CHAPTER - I

1.1 General Background:

Every business organization holds their own objectives. The primary objective of an organization is to generate profit with bearing social responsibilities. These two parts are interlinked with each other. Without economic contribution, social service cannot be provided. Also the long-term objective, in simple term let say profit, cannot be achieved through standing against the society. Mean while the self-survival, growth and continuity of the organization totally depends upon the degree of its profit.

Profit is the ultimate goal of every business organization. But the profit cannot be achieved automatically. It should be managed well with better managerial skills. So, the profit is a planned and controlled output of management. Profit planning and control means the planning of revenue i.e. increase the revenue, and control the cost i.e. control the inefficiency of cost. Therefore, planning and control are mainly focused on profit planning and control out of five functions of management i.e. planning, organizing, staffing, leading and controlling. Management process is the process of planning, organizing, staffing, leading and controlling effectively, efficiently and economically to attain the pre-determined goals or objectives. It gives the basis for PPC.

Comprehensive profit planning and control (profit planning and control) is a new term in the literature of business, not a new concept in management, not an end and a substitute of management. The other terms, which can be used in same context, are comprehensive budgeting, managerial budgeting and simply budgeting. The profit planning and control can be defined as a process/technique/tool of management that enhances the efficiency of management. Profit planning and control involves development and application of broad and long range objectives for the enterprise, specification of goals, strategic or long term goals, tactical or short range profit plan, a systematic performance reports detailed by organized responsibilities, control system, follow up procedures.

Hence, profit planning and control guidelines and acts as signal light to and for the management, which enables the management to correct its policy and to show its direction for achieving maximum result within a definite period. It consist three main budgets:

- Operation budget (budget related with revenue and expenses)
- Financial budget (budget related with financial statements)
- Appropriation budget (budget related with advertising and research expenses

As we earlier said that the prime objective of business enterprise is to generate profit, the first consideration of managerial budgeting or say budgeting must start from profit plan. To attain planned profit, a comprehensive budget should be made properly. It reduces the clouds of uncertainty and removes the risks over investment and future revenue. Therefore, budgeting is the foundation or a prime tool for profit planning in every type of business enterprises including Nepalese Co-operative organization too.

1.2 Importance of Financial Institution:

Financial institution can be considered as the catalyst to the economic growth of a country. The development process of a country involves the mobilization and deployment of resource and financial institutions have become much more significant than ever. Their activities for the poor can be considered as the major role-played by the endeavor toward poverty alleviation. In Nepal, there are several kinds of financial institutions such as Commercial Banks, Development Banks, Rural Development Banks, Finance Companies, Co-operatives involving in saving and credit activities etc. Most of the financial institutions are under regulation of Nepal Rastra Bank (NRB), the central bank of Nepal.

1.3 Concept of Co-operatives Organization:

Co-operative organization is voluntary association of persons having similar needs, established with the objectives of fulfilling these common objectives through mutual Co-operation and group efforts. It is also a form of economic organization, which is based on certain principles of mutuality and equality and directs its functions towards fulfilling common interest and needs of members. Such organizations operate on the basis of equality and with the objectives of promoting socio-economic status of their members. Co-operative movement is based on the philosophy- “Each for all and all for each.”

- Henry Calvert defines-“Co-operative is a form of organization where is a persons voluntarily associate together as human beings on the basis of equality for the promotion of economic interest of themselves.”

- International Co-operative Alliance (ICA) has defined co-operative in this way- “Co-operative is an autonomous economic, social and cultural needs and aspirations through jointly owned and democratically controlled enterprise.”
- According to International Labour Organization (ILO)- “Co-operative is an association of persons usually of limited means who have voluntarily joined together to achieve a common economic and through the formation of a democratically controlled business organization, making equitable contributions to the capital required and accepting a fair share of risk and benefits of the undertakings.”

1.4 Historical background of Co-operatives:

Going through the history of co-operative movement, we find that it has involved as a result of changes in economic and social conditions of people in England brought by industrial revolution of late 18th century.

Condition of agriculture and industries in England prior to industrial revolution was same to that of undeveloped countries at present. Changes started to visible since early 19th century. Agriculture profession was modernize, various machines and equipments were invented, big industries and factories were established, goods were produced in large quantities and so cost of unit product was reduced to great extent. As a result, small producers and cottage industries based on handicraft could not survive in competition. Large numbers of labours were replaced by machines. Labourers were to work at low wage rate. Their economic condition became very critical. Various middlemen involved in selling goods. Adulteration on consumer goods became common. In this way, exploitation of workers and consumers increased to critical point. Rich became richer and poor became poorer. Unemployment, economic exploitation, poverty, inequality etc. increased. As a result, revolts, strikes, rallies, riots etc. were started against these situations.

To solve these problems various economists, political thinkers and social reformists started thinking. Social reformist *Robert Owen* was the pioneer who started the concept of co-operative movement. However no any remarkable and concrete achievement had been got in co-operative movement until 1844 A.D.

On 24th October, 1844 A.D. 28 Rochdalee workers established a consumer store named- *"Rochdale Equitable Pioneers Society"* in Rochdale, London by collecting 28 pounds from members at the rate of 1 pound each and got the firm registered under 'Friendly Society Act'. This was the first co-operative society in co-operative movement. These 28 founding members including one woman are known as Rochdale Pioneers. They all were the followers of *Robert Owen***.** The principles established by this society were:

1. Cash transaction,
2. There must be certain portion of profit on transaction,
3. Mutual co-operation and faith among members.

   The Rochdale Equitable Pioneers Society started its formal transaction from 21st December 1844. Since then, it has been running successfully.

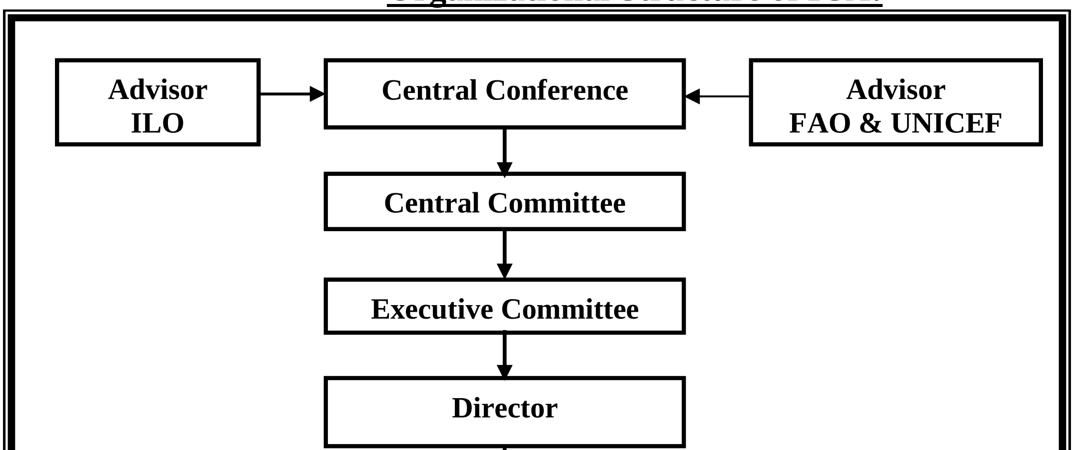
1.5 Short introduction to International Co-operatives Alliance (ICA):

ICA was established on 19th August 1895 in Manchester, UK in order to promote co-operative movement and bring uniformity among Co-operatives throughout the world. It is an autonomous non-government organization, which unites, leads and provides services to all co-operative organizations in the world and promotes Co-operative movement. It has been working as an umbrella organization of Co-operatives at international level.

On the occasion of its 100th anniversary, in 1995, it has issued seven Co-operative principles, which have been adopted by all the Co-operatives in the world. They are:

1. First principle: Voluntary and open membership
2. Second principle: Democratic controlled by members
3. Third principle: Economic participation of members
4. Fourth principle: Autonomy and independence
5. Fifth principle: Education, Training and information
6. Sixth principle: Co-operation among Co-operatives
7. Seventh principle: Interest towards community

Organizational Structure of ICA:



1.6 Co-operative Movement in Nepal:

The history of modern Co-operatives in Nepal is not very long. However, the spirit of Co-operative is found in existence from the very beginning of human civilization. Various practices and traditions based on the spirit of Co-operatives were prevalent in Nepal from ancient period. They were *Parma, Manga, Guthi, Dharma Dhikuti, Dharma Bhakari* etc. Some of them are still in practice and some have lost their existence.

Institutional development of Co-operatives in Nepal started since 2010 B.S. only, when Co-operative department was established under *"Planning Development and Agriculture Ministry."* In 2013 B.S. *'Co-operative credit committee'* was formed through executive order for the purpose of providing credits to farmers of Rapti Vally, Chitwan. On 20th Chaitra, 2013, *"Bakhan Saving & Credit Society"* as the first saving and credit Co-operative, was established under *'Rapti Development Project'* in aid of United States in Rapti valley, Chitwan. During that year, 13 saving and credit Co-operatives in total were established. So, Chitwan is regarded as a place having historic importance as regard to institutional development of Co-operatives in Nepal. Since then, 20th Chaitra is being observed as *"National Co-operative Day"* every year.

In 2016 B.S., Nepal Co-operative Act was enacted. This was the first Co-operative act in the history of Co-operative movement in Nepal. 'Co-operative Development Fund' was created in 2017 B.S. Co-operative Societies rules and regulations were issued in 2018 B.S. and in the same year, 'Central Sajha Office' was established.

In 2019 B.S., ‘Co-operative Training centre’ was established. ‘Co-operative Bank Act 2019’ was issued in the same year and under the same act, Co-operative Bank was established in 2020 B.S. in order to provide financial and banking facilities to Co-operative societies. The *Sajha yatayat,* the *Sajha Swasthya Sewa,* the *Sajha Bhander,* and the *Sajha Prakashan* were established during the year 2020 B.S.

In 2024 B.S, Agriculture Development Bank was established by replacing Co-operative Bank. In the process of co-operative movement, then HMG implemented a Co-operative strengthening progamme in 2027 B.S. As a result, many multipurpose co-operatives societies were formed through out the kingdom.

In 2023 B.S. Sajha programme was introduced through Royal Address. Compulsory saving amounts were converted into shares of Sajhas during the same year. In 2041 B.S. ‘Sajha Sansthsa Act 2041’ was implemented by replacing the ‘Co-operative Act 2016’. After the restoration of democracy in Nepal, ‘Co-operative Act 2048’ was enacted in 2048 B.S which replaced the ‘Sajha Sanstha Act 2041’. Prior to this act, Co-operative societies and movement had been conducted and controlled by state. This act ensured the autonomy and democratic management of co-operatives. After the implementation of this act, members, not by the state**,** controlled Co- operatives. So, this act is regarded as an important and revolutionary act in Co-operatives movement of Nepal. For the effective implement of this act, Co-operative rules and regulations were issued in 2049 B.S. In the same year ‘National Co-operative Development Board Act 2049’ has been passed and implemented. Under this act ‘National Co-operative Development Board’ has been formed under the chairmanship of minister of Agriculture.

On 27^{th} Baisakh, 2054(May 9, 1997), Nepal obtained the membership of ICA. In 2059, National Co-operative Bank was established as the umbrella bank in Nepal for Co-operatives.

In this way, Co-operative movement has been preceding in Nepal and it has been 50 years since first Co-operative society was established. On the occasion of 50^{th} National Co-operative Day, “Co-operative Golden Jubilee” has been celebrated throughout the country on 20^{th} Chaitra, 2063 with the slogan- *“Apnaau Paddhati Sahakari, hataau garibi ra berojgari”*

The Contribution of Co-operative in GDP is increasing every year. Contribution of Co-operative in financial sector is 7%. Total transactions of Co-operative in a year are more than Rs.63 Arab. Total Share capital of Co-operative has reached Rs.3 Arab 63 cores. Total saving and investment of Co-operative are Rs.29 Arab and Rs.30 Arab respectively. The Co-operative sector has been providing direct employment for more than 15000 people and indirectly it has providing opportunity of employment for more than one lakh people in different profession, industries, business, and service business. Specially, contribution of Co-operative is remarkable in the field of socio-cultural sector for the increment of awareness. (Co-operative Department, Aswin, 2065)

According to the data published by ‘Co-operative Department', number of various Co-operative organizations up to the end of Chaitra, 2065 are as follows:

Table No. 1

No. of Co-operative Organizations

S.N.	**Types of Co-operative**	**Nos.**
1.	Preliminary Co-operative society	12646
1.1	Preliminary Co-operative society operated by female only	1341
2.	District Co-operative Union	143
3.	Subject wise Co-operative Union	
3.1	Multipurpose	54
3.2	Saving and Credit	38
3.3	Milk Product	35
3.4	Agriculture	4
3.5	Vegetable & Fruits	4
3.6	Coffee Products	3
3.7	Consumers	3
3.8	Tea	1
3.9	Others	1
4	Subject wise Central Co-operative union	
4.1	National Co-0perative Federation	1
4.2	Saving and Credit	1

4.3	Milk Products	1
4.4	Vegetable & Fruits	1
4.5	Consumers	1
4.6	Coffee Products	1
4.7	Bee Keeping	1
4.8	Agriculture	1
4.9	National Co-operative Bank	1
4.10	Junar Central Co-operative Federation	1
5.	National Co-operative Development Board	1

Source: ***'Statistical Report of Nepalese Co-operatives institution 2065'***

1.7 Profile of Nepal Multipurpose Co-operative Society Ltd. Jhapa:

1.7.1 Introduction:

This Nepal Multipurpose Co-operative Society Ltd. (NMC) was established after the implementation of revolutionary Co-operative act of Nepal 2048. It was formally registered under the HMG Co-operative Department, Co-operative office, Bhadrapur, Jhapa with registration No. 3/1/3(31) 050/051in 2050/11/24 with the main objective of collecting of scattered money, utilizing them in productive sectors and fulfilling economic needs of its members. It is the first Co-operative society in Eastern to provide Home Banking Service.

