

# CHAPTER I

## INTRODUCTION

### 1.1 Background of the Study

Co-operative is a comprised of two Stem 'Co' Stands for together and 'operative' stands for working. Hence, the meaning of co-operative is working together, practice of living together and thinking together for mutual benefit of the members for the fulfillment of their economic and social problems. Co-operative organization is a business organization which is established by economically poor people with a view to working in an organized way for their common economic upliftman. In other words cooperative organization is an organization established by the economically poor people for freeing themselves from the exploitation of the rich. It is a voluntary association based on the principle of self help through mutual help. It has to satisfy two objectives i.e. service as well as profit.

A co-operative is an autonomous association of persons united voluntarily to meet their common economic, social and cultural need and aspirations, through a jointly owned and democratically-controlled enterprise (Kulkarni, 2007). It is the form of business enterprises or community organization, incorporate service to its member and users, in order to meet their common economic needs and aspiration. Co operative works together and controlled by members. Co operative follows democratic, participatory and transparent decision making process and organizational structure so that their member and user may directly responsible for benefiting themselves and the society in general (International Cooperative Alliance [ICA], 1995).

Co operative is the get things doing by member themselves to resolve the economic problems. People involve to get solution in order to get free from their problems. Human needs are unlimited and some of them can be fulfilled

by oneself but some not fulfilled without the support of people. Sharing ideas, Discussed on the subject matter, observation in the group, work in group give new ideas, new way of doing things and new methods to solve the problem which refers to the co-operation in general. Co-operative organization developed to remove defect of capitalism, to lesser competence to prevent exploitation over people and to support marginalized people. It tries to use different ideas to possible areas. Its ideology is 'tried to use in different possible areas,. In the beginning a success achieved as a consumer store, now it is found in the field of vegetable production, seed production, tea and coffee production, health, education, wood carving, furniture, cottage industries and housing.

Robert Owen was the founder of modern cooperatives co-operative in ancient time. The group of 28 labors founded a consumer's co-operative society called "Rochdale Equitable Pioneers Society" on 24<sup>th</sup> October 1844, Savings a pound each. It is the first co-operative society in the history of the world co-operative development. After that, it is extended in Germany, Italy, France, and all over the world. As a result of the development of co-operatives organization, International Co-operative Alliance (ICA) was established in England in 1895 (Shribastav 1970).

There is no long history of Co-operative in Nepal. The term in Nepali Language of '*Parma*', '*Dhikuti*', '*Dharma Bhakari*' and '*Guthi*' refer to the Co-operative activities. In 1956 A.D, the governments arrange the co-operation with the legal validity in which year the government incorporated "Bakhan Saving and Credit Co-operative Ltd." in Rapti valley, Chitwan by issuing executing order with legality. The thirty year panchayet regime also attempt to promote co operative by enforcing the co-operative act 1959 and co-operative regulation 1961. After the restoration of democracy in 1990, the government considered co-operative as a means of poverty alleviation. It enforced new co-operative act, 1991 and co-operative regulation 1992 and repealed both act and regulation of panchayet regime. The new co-operative act is considered one of the best co-operative act. But due to the undemocratic practices and

environment in democratic system, in the most of the cases, co-operative have turned out as an intermediary to transfer the money from poor to rich. The democratic government speeded up the liberalization of financial sector (Baral, 2006). In liberalized financial environment, saving and credit co-operative grew like mushroom especially in urban and sub-urban areas of country.

Namuna Saving and Credit Co-operative limited (NSCC) is one of a co-operative. NSCC is Located in Pokhara Kaski which is established in 2056 B.S. It celebrated 13<sup>th</sup> annual general meeting. The establishment of NSCC is to enhance the economic and social status of its members by providing financial services. The mission of NSCC is to generate self employment by providing the financial services to the member for the establishment of the income generation business and empower them for developing the savings habit in co-operative.

PEARLS is especially designed by the World Council of Credit Union, (WOCCU) for saving and credit co-operative institution. Since 1990, WOCCU has been using a set of financial ratio is known as “PEARLS” to evaluate and monitor credit union and co-operative of its member countries (Richardson 2002). Each alphabet of word PEARLS measures key areas of credit union operations: protection, effective financial structure, asset quality, rates of return on cost, liquidity and signs of growth.

## **1.2 Statement of the Problem**

Financial management is important part of every organization. To find out the effectiveness of financial management, it is needed to analyze the financial statement of the organizations to take right financial decision. There are different tool of financial performance analysis, i.e., CAMELS, CARSEL, PEARLS etc. PEARLS is the one of best tool to check up and analysis the financial position derived by WOCCU. The major fundamental objective is to examine the financial performance of Namuna Saving and Co-operative Ltd

under the framework of PEARLS. In this connection, the following research questions are set.

- ) How to measure level of delinquency and loan status?
- ) What is the level of effective financial structure?
- ) What is the condition of assets quality?
- ) What are the rate of return on various investments and cost on savings deposit?
- ) What is the liquidity position?
- ) What is the sign of growth in portfolio of loan, saving deposit, capital and total asset?

### **1.3 Objectives of the Study**

The main objective of the study is to examine the financial performance of Namuna Saving and Co-operative Ltd under the framework of PEARLS. The specific objectives are:

- ) To measure the level of delinquency and loan status.
- ) To analyze the level of effective financial structure.
- ) To analyze the condition of asset quality.
- ) To evaluate return on various investments and cost on saving deposit.
- ) To find out the level of liquidity and non earning assets.
- ) To evaluate the sign of growth in portfolio of loan, saving deposit, capital and total assets.

### **1.4 Significant of the Study**

This study is useful for the management level of co operative organizations to make the plan and policy, and improve their efficiency. The organization will get some useful ways and ideas to improve the performance of organization with the help of tool PEARLS. The main significance of this study of financial performance of co operative is to help how to minimize risk and maximize return.

## **1.5 Delimitation of the Study**

This study will mainly focus with a view to financial analysis of Namuna Saving and Credit Co-operative in the framework of PEARLS, however, there are some limitations.

- ) The study is mainly based financial data collected from Namuna Saving and Credit Co-operative Limited, Pokhara, Kaski, Nepal.
- ) Due to the nature of study, the study is based mainly on secondary data.
- ) As far as practicable all available resources are utilized for the study but the study covers especially financial information of the fiscal year 2062/2063 to 2067/2068 B.S.
- ) Only the PEARLS analytical tools are used in this study.
- ) Out of 44 ratios of PEARLS only 33 ratios are applied in this study because unavailable of related information.

## **1.6 Organization of the Study**

The first chapter contains the background of the study, statement of the problems, objective, significance, delimitation and organization of the study. The second chapter contains review of literature. This chapter is divided into three parts, i.e., conceptual review, review of related studies and research gap. The third chapter deals with research methodology. It includes research design, population and sample, nature and sources of data, data collection procedure, data processing and tools and techniques of analysis.

The fourth chapter consist the data presentation and analysis. It includes the different sub section for presentation and analysis of data using the financial indicator of PEARLS. Presentation of analyzed data will be made in the form of table and figure. The final chapter summarizes the whole study. It also contains the main conclusion that is taken from the study and offers some suggestion.

## **CHAPTER II**

### **REVIEW OF LITERATURE**

This chapter is mainly concerned with review of relevant literature. It includes conceptual review, theoretical description of PEARLS framework, review of related studies and research gap.

#### **2.1 Conceptual Review**

##### **2.1.1 Co-operative**

The term 'Co-operative' means an act together for a common purpose. All members share in its rewards in proportion to the degree in which they make monetary contribution in co-operative. It is a system of social organization based on the principles of unity, economy, democracy, equality and liberty (Kulkarni, 2007). Co-operatives follow democratic, participatory and transparent decision-making processes and organizational structures so that their members and users (i.e. owners, workers and consumers) may directly responsible for benefiting themselves and cooperative society in general. Co-operatives are based on the value of self-help, mutual help, self-responsibility, democracy, equality, equity and solidarity. Co-operative members believe in the ethical values of honesty, self ownership, social responsibility and caring for others.

Co-operation is the movement of voluntary association promoted by individuals having common needs. Therefore, co-operative represents itself as a happy means between the forces of extreme individualism on one hand and socialism and communism on the other. It stands for individual rights tempered by consideration of justice, equity and fair dealing between man and man and its one great aims is to prevent the exploitation the weakens by the stronger party. Co-operative is a form of organization in which person voluntarily

associate on a basis of equality for the promotion of their economic interest (Shreebastav, 1970). Those who come together have a common economic aim which they can not achieve by individual isolated action because the weakness of the economic portion of a large majority of this element of individual weakness is overcome by the pooling of their resources, by making self help effective through mutual aid, by strengthening the bonds of moral solidarity between them.

Finally, co-operative is a form of organization of economically weak class people wherein actual users of certain goods and services voluntarily associate together for the uplift of their low economic status and improvement of life standard with following the norms and principles of co-operative. People work together to achieve common goals.

### **2.1.2 Global Prospects of Co-operative**

At the beginning of 19<sup>th</sup> century, Robert Owen came out the idea of co-operative, but it was practically developed by a group of Rochdale Pioneers called the 'Consumer the Society'. It was a successful co-operative society, which was started all over the Great Britain. In the beginning, this society sold goods only for its members but later it is started to sell goods to non members also. Rochdale Principles of co-operative discussed in co-operative literature through out the world are open membership, democratic control, distribution of surplus in proportion to purchase limited interest on capital, religion and political neutrality, cash trading, promotion and education. Although there have hundreds of societies but the truth is that the Rochdale Pioneers Society achieved tremendous success and put economic and social life to Britain on the road of continuous progress. In 1919, the first co-operative college in the world was established in Manchester. It is administered by the education committee of the co-operative union and open for the student from all part of world. After the achievement of co-operative society, it was recognized in 1944. The government of Great Britain decided that boys and girl must attend a country

college after learning school. The main motto was to produce good co-operative citizens with the Grate Britain. Likewise, the idea of co-operative was suggested by two German at the time of Rochadale Pioneers and they stared their co-operative work in Germany after few years for improving the coordination of the poor peasants. Freiz Schulze Delizsch opened the co-operative bank to help the Germany people (Shreevastav, 1970).

The successful co-operative movement in Germany and Britain followed by it other countries. All of the developing countries as well as developed countries felt that co-operation might be one of the best instruments for uplifting the rural poor and liberating them the exploitation of landlords and moneylenders. Some of the information relating to cooperative creates employment and important event has been indicated in box 1 and box 2.

#### **Box I. Co-operatives Create and Maintain Employment**

- ) Co-operatives provide over 100 million jobs around the world, 20% more than multinational enterprises.
- ) In Canada, co-operatives and credit unions employ over 160,000 people. The Desjardins movement (savings and credit co-operatives) is the largest employer in the province of Québec.
- ) In Colombia, the co-operative movement provides 109,000 jobs and an additional 379,000 as owner-workers in workers co-operatives. They provide 23% of jobs in the health sector, 18% of the jobs in the transport sector, 13% in the worker/industrial sector, 11% in the financial sector and 9% in the agricultural sector.
- ) In Slovakia, the Co-operative Union represents more 700 co-operatives who employ nearly 75,000 individuals.
- ) In France, 21,000 co-operatives provide jobs to 700,000 people.
- ) In Germany, 8,106 co-operatives provide jobs for 440,000 people.
- ) In Kenya, 250,000 people are employed by co-operatives.

*Source: ICA: <http://www.ica.coop/coop/statistics.html>*



## **Box II Statistical Information on the Cooperative Movement**

The Co-operative Movement brings together over 800 million people around the world. The United Nations estimated in 1994 that the livelihood of nearly 3 billion people, or half of the world's population, was made secure by co-operative enterprise. These enterprises continue to play significant economic and social roles in their communities. Below are some facts about the Movement that demonstrate their relevance and contribution to economic and social development.

- ) In Canada, 1 in 3 individuals is a member of a co-operative (33%). The Desjardins co-operative movement in Québec has over 5 million members.
- ) In Germany, there are 20 million people who are members of co-operatives, 1 out of 4 people.
- ) In Japan, 1 out of every 3 families are members of a co-operatives
- ) In India, over 239 million people are members of a co-operative.
- ) In Singapore, 50% of the population (1.6 million people) is members of a co-operative.
- ) In the United States, 4 in 10 individuals is a member of a co-operative (25%).
- ) In Korea, agricultural co-operatives have a membership of over 2 million farmers (90% of all farmers), and an output of USD 11 billion. The Korean fishery co-operatives also report a market share of 71%.
- ) In Norway, dairy co-operatives are responsible for 99% of the milk production; consumer co-operatives held 25% of the market; fisheries co-operatives were responsible for 8.7% of total Norwegian exports; forestry co-operatives were responsible for 76% of timber and that 1.5 million people of the 4.5 million Norwegians are member of co-operatives (ICA: <http://www.ica.coop/coop/statistics.htm>).

Cooperative movement took place in different countries. The international co-operative congress established International Co-operative Alliance (ICA) in London on August 1895; ICA is an independent worldwide international association of co-operative organizations of all types. ICA has the affiliation in 102 countries with 256 national and 4 international level organizations as members serving well over 800 million individual members worldwide. ICA collaborates with several United Nations agencies, including the International Labor Organization (ILO), Food and Agriculture Organization (FAO) and the Council for Trade and Development (UNCTAD) (DVA Federal Credit Union, 2008).

In the early 1970s, World Council of Credit Union (WOCCU) was established. WOCCU has become a world's leading advocate, platform for knowledge exchange and development agency for credit unions on an international level, delivers the "Sound and Safe" credit union on an international level, legislator, regulators, donors, credit union projects with proven, tangible result. The PEARLS system was originally designed and implemented with Guatemalan CUs in the late 1980s (Evan, 1997). WOCCU has been using it worldwide to monitor the performance of CUs. The target goal of excellence for each indicator is put forth by the WOCCU based on its field experience working to strengthen and modernize credit unions.

### **2.1.3 Principles of Co-operative**

Co-operative principles are the set of rules and regulations to regulate and govern the activities of co-operative enterprise. They were first set out by the "Richdale Society of Equitable Pioneers" in the Richdale, England, in 1844 and have formed the basis for the principles on which co-operatives around the world operate this and being the guideline principles for all kinds of co-operative activities for the attainment of determined goals. Due to the rapid change in the economy of the world, the need of review of principles was felt. ICA has review of the co-operative principles in 1937, 1966 and 1995. The

definition of co-operative as established in 1995. Co-operative principles have been included in a number of policy documents with the help of United Nation Guidelines, the ILO Recommendation 193 on the promotion of co-operative. The ICA had reviewed the principles and the committee enunciated following principles which have commonly adopted all over the world.

**a) Voluntary and open membership**

Voluntary and open membership in the first Rochdale Principles which states that co-operatives are voluntary organization open to all persons to use the services and accept the responsibility of membership without any discrimination.

**b) Democratic member control**

Co-operative are democratic organizations controlled by members, who actively participate in the policy preparation and decision making. Representatives elected with one member to one vote system among the members must accountable to the member.

**c) Member economic participation**

Members contribute equitably to and democratically control the capital of their co-operative. Members usually receive limited compensation. Member allocate surplus for developing their co-operative, setting up reserves, part of which at least would be individual; benefiting members in proportion to their transactions with the co-operative, and supporting other activities.

**d) Autonomy and independence**

Co-operatives are autonomous, self help organizations controlled by their member. If they entered to agreements including governments or raise capital from external sources, they do so on terms that ensure

democratic control by their members and maintain their co-operative autonomy.

**e) Education, training and information**

Co-operatives provide education and training for their members, elected representatives, managers and employees so they can contribute effectively to the development of their co-operative. They inform the public, young and opinion leaders about the nature and benefits of co-operatives.

**f) Co-operation among co-operatives**

With accordance to the co-operative principles co-operatives serve their member most effectively and strengthen the co-operative movement by working together through local, national, regional and international structures.

**g) Concern for community**

The seventh of the Rochdale principles states that co-operative societies must have concern for their communities. According to the ICA's statement on the co-operative identity, co-operatives work for the sustainable development of their common unities through policies approved by their members. ([http://www.ica.coop/coop/principles\\_ revision](http://www.ica.coop/coop/principles_revision)).

#### **2.1.4 History and Development of Co-operative in Nepal**

Co-operative has been developed with the development of human civilization. Getting together with a view to helping each other or social occasions like Marriage, *Shradha* and other performing agriculture activities like marriage, plugging, sowing, crop protection, harvesting is a traditional of doing things in the rural mountainous and even the growing urban areas of Nepal. The different types of co-operative societies *Dharma Bhakari, Dhukuti, Parma* and

*Guthi* are used in practice in Nepal from the ancient time. (Shrestha, 2008) *Dharma Bhakari* means a religious store, which is a kind of grain bank. Each family in the village puts aside certain quantities of grains after the end of the harvest season. At the time of scarcity, the quantity of grains is distributed on advance to farmers. Loan is advanced from the grain bank only to the villagers who have contributed to the bank and agree to pay the loan in kind with interest. *Parma* is traditional information cooperative for exchange of labor. It is organized by the needy people and dissolved as the work finished. *Dhikuri* is an institution operated by the *Thakali* community of Nepal through time immemorial to provide credit to their members for the financial upliftment. These are the informal co-operative organization.

The concept of co-operative in Nepal is familiar from those days when people had the knowledge to live together in the society or community. But we can't ascertain the actual date when the co-operative movement was started in Nepal. Many types of informal co-operative were running in different part of Nepal. If we turnover the history of co-operative movement in Nepal, the organized history can be traced back to about 54 years old, formally, the history of Nepal has been started after the establishment of co-operative development in the year 1953 under the ministry of Agriculture for the promotion, supervision and evaluating of co-operative societies (Lamichhane, 2007).

In Nepal, co-operative movement was greed up with the establishment of 13 credit co-operative societies in 1956 as part of the resettlement of program for the flood stricken people in Rapti Dum Besi under the active support of United State Agency for International Development (USAID) on experimental basis. These co-operative were previously registered under an executive order of government of Nepal. The history of co-operative society dates back to 1956 A.D. in which year then the government incorporated Bakhan saving and credit co-operative society ltd. In Rapti valley, Chitwan by issuing the executive order for its legal validity. The thirty year Panchayat regime also attempted to promote co-operatives by inforcing the co-operative act, 1959 and co operative

regulation, 1961. However, co-operative became burdensome to the government due to the weak management, want of autonomy and unscientific accounting system of saving and credit (Baral, 2006). After the restoration of democracy in 1990 then the government considered co-operative is a means of poverty alleviation.

**Table 2.1 Important Events of Cooperative Movement in Nepal**

1953		Establishment of Department of Cooperatives (DOC) under the Ministry of Agriculture for Planning and Development
1954		Realizing need of cooperatives for the resettlement programme initiated for the flood-stricken people through Multipurpose Development Plan of Government of Nepal.
1956	a.	Promulgation of the Executive Order of Government of Nepal and recognition of cooperative society under it.
	b.	Credit Cooperative Society for the first time, was established in Chitwan District.
1958		The district level staff of DOC under the administrative control of Rural Development Block carried out cooperative activities.
1959	a.	DOC was kept under the Ministry of Food, Agriculture and Forestry
	b.	Cooperative Society Act, 1959, came into effect
1961	a.	Cooperative Society Rules, 1961, came into effect
	b.	The first amendment of Cooperative Society Act, 1959
	c.	Establishment of Cooperative Development Fund
	d.	Establishment of Sajha Society (Sajha Central Office)
1962	a.	Establishment of Cooperative Training Center

	b.	Establishment of Credit and Marketing Cooperative Union.
	c.	Cooperative Bank Act, 1962, came into effective
	d.	DOC was transferred to the Ministry of Panchayat
1963	a.	Establishment of Cooperative Bank
	b.	Conversion of Rural Development Blocks into District Panchayat Cooperative section was kept under the District Panchayat
1964	a.	Initiation of Agriculture Re-organization Programme
	b.	Initiation of Supervised Credit System
	c.	Transfer of Staff members in Cooperative activities to the Land Reforms programme
	d.	Publication of "Sahakarita" (Cooperation).
1966	a.	DOC was kept under the Ministry of Land Reforms, Agriculture and Food.
1967	a.	Formation of Central Investigation Committee on cooperatives
	b.	Emphasis on 'Sajha Management' in the 7 <sup>th</sup> point in the Back to the Village National Campaign
	c.	Conversion of Cooperative Bank into Agricultural Development Bank (ADB)
1968		Transfer of administrative and developmental works being carried out by DOC to the Department of Land Reforms.
1969	a.	DOC was kept under the control of the Ministry of Land Reform.
	b.	Implementation of the Coordinated Agricultural Development Programme

	c.	Compulsory Saving for the first time converted into shares in Bhaktapur
	d.	Credit and Marketing Cooperative Union was converted into District Cooperative Union
	e.	Return of Cooperative promotional and strengthening of activities undertaken by the Department of Land Reform to DOC
	f.	Introduction of guided cooperative programme emphasizing qualitative growth through reorganization and amalgamation.
1970	a.	The second amendment of the Cooperative Society Act, 1959.
	b.	Introduction of Cooperative Strengthening Programme.
	c.	Establishment of Central Cooperative Strengthening Committee.
	d.	Establishment of District Cooperative Strengthening Committee.
	e.	Transfer of management of Cooperatives to ADB.
1971		The first amendment of Cooperative Societies Rules, 1961
1973		Implementation of Cooperative Education Programme regularly
1976	a	Integration of Population Education with Sajha
	b.	Implementation of Sajha Programme emphasizing Sajha in a wider scale
	c.	The second amendment of Cooperative Society Rules, 1961
	d.	Compulsory Savings was converted into the share capital of Sajha Society
1977		Introduction of Sajha Society Administrative and Financial Regulation, 1977



1978	a.	Transfer of Sajha Societies' Management handled by ADB to the managing committee of cooperatives.
	b.	Introduction of Sajha Society Financial and Administrative Regulation, 1978
	c.	More emphasis on the qualitative growth of Sajha Societies than on quantitative growth
1980	a.	Implementation of Small Farmer Cooperatives
	b.	Introduction of Sajha Society Financial and Administrative Regulation, 1980
	c.	Special focus on co-operative system in the Constitution of Nepal.
1984		Enactment of Sajha Society Act, 1984, for making the cooperative development campaign effective
1985	a.	Conversion of DOC into Sajha Development Department
	b.	Conversion of Cooperative Training Center into Sajha Development Training Center
	c.	Conversion of the Regional Cooperative Office into Regional Sajha Development Office
	d.	Conversion of the Cooperative Section into Sajha Development Section
1986		Announcement of Sajha Sanstha Rules, 1986,
1987	a.	Formation of a 17-member 'High Level Central Coordination Commission for making the Sajha campaign more strong and effective
	b.	Sajha Development Department was transferred to the Ministry of Agriculture
1988		Announcement of compulsory savings to be refunded to the depositors

1990	a.	Remittance was announced by Government of Nepal up to the interest and compensation exceeding the principle amount in case of a full payment of principal paid by debtors within July, 1991.
	b.	Formation of an <i>ad hoc</i> committee for National Sajha Cooperative
1991	a.	Formation of a seven-member National Cooperative Federation Consultative Committee for submitting its opinion in order to strengthen the Sajha campaign and make it effective. The report presented by the Committee.
	b.	Dissolution of Sajha Central Office
	c.	Formation of a 11-member National Cooperative Development Board for the preparation of policy based norms, organizational structure its mobilization system, activities of cooperative movement for the preparation of necessary rules, bye-laws and other infrastructure in order to establish organizations from village level to central level.
1992	a.	Enactment of Cooperative Act, 1992.
	b.	Formation of District Cooperative Implementation Committee and an <i>interim</i> steering committee for continuation of cooperatives until January, 1992
	c.	Conversion of Sajha Development Department into DOC.
	d.	Conversion of Sajha Development Training Center into CTC.
	e.	Conversion of Regional Sajha Development Office into Regional Cooperative Office
	f.	Conversion of Sajha Development Section into District Cooperative Office.
1993	a.	Enactment of Cooperative Society Rules, 1993.
	b.	Dissolution of Regional Cooperative Office
	c.	Nationwide election of cooperative societies/unions.

	d.	Establishment of National Cooperative Federation
	e.	Establishment of Central Consumer Cooperative Union.
	f.	Establishment of Central Milk Producers Cooperative Union.
	g.	Formation of a large number of Single-purpose Cooperatives such as Consumers Cooperatives, Milk Producers Cooperatives, Saving and Credit Cooperatives throughout the country.
1994		Publication of "Sahakari Sandesh" (Co-operative Message).
1995	a.	Distribution of Rs. 31.8 million to the old cooperative employees by NCF as benefits received from Government of Nepal for only one time.
1997	a.	Reception of the membership from the International Cooperative Alliance (ICA).
	b.	Initiative taken by NCF for observance of International Cooperative Day.
1998	a.	Nepal (NCF/N) was elected for the post of Vice-Chairman of the Agriculture Committee for ICA, Asia and the Pacific Region.
2000	a.	Nepal (NCF/N) was elected for the post of Chairman of the Agriculture Committee for ICA, Asia and the Pacific Region.
	b.	Conversion of Ministry of Agriculture into the Ministry of Agriculture and Cooperatives.
	c.	Establishment of the National Cooperative Award by NCF.
	d.	Formation of the National Cooperative Development Advisory Working Team and submission of report.
	e.	The first amendment in the Section 26 of the Cooperative Act, 1992.

