 = 4824491

For FY 2064/65, y = 4824491.2 + 1279418 ×1 = 6103909

For FY 2065/66, y = 4824491.2 + 1279418 × 2 = 7383327

For FY 2066/67, y = 4824491.2 + 1279418 × 3 = 8662745

For FY 2067/68, y = 4824491.2 + 1279418 × 4 = 9942163

For FY 2068/69, y = 4824491.2 + 1279418 × 5 = 11221581

For FY 2069/70, y = 4824491.2 + 1279418 × 6 = 12500999

For FY 2070/71, y = 4824491.2 + 1279418 × 7 = 13780417

year (X)	Net Income (Y)	x = X – Middle year	X^2	xy
2062	36373	-2	4	-72746
2063	63709	-1	1	-63709
2064	141402	0	0	0
2065	137205	1	1	137205
2066	242114	2	4	484228
N = 5	**Σy = 620803**	**0**	$\sum x^2$ **= 10**	**Σxy = 484978**

Appendix-4

Trend value calculation for Net Income:

Where we have,

a = $\frac{\Sigma y}{n} = \frac{620803}{5}$ = **124160.60**

b = $\frac{\Sigma xy}{\Sigma x^2} = \frac{484978}{10}$ = **48497.80**

Putting the value of a & b in equation: y = a+bx

For FY 2061/62, y = 124160.60 + 48497.80 ×-2 = 27165

For FY 2062/63, y = 124160.60 + 48497.80 ×-1 =75663

For FY 2063/64, y = 124160.60 + 48497.80 × 0 = 124161

For FY 2064/65, y = 124160.60 + 48497.80 ×1 =172658

For FY 2065/66, y = 124160.60 + 48497.80 × 2 =221156

For FY 2066/67, y = 124160.60 + 48497.80 × 3 =269654

For FY 2067/68, y = 124160.60 + 48497.80 × 4 = 318152

For FY 2068/69, y = 124160.60 + 48497.80 × 5 = 366650

For FY 2069/70, y = 124160.60 + 48497.80 × 6 = 415147

For FY 2070/71, y = 124160.60 + 48497.80 × 7 = 463645

Trend value calculation for Operating Cost:

year (X)	Operating Cost (Y)	x = X – Middle year	X^2	xy
2062	193815	-2	4	-387630
2063	284394	-1	1	-284394
2064	294078	0	0	0
2065	372875	1	1	372875
2066	378343	2	4	756686
N = 5	**Σy = 1523505**	**0**	$\sum x^2$= **10**	**Σxy = 457537**

Where we have,

a = $\frac{\Sigma y}{n} = \frac{1523505}{5}$ = **304701**

b = $\frac{\Sigma xy}{\Sigma x^2} = \frac{457537}{10}$ = **45753.7**

Putting the value of a & b in equation: y = a+bx

For FY 2061/62, y = 304701 + 45753.7 ×-2 = 213194

For FY 2062/63, y = 304701 + 45753.7 ×-1 =258947

For FY 2063/64, y = 304701 + 45753.7 × 0 = 304701

For FY 2064/65, y = 304701 + 45753.7 ×1 = 350455

For FY 2065/66, y = 304701 + 45753.7 × 2 =396208

For FY 2066/67, y = 304701 + 45753.7 × 3 =441962

For FY 2067/68, y = 304701 + 45753.7 × 4 =487716

For FY 2068/69, y = 304701 + 45753.7 × 5 =533470

For FY 2069/70, y = 304701 + 45753.7 × 6 = 579223

For FY 2070/, y = 304701 + 45753.7 × 7 = 624977

Appendix-5

Calculation of Correlation Coefficient for Hatemalo SACCOS

Correlation between Total Deposit and Total Assets

In million rupees

Year	Deposits (x)	x^2	Total Assets (y)	y^2	xy
2061/62	1.30	1.70	1.77	3.13	2.30
2062/63	3.30	10.90	4.36	18.98	14.38
2063/64	7.03	49.38	9.11	83.03	64.03
2064/65	12.41	153.90	15.97	254.97	198.09
2065/66	18.58	345.18	23.33	544.08	433.36
N = 5	**Σx = 42.62**	**Σ x^2 = 561.05**	**Σy = 54.53**	**Σ y^2 = 04.18**	**Σxy = 712.17**