After two years of its establishment, it got permission to carry on banking transactions from Nepal Rastra Bank since 2052. This institution has occupied a big area in the eastern region by providing necessary banking facilities via different branches. The branches are under operation in many popular towns like Birtamode, Damak, Chandragai, Surunga and Charaali. Now Damak Branch has separated and made autonomous organization. The head office of the organization is at Kakarvitta that regulates and controls the overall functioning of the institution.

The Nepal Multipurpose Co-operative society Ltd is a fast growing Co-operative society, which has extended its work area throughout the Jhapa district. Due to its fair services, it has gained reputation and earned goodwill within a short span of time. It was established with 26 founding share members and till the end of Ashad, 2066, the number of its share members has reached to 13,288. It is providing banking services among more than 12,500 depositors and Share members. End fiscal year 064/065, the organization has increased paid of capital up to Rs.26125921.

The institution has been awarded as the best Co-operative society of the year 2059 by District Development Committee, Jhapa for its contribution in mobilization of scattered capital in various rural areas and improving life standard of people.

1.7.2 Objectives of Nepal Multipurpose Co-operative Society ltd. (NMC):

As per the principle of Co-operatives, the institution's primary objective is to provide maximum services to its members. It has the secondary objective of earning profit, which is necessary for the smooth operation of the institution. The main objectives are as follows:

- To collect the scattered money to form capital and to utilize them in productive sectors.
- To motivate to develop the habit of saving as well as co-operation among members, individuals and society.
- To introduce and generate the attitude or feelings of saving to those people who are beyond the rich of prevailing banking services.
- To promote the employment and income generation sectors for the economic welfare of members, individuals and society by providing necessary capital and services.
- To provide easy and simple home banking service with utmost good faith.
- To provide loan to its members at competitive interest rate and with the simple procedure.
- To strengthen its motive of Co-operative altitude throughout the country by providing knowledge and education among the people.

1.7.3 Future plans and Programmes of NMC:

- To put the accounting system in computerization process in order to make accounting system transparent, up to date and effective. For this, it has developed its own accounting programme and implemented in its head office and branches like Birtamode, Chanragadi, Surunga and Charali.

- To operate long term and permanent nature deposit (continuous and fixed deposit) collection with priority.
- To explore the new sector of loan investment and to expand the sector of loan investment. According to this plan, it has added two sectors- House Construction and Foreign Employment for loan investment since the fiscal year 062/063.

1.7.4 General Activities of NMC:

The organization has been doing different activities. It has been providing loan for various purposes according to its policy of diversification, security and effectiveness. It has extended its loan investment sectors by two more sectors i.e. house construction loan and foreign employment loan. It has also doing some social responsibility works. So its current general activities are:

General Business Activities:

- Acceptance of deposit
- Providing of loans and advances

  -Business loan

  -Deposit security loan

  -Vehicle loan

  -Staff Subsidy loan

  -Miscellaneous loan (Agriculture, animal husbandry etc.)

  -House Construction loan

  -Foreign Employment loan
- Providing Overdrafts
- Opening various types of customer accounts.
- Remittances (Transfer of Fund)
- As per the provision of Co-operative Act 2048, Chapter 7, sec. 31, it is going into the process of division i.e. it has given complete autonomy to Damak branch as the general meeting approved the resolution of division.
- Head Office Building of this organization is under construction in Kakarvitta in area of 0-1-0 (a kattha).

Corporate Social Responsibility Activities:

- NMC Health Club
- NMC Agriculture Department
- NMC Woman Department
- NMC Co-operative Contribution Award
- Provision for Insurance to Staffs
- Conducting Seminar and Programmes
- Scholarship to students who get highest marks in SLC exam within Jhapa District among the member's children.

<u>Organizational Structure of NMC:</u>

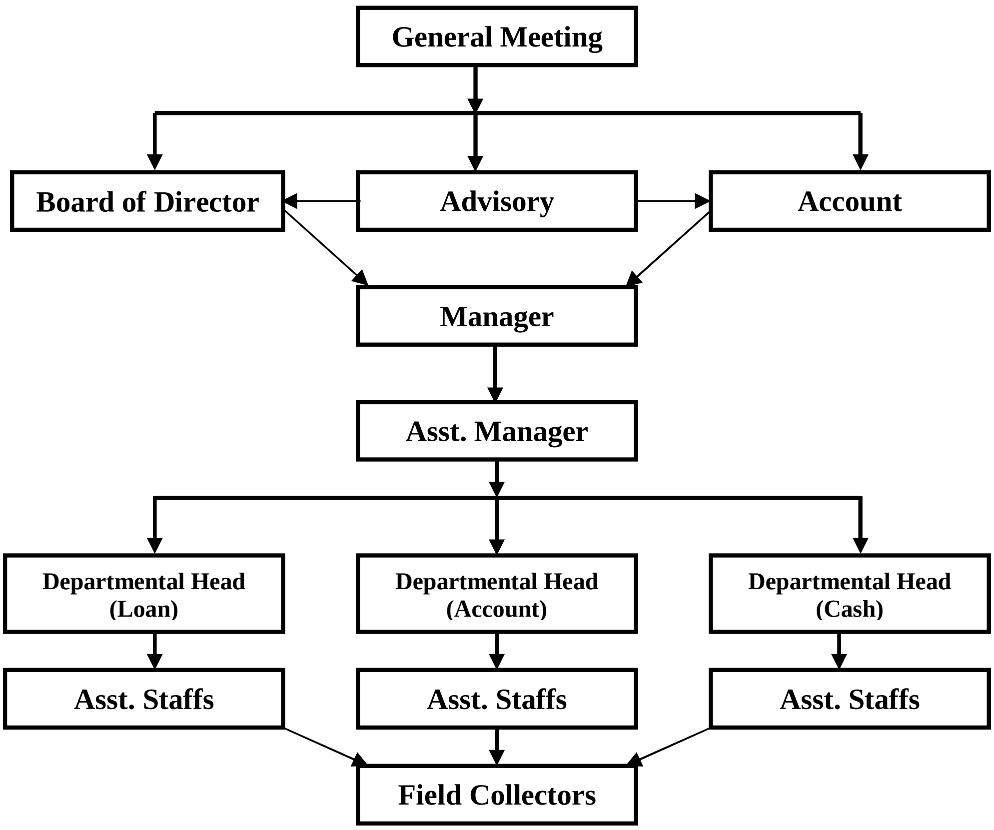


Fig 2: Organizational Structure of NMC

1.8 Focus of the Study:

Budgeting is the major tool of every business enterprises to achieve their goals by removing the clouds of uncertainty and risk.

Without proper planned sales revenue and controlled expenses through budgeting, desired profit cannot be secured and that makes PEs fiscal burden to the government. The various types of budget are used for the planning of profit, and comparing with the actual achievement by using different tools such as cost volume profit analysis, variance analysis etc. Standing on that context, this study will mainly focus on the different types of functional budgets and corporate planning practices and its effects on profitability of NMC.

This study will also focus to the responsibility body in preparing various budgets.

1.9 Statement of Problem:

Profit Planning and Control (PPC) model provides a tool for more effective supervision of individual operation and practical administration of a business as a whole. In our country, the industrialization is still in its infancy and therefore the concept of profit planning has not even been familiarized in the most of the business concerns. By proper profit planning a business can be managed more effectively and efficiently. Commercial Banks play vital role in economic growth of a country. As being a Co-operative organization, a Co-operative organization must make profit out of its operations for its survival and fulfillment of the responsibilities assigned. A Co-operative organization's major activities include mobilization of scattered money and resources, which involves cost, and profitable deployment of those resources, which generates income. The differential interest income over the interest cost, which is popularly called as Interest Margin or Spread, can be considered as the Contribution Margin in the Profit of the Co-operative. The other operational expenses form a burden to the 'Contribution Margin', which, the Co-operatives are attempting to compensate by other income, generated out of non-fund based business activities of the Co-operative. The present study has tried to analyze and examine the PPC side of Co-operative organization taking a case of Nepal Multipurpose Co-operative Society. Furthermore, the study has tried to answer the following research questions:

1. Does NMC have appropriate Budgeting system?
2. Which process of managerial budgeting applying by NMC?
3. What are the main problems facing by NMC in developing and implementing the managerial budgets?
4. What the fundamental principles are adopted by NMC in long term and short term profit planning?
5. Does the Co-operative mobilize the deposit and other resources at optimum cost?
6. Does the Budgeting system of Co-operative help to mange Co-operative organization?

1.10 Objective of the Study:

The main objective of the study is to analyze the budgeting part of NMC and its Role to mange Co-operative on actual performance, which can be measured through profitability. The specified objectives of the study are as follows:

1. To analyze the various functional budget of NMC.
2. To analyze the variance between budget and actual achievements of the Organization.
3. To identify the strength and weaknesses of Budgeting system of NMC
4. To point out the major shortcomings and recommend suggestive measures.

1.11 Significance of the Study:

Managerial budgeting is the key of financial planning and control. Profit is the essence of any business organization. Business organization can and equally shall not run without profit. This study will be completely concentrated to assess the profitability of power center by analyzing various functional budgets prepared at different levels. Profit is lifeblood of any enterprise, which doesn’t happen all of sudden. Profits are managed when a management plans its activities. It is a part of overall planning process of an organization. The process of preparing budget to achieve management objective is called budgeting.

Till date we are facing the problem in using the scarce resource efficiently due to the poor profit plan. In order to rectify this, the concerned authorities and enterprises should be aware and make proper plan for future. It will help the organization to define how far the plan has conformity with the objective of profit maximization. The foregoing information can be a basis to identify the strengths and weakness of the organization in term of profitability.

Profit is the most indicators in judging managerial efficiency. No organization can exist without profit, which happens through the efficient application of various types of budgets. So, it is necessary to analyze the various types of functional budgets for comprehensive profit planning. This study is concentrated to analyze and examine the managerial budget as a tool of increasing efficiency of Nepal Multipurpose Co-operative Society.

Mainly, this study will be useful and beneficial to following group and individuals:

1. Major stakeholders who are interested to the budgeting practices of NMC.
2. NMC itself to improve or restructure the entire system or practice of budgeting.
3. Board of directors and management body of NMC and,
4. Researchers to do further research in the same field.

1.12 Limitation of the study:

Every research has certain boundary since the world is dynamic therefore this study also is not an exception. The researcher has however tried to eliminate the limitations to the best possible extent, yet it suffers from the following limitations:

1. The study is made on the Budgeting system of NMC.
2. The profit planning of NMC has been analyzed, leaving other areas uncovered.
3. The study covers the period of seven years from F/Y 2058/059 to 2064/065 only.
4. Primary data is collected only from the informal discussion with the personnel of the NMC.
5. The accuracy of this study is based on the data available from the management of NMC, the various published documents of the Co-operative and the response made by the respondent during the informal discussion.

1.13 Research Methodology:

Research methodology refers to the various sequential steps to be adopted by a researcher in problem with certain objectives in view.

This study intends to show the relation of operating as well as managerial budgeting in the field of profit planning. It requires an appropriate research methodology. This study collects secondary data as well as some primary data from related departments, libraries, articles, persons, groups, thesis reports etc. Available data and information are presented and analyzed with the various statistical, mathematical tools and according techniques in order to come to decision. In this research study, main relevant research design will be followed:

- Descriptive Research Design
- Analytical Research Design
- Case Study Research Design
- Historical Research Design

1.14 Organization of the Study:

I. **Introduction:** This Chapter includes Background, Importance of Financial Institutions, Conceptual Framework of Budgeting, Concept of Co-operative organization, Historical background of Co-operatives, Short introduction of International Co-operative Alliance (ICA), Co-operative Movement in Nepal, Brief profile of NMC, Focus of Study, Statement of the Problems, Objectives of the Study, Significance of the Study and Limitation of the Study and Research Methodology.

II. **Review of literature:** This chapter includes two main aspects; conceptual framework and review of related study. The conceptual framework includes fundamental concept and component of managerial budgeting. It mainly deals with theoretical analysis and briefly reviews the concept related to the study and also deals with literature review of previous research works done in managerial budgeting of NMC.

III. **The research methodology contains:** This chapter reveals the methodology adopted in carrying out the research work. It includes introduction, research design, sources and nature of data, period covered, research variables, research tools used and research questions for the study.

IV. **Presentation and Analysis of Data:** This Chapter is one of the main chapters of this study. It includes almost data and graphs are interpreted in such a way so that the objectives of the study can be achieved.

V. **Summary, conclusion and recommendations:** This chapter includes summary and conclusions of the study and also recommends some suggestions and measures to solve the present shortcomings regarding comprehensive budgeting of NMC.

Besides these, References Books, Magazines, Newspapers, previous dissertations are shown under bibliography. Documents, Compile Sheet, Calculations etc. are separately shown under appendices. A Curriculum Vitae and other related items or figures would also be included at the end of the study report.

CHAPTER - II

REVIEW OF LITERATURE

2. Conceptual Framework:

2.1 Concept of Managerial Budgeting:

Managerial budgeting is viewed as a systematic and formal approach or process designed to help management for preparing significant phases of the management and control functions. Specifically, it involves: -

1) The development and application of broad and long range objective for the enterprises.
2) The specification of enterprise goals.
3) The development of profit plan with assigning responsibilities.
4) A system of periodic performance reports detailed by assigned responsibilities and,
5) Follow up procedure.

Managerial budgeting is a component of overall planning procedure of an organization. The managerial process and profit planning are interrelated to each other. Success of management always depends on well plan. Managerial budgeting is a tool, which may be used by the management in planning the future course of action and controlling the actual performance because it is a written plan in which all aspects of business operation concerned with future period are included. Managerial budgeting is a predetermined detail plan of action developed and distributed as guide to current operation and a partial basis for the subsequent evaluation of performance.