2001	a.	Announcement of observance of International Cooperative Day by the Government.
	b.	Republication of "Sahakari Sandesh " weekly.
2002	a.	Cooperative Ministers' Conference hosted by Nepal organized by International Cooperative Alliance, Regional Office for Asia and the Pacific, New Delhi in collaboration with National Cooperative Federation of Nepal.
	b.	The Ministry of Agriculture and Cooperatives has issued a circular, saying that there is no restriction for the eligibility of 'civil servant' as shareholder of cooperative although the Sec. 14 of the Anti-corruption Act refers to civil servant not eligible to become the shareholder of cooperatives.
	c.	Nepal elected for the member of ICA ROAP Standing Committee.
2003	a.	Establishment of National Cooperative Bank Ltd.
	b.	Seventh General Assembly of Network for Development of Agricultural Cooperatives' (NEDAC) was held in Nepal from 29 <sup>th</sup> Oct. to 1 <sup>st</sup> Nov.. In which Nepal was elected as Co-Chairman for two years.
2004	a.	National Cooperative Federation of Nepal established "National Cooperative Development Fund, NCDF
	b.	Nepal Government constituted a high level cooperative sector improvement consultative committee under convenorship of the Minister of Agriculture and Cooperatives submitted its report to the Government of Nepal.
	c.	Ministry of Finance constituted to study the legal frame work and institutional development of the savings and credit cooperative society and National Cooperative Bank under the convenorship of then Member of Ghanashaym Khatiwada submitted it's report to the Ministry of Finance.

	d.	Government of Nepal announced the policy of GOAN-GOANMA SAHAKARI GHAR GHAR GHAR MA ROJGARI through it's budget of the current fiscal year 2061-62
2005	a.	Completion of Second National Women Cooperative Congress held at Kathmandu.
	b.	Change of Name of MOAC.
	c.	Change of name of CTC into Central Cooperative Training Centre.
	d.	Change of name of District Cooperative Office into Division Cooperative Office.
	e.	Establishment of Regional Level Cooperative Training Office combining with Division Cooperative Office in Kailali, Surkhet, Kaski and Chitawan.
	f.	Grant of the sum Rs. 1. Million by Government of Nepal to NCF as a token for NCDF
2006	a.	Change of Agriculture Policy Unit into Agriculture and Cooperative Policy Unit in MOAC for coordination and establishing contact about cooperative policy-making.
	b.	Election of Nepal as Standing Committee Member of ICA/AP.
	c.	Establishment of Central Coffee Producers Cooperative Union
	d.	Establishment of Central Fruits and Vegetables producers Cooperative Union.
	e.	Election of Nepal as Vice-chairman of Housing Cooperative Foundation.
	f.	Beginning of Cooperative Golden Jubilee 2006/7 throughout the country for full year.

2007	a.	Completion of Cooperative Golden Jubilee 2006/07 with four special cooperative publications.
	b.	Recognition of cooperative as basic pillar of socio-economic development as equal footing those of private and government sector.
2008	a.	National conference on cooperative policy organized by NCF.
2009	a.	Government of Nepal announced the policy "GAUN GAUNMA SAHAKARI, GHAR GAHRMA BHAKARI."
2010	a.	Establishment of Central Sugarcane Cooperative Union.
	b.	Formation of Cooperative Cooperation Network.
	c.	UN proclaimed 2012 International Year of Cooperatives.
2011	a.	Establishment of Central Tea Cooperative Union
	b.	Completed the Regional and National Workshop on Cooperative Strategic Planning.
	c.	Co-operative is accepted as one of the three pillar economic policy.
	c.	Announcement of International Co-operative year 2012

*Source: National Cooperative Federation of Nepal, 2012.*

## **2.2 Theoretical Description of PEARLS Framework**

PEARLS is a financial performance monitoring system designed to offer management guidance for credit unions and other savings institutions. PEARLS is also a supervisory tool for regulators. PEARLS can be used to compare and rank institutions and can provide comparisons among peer institutions in one country or across countries. PEARLS is a set of financial ratios or indicators that help standardize terminology between institutions. In total, there are 44 quantitative financial indicators that facilitate an integral analysis of the financial condition of any financial institution. The purpose for

including a myriad of indicators is to illustrate how change in one ratio has ramifications for numerous other indicators.

Each indicator has a prudential norm or associated goal. The target goal, or standard of excellence for each indicator is put forth by World Council of Credit Unions based on its field experience with strengthening and modernizing credit unions and promoting savings-based growth. Depositors can have confidence that savings institutions that meet the standards of excellence are safe and sound. PEARLS, primarily a management tool for institutions, can also be used as a supervisory tool by regulators. As a management tool, PEARLS signals problems to managers before the problems become detrimental. For boards of directors, PEARLS provides a tool to monitor management's progress toward financial goals. For regulators, PEARLS offers indicators and standards to supervise the performance of savings institutions.

## **Features**

The PEARLS monitoring system offers credit union professionals a powerful and effective tool to monitor operational efficiency. Highlights of the system include:

- ) Four level system - allows monitoring of up to four levels of financial institutions: credit unions, credit union branches, credit union league or supervisory bodies, national associations;
- ) Multilingual system - Currently available in English, Spanish, Romanian, Macedonian and Bulgarian. New languages can be easily added to the system;
- ) System works in network or standalone environment;
- ) Generates reports and graphs, and analyzes data using two currencies - usually local currency and US dollar;

- ) Calculation help screens that facilitate understanding of different ratios;
- ) Easy to use data entry and configuration screens;
- ) Several user access levels;
- ) Includes data import/export capabilities to exchange data between PEARLS MS systems in different organizations or organization levels;
- ) Provides import capabilities from other accounting/banking packages if data prepared in specified format;
- ) Reports can be printed, previewed or exported to MS Word or Excel formats;
- ) Includes users and administrators manuals in English.

## **2.2.2 PEARLS Performance on Financial Activities**

### **a. Protection (P)**

Adequate protection of assets is a basic principle of the new credit union model. To protect the saving of member client the management must save the asset by making a adequate loan losses allowances for loan investment with consideration of time stipulation. According to the WOCCU model, protection 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 loan delinquent for 1-12 months (Richardson, 2002).



**Table: 2.2 NRB Guidelines for Protection of assets (Loan Loss Provision)**

<b>Classification of Loans</b>	<b>Time period</b>	<b>Loan loss Provision (%)</b>
Pass	1-3 Month Matured	1
Sub-standard	3-9 Months Matured	25
Doubtful	9-12 Months Matured	50
Bad	More than 1 year	100

*Source: Nepal Rastra Bank, 2012*

Loan loss provision is deducted from gross loan portfolio. So co-operative keep less provision means deduction of less loan loss provision expenses from gross loan portfolio which finally overstatements the value of assets in the balance sheet. Loan loss provision is charged off to profit and loss account. Less loan loss provision charged off to profit and loss account means the reported net income is overstated. So, adequate loan loss provision should keep to accurate and pure valuation of asset and profit and loss (Baral, 2006). There are six different ratios:  $p_1$ ,  $p_2$ ,  $p_3$ ,  $p_4$ ,  $p_5$ ,  $p_6$ .

**b. Effective Financial Structure (E)**

PEARLS system measures the effectiveness of financing and utilizing resources of MFIs. So, the ratios of different types of asset to total assets and different types of liabilities to total assets are work out to the effective financial structure of MFIs (Baral, 2006). According to PEARLS system, investment in net loan liquid assets, financial asset and non financial investment should be in the range of 70-80 percent, 10 percent and zero percent of total assets respectively. Financing of total assets with saving deposit, borrowed funds and member share capital should not exceed 80 percent, 5 percent and 20 percent of total assets respectively. Institutional capital should be at least 10 percent of total assets of MFIs (Richardson, 2002). The ratio of institutional capital to total assets at least should not come down below 10 percent of total assets.

MFI's financial structure is said effective when assets financed by saving deposit generate sufficient income to pay market interest rates on saving, cover operating cost and maintain capital adequacy (Evan & Branch, 2002).

**c. Asset Quality (A)**

Assets quality of a co-operative affects the earning power. Investment in non earning asset deteriorate the earning power and decrease the institutional capital but sometime, MFIs have to invest their fund in such assets to improve their physical image, attract the new member clients and increase the member share capital and saving deposit. But, increase in percentage in non earning asset should be temporary because high ratio gets more difficult to generate sufficient income to cover the operating cost. Therefore, MFIs should maintain the minimum level of their investment in non earning assets. It should not exceed 5 percent of their total assets. PEARLS uses the three indicators- delinquency ratio, percentage of non earning ratio and financing of non earning asset (Richardson, 2002). Delinquency ratio measures the delinquency rate of the total loan portfolio. MFIs should finance 100 percent of non earning asset with zero cost funds to do away the negative effect on profitability. This ratio should not exceed 5 percent of the total gross loan portfolio.

**d. Rate of Return and Cost (R)**

Co-operatives are mainly ranked as best and worst on the basis of return. PEARLS system differentiates the different component of yield on investment and management efficiency of controlling the operation cost. The indicators of this component are categorized into two categories. The indicators relate to rate of return and operational costs. R1, R2, R3, R4, R8 and R12 fall in the first category which measures the return on different component of investment: loan portfolio, liquid investment, financial investment, non financial investment and return on total asset. The WOCCU model compares the calculated returns to the entrepreneur return and market rate of returns. In the same way, R5, R6, R7, R9, R10 and R11 fall in the second category which shows the condition of

cost of fund raised from the saving deposit, external credit, and cost of member share capital. They are also compared with the market rates (Baral, 2006). Rate of return is the important standard of financial performance.

**e. Liquidity (L)**

The maintenance of adequate liquidity reserves is essential to sound, financial management in the WOCCU credit union model. Liquid asset is very much essential for the performance of day to day financial transaction but management must be very careful about how much liquidity is need for the financial institution over the certain time period because high or low liquidity affects the profitability of MFIs (Richardson, 2002). 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. The new concept of liquidity refers to the cash required for possible withdrawal of saving deposit which is beyond the control of the management of MFIs. So management should maintain adequate reserve for the sound financial health. PEARLS system uses two ratios- liquidity reserve to saving deposit and non earning liquid assets to total assets.

**f. Sign of Growth**

The only successful way to maintain asset values is through strong, accelerated growth of assets, accompanied by sustained profitability. PEARLS system links the growth to profitability and other key areas. The key areas are total assets, loan, and liquid investment, financial investment, saving deposit, external credit, member share capital, institutional capital and number of members. Growth in total asset is most important ratios which should be more than inflation rate. The higher growth in loan portfolio signals good profitability (Richardson, 2002).

### **2.3 Review of Related Study**

Baral (2006) has done the study on “Financial Health Check up of Pokhara Royal Co-operative Society Limited in the Framework of PEARLS”. The findings of the study indicates that the PRCSL has made sufficient loan loss provision for bad debt loan but it has not made adequate provision to cover the possible loan losses from doubtful and sub-standard loan. It has invested most of its funds in more productive assets and less in non-earning and less productive assets, and managed the source of funds effectively from saving deposits. But, it has a weak institutional capital base a second line of defense against non performing asset. Percentage of delinquent loan ratio and non earning assets are greater than the standard set be the WOCCU model. Similarly, percentage of net zero cost funds is less than the set benchmark. Operation and administration expenses of PRCSL are within the set limit but the yield on loan is not enough to contribute institutional capital and pay the returns on member share capital. The decreasing percent of liquid cash reserves to satisfy deposit withdrawal request show the deteriorating liquidity position. The highly fluctuating growth rates in key financial variables imply that PRCSL does not have sound strategy for sustainable growth in its business. But the sign of growth key variables expect to institutional capital show that it has achieved desired growth during the study period. Collectively, the results indicate positive financial health.

Ale (2007) has conducted the study on “Diagnosis of Financial Health of Paschimanchal Gramin Bikas Bank limited in the framework of PEARLS” in 2007 with the objective of diagnose the financial health of Pas. GBB ltd. in the framework of PEARLS. He conducted in his study that the institution has adequate earning to defend any future losses by provisioning for loan loss. The solvency of the institution is not adequate due to speedily increase of delinquency and low increase of total savings. The ratio of net loans to total assets falling below the PEARLS standard is due poor quality of assets and provision of allowances for the loan losses. Pas GBB ltd. Has maintained the

ratio of financial investment to total assets high above the maximum 10 percent. The ratio of institutional capital to total assets is lying high below the PEARLS standard. Total loan delinquency to total loan portfolio is in the fluctuation trend due to the fluctuation trend of total loan portfolio. It had the fluctuating trend of total loan income to average loan portfolio ration due to the poor asset quality. The decreasing trend of financial cost on saving deposit is that the institution is relying less in accumulating the saving deposits. The institution has maintained a high amount of liquidity reserve with respect to total deposits. He further conducted that the growth in loans ratio is not tune with increase in total asset due to poor quality assets resulted from delinquency. The institution has not relied on to increase the saving deposits so as to augment the total assets. Because the growth in liquid investment and financial investment are high above PEARLS standard. The growth in total assets has decreasing trend over the years. It indicates that the institution has not relied on to increase the saving deposits so as to augment the total assets.

In the study 2004, Lamichane uses different financial ratios to analyze the financial performance to the firm. He has found that the current ratio and inventory turnover ratio had not met the standard. The turnover is also not in good position as the firm is not able to receive debtors at time whereas average collection period is increasing rapidly which indicators bad condition. The capital structure of the society is also not sound as it has used more debt than equity. It is not a good decision because the interests are being crushed for a long time. The company has not able to increase its profit since last three years. The firm has not able to generate adequate profit by using its total assets and also the funds available from the creditors and shareholders are not utilized property. The study highlights the bad financial status of the firm.

Sharma (2011) has conducted the study on “Sustainability of Microfinance Institution: An Opinion Survey” with the objective to identify and evaluate the effectiveness and sustainability of the activities of MFIs, their contribution in socio-economic change and women empowerment, comparison of MFIs

performance of Nepal and Bangladesh and to evaluate financial and institution viability and overall sustainability of selected MFIs. He found that the microfinance leads to social and economic change in the borrowers after the participation in the program. Woman empowerment showed the positive changes with high level confidence in decision making, participation in social activities, gender equality and control of income. He also concluded that MFIs program increases income and saving which meet their emergency needs. Furthermore, Microfinance is creating an environment for poverty alleviation and rural development but the overhead and office expenses of the MFIs of Nepal are higher than Bangladesh. Hence the productivity of Bangladesh MFIs is better than Nepal. In this study he further concluded that, however microfinance is not a solution in itself, other issues of development policy and implementation is the most important factors for women empowerment.

Almeyada and Branch (1998) have done comparative study on two of two CUs namely Union Popular (UP) and Union Progresista Amatitaneca (UPA) based on PEARLS monitoring system for the periods 1994, 1995 and 1996. 25 components of PEARLS monitoring tool has been applied for comparison of these two CUs. The study has focuses in building the institutional base and growth of total assets with reliance in savings and deposits. In addition to it, the provisioning of allowance against the loss assets was also the attention they had paid for. The study exhibited that the UPA was able to generate more institutional capital than UP, a part of strategy to build a more solid capital base. But, contrary to the PEARLS standard, UPA heavily relied on member shares rather on savings deposits which UP was strictly adhering. They further concluded that loan pricing should take account of the fact that member's shares represent risk capital and therefore a long term investment in the institution. In conclusion, the study suggested building a stronger base for their performance and strengthening the credit unions financial system through the provision of efficient services, such as central liquidity management, system marketing, and new financial products.

Mahat (2011) has conducted the research work on "Financial Performance Analysis under the Framework of PEARLS of Janasewa Saving and Credit Cooperative Society Limited (JSCCS)". The Main objective of this study is to analyze the financial performance of JSCCS under the framework of PEARLS. This study has completed with the help of the financial statement of JSCCS during the period of 2061/062 to 2064/065 B. S. Out of 44 ratios only 33 ratios were used in this study. The researcher concluded that most of the PEARLS indicators were met by the organization.

## **2.4 Research Gap**

From the above study, it is concluded that there are several research work conducted in different topics of financial performance of cooperative under the frame work of PEARLS. But, these types relating to Namuna Saving and Credit Cooperative Limited have not been carried out by others. Therefore, I have selected the topic "Financial Performance Analysis under the Framework of PEARLS of Namuna Saving and Credit Cooperative Limited" for research purpose.

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The present chapter, the methodology of the study has been outlined. The chapter specially addresses the issuing operating to the research design, population and sample, nature and source of data, data collection procedure, data processing and tools and techniques of analysis.

#### **3.2 Research Design**

This study examines the financial performance of NSCC in the framework of PEARLS and trace out the basic practice of the institution. For this purpose, the descriptive and analytical research design is used in this study.

#### **3.3 Population and Sample**

There were 237 saving and credit cooperative registered till Ashadh 2068 (Kaski Saving and Credit Union Limited, 2068). These 237 cooperatives are the population of this study. Out of them Namuna Saving and Credit Cooperative limited has been selected as a single sample unit. Convenience sampling procedure is applied in this study.

#### **3.4 Nature and Source of Data**

Collecting data is the connecting link to the world of reality for the researcher. For the purpose of the study, annual financial report of the NSCC is the main sources of data. It means secondary data are the main sources of the study. Besides, data from Cooperative Development, documents related journal and related publication are used for the purpose of literature review.



### **3.5 Data Collection Procedure**

Required for this study was primarily collected from the annual reports and extracted from the ledger of NSCC Kaski. These data are verified and reported by authorized auditors. Therefore it can be assured regarding the reliability of the supplied data. Additional information required for the study collected from the Cooperative Department Board, Department of Co-operatives, Journals, Books, Booklet.

### **3.6 Data Processing**

After collecting raw data, data processing is essential for the presentation of data analysis. To meet the requirement of this study, most of the data used in this study have been processed according to the needs of the study. The obtained data were presented in various tables, bar diagrams, pie chart with supporting interpretation. Data were tabulated according to the nature of the data.

### **3.7 Tools and Techniques of Analysis**

After collecting and processing, indicators of PEARLS were calculated strictly following the principles and guidelines given in the Toolkit series number 4 and Technical Guide to PEARLS available online at official website of the WOCCU. These data was entered into the spreadsheet to work out the PEARLS financial ratios and prepare the necessary figures. Financial indicators of PEARLS system are worked out with the help of computer.

## **CHAPTER IV**

### **DATA PRESENTATION AND ANALYSIS**

#### **4.1 Protection**

Protection is important component offered by WOCCU for the limited banking service carried out co operative credit unions which refers to save the money of members. If the management expects the successful future of their cooperative they must input their effort to protect the assets that would assured the member clients being save their deposit. The assets protection can be save by providing the adequate allowances for the delinquent loan expenses.

