FINANCIAL PERFORMANCE ANALYSIS UNDER THE FRAMEWORK OF PEARLS OF JANASEWA SAVING AND CREDIT CO OPERATIVE LTD PURANCHOUR KASKI

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ABBREVIATIONS

BOD	Board of Director
B.S.	Bickram Sambat
CU	Credit Union
CAMEL	Capital Adequacy, Asset Quality, Management Quality, Earning, Liquidity and Sensitivity to Market
FY	Financial Year
ICA	International Co-operative Alliance
ILO	International Labor Organization
JSCCS	Janasewa Saving and Credit Co-operative Society
MFIs	Microfinance institutions
NRB	Nepal Rastra Bank
PEAF	Profitability, Efficiency and Productivity, Asset Quality, Financial Management
PEARLS	Protection, Effective Financial Structure, Asset Quality, Rate of Return and Cost, Liquidity and Sign of Growth
WOCCU	World Council of Credit Union

Chapter I

INTRODUCTION

1.1 Background of the Study

Co-operative is working together for the fulfillment of economic and social problems. In other words co operative is the get things doing by member themselves to resolve the economic problems. People need get solution in order to get satisfaction of problems. Human needs are unlimited, some need can fulfill by oneself but some need cannot fulfill without the participation of people. Transferring ideas, talking about the subject matter, observation in a group, work in group give new ideas, new way of doing things and new method to solve the problems which refers to the co-operation in general.

Co-operative is the form of business enterprise or community organization, incorporate service to its member and users, in order to meet their common economic needs and aspiration. Co operative is working 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 be directly responsible for benefiting themselves and the society in general. Therefore, a co-operative is an autonomous association of people united voluntary to meet their common economic, social and cultural needs and aspiration throughout a jointly owned and democratically controlled enterprise (International Cooperative Alliance [CIA], 1995).

Co-operative organization is developed to remove defect of capitalism, to lesser competence to prevent exploitation over people and to help the weak class people. It ideology is tried to use in different possible areas. In the beginning a success achieved as 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, housing and others. Due to its nature co operative with limited banking service, saving and co operative is also called credit union (CU) and recognized as micro finance institutions (MFIs).

The spirit of co-operative has been developed from ancient time "Robert Owen" from England is the founder of modern co-operatives. The group of 28 labores founded a consumer's co-operative society called "Rochdale Equitable Pioneers Society" on 24th 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).

In the frame of Nepal there is no long history about Co-operative but the activities in working system shows as a co-operation. The term in Nepali words of *'Parma'*, *'Dhikuti'*, *'Dharma Bhakari'and 'Guthi'* refer to the Co-operative activities. In 1956 A.D, the government 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. In liberalized financial environment, saving and credit co-operative grew like mushroom especially in urban and sub-urban areas of country (Baral 2006).

Janasewa Saving and Credit Co-operative society limited (JSCCS) is one of these co-operative. JSCCS is incorporated in Puranchour Kaski which is established in 2048 B.S. It celebrated 17th annual general meeting. The establishment of JSCCS is to enhance the economic and social status of its members by providing financial services. The mission

of JSCCS is to generate self employment by providing the financial services to the member for the establishment of the income generation business and motivating 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. In addition, MFIs also are using the PEARLS as a managerial tool to monitor and improve their performance. Each latter 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 (Richardson 2002).

1.2 Statement of the Problem

Proper financial transaction analysis is essential to smoothly run and evaluate the performance as well as enhancing the right financial decision of the financial institutions. Different financial analytical tools are developed to evaluate the performance of financial transaction worldwide. CAMELS, CARSEL and PEARLS are the worldwide famous tools to analyze financial ratios.

In other to achieve the co operatives goals and objectives co operative performance must be done with according to the co operative principles and act derived by world council of credit union (WOCCU). PEARLS is the best tool to check up and analysis the financial position derived by WOCCU. The major fundamental objective is to examine the financial performance of Janasewa Saving and Co-operative Society Ltd. in the framework of PEARLS. The specific problems of the study are:

a. What is the protection level of assets?
b. How effective is the financial structure?
c. What is the condition of assets quality?
d. What are the rate of return on various investments and cost on savings deposit?
e. What is the liquidity position?

f. What is the growth position in loan portfolio, liquid and financial investment, saving deposit, institutional capital, membership and total asset?

1.3 Objectives of the Study

This main objective of this study is to analyze the financial performance of JSCCS under the framework of PEARLS. The specific objectives are:

a. To evaluate the protection level of assets.
b. To analyze the effective financial structure.
c. To analyze the condition of asset quality.
d. To evaluate return on various investments and cost on saving deposit.
e. To find out the liquidity position and non earning assets.
f. To evaluate the growth in loan portfolio, liquid and financial investment, saving deposit, institutional capital, membership and total assets.

1.4 Significant of the Study

This study will more helpful to the management level of co operative organizations to make the plan and policy. 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 through PEARLS. PEARLS help the co operative member to make growth of their mutual benefits.

1.5 Delimitation of the Study

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

1. The study is mainly focus financial data analysis of Janasewa Saving and Credit Co-operative Puranchour V.D.C, word N. 8, Kaski, Nepal.

2. Due to the nature of study, the study is based mainly on secondary data.
3. As for as practicable all available resources are utilized for the study but the study covers especially financial information of the fiscal year 2061/2062 to 2065/2066 B.S.
4. Only the PEARLS analytical tools are used in this study.
5. 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 incorporates the conceptual review, meaning and definition of co-operative; principal of co-operative historical background, theoretical prescription of PEARLS framework.

The third chapter deals with research methodology. It includes research design, sources and procedure of data collection, data processing procedure, tools and techniques and limitation of the methodology.

The fourth chapter consist the presentation of relevant data and information. It includes the analyzing 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 for the improvement in future.

Chapter II

REVIEW OF LITERATURE

This chapter is basically concerned with review of relevant literature. It includes conceptual review, theoretical prescription of PEARLS framework and review of related studies.

2.1 Conceptual Review

2.1.1 Meaning and Definition of Co-operative

The term “Co-operative” is derived from the Latin words ‘Co’ means together and ‘Operai’ means to work. In ordinary sense co-operative means living, leaving, thinking and working together for the common goal and objectives. In a broader sense, it means self help, mutual help and assistance. The main philosophy of co-operation is “each for all and all for one”. Co-operation is associated with human being in every step of life. The term co-operative can be defined taking with it several meanings. This is why its meanings vary from person to persons. From sociological point of view, it is a socioeconomic movement and it is social order in which human is free from class struggle. From an economic point of view, with the help of co-operative as a form of business organization a middleman can get involved and make profit (Black, 1990)

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. 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 t'

resources, by making self help effective through mutual aid, by strengthening the bonds of moral solidarity between them (Shreebastav, 1970).

From the above discussion it is concluded that 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.

2.1.2 Global Prospects of Co-operative

At the beginning of 19th century, Robert owen came out the idea of co-operative, but it was practically developed by a group of Rochadole 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. Rochadale Principal of co-operative discussed in co-operative literature throughout 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 thruth is that the Rochadale Pioneeers Society achieved tremendous success and put economic and social life to Britain of the road of continuous progress.

In 1919, the first co-operative college in the world was established in Manchaster. 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 cooperative movement has been indicated in box 1 and box 2.

Box N. 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.
- ***(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).***

As the 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).

Similarly, in the yearly 1970s, World Council of Credit Union (WOCCU) was established. WOCCU has became 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. WOCCU has been using it worldwide to monitor the performance of CUs. The target goal, or standard of excellence for each indicator is put forth by the WOCCU based on its field experience working to strengthen and modernize credit unions and promote saving based growth (Evan, 1997).

2.1.3 Principles of Co-operative

All of the co-operative are guided by its principles. 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 which have commonly adopted all over the world *(http://www.ica.coop./coop/principles_revision).*

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-opertive identity, co-operatives work for the sustainable development of their common unities through policies approved by their members.

2.1.4 History and Development of Co-operative in Nepal

The world "Co operative" and its concept is not a new. Everyone has already familiar about its concept and principles. Self help, mutual help and co-operation are in practice among the people from the very ancient times. 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. *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 (Shrestha, 2008).

Dharma is another type of rural co-operative, which is the best example of voluntary co-operation of the *Thakali Society*. It is formed by a group of people with a specific

work. It is one of the important and popular forms of co-operation in Nepal. In this system, the members prepare the rules and regulation. Every member is required to contribute certain amount of capital towards its fund. The fund is to be contributed on the basis of financial requirement of the members.

Parma is still another type of traditional rural co-operative operation. Historically, it is the first form of co-operative in Nepal. It is a socioeconomic organization in which farmers, neighbors, friends and relatives work in co-operative operation to promote their economic and social interests (Shrestha, 2008).

In this way, the concept of co-operative in Nepal is not new one. It 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 the beginning, 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(Baral 2006).

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

Table 2.1: Major Events of Co-operative Movement in Nepal

Year	Movements
2010 B.S. 1953 A.D.	Establishment of co-operative decision under the ministry of plan development and agriculture.
2013 B.S.	Issue of executive order for the legal variety of co-operative society by the government.
1956 A.D.	Government incorporated Bakhan Saving and credit Co-operative ltd in Rapti Valley, Chitwan by issuing Executive order for its legal validity.
2018 B.S. 1961 A.D.	Issue of co-operative regulation 2018, first amendment of co-operative act 2016. Establishment of Co-operative development fund. Establishment of Sajha Sanstha ltd.
2019 B.S. 1962 A. D.	Establishment of Co-operative training centre, establishment of exchange, and loan association. Issue of co-operative Bank act 2019.
2020 B.S. 1963 A.D.	Establishment of co-operative bank. Co-operative Section had kept under the District Panchayat.
2021 B.S. 1964 A.D.	Being of Agriculture Reorganization Program. Division Staffs Transferred to Land Reform Program.
2023 B.S. 1966 A.D.	Co-operative Division had been transferred under the ministry of land reform Agriculture and Food.
2024 B.S. 1967 A.D.	Formation of Central Investigation Committee. Co-operative Bank transferred into Agriculture Development Bank.
2026 B.S. 1969 A.D.	Co-operative Division transferred under the Ministry of Land reform. Operation of Co-operative Agriculture Development. At first compulsory saving has converted in to Share of Co-operative Society, Bhaktapur. Co-operative Exchange and Loan Association changed

	into District Co-operative Association.
2027 B.S. 1970 A.D.	Second Amendment in Co-operative Act 2016. Arrangement of Central and District Co-operative Improvement Committee. The management of Co-operative Society has transferred to ADB/N.
2028 B.S. 1971 A.D.	First amendment in Co-operative regulation 2018.
2029 B.S. 1972 A.D.	Operational of regular Co-operative Education Program.
2033 B.S. 1976 A.D.	Beginning of population education through Co-operative. Occurrence of Central Sajha Development Committee. Second amendment on co-operative regualtio 2018. Compulsory saving converted into the share of sajha.
2034 B.S. 1977 A.D.	Fiscal Regulation 2034 issued for the Sajha Society management.
2035 B.S. 1978 A.D.	Management of co-operative Transferred to operating Committee from ADBN. Issue of fiscal and Administrative Regulation for Co-operative.
2041 B.S. 1984 A.D.	Sajha Society Act. 2041 was issued.
2043 B.S. 1986 A.D.	National Co-operative seminar conducted. Issue of Sajha Society Regulation 2043.
2044 B.S. 1987 A.D.	Members high level central coordination committee formed for the effective development of Sajha movement.
2045 B.S. 1988 A.D.	Announcement to return of compulsory saving to the savers.
2046 B.S. 1990 A.D.	Formation of Adhoc committee for the formation of central sajha society.
2047 B.S. 1991 A.D.	Formation of seven members central co-operative General Association Consulting committee.
2048 B.S.	Sajha Central office dissolved 11 Member National Co-operative

1991 A.D.	Development Board established. Sajha development transferred into co-operative department. Sajha Training centre transferred into Co-operative training centre.
2049 B.S. 1992 A.D.	Co-operative act 2048 issued. District Co-operation Committee and Co-operative Adhoc Committee formed.
2050 B.S. 1993 A.D	Co-operative society regulation 2049 issued. Formation of national co-operative federation. Establishment of National Saving and credit Co-operative Federation. Establishment of National Federation of Saving and Co-operative Union ltd. Consumer and saving and credit co-operative societies are established the large scale all over the country.
2052 B.S. 1995 A.D.	Formation of high level committee for co-operative improvement and proposal submitted.
2057 B.S. 2000 A.D.	Formation of the National Co-operative Department advisory Working Team and submission of report. The first amendment in the Section 26 of the co-operative act, 1992.
2058 B.S. 2001 A.D.	Announcement of observance of International Co-operative day by the government.
2060 B.S. 2003 A.D.	Establishment of National Co-operative Bank ltd.
2061 B.S. 2004 A.D.	National co-operative Federation of Nepal established "National Co-operative Development Fund, NCDF. Nepal Government constituted a high level Co-operative sector improvement consultative committee under governorship of the minister of Agriculture and Co-operatives submitted its reports to the government of Nepal. Ministry of finance constituted to study the legal framework and institutional development of the saving and credit co-operative society and National Co-operative Bank under the Governorship of then member of Ghanshyam Khatiwada submitted its report to the Ministry of finance. Government announced the policy of *Gaungaunma Shakari*

	Ghargharma Rojgari through its budget fiscal year 2061/2062.
2062 B.S. 2005 A.D.	Change the name of district co-operative office into division co-operative office. Establishment of Regional level Co-operative Training Office combining with Division Co-operative Office in Kailali, Surkhet and Chitwan.
2063 B.S. 2006 A.D.	Celebration of co-operative Golden Jubilee 2006/007 throughout the country.
2064 B.S. 2007 A.D.	Completion of co-operative Golden Jubilee 2006/007 with four special co-operative publications.
2008 A.D	National conference on cooperative policy organized by NCF.
2009 A.D.	Government of Nepal announced the policy "*Gaugauma Sahkari Ghargharma Bhakari*." (The cooperatives of village s brings food stocks into the villagers house)

Source: http://www.ncfnepal.com.np/historicalevents.html, National Cooperative Federation of Nepal, 2007

2.1.5 The situation of Banks and Financial institution in Nepal

With the introduction of liberalization and economic reform programs various banking and non banking financial institution have been established in Nepal. The trend of financial sector expansion has been continuing rapidly. As a result, financial sector is gradually becoming more intensified and consolidated. The number of commercial banks has been reached 25 (A class), development banks 61 (B class), finance companies 78 (C class) and micro finance institutions (MFIs) 13 (D class) by Mid April 2009. Likewise the number of authorized cooperatives for operating limited banking activities and non government organizations has reach 16 and 45 respectively. In addition to banks and financial institutions, there are 25 insurance companies, employee provident fund, citizen investment trust and postal saving banks serving by mid-April 2009 (Gurung, 2010).

Table 2.2: Number of Banks and Financial Institutions

Banks and Financial Institutions	Mid July 2006	Mid July 2007	Mid July 2008	Mid Apr 2009
Commercial Banks	18	20	25	25
Development Banks	29	38	58	61
Finance Companies	70	74	78	78
Microfinance Institutions	11	12	12	13
NRB Licensed Cooperatives (Limited Banking Transactions)	19	17	16	16
NRB licensed NGOs (Dealing in microfinance)	47	47	46	45
Insurance companies	NA	21	25	25
Employees Provident Fund	1	1	1	1
Citizen Investment Trust	1	1	1	1
Postal Saving Banks	1	1	1	1
Informal Financial Institutions	NA	NA	NA	NA

Source: Economic Survey, 2006/7 and 2008/9, (as cited in Gurung, 2010)

2.1.6 Micro-Finance Institutions

Micro-Finance encompasses the management of small amount of money through a range of products and a system of intermediary functions that circulates money in an economy. Micro finance is small in value amounts targeted at low income clients. It includes loans, savings, transfer services and other financial services. In Nepal, 5 Grameen Bikash Banks, 6 Grameed Bank Replicators and 2 institutions for wholesale lending, total 13 institutions, are operating as micro finance institutions. The total deposit and credit of wholesale lending micro finance companies stood Rs 1.09 billion and Rs. 5.83 billion respectively (Gurung, 2010).

2.1.7 NRB Licensed Cooperatives

Co operative have developed as alternative of usury. They are established by a group of economically wealthier people of the society under the Cooperatives Act 2048. They have the objectives to save rural and poor people from economic exploitation of

profit motive ventures. The number of NRB licensed cooperative reached 16 by April 2009. The total financial resources/ capital fund of these cooperatives was Rs.431.6 million by January 2009. Their combined deposits were Rs.3.17 billion, the credit and loans reached Rs.2.82 billion (Gurung, 2010) The saving and credit cooperatives licensed by district cooperative office and a glimpse of their activities are shown in table 2.3.

Table 2.3: Activities of Saving and Credit Cooperatives

Description	Mid July 2007	Mid April 2008
N. of Cooperatives	3,392	4,432
Members (in '000')	403	686
Savings (Rs. in millions)	89,630.0	15,730.6
Investment (Rs. in Millions)	15,098.0	19,959.0

Source: *Economic survey, 2008/09 (as cited in Gurung, 2010)*

Table: 2.4 Number of Co-operative in different fiscal year

A) Primary Level Year	2005/06	2006/07	2007/08	2008/9	2009/10
1. Multipurpose	2402	2532	2808	2978	NA
2. Savings and Credit	3241	3392	4432	5162	NA
3. Dairy	1564	1564	1561	1603	NA
4. Agricultural	1192	1218	1497	1736	NA
5. Small Farmers	213	215	245	273	NA
6. Coffee Producers	65	66	69	73	NA
7. Herbal Producers	24	24	33	38	NA
8. Tea Producers	22	22	39	48	NA
9.Vegetables and Fruits				123	NA
10. Bee Keeping				30	NA

11. Electricity	169	226	254	257	NA
12. Science and Technology	102	84	76	83	NA
13. Health	28	30	41	41	NA
14. Consumers	103	103	103	201	NA
15. Other	237	244	144		NA
Total	9,362	9,720	11,302	12,646	20,102
b) Secondary Level Unions	129	139	141	171	193
c) Tertiary Level Unions	3	5	7	8	10
d) National Cooperative Bank	1	1	1	1	1
e) National Cooperative Federation of Nepal	1	1	1	1	1

Source: (http: //www.ncfnepal.com.np/PDF/Types of Cooperatives at all levels.pdf)

The National Cooperative Federation of Nepal (NCF/N) established in June 20, 1993 under the Co-operative Act, 1992 is an apex body of the cooperative movement of all types and levels of cooperatives organized on the basis of universally accepted cooperative values and principles. As the national apex body of cooperatives of all types and levels, it on behalf of them represents in government, national and international forum.

NCF/N represents around 18,000 cooperatives operating throughout the country. Approximately 6 million individual members are involved in the different types of co-operatives for their economic, social and cultural development various activities *(http:// www.ncfnepal.com.np/index.html)*

2.2 Theoretical Prescription of PEARLS Framework

PEARLS stand for P- Protection, E- Effective financial structure, A- Asset quality, R-Rates of return and costs, L-liquidity and S-Sign of growth. Each letter has its own meaning. PEARLS is a financial performance monitoring system designed to offer

management guidance for Credit Unions and other Saving Institutions. It is a set of financial indicators and management tool that help to standardize terminology between the institutions. PEARLS is also a supervisory tool for regulators. It can be used to compare and rank institutions, it can provide comparisons among peer institutions in one country or across countries. The PEARLS system was originally designed and implemented with Guatemalan CUs in the late 1980s WOCCU has been using it worldwide to monitor the performance of CUs. PEARLS provides a systematic approach to develop strong modern CUs that balance the needs of services, borrowers, stakeholders and staffs. It has proved a key tool in achieving CUs growth and self sustainability. (Almeyada & Brian, 1998). The purpose for including a myriad of indicators is to illustrate how to change in one ration has ups hot for numerous other indicators. Each indicator has a prudential norm or associated goals. The target goals or standard excellence for each indicator is put forth by the WOCCU based on its field experience working to strengthen and modernized CUs and promote saving based growth. PEARLS provides MFIs managers with concise, easy to read reports that reveal institutional weakness and trends. It also offers a strategic business planning tools to help managers to implement change. PEARLS indicators shows the adequacy of CUs delinquent loans provision, how close CUs were to international CUs capital structure standards, the excess non performing assets, the income and cost yields, the management cash administration abilities and the growth in key operational areas (Evan & Branch, 2002).