The primary aim of managerial budgeting is to assess in assuring the procurement of the profit planned and to provide a guide for assisting in establishing the financial control policies including fixed assets additions, inventories and the cash position. The adoption of a correctly constructed profit plan provision provide opportunity for a regular and systematic analysis of incurred or anticipated expenses, organized future planning fixing of responsibilities and stimulation of effort. In short it provides a tool for more effective supervision of individual operations and practical administration of the business as a whole.

2.2 Concept of Profit:

Profit is the primary objective of a business. In view of the heavy investment which is necessary for the success of most enterprises, profit lies the accounting sense, tends to become along term objectives, which measure not only the success of a product but also of the development of the market for it. The word profit implies a comparison of the operation of business between two specific dates, which are usually separated by an interval of one year. In order to optimize those corporate source of wealth on which national prosperity depend, the basic financial objectives of companies is to maximize, with in socially acceptable limits, profit from the use of the fund employed by them. No company can survive long without profit for; profit is the ultimate measure of its effectiveness, and in a capitalist society, there is no future for a private enterprise, which always incurs losses. Profit is a signal for the allocation of resources and a yardstick for judging managerial efficiency. In fact, it is the growth of profit, which enables a firm to pay higher dividend to its ordinary shareholder. Profit result from transaction. Profit is the dominant goal in business, and profit making should be the main objectives in term of which the general effectiveness of an organization is measured. Profit is also defined as a surplus of revenues and the after the deduction of all the expenses incurred on earning it. Usually, profits do not happen; they are managed *(Kulkarni, 1992; 310-311).*

Profit is the income received by the organizer. It is the reward for the services of an entrepreneur. A firm makes profit when it receive a surplus after it has paid interest on capital, wage to labor which id equal to the difference between the total revenue and total cost of production. Profit earned by the entrepreneur may be broadly divided into two categories viz. the gross profit and net profit. Gross profit of the entrepreneur refers to whole of the income earned by him. It consists of the reward for the factors of production supplied by the organizer him self, reward for management and reward for the organization of production *(Chitrakar & Devkota; 204-331).*

Hence, profit is the amount after deducting cost from revenue. It determines from cost and revenue. Every business enterprise makes an investment of a huge amount with taking a higher degree of risk and thus they expect higher rate of return and so we can say that profit is the reward against risk and innovation.

2.3 Concept of Planning:

In translating goals and objectives into success, the specific activities, sufficient resources and their proper management are required, which is called planning. Every organization shall develop three types of plan, short, intermediate and long term. Managers at every level of management perform planning. It is a decision in advance for what to do, when to do, how to do and who will do the particular tasks. Thus, it is the process of developing objectives and selecting a future course of action to accomplish them. It includes:

- Establishing enterprises objective.
- Developing premises about the environment in which they are to be accomplished.
- Selecting a course of action for accomplishing the objectives.
- Initiating activities necessary to translate plans into actions.
- Current re planning to correct current deficiencies.

2.4 Planning Vs Forecasting:

Forecasting and planning are not of the same meaning. Simply we can say that forecasting is expected future conditions. These expectations depend up on some assumptions, which are very useful. Forecasting is our best thinking about what will happen to us in future. In fact, planning comes only after forecasting as second step. Planning entails regular measurement of progress toward objectives and goals and the execution of strategic and action program. Yet, it is clearly recognized that plans often have to be altered in the light of new circumstances. It should be continuous process and not once or a year experience.

Planning and forecasting are often confusing and ambiguous. Although they are related, have distinctly different purposes. A forecasting is not a plan: rather it is a statement and a quantified assessment of future condition of the particular subject based on one or more explicit assumptions. Forecasting, one of the essential elements of planning is a predication of what will happen on the basis of certain assumption, but planning is an attempt to determine what should happen and then to take steps that will make it likely to happen.

2.5 Management process:

Management is the process that includes planning, organizing, staffing, leading and controlling. The five function of management collectively constitute the management process, because they are concurrently and continuously being performed in managing enterprise the management process uses sequential linkage and feedback. The five functions and the management process are given below: -

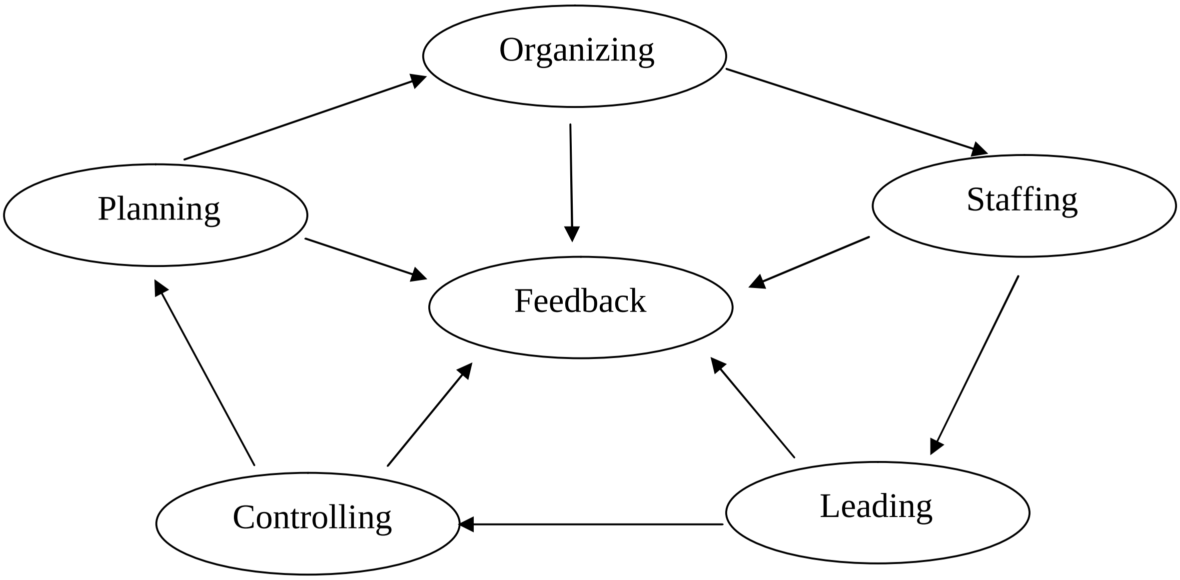


Fig. 3 Management Process

2.6 Fundamental concept of Managerial Budgeting:

The fundamental concept of managerial budgeting includes the underlying activities or tasks that must generally be carried out to attain maximum usefulness from managerial budgeting. These fundamental have been full codified. As a basis for discussion, an outline of the fundamental concept usually identified with managerial budgeting is given below: -

2.6.1 Management involvement and commitment:

Management involvement entails managerial support, confidence, and participation and performance orientation. In order to engage competently in comprehensive managerial budgeting, all levels of management, especially top management must (1) understand the nature and characteristic of PPC, (2) be convinced that this particular approach of managing is to devote the effort required to make it operation, (3) support the program in all its panning process as performance commitment. For a comprehensive budgeting program each member of management must be motivated and directed toward achieving goal through preplanned activities.

2.6.2 Organization adaptation:

A managerial budgeting or PPC program must rest upon a sound organization structure for the enterprise and clear-cut line of authority and responsibility. The purpose of organization structure and the assignment of authority are to establish a framework within which enterprise objectives may be attained in a coordinated and effective way on a continuing basis. The scope and interrelationship of the responsibilities of each individual manager are specified. To increase managerial and operational efficiency, practically all enterprise, except perhaps the very smallest ones, should be structurally disaggregated into organization subunits. Thus, the company as a whole is a responsibility center, as is each division, department, and sales district.

Responsibility center are future classed in respect to the extent of responsibility as follows:-

1. Cost center
2. Revenue center
3. Profit center
4. Investment center

2.6.3 Responsibility Accounting:

Every planning will be made with the help of historical data supplied by accounting department and controlling will be made by evaluating both actual and budgeted data. Therefore, accounting system of any enterprise should be built around the responsibility accounting. So, managerial budgeting program find it necessary to analyze with a consequent reorganization of the system on a responsibility accounting.

2.6.4 Full communication:

Managerial budgeting can be done only with more effective communication network in an enterprise. Full communication means, each unit of the organization or enterprise can be familiar with goal and objective. Communication can be of dialogue, message or understanding from working together. Although, in practice the management gives least importance to communication, it is most important thing for the observation and control of an organization.

For managerial budgeting, effective communications means development of well defined objective, specification of goals, development of profit plan and reporting and follow up activities related to performance evaluation for each responsibility center.

2.6.5 Realistic Expectation:

In managerial budgeting or PPC, expectation must be realistic and avoid being either mainly conservations or irrationally optimistic. The care with which budget goal are set for such items as sales, production levels, cost, capital expenditures, cash flow and productivity determines the usefulness of a managerial budgeting program. For managerial budgeting or PPC purposes, enterprise objective and specific budget goal should represent realistic expectations. To be realistic expectation must be related (1) to their specific time dimension and (2) to on assumed external environment that will prevail during that time span. Within these two constraints, realistic expectation should assume a high level of overall efficiency; however, the objective this and goal should be attainable.

2.6.6 Flexible Application:

The management should not dominate managerial budgeting program or any other management techniques. Such techniques of management must be flexible. These are the techniques, which is not only the end of the management itself because the main end or aim of the management is to use the resources in the most effective way and earn high return against investment and for this purpose managerial budgeting or other techniques are to be used as mean only.

2.6.7 Activity costing:

Responsibility accounting system generally accumulates costs by department, and product costing systems associate costs with unites of product or services. Organizations also frequently find it useful to associate cost with activities. By decomposing as organization’s production process into a discrete set of activities, and them association costs with each of those activities management is in a better position to determine the costs and benefit of continuing the activities.

2.6.8 Zero- base budgeting:

Zero base budgeting is constructed on the premise that every activity in the budget must be justified. It starts with the basic premise that the budget for next year is zero and that every expenditure, old and new, must be justified on the basis of its cost and benefit. The discipline of zero base budgeting takes a different approach in fact, a reverse approach to this problem of justifying everything. What it says is this: begin with where you are and establish a business as usual budget for next year the same way and the same thing you would do if you weren't concerned about constraint and total justification.

2.7 Establishing the Foundation for Managerial budgeting:

To establish sound foundation for initiating a managerial budgeting program, the following steps should be followed: -

Step 1: There must be commitment by the top management to the broad concept of managerial budgeting or PPC and a sophisticated understanding of its implication and operations.

Step 2: The characteristics of the enterprise and the environment in which it operates including the controllable and uncontrollable variables must be identified and evaluated so that relevant decisions may be made over the characteristics of a managerial budgeting or PPC program that would be effective and practical.

Step 3: There should be an evaluation of the organization structure and assignment of managerial responsibility and implementation of changes deemed necessary for effective planning and control.

Step 4: There must be evaluation and reorganization of the accounting system to ensure that it is tailored to the organization responsibilities so that it can provide data particularly useful for planning and control purpose.

Step 5: A policy determinations must be made about the time dimensions to be used for managerial budgeting or PPC purposes.

Step 6: A program of budget education should be developed to inform management at all levels about (a) the purpose of the program; (b) the manager in which it will operate, including the basic management policies and guidelines for the administration; (c) the responsibility of each level of management in the program; and (d) the ways in which the program can facilitate the performance of each manager's function (*Welsch, et al, 2001; 59*).

2.8 Objectives of Managerial Budgeting:

The main objectives of managerial budgeting are as follows: -

1. To state the firm's goal in clear formal term to avoid confusion & facilities their attainability.
2. To communicate expectation to all concerned with the management to the firm so that they are understood support and implemented.
3. To provide a detailed plan of actions for reducing uncertainly and for its proper direction of individual and group efforts to achieve goal.
4. To co-ordinate the activities and effort in such a way that the use of resources maximized.
5. To provide a means of measuring and controlling the performance of individual and nit and to supply information based on which the corrective action can be taken.

2.9 Advantages of Managerial Budgeting:

The main advantages of managerial budgeting are as follows: -

1. It forces early consideration over basic policies.
2. It requires adequate and sound organization structure: that is, there must be a defined assignment of responsibility for each function of the enterprises.
3. It compels all members of management, from top to bottom, to participate in the establishment of goal and plans.
4. It requires adequate and appropriate historical accounting data.
5. It instills at all level of management the habit of timely, careful, and adequate consideration of the relevant factors before reaching important decision.
6. It reduces cost by increasing the span of control because fewer supervisors are needed.

7. It tends to remove the uncertainty that exists in man organizations, especially among lower levels of management, relative to basic policies and enterprises objectives.
8. It pinpoints efficiency and inefficiency.
9. It forces management to give adequate attention to the effect of general business conditions.
10. It forces recognition and corrective action.
11. It reward high performance and seek to correct unfavorable performance.

2.10 Disadvantages and limitations of Managerial Budgeting:

The main disadvantages of managerial budgeting are as follows: -

1. It is difficult, if not impossible, to estimate revenues and expenses in our company realistically.
2. It is not realistic to write out and distribute our goals, policies, and guidelines to all the supervision.
3. It creates all kinds of behavioral problem.
4. It adds a level of complexity that is not needed.
5. It is too costly, aside from management time.
6. The manager, supervision, and other employees hate budget

2.11 Components of managerial budgeting:

The components of managerial budgeting can be mentioned as follows:

1. The Substantive Plan
2. The financial plan
3. Variable Expenses Budget
4. Supplementary Data
5. Performance Reports and
6. Follow –up

2.12 Process of Managerial Budgeting:

The managerial budgeting process should involve periodic consistent and depth re planning so that all aspect of operation are carefully reexamined and re-evaluated. This prevents a budget planning approach that involves only justification of increases over the prior period. The concept of revaluation and the necessity to justify all aspect of the plan periodically finds its strongest support in what has been called zero base budgeting.