##### **4.1.1 Allowances for Loan Losses to Allowance Required for Loans Delinquent grater than 12 months (P1)**

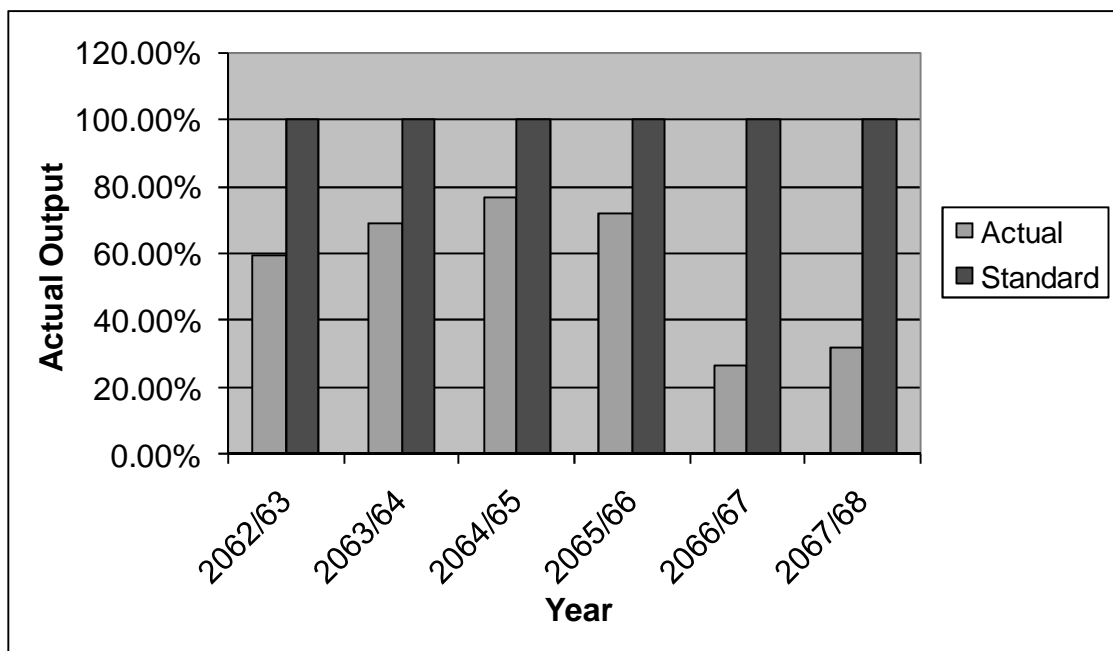
According to WOCCU model, the loan delinquency has been classified into two parts on the basis of its time period. The first one is balance of loan delinquent grater than 12 months and the other is the balance of loan delinquent from 1 month to 12 month. CU has suggested that institution should maintain its standard by 100 percent provision of allowances for the loan delinquency grater than 12 months and the 35 percent provision of allowances for the loan delinquency from 1 month to 12 month. In Nepal, NRB provided a guideline to the licensed limited banking service cooperative for the loan loss provision but must of saving and credit cooperatives are out of the jurisdiction of NRB.

**Table 4.1.1 Allowances for Loan Losses to Allowances Required for Loans  
Delinquent grater than 12 months (10000)**

<b>Year</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>	<b>2067/68</b>
a. Allowances for Loan Losses	69.19	115.34	141.86	141.86	29.96	38.67
b. Loan Balance of all Loan Delinquent more than 12 months	116.23	166.53	184.74	196.93	112.63	121.34
c. P1	59.53%	69.26%	76.79%	72.04%	26.61%	31.86%
Standard	100%					

Source: Annual Report of NSCC

**Figure 4.1.1 Allowances for Loan Losses to Allowances Required for  
Loans Delinquent greater than 12 months**



The table and figure shows that the ratio of provision for loan losses to delinquent loan seen very lower. The provision of loan is very low but the delinquent loan is very high. The organization has not made sufficient provision for the delinquent loan.

### 4.1.2 Solvency (P6)

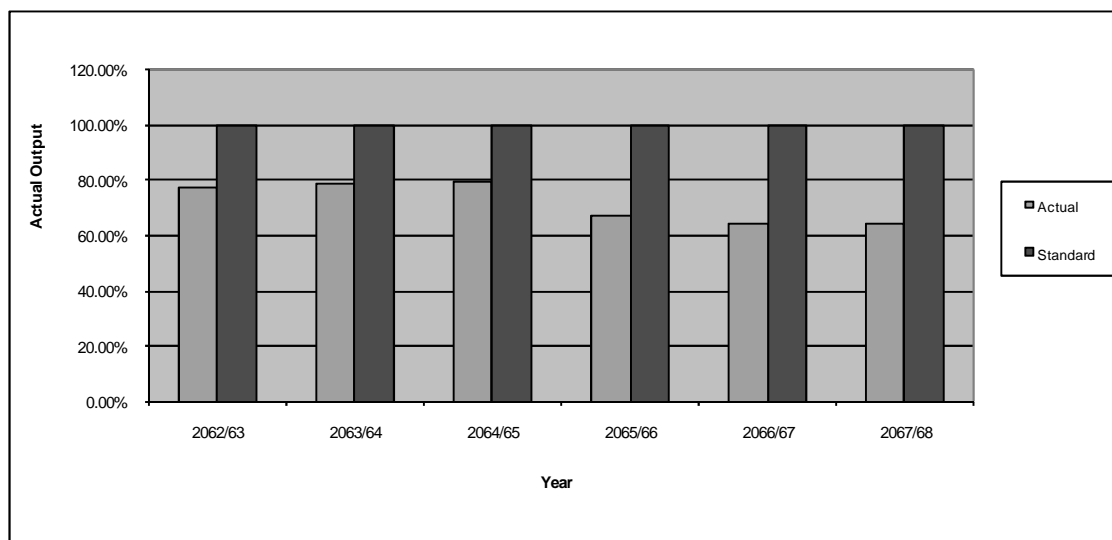
According to the PEARLS system the credit union should maintain their solvency ratio that is greater than or equal to 100 percent. It is the net value of asset to total share and deposit. The net value of asset is calculated with the component of total delinquency loans, liability, problem of assets, allowances for loan loss provision and saving deposit.

**Table 4.1.2 Solvency (P6)**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
P6	77.18%	79%	79.57%	67.51%	64.46%	64.10%
Standard	100%					

Source: Annual Report of NSCC

**Figure 4.1.2 Solvency (P6)**



The table and figure 4.1.2 shows that the actual output ratio is below the standard rate. Solvency position is not good. The higher actual ratio is 79.57% in financial year 2064/65 which means the value of one rupee of member is less than that.

## 4.2 Effective Financial Structure (E)

Financial structures shows the combination of different kinds of sources remained on the asset side of the balance sheet. Proper financial structures makes the earning power high, save from the liquidation, decreases the non performing assets and increase in members share capital. According to PEARLS system financing to total assets with saving deposit, borrowed fund and members share capital should not exceed 80 percent, 5 percent, 20 percent of the total assets respectively. Institutional capital should be at least 10 percent of total assets.

### 4.2.1 Net Loan Investment to Total Asset (E<sub>1</sub>)

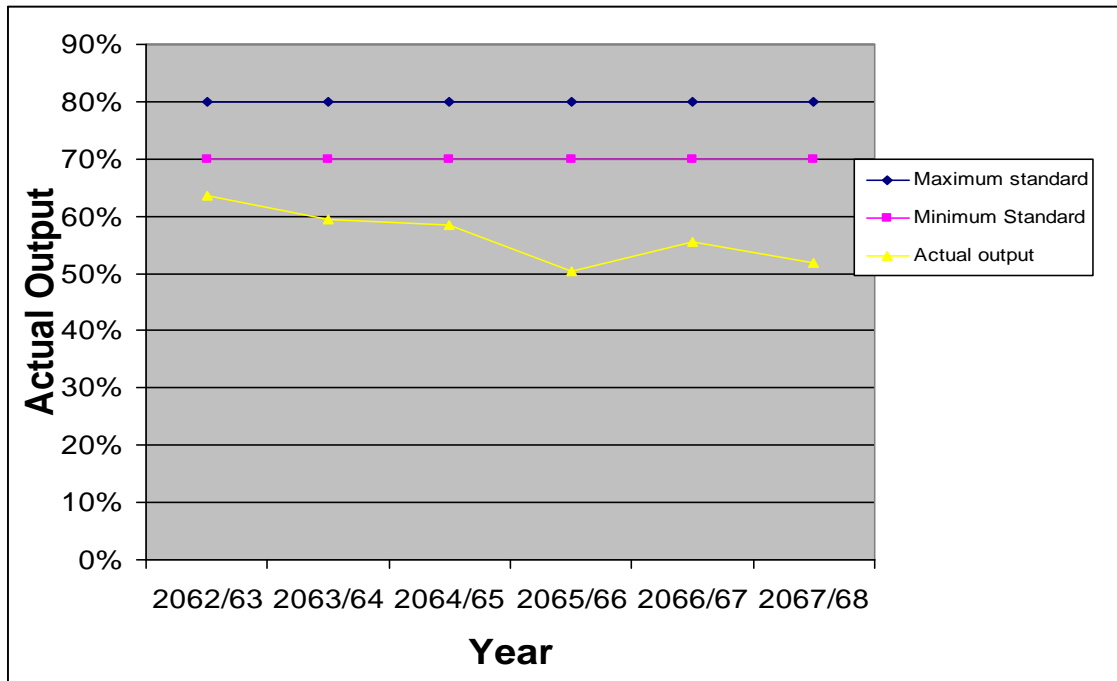
According to the PEARLS system the ratio of net loan to total asset been under the 70 to 80 percent is known as effective financial structure. Table and figure shows the following.

**Table 4.2.1 Net Loan to Total Assets (10000)**

<b>Year</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>	<b>2067/68</b>
a. Total Loan Investment	6,411.77	7,669.87	7,824.87	8,975.92	8,671.16	8311.08
b. Provision for Loan Losses	69.20	115.34	141.86	141.86	29.16	38.67
c. Total Assets	9978.48	12,697.8	13,150.1 2	17530.55	15583.73	15934.7 5
E1	63.56%	59.5%	58.43%	50.39%	55.46%	51.91%
Standard %	(70%-80%)					

*Sources: Annual Reports of NSCC*

**Figure 4.2.1 Net Loan to Total Asset**



The table 4.2.1 and figure 4.2.1 shows that all the ratios of net loan to total assets are less than standard ratio. The ratios are 63.56%, 59.5%, 58.43%, 50.39%, 55.46% and 51.91% in year 2062/63 to 2067/68 respectively.

#### **4.2.2 Total Liquid investment to Total Asset (E2)**

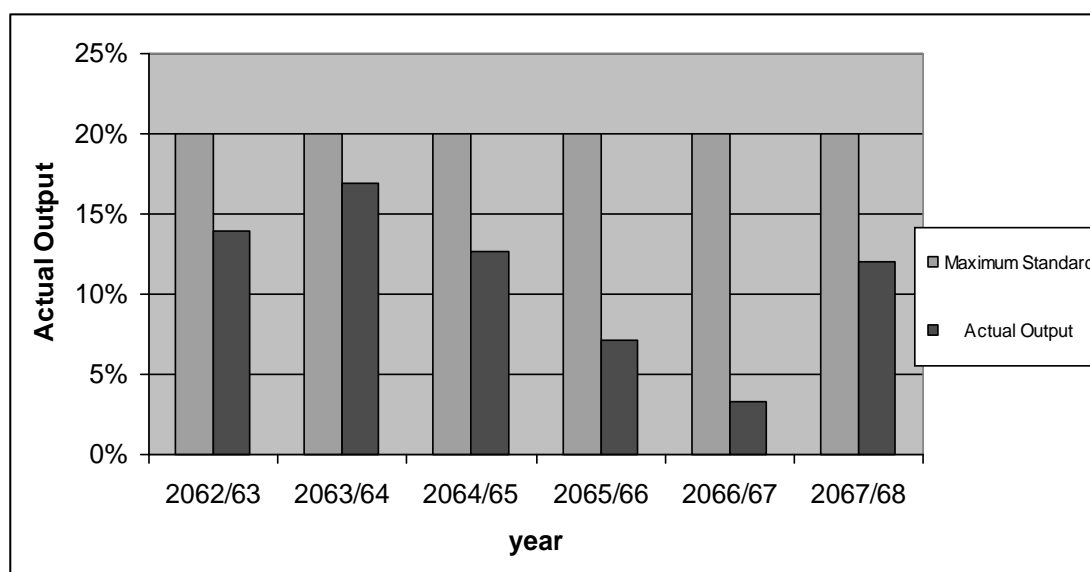
E2 measures the liquid investment position on the base of total assets. This is the most important ratio which affects the withdrawal position of the institutions.

**Table 4.2.2 Total Liquid Investment to Total Asset (10000)**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a. Total Liquid Investment	1392.9	2149.63	1666.89	1247.69	509.0	1919.95
b. Total Assets	9978.48	12,697.8	13,150.12	17530.55	15583.73	15934.75
E2	13.96%	16.93%	12.68%	7.12%	3.27%	12.04%
Standard	Maximum 20%					

Sources: Annual Reports of NSCC

**Figure 4.2.2 Total Liquid Investment to Total Asset**



From the above table all the actual output ratio is within the standard rate. Maximum ratio is 16.93 percent and minimum ratio is 3.27 percent in financial year 2063/64 and 2066/67 respectively.

### 4.2.3 Financial Investment to Total Asset (E3)

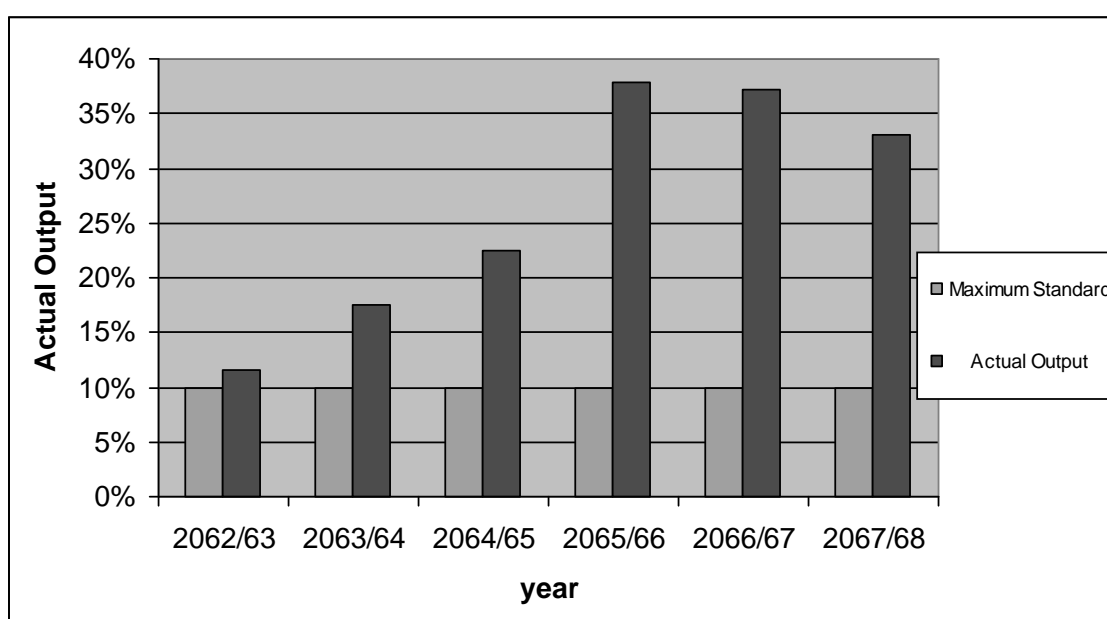
E3 measures the long term income generating investment sector on the base of total assets. Institution can earn high income from the long term investment sector which increases the capital of institution.

**Table 4.2.3 Financial Investment to Total Assets (10000)**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a. Total Financial Investment	1154.85	2224.85	2956.6	6631.2	5776.2	5256.90
b. Total Assets	9978.48	12,697.8	13,150.12	17530.55	15583.73	15934.75
E3	11.57%	17.52%	22.48%	37.83%	37.12%	32.99%
Standard	Maximum 10%					

Sources: Annual Reports of NSCC

**Figure 4.2.3 Total Financial Investment to Total Assets**





The table and figure shows that all the actual output is more than the standard rate. It is very high in financial year 2065/66 and 2066/67. Financial investment shows very higher than standard rate.

#### 4.2.4 Saving Deposit to Total Assets (E5)

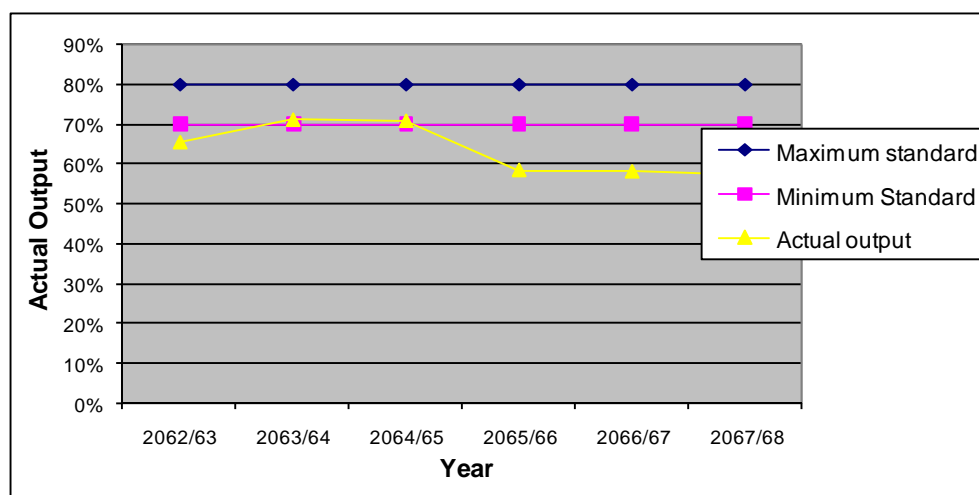
E5 measures the percentage of total assets financed by saving deposit. The huge saving deposit indicates that institution is developed effective marketing programs and achieved financial independence. Saving deposit is affected by the interest rate offered to the depositors.

**Table 4.2.4 Saving Deposit to Total Assets (10000)**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a. Total saving Deposit	6553.63	9066.1	9352.73	10291.66	9087.85	9179.86
b. Total Assets	9978.48	12,697.8	13,150.12	17530.55	15583.73	15934.75
E5	65.68%	71.4%	71.13%	58.7%	58.32%	57.60%
Standard	(70%-80%)					

Sources: Annual Report of NSCC

**Figure 4.2.4 Total Saving Deposit to Total Assets**



The actual output ratio is within the standard rate in 2063/64 and 2064/65 which is 71.45%, 71.13%, and the other ratios are below the standard rate

#### 4.2.5 Member Share Capital to Total Assets (E7)

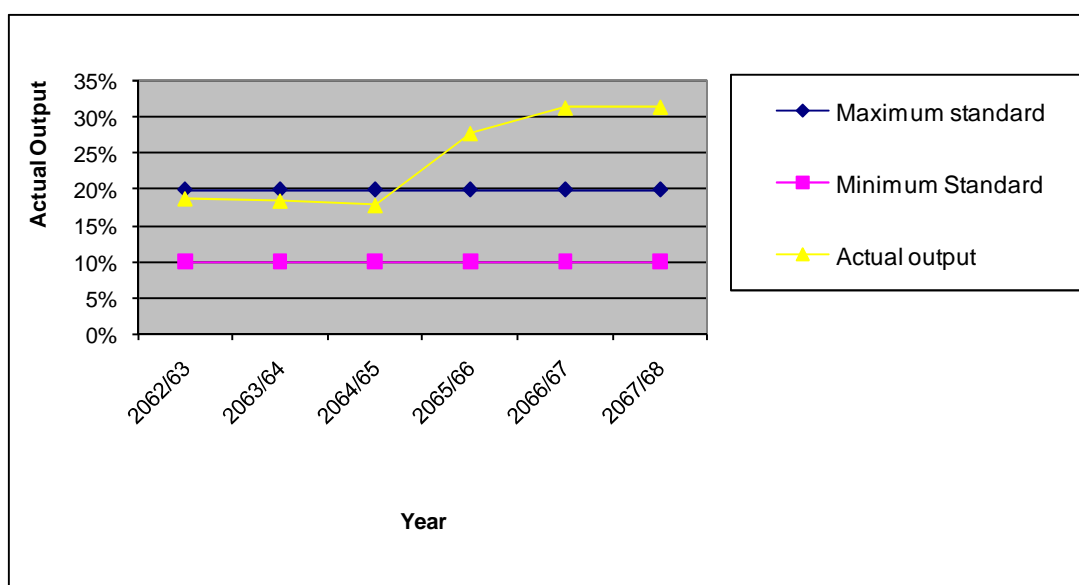
E7 measures member share capital on the base of total assets. Institution has not any obligation to make expenses for member share capital unless and until it generate profit. The institution should maintain the standard rate for capital growth.

**Table 4.2.5 Member Share Capital to Total Assets (10000)**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a. Member Share Capital	1876.35	2345.56	2346.77	4870.77	4880.94	5011.21
b. Total Assets	9978.48	12,697.8	13,150.12	17530.55	15583.73	15934.75
E7	18.8%	18.48%	17.85%	27.8%	31.32%	31.44%
Standard	(10%-20%)					

Source: Annual Report of NSCC

**Figure 4.2.5 Member Share Capital to Total Assets**



The actual output ratio is 18.8%, 18.48%, 17.85%, 27.8% 31.32% and 31.44% in the financial year 2062/63 to 2067/68 respectively. The ratio is higher than the standard rate in the financial year 2065/66 and 2067/68.

#### 4.2.6 Institutional Capital to Total Assets (E8)

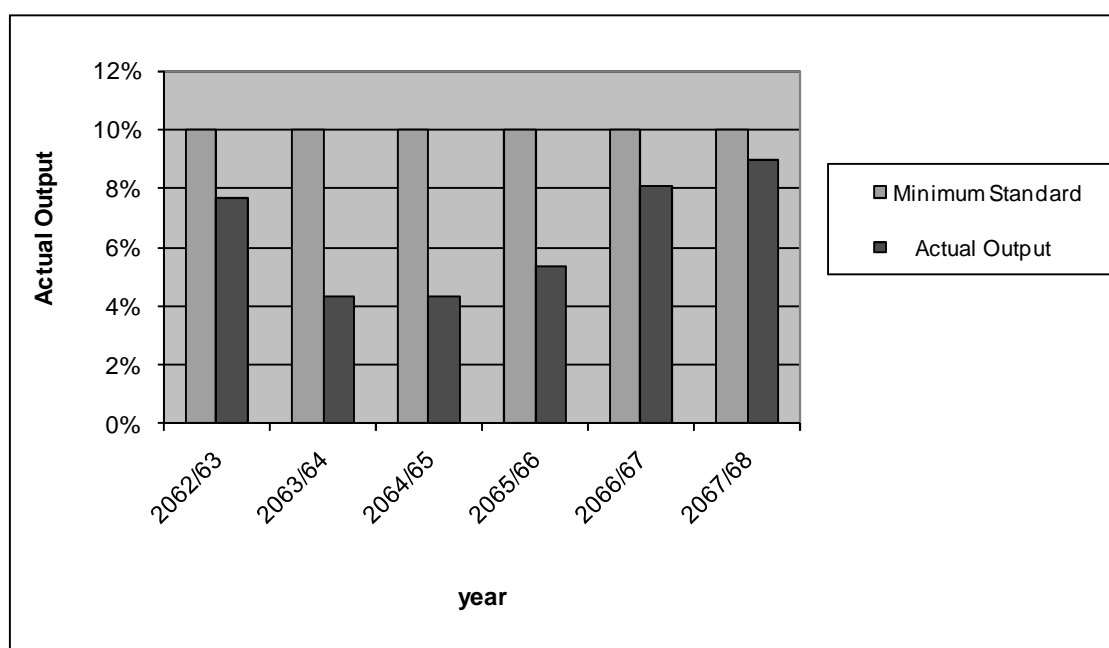
It measures the percentage of total assets financed by institutional capital. Since institutional capital has no explicit interest cost, it will generate 100 percent return to institutions investing to the productive assets. According to CU model focus on epidemic is a crucial that institution should pay observe in its operation. It includes general reserve, member education reserve, reserve for organization and net profit.