The methodologies adopted by MFIs are based on the examiner's overall subjective judgment, which does not provide the comparative rankings to its objectivity. The objective indicators are included in the assessment for the ranking that facilities to rank the performance of MFIs by applying the PEARLS monitoring tools and techniques. PEARLS avoid subjective assessment and present objective reports to the MFIs that are substantiated by financial information taken from their balance sheets. The objective ranking system permits open discussion of problems with Board of Directors and management (Richardson, 2002).

The important realization from the use of PEARLS is the provision of framework for a management and supervisory tool that goes beyond the simple identification of problem. It identifies the weak capital base of MFI and its probable causes thereby giving the meaningful solution to serious institutional deficiencies by using the PEARLS monitoring system. Further, the use of standardize financial ratios under this system eliminates the diverse criteria used by the MFIs to evaluate their operation. National association can be use the financial ratios generated by PEARLS to conduct quarterly or monthly analysis of all key areas of MFI operations that determines the performance of MFI. These evaluations are invaluable for spotting trends and detecting areas of concern among the affiliates. Considering the assets growth of institutions is much horrible and one of the key strategies to address the problems that accompany monetary devaluation and runaway inflation. Financial institution has to sustain the aggressive growth to preserve the value of the assets in the hostile macro-economic environment. As it has been already referred each of the letter of PEARLS, the first and foremost is the evaluation of asset indicators to ensure that the financial institution provides depositors a safe place to save their money with the standard of excellence (Evan & Branch, 2005).

2.2.1 Objectives of PEARLS

The use of PEARLS evaluation system accomplishes the following objectives and the PEARLS monitoring goals are presented in the appendix.

a. Executive management tool

Monitoring the performance of the credit union, MFIs is the most important use of the PEARLS system. It is designed as a management tool that goes beyond the simple identification of problems. It helps managers find meaningful solutions to serious institutional deficiencies. Use of the system permits managers to make the necessary adjustments before problems become serious. In essence PEARLS is an “Early warning system” that generates invaluable management information.

b. Standardized Evaluation Ratios and Formulas

The use of standardized financial ratios and formulas eliminates the diverse criteria used by MFIs to evaluate their operations. It also creates a universal financial language that everyone can speak and understand.

c. Comparative Rankings

The combined use of the standardized accounting system and the PEARLS performance indicators produce a completely new type of information: comparative rankings of the MFIs. The standardization of financial information eliminates the diversity and provides an effective tool for comparing MFIs performance on a national basis.

d. Facilitates Supervisory Control

In addition to its usefulness as a management tool, the PEARLS system provides the framework for a monitoring authority. Monitoring authority can use the financial ratios generated by PEARLS to conduct quarterly or monthly analyses of all key areas of MFIs operation. These evaluations are invaluable for the spotting trends and detecting areas of concern among the affiliates

2.2.2 PEARLS Performance on Financial Activities

a. Protection (P)

Protection is a one of the very important tool to monitor the financial performance of MFIs which saves the money of member client. The member client can borrow the money only after being the member of co-operatives so every client is member and every member is client of co-operative. 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: 2.5 NRB Guidelines for Protection of assets (Loan Loss Provision)

Classification of Loans	Time period	Loan loss Provision (%)
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

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. The research is done with the help of sufficient available data provided by JSCCS.

b. Effective Financial Structure (E)

The financial structure means composition of different sources of resources. 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. MFIs 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)

Quality of assets 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 earnings ratio and financing of non earning asset (Richardson, 2002). Delinquency ratio measures the delinquency rate of the total loan portfolio. This ratio should not exceed 5 percent of the total gross loan portfolio. MFIs should finance 100 percent of non earning asset with zero cost funds to do away the negative effect on profitability.

d. Rate of return and cost (R)

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, cost of member share capital. They are also compared with the market rates (Baral, 2006, 50).

e. Liquidity (L)

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. 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. According to the WOCCU model, MFIs should maintain 10 percent, liquidity reserve of the saving deposit and have non earning assets less than 1 percent of total assets.

f. Sign of growth

PEARLS system links the growth to profitability and other key areas. The key areas are total assets, loan, 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. Growth in saving deposit affects the growth in loan portfolio and total assets but high growth in saving deposit may creates the burdensome if MFIs is not able to mobilize the deposit to portfolio investment. Growth in institutional capital reflects the profitability of MFIs.

2.3 Review of Related Study

Various studies have been carried out regarding the evaluation of co-operative societies and MFIs. Societies some of the leading and available studies will be reviewed in the study. Study concerns the financial analysis of CON Community saving and credit Cooperative Society Limited the framework of PEARLS. There has

been no study particularly regarding in this topic, but there are some researchers and articles on PEARLS on financial analysis and the analysis of Co-operatives and MFIs.

Baral(2006) has conducted the study on "Financial Health Check up of Pokhara Royal Co-operative Society Limited (PRCSL) in the Framework of PEARLS". His finding were; 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.

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 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.

Lamichane (2004) has conducted a research on Financial Performance Analysis of friendship and Economic Community Saving and Loan Co-operative Society ltd. for the five years period starting from FY 2053/2054 to 2057/2058. He has used 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.

Sharma(2006) has conducted the study on "Microfinance Practices and their Sustainability in Nepal" in 2006 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, which effect women empowerment, poverty reduction, and utility of microfinance need to be addressed at proper and appropriate levels.

Almeyada and Branch(1998) have been conducted the case study “microfinance in Gautemala; The case study of Credit union’s” on measuring sustainability: Financial and Operational Performance 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.

2.4 Research Gap

There is seen more research in the topic of Financial performance Analysis under the Framework of PEARLS of more saving and credit cooperatives. The research has

been carried out on the same topic in Janasewa Saving and Credit co-operative Society Limited but nobody has done any research in this cooperative in the previous years. This is the reason why this institution is selected for research conduction.

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, source of data, data collection procedure, data processing and tools and techniques of analysis.

3.2 Research Design

This study is an examination and evaluation of financial performance of JSCCS in the framework of PEARLS and trace out the basic practice of the institution. Suggestions are made for the improvement in financial performance. This study research design is descriptive and analytical in nature.

3.3 Population and Sample

There are 5162 saving and credit cooperatives incorporated in Nepal up to 2008/09. Among of them Janasewa Saving and Credit Cooperative Society Limited, Puranchour-8, Kaski has been selected as a single sample unit.

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 report of the cooperative through Cooperative Department, Cooperative Training Center and National Cooperative Development Board, documents related journal and related available publication are the basis sources of data. As such secondary sources of information have been consulted as per the need of the situation. Published and unpublished magazines, master's dissertations available report and materials are used this study.

3.5 Data Collection Procedure

Required for this study was primarily collected from the annual reports and extracted from the ledger of JSCCS, Kaski. These 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 and master's dissertations.

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

In this chapter 5 years (2061/062 to 2065/66) financial reports of JSCCS are presented and analyzed as following topic.

4.1 Protection (P)

Protection is very essential component offered by WOCCU for the limited banking service carried out co-operative credit unions which refers to save the money of members. Every member feeling their deposited money safe shows the good performance of financial activities of related MFIs. If the management expects the successful future of their co-operative they must input their effort to protect the assets that would assured the member clients being save their deposit. The asset protection can be saved by providing the adequate allowances for the delinquent loan expenses.

4.1.1 Allowances for Loan Losses to Allowance Required for Loans Delinquent > 12 Months (P_1)

According to WOCCU model, the loan delinquency has been classified into two parts on the basis of its time period. The first one is the 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 greater than 12 months and 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 co-operative for the loan loss provision (see page) but most of saving and credit cooperatives are out of the jurisdiction of NRB.

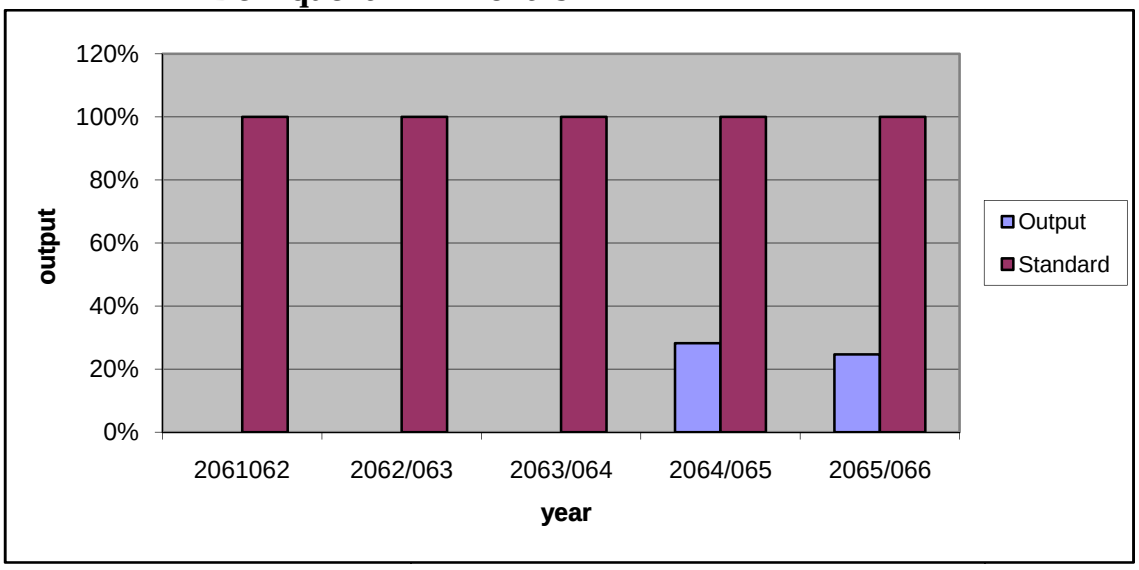
Table 4.1.1 Allowances for Loan Losses to Allowances Required for Loans Delinquent > 12 Months

(In Thousand)

P_1	2061/62	2062/63	2063/64	2064/65	2065/66
a) Allowance for loan losses	144.70	185.81	192.98	151.24	171.09
b) Loan balance of all loan delinquent more than 12 months	-	-	-	536.66	694.54
c) P_1	0%	0%	0%	28.18%	24.63%
Standard %	100%				

Source: Annual Report of JSCCS and Researcher's Calculation

Figure 4.1.1 Allowances for Loan Losses to Allowances Required for Loans Delinquent > 12 Months



The table 4.1.1 and figure 4.1.1 shows the ratio of delinquency loan more than one year is very much less than the standard rate in last two financial years found only. But the previous three year not get any delinquent loan because at that time institution use to make the delinquent loan new loan investment with accumulating interest.

4.1.2 Solvency (P_6)

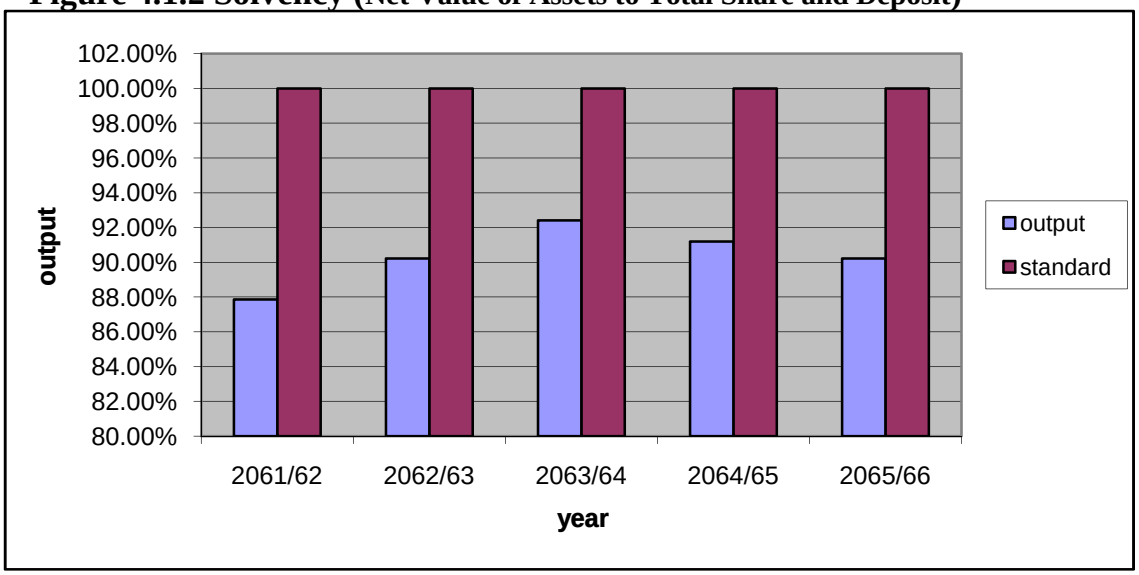
According to the PEARLS system the credit union should maintain their solvency ratio that is greater than or equal to 100 percent. It is the net value of assets to total share and deposit. The net value of assets is calculated with the components of total delinquency loans, liability problem of assets,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

Table 4.1.2 Solvency (Net Value of Assets to Total Share and Deposit) (In Thousand)

Year	2061/62	2062/63	2063/64	2064/65	2065/66
P_6 %	87.86%	90.22%	92.40%	91.19%	90.21%
Standard %	≥ 100%				

Source: Annual report of JSCCS and Researcher's Calculation

Figure 4.1.2 Solvency (Net Value of Assets to Total Share and Deposit)



The table and figure 4.1.3 shows that all ratios are below the PEARLS standard but in fluctuating trend. The ratio is 87.86%, 90.22%, 92.40%, 91.19% and 90.21% in year 2061/2062 to 2065/2066 respectively. This implies that asset is inflated. Member one rupee worth is less than that.

4.2 Effective Financial Structure (E)

Financial structure shows the combination of different sources of resources. Proper financial structure makes the earning power high, save from the liquidation, decrease the non performing assets, increases the institutional and member share capital. According to PEARLS system financing of total assets with saving deposit, borrowed fund and member 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 of MFIs (Richardson, 2002).

4.2.1 Net Loan to Total Assets (E_1)

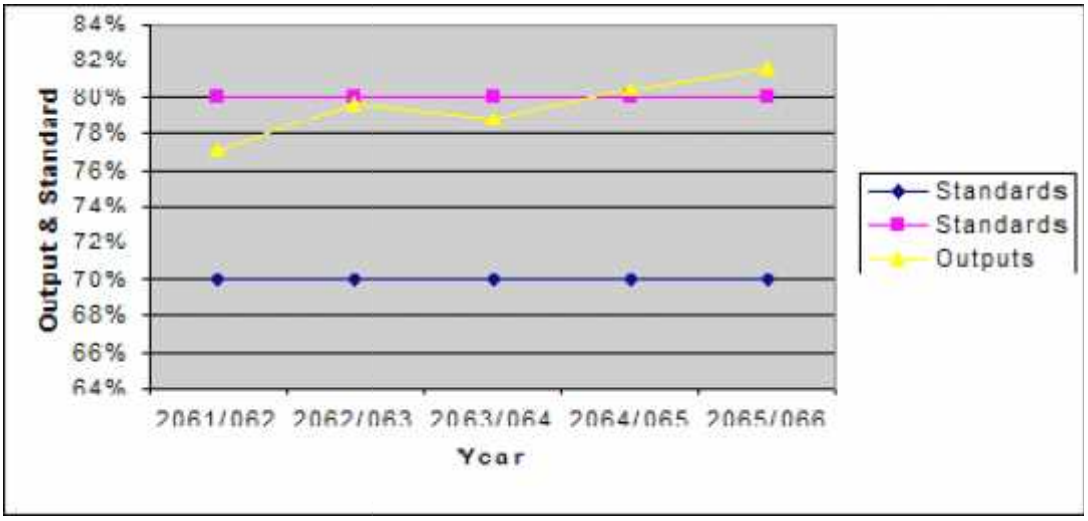
According to the PEARLS system the ratio of net loan to total asset been under the 70 to 80 percent is known as effective financial structure. Table and figure shows the following

Table 4.2.1 Net Loan to Total Asset (In Thousand)

Year	2061/62	2062/63	2063/64	2064/65	2065/66
a) Total loan investment	7871.28	10479.55	13467.90	18432.63	23963.90
b)Allowance for loan losses	144.70	185.81	192.98	151.24	171.09
c)Total asset	10,019.00	12931.33	16832.71	22737.51	29147.93
E_1	77.12%	79.6%	78.86%	80.40%	81.63%
Standard %	(70%-80%)				

Source: Annual Report of JSCCS and Researcher's Calculation

Figure 4.2.1 Net Loan to Total Assets



The table 4.2.1 and figure 4.2.1 shows that the ratio is most likely within the PEARLS standard. The trend is in growth rate except year 2063/2064. The ratio is 77.12%, 79.6%, 78.86%, 80.40% and 81.63% in year 2061/2062, 2062/2063, 2063/2064, 2064/2065 and 2065/2066 respectively. The ratio of net loan to total assets is in good position as WOCCU prescription.

4.2.2 Liquid Investment to Total Assets (E_2)

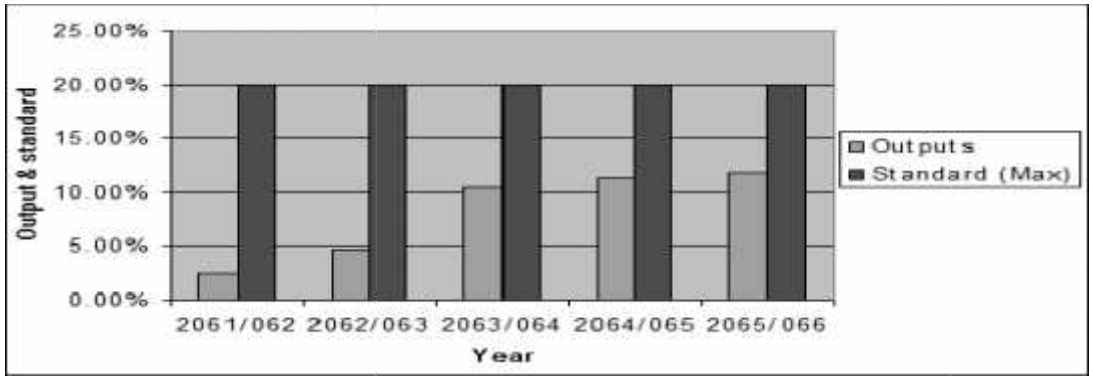
E_2 is the ratio of two factors they are short term investment and total asset. According to the PEARLS model it must be maximum 20 percent. Management must arrange proper trade of between short term investment and loan portfolio because investment in short term is related with the member withdrawal and affects gross spread and institutional capital.

Table 4.2.2 Total Liquid Investment to Total Assets (In Thousand)

year	2061/62	2062/63	2063/64	2064/65	2065/66
a) Total liquid investment	235.02	599.37	1767.71	2586.37	3490.16
b) Total asset	10019.00	12931.33	16832.71	22737.51	29147.93
E_2	2.435%	4.64%	10.50%	11.38%	11.87%
Standard %	Max 20%				

Source: Annual Report of JSCCS and Researcher's Calculation

Figure 4.2.2 Total Liquid Investment to Total Assets



The table 4.2.2 and figure 4.2.2 shows that the output ratio is 2.435%, 4.64%, 10.50%, 11.38%, 11.87% in year 2061/2062, 2062/2063, 2063/2064, 2064/2065 and 2065/2066 respectively. The output ratio is in increasing trend during the year but all the outputs ratio is within the PEARLS standard.