2.12.1 Identification and Evaluation of External Variable:

Management planning must focus on how to manipulate the controllable variables. Moreover, there must be managerial planning of how to work with the non-controllable variables. That is for both kinds of variable, how can management take advantage of potential favorable impacts and minimize potential unfavorable impacts and minimize potential unfavorable impacts on the enterprise? By relevant variable we mean those that will have a direct and significant impact on the enterprise.

Particularly, significant phase of this analysis includes an evaluation of the present strength and weakness of the enterprise. Planning must necessarily status with on objective and returns understanding of the present status of products, service, market, profit and returns on investment cash flow, availability of capital, productive capabilities, and the competence of both management and non management personnel.

2.12.2 Development of Broad Objective of the Enterprise:

Development of the broad objective of the enterprise is a responsibility of executive management. Based on a realistic evaluation of the relevant variable and an assessment of the strengths and weakness of the organization, executive management can specify or restate this phase of the managerial budgeting.

2.12.3 Development of specific goal for the enterprise:

The primary purpose of the “goal phase” of the PPC or managerial budgeting process is to bring the statement of broad objective into sharper focus and to generate more specific planning information from the realm of general information. It provides both narrative and quantitative goals that are definite and measurable and should be developed by executive management as the second component of the substantive plan for the upcoming budget year.

These are specific goals that relate to the enterprise as a whole and to the major responsibility centers.

2.12.4 Development and evaluation of Company strategies:

Company strategies are the basic ways and tactics that will be used to achieve planned objective and goal. A particular strategy may be of short term or long term. The purpose of developing and disseminating enterprise strategies is to find the best alternative for attaining the planned broad objectives and specific goals. Executive management must be creative and directly involve in the development of new strategies that focus on "how" and thus which outline a plan of action for the enterprise.

2.12.5 Executive management planning instructions:

The executive planning instruction, issued by top management, communicates the planning foundation that is necessary for the participation of all levels of management in the development of the strategic and tactical profit plan for the upcoming budget year. Executive leadership is fundamental in developing and articulating this planning foundation including the formulation of relevant strategies (*Welsch, et al, 2001; 78-79).*

2.12.6 Preparation and evaluation of project plan:

Project plan encompass variable time horizon because each project has a unique time dimension. Project plans encompass such item as plans for improvement of present product, new and expanded physical facilities, and entrance into new industries, exit from products and industries, new technology and other major activities that can be separately identified for planning purposes. The nature of project is such that they must be planned as separate units. During the formal planning cycles management must evaluate and decide upon the plan status of each project in process and select any new projective to be initiated during time dimensions converted by the upcoming strategic and tactical profit plan *(Welsch, et al, 2001; 79).*

2.12.7 Development and approval of strategic and tactical profit plan:

The strategic long range and tactical short range profit plans normally should be developed concurrently for all practical purpose and that the executives in charge of each of the responsibility centers through out the firm should participate in their development in harmony with planning premises. Meaningful participation in the planning process generates positive behavioral effects. A manager of each responsibility center has to initiate immediate activities within his own functional sphere to develop a strategic long range profit plan as soon as he receive the planning premises and procedural instructions.

2.12.8 Implementation of managerial budgeting:

Implementation of management plan, developed and approved in the planning process involves the management function of leading as well as motivating subordinates in attaining enterprise objectives and goals. For that, effective management at all levels requires in the enterprise to communicate the objectives, goals, strategies, and policies and make the subordinates to be understood. On the other hand, there are many facets involved in management leadership and each of them stands on their own values and norms. Thus under managerial budgeting process, management should be aware in establishing realistic and attainable goals and objectives; to the overall enterprise and to each responsibility center.

2.12.9 Use of periodic performance report:

As profit plan are being implemented during the period of time specified in the tactical plan, periodic performance reports are needed. The accounting department on a monthly basis prepares these performance reports. Also some special performance reports are prepared more often on an "as needed" basis. These performance reports (a) compare actual performance with planned performance and (b) show each different as a favorable or unfavorable performance variation *(Welsch, et al, 2001; 85)*

2.12.10 Use of Flexible expenses budgets:

The flexible expenses budget is also known as the variable budget, sliding scale budget; expenses control budget or formula budget etc. The flexible budget concept completely applies only to expenses. It is completely separate from the profit plan, but used to complement it. In the context of Nepal, most of the companies' especially public enterprises do not have the practice of using flexible budget procedures. And rests integrate flexible expense budget to the profit planning procedures.

2.12.11 Implementation of follow-up:

Follow up is an important part of effective control. Because performance reports are based on assigned responsibilities, they are the basis for effective follow up actions. It is important to distinguish between cause is primary a responsibility of line management. Analysis to determine the underlying causes of both favorable and unfavorable performance variances should be given immediate priority. In the case of unfavorable performance variances after identifying the basis causes, as opposed to the results, are selected. Then the corrective action must be implemented *(Welsch, et al, 2001; 88).*

2.13 Budgeting as a tool of managerial budgeting:

A budgeting is a written plan for the future. The managers of firms, which use budgets, are forced to plan ahead. Thus, these firms tend to do well because they anticipate problems before they occur. A firm without financial goal may find it difficult to make proper decision. A firm with specific goals, in form of a budget, makes many decision a head of time. Budget helps a firm to control its costs by setting guidelines for spending money for undead items.

Budget as a tool of planning and control is clearly related to the broader system of planning and control in an organization. Planning involves the specification of the basic objectives that the organization will pursue and fundamental polices that will guide it. In operation term, it involves the step of setting objectives, specifying goals, formulating strategies, and expressed in financial terms, for the operation and resources of an enterprise for same specified period in the future *(Khan& Jhin, 1989; 296).*

Hence, budgeting includes sales, production, distribution and financial aspects of an organization. Budget programs are designed to carry out a variety of function, planning, evaluation of performance, coordinating activities, implementation of plans, communicating motivating and authoring.

2.13.1 Characteristics of Good Budgeting:

The characteristics of good budgeting are as follows: -

1. Budgeting may be formulated for the organization as a whole as for any subunit.
2. A good system of accounting is also essential to make the budgeting useful.
3. A budgeting is a quantitative expression of a plan of action and aid to co ordination and implementation.
4. A good budgeting system should involve persons at different levels while preparing the budgets; the subordination should not feel only imposition on term.
5. Budgets are designed to carryout a variety of function planning, evaluating activities and implementation *(Rathman, 1974; 21- 22).*

2.13.2 Objectives of Good Budgeting:

The main objectives of budgeting are as follows: -

1. It is a plan, which reflects the policy of a business in financial terms.
2. It is a plan of action and serves as a declaration of policies.
3. It is a control document by which management can monitor actual performance.
4. It is the plan to forecast for future to avoid losses and to maximize profits, i.e. to help in planning.
5. It is a plan states the firm's expectation in clear, formal term to avoid confusion and to facilitate their attainability.
6. It defines the objectives for the entire executive's communication.
7. It is a plan to bring about co-ordination between different functions of an enterprise, i. e. to help in co-ordination.
8. It is a plan to communicate expectations to all concerned with the management of the firm so that they are understood, supported and implemented.
9. It acts as a motivator of employees.

10. It provides a means of co-ordination and communication. It is a measure against which to evaluate the quality of management.
11. Budget facilitates centralize control with delegated authority and responsibility *(Rathman, 1974; 20).*

2.13.3 Classification of Budgets:

The classifications of budgets are as follows:-

A) On the basis of time:

1. Long term budget
2. Short term budget
3. Current budget

B) On the basis of function:

1. Sales budget
2. Production budget
3. Direct material budget
4. Direct material purchase budget
5. Direct labor cost budget
6. Cost of production budget
7. Selling and distribution expenses budget
8. Cash budget
9. Capital budget

C) On the basis of flexibility:

1. Static budget
2. Flexible budget

D) On the basis of nature of business activities:

1. Capital expenditure budget
2. Operating expenditure budget

2.13.4 Problems and limitations of Budgeting:

The major problems of budgeting system are as follows:-

1. Developing meaningful forecasting and plans, especially the sales plan.
2. Seeking the support and involvement of all levels of management.
3. Establishing realistic objectives, policies, procedures and standards of desired performance.
4. Educating all individual to be involved in the budgeting process and joining their full participation etc.

The following are the limitation of budgeting system:-

1. Budgeting is not an exact science. It success hinges upon the prevision of estimates.
2. The installation of a perfect system of budgeting is not possible in a short period. Budgeting has to a continuous exercise. It is a dynamic process.
3. The success of the budgeting program is to understand by all and concerned effort for accomplishing the budget goals.
4. The presence of a budgeting system should not make management complacent. To get best results of management; management should use budgeting with intelligence and foresight. Budgeting cannot replace management.
5. Budgeting will hide in efficiencies if a proper evaluation system lacks. It should be re-examined regularly.

2.14 Development of Managerial Budgeting:

2.14.1 Sales Budget or Plan:

Sales budget provides as estimate of goal to be sold and revenue to be derived from sales. It is a starting point in the budgeting procedure. Sales plan or budget is one of the function budgets and is essentially, a forecast of sales to be effected in a budget period. It defines the quantities and values of expected sales in total as well as product wise and area wise during definite future period. The preparation of sales budget is based up on the sales forecast the sales for the planning period.

Sales planning or budgeting provides basic management decision about marketing. Marketing decisions are basic approach for developing comprehensive sales plan and profit plan. Therefore, sales budgeting is the foundation of all other budgets as well as a tool of profit plan for the every business enterprises either they are manufacturing or non-manufacturing and either public or private enterprises. If sales plan is not realistic, most other parts of overall profit plan cannot be realistic. Thus management should develop a realistic sales plan. If management cannot develop realistic sales plan, it will be little justified. Standing on the above definition the primary purposes of a sales plan can be stated as below: -

a) To reduce uncertainty about future revenue,
b) To incorporate management judgments and decisions into the planning process,
c) To provide necessary information for developing other element of a comprehensive profit plan, and
d) To facilitate management control of sales activities

A comprehensive sales plan comprises all sales activities. It is also referred as a market penetration plan. A common misconception is that sales planning involves for developing a profit. This shows only the amount of expected sales volume. But actually there are many variables, which influence to sales. So, we should be considering these influencing variable, when, preparing a sales plan.

Hence, sales plan is the strategizing point is the preparation of the managerial budgeting. All the other plan and budgets are dependent up on the sales budget. The budget is usually presented both in unites and in dollars of sales revenue or sales volume. The preparation of sales plan is based up on the sales forecast the sales for the planning period.

2.14.1.1 Strategic and Tactical Sales Planning:

A sales plan can be developed of two types in accordance with period. Those are long term planning and short term planning. The planning prepared for more than one year is long term planning. Commonly, five years strategic sales planning is categorized as long rang planning. The planning prepared for one year or less than one year is short range planning. It is also known as strategic and tactical sale plan.

Strategic long-term sales plan is one of the first steps in the overall planning process. Long-term sales plans are usually developed as annual amounts. The long-term sales plan uses broad grouping of product (product lines) with separate consideration of major and new products and services. Long term sales plan usually involve in depth analyses of future market potentials, which may be built up from a basic found of the economy, industry projections, and finally company objectives. Long-term managerial strategies would affect such areas as long term pricing policy, development of new product and innovations of present products new directions in marketing efforts, expansion or changes in distribution channels, and cost patterns. The influence of managerial strategy decision is explicitly brought to bear on the long-term sales plan primarily on a judgment basis *(Welsch, et al, 2001; 174).*

2.14.1.2 Purpose of a Sales Plans / Budget:

The main purpose of a sales plan is to express sales revenue for a specific future period. It is based upon:

- The present knowledge of the company,
- The environment and
- The management strategies.

The main purposes of a sales planning are as follows: -

1. To reduce uncertainty about future revenue,
2. To provide necessary information for developing other elements of managerial budgeting.
3. To facilitate management judgment and decision into the planning process.

2.14.1.3 Components of Comprehensive Sales Plan:

A comprehensive sales plan should satisfy the requirement of, and be consistent with, the overall managerial budgeting program. The components of comprehensive sales plan can be shown with the following two broad phases as follows: -

(A) Components of the foundation for comprehensive sales planning: -

1. External variable identified and evaluated.
2. Broad enterprises objective and goal formulated.
3. Strategic for the company developed.
4. Planning premises specified.

(B) Components of a comprehensive sales plan: -

1. Management policies and assumptions.
2. Marketing plan (Sales and services revenues) revenues.
3. Advertising and promotion plan.
4. Distribution (selling) expenses plan *(Welsch, et al, 2001; 175-176).*

2.14.1.4 Developing a Comprehensive Sales Plan or Budget:

Basic steps in developing a comprehensive sales budget are as follows:

Step-1 To develop management guidelines in relation to sales plan including the sales planning process and planning responsibility.

Step-2 To prepare sales forecast consistent with specified forecasting guidelines including assumption. Forecasting method is broadly classified as:

1. Quantitative
2. Technical
3. Judgmental

Step-3 To assemble all other relevant data as:

1. Manufacturing capacity
2. Sources of raw material and a labor force
3. Capital availability
4. Availability of alternative distribution channel

Step-4 Based on above steps, management evaluate and judgment to develop comprehensive sales plan. There are four different participation approaches widely used in the process of developing sales plan: -

1. Sales forces composite
2. Sales division managers composite
3. Executive decision
4. Statistical approach

Step-5 To get the managerial commitment in attaining the goals specified in the comprehensive sales plan.