#### 4.2.6 Institutional Capital to Total Assets

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a. Institutional Capital	765.73	545.7	568.44	934.17	1262.28	1426.46
b. Total Assets	9978.48	12,697.8	13,150.12	17530.55	15583.73	15934.75
Actual Output	7.67%	4.30%	4.33%	5.33%	8.1%	8.95%
E8	Minimum 10%					

Source: Annual Report of NSCC

Figure 4.2.6 Institutional Capital to Total Assets



All the ratio of institutional capital to total assets seems less than standard. The rate is near the standard in 2066/67 and 2067/68 the rate in very low in financial year 2063/64.

All the ratio of institutional capital to total assets seems less than standard. The rate is near the standard in 2066/67 and 2067/68 the rate is very low in f/y 2063/64

#### 4.2.7 Net Institutional Capital to Total Assets (E9)

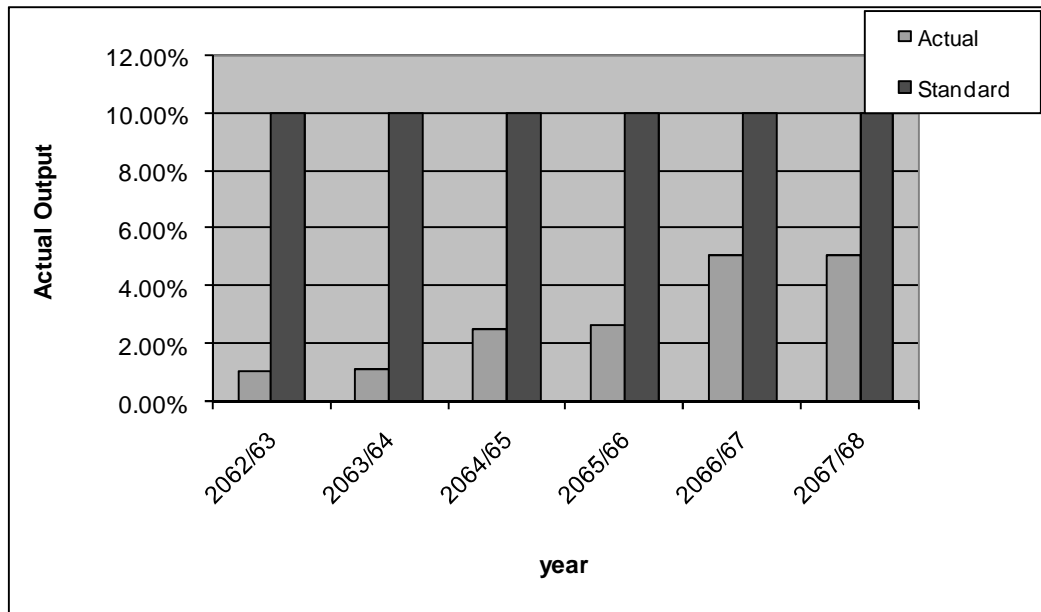
E9 measures the actual institutional capital after adjusting the allowances for risk assets to meet the standard of p1 and p2 covering any other potential losses. Net institutional capital is calculated by deducting all delinquent loan balance and problem assets. The net institutional capital to total asset has been shown in the table and figure 4.2.7.

**Table 4.2.7 Net Institutional Capital to Total Assets (10000)**

<b>Year</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>	<b>2067/68</b>
a. Net Institutional Capital	103.32	140.91	329.06	458.6	784.06	963.44
b. Total Assets	9978.48	12,697.8	13,150.1 2	17530.55	15583.7 3	15934.75
E9	1.04%	1.11%	2.5%	2.62%	5.03%	6.04%
Standards	Minimum 10%					

*Sources: Annual Report of NSCC*

**Figure 4.2.7 Net Institutional Capital to Total Assets**



All output ratios is lower than the standard rate which means the institution capital is very lower in institution. The ratio is increasing all the year which is good thing but it will take more years to go up to standard rate.

### 4.3 Asset Quality

Asset quality indicator measures the impact of assets which do not generate income such as loan delinquency and non earning assets. The delinquency ratio is the most important measurement of institutional weakness. The higher the ratio of non earning assets the more difficult it is to generate sufficient earnings.

#### 4.3.1 Total Loan Delinquency to Gross Loan Portfolio (A1)

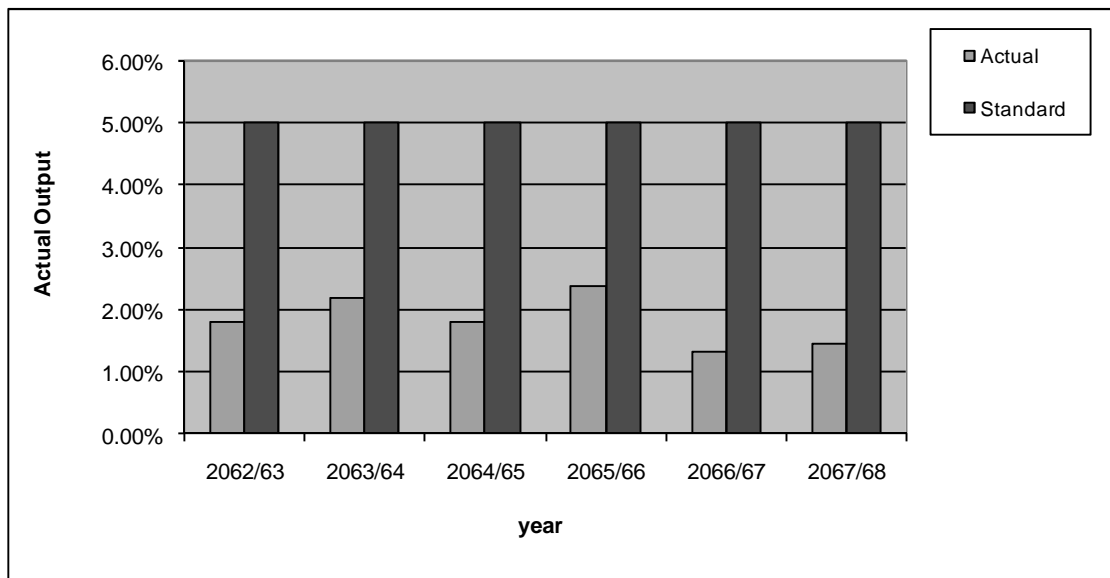
A non productive or non earning asset is one that does not generate income. An excess of non earning assets affects credit union earnings in a negative way. All of the PEARLS ratios, if the delinquency ratio is high, it usually affects all other key areas of credit union operations. By using the PEARLS formula to accurately measure delinquency, credit unions are properly informed of the severity of the situation before a crisis develops. The delinquency rate must be below 5% of total loan outstanding.

**Table 4.3.1 Total Loan Delinquency to Gross Loan Portfolio (10000)**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a.Total Delinquent Loans	116.23	166.53	184.74	196.93	112.63	121.30
b. Total Loans Portfolio	6,411.77	7,669.87	7,824.87	8,975.92	8,671.16	8311.08
A1	1.81%	2.17%	2.36%	2.19%	1.3%	1.45%
Standard	5%					

Source: Annual Report of NSCC

**Figure 4.3.1 Total Delinquent Loan to Total Gross Loan Portfolio**



The output ratio of NSCC on total delinquency loan to gross loan portfolio is within the standard rate. All delinquent loans is less than 5 percent.

#### **4.3.2 Non Earning Asset to Total Assets (A2)**

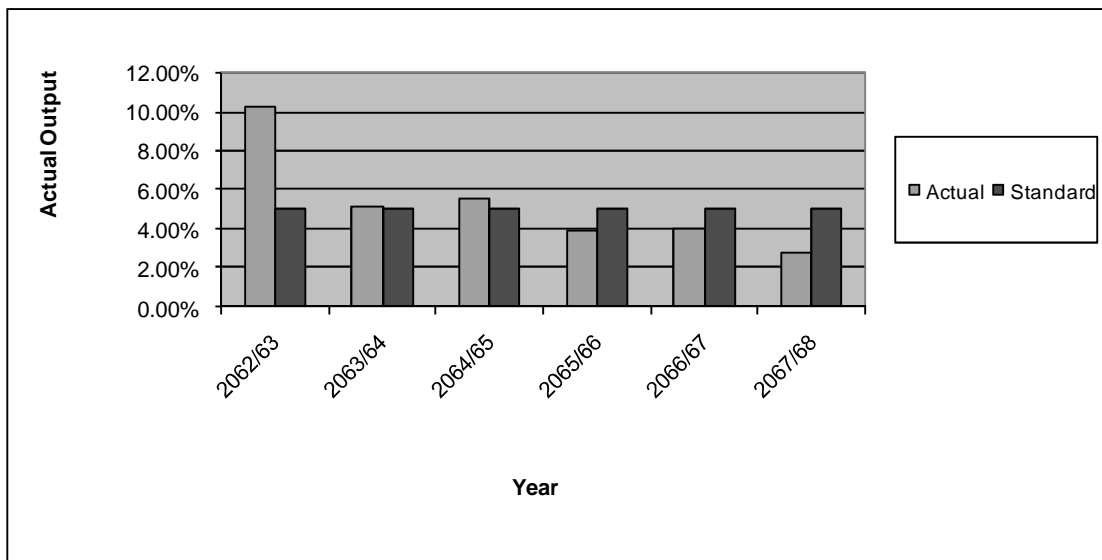
Non earning assets play important role in business in other to carryout the transaction but it is with in the limitation because higher non earning asset hampers to generate the income. The WOCCU prescribed maximum limit of non earning assets is less than or equal to 5 percent.

**Table 4.3.2 Non Earning Assets to Total Assets (10000)**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a. Total Non Earning Assets	1018.98	653.46	701.76	675.74	627.38	446.81
b. Total Assets	9978.45	12697.79	13150.11	17530.55	15583.73	15934.75
A2	10.21%	5.14%	5.33%	3.85%	4.03%	2.80%
Standard	5%					

Source: Annual Report of NSCC

#### 4.3.2 Non Earning Asset to Total Assets



The table and figure shows that the ratio of non earning assets to total assets is more than standard rate over the first three years but it is less in last two years. The ratio is very high in first year.

#### 4.3.3 Net Zero Cost Fund to Non Earning Assets (A3)

A3 measures the percentage of non earning assets that are financed with institutional capital, transitory capital and non interest bearing liabilities.

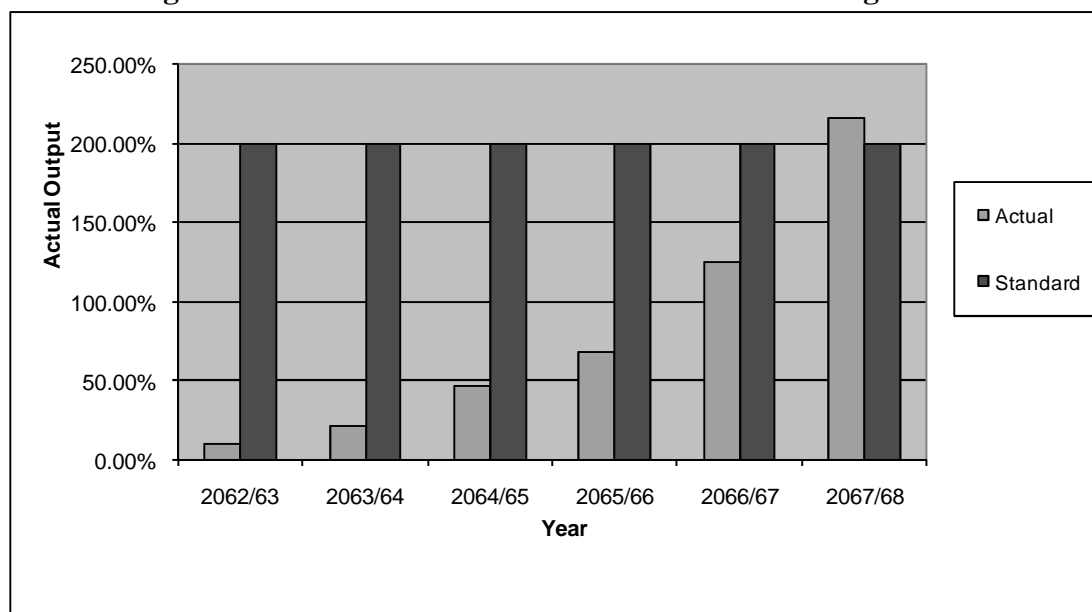
Transitory capital includes monitory educational and social reserves. The ratio should not be down below 200 present.

**Table 4.3.3 Net Zero Cost Fund to Non Earning Assets (10000)**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a. Net Zero Cost Fund	103.32	140.41	329.06	458.6	784.06	963.44
b. Total Non Earning Assets	1018.98	653.46	701.75	675.74	627.38	446.81
A3	10.14%	21.48%	46.89%	67.87%	124.99%	215.62%
Standard	>200%					

Source: Annual Report of NSCC

**Figure 4.3.3 Net Zero Cost Fund to Total Non Earning Assets**



All ratios are less than the standard rate. except 2067/68 10.14%, 18.5%, 44.8%, 67.87%, 124.99%, 215.62% in financial year 2062/63, 63/64, 64/65, 65/66 66/67 and 67/68 respectively.



## 4.4 Rate of Return and Cost

PEARLS system classifies the essential components of earnings to measure the specific yield on various investments. It is one of most important tool to measure the ratios between various investment and their subsequent yields. This system calculates the yields on various investments on the base of related average assets and assists management to determine the investment which is most profitable. It helps to make the more income generating investment portfolio structure.

### 4.4.1 Net Loan Income to Average Net Loan Portfolio (R1)

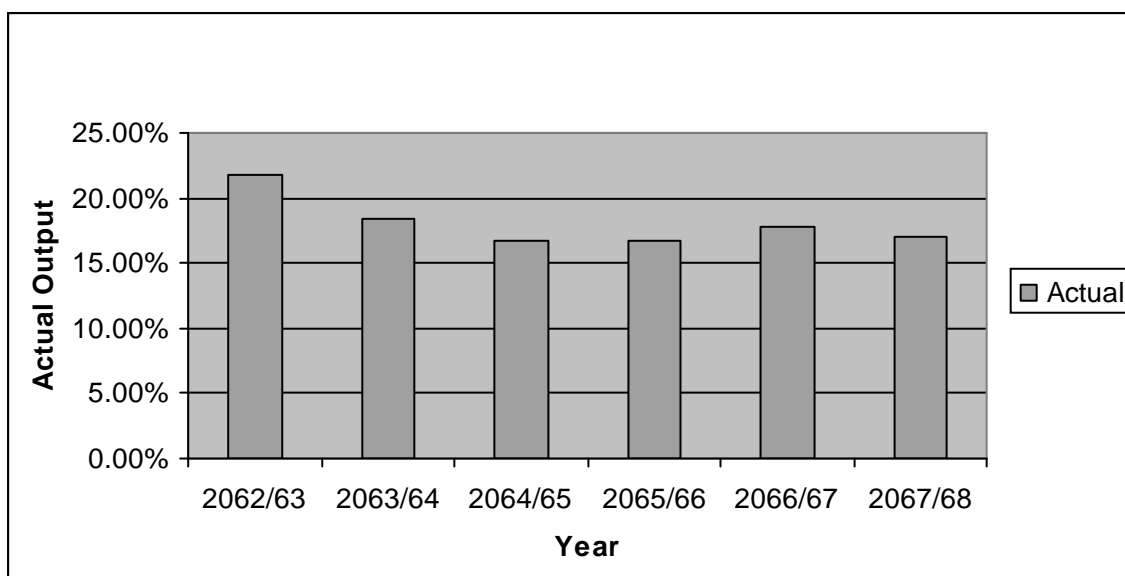
All interest income, delinquent interest, penalties and commission from landing operations are divided by the total amount invested in the loan portfolio. Interest income is inclusive to premium on loan insurance. The output should cover the interest expenses, cost of operation and administration.

**Table 4.4.1 Net Loan Income to Average Net Loan Portfolio (10000)**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
Total Interest income	1383.36	1277.22	1278.08	1379.67	1455.1	1438.35
a. Net Income	1383.36	1277.22	1278.08	1379.67	1455.1	1438.35
b. Net Loan Portfolio as Current Year end	6342.57	7554.5	7683.01	8834.06	8642.0	8272.41
c. Net Loan Portfolio as Last Year end	6367.03	6342.57	7554.5	7683.01	8834.06	8642.00
R1	21.77%	18.38%	16.77%	16.71%	17.8%	17%
Standard %	Entrepreneurial Rate					

Sources: Annual Report of NSCC

**Figure 4.4.1 Net Loan Income to Average Net Loan Portfolio**



All the actual outputs rate seen higher than entrepreneurial rate.

#### **4.4.2 Liquid Investment Income to Average Liquid Investment (R2)**

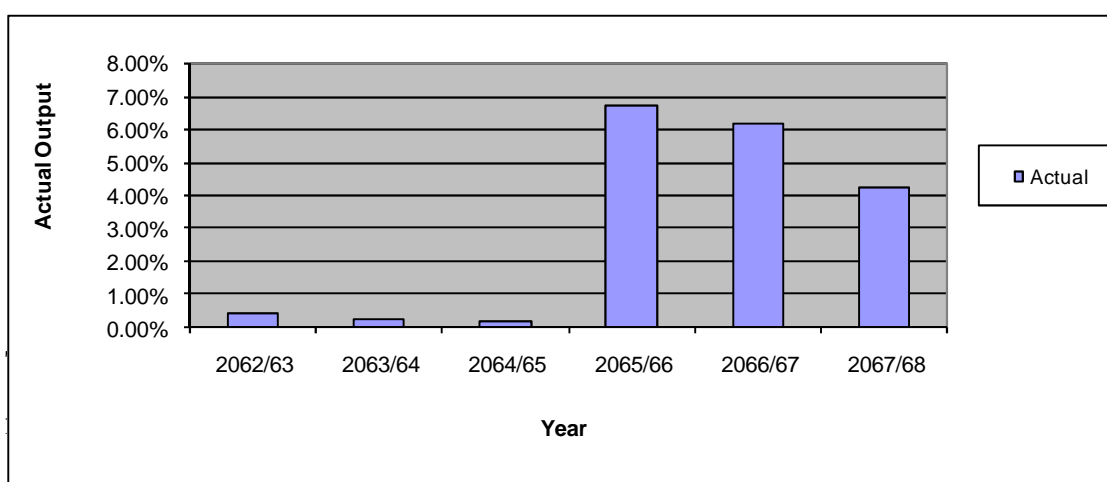
All income from bank saving accounts and liquidity reserves deposited in either the National Association or Regularity body is divided by the amount invested in those areas.

**Table 4.4.2 Liquid Investment Income to Average Liquid Investment**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
Misc. Income	23293.17	17558.52	22288.0	34016.54	21817.3	104729.13
Membership fees	2282.00	21340.00	14975.0	10335.00	7030.00	3835.00
Service Charge	0	0	0	936498.0	514571.0	410021.00
a. Total Income	46113.17	38898.52	37263.0	980850.0	543418.3	518685.13
b. Liquid Investment Current Year(10000) end	1392.89	2149.63	1666.89	1247.69	508.99	1919.95
c. Liquid Investment Last Year end (10000)	871.96	1392.89	2149.63	1666.89	1247.69	508.99
R2	0.41%	0.22%	0.20%	6.73%	6.19%	4.27%
Standard %	Market Rate					

Sources: Annual Report of NSCC

**Figure 4.4.2 Liquid Investment Income to Average Liquid Investment**



The actual rate seems very lower than the market rate. It is lower in first three years but last three years seems 6.73%, 6.19% and 4.27% respectively.

#### 4.4.3 Financial Investment Income to Average Financial Investment

Many credit unions invest liquidity into financial investment (e.g. Government securities) that pays higher yields than bank savings accounts. This investment income is also divided by the outstanding capital invested in those instruments.