Here, N = 5, **ΣX = 42.62, Σ x^2 =561.05, ΣY =54.53, Σ y^2 = 904.18, Σxy = 12.17**

Now,

$$r = \frac{5(712.17) - (42.62)(54.53)}{\sqrt{5\times 561.05 - 42.62^2}\ \sqrt{5\times 904.18 - 54.53^2}}$$

r = 0.9999

Correlation between Outstanding Loan and Total Assets

In million rupees

Year	Outstanding loan (X)	x^2	Total Assets (y)	y^2	xy
2061/62	1.63	2.66	1.77	3.13	2.88
2062-63	4.09	16.75	4.36	18.98	17.83
2063-64	8.43	71.09	9.11	83.03	76.83
2064-65	14.99	224.60	15.97	254.97	239.30
2065-66	20.57	423.16	23.33	544.08	479.82
N = 5	**Σx = 49.71**	**Σ x^2 = 38.26**	**Σy = 54.53**	**Σ y^2 = 904.18**	**Σxy = 816.67**

Here, N = 5, **Σx =49.71, Σ x^2 = 738.26, Σy = 54.53, Σ y^2 = 904.18, Σxy = 816.67**

Now,

$$r = \frac{5(816.67) - (49.71)(54.53)}{\sqrt{5 \times 738.26 - 49.71^2}\ \sqrt{5 \times 904.18 - 54.53^2}}$$

r = 0.9989

Appendix-6

Calculation of Correlation Coefficient for DD SACCOS

Correlation between Total Deposit and Total Assets

In million rupees

Year	Deposits (x)	x^2	Total Assets (y)	y^2	xy
2061/62	2.63	6.94	4.06	16.47	10.69
2062-63	3.47	12.04	5.40	29.21	18.75
2063-64	4.27	18.27	7.16	51.25	30.60
2064-65	5.96	35.46	9.14	83.46	54.40
2065-66	7.79	60.67	11.15	124.28	86.83
N = 5	**Σx = 24.12**	**Σ x^2 = 133.38**	**Σy = 36.91**	**Σ y^2 = 304.66**	**Σxy = 201.28**

Here, N = 5, **ΣX = 24.12, Σ x^2 =1333.38, Σx = 36.91, Σ y^2 =304.66, Σxy = 201.28**

Now,

$$r = \frac{5(201.28-(24.12)(36.91)}{\sqrt{5\times 1333.38 - 24.12^2}\ \sqrt{5*304.66 - 36.91^2}}$$

r = 0.117

Correlation between Outstanding Loan and Total Assets

In million rupees

Year	Outstanding loan (x)	x^2	Total Assets (y)	y^2	xy
2061/62	3.49	12.165	4.06	16.47	14.15
2062-63	4.61	21.241	5.40	29.21	24.91
2063-64	6.40	40.996	7.16	51.25	45.83
2064-65	8.46	71.638	9.14	83.46	77.32
2065-66	10.37	107.467	11.15	124.28	115.57
N = 5	**Σx = 33.33**	**Σ x^2 = 253.506**	**Σy = 36.91**	**Σ y^2 = 304.66**	**Σxy = 277.79**

Here, **N** = 5, **Σx = 33.33, Σ x^2 = 253.506, Σy = 36.91, Σ y^2 = 304.66, Σxy = 277.79**