Above steps must be revised and implemented in various ways depending on the characteristics of the business and the expertise of the management. *(Welsch, et al, 2001).*

2.14.1.5 Method of projecting sales:

Presenting future expectation over sales is such a complex work. Moreover it is based on the external or says uncontrollable factors like market structure, consumer behavior, other natural factors etc. and a little more on internal factors. Standing on the fact, a company's sales projection should be nearest to the reality and for tackling to that challenge, we can use one or more than one of the following methods:

1. Judgmental methods
2. Statistical methods
3. Special purpose methods

2.14.1.6 Consideration of Alternative in Developing a realistic Sales Plan or Budget:

Sales plan is also a step of decision-making process. All other are depended on it. In this plan the executive management has to choose one final alternative among the various alternatives. Important decision must be made on the issues of new product, pricing, expansion or contraction of sales areas, size of sales force, new distribution cost limitation, and advertising and other promotional policies. Basically, the following two types of problems should be considered while developing a sales plan:

(a) Price – Cost – Volume Consideration

(b) Product line alternative

2.14.2 Production Plan or Budget:

2.14.2.1 Meaning:

The production budget deals with the scheduling of operations, the determination of volume, and the establishment of maximum and minimum quantities or raw material and finished goods inventories. It summaries, details and after all provides the basis for preparing the budget of material, labor and factory overhead. These three elements selection of the income statement and their totals are estimated in the manufacturing budget.

Once sales and inventory requirement have been established, the logical first step in the production plan is a facility survey; this survey should determine that all planned products can be produced on existing or contemplated equipment and that they can be made the volumes required. In this initial stage availability of labor supply and skill are considered, bottlenecks caused by lack of skill or equipments are frequently uncovered. At this point decisions must be made either to eliminate bottlenecks or reduce planned volume *(Willam, Thomsa; 58).*

The production plan involves of determining the number of unit of each product that must be manufactured to meet planned sales and maintaining planned inventory levels of finished goods. The production budget is prepared in units only, which can be shown in the following way:

Budgeted Production Units = Budgeted Sales Unit + Desired Closing Inventory – Opening Inventory

Thus, production is based on budgeted sales volume and desired inventory level. The responsibility for the preparation and operation of production budget is of the production manager.

2.14.2.2 Responsibility for Production Plan:

Production manager are responsible for the development of production plan. The complete and detailed marketing plan is given to the production manager translating it into a production program, consistent with managerial policies and subject to certain constraints. Managers have first hand knowledge of the plant and personnel capacities, availability of materials, and production process. Although the responsibility rests directly upon the production manager, the entire corporate policies must be considered in such matters as:

1. Inventory levels,
2. Stability of production and
3. Capital additions.

With respect to production planning, the manager must maintain an optimum co-ordination between sales, inventory and production levels. On the other hand, an efficient, standardized and co-coordinated plan is required for economic production.

2.14.2.3 General Considerations in Planning Production and Inventory levels:

Following basic facts should be considerations while planning the production: -

1. Total production requirement (by product) for the budget period.
2. Inventory policies about levels of finished goods; work in process and the cost of carrying inventory.
3. Plant capacity policies, such as the limits of permissible departures from a stable production level throughout the year.
4. Adequacy of manufacturing facilities [expansion or contraction of plant capacity.]
5. Availability of direct material, purchased components and labor.
6. Length of the processing time.
7. Economic lots or runs.
8. Timing of production through out the budget period, by product and responsible centers *(Welsch, et al, 2001; 214).*

However, the approach used by a particular company shall depend upon its size and the characteristics of its manufacturing processes.

2.14.2.4 Developing a Production Plan:

The sales unit estimated in the sales budget must be translated in production units with considering management inventory policy. Production manager must translate the quantities in the sales budget in to required production unit for the budget perused for each product. Basically there are three major steps to be followed in developing a production plan: -

1. Establishing policies for inventory levels.
2. Planning the total quantity of each product that is to be manufactured during the budget period.
3. Scheduling the production by interim period.

2.14.3 Material Plan or Budget:

Planning and controlling of material purchase and material usages is a comprehensive managerial budgeting of raw material involved in production process. Raw material budget is prepared after the determination of production. It is depended upon production volume. The material budget is the responsibility of the purchasing manager, since it will be he or she who is responsible for obtaining the planned quantities of raw material to meet the production requirement. The objective is to purchase the material at the right time, from the right place and at the right price. In addition, it is necessary to take into account for maintaining the stock level of raw material.

A compressive managerial budgeting includes planning and controlling of raw material and components used in the manufacturing of finished product. Adequate co-ordination and balance should be maintained in between (a) factory requirements for raw materials, (b) raw material inventory levels, and (c) purchase of raw materials. Hence, planning raw material usually requires the following sub budgets: -

1. Materials Budget
2. Purchase Budget
3. Material and Inventory Budget

2.14.3.1 Material and Parts Inventory Policies:

The primary consideration in setting inventory policies for materials and parts are: -

1. Timing and quantities of manufacturing needs.
2. Economic in purchasing through quantity discount.
3. Availability of material and parts.
4. Lead-time.
5. Perish ability of material and parts.

6. Storage facilities needed.
7. Capital requirement to financial inventory.
8. Expected changes in the cost of material and parts.
9. Cost of storage.
10. Risks involved in inventories.
11. Opportunity costs.

2.14.3.2 Purchasing Policy:

Management policy with respect to purchase and inventory should be specified. The two basic timing factors are (1) how much to purchase at a time and (2) when to purchase it. A well-known approach to compute the purchase quantity is the Economic Order quantity Model (EOQ). Formula for the computation of EOQ is as follows:

$$\mathbf{EOQ} = \sqrt{\frac{2AO}{C}}$$

Where,

A= Total quantity to be purchase

O= Average cost of placing an order

C= Annual carrying one unit in inventory.

The second question is; when to purchase? It can be determined by reorder point method. It is the point where the inventory level is equal to the quantity needed to sustain production for a period to reorder and receive the replenishments. It can be shown as follows:

Re-order Point= Average Usage × Average lead time + Safety inventory

2.14.3.3 Just in time purchase:

Just in time purchase concept is the latest development in the field of material purchase and inventory control. Its primary objective is to minimize inventory levels and its cost. According to this approach, materials are purchased only at the time of production so as to minimize the inventory holding costs. But the problem is to anticipate the exact time of material requirement.

2.14.4 Planning and Controlling Direct Labor Cost:

The direct labor budget is also developed from the production budget. Direct labor requirements must be computed so that the company will know whether sufficient labor times are available to met production needed. By knowing in advance, the company can develop a plan to adjust the labor force as the situation may require. Direct labor requirements can be computed by multiplying product to be produced in each period by the number of direct labor hours required to produce a single unit. Many different types of labor may be involved. If so, then the computation should be made of the types of labor needed. The hours of direct labor resulting from these computations can then be multiplied by direct labor cost per hour to obtain the budgeted total direct labor cost.

Planning and controlling labor costs involve major and complex area: (1) personnel needs, (2) recruitment, (3) training, (4) job description and evaluation, (5) performance measurement, (6) union negotiation, and (7) wage and salary administration. A comprehensive managerial budgeting program should incorporate appropriate techniques and approaches applicable to each problem area. Careful planning and realistic control of long term and short term labor costs will benefit both the company and its employee. There are two types of labor costs as follows:

(a) Direct labor cost, and

(b) Indirect labor cost.

2.14.5 Planning and Controlling Expenses:

The expenses planning and controlling is very necessary for supporting the objectives and planned programmers of the firm, an expenses in related with profit. It should not be forget that the minimization of cost is maximization profit. Manager should view expenses planning and control as necessary to maintain reasonable expense levels to support the objectives and planned programs of the enterprise. Expenses planning should not focus on decreasing expenses, but rather on better utilization of limited resources. Expenses planning and control should forces on the relationship between expenditures and the benefit derived from those expenditures and the benefits derived from that expenditure. The desired benefits should be viewed as goals, and sufficient resources must be planned to support the operating activities essential for their accomplishment.

2.14.6 Manufacturing Overhead Budget:

Manufacturing overheads are the part of the total production cost, which do not directly identify with specific products or jobs. Manufacturing overhead includes many dissimilar expenses; therefore, they cause problem in the allocation of the costs to products. There are two distinct types of responsibility centers in most of the manufacturing companies, viz. production and service. Responsibility for the operation of each department should be classified separately in the chart of accounts used by the cost accounting department. Finally, the expenses of each depart should be planned and controlled separately.

After the production budget has been completed, manufacturing expense budget should be developed for each responsibility center in the organization. It provides a schedule of all costs of production other than of direct material and labor. These costs should be broken down by cost behavior as variable and fixed for budgeting purpose and a predetermined overhead rate should be developed. This rate will be used to apply manufacturing overheads to the units of production through out the budget period. After all, the development of manufacturing overhead budget should be followed by the following consideration: -

1. Translate the requirement specified in the production plan with output or activity in each department.
2. Plan departmental overhead expenses.
3. Allocation of the planned departmental expenses to the producing department.
4. Allocation of the production department’s expenses to the products.

2.14.7 Selling and Distribution Expenses Budget:

The selling and administrative expenses budget contains a listing of anticipated expenses for the budget period that will be incurred in areas other then manufacturing. The budget will be made up of many smaller, individual budget submitted by various person having responsibility for cost control in selling and administrative matters. If the numbers of expenses items vary large, separate budgets may be needed for the selling and administrative functions. Selling and distribution expenses include all cost related to selling, distribution, and delivery of products to customers. In many companies, this cost is a significant percentage of the total expenses. Careful planning of such expenses affects the profit potential of the firm.

2.14.8 Administrative Expenses Budget:

Administrative expenses budget includes those expenses other than manufacturing and distribution. They are incurred in the responsibility center that provide supervision of and service to all function of the enterprise, rather than in the performance of any one function. Because large portion of administrative expenses are fixed rather then variable, the notion persists that they cannot be controlled. Aside from certain top manager's salaries, most administrative expenses are determined by management decisions.

It is advisable to base budgeted administrative expenses on specific plans and programs. Past experience, adjusted for anticipated changes in management policy and general economic conditions, is helpful. Because most administrative expenses are fixed, and analysis of the historical record will often provide a sound basis for budgeting them.

2.14.9 Capital Expenditure Budget:

Capital expenditure often called capital budgeting. Capital refers to total assets of the firm while budgeting is the monitory presentation of a plan. But in capital budgeting the term capital refers to the fired asserts used in the production while budgeting is a detailed outline of planned capital expenditure. Generally, the capital budgeting is concerned with expansion, addition and replacement of fixed assets.

The capital budgeting decision, as already pointed out; pertain to fixed assets or long term assets which by definition refer to assets which are in operation, and yield a return, over a period of time, usually exceeding one year. The capital budgeting decision, therefore, involves a current outlay or series of outlays of cash resources benefits *(Quirin, 1967; 2).*

Hence, investment in long-term assets for increasing the revenue of the firm is called capital budgeting. It is a decision to invest funds in long-term activities for future benefits that increase the wealth of the firm and their increase the value of share of the firm. Capital budgeting plans to deploy the available resources of the purpose of maximizing the long-term profitability of the firm. It involves the generation of investment proposals, the estimation of cash flows and the selection of projects based upon as acceptance.

2.14.9.1 Process for planning and controlling of capital expenditures:

Capital expenditure is such a complex part in an organization. It plays a vital role in the determination of future of the organization and that is why a proper and an efficient process to make plan and get control over it should be followed as of below:

1. Identify and generation capital additional projects and other needs.
2. Develop and refine capital addition proposal- collection of relevant data about each proposal, including any related alternatives.
3. Analyze and evaluate all capital additions, proposal, and alternatives. Emphasis should be given to the validity of the underlying financial and operation data.
4. Make capital expenditure decisions to accept the vest alternatives and the assignment of project designations to selected alternatives.
5. Develop the capital expenditure budget;
   i. Strategic plan- Replant and extend the long-term plan by dropping the past year and adding one year into the future.
   ii. Tactical plan- Develop a detail annual plan capital expenditure budget, by responsibility center and time that is consistent with a comprehensive profit plan.
6. Establish control of capital expenditure during the budget year by using periodic and special performance report by responsibility centers.
7. Conduct post completion audits and follow up evaluation of the actual result from capital expenditure in period after completion.

2.14.9.2 Capital Expenses Decision:

The crucial expenses decision is the choice of management from the computation of capital expenditure alternative problems.

1. Investment decision:

Selecting the best alternative based on their economic worth to the company called investment decision.

2. Financing decision:

Determining the amount and sources of funds needed to pay for the selected alternatives. This cash constraint may necessarily limit the project and proposal that can be initiated *(Welsch, et al, 2001; 401).*

2.14.9.3 Evaluation of Investment Decision:

There are several methods available for making such decision. Though some following are popular for the evaluation of investment proposals:

1. Net present value method:

NPV method is a discounted technique, which recognizes the time value of money. It is a classic economic method for evaluating the investment proposal. It considers that the cash flows at different time period differ in their values.

$$\mathbf{NPV} = \sum_{t=0}^{n} \frac{At-C}{(1+k)^{n}}$$

Where,

k= cost of capital

t= no. of year

A= Expected cash inflow

c= initial cash outlays

Decision rule:

1. Independent project: - All projects having positive net present (NPV) should be accepted and vice versa.

2. Mutually exclusive project: - Project having highest net present value should be accepted.

2. Internal Rate of Return (IRR):

IRR is the rate of return than an investment project earns. It is sometime referred to as time adjusted rate of return, yield of an investment, managerial efficiency of capital, rate of return over cost, time preference rate and break even rate. It is that rate which gives the project's NPV zero.

$$A_0 = \frac{A_1}{(1+r)^1} + \frac{A_2}{(1+r)^2} + \dots\dots\dots\dots\dots \frac{A_n}{(1+r)^n}$$

Where,

R= Internal rate of return

A_0= Initial investment at time zero

A_1, A_2, A_n= Cash inflow at future.

Acceptance rule:

1. Independent project: - All projects that have IRR greater than required rate of return should be accepted.
2. Mutually exclusive project: - Project having higher IRR should be accepted.