**Table 4.4.3 Financial Investment Income to Average Financial Inv. (10000)**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a. Financial Investment Income	2.34	1.76	2.32	3.48	2.34	3.2
b. Financial Investment as of Current Year end	1154.85	2224.85	2956.6b	6631.2	5776.2	5256.90
c. Financial Investment as of Last Year end	1.0000	1154.85	2224.85	2956.6	6631.2	5776.2
R3	0.405%	0.104%	0.0896 %	0.073%	0.038%	0.05%
	Market Rate					

Sources: Annual Report of NSCC

#### 4.4.4 Total Interest Cost on Saving Deposit to Average Saving Deposit (R5)

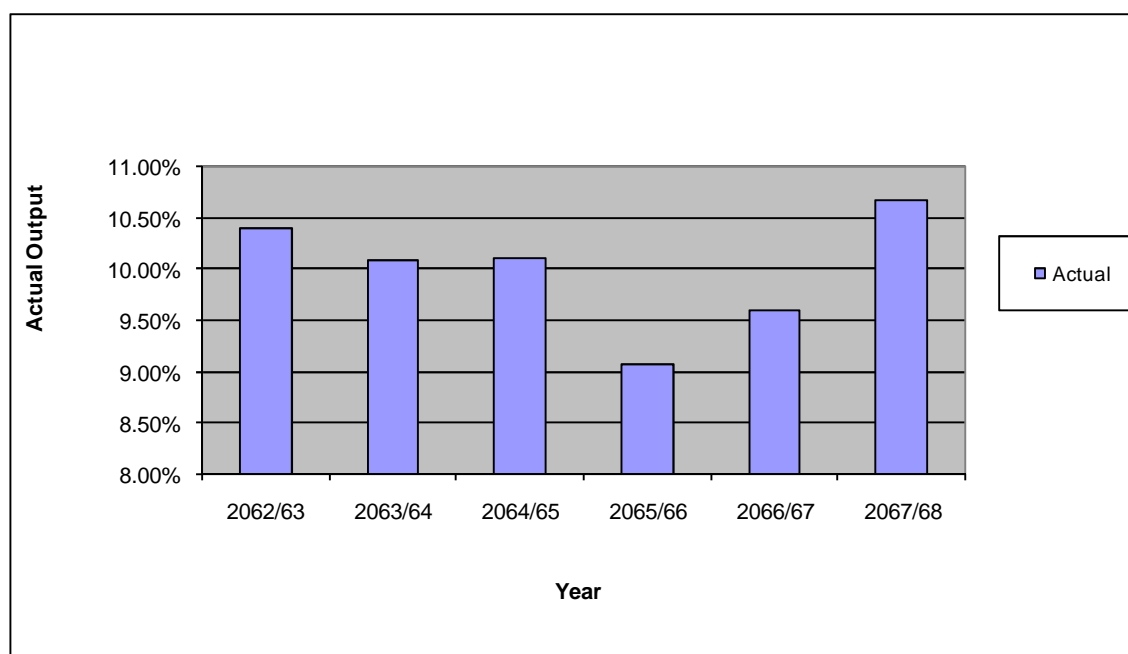
Saving deposit cost includes total interest paid on saving deposits, total interest paid on saving deposit, total tax paid by MFIs on saving deposit interest. The cost of insurance premium and tax paid on saving deposit not found during the study period.

**Table 4.4.4 Total Interest Cost on Saving Deposit (10000)**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a. Total Interest paid on Deposit	661.61	787.06	930.81	891.52	930.07	974.67
b. Total Deposit as of Current Year end	6553.65	9066.01	9352.73	10291.66	9087.85	9179.86
c. Total Deposit as of Last Year end	6167.1	6553.65	9066.01	9352.73	10291.66	9087.85
R5	10.04%	10.08%	10.11%	9.08%	9.6%	10.67%
<b>Standard %</b>	Market Rate>Inflation rate					

Sources: Annual Report of NSCC

**Figure 4.4.4 Total Interest Cost on Deposit**



The interest cost ratio is 10.4%, 10.08%, 10.11%, 9.08%, 9.6% and 10.67% in the year 2062/63, 2063/64, 2064/65, 2065/66 and 2067/68 respectively.

#### 4.4.5 Total dividend Cost on Share to Average Member Share Capital (R7)

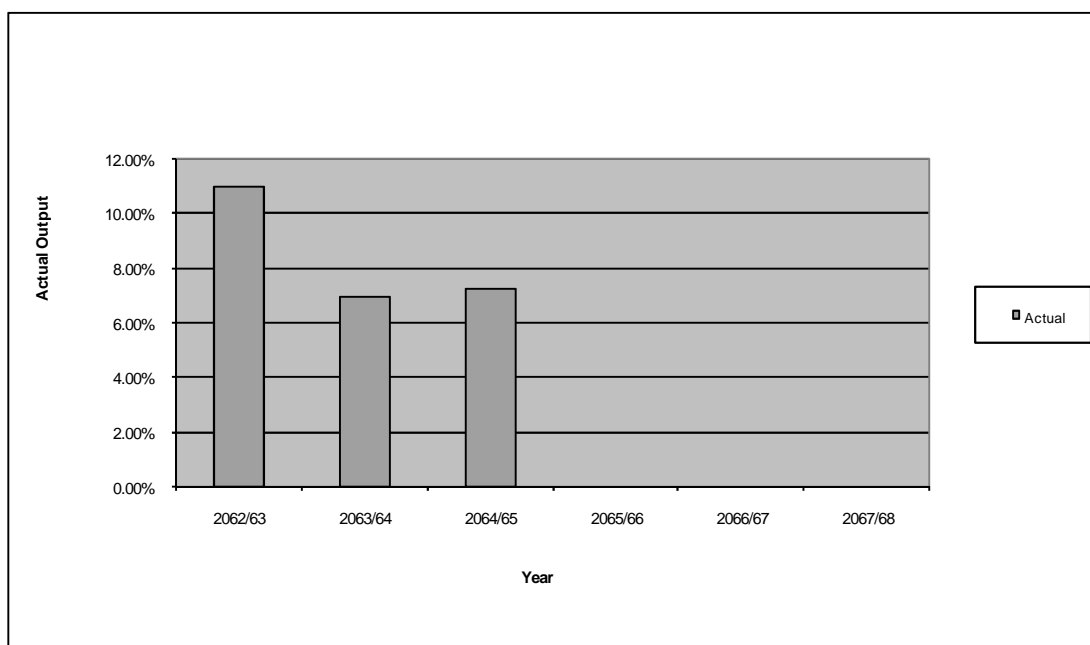
Total dividend cost includes total insurance paid, total tax paid by MFIs on dividend on share. But the cost items not found during the study period.

**Table 4.4.5 Dividend on Share to Average Share Capital (10000)**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a. Dividend cost	135.46	146.87	169.61	0.00	0.00	0.00
b. Member Share Capital as of Current year end	1876.35	2345.56	2346.77	4870.77	4880.94	5011.21
c. Member Share Capital as of Last year end	584.64	1876.35	2345.56	2346.77	4870.77	4880.94
R7	11.01%	6.96%	7.23%	0.00	0.00	0.00
Standards	Market Rate					

Sources: Annual Report of NSCC

**Figure 4.4.5 Total Dividend Cost on Share to Member Share Capital**



The dividend provided ratio is 11.01%, 6.96% and 7.23% on first three years but organization has not provided dividend on last three years. Provided dividend in first year is high.

#### 4.4.6 Total Gross Income Margin to Average Total Assets (R8)

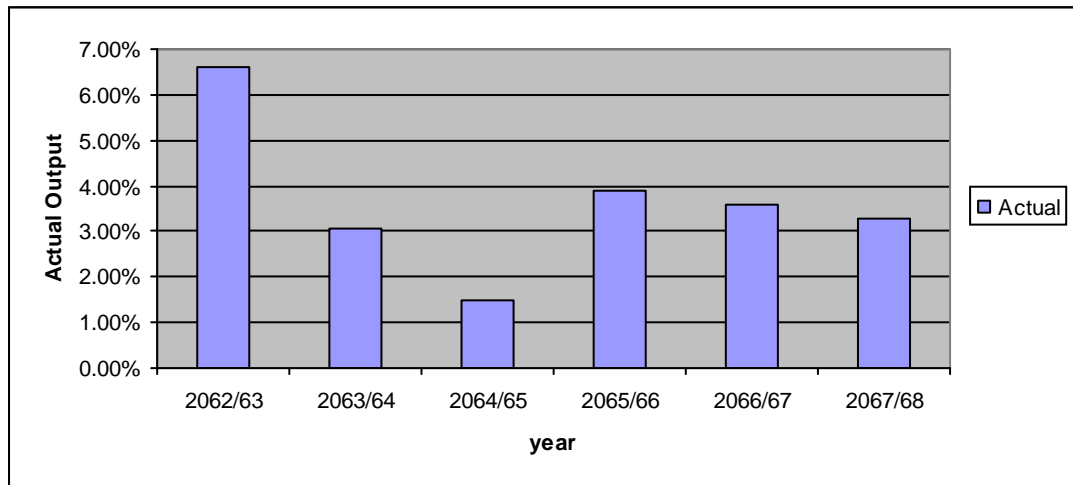
R8 measures the gross income base on total assets. Gross income must adequate to cover the operating expenses and allowances for loan losses. It also gives contribution to institutional capital like general reserve and funds. This ratio includes interest income, liquid investment income, financial income and other income etc.

**Table 4.4.6 Total Gross Income Margin to Average Total Assets (10000)**

<b>Year</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>	<b>2067/68</b>
a. Total Gross Income Margin	1391.75	1283.244	1292.46	1486.89	1526.19	1490.59
b. Total Gross cost	797.00	933.93	1100.42	891.52	930.07	974.67
c. Total Assets as of Current year end	9978.48	12,697.8	13,150.12	17530.55	15583.73	15934.75
d. Total Assets as of Last year end	8020.53	9978.48	12,697.8	13,150.12	17530.55	15583.75
R8	6.61%	3.08%	1.49%	3.88%	3.6%	3.27%
Standard	Linked to R9, R11, R12					

*Source: Annual Report of NSCC*

**Figure 4.4.6 Total Gross Income Margin to Average Total Asset**



The ratio of gross income margin seen very low on financial year 2062/63 it seen very high and financial year 2064/65 it seen very low. This ratio is linked with R9, R11 and R12. Institution has not earn sufficient income.

#### 4.4.7 Total Operating Expenses to Total Asset (R9)

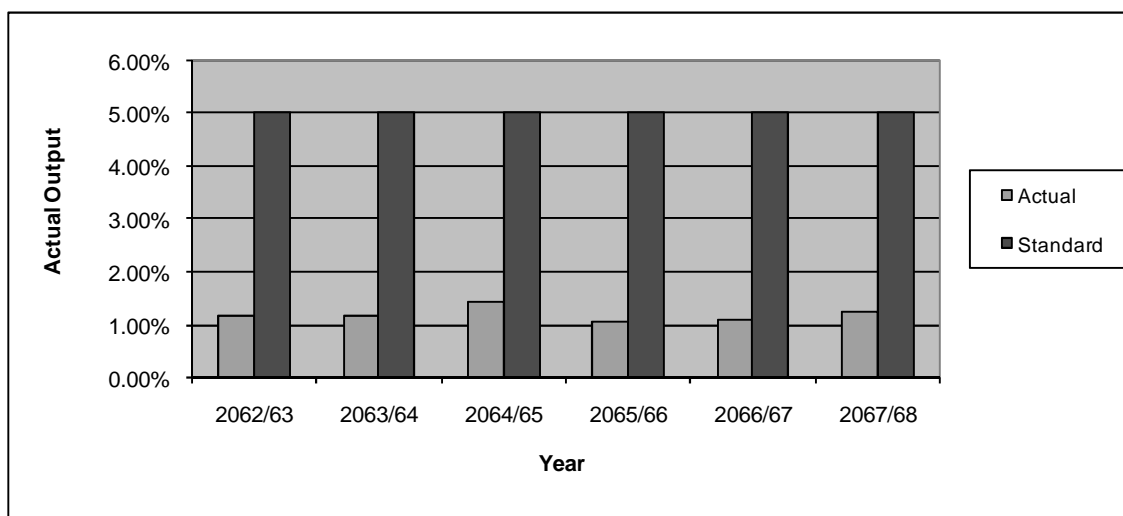
R9 measures the operating expenses on average total asset. It must be not above 5 percent. It shows the efficiency of management either they are success or failure in controlling the office and administrative expenses in the cooperatives. The table and figure shows the following.

**Table 4.4.7 Total Operating Expenses to Total Asset (10000)**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a. Total Operating expenses	106.00	134.79	148.48	160.15	178.00	195.14
b. Total Assets as of Current year end	9978.48	12,697.8	13,150.12	17530.55	15583.73	15934.75
Total Assets as of Last year end	8020.53	9978.48	12,697.8	13,150.12	17530.55	15583.73
R9	1.18%	1.18%	1.45%	1.044%	1.08%	1.23%
Standard	5%					

Sources: Annual Report of NSCC

**Figure 4.4.7 Total Operating Expenses to Average Total Asset**



All operating ratio is less than the standard rate which refers that organization is able to control the operating cost. The ratio seems high in financial year 2064/65 and low in financial year 2063/64.

#### **4.4.8 Total Loan Loss Provision Expenses to Average Total Assets (R10)**

The final cost area evaluated by PEARLS separated the cost of creating provision for loan losses from other administrative costs. Traditional accounting standard usually include loan loss provisions as part of the overall administrative cost. In rally, the creation of adequate provisions represents completely different types of expenses.

**Table 4.4.8 Total Loan Loss Provision Expenses to Average Assets (10000)**

<b>Year</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>	<b>2067/68</b>
a. Total Loan Losses Provision Expenses	69.20	115.34	141.86	141.86	29.16	38.67
b. Total Assets as of current year end	9978.48	12,697.8	13,150.12	17530.55	15583.73	15934.75
c. Total Assets as of Last year end	8020.53	9978.48	12697.8	13150.12	17530.55	15583.73
R10	0.77%	1.02%	1.1%	0.92%	0.18%	0.24%
Standard	Depend on Delinquent Loan					

Source: Annual Report of NSCC



The ratio of loan loss provision expenses are 0.77%, 1.02%, 1.1%, 0.92%, 0.18% and 0.24% in the financial year 2062/63 to 2067/68 respectively. The ratio depends up on delinquent loan. The ratio is decreasing on last years.

#### 4.4.9 Net Income to Average Total Assets (R12)

R12 measures the adequacy of earning as well as the capacity to built institutional capital. Control and reduction of necessary overheads generates high earnings. The collection of loan according to the schedule is also a key factor for the earning. High delinquent affects the income of institutions.

**Table 4.4.9 Net Income to Average Total assets (10000)**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a. Net Income	615.35	353.6	196.5	420.5	394.75	380.36
b. Dividend for the year	135.46	146.87	169.61	00	00	0
c. Net Income after tax	479.89	206.73	26.89	420.5	394.75	380.36
d. Total assets as of current year end	9978.48	12,697.8	13,150.1 2	17530.55	15583.73	15934.75
e. Total assets as of last year end	8020.53	9978.48	12697.8	13150.12	17530.55	15583.78
R12	5.33%	1.82%	0.21%	2.74%	2.38%	2.41%
Standard	Linked to E9					

Sources: Annual Report of NSCC

The output ratio is 5.33%, 1.82%, 0.21%, 2.74%, 2.38% and 2.41% in financial year 2062/63 to 2067/68 respectively. The ratio is in fluctuation and the cooperative has not earned sufficient income during the study period.

## 4.5 Liquidity

Liquidity indicator measures the cash position of an institution to meet deposit withdrawal request and liquidity reserve requirements. The sufficient cash reserve must be maintained to serve the client and save from the cash crisis but management must be careful of high idle cash because it earns no interest income. Therefore, management must maintain the confidence of depositor and overcome the financial crisis efficiently in order to achieve the goal of liquid assets.

### 4.5.1 St Investment, Liquid Assets and St Payable to Total Average Saving Deposit (L1)

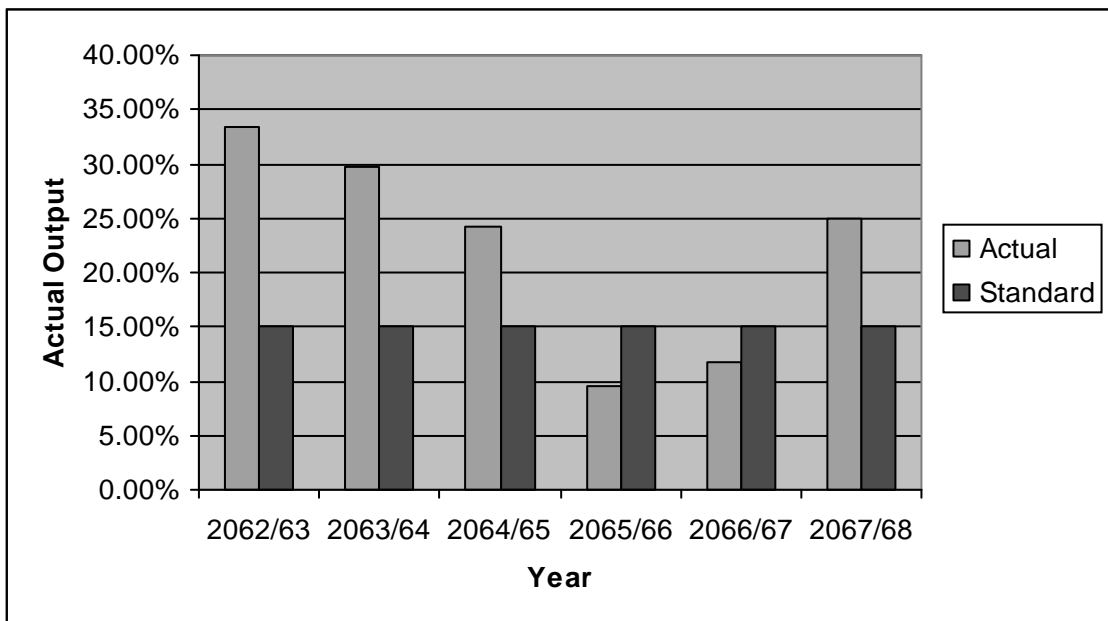
L1 measures the liquidity position with the components to short term investment, liquid assets and short term payable on the basis of saving deposit. Short term investment and short term payable within thirty days not found during the study period.

**Table 4.5.1 St Investment, Liquid Assets and St Payable to Total Average Saving Deposit (10000)**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a. Short Term Investment	0	0	0	0	0	0
b. Liquid Asset	1479.56	2165.35	1769.5	1445.0	681.33	1991.33
c. Other Assets	894.8	591.09	588.42	440.0	416.41	317.08
Total Liquid Assets	2374.36	2756.44	2327.92	1885.00	1097.94	2308.41
Short Term Payable	57.04	57.13	67.03	907.89	31.75	25.20
Net Amount	2317.32	2599.31	2260.89	977.11	1066.19	2283.21
Saving Deposit	6553.65	9066.01	9352.73	10291.66	9087.85	9179.86
L1	35.36%	29.77%	24.17%	9.49%	11.73%	24.87%
Standard	Min 15%					

Source: Annual Report of NSCC

**Figure 4.5.1 Investment, Liquid Assets and St Payable to Total Average Saving Deposit**



The table and figure shows that the ratio is higher than standard rate for the first three years and last year but the last two years it lower than the standard rate. In first year the liquid ratio seen very high which denotes the company has huge unused liquid assets.

#### **4.5.2 Liquidity Reserve to Saving Deposit (L2)**

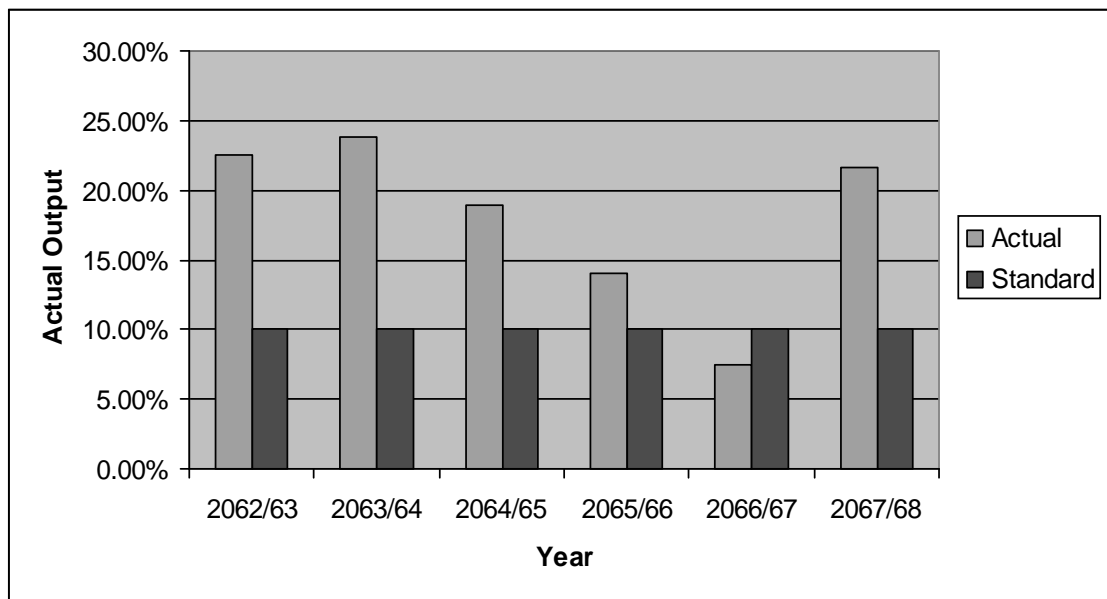
L2 measures the liquidity reserve on saving deposit. Sufficient liquidity reserve must maintain in other to carryout the transaction. An excess uphold of liquidity reserve hampers institutions from generating income. The interest margin on depository institution and commercial banks is significantly lower than investing them in productive assets. Earning liquid reserve includes bank deposit and non earning liquid reserve includes cash in hand.

**Table 4.5.2 Liquidity Reserve to Saving Deposit (10000)**

<b>Year</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>	<b>2067/68</b>
a. Total Liquidity Reserve	1479.56	2165.35	1769.5	1445.0	681.73	1991.33
b. Saving Deposit	6553.65	9066.01	9352.73	10291.66	9087.85	9179.86
L2	22.58%	23.88%	18.92%	14.04%	7.5%	21.69
Standard	10%					

Source: Annual Report of NSCC

**Figure 4.5.2 Liquidity Reserve to Saving Deposit**



The ratio of liquidity reserve to total saving deposit seems very higher than the standard rate except 2066/67.