4.2.3 Financial Investment to Total Assets (E_3)

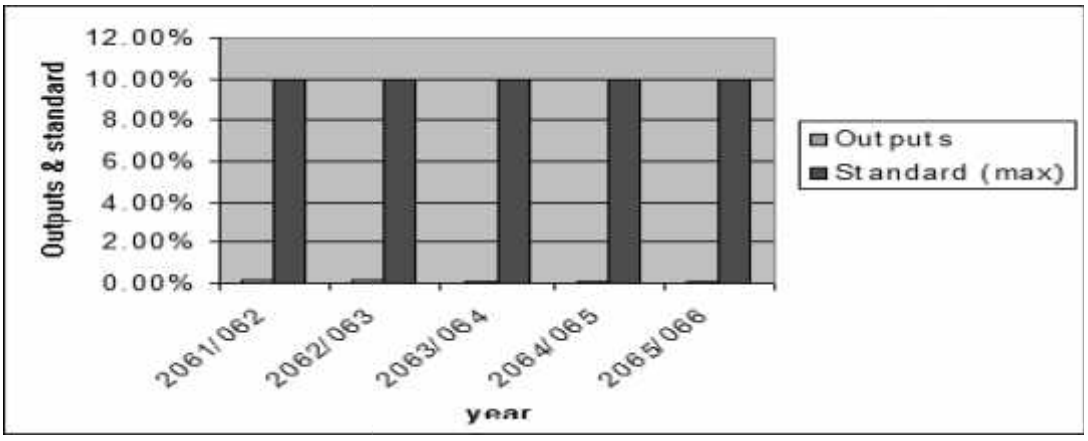
E_3 measures the percentage of total assets invested in long term investments. Financial investment yields some income but have certain risk. Management should investment the fund in the productive sector or more income earned sector and should arrange proper trade of between investment and deposit collection. If the management could not identify the investment opportunity, they earned significantly low interest.

Table 4.2.3 Total Financial Investment to Total Asset (In Thousand)

Year	2061/62	2062/63	2063/64	2064/65	2065/66
a)Total financial Investment	12,000.00	16,000.00	16,000.00	16,000.00	16,000.00
b)Total asset (1000)	10019.00	12931.33	16832.71	22737.41	29147.93
E_3	0.1198%	0.1237%	0.0951%	0.07037%	0.0549%
Standard %	Max 10%				

Source: Annual Report of JSCCS and Researcher's Calculation

Figure 4.2.3 Total Financial Investment to Total Asset



The table 4.2.3 and figure 4.2.3 shows that the output ratio is 0.1198%, 0.1237%, 0.0951%, 0.07037% and 0.0549% in year 2061/2062, 2062/2063, 2063/2064, 2064/2065 and 2065/2066 respectively. The output ratio is very much lower than the PEARLS standard. The trend is in decreasing rate. It is need to invest in financial

sector. If we see the histogram, we con not see the investment ratio because early mentioned that it is very much less than 1 percent.

4.2.4 Saving Deposit to Total Assets (E_5)

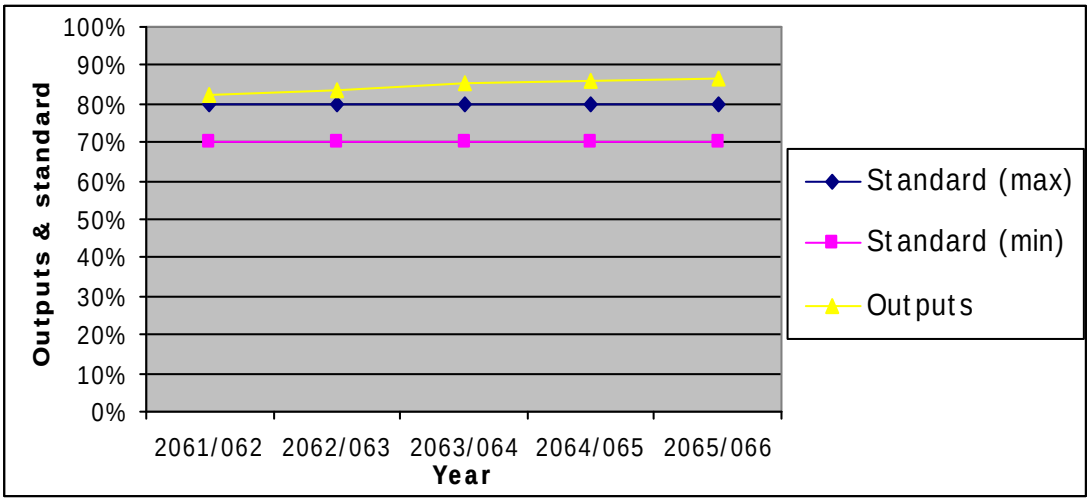
E5 measures the percentage of total assets financed by saving deposit. The huge deposit saving indicates that institution have developed effective marketing programs and achieved financial independence. Saving deposit is affected by the interest rate offered to the depositors. According to the CU model setting a saving rate within market is a compulsory. But attempting to pay more than the market rate may hinder a problem. Such interest charge should below the loans rate charged. Adequate provision of allowances for loans loss is another consideration that institution should choose that safeguard to depositor.

Table 4.2.4 Savings Deposit to Total Asset (In Thousand)

Year	2061/2062	2062/2063	2063/2064	2064/2065	2065/2066
aTotal Saving deposit	8243.65	10776.53	14390.42	19548.88	25304.00
b) Total asset	10019.00	12931.33	16832.71	22737.52	29147.93
E_5	82.28%	83.34%	85.5%	85.98%	86.81%
Standard %	70-80%				

Source: Annual Report of JSCCS and Researcher's Calculation

Figure 4.2.4 Savings Deposit to Total Assets



The output ratio of saving deposit is 82.28%, 83.34%, 85.5%, 85.98% and 86.81% in year 2061/2062, 2062/2063, 2063/2064, 2064/2065 and 2065/2066 respectively. The output ratios all are above the maximum standard rate but they are in increasing trends which is seen in the figure 4.2.4.

4.2.5 Member Share Capital to Total Assets (E_7)

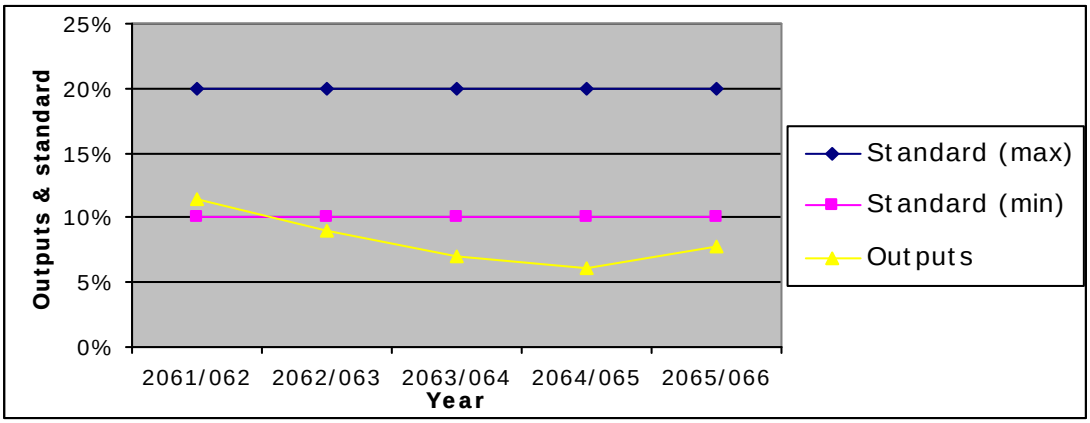
It measures the percentage of total assets financed by member share capital. Since institution do not have any obligation of expenses for member share capital unless and until it generate profit. The institution should maintain the standard of share capital as increases otherwise the high cost fund grows up and adversely affects the earning of the institutions.

Table 4.2.5 Member Share Capital to Total Assets (In Thousand)

Year	2061/2062	2062/2063	2063/2064	2064/2065	2064/2066
a)Member share Capital	1139.40	1168.40	1183.30	1391.80	2243.20
b) Total asset	10019.00	12931.33	16832.71	22737.51	29147.93
E_7	11.37%	9.04%	7.03%	6.12%	7.7%
Standards%	10%-20%				

Source: Annual Report of JSCCS and Researcher's Calculation

Figure 4.2.5 Member Share Capital to Total Assets



The output ratio is 11.37%, 9.04%, 7.03%, 6.12% and 7.7% in year 2061/2062, 2062/2063, 2063/2064, 2064/2065 and 2065/2066 respectively. The member share capital seems decreasing for the first four years and increasing in last year with respect to total assets. The trend is not seen within the PEARLS standards.

4.2.6 Institutional capital to total assets (E_8)

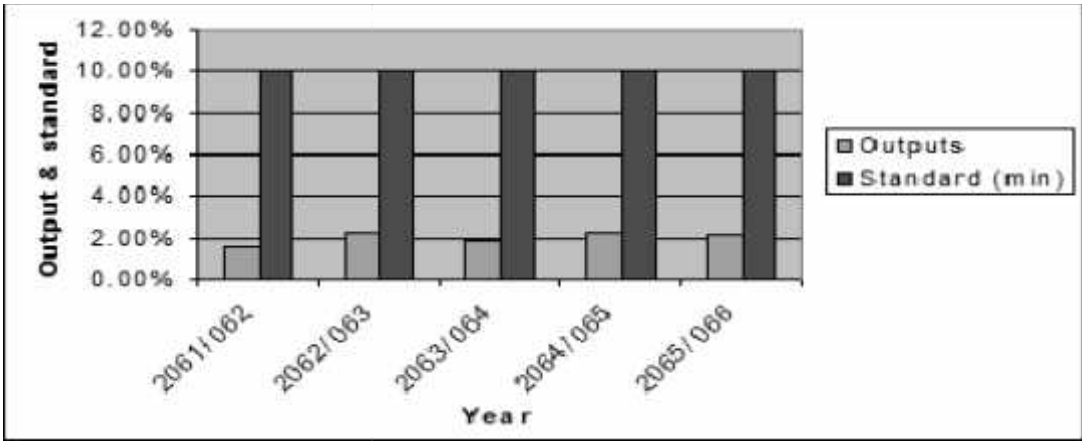
It measures the percentage of total assets financed by institutional capital. Since institutional capital has no explicit interest cost, it will generate 100 percent return to institutions investing to the productive assets. According to CU model focus on epidemic is a crucial that institution should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

Table 4.2.6 Total Institutional Capital to Total Assets (In Thousand)

Year	2061/2062	2062/2063	2063/2064	2064/2065	2065/2066
a)Total institutional capital	156.88	297.51	321.40	503.90	636.20
b)Total asset	10019.00	12931.33	16832.71	22737.51	29147.93
E_8	1.57%	2.3%	1.91%	2.22%	2.18%
Standard%	Min 10%				

Source: Annual report of JSCCS and Researcher's Calculation

Figure 4.2.6 Total Institutional Capital to Total Assets



The total institutional capital is 1.57%, 2.3%, 1.91%, 2.22% and 2.18% for the year 2061/2062, 2062/2063, 2063/2064, 2064/2065 and 2065/2066 respectively. The total institutional capital is very lower than PEARLS standards. The ratio is around the two percent only.

4.2.7 Net Institutional Capital to Total Assets (E_9)

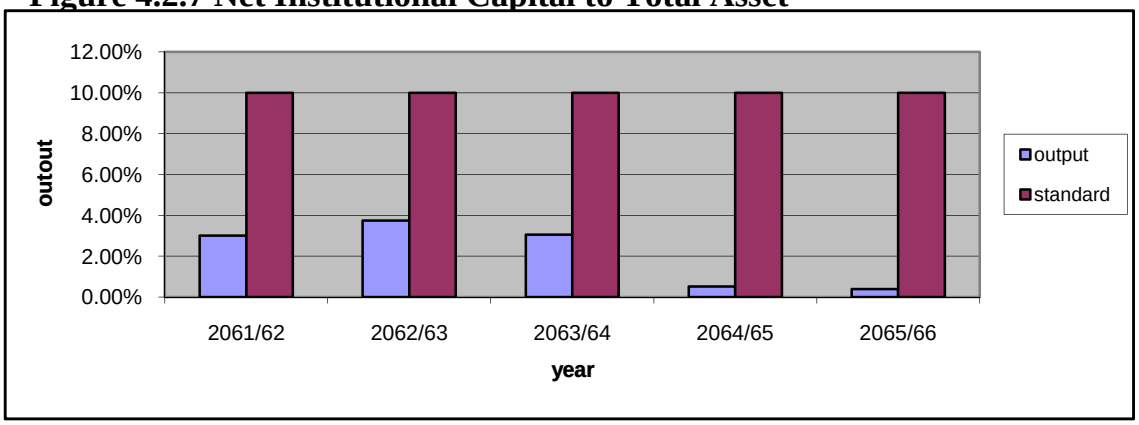
E9 measures the real level of institutional capital after adjusting the allowances for risk assets to meet the standard of p1 and p2 covering any other potential losses. Net institutional capital is calculated by deducting all delinquent loan balance and problem assets. The net institutional capital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

Table 4.2.7 Net Institutional Capital to Total Assets (In Thousand)

year	2061/062	2062/63	2063/64	2064/65	2065/66
a. Net institutional capital	301.58	483.32	514.38	118.47	112.75
b. Total assets	10019.00	12931.3	16832.7	22737.5	29147.9
E_9	3.01%	3.74%	3.06%	0.52%	0.39%
Standards %	Min 10%				

Source: Annual report of JSCCS and Researcher's Calculation

Figure 4.2.7 Net Institutional Capital to Total Asset



The output rate is 3.01%, 3.74%, 3.06%, 0.52% and 0.39% in year 2061/2062, 2062/2063, 2063/2064, 2064/2065 and 2065/2066 respectively. The output ratio is very lower than the PEARLS standard. The institutional capital is increasing but the ratio is increased in 2nd year, decreasing in 3rd year but equal in 4th and 5th year. The histogram shows the fluctuation of net institutional capital ratio due to the asset increasing even if actually it is increasing during the year.

4.3 Assets Quality

Assets 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 (A_1)

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. Of all the PEARLS ratios, the delinquency ratio is the most important key measurement of institutional weakness. If delinquency 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 ideal goal is to maintain the delinquency rate below 5% of total loans outstanding.

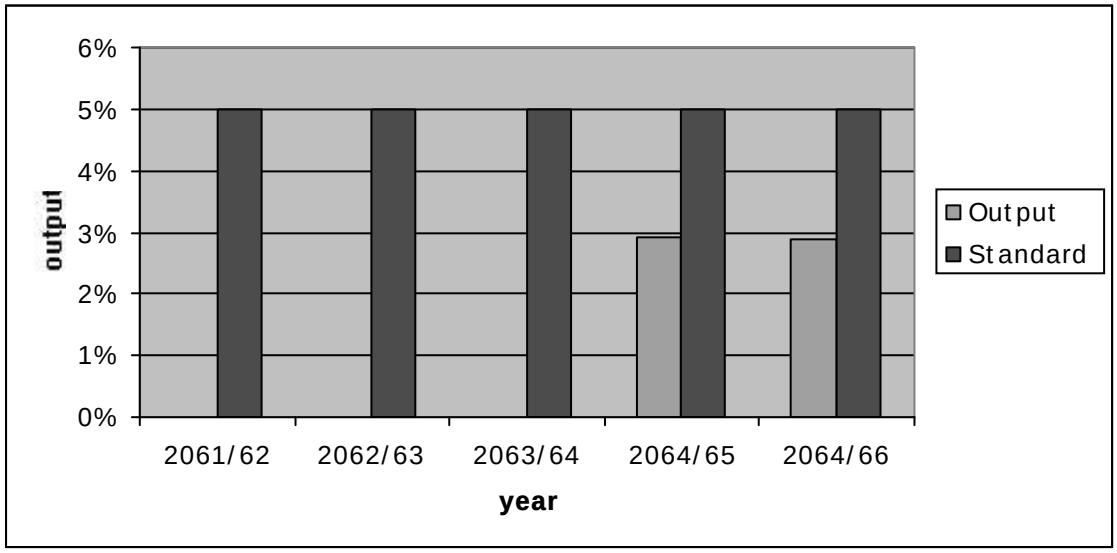
Table 4.3.1 Total Loan Delinquency to Gross Loan Portfolio

(In Thousand)

Year	2061/062	2062/63	2063/64	2064/65	2065/66
a. Total delinquent loans	0	0	0	536.66	694.54
b. Total loans portfolio	7871.28	10479.5	13467.9	18432.6	23963.90
A_1	0 %	0 %	0 %	2.91%	2.90%
Standard %	Less than or equal to 5%				

Source: Annual report of JSCCS and Researcher's Calculation

Figure 4.3.1 Total Delinquent Loan to Gross Loan Portfolio



The output ratio of JSCCS on total delinquency loan to gross loan portfolio is within the standard found only for two financial years. The output is 2.91%, and 2.90% of financial year 2064/2065 and 2065/2066 respectively. The information of delinquent loan for the previous year not found during the study period.

4.3.2 Non Earning Assets to Total Assets (A_2)

A second key ratio is the percentage of non-earning assets owned by the credit union. The higher the ratio, the more difficult it is to generate sufficient earnings. The goal also limits non-earning assets to a maximum of 5% of the total credit union assets.

Where credit unions are in dire need of improving their poor physical image, the non-earning asset ratio can increase in the short run. An improved image is more important to the success of aggressive marketing programs than it is to keep a ratio within its limits. As new members join and deposit their savings with the credit union, the non-earning asset ratio begins to decrease as a result of increased public confidence.

Table 4.3.2 Non Earning Asset to Total Assets (In Thousand)

Year	2061/2062	2062/2063	2063/2064	2064/2065	2065/2066
a. Total non earning assets	1837.2	1805.8	1576.86	1660.2	1631.56
b. Total assets	10019.00	12931.3	16832.7	22737.5	29147.9
A_2	18.34%	13.96%	9.37%	7.30%	5.60%
Standard %	Less than of equal to 5%				

Source: Annual report of JSCCS and Researcher's Calculation

Figure 4.3.2 Non earning assets to total assets

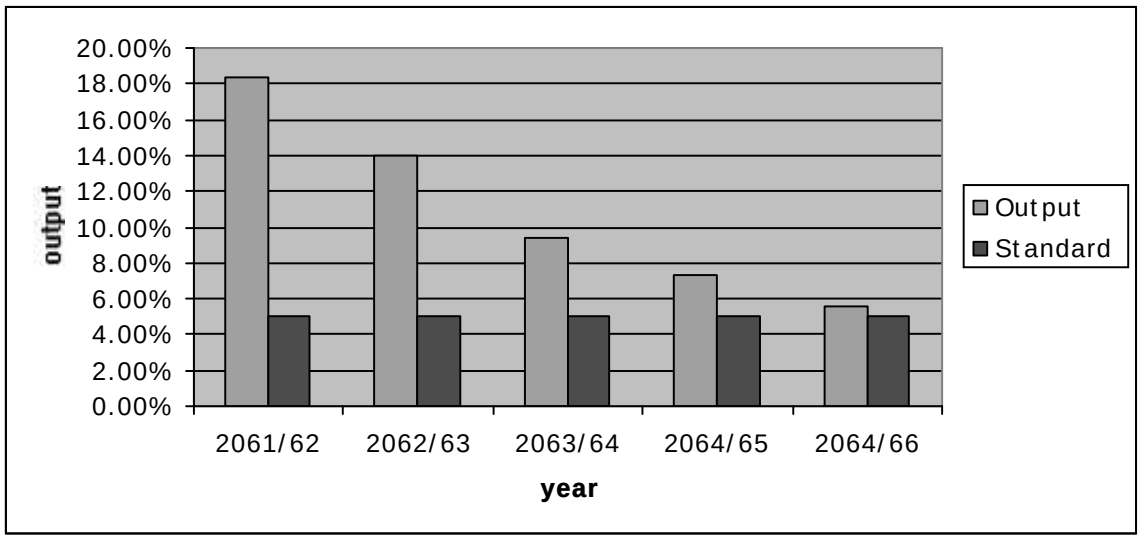


Table 4.3.2 and figure 4.3.2 shows that the outputs ratio of non earning assets to total asset is 18.34%, 13.96%, 9.37%, 7.30% and 5.60% in year 2061/2062, 2062/2063, 2063/2064, 2064/2065 and 2065/2066 respectively. The output ratio is more than the PEARLS standard but trend is decreasing year by year reached near to the standard in year 2065/2066.