3. Payback Period:

It is a popular traditional method of evaluating investment proposal. It is also called pay off period. It calculated the time require for getting back the investment amount. So, it is the length of time needed to get back the original investment from the investment project.

a) Payback period for having even cash flow:

$$\text{Payback Period} = \frac{\text{Net investment (NCO)}}{\text{Annual net cash flow}}$$

b) Payback period for project having uneven cash flow:

$$\text{Payback Period} = \text{Number of years before full recovery of NCO} + \frac{\text{Amount not recovered at start of year}}{\text{Cash flow of the recovered year}}$$

Decision rule:

1. Independent project: - A project should be accepted if its payback period is less than or equal to a specified maximum period i.e. standard time fixed.

2. Mutually exclusive projects: - project having lowest payback period should be accepted.

4. Average Rate of Return \Accounting Rate of Return (ARR):

Average rate of return based upon accounting profit rather than cash flow. It represents the ratio of average annual net profit after tax to the average investment of the project.

$$\mathbf{ARR} = \frac{\text{Average net profit after tax}}{\text{Initial investment (NCO)}} \times \mathbf{100}$$ Or,

$$\mathbf{ARR} = \frac{\text{Average net profit after tax}}{\text{Average Investment}} \times \mathbf{100}$$

Decision rule:

1. Independent project: - Accept those project whose ARR is higher than the minimum rate established by the management and reject those projects which have ARR less than the minimum rate.
2. Mutually exclusive: - Accept that project which has the highest accounting rate of return.

5. Profitability Index (PI):

Profitability index denotes the Benefit Cost Ratio and excess present value index. It is the ratio of present value of net cash benefit to the present value of net cash outlay.

$$\mathbf{PI} = \frac{\text{Total Present Value}}{\text{Net Cash Outlay}}$$ Or,

$$\mathbf{PI} = \frac{(1+k)^t}{A_0}$$

Where,

K= Cost of capital

T= No. of year

A_0= Expected cash flow

Acceptance rule:

1. Independent project: - All projects that have I greater than 1 are accepted (IP>1).
2. Mutually exclusive: -Project that has highest IP is accepted.

2.14.10 Planning Cash Flows:

Cash is base for any business. Without cash, business cannot be survived. So, cash budget is one of the most important schedules prepared during the budgeting process. A cash budget is developed after all the operating budgets and capital expenditure outlays have been accomplished. A cash budget shows the planned cash inflows, outflows, and ending position by interim period for a specific time span. Most companies should develop both long term and short term plans about their cash flows. The short term cash budget is includes in the annual profit plan. A cash budget, basically, includes two parts (1) the planned cash receipts (2) the planned cash disbursement planning cash inflow and outflow given the planned beginning and ending cash position for the budget period. Planning the cash inflow and outflow will include (1) the need for financing probable cash deficit or (2) the need for investment planning to put excess cash to profitable use. The primary purposes of the cash budget are: -

1. Providing managers with advance notices of the resources at their disposal and the result they are expected to achieve.
2. Providing targets useful in evaluating departmental performance.
3. Providing warnings of potential cash shortages by time period.
4. Establishing the need for financing and\ or the availability of idle cash for investment.
5. Forcing managers to plan and coordinate cash with (a) total working capital, (b) sales revenue, (c) expenses, (d) investments and (e) liabilities.
6. Establishing a sound basis for continuous monitoring of the cash position.

2.14.10.1 Techniques for Improving Cash flow:

Planning the cash flows of a company should include consideration of how to improve cash flow. Improving cash flow basically involves increasing the amount of available cash on a day-to-day basis. Some of the ways often used to improving the efficiency of the cash collection process are as follows: -

1. Review the lag from the date of sales of goods and services on credit to the mailing of (a) invoices of and (b) the first billing. To extend feasible, invoices should be designated to also be the first billing to encourage immediate payment by the customer. The time lag here can avoid a significant adverse affect on early collection.
2. If cash discount are given to customers for early payment, review their effect on early cash collection and whether the discount policy is being violated in the company (i.e. allowing the discount after its expiration date) alternatively, if discounts are not given, does inflow is company assess an interest penalty for late payment? How much cash inflow is lost by not charging for late payments?
3. Review the credit granting process to determine whether bad credit risks and collection screened out. Also, are delinquent receivable being identified early and collection action taken before the receivable becomes an uncollectible (i. e. a bad dept)?
4. Consider ways to decrease the time between the date that customers pay by check and the date that cash is available for user in the company's bank account. This time is called float and it may vary from one day to ten days. Float can be very costly because (a) the cash inflow is sloe and (b) the opportunity to earn interest on the cash during the float period is lost. The float lag can be minimized by techniques such as the following:
    i. Use lockbox system- the purpose of lockbox system is to reduce the float time of cash from the customer to the company.
    ii. Establish bank accounts in outlying areas where a designated company employee receives the customer's payments and immediately deposits the checks in the bank account.
    iii. Decrease the check- processing time within the company and make daily night deposit of all cash checks received during the day.
    iv. Promoter timely and frequent billing on all receivable. Do not use month end billing, bill immediately after sales.

A company should develop a specific policy about the investment of temporarily idle cash. The policy should be specific about such issues as (a) types and mix of acceptable securities, (b) monthly reporting and monitoring of the portfolio, and (c) safeguarding and disposal of temporary investment.

2.14.11 Completion and Application of the Managerial Budgeting:

2.14.11.1 Completion of Managerial Budgeting:

The development of an annual profit plan ends with the planned income statement, the planed balance sheet and the planned cash flow statement. These three statements summarize and integrate the detail plans developed by management for the planning period. At this point in profit planning, the budget director has an important responsibility. Aside from designing and improving the overall system, the budget director has been described as adviser each responsibility center. Now the parts must be assembled into a complete profit plan.

2.14.11.2 Implementing the Managerial Budgeting or Profit Planning:

The ultimate test of whether the effort and cost of developing a profit plan are worth whole is its usefulness to management; this is a cost benefit test. We have emphasized that a profit plan should represent potentially attainable goals, yet the goals should present challenges to the enterprise. The plan should be developed with conviction that the enterprise is going to meet or exceed all major objectives.

After approval of a profit planning the next step is its distribution to the center managers in the enterprise. Distribution instructions were illustrated as an important part of the budget manual. Recall that a limited number of copies of the plan should be prepared. Complete profit plan should be distributed to the vice-president and to the heads of certain staff groups. The guiding principle in establishing the distribution policy might be to provide one copy to each member of the management team according to his or her overall responsibilities while taking into account the problem of security.

2.14.12 Ratio Analysis in Managerial Budgeting:

2.14.12.1 Meaning:

Ratio refers to the numerical or quantitative relationship between two items or variables. It is one number expressed by dividing one items of the relationship with the other. Ratio analysis of business enterprise centers on efforts to drive quantitative measure or guides concerning the expected capacity of the firm to meet its future financial obligations or expectation. It is a very powerful tool of company's strength, weakness, opportunity and threat analysis. Hence, ratio analyses are the process of identifying the financial strengths and weakness of the firm by properly establishing relationship between the items of financial statement.

2.14.12.2 Ratio Analysis; Relation with Managerial Budgeting:

The ratio analysis can be of invaluable aid to management in the discharge of its basic functions of forecasting, planning, co-ordination, communications and control. By an analytical study of the past performance of the business, it helps in predicting and projecting the future. It assists in communication by conveying information, which is pertinent and purposeful to those for whom it is meant. It promotes co-ordination by a study of the efficiency of the business and paves the way for effective control of business operations by undertaking and appraisal for both the physical and monetary targets. Hence, ratio analysis becomes an integral part of targets. It becomes an integral part of managerial budgeting system *(Goyal & M.M., 1997; 496).*

2.14.13 Cost volume Profit Analysis:

A cost volume Profit analysis is a tool of management to show the relationship between the elements of profit planning. Profit planning is the function of the selling price of product, demand, variable costs, fixed costs and taxes. The whole picture of profit planning is associated with cost volume profit inter relationship. A CVP analysis assumes that under constant underlying conditions, CVP analysis can be used for the analysis of break-even volume, break-even analysis and contribution margin analysis for profit planning. The many all thorns of financial management and accounting have criticized this assumption of constant underlying condition and the short-term relationship. With the help of CVP management require careful analysis of cost behavior in relationship to output volume.

2.14.13.1 Break- even- point Analysis:

Break-even point is that point which break the total cost and the selling price evenly to show the level of output or sales at which there shall be neither profit nor loss. At this point, the incomes of the business exactly equal its expenditure. It can be determine by three techniques. They are as follows:-

1. Equation technique
2. Contribution margin technique
3. Graphic technique

Equation technique uses an algebraic equation to calculate the BEP. This is the most general form of analysis, which can be applied to any CVP situation. This approach of finding out the BEP is based on the profit equations.

Sales Revenue = Fixed cost + variable cost + profit

Contribution margin is the difference between the sales revenue and variable cost of production. Contribution margin consist the fixed cost and profit. Formulae to find out BEP are mentioned below:

$$\textbf{BEP (in unit)} = \frac{\text{Fixed Cost}}{\text{CMPU}}$$ And,

$$\textbf{BEP (in Rs.)} = \frac{\text{Fixed Cost}}{\text{CM Ratio}}$$

Where,

CMPU= Contribution Margin per Unit

CM Ratio= Contribution Margin Ratio

To depict the relationship between profit and volume of activity, a cost volume profit graph is commonly used. Graphical presentation of CVP is preferred: -

1. Where a simple overview is sufficient,

2. Where there is a need to avoid a detailed, of numerical approach avocation of numerical approach is specially required if, the recipients of the information having no accounting back ground (*Munankarmi, 2002; 144).*

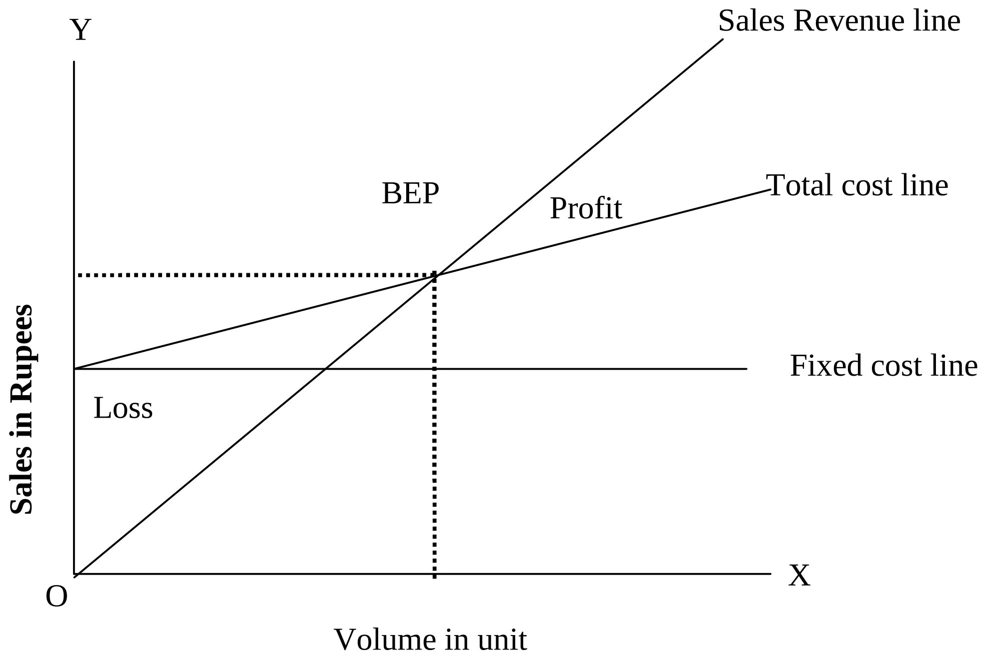


Fig. 4 BEP Analysis

In this figurer fixed cost has remained constant within the relevant range; the fixed cost curve is parallel to OX axis. Variable costs slope has up warded from the origin to right but the slope depends on variable cost ratio. The total cost curve is parallels the variable cost curve.

2.14.13.2 Application of Break Even Analysis in Managerial Budgeting:

Break-even concept can be used to formulate different policies in a business enterprise. Some of those applications are as follows: -

- Determination of profit at different levels of sales and margin of safety.
- To find the level of output to get the desired profit.
- Effect of price reduction on sales volume and changes in sales mix.
- Selection of most profitable alternative and make or buy decision and drop and / or add decisions (*Maheshwari, 2000; 182).*

2.15 Performance Evaluation:

Use of performance reporting for internal management is an important part of managerial budgeting systems. The performance reporting phase of a comprehensive PPC program significantly influences the extent to which the organization's planned goals and objectives are attained. To indicate the extensive reporting requirements, a business house needs to focus on performance reporting. On this regard, the following overview of financial report is presented and briefly explained: -

1. Special External Reports: - These are the reports provided to government agencies, regulatory commission, creditor's investigative agencies and other external groups to make the management active.

2. Report to Owners: - This is the traditional annual report to the owners and other special reports prepared for the owners. These reports, by and large, are based on "generally accepted accounting principles'' and generally report data that have been subject to on audit by on independent CPA.

3. Internal Reports: - These confidential reports are prepared within the company for internal use only. This report is sub divided into three different sub classifications.

(a) Statistical Reports

(b) Special Reports

(c) Performance Reports

2.16 Analysis of Budget Variances:

Comparison of actual result with planned or budgeted goals has been emphasized as an integral part of the control process. Performance report is mainly concerned with reporting of variance between actual results and planned or budgeted goals. Performance report just indicates the variances and the meaningful analysis of them if possible through the technique of variance analysis. Variance indicated through performance reports has some managerial meaning. There are numerous ways to study or investigate variances to determine the underlying cause. Some of the primary approaches are as follows: -

1. Conferences with responsibility center manager and supervisions and other employees in the particular responsibility center involved.
2. Analysis of the work situation including the flow of work, co-ordination of activities, effectiveness of supervision, and other prevailing circumstances.
3. Direct observation.