Now,

$$r = \frac{5(277.79)-(33.33)(36.91)}{\sqrt{5\times 253.506-33.33^2}\ \sqrt{5\times 304.66-36.91^2}}$$

r = 0.9997

Balance Sheet of Hatemalo SACCOS for the Year 2060/61 to 2065/66

Assets	**2060**	**2061/62**	**2062/63**	**2063/64**	**2064/65**	**2065/66**
Cash Balance	55097.69	65055.69	87396.19	261566.19	294017.19	78753.19
Bank Balance	4614.7	6682.02	8942.47	54887.33	227802.97	1971457.67
Outstanding Loan	697500	1650650	4189249	8701887	15282602	21078382
Furniture	425	5582	27894	32450	76830.5	80330.5
Computer	36741	30495	24896	19917	51726	51726
Other Assets			3289	2632	19692	23292
Deposits in Telecome			5000	5000	5000	3750
Share Purchase	10000	10000	10000	10000	10000	10000
Stationery Stock						27755
Printer				23624		
TOTAL	**808203.39**	**1768464.71**	**4356666.66**	**9111963.52**	**15967670.66**	**23325446.36**
Liabilities	**2060**	**2061/62**	**2062/63**	**2063/64**	**2064/65**	**2065/66**
Share Capital	115500	228600	578100	934400	1469400	2072500
General Reserve	77735.91	99432.99	201763.91	377800.07	964146.73	1099524.43
Other Reserves	18924.76	19516	22521.79	27402.4	29305.54	44969.54
Deposits	574474	1303112	3301010	7027074.19	12405768.19	18578937.19
Other Liabilities	14500	49785	6584	6584	3430.42	33425.42
Tax Provision	6422.72	10102.72	19774.96	41427.08	41680	73365
Health Provision	46	3122	10013	20002	33019	49413
Loan Loss Reserve (Sandigna Kosh)		19794	96231	270288	296017	507525
Payable Audit Fee			2000	2500	3000	5000
Payable Helen			4070	147903.78	147903.78	147903.78
Women Health Reserve			51498	145482	483500	112011
Depreciation Fund						23301
Income Tax						1221
Relief Fund		4400				576350
Annual General Meeting Exp			30000	80500	90500	
Gurung Reserve	600	600	600	600		
Donation		30000	30000	30000		
Evaluation Fund			2500			
TOTAL	**808203.39**	**1768464.71**	**4356666.66**	**9111963.52**	**15967670.66**	**23325446.36**
Net Loan	697500	1630856	4093018	8431599	14986585	20570857
Net Institutional Capital	58811.15	79916.99	179242.12	350397.67	934841.19	1054554.89

Source: Audit report of Hatemalo SACCOS for the year 2060/61 to 2065/66

Profit & Loss Account of Hatemalo SACCOS for the Year 2061/62 to 2065/66

Credit Amounts	2061/62	2062/63	2063/64	2064/65	2065/66
Interest Income	159602.5	385373	849739	1744391.26	2737732
Interest from Bank	223.32	1257.45	2545.83	1050	
Miscellaneous Incomes	3937	3570	577		16478
Application Fee	1180	2900	16620	6000	
Others Incomes	4040	3570			
Amount from Piggy Banking			2300		
Late fee Charges		4340	6205	9990	
Pass Book Charges			4200	7365	
Loan Fee			135651		307836
Account Closing Fee		1050	1350	2500	
Training Service		5450			
ID Card Fee			6310	3100	
Total	**168982.82**	**408340.45**	**1025497.83**	**1774396.26**	**3062046**
Debit Amounts					
Operating Expenses		9500		427365.54	
Tea Expenses			10751		19867
Training Expenses			1000		
Refreshment			3488		16436
Lunch Expenses			1000		
Election Expenses			12512		2143
Stationery Expenses	8965.5	12434.5	24501		47266
Salary Expenses	16500	89850	130830		403436
Interest Expenses	59015	149423	340647.45	694960	1467313
Miscellaneous Expenses	4203	20171	15466.75		32042
Transportaion Expenses	512		20600		15326
Traveling Expenses			6919		30000
House Rent	11500	6000	24000		36000
Maintenance	10823		423		
Renewable Fee	1000				
Annual General Meeting Exp	2048	31271	80500	90500	255067
Outstanding AGM Expenses	15000				
Water Bill					1501
Telephone and Electricity Bill	2205	6291	11495		19108
Women Health Checkup Exp	23500	51498	143500	483500	112011
Relief Fund	4400		174057	25729	194050
Bad Debts					211508
Payable Audit Fee	1500	2000	2500	3000	5000
Interest Tax					73365
Income Tax				3430.42	5221
Depreciation	6884	6937	13173	32189.5	23301
Piggy bag purchase		8750			
Telphone purchase		9500			
Contingecy Expenses					71200
Net Income	927.32	4714.95	8134.63	13721.8	20885
Total	**168982.82**	**408340.45**	**1025497.83**	**1774396.26**	**3062046**