4.3.3 Net Zero Cost Fund to Non Earning Assets (A_3)

A_3 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 reserve. The ratio should not be down below 200 percent.

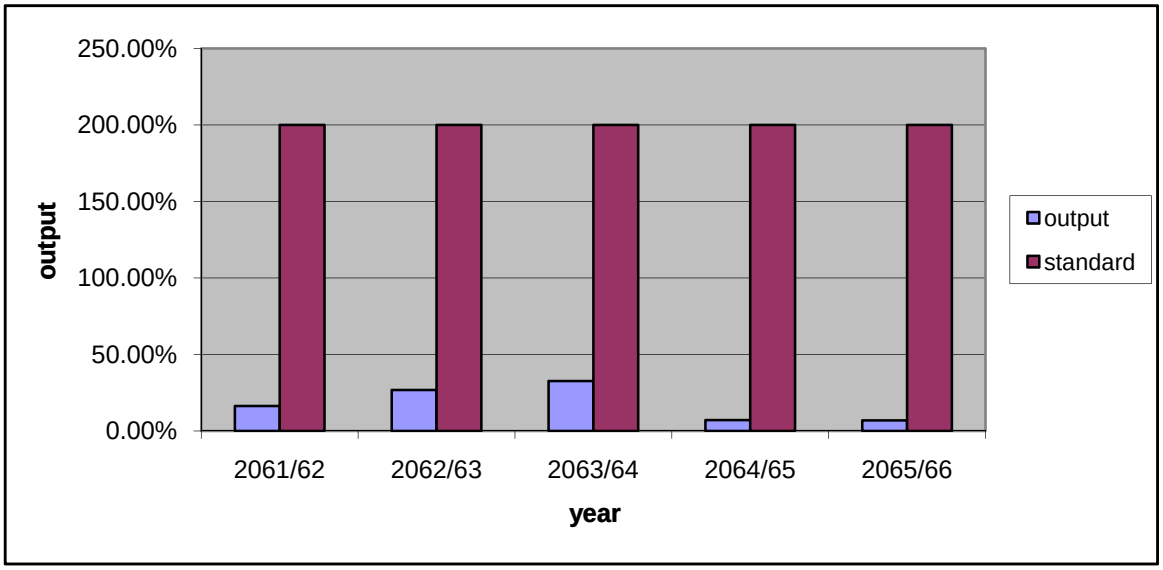
Table 4.3.3 Net Zero Cost Fund to Non Earning Assets

(In Thousand)

Year	2061/62	2062/63	2063/64	2064/65	2065/66
a. Net zero cost fund	301.58	483.32	514.38	118.47	112.75
b. Total non earning assets	1837.2	1805.8	1576.86	1660.2	1631.56
A_3	16.42%	26.76%	32.62%	7.12%	6.91%
Standard %	Greater than 200%				

Source: Annual report of JSCCS and Researcher's Calculation

Figure 4.3.3 Net Zero Cost Fund to Non Earning Assets



From the table 4.3.3 and figure 4.3.3 shows that the output ratio is very much lower than the standard rate. It is 16.42%, 26.76%, 32.62% 7.12% and 6.91% in year 2061/ 2062 to 2065/2066 respectively. But the ratio is increasing for the previous three years and decreasing for last two years.

4.4 Rate of Return and Cost

The PEARLS system segregates all of the essential components of net earnings to help management calculate investment yields and evaluate operating expenses. In this way, PEARLS demonstrates its value as a management tool. Unlike other systems that calculated yields on the basis of average assets, PEARLS calculates yields on the basis of actual investments outstanding. This methodology assists management in determining which investments are the most profitable. It also permits the credit unions to be ranked according to the best and worst yields. By comparing financial structure with yields, it is possible to determine how effectively the credit union is able to place its productive resources into investments that produce the highest yield. These powerful analysis techniques help management stay abreast of the financial performance of the credit union. Yield information is computed on four main areas of investment.

4.4.1 Net Loan Income to Average Net Loan Portfolio (R_1)

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

Table 4.4.1: Net Loan Income to Average Net Loan Portfolio

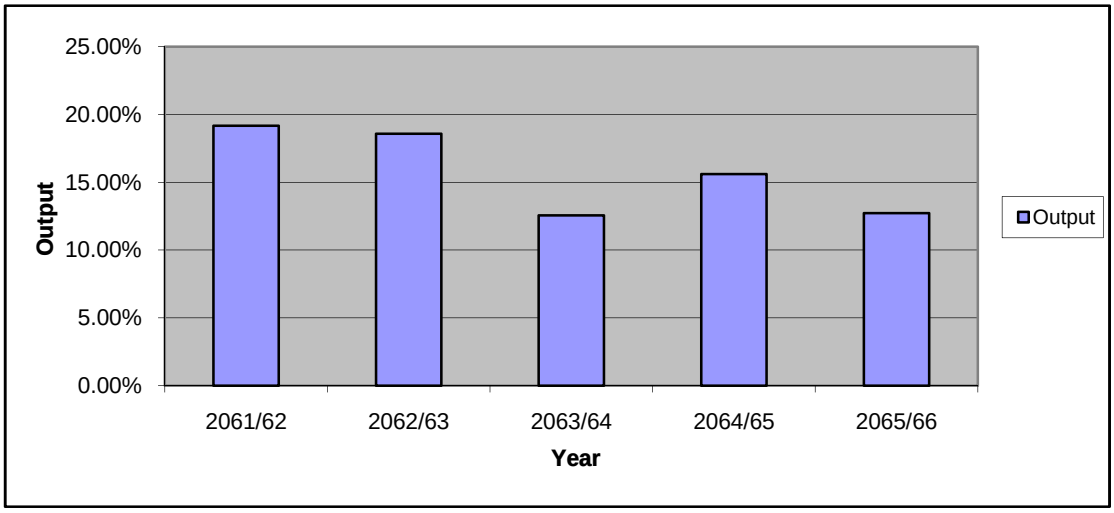
(In Thousand)

Year	2061/2062	2062/2063	2063/2064	2064/2065	2065/2066
a.Net loan income	1330.41	1674.32	1482.42	2463.07	2677.36
b.Loan portfolio current year	7726.57	10293.73	13274.91	18281.39	23792.81
c.Loan portfolio last year	6159.88	7726.57	10293.73	13274.91	18281.39
R_1	19.16%	18.58%	12.57%	15.61%	12.73%
Standard %	Entrepreneurial return				

Source: Annual report of JSCCS and Researcher's Calculation

The output ratio is 19.16%, 18.58%, 12.57%, 15.61% and 12.73% in year 2061/2062, 2062/2063, 2063/2064, 2064/2065 and 2065/2066 respectively. The ratio is greater than entrepreneurial rate during the study period.

Figure 4.4.1 Net Income to Average Net Loan Portfolio



Graph shows the actual rate is higher than entrepreneurial rate

4.4.2 Total Liquid Investment Income to Average Liquid Investment (R_2)

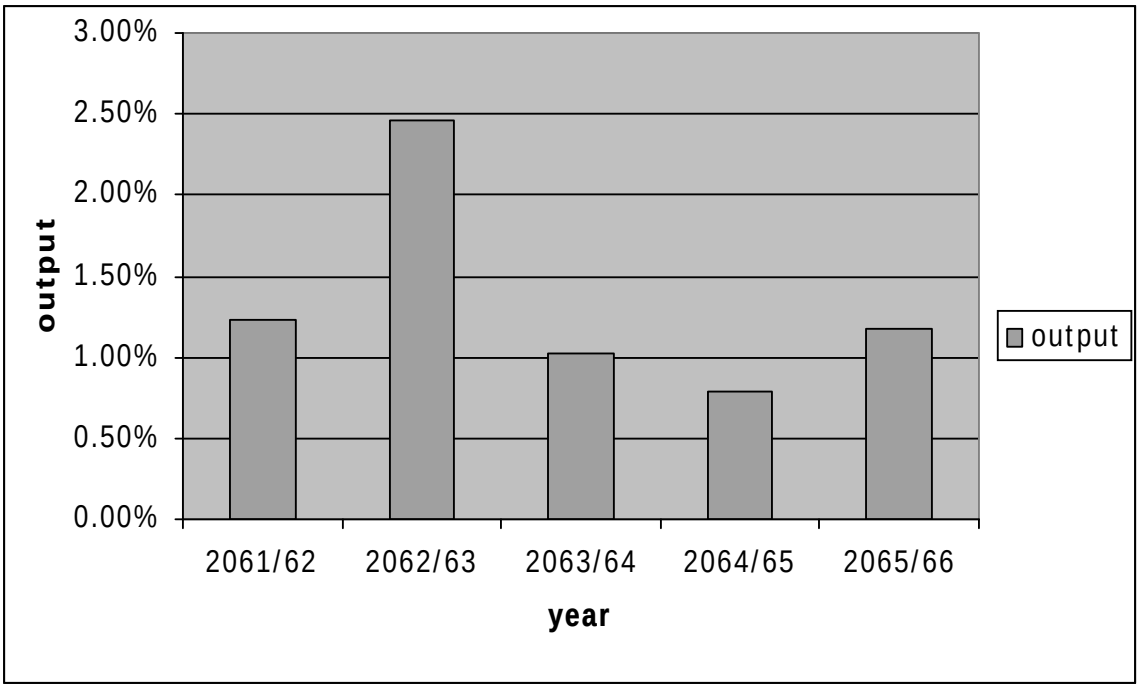
All income from bank savings accounts and liquidity reserves deposited in either the National Association or regulatory body is divided by the amounts invested in those areas.

Table 4.4.2 Total Liquid Investment income to Average Liquid Investment

Year	2061/062	2062/063	2063/064	2064/065	2065/066
a) Liquid investment income	3323.7	9840.23	12031.2	17057.2	35580.8
b)Liquid investment (current year) (1000)	235.02	599.37	1767.71	2586.37	3490.16
c) Liquid investment (last year) (1000)	306.97	235.02	599.37	1767.71	2586.37
R2	1.23%	2.36%	1.02%	0.784%	1.17%
Standard %	Market rate				

Source: Annual Report of JSCCS and Researcher's Calculation

Figure 4.4.2 Total Liquid Investment income to Average Liquid Investment (R_2)



The outputs ratio is very lower than the market rates. There is no sufficient liquid investment income. The output ratio is 1.23%, 2.36%, 1.02%, 0.784% and 1.17% in year 2061/2062, 2062/2063, 2063/2064, 2064/2065 and 2065/2066 respectively.

4.4.3. Total Financial Investment Income to Total Average Financial Investment (R3)

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

There is no financial income find out during the study period so financial income is zero. Financial investment is same all the years.

Table 4.4.3 Total Financial Investment Income to Average Financial Investment

Year	2061/62	2062/63	2063/64	2064/65	2065/66
a)Total financial investment income	NA	NA	NA	NA	NA
b)Total financial investment (current year end)	12,000	16,000	16,000	16,000	16,000
c)Total financial investment (last year end)	2,000	12,000	16,000	16,000	16,000
R3 %	0	0	0	0	0
standard %	market rate				

Source: Annual report of JSCCS and Researcher's Calculation

4.4.4 Total Interest Cost on Saving Deposit to Average Saving Deposit (R_5)

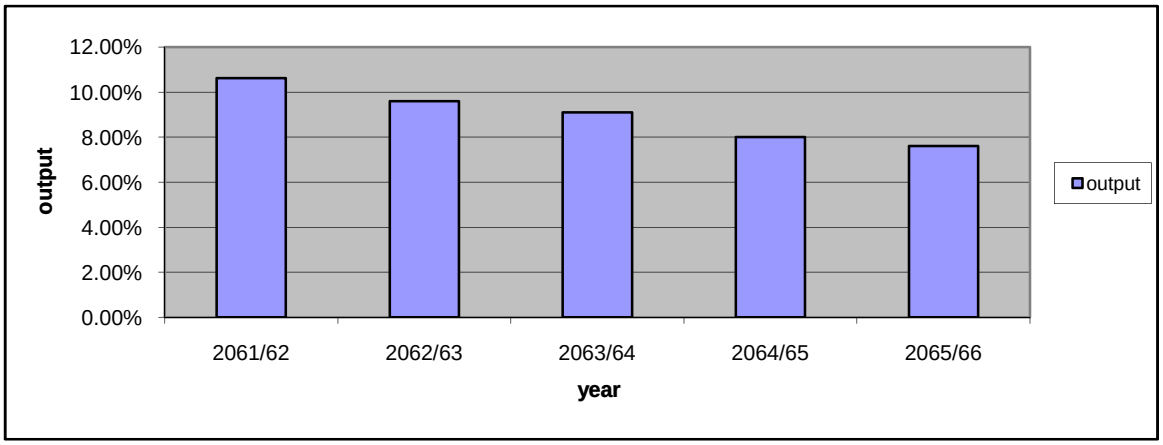
Saving deposit cost includes total interest paid on saving deposits, total interest premium paid on saving deposits, total tax paid by MFIs on saving deposit interest. The cost of insurance premium and tax paid on saving deposit not found during the study period.

Table 4.4.4 Total Interest Cost on Saving Deposit to Average Saving Deposit (In Thousand)

year	2061/62	2062/63	2063/64	2064/65	2065/66
a. Total interest paid on saving deposit	800.62	912.32	1141`.67	1357.77	1696.82
b. Total saving deposit as of current year end	8243.7	10776.5	14390.4	19548.9	25304.0
c. Total saving deposit as of last year end	6838.78	8243.7	10776.5	14390.4	19548.9
R5	10.62%	9.6%	9.1%	8%	7.6%
Standards %	Market rate > inflation rate				

Source: Annual report of JSCCS and Researcher's Calculation

Figure 4.4.3: cost saving deposit to average saving deposit



The ratio is 10.62%, 9.6%, 9.1%, 8% and 7.6% in year 2061/2062, 2062/2063, 2063/2064, 2064/2065 and 2065/2066 respectively. But the ratio is decreasing year by year.

4.4.5 Total Dividend Cost on Share to Average Member Share Capital (R_7)

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

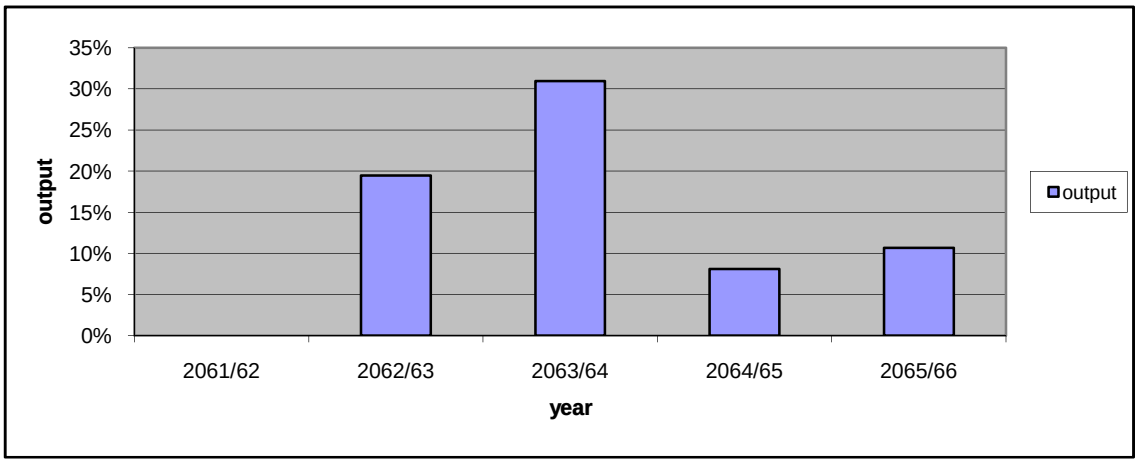
Table 4.4.5: Total Dividend Cost on Share to Member Share Capital

year	2061/2062	2062/2063	2063/2064	2064/2065	2065/2066
a) Total div. paid on member share	0	2,24,676.0	3,64,020.0	1,04,359.0	194,155.0
b)Member share capital as of current year end	1139400.0	1168400.0	1183300.0	1391800.0	2243200.0
c)Member share capital as of last year end	753400.0	1139400.0	1168400.0	1183300.0	1391800.0
R_7	0%	19.48%	30.96%	8.11%	10.68%

Standards %	Market rates

Source: Annual report of JSCCS and Researcher's Calculation

Figure 4.4.4: Total Dividend Cost on Share to Member Share Capital



The table 4.4.5 shows the cost of dividend paid high in financial year 2063/2064 which is 30.96% and shows low in financial year 2065/2066 which is 8.11% but the institution has not paid dividend in first financial year. The trend shows fluctuation.

4.4.6 Total Gross Income Margin to Average Total Assets (R_8)

R_8 measures the whether the cooperative has generated sufficient income to cover the operating expenses and allowances for loan losses and provided for adequate increases in institutional capital. R_8 includes loan interest income, liquid investment income, financial income, non financial income other income and the costs are interest cost on saving deposit, dividend cost on member share capital and interest cost on external credit (borrowed funds).

Table 4.4.6 Total Gross Income Margin to Average Total Assets

(In Thousand)

Year	2061/2062	2062/2063	2063/2064	2064/2065	2065/2066
a) Total gross income margin	472.21	429.53	273.81	892.52	734.07
b) Total asset as of current year end	10019.00	12931.33	16832.72	22737.51	29147.93
c) Total asset as of last year end	7966.06	10019.00	12931.34	16832.72	22737.51
R_8	5.25%	3.74%	1.84%	4.51%	2.83%

Standard %	Link to R_9, R_{11} & R_{12}

Source: Annual report of JSCCS and Researcher's Calculation

The gross income margin is 5.25%, 3.74%, 1.84%, 4.51% and 2.83% in year 2061/2062, 2062/2063, 2063/2064, 2064/2065 and 2065/2066 respectively. The income margin seems very low in the study period. The institution does not earned sufficient income to contribute to the institutional capital.

4.4.7 Total Operating Expenses to Average Total Asset (R_9)

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.

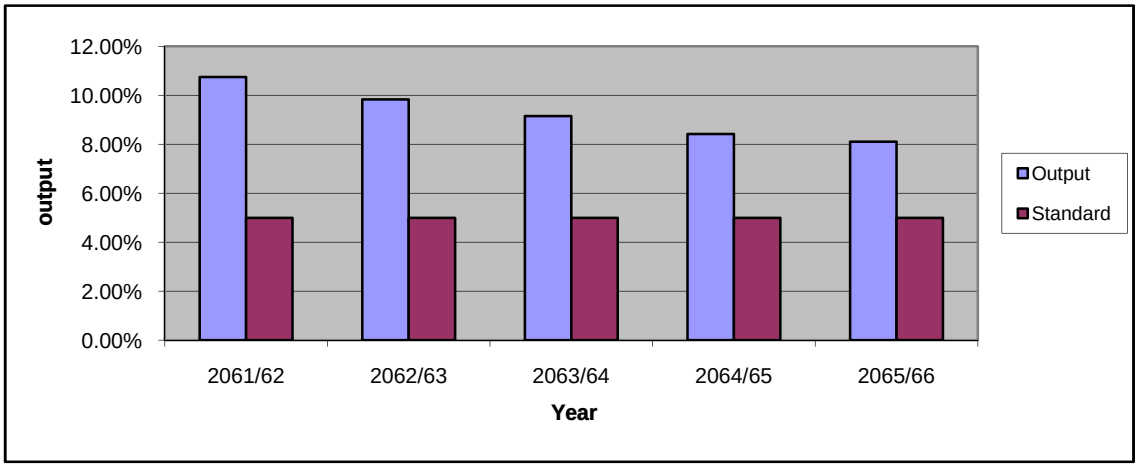
Table 4.4.7 Total Operating Expenses to Total Asset

(In Thousand)

Year	2061/2062	2062/2063	2063/2064	2064/2065	2065/2066
a)Total operating expenses	966.97	1127.52	1362.31	1666.42	2100.8
b) Total asset as of current year end	10019.00	12931.33	16832.71	22737.51	29147.93
c) Total asset as of last year end	7966.06	10019.00	12931.33	16832.71	22737.51
R_9	10.75%	9.83%	9.15%	8.42%	8.1%
Standard %	5%				

Source: Annual Report of JSCCS and Researcher's Calculation

Figure 4.4.5 Total Operating Expenses to Average Total Asset



The table 4.4.6 and figure 4.4.3 shows that the output is 10.75% 9.83%, 9.15%, 8.42% and 8.1% in year 2061/2062, 2062/2063, 2063/2064, 2064/2065 and 2065/2066 respectively. The operating cost is decreasing all the year. Operating cost is more than standard rate throughout the year.