### 4.5.3 Total Non Earning Liquid Assets to Total Assets (L3)

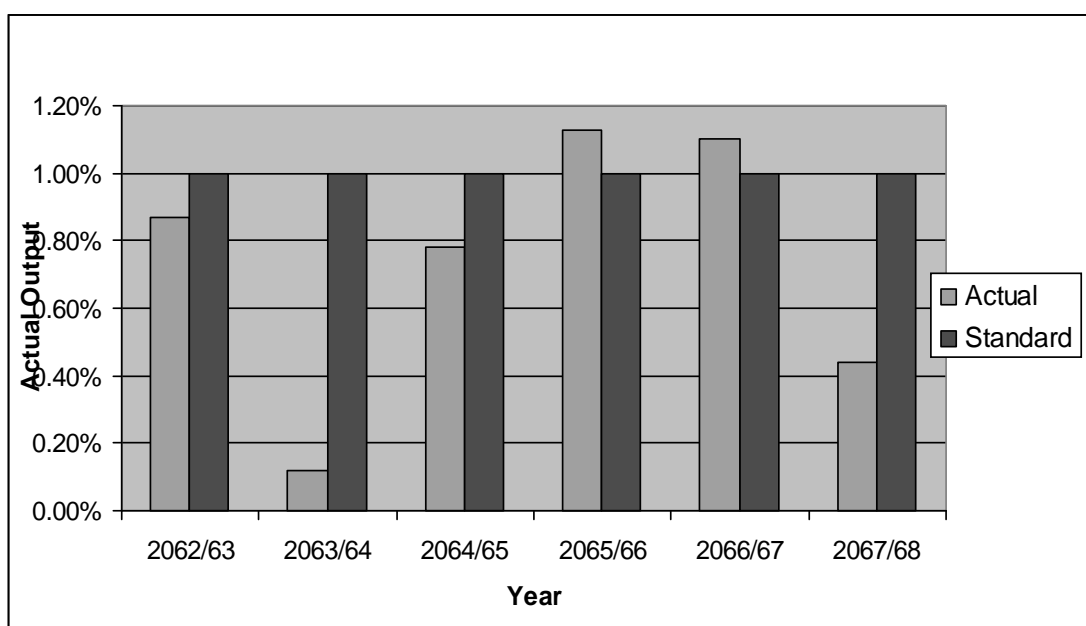
L3 measures the percentage to total assets that is invested in non earning liquid assets. Non earning asset is the cash at hand which do not generate income. But institution should keep sufficient cash and monitory deposit for the deposit withdrawal. For the daily operation how much keep the cash is depends upon the analysis of previous cash deposit and withdrawal transaction and its trends.

**Table 4.5.3 Total Non Earning Liquid Assets to Total Assets (10000)**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a. Total Non Earning Liquid Assets (Cash)	86.67	15.72	102.62	197.33	171.51	71.38
Total Assets	9978.45	12697.8	13150.12	17530.55	15583.89	15934.75
L3	0.87%	0.123%	0.78%	1.13%	1.1%	0.44%
Standards	<1%					

Source: Annual Report of NSCC

**Figure 5.5.3 Non Earning Liquid Assets to Total Asset**



All ratios of non earning liquid assets to total asset is around the standard rate.

## **4.6 Sign of Growth**

There are eleven ratios is sign of growth. Sign of growth indicator helps to new strategy formulation, decision making and corrective action by analyzing the previous position of many financial variables. It helps the management how to arrange and achieve the better position in other to growth of assets. Sign of growth provides the trend of past condition of financial variables which more helpful to reach a decision in uncertain future. The ratios are total assets, loans, liquid investment, financial investment, non financial investment, saving deposit, external credit, share capital, institutional capital, net institutional capital and membership. The loan portfolio is important in other to make the earning and assets growth. Asset depends on the growth of saving and investment. Growth in institutional capital consists almost entirely of reserve and surplus. Increase in share capital and membership depends up on the performance of management and member, their activity and institution's well known and goodwill.

### **4.6.1 Growth in Loans to Member (S1)**

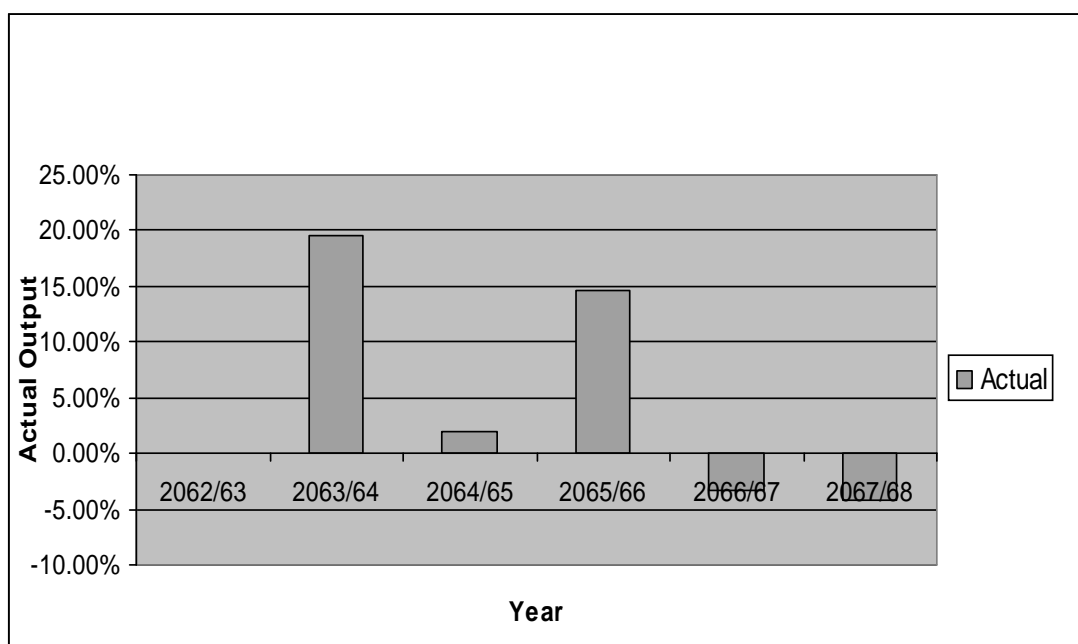
S1 measures the growth in loans portfolio. In other to growth the loan portfolio there must be more investment alternative fields and management must choose the best alternative for investment being very much careful to risk, cost and uncertain future. Investment on more profitable sector is essential for growth in loans assets and external environment also affects the investment sector. Earning from loan and provision of allowances for loan delinquency affects the growth in loans. If not occur the delinquency, increase in earning and can reinvest it in productive assets, which yield income. This ratio is affected by R1 and R10. According to PEARLS standard, if institution needs to increase the percentage of total loan outstanding (E1), the growth in loans (S1) should be greater than growth in total assets (S11).

**Table 4.6.1 Growth in Gross Loan (10000)**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a. Loan Portfolio as of Current year end	6411.77	7669.84	7824.87	8975.92	8671.16	8311.09
b. Loan Portfolio as of last year end	6406.55	6411.77	7669.84	7824.87	8975.92	8671.16
S1	0.08%	19.62%	2.02%	14.71%	(3.4%)	(4.16)
Standard	Dependent on E1					

Sources: Annual Report of NSCC

**Figure 4.6.1 Growth in Loans to Member**



The output ratio is 0.08%, 19.62%, 2.02%, 14.71%, (3.4%) and (4.16) for the year 2062/63 to 2067/68 respectively. The ratio is in more fluctuation.

#### **4.6.2 Growth in Liquid Investment (S2)**

It shows the position of liquid investment. Liquid assets is basis necessity for day to day transaction of institution but sufficient liquid assets must be kept because excess liquid assets generates very low earnings and it stops the high

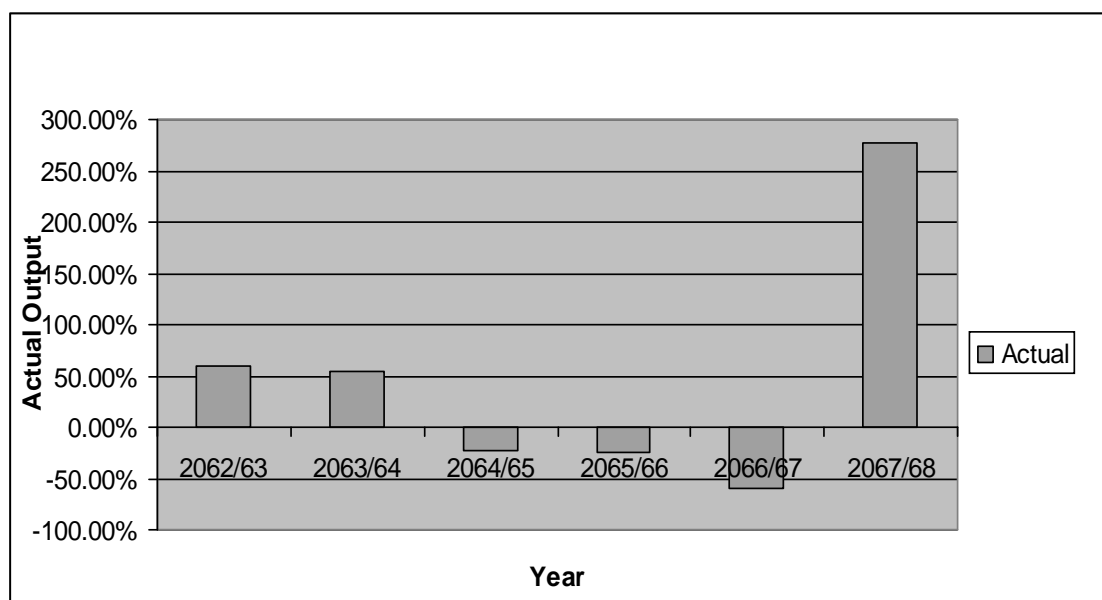
productive investment sector. According to PEARLS standard is institution needs to increase the percentage to liquid investment (E2), the growth in liquid investment (S2) should be greater than growth in total assets (S11).

**Table 4.6.2 Growth in Liquid Investment (10000)**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a. Liquid Investment as of current year end	1392.89	2149.63	1666.89	1247.69	508.99	1919.95
b. Liquid investment as last year enc	871.96	1392.89	2149.63	1666.89	1247.69	508.99
S2	59.74%	54.33%	(22.46%)	(25.15%)	(59.21%)	277.20%
Standards	Dependent on E2					

Sources: Annual Report of NSCC

**Figure 4.6.2 Growth in Liquid Investment**



The actual outputs ratio is 59.74%, 54.33%, (22.46%), (25.15%), (59.21%) and 277.20% for financial year 2062/63 to 2067/68 respectively. The ratio has not growth is last three years it is decreasing.



### 4.6.3 Growth in Financial Investment (S3)

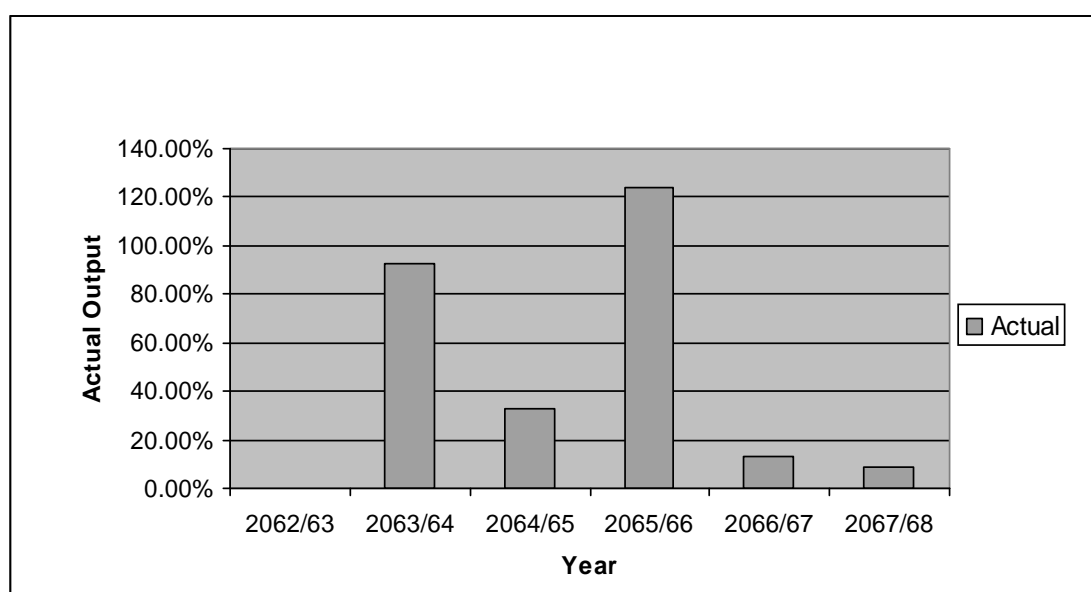
S3 measures the growth in financial investment. Investing the fund in the loan portfolio, yields a high portion on income rather than investing the fund in financial securities because investing in financial securities reduce the risk but consequently result a low earnings. This growth depends upon the financial investment to total assets (E3).

**Table 4.6.3 Growth in Financial Investment (10000)**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a. Total Financial Investment as of current year end	1154.85	2224.85	2956.6	6631.2	5776.2	5256.90
b. Financial Investment as of last year end	0	1154.85	2224.85	2956.6	6631.2	5776.2
S3	0%	92.65%	32.89%	124.28%	(12.9%)	(9%)
Standard	Dependent on E3					

Source: Annual Report of NSCC

**Figure 4.6.3 Growth in Financial Investment**



The ratio is 0%, 92.65%, 32.89%, 124.28%, (12.9%) and (9%) in financial year 2062/63 to 2067/68 respectively. The ratio is negative in financial year 2067/68. The ratio is more fluctuation.

#### 4.6.4 Growth in saving Deposit (S5)

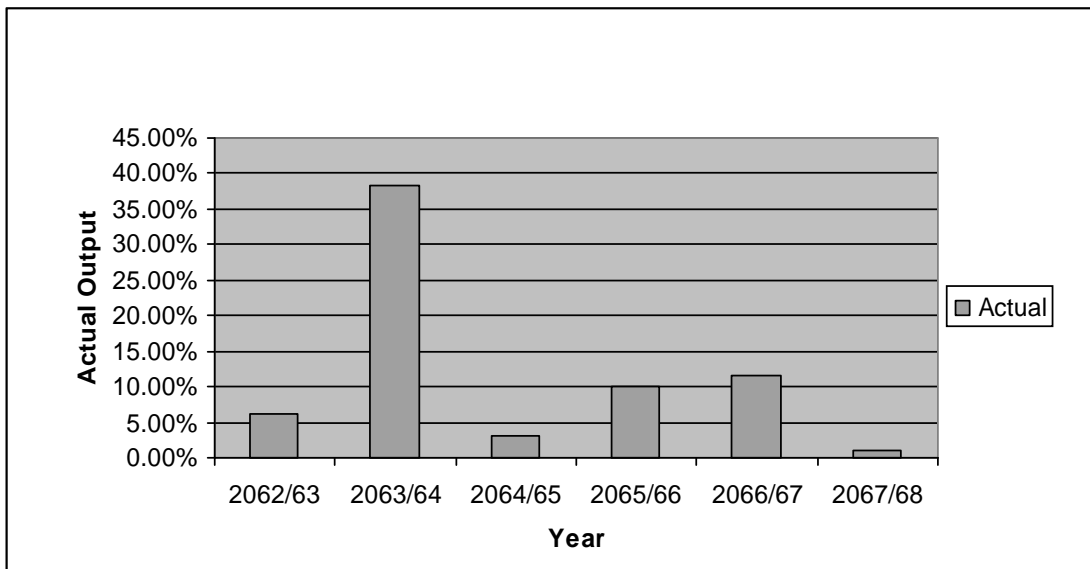
Saving deposit is most essential ratio for MFIs. All the investment, financial and operating activities depend on saving deposit. Higher the saving deposit higher the investment, financial activities generating high profit and increasing the total assets. Growth in saving deposit depends up on the activity and goodwill of institution. Saving deposit affect all the other variables. Saving deposit growing is possible only by encouraging the people to be a member of institution and conduct the effective marketing program. And mobilizing the saving deposit properly is also most important work of management in other to increase the total assets as a whole. The growth depends on E5.

**Table 4.6.4 Growth in Saving Deposit (10000)**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a. Total Saving Deposit as of current year end	6553.63	9066.1	9352.73	10291.66	9087.85	9179.86
b. Total Saving Deposit as of last year end	6167.1	6553.63	9066.1	9352.73	10291.66	9087.85
S5	6.27%	38.33%	3.16%	10.04%	(11.7%)	1.01%
Standard	Dependent on E5					

Source: Annual Report of NSCC

**Figure 4.6.4 Growth in Saving Deposit**



The ratio is 6.27%, 38.33%, 3.16%, 10.04%, (11.7%) and 1.01% for the year 2062/63 to 2067/68 respectively. The ratio is negative in financial 2066/67. The rate is also fluctuation.

#### **4.6.5 Growth in Share Capital (S7)**

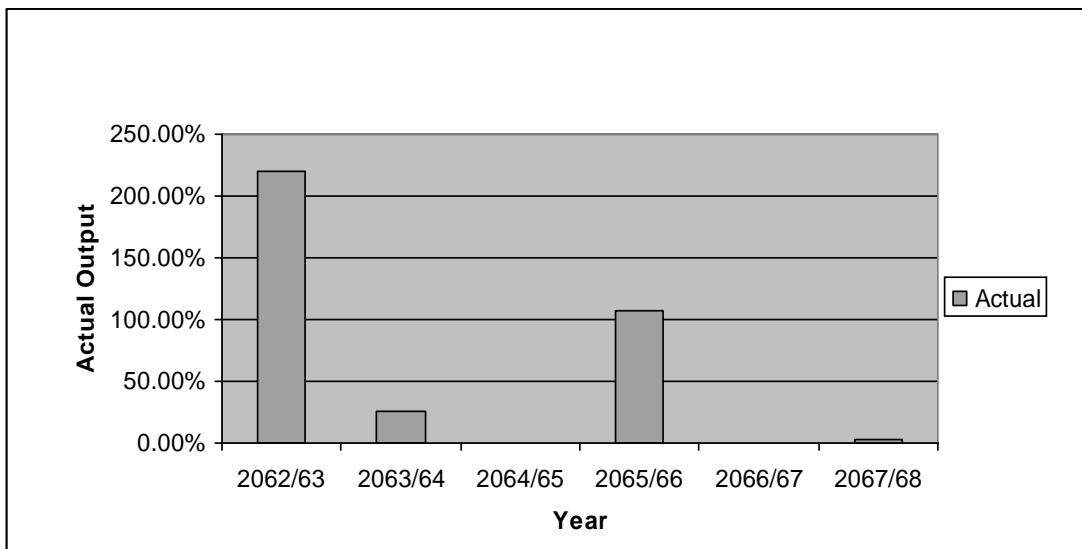
Increasing the share capital may be fundamental objective of MFIs. Increasing in member share capital depends upon financial policy and investment decision making of management. Management should investment the fund on more profit generating sector and control the overhead cost as well as they can increase the member share capital. External environment like peace and safety investment field, government's rule and regulation, tax system and political situation are also the variables for the achievement of objectives of institutions which fully affects the growth and development of assets and capital. According to the PEARLS standard, if institution needs to increase the percentage of member share (E7), the growth in member share (S7) must be greater than S11.

**Table 4.6.5 Growth in Share Capital (10000)**

<b>Year</b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>	<b>2066/67</b>	<b>2067/68</b>
a. Member Share Capital as of current year end	1876.35	2345.56	2346.77	4870.77	4880.94	5011.21
b. Member Share Capital as of last year end	584.64	1876.35	2345.56	2346.77	4870.77	4880.94
S7	220.1%	25.10%	0.052%	107.55%	0.21%	2.66%
Standard	Dependent on E7					

Sources: Annual Report of NSCC

**Figure 4.6.5 Growth in Member Share Capital**



The output ratio is 220.1%, 25.1%, 0.052%, 107.55%, 0.21% and 2.66% in financial year 2062/63 to 2067/68 respectively. The ratio is very much fluctuation.

#### **4.6.6 Growth in Institutional Capital (S8)**

Institutional capital refers to the profit and loss, retained earning, capital reserve and other fund related to institutional capital. Increase in capital reserve

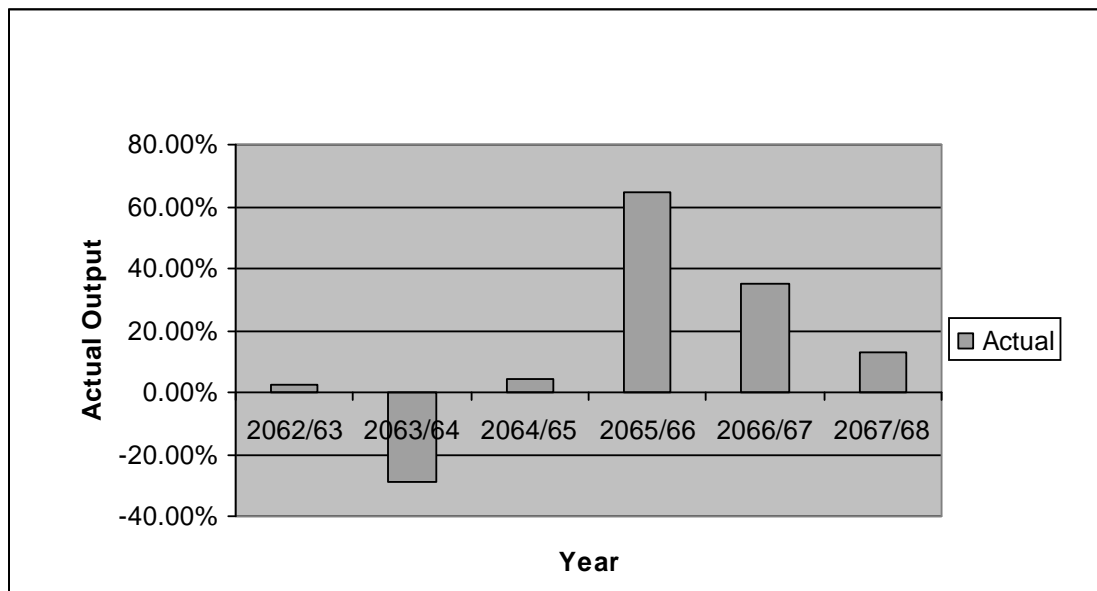
is depends up on the profit achievement success of institution. In other to achieve the expected profit, management should invest the fund in high profit giving investment alternative with care of uncertain future. Effective profit oriented financial program should be conducted and control the overhead cost as well as management can. The growth is depends on E8.

**Table 4.6.6 Growth in Institutional Capital (10000)**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a. Institutional Capital as of current year end	765.73	545.7	568.44	934.17	1262.28	1426.46
b. Institutional Capital as of last year end	746.73	765.73	545.7	568.44	934.17	1262.28
S8	2.54%	(28.73%)	4.17%	64.33%	35.12%	13%
Standard	Depends on E8					

Sources: Annual Report of NSC

**Figure 4.6.6 Growth in Institutional Capital**



The growth rate is 2.54%, (28.73%), 4.17%, 64.34%, 35.12% and 13% in financial year 2062/63 to 2067/68 respectively. The ratio is fluctuation. It is

negative in financial year 2063/64. The ratio has increase only 4.17% in financial year 2064/65.