4. On-the-spot investigation by line managers.
5. Investigations by staff groups.
6. Internal audits.
7. Special studies.
8. Variance Analysis.

Normally, variance can take two form viz. favorable variance and unfavorable variance. When actual results are better than expected, a favorable variance arises and on the other hand, when actual results are up to standard, unfavorable variances arises. Variance analysis is helpful in controlling the performance and achieving the profits that have been planned.

2.17 Review of previous Research Work:

There are many research works made as like as this topic i.e. profit planning and control. But all that research had not success to analysis the true picture of planning of profit. The research work "Managerial Budgeting as a tool of increasing efficiency of public enterprise" which focuses to all kind of budget, which helps to increasing overall efficiency (Profit) of this enterprise. An attempt is made here to review some of the researches, which have been submitted in profit planning and control in public enterprise.

MR. Damodar Niraula (2008) has made research on *"Impact of Budgeting in Profitability of Nepalese Public enterprise"*(a case study of Nepal Electricity Authority) submitted to Faculty of Management, Shanker Dev Campus for the partial fulfillment of M.B.S. In this study Mr. Niraula has pointed out the following major findings and gave recommendations: -

Objectives:

1. To analyze the various functional budget of NEA.
2. To analyze the true picture of managerial budgeting adopted by NEA.
3. To analyze the variance between budget and actual achievements of the authority.

Findings:

1. NEA prepares both tactical and strategic profit plan but strategic plan is confined only to the level executives.
2. Operating costs have not been controlled effectively during the study period.

3. NEA has not maintained sound liquidity during the study period.
4. NEA has not considered demand determinates such as family income, price of electricity, connection charge, cost of alternatives available, cost of auto generation of electricity and reliability of NEA service while forecasting demand.

Recommendations:

1. A systematic approach to comprehensive profit planning and control is essential. To adopt these approaches existing planners should be trained and new planner should be hired. This can contribute to increase the profitability of NEA.
2. NEA should reduce the long-term loan to reduce the high interest amount. Similarly, NEA should give emphasis in internal financing to reduce excess internal economic burden. NEA should complete its projects timely so that they will return to repay long-term loan in time.
3. Cost volume profit relationship should be considered while developing the sales plan and pricing strategy. To maintain the breakeven point, NEA should control fixed and variable cost and should increase sales volume.
4. It is suggested that NEA should invest in small hydro project to ensure profitability become such projects do not require much fund and they start to provide return in investment more quickly.

Mr. Dipak Bhattarai (2008) has made research on *"Role of Managerial Budget for Increasing Efficiency of Public Enterprises"* with reference to Nepal Electricity Authority submitted to Faculty of Management, Shanker Dev Campus for the partial fulfillment of M.B.S. In this study Mr. Bhattarai has pointed out the following major findings and gave recommendations: -

Objectives:

1. To analyze the various functional budget of NEA.
2. To analyze the true picture of managerial budgeting adopted by NEA.
3. To point out the major shortcomings and recommend suggestive measures.

Findings:

1. Actual and budgeted sales are found to be significant but the difference between budgeted and actual production is found to be vague. In spite of the fact, there is perfect correlation between budgeted and actual sales and production respectively.
2. NEA has adopted the practice of preparing strategic as well as tactical managerial budgeting, but even the strategic plan cannot play a vital role for its development.
3. It is bearing a high fixed cost due to the technology that it is using till now, overstaffing and many more.
4. Actual sales are always less than actual production due to power loss, which is a main problem of NEA, which affects its profit directly.

Recommendations:

1. NEA should develop an efficient management system to get control over cost. It must classify the costs into fixed cost and variable to maintain the Accounting Standard.
2. NEA should restructure its capital and give emphasis over the internal financing so as to avoid burden of interest. On the other hand it should complete the proposed projects in time so that they will get return to repay loan in time.
3. To achieve the targeted growth rate in sales revenue, NEA should make realistic forecast. Sales forecasting should be made after analyzing all variable that affect the sales. .
4. Electricity loss is increasing each year, which is a main cause of reducing sales revenue. So, leakage of the electricity shall be controlled promptly. The most important aspect is to motivate its employees engaged in transmission and distributions line to control the leakage. Staffs who are them selves engaged in encouraging power leakage should be strictly demoralized.

Miss. Kamala Rimal (2008) has made research on *"A Study on Profit Planning & control Of Nepal Bangladesh Bank"* submitted to Faculty of Management, Shanker Dev Campus for the partial fulfillment of M.B.S. In this study Miss. Rimal has pointed out the following major findings and gave recommendations: -

Objectives:

1. To highlight the current profit-planning premises adopted and its effectiveness in NB bank.
2. To observe NB Bank’s Profit planning on the basis of overall managerial Budgets developed by the Bank
3. To analyze the variance of budgeted allocation and actual achievements.
4. To study the growth of the business of the Bank over the period.

Findings:

1. The targets set for deposit mobilization by the bank were being well met every year.
2. From the analysis of Budgeted and Actual LDO with the help of co-efficient of variance, it was found that, the actual LDO was less variable than the budgeted one.
3. The interest expenses of the bank were found decreasing each year corresponding to the increase in deposit. The interest expenses were perfectly and positively correlated with deposit.
4. From the profitability ratio, it was found that the ROC (Return on capital) was negative and this trend followed the same trend over the study period. This maybe due to higher rate of increase in capital fund than that of the net profit.

Recommendations:

1. The average cost of deposit of the Bank is high, therefore Bank should try to lower it by mobilizing more and more low cost or cost free deposits thereby reducing the interest cost because due to the high cost of deposit, bank is forced to invest its fund more on highly yielding assets, which are generally not liquid and obviously risky for the Bank.
2. Expenses cannot be avoided and always are growing with increasing activities, but it should be optimize and should be related with the income generating activities. Bank should minimize those expenses, which are not related to income earning.
3. Bank should implement its activities with prior planning; there must be budgeting system, which enables it to achieve its objectives.
4. Non performing assets could wreck bank's profitability but while lending to the borrowers proper analysis of the loan proposal must be done which will decrease the chances of bad loan to the bank.

Miss. Bina Kapali (2008) has made research on *"Role of Sales Budgeting in Profitability of Salt Trading Corporation Limited"* submitted to Faculty of Management, Shanker Dev Campus for the partial fulfillment of M.B.S. In this study Miss. Kapali has pointed out the following major findings and gave recommendations: -

Objectives:

1. To analyze the current profitability situation of STCL.
2. To evaluate the variances between budgeted and actual achievement of the sales activities of STCL.
3. To analyze the various trends of profit and loss of STCL.
4. To examine the practical difficulties and recommend for improvement in future to STCL.

Findings:

1. Actual sales of STCL are mostly below than budgeted sales.
2. The correlation between budgeted sales and actual sales is positively correlated which means that the company can meet sales goals as specified in annual programmed.
3. There is no effective cost classification system in the company. The costs are not segregated into fixed cost, variable cost and semi variable cost in systematic manner.
4. The company is bearing high storage cost of inventory. It has suffered by inventory storage problem. It has high inventory cost.

Recommendations:

1. The Company should adopt a systematic approach for profit planning. To adopt this approach, proper planning experts should be hired or existing planners should be trained. The implementation considerably contributes to increase the profitability of the industry.
2. Operating expenses should be controlled through the daily reporting system, monitoring and supervision.
3. Variance analysis should be effective and unfavorable variance should be notified. The company should identify causes to eliminate unfavorable variances in time.

4. The company should try to export the home products of Nepal. It has been exporting green vegetables and the raw sugar in Gulf countries and in European Union. It should try to search the other international markets too.

Mr. Sujit Kumar Karn (2008) has made research on *“A Study on Profit Planning Mechanism in Nepal Telecom"* submitted to Faculty of Management, Shanker Dev Campus for the partial fulfillment of M.B.S. In this study Mr. Karn has pointed out the following major findings and gave recommendations: -

Objectives:

1. To analyze the financial position of Nepal Telecom.
2. To analyze target and actual budget of Nepal Telecom.
3. To assess the strengths and weakness of Nepal Telecom.

Findings:

1. The actual sales achievement is below than targets sales.
2. Budgets are set only on the assumption of management. Budgets are prepared on the basis of historical data. But NTC actual achievement of sales or revenue is less than budgeted sales or revenue during the study period.
3. The average Interest Coverage Ratio is 1764.535 times which implies that NTC has been able to cover the interest expenses by a good margin of safety.
4. Average operating expenses Ratio of NTC for past five years is 43.34%, which is lower than the general standard average of around 50% for this line of business.

Recommendations:

1. The investment in working capital was not reasonable. So NTC should rearrange its current assets components. The working capital should be made on the basis of service delivered.
2. Given the high risk perception on most part of the countryside where the key communication towers and related structures are situated, NTC should manage for insuring all of these structures, so that it does not suffer from huge losses even if the facilities/structures are destroyed. The past experience of the management on account of not insuring those valuable structures should have taught a good lesson to them.

3. Periodic financing requirement should be forecasted and planned in advance so that uniformity in financing can be insured.
4. The Organization should impart professional management at its top hierarchy. Given the tough competition emanating from the private sector, the Organization should resist unnecessary political interferences in managing its day-to-day operations. It should seek freedom to decide on its own under the broad guidelines given by the government.

2.18 Research Gap

All the research studies mentioned above are concerned with the study of profit planning system that too basically related to the planning system of Nepalese public enterprises. The findings and conclusion of all those studies like to be same. The conclusion of those researches is that there is no proper planning and controlling system in Nepalese public enterprises. Therefore this study paper is designated to highlight the “Role of (Managerial) Budgeting in management of Co-operative Organization”. It means, the scope of the study is to find or identify the role-playing by Managerial budgeting that is adopting or practicing currently by Co-operative Organization in increasing their efficiency. And on the other hand, for this study, I will analyze the efficiency through the volume of profit earned or profitability of Nepal Multi-purpose Co-operative Society because of the availability of data.
This study is shall be a new one in this field as no study has been made so far in the profit planning and controlling of particularly Co-operative Organization. This study has tried to indicate the role of budgets for effective formulation and implementation of profit planning system as well as to see how far the Co-operative Organization is practicing. This study has analyzed the financial position of Nepal Multi-purpose Co-operative Society by applying the tools of ratio analysis and other mathematical and statistical tools. Finally it concludes the various finding of research and recommendation to NMC.

CHAPTER – III

RESEARCH METHODOGY

3.1 General Introduction:

Research methodology is the way to solve the research problem in a systematic manner. It may be understood as a science of studying how research is done scientifically. Systematically and planned way of collection, analysis and interpretation of data are made to solve the research problem and accomplish basic objective of the study. This study is carried out to analyze, examine and interpret the budgeting, various functional budgets and its use in the process of planning profit and it's effectives in the public enterprise with the help of various financial statements, statistical tools etc. Research methodology is followed to achieve the objective of this research paper. The following contents of research methodology are followed to conduct the research on this subject matter.

3.2 Research Design:

This study attempts to analyze and evaluate the budgeting procedure in relation to measuring analysis that is closely related with various functional budgets. In this context research design is the plan structure and strategy of investigation conceived so as to obtain answer to research questions and to control variance.

3.3 Data collection procedure:

The significance of research depends on the nature, availability and accuracy of information. Data collection is the major task of the research work. The data is collected from the secondary sources. Those sources used to collect the secondary data are as follows:

1. Published and unpublished relevant document of NMC.
2. Magazines and booklets published half yearly, yearly etc by NMC.
3. Official records and similar other dissertations.
4. Statistical data published by Department of Co-operatives, Government of Nepal.
5. Magazines and booklets published by National Co-operatives Association.

3.4 Methods of presentation and Analysis:

The collected data are arranged and presented in proper tables and formants. After arranging relevant data, they are analyzed by applying financial and statistical tools such as ratio analysis, CVP analysis, mean, standard deviation, graphs, diagrams, correlation, time series etc. so that the finding could be presented and interpreted properly and clearly.

3.5 Research Question:

This research study is concentrated to answer to the following questions to fulfill the objective of the study:

1. What are the strength and weaknesses of Budgeting system of NMC?
2. What obstacles are being faced by NMC for fulfilling its objective?
3. To what extent the procedure of budgets formulation is followed by NMC?
4. What step should be taken to improve the management of NMC?
5. What are the overall managerial problem and what suggestion can be recommended for their proper solution?

3.6 Period Covered:

This study covered a period of the fiscal year from 058\059 to 064\065. Data were taken from NMC and the analysis was made on the basis of these Seven years data.

3.7 Research variables:

Deposits of members, Loan and advances, Interest expenses, Office operational expenses, capital expenditure, cash flow, receipts and payments, income and expenditure, and balance sheet of NMC are the research variable of the present study.

CHAPTER - IV

DATA PRESENTATION AND ANALYSIS

4.1 Status of Resource Mobilization

All the Co-operative organizations have identical accounting year of 12 months beginning from 1st of Shrawan to the end of Ashad of the next year. NMC prepares the profit plans for every year, which includes the business budget; revenue, expenditure and profit plan for the year. The Strategic Profit Plan of NMC is reflected in its Business budget that shows the resource mobilization plan of NMC. Here, the term resources have been used for the fund required by the Co-operative for its activities. NMC mobilizes its resources from the following sources:

Deposit collection

Loan and Borrowings from other Co-operatives or Banks

Capital Fund

Among the above three sources, the Deposits collection is the major source of resource mobilization which is in fact, one of the most important activities of every Co-operative Organization. Loans and Borrowings are obtained from local Banks, Co-operative Bank, Central Bank and financial institutions generally for a short period of time. The Capital Find is raised from shareholder’s equity. It reflects the net-worth of the Co-operative organization. Co-operative organization’s Capital Fund has been divided into two categories viz Core capital and Supplementary Capital. The following table shows the resource mobilized by the NMC over the period of study:

Table No. 2

Status of Resource Mobilization

Amount in Rs.