4.4.8 Total Loan Loss Provision Expenses to Average Total Assets (R_{10})

The final cost area evaluated by PEARLS separates the costs of creating provisions for loan losses from other administrative costs. This can be facilitated by the use of clear accounting nomenclature. Traditional accounting standards usually include loan loss provisions as part of the overall administrative costs. In reality, the creation of adequate provisions represents a completely different type of expense. It is directly linked to experienced credit analysis and effective loan collection techniques. By isolating this expense from the other administrative costs, it is possible to get a much clearer picture of weak credit administration practices in the credit union.

Table 4.4.8 Total Loan Loss Provision Expenses to Average Total Assets

(In Thousand)

Year	2061/62	2062/63	2063/64	2064/65	2065/66
a)Total loan loss provision expenses	144.70	185.81	192.98	151.14	171.09
b)Total asset as of current year end	10019.0	12931.33	16832.71	22737.51	2914793
c)Total asset as of last year end	7966.06	10019.00	12931.33	16832.71	22737.51
R_{10}	1.61%	1.62%	1.30%	0.764%	0.66%
Standard	Dependent on delinquent loan				

Source: Annual Report of JSCCS and Researcher's Calculation

Loan loss provision expenses to total average asset is 1.61%, 1.62%, 1.3%, 0.764% and 0.66% in year 2061/2062, 2062/2063, 2063/2064, 2064/2065 and 2065/2066 respectively. The ratio depends on delinquent loan. The ratio is decreasing in recent year.

4.4.9 Net Income to Average Total Assets (R_{12})

R_{12} measures the adequacy of earning as well as the capacity to built institutional capital. Control and reduction of unnecessary overhead generate high earnings. The collection of loan according to the schedule is also a key factor for the earning. High delinquencies affect the income of institutions. This ratio is linked to E_9.

Table 4.4.9 Net Income to Average Total Assets

(In Thousand)

Year	2061/2062	2062/2063	2063/2064	2064/2065	2065/2066
a)Net income	362.09	552.91	95.55	730.00	529.22
b)Dividend forthe year	162.94	207.34	35.83	273.75	198.46
Net income After dividend	199.15	345.57	59.72	456.25	330.76
b)Total asset as of current year end	10019.00	12931.33	16832.71	22737.52	29147.93
c)Total asset of last year end	7966.06	10019.00	12931.33	16832.71	22737.52
R_{12}	2.21%	3.01%	0.41%	2.31%	1.27%
Standard	Linked to E9				

Source: Annual Report of JSCCS and Researcher's Calculation

The output ratio is 2.21%, 3.01%, 0.41%, 2.31% and 1.27% in year 2061/2062, 2062/2063, 2063/2064, 2064/2065 and 2065/2066 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, the management must maintain the confidence of depositor and overcome the financial

crisis efficiently in other to achieve the goal of liquid assets. Only two ratios L_2 and L_3 have workout in the study. The other is not computed due to the data availability.

4.5.1 St Investment, Liquid Assets & St Payable to Total Average Saving Deposit (L_1)

L_1 measures the liquidity position with the components of 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.

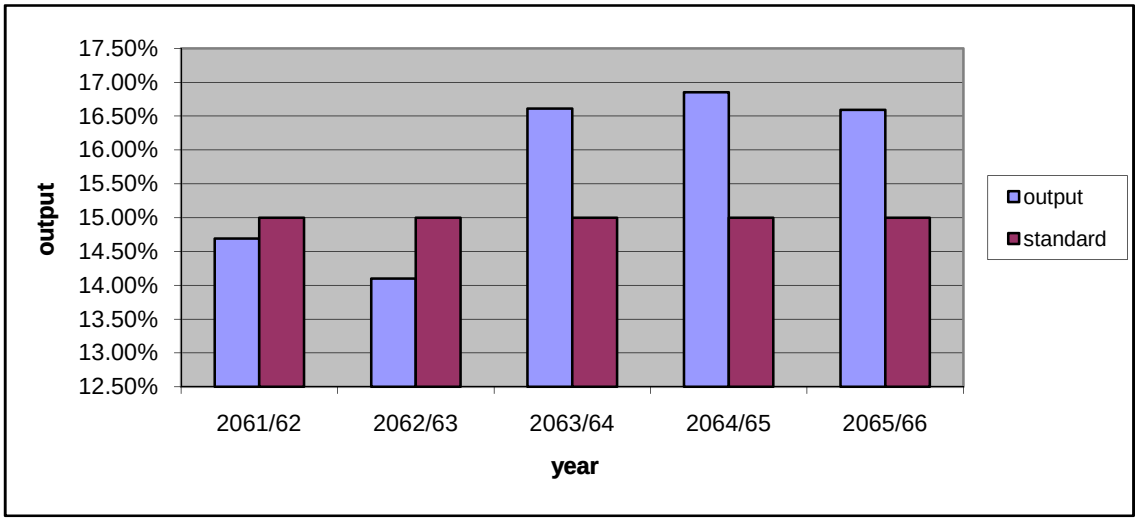
Table 4.5.1: St Investment, Liquid Assets & St Payable to Total Average Saving Deposit

(In Thousand)

Year	2061/2062	2062/2063	2063/2064	2064/2065	2065/2066
a) Liquid assets	1210.75	1519.92	2389.81	3294.28	4197.29
b) Total saving deposit	8243.65	10776.53	14390.42	19548.9	25304.01
L_1	14.69%	14.10%	16.61%	16.85%	16.59%
Standards	Min 15%				

Source: Annual report of JSCCS and Researcher's Calculation

Figure 4.5.1: St Investment, Liquid Assets & St Payable to Total Average Saving Deposit



The table and figure shows the ratio is little lower than the standard rate in previous two financial years. And last three financial years the ratio is more than minimum 15 percent of PEARLS standard.

4.5.2 Liquidity Reserve to Saving Deposit (L_2)

L_2 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 institution 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

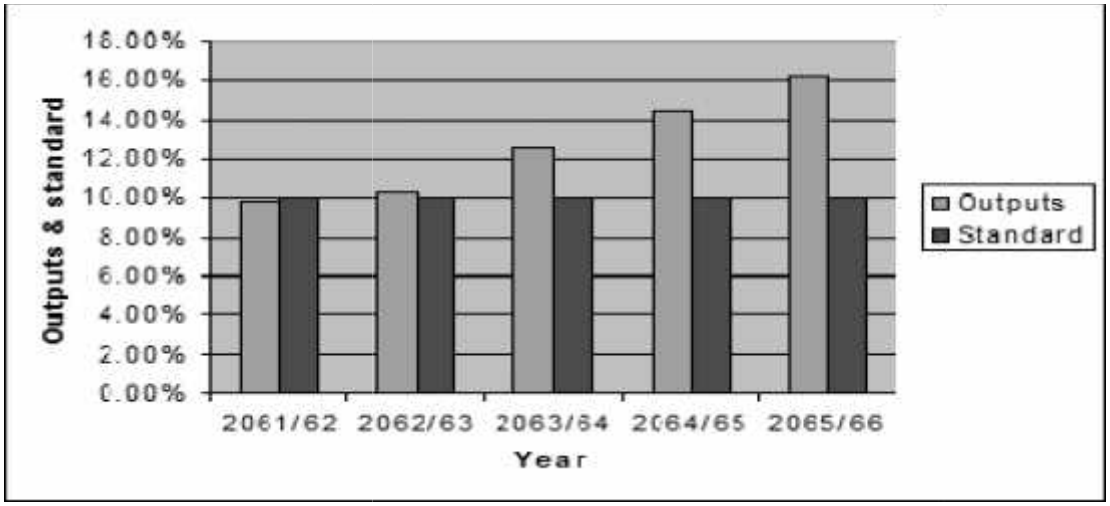
(In Thousand)

Year	2061/62	2062/63	2063/64	2064/65	2065/66
a)Total earning liquid reserve	235.02	599.37	1767.71	2586.37	3490.16
b)Total non earning liquid reserve	571.93	498.91	39.23	233.94	619.73
c) Saving deposit	8243.72	10776.5	14390.4	19548.9	25304.0
L2	9.79%	10.19%	12.56%	14.43%	16.24%
Standard	10%				

Source: Annual Report of JSCCS and Researcher's Calculation

The table shows that the output ratio in 2061/2062 is 9.79% which is little low than standard rate. The ratio in other year is higher than the standard rate. The ratio is 10.19%, 12.56%, 14.43% and 16.24% in year 2062/2063, 2063/2064, 2064/2065 and 2065/2066 respectively.

Figure 4.5.2 Liquidity Reserve to Saving Deposit



From the figure 4.5.1 the output ratio liquid reserve is increasing year by year during the study period and reached above the standard rate.

4.5.3 Total Non Earning Liquid Assets to Total Assets (L_3)

L3 measures the percentage of 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.

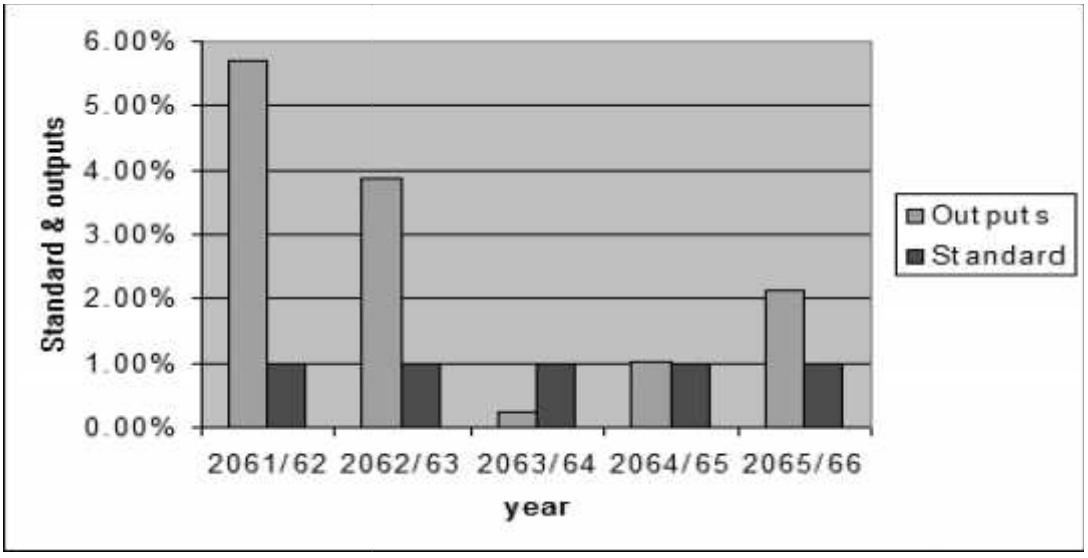
Table 4.5.3 Non Earning Liquid Asset to Total Assets

(In Thousand)

Year	2061/2062	2062/2063	2063/2064	2064/2065	2065/2066
a)Non earning liquid asset	571.93	498.91	39.23	233.94	619.73
b) Total asset	10019.00	12931.33	16832.71	22737.51	29147.93
L3	5.71%	3.86%	0.233%	1.03%	2.13%
Standard	< 1%				

Source: Annual Report of JSCCS and Researcher's Calculation

Figure 4.5.3 Non Earning Liquid Assets to Total Asset



From the above table and figure the output is 5.71%, 3.86%, 0.233% 1.03% and 2.13% in year 2061/2062, 2062/2063, 2063/2064, 2064/2065 and 2065/2066 respectively. The output ratio is above the standard except the ratio in 2063/64. The ratio is decreasing in first year than increasing from 2064/2065 to 2065/2066.

4.6 Sign of Growth

There are eleven ratios in sing 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 to management how to arrange and achieve the better position in other to growth of assets. Sing of growth provides a trend of past condition of financial variables which more helpful to reach a decision in uncertain future. There are many keys which is separately watched out bout their growth trend. They 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 grow high. Assets growth 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 (S_1)

S_1 measures the growth in loan 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 of risk, cost and uncertain future. Investment on more profitable sector is essential for growth of 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 re invest it in productive assets, which yield income. This ratio is affected by R1and R10. According to PEARLS standard, if institution needs to increase the percentage of total loan outstanding (E_1), the growth in loans (S_1) should be greater than growth in total assets (S_{11}).

The output ratio is 25.61%, 33.14%, 28.52%, 36.86% and 30.01% in year 2061/2062, 2062/2063, 2063/2064, 2064/2065 and 2065/2066 respectively. The ratio is increasing except last year. The table is presented below.

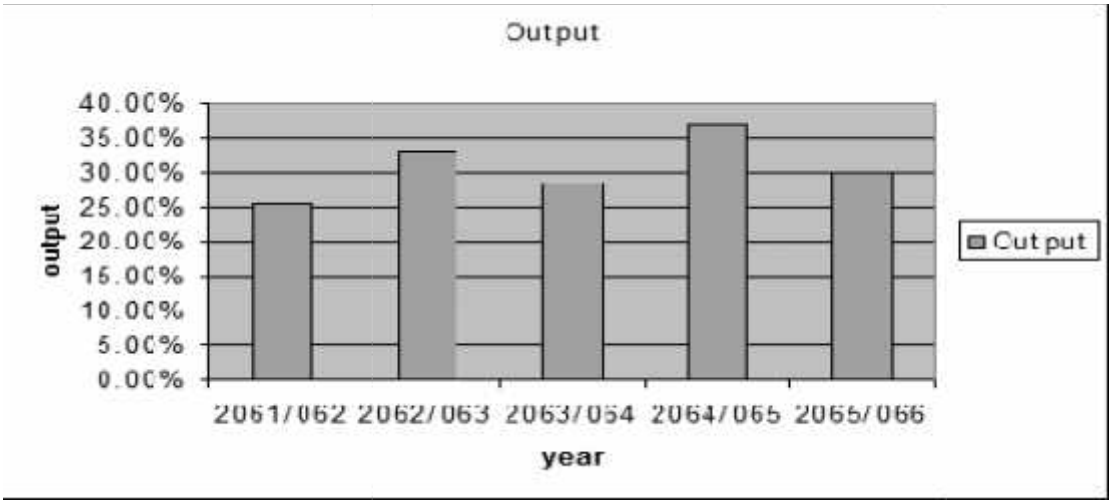
Table 4.6.1 Growth in Gross Loan

(In Thousand)

year	2061/262	2062/63	2063/64	2064/65	2065/66
a)Loan portfolio as of current year end	7871.28	10479.55	13467.90	18432.63	23963.9
b) Loan portfolio as of last year end	6266.59	7871.28	10479.55	13467.90	18432.63
S_1	25.61%	33.14%	28.52%	36.86%	30.01%
Standard	Dependent on E_1				

Source: Annual Report of JSCCS and Researcher's Calculation

Figure 4.6.1 Growth in Loans to Member



4.6.2 Growth in Liquid Investment (S_2)

It shows the position of liquid investment. Liquid assets is very much needs for day to day transaction of institution but sufficient liquid assets must be kept because excess liquid assets generates very low earning and it stops the high productive investment sector. According to PEARLS standard if institution needs to increase the percentage of liquid investment (E_2), the growth in liquid investment (S_2) should be greater than growth in total assets (S_{11}).

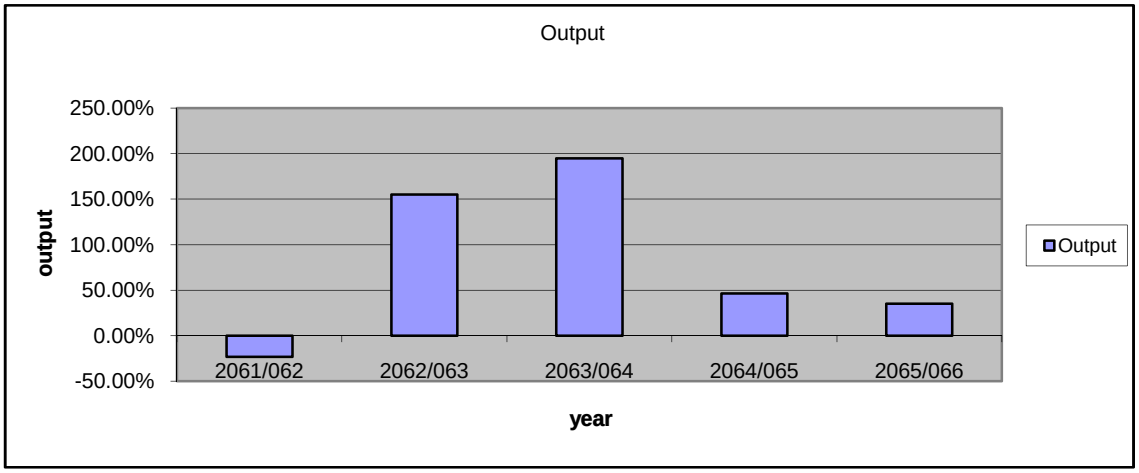
Table 4.6.2 Growth in Liquid Investment

(In Thousand)

year	2061/2062	2062/2063	2063/2064	2064/2065	2065/2066
a)Liquid investment as of current year end	235.02	599.37	1767.71	2586.37	3490.16
b)liquid investment as of last year end	306.97	235.02	599.37	1767.71	2586.37
S_2	(23.44%)	155.03%	194.93%	46.31%	34.94%
Standard	Dependent on E2				

Source: Annual Report of JSCCS and Researcher's Calculation

Figure 4.6.2 Growth in Liquid Investment



The ratio is (23.44%), 155.03%, 194.93%, 46.31% and 34.94% in year 2061/2062, 2062/2063, 2063/2064, 2064/2065, 2065/2066 respectively. The output ratio is negative in first year. It has increased and reached high in financial year 2063/64. It is decreasing for the last two year.

4.6.3 Growth in Financial Investment (S_3)

S_3 measures the growth of financial investment. Investing the fund in the loan portfolio, yields a high portion of income rather than investing the fund in financial securities because investing on financial securities reduce the risk but consequently result a low earnings. This growth depends upon the financial investment to total assets (E_3).

Table 4.6.3 Growth in Financial Investment

(In Thousand)

year	2061/2062	2062/2063	2063/2064	2064/2065	2065/2066
a. Financial investment as of current year end	12,000.0	16,000.0	16,000.0	16,000.0	16,000.0
b) Financial investment as of last year end	2000.0	12,000.0	16,000.0	16,000.0	16,000.0
S3	500%	33.33%	0%	0%	0%

Standard	Dependent on E3

Source: Annual Report of JSSCC and Researcher's Calculation

The output ratio is 500% and 33.33% in year 2061/2062 and 2062/2063 respectively but no any increasing in other year. There no any financial investment during the study period. The investment position is not good.

4.6.4 Growth in Saving Deposit (S_5)

Saving deposit is most essential ratio for MFIs. All the investment, financial and operating activities depend on saving deposit. Higher the saving deposits 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 affects 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 programs. And mobilizing the saving deposit properly is also most important work of management in other to increase the total asset as a whole. The growth depends on E_5.