Source: Audit report of Hatemalo SACCOS for the year 2060/61 to 2065/66

Balance Sheet of Daunnedevi SACCOS
for the Year 2060/61 to 2065/66

Assets	2060	2061/62	2062/63	2063/64	2064/65	2065/66
Cash Balance	451.00	2,804.00	100	674	100	3945
Bank Balance	25,377.00	39,575.00	188531	74460	24450	164356
Investment	1,000.00	1,000.00	1000	1000	1000	1000
Outstanding Loan	2,932,960.00	3,487,828.00	4608775	6402776	8463919	10366636
Receivables	79,910.00	126,278.00	123459	19053	7636	3870
Fixed assets	386,845.00	384,386.00	393064	591022	580925	563376
Other assets	23,251.00	16,192.00	89782	69579	57721	44769
	3449794	**4,058,063.00**	**5404711**	**7158564**	**9,135,751.00**	**11147952**

Liabilities						
Share Capital	303200	312800	356800	365300	417200	629400
Reserve Fund	489629	567033	711248	1067026	1307890	1629100
Saving Deposits	1946496	2634661	3469215	4274691	5955058	7788831
Loan (external borrowings)	667342	462140	775055	1313188	1301975	929213
Donation	20000	20000	20000	20000		
Payables	23127	61429	72393	118359	153628	171408
	3449794	**4058063**	**5404711**	**7158564**	**9135751**	**11147952**
Net Loan	2,932,960.00	3,487,828.00	4,608,775.00	6,402,776.00	8,463,919.00	10,366,636.00

Source: Audit report of Daunnedevi SACCOS for the year 2060/61 to 2065/66

Profit & Loss Account of Daunnedevi SACCOS
for the Year 2061/62 to 2065/66

Credit Amounts	2061/62	2062/63	2063/64	2064/65	2065/66
Interest Received	476336	598336	839285	1017675	1240469
Interest from Bank	155				3840
Other Receivables	74467	116877	93556	102505	10245
Discount on Interest	1820				
Stationary Income					27820
Miscellaneous Income					98310
	552778	715213	932841	1120180	1380684

Debit Amounts					
Employees Expenses	142426	176260	166590	206838	217400
Stationery Expenses	14459	21925	10144	28598	22615
Maintenance Expenses	805			775	3220
Interest Expenses	268892	321022	433333	525461	625461
Miscellaneous Expenses	22956	28434	35614	56685	56121
Discount Expenses		22217	33106	35541	39623
Audit Expenses	2500		48624		
Interest Expenses	18820				
Depreciation Expenses	10669	35558		44438	39364
Relief Fund/Allowances for Loan Loss	34878	46088	64028	84639	134766
Net Income	36373	63709	141402	137205	242114
	552778	715213	932841	1120180	1380684
Delinquency > 12 months	0	0	68160.18	205157.75	135692.2261
Delinquency 1-12 months	0	0	241658.82	381007.25	564881.4125
Operating Cost	193815	284394	294078	372875	378343

Source: Audit report of Daunnedevi SACCOS for the year 2060/61 to 2065/66