#### 4.6.7 Growth in Net Institutional Capital (S9)

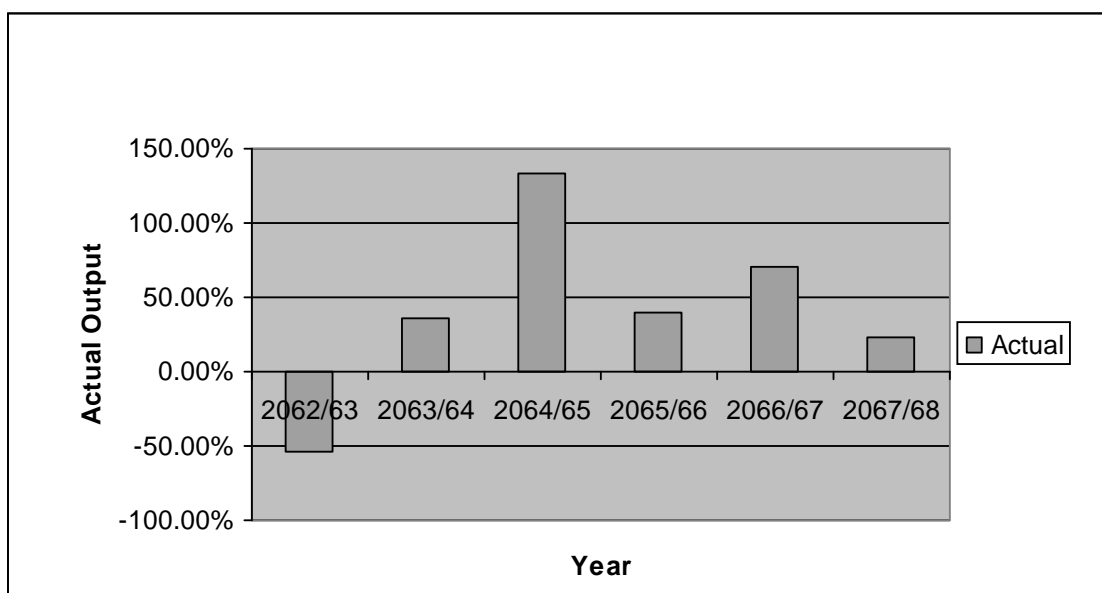
Net institutional capital comes adding the allowance of risk assets on institutional capital and reducing the balance of loan delinquent grater than 12 months and 1 to 12 months and problem of assets. Without earning the profit increasing in net institutional capital is impossible. Higher the earning higher the reserve and increase the net institutional capital. Net institutional capital (S9) linked with E9.

**Table 4.6.7 Growth in Net Institutional Capital (10000)**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a. Net Institutional Capital as of current year end	103.32	140.91	329.06	458.6	784.06	963.44
b. Net Institutional Capital as of last year end	223.66%	103.32	140.91	329.06	458.6	784.06
S9	(53.8%)	36.38%	133.52%	39.37%	70.96%	22.87%
Standard	Depend up on E9					

Sources: Annual Report of NSCC

**Figure 4.6.7 Growth in Net Institutional Capital**



The growth rate of net institutional capital to total assets is (53.8%), 36.38%, 133.52%, 39.37%, 70.97% and 22.87% in financial year 2062/63 to 2067/68 respectively. The ratio is negative in financial year 2062/63. The ratio is in more fluctuation.

#### 4.6.8 Growth in Membership (S10)

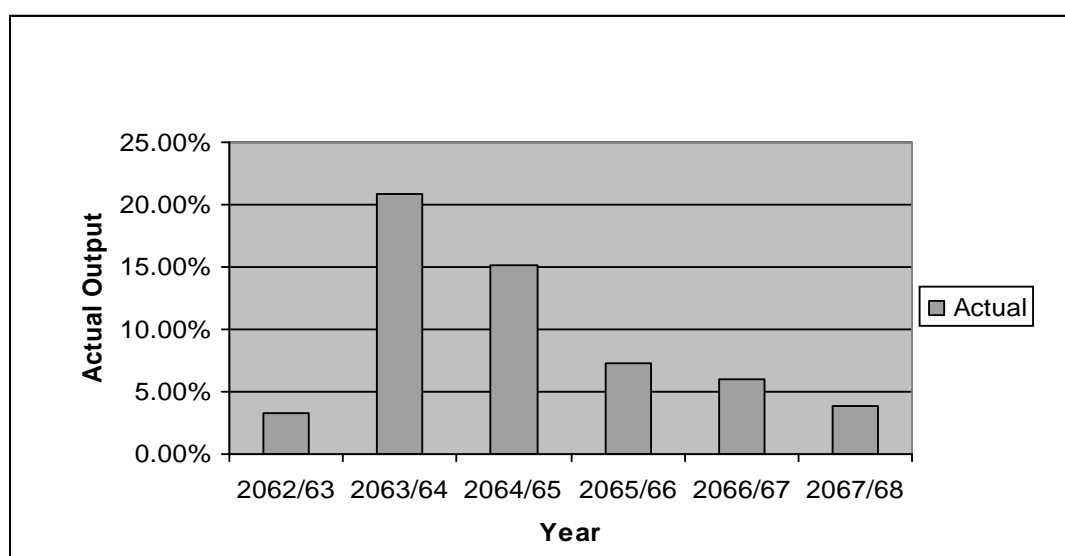
S10 measures the increasing in general member always depends up on the activity of institution financial position, goodwill of institution, programs, policy of institution and behavior and character of founder and operational committee. Institution should adopt the effective programs and show the good image in society in other to increase the membership in organization. The PEARLS standard suggests the growth rate must be above 12 percent.

**Table 4.6.8 Growth in General Member**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a. General Member as of current year end	822	993	1144	1228	1302	1352
b. General Member as of last year end	796	822	993	1144	1228	1302
S10	3.27%	20.8%	15.21%	7.34%	6.03%	3.80%
Standard	Grater Than 12%					

Sources: Annual Report of NSCC

**Figure 4.6.8 Growth in General Member**



Growth in membership is 3.27%, 20.08%, 15.21%, 7.34%, 6.03% and 3.80% in financial year 2062/63 to 2067/68 respectively. The rate is decreasing trend without first financial year. The ratio is less than standard rate. But in financial year 2063/64 and 2064/65 it is more than standard rate.

#### 4.6.9 Growth in Total Assets (S11)

Measurement of total assets is very much essential and important work of management is which depends most of the PEARLS ratios. Growth and declining rate of assets directly impact the other ratios. Increasing in assets is the fundamental objectives of institution. But management must think over the increasing of qualitative assets shows the real value of assets, save from the problem of overstatement and understatement of assets and inflation.

**Table 4.6.9 Growth in Total Assets (10000)**

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a. Total Assets as of Current year end	9978.48	12,697.8	13,150.12	17530.55	15583.73	15934.75
b. Total Assets as of Last year end	8020.53	9978.48	12,697.8	13,150.12	17530.55	15583.89
S11	24.41%	27.25%	3.56%	33.31%	(11.11%)	2.20%
Standard	Grater Than Inflation					

Sources: Annual Report of NSCC

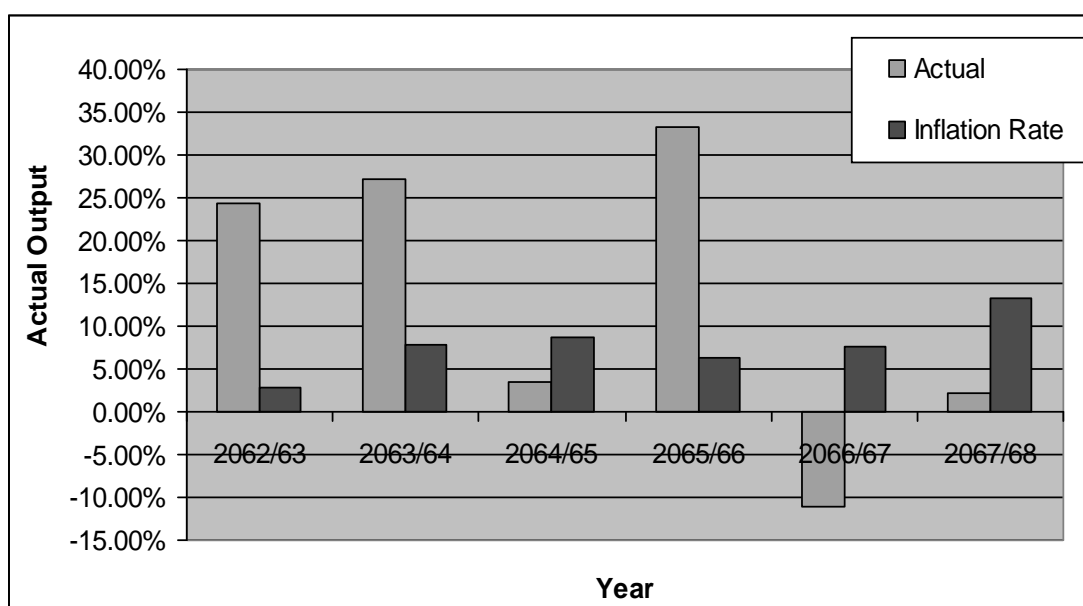
#### Inflation Rate

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
Inflation Rate	2.9%	7.8%	8.6%	6.4%	7.7%	13.2%

[www.indexmundi.com/g/g.asp](http://www.indexmundi.com/g/g.asp)



**Figure 4.6.9 Growth in Total Assets**



The growth rate of total assets is 24.41%, 27.25%, 3.65%, 33.31% and (11.11%) in financial year 2062/63 to 2066/67 respectively. The growth rate is higher than inflation rate in financial year 2062/63, 2063/64 and 2065/66 but it is negative also in financial year 2066/67. In financial year 2064/65 the growth rate is less than inflation rate.

### **Major Findings**

1. According to the PEARLS standard provision for delinquent loan above 12 months must be 100 percent but the provision of delinquent loan of NSCC is made very low. Delinquent loan is higher than provision. There is not sufficient loan provision.
2. P6 measures the solvency position of institution. According to the PEARLS standards the ratio of solvency position of institution must be greater than 100 percent but the solvency ratio of NSCC found below the PEARLS standards during the study period. Low solvency position shows that the real value of 1 rupee worth of institution is less than that.

3. The ratio of net loan is under the PEARLS standard. The ratio is very less in financial year 2965/66 to 2067/68
4. Liquid investment ratio is within the PEARLS standard but in 2066/67 financial year it is seen very low.
5. Financial investment ratio seen very higher than the standard rate. It is seen as increasing trend. Lower ratio is 11.57% in financial year 2062/63 and higher is 37.12% in financial year 2066/67.
6. Saving deposit seen very low in financial year 2067/68. but the ratio is within the PEARLS standard rate of financial year 2063/64 and 2064/65.
7. Member share capital is seen as increasing trend. It is very high in financial year 2067/68.
8. Institutional capital to total assets seen lower than the standard rate. It is very lower in financial year 2063/64, 2064/65 and 2065/66 than the PEARLS standard. Ratios are near the standard rate in last two year.
9. Net institutional capital is also very lower in every financial year than the standard rate. The higher ratio is 5.03 percent in last financial year. The ratio is increasing all the year.
10. Loan delinquency is within the PEARLS standard. All the delinquency is between 5% highest ratio is 2.36% in financial year 2065/66 and lower ratio is 1.3 percent in financial year 2066/67.
11. Non earning assets to total asset is higher in financial year 2062/63 to 2064/65 respectively but remaining last year it is with in the PEARLS standard rate.
12. Net zero cost fund to non earning asset is very lower than the PEARLS standard. The standard rate is greater than 200 percent but the actual

output ratio is only 10.14%, 18.5%, 44.8%, 67.87%, 124.99% and 215.62% in financial year 2062/63 to 2067/68 respectively.

13. Net loan income to loan portfolio seen 21.77%, 18.38%, 16.71% and 17.8% in financial year 2062/63 to 2066/67 respectively. The higher rate is 21.77 percent in financial year 2062/63 and lower is 16.71 percent in financial year 2065/66.

14. Liquid investment income found 0.41%, 0.22%, 0.20%, 6.73%, 6.19% and 4.27% in the financial year 2062/63 to 2067/68. The ratio is very low in previous three years.

15. Financial investment income ratio found very low during the study period. All ratio is less than 1 percent.

16. Total interest cost on saving deposit found 10.4%, 10.08%, 10.01%, 9.08%, 9.6% and 10.67% for the financial year 2062/63 to 2067/68 respectively. The ratio is seen decreasing trend.

17. Dividend cost seen 11.01%, 6.96% and 7.23% for the previous three years. There is not dividend cost on last three years. The higher dividend cost is 11.01% in financial year 2062/63.

18. Total gross income margin is 6.61%, 3.08%, 1.15%, 3.88%, 3.6 and 3.27% in the financial year 2062/63 to 2067/68 respectively. There is not seen good position in generating income. It is in fluctuation trend.

19. Total operating ratio is less than the PEARLS standard rate. Standard rate is 5% but the actual operating cost rate is not more than 1.5 percent in all financial year.

20. Loan loss provision expense is very lower than the delinquent loans. There is no sufficient provision on delinquent loan.

21. Net income to total asset ratio seen 5.33%, 1.82%, 0.21%, 2.74%, 2.38% and 2.41% for the financial year 2062/63 to 2067/68 respectively. There is not found of good position of income. The higher rate is 5.33 percent in financial year 2062/63 and lower ratio is only 0.21 percent in financial year 2064/65.
22. According to the PEARLS standard the ratio of L1 must be minimum 15% but the ratio found 35.36%, 29.77%, 24.17%, 9.49%, 11.37% and 24.87% in financial year 2062/63 to 2067/68 respectively. The higher ratio is 35.36 percent and lower rate is 9.49 percent. But the ratio in last 2 financial years is lower than the standard rate.
23. The liquidity reserve of organization seen 22.58%, 23.88%, 18.92%, 14.04%, 7.5% and 21.69% in financial year 2062/63 to 2067/68 but the standard rate is 10 percent. The ratio is less than standard rate in 2066/67 and it is very high in financial year 2063/64.
24. Non earning liquid assets seen around the standard rate. But it is little more than the standard rate in financial year 2065/66 and 2066/67 respectively.
25. The growth position of loan portfolio seen 0.08%, 19.62%, 2.02%, 14.71% and (3.4%) and (4.16%) in financial year 2062/63 to 2067/68 respectively. The ratio is not constant. It is fluctuation trend and negative also.
26. Growth in liquid investment is 59,74%, 54.33%, (22.46%), (25.15%), (59.21%) and 277.20% in financial year 2062/63 to 2067/68 respectively. It is negative and highly fluctuation trend in last three financial years.

27. Growth in financial investment ratio found 0%, 92.65%, 32.89%, 124.28% (12.9%) and 9% in financial year 2062/63 to 2067/68 respectively. The ratio seen highly fluctuation and it is negative also.
28. Growth in saving deposit also seen highly fluctuation trend and negative also. The higher growth is 38.33% in financial year 2063/64 and it is negative is in 2066/67.
29. Member share capital found 220.1%, 25.1%, 0.052%, 107.35%, 0.21% and 2.66% in financial year 2062/63 to 2067/68 respectively. The ratio is seen highly fluctuation.
30. Growth in institutional capital seen 2.54%, (28.73%), 4.17%, 64.33%, 35.12% and 13% in financial year 2062/63 to 2067/68 respectively. The ratio seen highly fluctuation trend and it is seen negative also.
31. Net institutional capital found (53.8%), 36.38%, 133.52%, 39.37%, 70.96% 22.87% in financial year 2062/63 to 2067/68 respectively. The ratio seen highly fluctuation trend and negative.
32. Growth in membership found 3.27%, 20.8%, 15.21%, 7.34%, 6.03% and 3.80% in financial year 2062/63 to 2067/68 respectively.
33. Growth in total assets found 24.41%, 27.25%, 3.56%, 33.31%, (11.11%) and 2.20% in financial year 2062/63 to 2067/68 respectively. The ratio seen highly fluctuation trend but all the growth rate of assets is higher that the inflation rate except financial year 2066/67.

## **CHAPTER V**

### **SUMMARY, CONCLUSION AND RECOMMENDATION**

#### **5.1 Summary**

Co-operative refers to the working together for the fulfillment of the member common economic and social goals. Democratic control, one member one vote, each for all and all for each, voluntary service, freedom to involve and out are the main characters of cooperative organization.

To achieve the goal of cooperatives, proper financial transaction analysis is essential to smoothly run and evaluate the performance. Very financial analytical tools are developed worldwide famous tools like CAMELS, CARSEL and PEARLS. This study concerned with the financial performance of Namuna Saving and Credit Cooperative Limited. The main objective of the study is to know the financial performance within the framework of PEARLS designed by World Council of Credit Union. The problem and objectives are raised in first chapter. Six set of problem and objectives raised in this study.

The study includes the concept of microfinance, meaning and definition of cooperatives, global prospects of cooperative, cooperative creates and maintain employment, statistical information on the cooperative movement, principles of cooperative, history and development of cooperative in Nepal, major events of cooperative movement of Nepal, conceptual framework similarly, prescription of PEARLS framework, objectives of PEARLS, NRB guidelines, review of related study and research gap are included as literature review in this study.

This study is based on secondary financial data of NSCC. The study is descriptive and analytical nature. PEARLS is the tool that guides the cooperative to perform their financial work under the PEARLS ratio. Out of 44 ratios only 33 ratios has been work out due to data availability. Data presentation and analysis provides the facts and figure of financial activities of

institution. The table and figure of most of the ratio and trend has been also presented in this study. All the findings have been summarized in last part of analytical section.

## 5.2 Conclusion

- ) Institution has not made sufficient provision for delinquent loan. According to the PEARLS standard Provision must be make 100 percent of delinquent loan more than 12 months but it is not found that. The solvency position is not good. It is below the PEARLS standard rate and fluctuation trend. The worth of one rupee is less than that.
- ) The ratio of net loan investment to total assets (E1) is under the standard rate. Liquid investment ratio (E2) is within the standard rate. Financial investment to total assets (E3) more than standard rate it is increasing trend it means cash invest on long term sources is high, Saving deposit to total assets (E5) is good but little below the standard rate. Member share capital to total assets (E7) seen near the PEARLS standard. Institutional capital (E8) and Net institutional capital (E9) is less than PEARLS standard.
- ) Total loan delinquency to gross loan portfolio (A1) is within the standard rate which means there is low in loan delinquency on the base of loan portfolio. Non earning assets to total assets (A2) also within the standard rate it means the institution has maintain the assets quality and Net zero cost fund to non earning assets is under the standard rate except last financial year.
- ) Net loan income to loan portfolio (R1) seen greater than the standard rate well position. Liquid investment income (R2), Financial investment income (R3) very low during the study period. All the ratio is less than 1 percent. The income position of organization in not good. Interest cost on saving deposit (R5) seen decreasing trend. Dividend cost (R7) seen higher in first three years but there is no dividend cost on last three

years. Total gross income margin seen very low, there is not seen good position in generating income. It is fluctuating trend. Total Operating ratio is less than the PEARLS standard rate but institution is able to control the operating cost. Net income to total assets ratio is fluctuation trend.

) According to the PEARLS standard the ratio of L1 must be minimum 15% but the ratio is more the standard. The liquidity position found good during the study period. The institution has sufficient liquidity reserve for the deposit withdrawals. All the ratios are around the PEARLS standard. The reserve position is seen good in organization.

) Growth in loan to member (S1), growth in saving deposit (S5), growth in share capital (S7) seen highly fluctuation in aggregation. Liquid investment seen negative during the last three years. Institutional capital and net institutional capital seen highly fluctuation. The output ratio is unreliable trend. Growth in member share capital S10 and growth in total assets found normal during the study period except last financial year.

### **5.3 Recommendation**

) Institution is suggested to make the sufficient provision to protect the delinquent loan. Institution should run the effective loan providing program to decrease the delinquent loan. Solvency position is getting quite low than WOCCU standard. Increase in the net value of asset with decreasing risk assets. Effectives penalty, rule and regulation and their implementation must be perform in other to getting higher solvency position.

) The financial structure of net loan to total assets is less than the standard rate, liquid investment to total assets found satisfactory but the financial structure of financial investment to total assets is more than the standard rate, The structure of saving deposit to total assets is most important for



other financial structure which is basic structure. The actual structure found quit below than the range of WOCCU model. Member share capital to total assets is near the standard rate. Institutional capital to total assets and net institutional capital to total assets found lower than the WOCCU standard. Therefore the institution is suggested to increase institutional capital and net institutional capital with high implementation of effective marketing policy and programs built the active role in institution to increase saving deposit choose the high return investment portfolio, decreasing the unnecessary expenses and losses. Therefore the institution is suggested to run the effective marketing programs to increase them.

) Total loan delinquency to gross loan portfolio is within the PEARLS standard but it has not sufficient provision to protect the delinquent loan. Institution is suggested to make sufficient provision to protect the loan. Non earning assets to total assets is more than the standard in initial year but within the standard rate in remaining year. The ratio of net zero cost fund to non earning assets is found lower than standard rate, so institution is suggested use of necessary expenses only on non earning assets it try to increase zero cost fund with make the institution well known in the market with conducting effective programs and policy and should decrease the non earning assets. Organization is suggested to invest the fund on higher productive sector.

) Net Loan income to average net loan portfolio seen higher than the standard rate. Liquid investment income, financial investment income, gross income margin, net income to total assets seen very low than the standard rate. There is not seen good position in generating income, it is fluctuating trend because of office and administrative cost seen high. Interest cost on saving deposit is decreasing trend. Total operating ratio is less than the PEARLS standard but institution is able to control the

operating cost. Therefore, institution should reduce cost and non earning assets and use the zero cost funds.

) Liquidity position found satisfactory but which is more than the standard. Liquidity reserve to saving deposit also seen higher than the standard. It means Institution has huge unused liquid assets. Institution is recommended to reduce the non earning liquid assets. The reserve must be reduced to standard rate. Institution should cash and bank reserve on higher productive sector. Organization should seek the higher income generating investment sectors.

) Growth Position of all ratios are unsuitable fluctuation trend which is not good for the institution. It is recommended to make the suitable stability on growth. Organization is recommended to employ their effort to increase the saving deposit as well as invest it in higher productive and tax free sectors in order to generate the high profit. High profit generating makes increasing of member share capital, institutional capital and net institutional capital and total assets at end.