Table 4.6.4 Growth in Savings Deposit

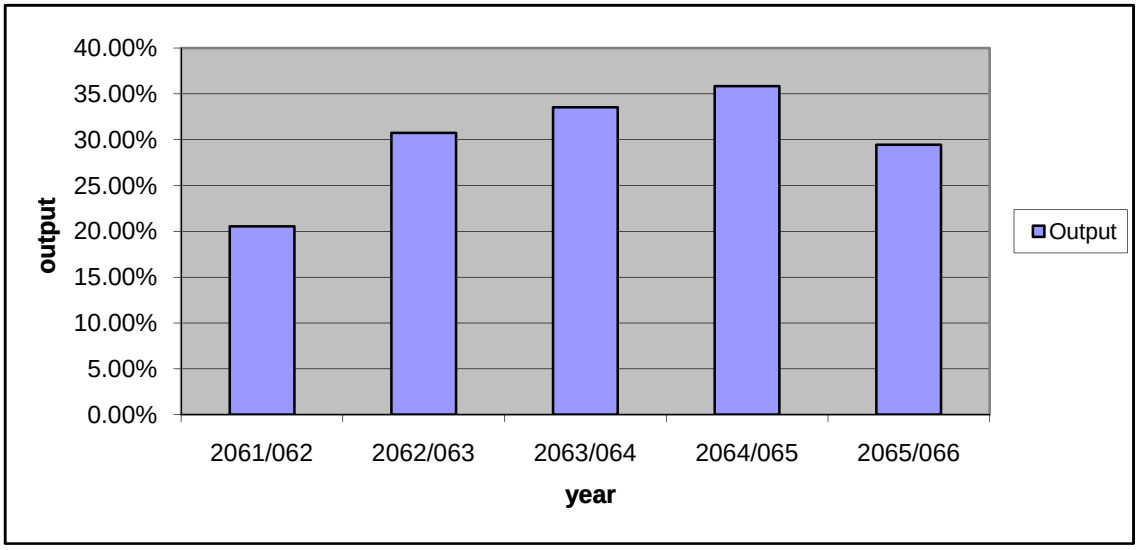
(In Thousand)

Year	2061/2062	2062/2063	2063/2064	2064/2065	2065/2066
a)Saving deposit as of current year end	8243.65	10776.53	14390.42	19548.88	25304.00
b)Saving deposit as of last year end	6838.78	8243.65	10776.53	14390.42	19548.88
S5	20.54%	30.73%	33.53%	35.85%	29.44%
Standard	Dependent on E5				

Source: Annual Report of JSSCC and Researcher's Calculation

From the table 4.6.5, the ratio of saving deposit is 20.54%, 30.73%, 33.53%, 35.85% and 29.44%. The saving deposit is increasing for the first four year but it has decreased in last year. The deposit in year 2064/2065 is very high and deposit in year 2061/2062 is very low during the study period.

Figure 4.6.3 Growth in Saving Deposit



The figure shows that the saving deposit is growing in first four year but decreasing in last year. The saving deposit depends upon E_5.

4.6.5 Growth in Share Capital (S_7)

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

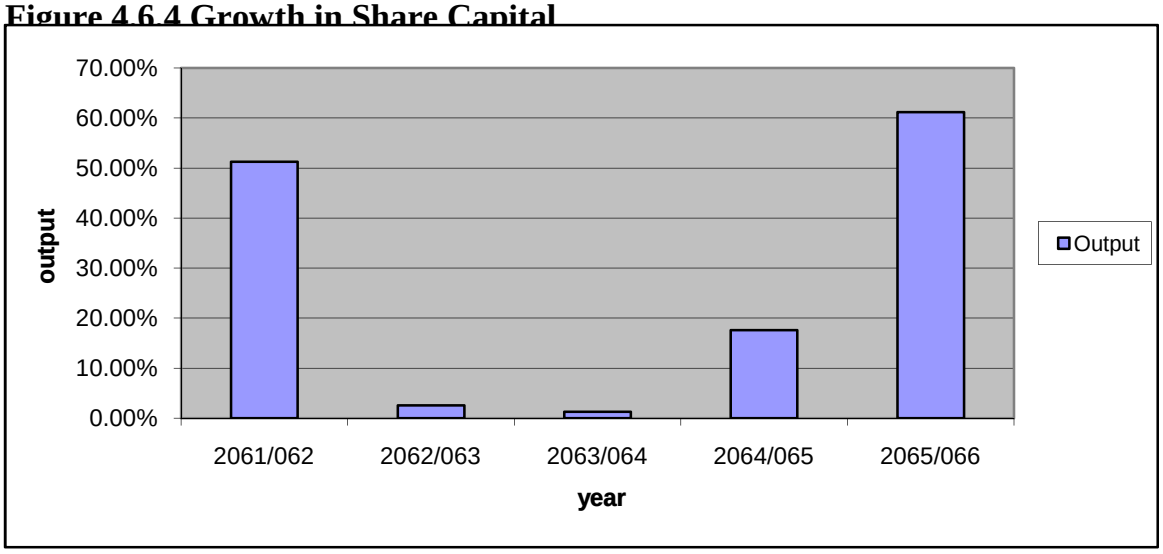
Table 4.6.5 Growth in Share Capital

(In Thousand)

year	2061/62	2062/63	2063/64	2064/65	2064/66
a) Share capital as of current year end	1139.40	1168.40	1183.30	1391.80	2243.20
b) Share capital as of last year end	753.40	1139.40	1168.40	1183.30	1391.80
S7	51.23%	2.55%	1.28%	17.62%	61.17%
Standard	Dependent in E7				

Source: Annual Report of JSCCS and Researcher's Calculation

Figure 4.6.4 Growth in Share Capital



From the above table and figure the growth rate is 51.23%, 2.55%, 1.28%, 17.62% and 61.17% in year 2061/2062, 2062/2063, 2063/2064, 2064/2065 and 2065/2066 respectively. The growth rate is very low in year 2063/64. The rate is decreasing in the first three year than increasing in last two year.

4.6.6 Growth in Institutional Capital (S_8)

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 must invest the fund in high profit giving investment alternative with care of uncertain future, effective profit oriented financial programs must be conducted and control the overhead cost as well as management can. The growth is depends on E_8.

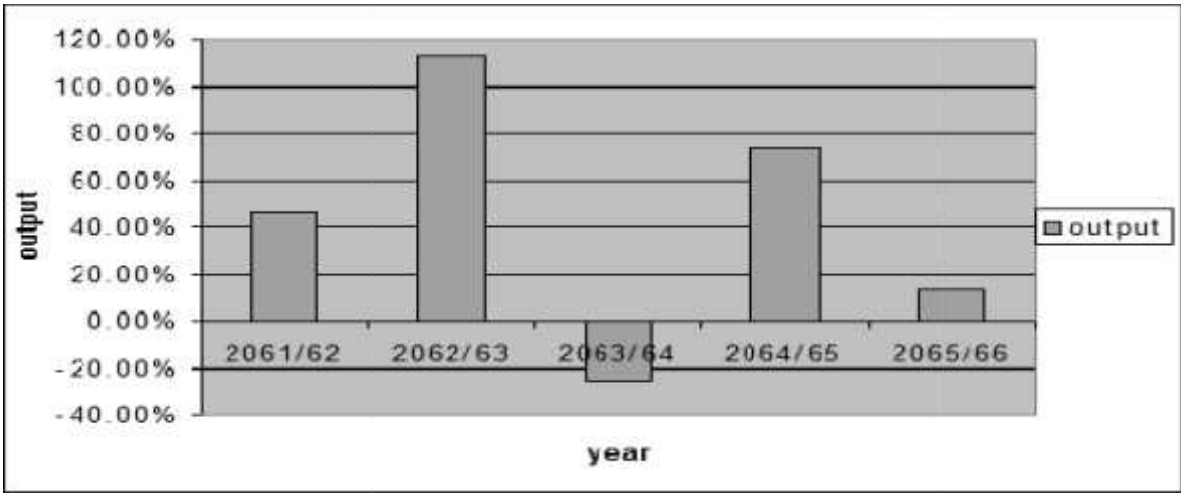
Table 4.6.6 Growth in Institutional Capital

(In Thousand)

year	2061/62	2062/63	2063/64	2064/65	2065/66
a) Total institutional capital as of current year end	241.87	515.25	385.40	672.63	767.01
b) Total institutional capital as of last year end	163.78	241.87	515.25	385.4	672.63
S_8	46.68%	113.03%	(25.20%)	74.53%	14.03%
Standard	Dependent on E8				

Source: Annual report of JSCCS and Researcher's Calculation

Figure 4.6.5 Growth in Institutional Capital



From the above table the growth in institutional capital is 46.68%, 113.03%, (25.20%), 74.53% and 14.03% in the year 2061/2062, 2062/2063, 2063/2064, 2064/2065 and 2065/2066 respectively. The ratio is very fluctuation. In year 2063/2064, the ratio is negative and last two years the ratio is increasing.

4.6.7 Growth in Net Institutional Capital (S_9)

Net institutional capital comes adding the allowance of risk assets on institutional capital and reducing the balance of loan delinquent greater 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 (S_9) linked with E9.

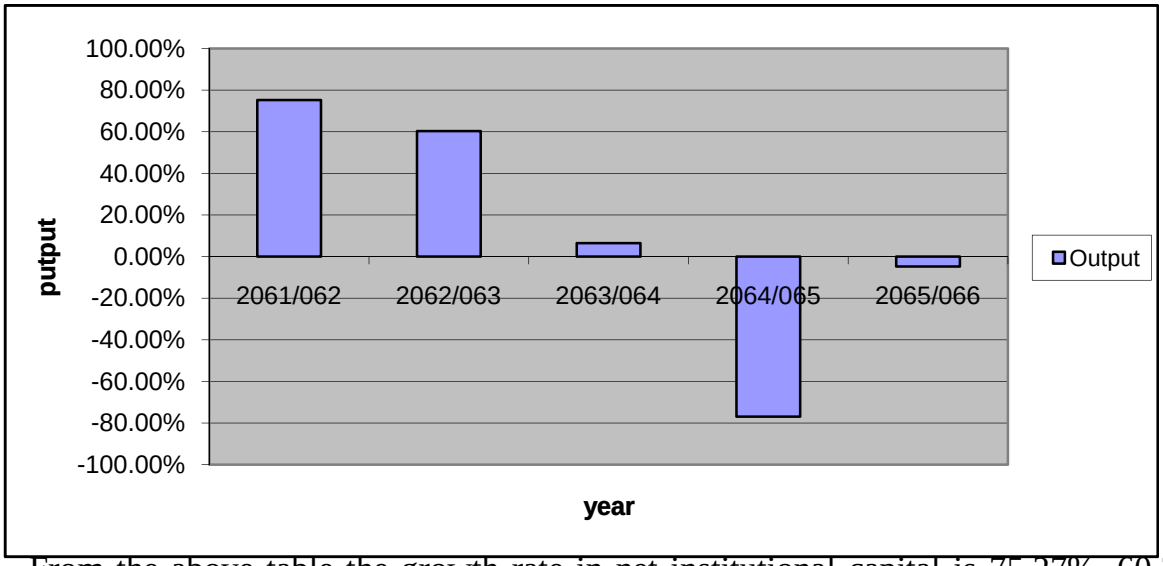
year	2061/2062	2062/2063	2063/2064	2064/2065	2065/2066
a. Net institutional capital as of current year end	301.58	483.32	514.38	118.47	112.75
b.Net institutional capital as of last year end	172.07	301.58	483.32	514.38	118.47
S_9	75.27%	60.26%	6.43%	(76.98%)	(4.83%)

standard	Dependent on E_9	**4.6.7**

Growth in Net Institutional Capital (S_9) (In Thousand)

Source: Annual report of JSCCS and Researcher's Calculation

Figure 4.6.6 Growth in Net Institutional Capital



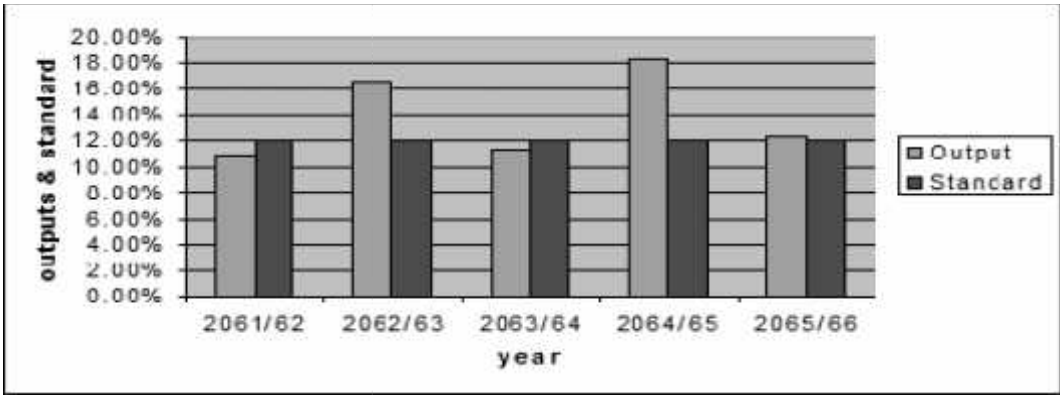
From the above table the growth rate in net institutional capital is 75.27%, 60.26%, 6.43%, (76.98%) and (4.83%) in year 2061/2062, 2062/2063 2063/2064, 2064/2065 and 2065/2066 respectively. The growth rate is very fluctuation. The maximum growth is in 2061/2062. The growth rate is negative in last two years.

4.6.8 Growth in General Membership (S_{10})

S_{10} measures 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 society in other to increase the membership in organization. The PEARLS standard suggests the growth rate must be above 12 percent.

4.6.8 Growth in General Member (S_{10})

Figure 4.6.7 Growth in General Membership



From the above table the growth rate in general member is 10.98%, 16.54%, 11.28%, 18.27% and 12.31% in year 2061/2062, 2062/2063, 2063/2064, 2064/2065 and 2065/2066 respectively. The growth rate in 2064/2065 is very high and the growth rate in 2061/2062 is very low. The growth rate is in fluctuation trend. The growth rate in year 2061/2062 and 2063/2064 is below the standard.

Year	2061/2062	2062/2063	2063/2064	2064/2065	2065/2066
a. General member as of current year end	768	895	996	1178	1323
b. General member as of last year end	692	768	895	996	1178
S_{10}	10.98%	16.54%	11.28%	18.27%	12.31%
Standard	Greater than 12%				

4.6.9 Growth in Total Assets (S_{11})

Measurement of total asset is very much essential and important work of management in which depends most of the PEARLS ratios. Growth and declining rate of assets directly impact the other ratios. Increasing in asset is the fundamental objective of institution. But management must think over the increasing of qualitative assets rather than increasing only assets. Only increasing in 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

Year	2061/62	2062/63	2063/64	2064/65	2064/66
a. Total asset as of current year end	10019.00	12931.33	16832.71	22737.51	29147.93
b. Total asset as of last year end	7966.06	10019.00	12931.33	16832.71	22737.51
S_{11}	25.77%	29.07%	30.17%	35.08%	28.19%
Standard %	Greater than Inflation				

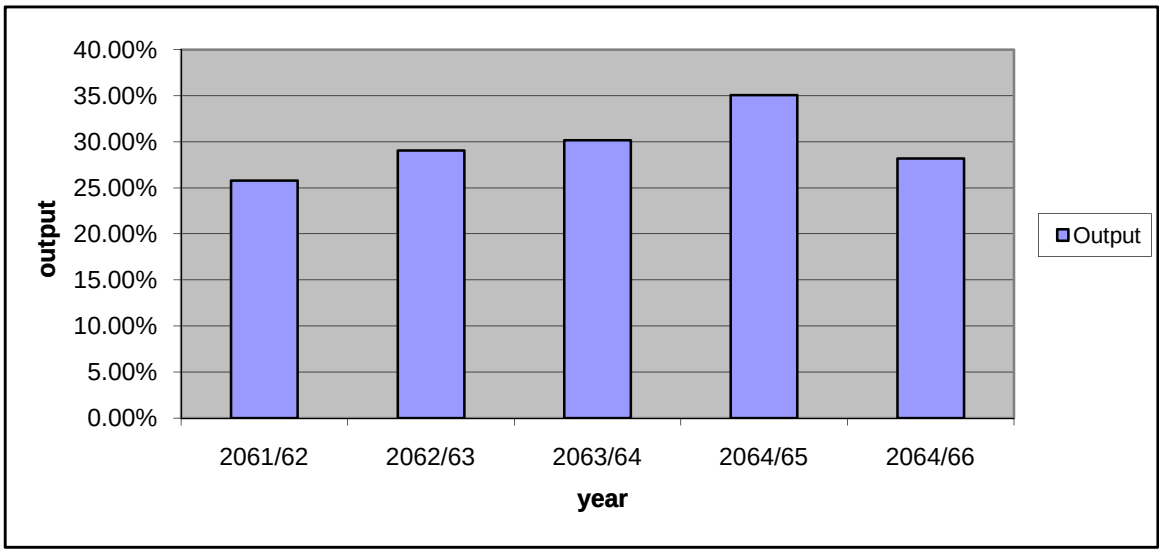
Source: Annual Report of JSCCS and Researcher's Calculation

Inflation Rates

Year	2061/62	2062/63	2063/64	2064/65	2064/66
Inflation rate	2.9%	7.8%	8.6%	6.4%	7.7%

www.indexmundi.com/g/g.asp

Figure 4.6.8 Growth in Total Assets



From the above table, the growth rate in total asset is 25.77%, 29.07%, 30.17%, 35.08% and 28.19% in year 2061/62, 2062/63, 2063/64, 2064/65 and 2064/66

respectively. The growth rate is increasing for the first three years but it has decreased in year 2064/65. The growth rate in 2065/66 is very high and 2061/62 is very low. The growth rate is very higher than inflation rate.

4.7 Major Findings

1. According to the PEARLS standard provision for delinquent loans above 12 month and 1-12 months is 100 percent and 35 percent respectively. JSCCS has made the provision for delinquent loans but delinquent loan is higher than the provision. And the delinquent loan found only for last two financial years but not found delinquent loan of previous three financial years because company used to make the delinquent loan to new loan with charged interest on delinquent loan amount in previous year.

2. P_6 measures the solvency position of institution. According to the PEARLS standard the ratio of solvency of institution must be greater than 100 percent but in JSCCS, the solvency ratio found below the PEARLS standards during the study period. The ratio in financial year 2063/64 is very high and the ratio on financial year 2061/62 is very low. Low solvency position shows that the real value of 1 rupee worth of institution is less than that.

3. The ratio of net loan in financial year 2061/62, 2062/63, 2063/64 is under the PEARLS standard but in year 2064/65 and 2065/66 is little more than standard rate.

4. The investment on liquid assets is found under the PEARLS standard but it is very lower for the first two year. The ratio is increasing from 2.4.3 percent in financial year 2061/62 to 11.87 percent in financial year 2065/66. The ratio is in increasing trend.

5. The ratio of financial investment found very low during the study period. Standard rate is maximum 10 percent but the output ratio is below than 1 percent and it is in decreasing trend.

6. According to PEARLS standard the rate of saving deposit must be 70 to 80 percent but all the ratio of institution is quite above the standard rate. The ratio found in increasing trend during the study period. 86.8 percent is the highest saving ratio and 82.28 percent is the lowest saving ratio of institution.

7. Member share capital ratio is 11.37%, 9.04%, 7.03%, 6.12% and 7.7% in the year 2061/62 to 2065/66 respectively. The ratio is decreasing from beginning year and increased in last year. The standard rate is 10 to 20 percent but only in financial year 2061/62 ratio found within the standard framework. But other year the ratio is below the standard rate.

8. According to the PEARLS standard the ratio of institutional capital must be minimum 10 percent. The ratio is found lower than the standard rate. The ratio 2.3 percent is very high in year 2062/63 and the ratio 1.57 percent is very low in 2061/62.

9. Net institutional capital is also lower than the PEARLS standard rate. The ratio 2.66 percent is very high in 2062/63 and the ratio 1.83 percent is very low ratio in 2061/62.

10. According to the PEARLS standard total loan delinquency to gross loan portfolio must be less than or equal to 5 percent. The actual ratio of institution is also under the framework of PEARLS. The delinquent loan not found in previous three financial years because loan renewable policy had used at that time.

11. The actual ratio of JSCCS on non earning assets to total asset found higher than the standard rate. Ratio is above the standard. The ratio 18.34% is very high but the standard rate is only less than or equal to 5 percent. But the trend is decreasing and reached to 5.76% in financial year 2065/66.

12. The ratio of A3 must be greater than 200 percent according to the PEARLS standard but the actual ratio found lower than the standard rate. The highest ratio

is only 32.62% percent in year 2063/64. The ratio found fluctuating throughout the study period. Last financial year it is decreased to 6.91 percent.

13. The ratio of net loan income to average net loan portfolio found 18.16% is very high in year 2061/62 and 12.57% in year 2063/64 is very low. The rate is decreasing for the previous 3 financial year. It is in fluctuation trend.

14. Liquid investment income found 2.46% in financial year 2062/63 is very high and 0.784% is very low in financial year 2064/65.The ratio is in fluctuation trend.

15. There no any financial investment income found during the study period.

16. The total interest cost on saving deposit to average saving deposit is in decreasing trend. The ratio 10.62% in financial year 2061/2062 is very high and 7.6% in financial year 2065/66 is very low. The decreasing ratio refers to institution is success for reducing the cost on saving deposit.

17. Dividend cost on member share capital found 19.84%, 30.96%, 8.11% and 10.68% in financial year 2062/63 to 2065/66. Institution has not paid dividend in first year. It is in fluctuation trend.

18. Total gross income margin is found 5.25%, 3.74%, 1.84%, 4.51% and 2.83% in year 2061/62 to 2065/66 respectively. The income achievement is not well satisfactory.

19. According to the PEARLS standard the operating expenses to total assets must be 5 percent. The operating expenses all are not in controlled under the standard rate. The ratio of operating expenses is higher than standard rate. But the ratio of operating expenses is decreasing in all the financial year from 2061/62 to 2065/66 respectively.

20. The total loan loss provision expenses found 1.61%, 1.62%, 1.3%, 0.764% and 0.66% in financial year 2061/62 to 2065/66 respectively. It is decreasing trend.

21. The net income to average total asset ratio found 2.21%, 3.01%, 0.41%, 2.3% and 1.27% in financial year 2061/62 to 2065/66 respectively. The ratio is in fluctuation trend.

22. According to the PEARLS standard the ratio of L1 must be min 15%. The ratio found 14.69%, 14.1%, 16.61%, 16.85% and 16.59% for the financial year 2061/62 to 2065/66 respectively.

23. The ratio of liquidity reserve to saving deposit is found greater than the standard rate during the study period. The rate of financial year 2061/62 is only below the standard rate. The highest ratio is 16.24% in last financial year. The ratio is increasing trend.

24. Non earning liquid assets to total asset must be less than 1 percent according to PEARLS rate but the actual rate of institution found higher than standard rate in financial year 2061/62, 2062/63 and 2065/66 during the study period. The rate is less than 1 percent in financial year 2063/64 but in financial year 2064/65 is nearly equal to standard rate.

25. The growth in loans to member has increasing sufficiently during the study period of institution. The highest rate is 36.86% in financial year 2064 to 2065 and lowest rate is 25.61% in financial year 2061/062.

26. Growth in liquid investment found very high during the study period and it is also in very high fluctuation position. The highest ratio is 194% in financial year 2063/064 and it is negative in financial year 2061/062.

27. The growth in financial investment found zero in last three financial. But 500% and 33.33% growth found in previous two financial years.

28. Growth in saving deposit found satisfactory during the study period. All the growth is above the 20 percent. The maximum growth found 35.85 percent in financial year 2064/65 and the minimum growth found 20.54 percent in financial year 2061/62.

29. The growth in share capital found fluctuation during the study period. The maximum and minimum growth found 61.17 percent and 1.28 percent in the financial year 2065/66 and 2063/64 respectively.

30. The growth in institutional capital found well satisfactory during the study period. But the growth rate seen negative in financial year 2063/2064.

31. Net institutional capital also found well satisfactory during the first two financial years. But last two financial years found negative. Financial year 2063/64 found very low.

32. The growth in general membership found satisfactory. The growth in financial year 2064/65 is very high. But in FY 2061/2062 is very low.

33. The growth in total assets found greater than inflation rate during the study period. The high growth rate is in financial year 2064/65 and the lower growth rate is in financial year 2061/62.

Chapter v

SUMMARY, CONCLUSION AND RECPMMENDATION

This chapter includes Summary, Conclusion and Recommendation of the study.

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 as well as enhancing the right financial decision of the financial institutions. Vary financial analytical tools are developed to evaluate the performance of financial transaction worldwide. CAMELS, CARSEL and PEARLS are the worldwide famous tools to analyze financial ratios.

This study concerned with the financial performance of Janasewa Saving and Credit Cooperative Society 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 specific objectives are raised in first chapter.

There are six set of problem raised in this study. Problem of quality in assets, effective financial capital structure, protection of assets, condition of rate of return and cost, liquidity position and growth position are raised as questions forms in first chapter. The objectives has raised on measure the protection of asset, analyze the condition of asset quality and liquidity position, forms of financial structures, know the rate of return and growth position of JSCCS.

The study includes the concept of microfinance, meaning and definition of cooperatives, global prospects of cooperative, cooperative creates a [illegible] employment, statistical information on the cooperative movement,

cooperative, history and development of cooperative in Nepal, major events of cooperative movement of Nepal, situation of bank and financial institution in Nepal, microfinance institution and NRB licensed cooperative as 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 the study of secondary financial audited data of JSCCS. The study is descriptive and analytical nature. Cooperative is a means of development economic lifestyle of people for the developed as well as developing country like Nepal but for the achievement of success the financial work performance must be under the guidelines of WOCCU. Therefore, 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

5.2.1 Institution has not followed the provision for loan delinquent policy for the first three financial years. Loan renewal policy is used at that time. In which policy institution used to make the delinquent loan new with accumulating interest. The provision for delinquent loan for last two financial years found lower than the delinquent loan. Therefore, there is no sufficient provision found during the study period. There is no any provision found for the loan delinquent 1 to 12 month. The solvency position of institution is also below the PEARLS standard rate which means the worth of one rupee of institution is less than that.

5.2.2 The output ratio of net loan to total assets (E1), liquid investment to total assets (E2) and financial investment to total assets (E3) seems within the range fixed by WOCCU model. The ratio of saving deposit to total assets (E5) is quite

above the range of WOCCU standards which refers saving deposit is high satisfactory. Member share capital to total asset (E7) is lower than the WOCCU standard for the last four years. which shows that the institution has running with low marketing program. Institutional capital to total asset (E8) and net institutional capital to total assets (E9) is lower than the range of WOCCU model. The lower level of E8 and E9 implies that JSCCS has insufficient reserve and retained earning in institution.

5.2.3 The ratio of total loan delinquency to gross loan portfolio (A1) is within the standards of WOCCU model. The ratio of non earning assets to total assets (A2) is above the WOCCU model but it is in decreasing trend. Net zero cost fund to non earning assets (A3) ratio is lower than the standard of WOCCU model. Non earning assets seems decreasing and zero cost fund seems increasing during the study period. Increasing in zero cost fund increases the quality in assets and vice versa. As a whole the ratio shows lower in asset quality.

5.2.4 Institution is not generating income sufficiently with respect to investment portfolio. Liquid investment income to average liquid investment is also lower. Gross income margin to average total assets and net income to average total assets is insufficient and fluctuation trend. Cost on saving deposit to average saving deposit is quite above the inflation rate. Dividend cost to member share capital seen high and more fluctuation. Operating expenses to average total assets is higher than the standard rate which shows that institution is not get the success to control the operating cost efficiently. It's trend is decreasing which means management is capable to control the operating cost. Similarly provision for loan loss expenses is insufficient with respect to loan delinquency.

5.2.5 According to the WOCCU model, the standard of liquidity reserve to saving deposit is 10 percent. The actual output ratio is quite above the standard rate which indicates that institution has sufficient liquidity reserve for the deposit

withdrawals. Similarly the ratio of non earning liquid assets found higher then the standard rate except FY 2063/64 and 2064/65. The ratio of mentioned year shows that the institution is success to pay all immediate obligations as per need of institution but the ratio in remaining FY found high means the institution have high non earning liquid reserve (cash) then need of institution to pay the immediate obligation in future. Non earning liquid assets get earn nothing.

5.2.6 Growth in loan portfolio found satisfactory during the study period which depends on net loan to total assets is also found within the WOCCU standard. Liquid investment is not stable in institution. Growth in financial investment found insufficient. It is 500%, 33.33% growth in FY 2061/2062 and 2062/63 respectively but other financial year found zero growth during the study period. Growth in saving deposit found satisfactory and increasing in suitable trend except last year. Growth in membership capital found more unsuitable fluctuating trend. Growth in institutional capital found high fluctuation and it is negative in FY 2063/64. Growth in net institutional capital also found high unsuitable fluctuating trend and it is negative also. Growth in general member found satisfactory as a whole during the year. It seems that institution must input other more effort to grow the member to get WOCCU standard. Growth in total assets found very high above the inflation rate is satisfactory during the study period.

5.3 Recommendation

5.3.1 The institution is suggested to make the sufficient provision to protect the delinquent loan and decrease the delinquent loan with effective management of loan providing and collection activities. Solvency position is getting quite low then WOCCU standard. Therefore institution must be careful to increase the net value of asset with decreasing the risky assets. Effective penalty, suggestion, rule and regulation and highly implementation of them are the cure of insolvency in other to get higher solvency position and protection of assets.

5.3.2 The structure of member share capital to total assets E7, institutional capital to total assets E8 and net institutional capital to total assets E9 are lower than the standard rate. Therefore, the institution must run effective marketing programs to increase the member share capital and increase in reserve and retained earnings in order to achieve institutional capital.

5.3.3 Institution should make the sufficient provision to protect the delinquent loan, increase in zero cost fund and decrease in non earning assets in order to achieve quality in assets.

5.3.4 The income of institution is not enough because of higher operating cost and administrative cost. Therefore, institution should reduce in cost and non earning assets and use of zero cost fund and investment made on high productive assets in order to increase the profit.

5.3.5 The ratio of liquidity reserve to total saving deposit (L2) must be 10 percent according to WOCCU model. But actual ratio found quite higher than standard rate and increasing trend. Non earning liquid asset to total asset is more than standard rate for financial years 2061/62, 2062/63 and 2065/66. Institution is recommended to stop increasing liquidity reserve and reduce to standard rate and decrease in non earning liquid assets.

5.3.6 Growth in liquid investment, growth in financial investment, growth in share capital, growth in institutional capital and growth in net institutional capital are highly unsuitable fluctuating and sometime seen negative also which is not good signal and these may be the cause of accident happening in future. Therefore the company is suggested to run the suitable and stable growth getting financial activities effectively. Growth in loan, growth in saving deposit, growth in membership and growth in total assets found suitable fluctuation which is satisfactory.

5.3.7 Finally, the institution is getting success to grow up deposit collection and loan portfolio, assets and membership but seen weakness to generating income and control over the cost.

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Appendix – 1

1. Protection (P)

1.1 Allowances for Loan Losses to Allowances Required for Loans Delinquent More Than 12 Months (P_1)

$P_1 = a/b$

Where:
a = Allowances for Loan Loss (Loan Loss Fund)
b = Loan Balance of All Loan Delinquent more than 12 Months

Therefore,

P_1 for the 2065/66 = 171.09/694.54

= 24.63%

1.2. Solvency (P_6) (In Thousand)

year	2061/062	2062/063	2063/064	2064/065	2065/066
a. Total asset	10019.00	12931.33	16832.71	22737.51	29147.93
b. Allowances for risk asset	144.70	185.81	192.98	151.24	171.09
c. Delinquent loans>12 month	0	0	0	536.66	694.54
d. Delinquent loan 1-12 month	0	0	0	0	0
e. Total liabilities	10019.00	12931.33	16832.71	22737.51	29147.93
f. Problem of assets	0	0	0	0	0
g. Total savings	8243.65	10778.53	14390.42	19548.88	25304.01
h. Total shares	1139.4	1168.4	1183.3	1391.8	2243.2

Source: Annual report of JSCCS and Researcher's Calculation

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

Where:
a= Total assets
b= Allowances for Risk Assets (Loan Loss Fund)
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,

$$P_6 \text{ For } 2065/2066 = \frac{(29147.93+171.09)-(694.54 + 0.35(0) + 29147.93+0 - 25304.0)}{(25304.0+2243.2)}$$

$$= 90.21\%$$

Appendix 2

2. Effective Financial Structure (E)

2.1. Net Loan to Total Assets (E_1)

$E_1 = (a-b)/c$

Therefore, E_1 for 2062/63

= (10479.55-185.81)/ 12931.3

= 79.6%

Where;
a = Total Gross Loan (Investment in Loan)
b = Total Allowances for Loan Losses (Loan Loss Fund)
c = Total Assets

2.2. Liquid Investment to Total Assets (E_2)

= a/b

Therefore, E_2 for 2062/63

= 599.37/12931.33

= 4.64%

Where;
a = Liquid Investment (Bank)
b = Total Assets

2.3. Financial Investment to Total Assets (E_3)

= a/b

Therefore, E_3 for 2062/63

= 16,000.00/ 12931.33

= 0.1237%

Where;
a = Financial Investment (Investment on Share)
b = Total Assets

2.4. Saving Deposit to Total Assets (E_5)

= a/b

Therefore, E_5 for 2062/63

= 10776.53 /12931.33

= 83.34%

Where;

a = Saving Deposit (Deposit)

b = Total Asset

2.5. Member Share Capital to Total Asset (E_7)

E_7 = a/b

Therefore, E_7 for 2062/63

= 1168.40/12931.33

= 9.04%

Where;

a = Member Share Capital (Paid up Capital)

b = Total Asset

2.6. Institutional Capital to Total Assets (E_8)

= a/b

Therefore, E_8 for 2062/63

= 297.51/ 12931.33

= 2.3%

Where;

a = Institutional Capital (Reserve Fund)

b = Total Assets

2.7. Net Institutional Capital to Total Asset (E_9)

= a/b

Therefore E_9 for 2062/63

= 483320.8/1,29,31,334.02

= 3.74%

Where;

a = Net Institutional Capital

b = Total Assets

Net Institutional Capital

Year	2061/062	2062/2063	2063/2064	2064/065	2065/066
c. Institutional capital(Reserve fund)	1,56,879.00	2,97,507.79	3,21,395.02	5,03,894.66	6,36,200.06
d. Allowances for risk assets	1,44,704.00	1,85,813.0	1,92,981.53	1,51,240.00	1,71,086.0
e. Outstanding loan delinquent > 1 year	0	0	0	5,36,660.0	6,94,538.0
f. Outstanding loan delinquent < 1 year	0	0	0	0	0
Net institutional capital	3,01,583.0	4,83,320.8	5,14,376.55	1,18,474.66	1,12,748.6

Source: Annual Report of JSCCS

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 (Loan Loss Fund)

e = Outstanding Loan Delinquent Loan > 12 Month

f = Outstanding Loan Delinquent Loan < 12 Month

Appendix 3

3. Asset Quality

3.1. Total Delinquent Loan to Gross Loan Portfolio (A_1)

$A_1 = a/b$

Therefore, A_1 for 2065/66

= 694538.0/2,39,63,897.0

= 1.90%

Where;

a = Total Delinquent Loan

b = Gross Loan Portfolio (Investment on Loan)

3.2 Non Earning Assets to Total Assets (A_2)

$A_2 = a/b$

Therefore, A_2 for 2065/66

= 16,31,559.5/2,91,47,929.53

= 5.6%

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 Monitory 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

Year	2061/2062	2062/2063	2063/2064	2064/2065	2065/2066
c. Cash in hand	5,71,933.78	4,98,912.50	39,225.00	2,33,941.85	6,19,730.12
d. Total non interest bearing monitory checking account	0	0	0	0	0
e.Account receivable	4,03,800.93	4,21,630.44	5,82,880.44	4,73,972.44	87,402.38
f. Assets in liquidation	0	0	0	0	0
g.Fixed Assets	8,61,462.00	8,85,219.00	9,54,752.00	9,32,282.00	9,24,427.89
h. Prepaid expenses	0	0	0	0	0
Total non earning assets	1837,196.6	1805,761.9	1576,857.4	1660,196.3	1631559.5
b. Total Assets	1,00,18,996.9	1,29,31,334.0	1,68,32,714.8	2,27,37,510.8	2,91,47,929.5

Sources: Annual Report of JSCCS and Researcher's Calculation

3.3 Net Zero Cost Fund to Total Non Earning Assets Ratio (A_3)

$$A_3 = a/b$$

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

Net Zero Cost Fund (a) = (c + d + e)

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

Statement of Net Zero Cost Fund

Year	2061/2062	2062/2063	2063/2064	2064/2065	2065/2066
c.Net institutional capital	3,01,583.0	4,83,320.8	5,14,376.55	1,18,474.66	1,12,748.6
d.Total transitory capital	0	0	0	0	0
e. Total non interest bearing liabilities	0	0	0	0	0
Net zero cost fund	3,01,583.0	4,83,320.8	5,14,376.55	1,18,474.66	1,12,748.6
Total non earning assets	1837,196.6	1805,761.9	1576,857.4	1660,196.3	1631559.5

Sources: Annual Report of JSCCS and Researcher's Calculation

Appendix 4

4. Rates of Return and Cost

4.1 Net Loan Income to Average Net Loan Portfolio (R_1)

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

R_1 for 2062/63 = 16,74,320.0 /(1,02,93,733.5+77,26,571.0) / 2

= 18.58%

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)

Statement of Net Income

Year	2061/2062	2062/2063	2063/2064	2064/2065	2065/2066
Interest income	12,72,018.9	15,70,905.0	14,11,366.23	23,51,501.2	26,25,047.76
Commission	0	0	0	0	0
Fees	5,000.00	0	6,662.0	6260.0	6145.00
Penalty income	53,393.0	103415.0	64,389.0	105306.0	46166.0
Total Income	13,30,411.9	16,74,320.0	14,82,417.23	24,63,067.2	26,77,358.76
Insurance premium paid on loan	0	0	0	0	0
a)Net income	13,30,411.9	16,74,320.0	14,82,417.23	24,63,067.2	26,77,358.76
b)Net loan portfolio as on current year end	77,26,571.0	1,02,93,733.5	1,32,74,914.0	1,82,81,394.0	2,37,92,811.0
c)Net loan as on last year end	61,59,876.0	77,26,571.0	1,02,93,733.5	1,32,74,914.0	1,82,81,394.0

Sources: Annual Report of JSCCS and Researcher's Calculation

4.2 Total Liquid Investment Income to Average Liquid Investment (R_2)

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

R_2 for 2062/63 = 9840.29/(599373.08+ 235018.52)/2
= 2.36%

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_3)

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

R_3 for 2062/63 $= 0 /(16000 + 12000)/2$

$= 0\%$

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_5)

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

R_5 for 2062/63 $= (9,12,318.0 + 0 + 0)/(10776532 + 8243646)/2$

$= 9.6\%$

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_7)

year	2061/2062	2062/2063	2063/2064	2064/2065	2065/2066
a. Total dividend paid on member share	0	2,24,676.0	3,64,020.0	1,04,359.0	194,155.0
b. Tax paid on dividend of share	0	0	0	0	0
c.Total insurance premium paid on member share capital	0	0	0	0	0
Total interest (Dividend) cost	0	2,24,676.0	3,64,020.0	1,04,359.0	194,155.0
d. Member share capital as of current year end	1139400.0	1168400.0	1183300.0	1391800.0	2243200.0
e. Member share capital as of last year end	753400.0	1139400.0	1168400.0	1183300.0	1391800.0

Source:Annual Report of JSCCS and Resescrher's Calculation

$$R7 = \frac{(a + b + c)}{(d + e)/2}$$

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)

$$\text{R7 for the 2062/63} = \frac{(2,24,676.0 + 0 + 0)}{(1168400.0 + 1139400.0)/2}$$

19.48%

4.6 Gross Income Margin to Total Asset (R_8) **(In Thousand)**

year	2061/62	2062/63	2063/64	2064/65	2065/66
a. Loan interest income	1268.7	1555.49	1399.34	2334.44	2589.47
b. Liquid inv. income	3.32	9.84	12.03	17.06	35.58
c. Financial investment income	0.00	0.00	0.00	0.00	0.00
d. Non financial investment income	0.00	0.00	0.00	0.00	0.00
e. Other income	0.815	1.2	3.81	3.15	0
f. Interest cost on saving deposit	800.62	912.32	1141.37	1357.77	1696.82
g. Dividend cost on member share capital	0.00	224.68	0.00	104.36	194.16
h. Interest cost on borrowed funds	0.00	0.00	0.00	0.00	0.00
i. Total asset of current year end	10019.00	12931.33	16832.72	22737.51	29147.93
j. Total asset of last year end	7966.06	10019.00	12931.34	16832.72	22737.51