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## APPENDIX – I

### 1. Protection (P)

#### 1.1 Allowances for Loan Losses to Allowances Required for Loans Delinquent More Than 12 Months (P<sub>1</sub>) (10000)

$$P_1 = a/b$$

Where:

a = Allowances for Loan Loss (Provision)

b = Loan Balance of All Loan Delinquent more than 12 Months

Therefore,

$$P_1 \text{ for the } 2062/63 = 69.19/116.23$$

$$= 59.53\%$$

#### 1.2. Solvency (P<sub>6</sub>)

(10000)

year	20	2	20	20	2	20
a. Total asset	9978.45	12697.8	13150.12	17530.55	15583.70	15934.75
b. Allowances for risk asset	69.19	115.34	141.86	141.86	29.96	38.67
c. Delinquent loans > 12 month	116.23	166.53	184.74	196.93	112.63	121.30
d. Delinquent loan 1-12 month						
e. Total liabilities	9978.45	12697.8	13150.12	17530.55	15583.70	15934.75
f. Problem of assets	0	0	0	0	0	0
g. Total savings	6553.63	9066.1	9352.73	10291.66	9087.85	9179.86
h. Total shares	1876.35	2345.56	2346.77	4870.77	4880.94	5011.21

Source: Annual Report of NSCC

$$P_6 = \frac{(a+b)-(c+0.35(d)+e+f-g)}{(g+h)}$$

Where:

a= Total assets

b= Allowances for Risk Assets (Provision)

c= Delinquent Loans Greater than 12 months

d= Delinquent Loans 1-12 Months

e= Total Liabilities

f= Problem of Assets

g= Total Savings (Deposit)

h= Total Shares (Paid up Capital)

Therefore,

$$P_6 \text{ For } 2062/2063 = \frac{(9978.45+69.19)-(116.23+ 0.35(0) + 9978.45+0 - 6553.63)}{(6553.63+1876.35)}$$
$$= 77.18\%$$

## APPENDIX II

### 2. Effective Financial Structure (E)

#### 2.1. Net Loan to Total Assets (E<sub>1</sub>) (10000)

$$E_1 = (a-b)/c$$

Therefore, E<sub>1</sub> for 2062/63

$$= (6411.77 - 69.22) / 9978.48$$

Loan)

$$= 63.56\%$$

Where;

a = Total Gross Loan (Investment in

b = Total Allowances for Loan Losses  
(Loan Loss Fund)

c = Total Assets

#### 2.2. Liquid Investment to Total Assets (E<sub>2</sub>) (10000)

$$= a/b$$

Therefore, E<sub>2</sub> for 2062/63

$$= 1392.90 / 9978.45$$

$$= 13.96\%$$

Where;

a = Liquid Investment (Bank)

b = Total Assets

#### 2.3. Financial Investment to Total Assets (E<sub>3</sub>) (10000)

$$= a/b$$

Therefore, E<sub>3</sub> for 2062/63

$$= 1154.85 / 9978.45$$

$$= 11.57\%$$

Where;

a = Financial Investment (Investment on Share)

b = Total Assets

#### 2.4. Saving Deposit to Total Assets (E<sub>5</sub>) (10000)

$$= a/b$$

Therefore, E<sub>5</sub> for 2062/63

$$= 6553.65 / 9978.45$$

$$= 65.68\%$$

Where;

a = Saving Deposit (Deposit)

b = Total Asset

**2.5. Member Share Capital to Total Asset (E<sub>7</sub>) (10000)**

$$E_7 = a/b$$

Therefore, E<sub>7</sub> for 2062/63

$$= 1876.35/9978.45$$

$$= 18.8\%$$

Where;

a = Member Share Capital (Paid up Capital)

b = Total Asset

**2.6. Institutional Capital to Total Assets (E<sub>8</sub>) (10000)**

$$= a/b$$

Therefore, E<sub>8</sub> for 2062/63

$$= 765.73/ 9978.45$$

$$= 7.67\%$$

Where;

a = Institutional Capital (Reserve Fund & Net Profit)

b = Total Assets

**2.7. Net Institutional Capital to Total Asset (E<sub>9</sub>) (10000)**

$$= a/b$$

Therefore E<sub>9</sub> for 2062/63

$$= 103.32/9978.45$$

$$= 1.04\%$$

Where;

a = Net Institutional Capital

b = Total Assets

**Net Institutional Capital (10000)**

Year	2062/063	2063/2064	2064/2065	2065/066	2066/067	2067/68
c. Institutional capital(Reserve fund)	150.36	192.1	371.94	513.67	867.53	1046.11
d. Allowances for risk assets	69.19	115.34	141.86	141.86	29.16	38.67
e. Outstanding loan delinquent > 1 year	116.23	166.53	184.74	196.93	112.63	121.34
f. Outstanding loan delinquent < 1 year	0	0	0	0	0	0
Net institutional capital(a)	103.32	140.91	329.06	458.8	784.06	963.44

Source: Annual Report of NSCC

$$\text{Net Institutional Capital (a)} = (c + d) - (e + 0.35 f)$$

Where;

a = Net Institutional Capital

b = Total Assets

c = Institutional Capital (Reserve Fund)

d = Allowances for Risk Assets (Provision)

e = Outstanding Loan Delinquent Loan > 12 Month

f = Outstanding Loan Delinquent Loan < 12 Month



## APPENDIX III

### 3. Asset Quality

#### 3.1. Total Delinquent Loan to Gross Loan Portfolio ( $A_1$ ) (10000)

$$A_1 = a/b$$

Therefore,  $A_1$  for 2062/63

$$= 116.23/6411.77$$

$$= 1.81\%$$

Where;

a = Total Delinquent Loan

b = Gross Loan Portfolio  
(Investment on Loan)

#### 3.2 Non Earning Assets to Total Assets ( $A_2$ ) (10000)

$$A_2 = a/b$$

Therefore,  $A_2$  for 2062/63

$$= 1018.98/9978.45$$

$$= 10.21\%$$

Where:

a = Non Earning Assets

b = Total Assets

Non Earning Assets (a) = (c + d + e + f + g + h)

Where; c = Cash on Hand

d = Non Interest Bearing Monetary Checking Account

e = Account Receivable (Other Assets)

f = Assets in Liquidation

g = Fixed Assets

h = Prepaid Expenses and Other Deferrals

#### Statement of Non Earning Assets (10000)

Year	2062/2063	2063/2064	2064/2065	2065/2066	2066/2067	2067/68
<b>c.</b> Cash in hand	86.67	15.71	102.62	197.33	171.51	71.38
<b>d.</b> Total non interest bearing monetary checking account	0	0	0	0	0	0
<b>e.</b> Account receivable(Other assets)-	894.80	591.09	558.42	440.00	416.41	317.084
<b>f.</b> Assets in liquidation	0	0	0	0	0	0
<b>g.</b> Fixed Assets	37.51	46.66	40.72	38.41	39.47	58.346
<b>h.</b> Prepaid expenses	0	0	0	0	0	0
Total non earning Assets	1018.98	653.46	701.76	675.74	627.38	446.81

Sources: Annual Report of NSCC

### 3.3 Net Zero Cost Fund to Total Non Earning Assets Ratio (A<sub>3</sub>) (10000)

$$A_3 = a/b$$

$$\text{Net Zero Cost Fund (a)} = (c + d + e)$$

Where:

a = Net Zero Cost Fund  
b = Total Non Earning Assets

Where:

c = Total Net Institutional Capital  
d = Total Transitory Capital  
e = Total Non Interest Bearing Liabilities

#### Statement of Net Zero Cost Fund (10000)

Year	2062/2063	2063/2064	2064/2065	2065/2066	2066/2067	2067/68
<b>c.</b> Net institutional capital	103.32	140.91	329.06	458.6	784.01	963.44
<b>d.</b> Total transitory capital	0	0	0	0	0	0
<b>e.</b> Total non interest bearing liabilities	0	0	0	0	0	0
Net zero cost fund	103.32	140.91	329.06	458.6	784.01	963.44
Total non earning assets	1018.98	653.46	701.75	675.74	627.38	446.81

Sources: Annual Report of NSCC

## APPENDIX IV

### 4. Rates of Return and Cost

#### 4.1 Net Loan Income to Average Net Loan Portfolio (R<sub>1</sub>) (10000)

$$R_1 = a / (b + c)/2$$

$$R_1 \text{ for } 2062/63 = 1383.36 / (6342.57 + 6367.03) / 2$$

$$= 21.77\%$$

Where;

a = Net Loan Income

b = Current Year Net Loan Portfolio (Gross Loan Portfolio – Loan Loss Fund)

c = Last Year Net Loan Portfolio (Gross Loan Portfolio – Loan Loss Fund)

#### 4.2 Total Liquid Investment Income to Average Liquid Investment (R<sub>2</sub>) (10000)

$$R_2 = a/(b + c)/2$$

$$R_2 \text{ for } 2062/63 = 4.61 / (1392.89 + 871.96) / 2$$

$$= 0.41\%$$

Where;

a = Total Liquid Investment (Bank Interest Received)

b = Liquid Investment Current Year End (Bank Deposit)

c = Liquid Investment Last Year End

#### 4.3. Total Financial Investment Income to Average Financial Investment (R<sub>3</sub>) (10000)

$$R_3 = a/(b + c)/2$$

$$R_3 \text{ for } 2062/63 = 2.340 / (1154.85 + 1) / 2$$

$$= 0.41\%$$

Where;

a = Total Financial Investment Income

b = Financial Investment Current Year End  
(Investment on Share)

c = Financial Investment Last Year End

#### 4.4. Total Interest Cost on Saving Deposit to Average Saving Deposit (R<sub>5</sub>) (10000)

$$R_5 = (a + b + c) / (d + e) / 2$$

$$R_5 \text{ for } 2062/63 = (661.61 + 0 + 0) / (6553.65 + 6167.1) / 2$$

$$= 10.4\%$$

Where;

a = Total Interest Paid on Saving Deposit

b = Total Insurance Premium on Saving Deposit

c = Total Tax Paid on Saving Deposit

d = Total Saving Deposit as of Current Year End

e = Total Saving Deposit as of Last Year End

**4.5 Total Interest (Dividend) Cost on Share to Average Member Share (R<sub>7</sub>)  
(10000)**

$$R_7 = \frac{(a + b + c)}{(d + e)/2}$$

Where;

a = Total Dividend Paid on Member Share

b = Tax Paid on Dividend of Share

c = Total Insurance Premium Paid on Member Share Capital

d = Member Share Capital as of Current year End (Paid up Capital)

e = Member Share Capital as of Last Year End (Paid up Capital)

$$R_7 \text{ for the } 2062/63 = \frac{(135.46 + 0 + 0)}{(1876.35 + 584.64) / 2}$$

11.01%

#### 4.6 Gross Income Margin to Total Asset (R<sub>8</sub>)

(10000)

Year	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68
a. Loan interest income	1383.6	1277.22	1278.08	1379.67	1455.1	1438.34
b. Liquid inv. Income	4.61	3.89	3.73	98.09	54.34	51.86
c. Financial investment income	1.5	00	9.15	7.5	16.05	0
d. Non financial investment income	0.00	0.00	0.00	0.00	0.00	0
e. Other income	2.28	2.13	1.5	1.034	0.705	.3935
f. Interest cost on saving deposit	661.61	787.06	930.81	891.52	930.07	974.67
g. Dividend cost on member share capital	135.46	146.87	169.61	00	00	0
h. Interest cost on borrowed funds	0.00	0.00	0.00	0.00	0.00	0
i. Total asset of current year end	9978.48	12,697.8	13,150.12	17530.55	15583.73	15934.75
j. Total asset of last year end		9978.48	12,697.8	13,150.12	17530.55	15583.73

Source: Annual report of NSCC and Researcher's Calculation

$$R_8 = [(a + b + c + d + e) - (f + g + h)] / [(i + j) / 2]$$

$$R_8 \text{ for } 2062/63 = \frac{[(1383.6 + 4.61 + 1.5 + 0.0 + 2.28) - (661.61 + 135.46 + 0.0)]}{[(9978.48 + 8020.53) / 2]}$$

$$= 6.61\%$$

Where;

- a = Loan Interest Income (Interest Income from Loan Portfolio)
- b = Liquid Investment Income (Interest Income from Bank)
- c = Financial Investment Income
- d = Non Financial Investment Income
- e = Other Income
- f = Interest Cost on Saving Deposit
- g = Dividend Cost of Member Share Capital
- h = Interest Cost on Borrowed Funds
- i = Total Asset of Current Year End
- j = Total Asset of Last Year End

#### 4.7 Total Operating Expenses to Average Total Assets (R<sub>9</sub>)

##### Statement of Operating Expenses (10000)

Year	2062/2063	2063/2064	2064/2065	2065/2066	2066/2067	2067/68
Salary expenses	57.75	76.43	93.6	101.23	103.53	113.23
Office expenses	31.88	39.42	41.52	56.35	70.76	77.009
Misc. expenses	16.37	18.93	13.36	2.57	3.71	4.8983
Total operating expenses	106.0	134.79	148.48	160.15	178.00	195.1373

Source: Annual Report of NSCC

$$R_9 = a/(b + c)/2$$

$$R_9 \text{ for } 2062/63 = 106.00 / (9978.45 + 8020.53) / 2$$

$$= 1.18\%$$

Where;

a = Total Operating Expenses

b = Total Assets as of Current

c = Total Assets as of Last Year

Year End

End

#### 4.8 Total Loan Loss Provision Expenses to Average Total Assets (R<sub>10</sub>) (10000)

$$R_{10} = a/ (b + c) / 2$$

$$R_{10} \text{ for } 2062/63 = 69.19/ (9978.45 + 8020.53) / 2$$

$$= 0.77\% \quad \text{Where;}$$

a = Total Loan Loss Provision Expenses (Loan Loss Fund)

b = Total Assets as of Current Year End

c = Total Assets as of Last Year End

#### 4.9 Net Income to Average Total Assets (R<sub>12</sub>)

##### Net Income Statement after Dividend (10000)

Year	2062/2063	2063/2064	2064/2065	2065/2066	2066/2067	2067/68
a) Net income	615.35	353.6	196.5	420.5	394.75	380.36
b) Dividend	135.36	146.87	169.61	000	000	0
Net income after dividend	479.89	206.73	26.89	420.5	394.75	380.36

Source: Annual Report of NSCC and Researcher's Calculation

$$R_{12} = a/(b + c)/2$$

$$R_{12} \text{ for } 2062/63 = 479.89/(9978.45 + 8020.53) / 2$$

$$= 5.33\% \quad \text{Where;}$$

a = Net Income

b = Total Assets as of Current Year End

c = Total Assets as of Last Year End

## APPENDIX V

### 5. Liquidity

#### 5.1 Short Term Investment+Liquid Assets+Short Term Payables to Saving Deposit (10000)

Where: Liquid Assets = (Bank + Cash + Other Assets)

$L_1$  for the 2062/63 =  $\frac{\text{Short term Investment+ Liquid Assets - Short Term Payable}}{\text{Saving Deposit}}$

$$\begin{aligned} &= \frac{(0+1479.56+894.8-57.04)}{6553.56} \\ &= 35.36\% \end{aligned}$$

#### 5.2 Liquidity Reserve to Saving Deposit ( $L_2$ ) (10000)

$$L_2 = (a + b)/c$$

$$L_2 \text{ for } 2062/63 = (1479.56) / 6553.65$$

$$= 22.58\%$$

Where;

a = Total Earning Liquid Reserve (Bank)

b = Total Non Earning Liquid Reserve (Cash)

c = Total Saving Deposit (Deposit)

#### 5.3 Non Earning Liquid Asset to Total Assets ( $L_3$ ) (10000)

$$L_3 = a/b$$

$$L_3 \text{ for } 2062/63 = 86.67/9978.45$$

$$= 0.87\%$$

Where:

a = Non Earning Liquid Assets (Cash)

b = Total Assets

## APPENDIX VI

### 6. Sign of Growth

#### 6.1 Growth in Loans to Member (S<sub>1</sub>)

$$S_1 = (a/b) 100-100$$

$$S_1 \text{ for } 2062/63 = (6411.77/6406.55) 100-100$$

Where;

a = Total Gross Loan as of current Year End (Investment on Loan)

b = Total Gross Loans as of Last Year End

$$= 0.08\%$$

#### 6.2 Growth in Liquid Investment (S<sub>2</sub>)

$$S_2 = (a/b) 100-100$$

$$S_2 \text{ for } 2062/63 = (1392.89/871.96) 100-100$$

$$= 59.74 \%$$

Where:

a = Total Liquid Investment as of Current Year End

b = Total Liquid Investment as of Last Year End (Bank)

#### 6.3 Growth in Financial Investment (S<sub>3</sub>)

$$S_3 = (a/b) 100-100$$

$$S_3 \text{ for } 2062/63 = (1154.85/1) 100-100$$

$$= 115385.0\%$$

$$= 0 \%$$

Where:

a = Financial Investment as of Current Year End

It is initial year it is not figure so 0 %

b = Financial Investment as of Last Year End (Investment on Share)

#### 6.4. Growth in Saving Deposit (S<sub>5</sub>)

$$S_5 = (a/b) 100-100$$

$$S_5 \text{ for } 2062/63 = (6553.63/6167.1)100-100$$

$$=6.26 \%$$



Where:

a = Saving Deposit as of Current Year End

b = Saving Deposit as of Last Year (Deposit)

### **6.5 Growth in Share Capital (S<sub>7</sub>)**

$$S_7 = (a/b) 100-100$$

$$S_7 \text{ for } 2062/63 = (1876.35/584.64)100-100$$

$$= 220.94\%$$

Where:

a = Total Share Capital as of Current Year End

b = Total Share Capital as of Last Year End (Paid up Capital)

### **6.6 Growth in Institutional Capital (S<sub>8</sub>)**

$$S_8 = (a/b) 100-100$$

$$S_8 \text{ for } 2062/63 = (765.73/746.73)100-100$$

$$= 2.54\%$$

Where:

a = Total Institutional Capital as of Current Year End (Reserve Fund)

b = Total Institutional Capital as of Last Year End (Reserve Fund)

### **6.7 Growth in Net Institutional Capital (S<sub>9</sub>)**

$$S_9 = (a/b) 100-100$$

$$S_9 \text{ for } 2062/63 = (103.32/223.66\%)100-100$$

$$= (53.81\%)$$

Where:

a = Total Net Institutional Capital as of Current Year End

b = Total Net Institutional Capital as of Last Year End

### **6.8 Growth in General Membership (S<sub>10</sub>)**

$$S_{10} = (a/b) 100-100$$

$$S_{10} \text{ for } 2062/63 = (822/796)100-100$$

$$= 3.20\%$$

Where:

a = General Membership as of Current Year End

b = General Membership as of Last Year End

### 6.9 Growth in Total Assets (S<sub>11</sub>)

$$S_{11} = (a/b) 100-100$$

$$S_{11} \text{ for } 2062/63 = (9978.48/8020.53)100-100$$

$$= 24.41\%$$

Where:

a = Total Assets as of Current Year End

b = Total Assets as of Last Year End

#### Inflation Rates

Year	2061/62	2062/63	2063/64	2064/65	2064/66	2067/68
Inflation Rate	2.9%	7.8%	8.6%	6.4%	7.7%	13.2%

<http://www.indexmundi.com/g/g.asp>

## APPENDIX VII

**Table: 2.5 PEARLS Monitoring System Key to PEARLS**

PEARLS		DESCRIPTION	GOALS
P = Protection	P1	Allowance for loan losses/Allowance required for loan delinquent > 12 months	100%
	P2	Net allowance for loan losses/Allowance required for loan delinquent < 12 months	35%
	P3	Total charge off of delinquent loans > 12 months	100%
	P5	Annual loan charge off	Minimum
	P4	Accumulated loan recoveries/Accumulated loan charge off	100%
	P6	Solvency	100%
E = Effective Financial Structure	E1	Net loan / Total assets	70%-80%
	E2	Liquid investment / Total assets	Max -20%
	E3	Financial investment / Total assets	Max -10%
	E4	Non financial investment / Total assets	0%
	E5	Saving deposit / Total assets	70%-80%
	E6	External credit / Total assets	Max-5%
	E7	Member share capital / Total assets	10%-20%
	E8	Institutional capital / Total assets	Min -10%
	E9	Non institutional capital / Total assets	Min -10%
A = Asset Quality	A1	Total loan delinquency/ Gross loan portfolio	5%
	A2	Non earning assets/ Total assets	5%
	A3	Net institutional & transitory capital + non interest-bearing liabilities/ Non earning assets	>200%
R = Rate of Return and	R1	Net loan income/ Average loan portfolio	Entrepreneurial rate
	R2	Total liquid investment income/ Average liquid investment	Market rate
	R3	Total financial investment income/ Average financial investments	Market rate
	R4	Total non financial investment income/	Greater than R1

		Average non financial investment	
	R5	Total interest cost on saving deposits/ Average saving deposit	Market rate > inflation rate
	R6	Total interest cost on external credit/ Average external credit	Market rates
	R7	Total interest (dividend) cost on share/ Average member shares	Market rates
	R8	Total gross margin income/Average total assets	Variables-linked to R9, R11 & R12
	R9	Total operating expenses/ Average total asset	5%
	R10	Total loan loss provision or expenses/ Average total asset	Dependent on delinquent loan
	R11	Non recurring income or expenses/ Average total assets	Minimum
	R12	Net income/ Average total assets	Linked to E9
Liquidity			
L=liquidity	L1	S.T. Investment + liquid assets- S.T. payable/ saving deposit	Min 15%
	L2	Liquidity reserve/ saving deposit	10%
	L3	Non earning liquid assets/ Total assets	<1%
Sign of growth			
S = Sign of Growth	S1	Growth in loan to member	Dependent on E1
	S2	Growth in liquid investment	Dependent on E2
	S3	Growth in financial investment	Dependent on E3
	S4	Growth in non financial investment	Dependent on E4
	S5	Growth in saving deposit	Dependent on E5
	S6	Growth in external credit	Dependent on E6
	S7	Growth in share capital	Dependent on E7
	S8	Growth in institutional capital	Dependent on E8
	S9	Growth in net institutional capital	Dependent on E9
	S10	Growth in membership	>12%
	S11	Growth in total asset	>Inflation

Source: World Council of Credit Union (WOCCU)