Source: Annual report of JSCCS and Researcher's Calculation

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

$$\text{R8 for 2062/63} = \frac{[(1555.49 + 9.84 + 0.0 + 0.0 + 1.2) – (912.32 + 224.68 + 0.0)}{[(12931.33 + 10019.00) / 2]}$$

$$= 3.74\%$$

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_9)

Statement of Operating Expenses

Year	2061/2062	2062/2063	2063/2064	2064/2065	2065/2066
Salary expenses	1,08,300.0	1,21,472.0	1,36,296.0	1,59,938.0	2,04,301.16
Allowances	15,800.0	20,100.0	20,500.0	23,900.0	-
Discount on interest	9,856.0	14,259.0	14,380.0	19,064.0	34,451.0
Interest expenses	8,00,619.0	9,12,318.0	11,41,368.0	13,57,770.0	16,96,818.67
Audit fees	3,000.0	3500.0	4,000.0	4,500.0	5,000.0
Selling expenses	-	-	-	1,524.0	2,600.0
Stationary expenses	18,377.0	24,426.0	18,222.0	28,888.0	30,592.0
Renewal expenses	-	8,625.0	-	-	1,650.0
Telephone expenses	-	-	2,000.0	1,020.0	510.0
Electricity expenses	927.0	928.0	816.0	1,230.9	1,206.0
Refreshment expenses	6,927.0	15,896.0	16,864.0	22,433.0	39,270.0
Published expenses	-	-	-	10,000.0	33,765.0
Other operating expenses	3,165.0	-	-	-	-
Traveling expenses	-	6008.0	7,866.0	6,151.0	12,101.0
Training expenses	-	-	-	30,000.0	-
Maintenance expenses	-	-	-	-	780.0
Meeting expenses	-	-	-	-	37,750.0
Total operating expenses	9,66,971.0	11,27,532.0	13,62,312.0	16,66,420.0	21,00,795.0

Source: Annual Report of JSCCS and Researcher's Calculation

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

R9 for 2062/63 = 11,27,532.0 / (12931.33 + 10019.00) / 2

= 9.83%

Where;
a = Total Operating Expenses
b = Total Assets as of Current Year End
c = Total Assets as of Last Year End

4.8 Total Loan Loss Provision Expenses to Average Total Assets (R_{10})

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

R_{10} for 2062/63 =185.81/ (12931.33 + 10019.00) / 2

= 1.62%

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_{12})

Net Income Statement after Dividend

Year	2061/2062	2062/2063	2063/2064	2064/2065	2065/2066
a) Net income	362.09	552.91	95.55	730.00	529.22
b) Dividend	162.94	207.34	35.83	273.75	198.46
Net income after dividend	199.15	345.57	59.72	456.25	330.76

Source: Annual Report of JSCCS and Researcher's Calculation

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

R_{12} for 2062/63 = 552.91/(12931.33 + 10019.00) / 2

= 4.82% Where;

a = Net Income
b = Total Assets as of Current Year End
c = Total Assets as of Last Year End

Appendix 5

5. Liquidity

5.1 Short Term Investment+Liquid Assets+Short Term Payables to Saving Deposit

Year	2061/062	2062/063	2063/064	2064/065	2065/066
a. Short term investment	0	0	0	0	0
b. Liquid assets	12,10,753.23	15,19,916.02	23,89,814.25	32,94,280.3	41,97,292.32
c. Short term payable	0	0	0	0	0
Total net liquidity (a+b-c)	12,10,753.23	15,19,916.02	23,89,814.25	32,94,280.3	41,97,292.32
Saving deposit	82,43,646.0	10776,532.0	1,43,90,423.0	1,95,48,883.0	2,53,04,007.0

Sources: Annual Report of JSCCS and Researcher's Calculation

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

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

$= \frac{(0+15,19,916.02-0)}{1,07,76,532.0}$

= 14.10%

5.2 Liquidity Reserve to Saving Deposit (L_2)

$L_2 = (a + b)/c$

L_2 for 2062/63 = (599,373.08 + 498,912.50) / 10776,532.0

= 10.19%

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)

$$L_3 = a/b$$

L_3 for 2062/63 = 498.91/12931.33

= 3.86%

Where:

a = Non Earning Liquid Assets (Cash)
b = Total Assets

Appendix 6

6. Sign of Growth

6.1 Growth in Loans to Member (S_1)

$S_1 = (a/b)\ 100\text{-}100$

S_1 for 2062/63 = (10479.55/7871.28) 100-100

= 33.14%

Where;
a = Total Gross Loan as of Last Year End
b = Total Gross Loans as of Last Year End (Investment on Loan)

6.2 Growth in Liquid Investment (S_2)

$S_2 = (a/b)\ 100\text{-}100$

S_2 for 2062/63 = (599.37/235.02) 100-100

= 155.03%

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_3)

$S_3 = (a/b)\ 100\text{-}100$

S_3 for 2062/63 = (16000/12000) 100-100

= 33.33%

Where:
a = Financial Investment as of Current Year End
b = Financial Investment as of Last Year End (Investment on Share)

6.4. Growth in Saving Deposit (S_5)

$S_5 = (a/b)\ 100\text{-}100$

S_5 for 2062/63 = (10776.53/8243.65)100-100

= 30.73%

Where:
a = Saving Deposit as of Current Year End
b = Saving Deposit as of Last Year (Deposit)

6.5 Growth in Share Capital (S_7)

$S_7 = (a/b)\ 100\text{-}100$

S_7 for 2062/63 = (1168.4/1139.4)100-100

= 2.55%

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_8)

$S_8 = (a/b)\ 100\text{-}100$

S_8 for 2062/63 = (515.25/241.87)100-100

= 113.03%

Where:
a = Total Institutional Capital as of CurrentYear End (Reserve Fund)
b = Total Institutional Capital as of Last Year End (Reserve Fund)

6.7 Growth in Net Institutional Capital (S_9)

$S_9 = (a/b)\ 100\text{-}100$

S_9 for 2062/63 = (483320.8/301583.0/)100-100

= 60.26%

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_{10})

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

S_{10} for 2062/63 = (895/768)100-100

= 16.54%

Where:
a = General Membership as of CurrentYear End
b = General Membership as of Last Year End

6.9 Growth in Total Assets (S_{11})

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

S_{11} for 2062/63 = (12931.33/10019.00)100-100

= 29.07%

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
Inflation Rate	2.9%	7.8%	8.6%	6.4%	7.7%

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

Appendix 7

The worked out ratios of PEARLS of JSCCS

Standard	Ratio / year	2061/62	2062/63	2063/64	2064/65	2065/66
P = Protection						
100%	P1	0%	0%	0%	28.18%	24.63%
≥ 100%	P6	87.86%	90.22%	92.40%	91.19%	90.21%
E = Effective financial structure						
70%-80%	E1	77.12%	79.6%	78.86%	80.40%	81.63%
Max 20%	E2	2.435%	4.64%	10.50%	11.38%	11.87%
Max 10%	E3	0.1198%	0.1237%	0.0951%	0.07037%	0.0549%
70%-80%	E5	82.28%	83.34%	85.5%	85.98%	86.81%
10%-20%	E7	11.37%	9.04%	7.03%	6.12%	7.7%
Min 10%	E8	1.57%	2.3%	1.91%	2.22%	2.18%
Min 10%	E9	3.01%	3.74%	3.06%	0.52%	0.39%
A = Asset quality						
≤ 5%	A1	0%	0%	0%	2.91%	2.9%
≤ 5%	A2	18.34%	13.96%	9.37%	7.30%	5.60%
> 200%	A3	16.42%	26.76%	32.62%	7.12%	6.91%
R = Rate of return and cost						
Entrepreneurial rate	R1	19.16%	18.58%	12.57%	15.61%	12.73%
Market rate	R2	1.23%	2.36%	1.02%	0.784%	1.17%
Market rate	R3	0	0	0	0	0
Market rate > inflation rate	R5	10.62%	9.6%	9.1%	8%	7.6%
Market rate	R7	0%	19.84%	30.96%	8.11%	10.68%
Variables- linked to R9, R11 & R12	R8	5.25%	3.74%	1.84%	4.51%	2.83%
5%	R9	10.75%	9.83%	9.15%	8.42%	8.1%
Dependent on delinquent loan	R10	1.61%	1.62%	1.30%	0.764%	0.66%
Linked to E9	R12	2.21%	3.01%	0.41%	2.31%	1.27%
L = Liquidity						
Min 15%	L1	14.69%	14.10%	16.61%	16.85%	16.59%
10%	L2	9.79%	10.19%	12.56%	14.43%	16.24%
< 1%	L3	5.71%	3.86%	0.233%	1.03%	2.13%
S = Sign of growth						
Dependent E1	S1	25.61%	33.14%	28.52%	36.86%	30.01%
Dependent on E2	S2	(23.44%)	155.03%	194.93%	46.31%	34.94%
Dependent on E3	S3	500%	33.33%	0%	0%	0%
Dependent on E5	S5	20.54%	30.73%	33.53%	35.85%	29.44%
Dependent on E7	S7	51.23%	2.55%	1.28%	17.62%	61.17%
Dependent on E8	S8	46.68%	113.03%	(25.20%)	74.53%	14.03%
Dependent on E9	S9	75.27%	60.26%	6.43%	(76.98%)	(4.83%)
> 12%	S10	10.98%	16.54%	11.28%	18.27%	12.31%
> Inflation	S11	25.77%	29.07%	30.17%	35.08%	28.19%

Source: Annual Report of JSCCS and Researcher's Calculation

Appendix 8

Checklist

Problems	Objectives	Research Methodology		Analysis		Findings					Conclusion	Recommendation
				Tables	Figures	61/62	62/63	63/64	64/65	65/66		
a. What is the Protection level of assets?	a. To evaluate the protection level of asset.	Limits	P1	4.1.1	4.1.1	0%	0%	0%	28.1%	24.63%	Lower than standard rate	Make sufficient provision for delinquent loan and run effective management of loan collection and investment activities in order to protect the assets.
			P6	4.1.2	4.1.2	87.9%	90.2%	92.4%	91.2%	90.2%		
		Secondary Sources										
b. How effective is th e financial structure?	b. Analyze the effective financial structure.	Limitation	E1	4.2.1	4.2.1	77.12%	79.6%	78.86%	80.40%	81.63%	Good	Effective marketing programs should be run and increase in reserve and retained earning with high profit generating in order to achieve the good financial structure.
			E2	4.2.2	4.2.2	2.435%	4.64%	10.50%	11.38%	11.87%	Within standard	
			E3	4.2.3	4.2.3	0.1198%	0.1237%	0.0951%	0.07037%	0.0549%	Within standard but low	
			E5	4.2.4	4.2.4	82.28%	83.34%	85.5%	85.98%	86.81%	Little more than standard	
			E7	4.2.5	4.2.5	11.37%	9.04%	7.03%	6.12%	7.7%	Less than standard	
			E8	4.2.6	4.2.6	1.57%	2.3%	1.91%	2.22%	2.18%	Less than standard	
			E9	4.2.7	4.2.7	3.01%	3.74%	3.06%	0.52%	0.39%	Less than standard	
		Secondary Source										
c. What is the condition of assets quality?	c. To analyze the condition of assets quality.	Limits	A1	4.3.1	4.3.1	0%	0%	0%	2.91%	2.9%	Within standard	Institution should make sufficient provision to protect the delinquent loan, development and use of zero cost fund and decrease in non earning assets.
			A2	4.3.2	4.3.2	18.34%	13.96%	9.37%	7.30%	5.60%	More than standard	
			A3	4.3.3	4.3.3	16.42%	26.76%	32.62%	7.12%	6.91%	Far less than standard	
		Secondary Sources										
d. What is the rate of return on various investments and cost on saving deposit?	d. To evaluate the return in various investment and cost on saving deposit.	Limits	R1	4.4.1	4.4.1	19.16%	18.58%	12.57%	15.61%	12.73%	Less income gain	The institution is recommended to control over the operating cost, administrative cost, non earning assets and dividend distribution.
			R2	4.4.2	4.4.2	1.23%	2.36%	1.02%	0.784%	1.17%	Not good	
			R3	4.4.3	-	0	0	0	0	0	No any income	
			R5	4.4.4	4.4.3	10.62%	9.6%	9.1%	8%	7.6%	High cost ratio	
			R7	4.4.5	4.4.4	0%	19.84%	30.96%	8.11%	10.68%	High dividend cost with respect to income	

			R8	4.4.6	-	5.25%	3.74%	1.84%	4.51%	2.83%	Very low income	Development and use of zero cost fund, investment made on high productive asset in order to increase the profit margin.
			R9	4.4.7	4.4.5	10.75%	9.83%	9.15%	8.42%	8.1%	High operating cost	
			R10	4.4.8	-	1.61%	1.62%	1.30%	0.764%	0.66%	Less provision	
			R12	4.4.9	-	2.21%	3.01%	0.41%	2.31%	1.27%	No net income generating	
		Secondary Sources										
e. what is the Liquidity position?	e. To find out the liquidity position and non earning asset.	Limits	L1	4.5.1	4.5.1	14.69%	14.10%	16.61%	16.85%	16.59%	Mostly correct	The institution is recommended to reduce the liquidity reserve and non earning liquid assets.
			L2	4.5.2	4.5.2	9.79%	10.19%	12.56%	14.43%	16.24%	More than standard	
			L3	4.5.3	4.5.3	5.71%	3.86%	0.233%	1.03%	2.13%	More than standard	
		Secondary Sources										
f. What is the growth position of loan, liquid and financial investment, saving deposit, institutional capital, membership and total assets?	f. To evaluate the growth in loan, liquid and financial investment, saving deposit, institutional capital, membership and total assets.	Limits	S1	4.6.1	4.6.1	25.61%	33.14%	28.52%	36.86%	30.01%	Good	Recommended to run the suitable and stable growth getting financial activities effectively.
			S2	4.6.2	4.6.2	(23.44%)	155.03%	194.93%	46.31%	34.94%	Highly fluctuation	
			S3	4.6.3	-	500%	33.33%	0%	0%	0%	Highly fluctuation	
			S5	4.6.4	4.6.3	20.54%	30.73%	33.53%	35.85%	29.44%	Most likely	
			S7	4.6.5	4.6.4	51.23%	2.55%	1.28%	17.62%	61.17%	Highly fluctuation	
			S8	4.6.6	4.6.5	46.68%	113.03%	(25.20%)	74.53%	14.03%	Highly fluctuation	
			S9	4.6.7	4.6.6	75.27%	60.26%	6.43%	(76.98%)	(4.83%)	Highly fluctuation	
			S10	4.6.8	4.6.7	10.98%	16.54%	11.28%	18.27%	12.31%	Good	
			S11	4.6.9	4.6.8	25.77%	29.07%	30.17%	35.08%	28.19%	Good	
		Secondary sources										

Sources: Researcher's calculation from financial report of JSCCS

Appendix 9

Balance sheet as on
(2060/61 - 2065/66)

Year	2060/062	2061/2062	2062/2063	2063/2064	2064/2065	2065/2066
Assets						
Cash	2,01,975.78	5,71,933.78	4,98,912.50	39,225.00	2,33,941.85	6,19,730.12
Bank	3,06,970.65	2,35,018.52	5,99,373.08	17,67,708.80	25,86,366.0	34,90,159.8
Investment on share	2000	12000	16000	16000	16000	16000
Investment on loan	62,66,590.0	78,71,275.00	1,04,79,547.0	1,34,67,896.	1,84,32,634.0	2,39,63,897.
Fixed assets	8,69,589.0	8,61,462.00	8,85,219.00	9,54,752.00	9,32,282.00	9,24,427.89
Current assets	2,78,360.0	4,03,800.93	4,21,630.44	5,82,880.44	4,73,972.44	87,402.38
Final inventory	40,568.2	63,506.0	30,652.00	4252.5	62,314.52	46,312.32
Total assets	79,66,064.6	1,00,18,996.9	1,29,31,334.0	1,68,32,714.	2,27,37,510.8	2,91,47,929.
Liabilities and equity						
Paid up capital	7,53,400.00	11,39,400.00	11,68,400.00	11,83,300.00	13,91,800.0	22,43,200.0
Reserve funds	65,357.00	1,56,879.00	2,97,507.79	3,21,395.02	5,03,894.66	6,36,200.06
Deposit	68,38,783.0	82,43,646.00	1,07,76,532.00	1,43,90,423.0	1,95,48,883.0	2,53,04,007.0
Share bonus funds	-	1,64,732.00	2,40,365.00	1,04,359.00	2,73,749.45	2,78,053.36
Reserve capital return fund	-	84,988.00	2,17,747.90	64,002.90	1,68,732.58	1,30,805.92
Staffs bonus funds	-	27,835.00	20,734.00	14,377.00	29,097.95	19,845.89
Co-op. educ. Funds	-	53,811.90	20,734.00	17,317.00	42,446.95	28,700.00
Loan loss funds	-	1,44,704.00	1,85,813.53	1,92,981.33	1,51,240.25	1,71,086.11
Risk bearing fund of loan	-	-	-	-	1,84,326.00	2,39,638.97
Staffs security fund	-	-	-	-	7189.0	25,434.95
Organization dev. Fund	-	-	-	-	-	19,845.89
C. liabilities	3300	3000	3500	4000	4500	13,602.9
Contra	-	-	-	5,40,559.0	4,31,651.0	37,507.0
Borrowing	-	-	-	-	-	-
Total Liability	79,66,064.56	1,00,18,996.23	1,29,31,334.02	1,68,32,714.75	2,27,37,510.8	2,91,47,929.5

Sources: Annual report of JSCCS

Appendix 10

Profit and Loss Account
(2061-2064)

Fiscal year	2061/2062	2062/2063	2063/2064	2064/2065	2065/2066
Loan interest	12,72,019.00	15,65,325.00	14,11,366.00	23,51,501.00	26.25,048.00
Penalty interest	53,393.00	1,03,415.00	64,389.00	1,05,306.00	46,166.00
Entrance charge	960.00	2,650.00	2400.00	3,300.00	3,000.0
Service charge	-	-	-	-	19,475.00
Other	9,800.00	21,969.00	11,395.00	42,663.00	64,871.00
Account close	5,000.00	-	6,662.00	6,260.00	6,145.00
Total	13,41,172.00	16,93,359.00	14,96,212.00	25,09,030.00	27,64,701.00
Expenses					
Total interest	8,00,619.00	9,12,318.00	11,41,368.00	13,57,771.00	16,96,819.00
Salary	1,08,300.00	1,21,472.00	1,36,296.00	1,59,938.00	2,04,811.00
Allowance	15,800.00	20,100.00	20,500.00	30,052.00	12,101.00
Total staff overhead	6,927.00	21,904.00	24,730.00	22,433.00	80,190.00
Office operating	35,325.00	51,738.00	54,580.00	97,226.00	1,20,344.00
Provision on loan	-	-	-	-	55,313.00
Depreciation	12,112.00	12,914.00	23,188.00	23,777.00	65,903.00
Bad debts	-	-	-	-	-
Total expenses	9,79,083.00	11,40,446.00	14,00,662.00	17,79,032.00	22,35,482.00
Gross income	3,62,088.00	5,52,913.00	95,550.00	7,29,998.56	5,29,223.75

Sources; Annual report of JSCCS and Researcher's Calculation

Appendix 11

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 chare 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%
	E3	Liquid investment / Total assets	Max -20%
	E2	Financial investment / Total assets	Max -10%
	E4	Non financial investment / Total assets	0%
	E5	Saving deposit / Total assets	70%-8%
	E6	External credit / Total assets	Max-5%
	E7	Member share capital / Total assets	10%-20%
	E8	Institutional capita / 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 Cost	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/ Average non financial investment	Greater than R1
	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 =	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)