Fiscal Year	Deposit	% of D	B	% of B	Capital Fund	% of CF	Other liability	% of OL	Total
2058/059	119517307	96.34	0	0	4429953	3.57	115466	0.09	124062726
2059/060	135263297	96.06	0	0	5366203	3.81	185167	0.01	140814667
2060/061	161474474	95.16	0	0	7930434	4.67	288727	0.02	169693635
2061/062	236353247	95.33	0	0	11110360	4.48	457826	0.02	247921433
2062/063	386122532	96.21	0	0	15227418	3.79	0	0	401349950
2063/064	612902898	96.91	0	0	19553338	3.10	0	0	632456236
2064/065	769685431	94.94	0	0	27599546	3.40	13429116	1.66	810714093

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

From the above table, it is clear that the Customer deposit collection contributes the major share in Resources mobilization. Therefore, total sources of resources mobilization comprised of two categories as follows.

a) From Customer Deposit Collection (Deposit).

b) From other sources than Customer Deposit (RMOD)

4.1.1 Deposit Collection

Customer Deposit is the major important source of resource mobilization of Co-operative organization. The contribution of customers deposit to total resources is high. Deposit is collected from the various sectors such as the members of Co-operative organization, general public, business entities NGO's, Schools, And Trusts and other individuals and institutions, which qualify to open an account in Co-operative organization. Deposits are collected on member's account, which are opened as per the Co-operative policy. The customer's deposit accounts are of two types.

i) Interest Free Deposit Accounts

1. Current Deposits A/C

2. Margin Deposits A/C

3. Other Deposits A/C

ii) Interest Bearing Deposits accounts

1. Saving Deposit Account

2. Fixed Deposit Account

3. Regular Fixed Deposit Account

4.1.2 Deposit Collection Budget of NMC

The following table shows the budgeted amount of deposit collection which has been find out following the time series approach was adopted to ascertain the budgeted figure for Deposit collection from F/Y 2058/059 to F/Y 2064/065. Realizing its significance the NMC has started to prepare budget statement. The actual amount of deposit and achievement of it on the budgeted amount is given in the table.

Table No. 3

Budgeted and Actual Deposit Collection

From FY 2058/059 to 2064/065

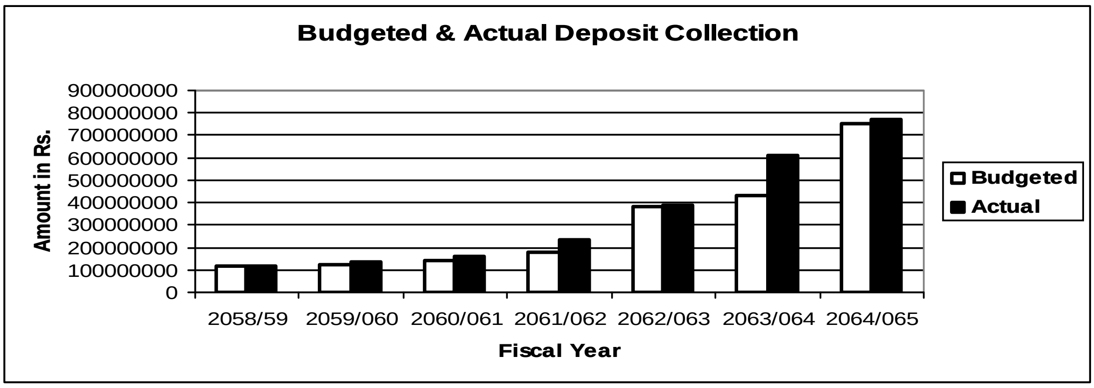
Amount in Rs.

Fiscal Year	Budgeted Deposit Collection	Actual Deposit Collection	Achievements %
2058/059	11,95,00,000	11,95,17,307	100.01%
2059/060	12,50,00,000	13,52,63,297	108.21%
2060/061	14,00,00,000	16,14,74,474	115.34%
2061/062	17,58,32,000	23,63,53,247	134.42%
2062/063	38,00,00,000	38,61,22,532	101.61%
2063/064	43,00,00,000	61,29,02,898	142.54%
2064/065	75,00,00,000	76,96,85,431	102.62%

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

Diagram No. 1

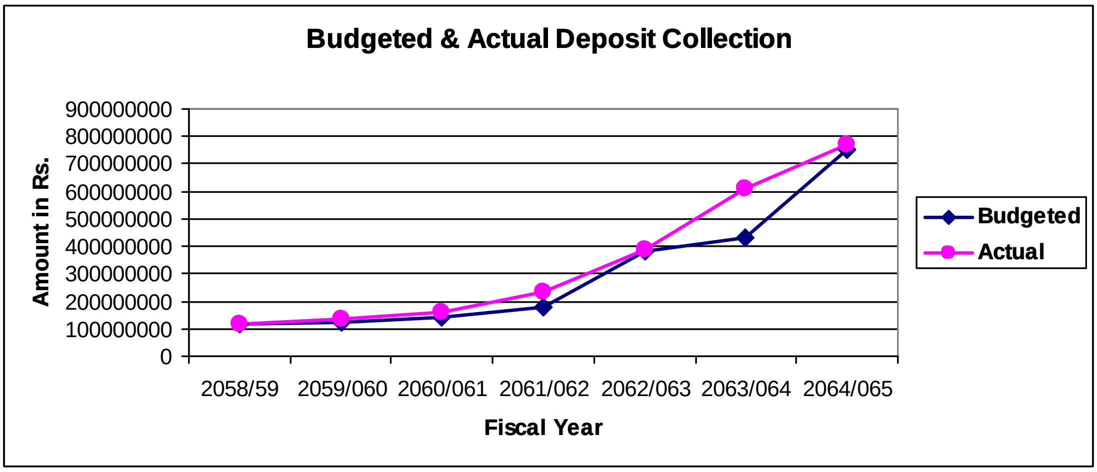
Bar Diagram of Budgeted and Actual Deposit Collectio



(Sources: Table No. 3)

Diagram No. 2

Line graph of Budgeted and Actual Deposit Collection



(Sources: Table No. 3)

The table shows that the Deposit collection target was achieved every year recording 100.01% in the first fiscal year 2058/59, 108.21% in fiscal year 2059/060, 115.34% in fiscal year 2060/061, 134.42% in fiscal year 2061/062, 101.61% in fiscal year 2062/063, 142.54% in fiscal year 2063/064 and 102.62% in fiscal year 2064/065 and this picture shows the high level of achievement made by the NMC in deposit collection budget. The Bar diagram shows the achievement level remaining higher than the budgeted level. Similarly, in the line diagram, the actual line is running higher than the budgeted line. The reason behind it is the increment of faith of members towards NMC.

Table No. 4

Relationship between Budgeted and Actual Deposit Collection

Statistical Tools	Budgeted Deposit Collection (00000)	Actual Deposit Collection (00000)
Mean ($\overline{X}$)	3029.05	3459.03
Standard deviation (σ)	2171.12	2372.86
C.V.	71.68%	68.60%

Source: -Appendix 1

The above table shows that budgeted deposits are little more variable than actual deposits. Since the coefficient of variations of actual deposits is less than that of budgeted deposits. Actual deposits are less variable on the other hand budgeted deposits are more variable. A greater coefficient of variation is said to be more heterogeneous. Here NMC's actual deposit is the nature of less variable than budgeted deposits. A statistical tool correlation co-efficient can be used to analyze the relationship between budgeted deposits and actual deposits. There should be positive co-relation between budgeted deposits and actual deposits. Karl person's coefficient correlation was used to find correlation between actual deposits and budgeted deposits. Karl person's coefficient of correlation is denoted by (r). By calculating (r) correlation between budgeted deposits and actual deposits can be known. The actual deposits will change in the same direction, as the budgeted deposits. For this purpose budgeted deposits assuming to be independent variable and actual deposit assuming to be dependent variable upon budgeted deposits. Budgeted deposits and the actual achievement increased, which meant that there should be positive correlation between, budgeted figure and achievement figures. Significance of correlation of (r) is tested with probable error PE. The detail calculation of 'r' and probable error PE was made in appendix 1. From that appendix the calculated the value of r was 0.9691. This figure 'r' shows that there was positively perfect correlation between budgeted deposits and actual deposits. The value of r= 0.9691 and Probable Error (PE)= 0.0155 From the calculations shown in Appendix 1, the Karl Person's coefficient of correlation (r) between the Budgeted deposit and Actual deposit being 96.91%. The following table shows the data of actual deposit mobilized by the NMC as of the end of each fiscal year. The table shows the amount of deposits is increased every year considerably.

Table No. 5

Growth of deposits of NMC.

Amount in Rs.

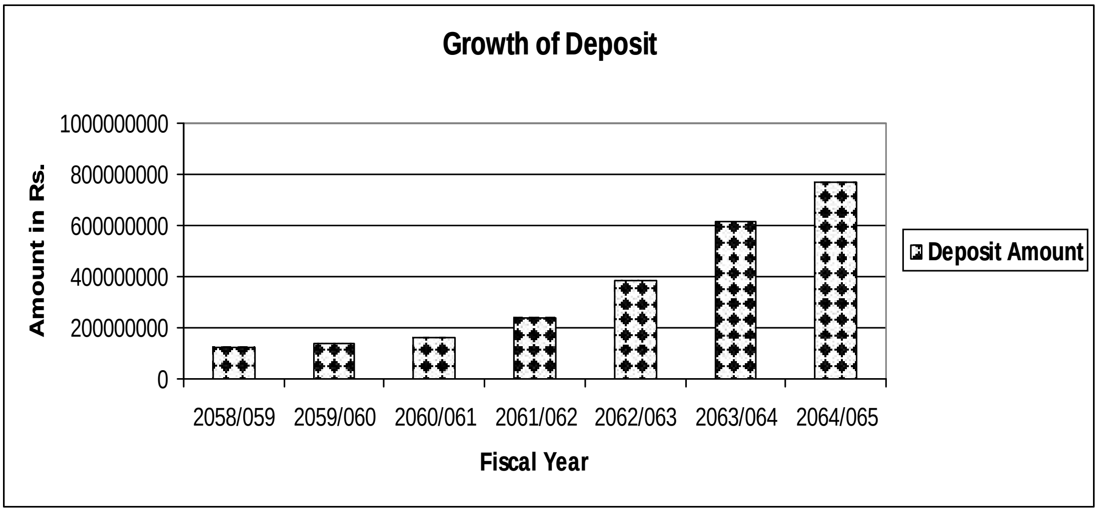
Fiscal Year	Deposit Amount	Growth in Rs.	Growth %
2058/059	11,95,17,307	3,475	0.0029%
2059/060	13,52,63,297	1,57,45,990	13.17%
2060/061	16,14,74,474	2,62,11,177	19.38%
2061/062	23,63,53,247	7,48,78,773	46.37%

2062/063	38,61,22,532	14,97,69,285	63.37%
2063/064	61,29,02,898	22,67,80,366	58.73%
2064/065	76,96,85,431	15,67,82,533	25.58%
Average Growth		9,28,81,657	

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

Diagram No. 3

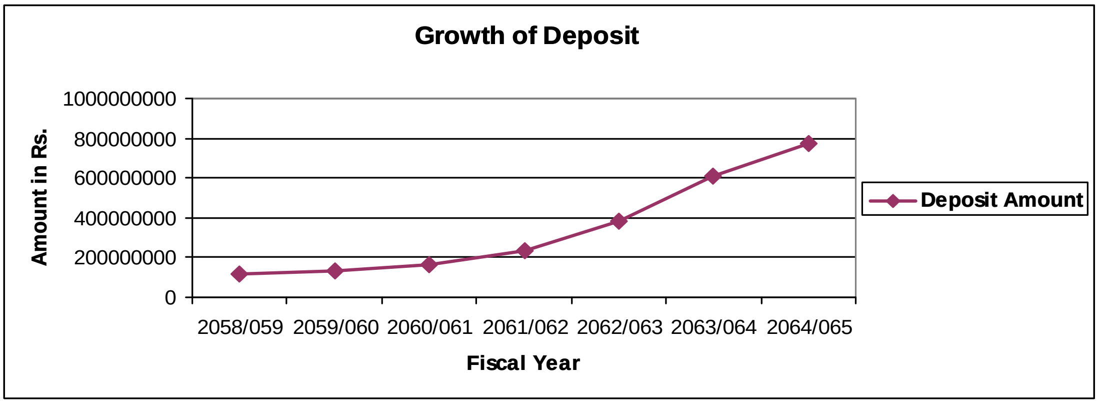
Bar Diagram of Growth of Deposits.



(Sources: Table No. 5)

Diagram No. 4

Line Graph Diagram of Growth of Deposits.



(Sources: Table No. 5)

The table shows that the growth of Deposit collection increasing trend. The growth percentage every year recording 0.0029% in the first fiscal year 2058/59, 13.17% in fiscal year 2059/060, 19.38% in fiscal year 2060/061, 46.37% in fiscal year 2061/062, 63.37% in fiscal year 2062/063, 58.73% in fiscal year 2063/064 and 25.58% in fiscal year 2064/065 and this picture shows the growth of Deposit collection is satisfactory. Average growth of

Deposit collectio is Rs. 9,28,81,657. The Bar diagram shows the growth of Deposit collection is increasing in every year. Similarly, in the line diagram, the growth of Deposit collection also in increasing trend. The reason behind it is the increment of faith of members towards NMC.

4.1.3 Deposit Refunded Budget of NMC

The following table shows the budgeted amount of deposit Refunded which has been find out following the time series approach was adopted to ascertain the budgeted figure for Deposit Refunded from F/Y 2058/059 to F/Y 2064/065. Realizing its significance the NMC has started to prepare budget statement. The actual amount of deposit refund and achievement of it on the budgeted amount is given in the table.

Table No. 6

Budgeted and Actual Deposit Refunded

From FY 2058/059 to 2064/065

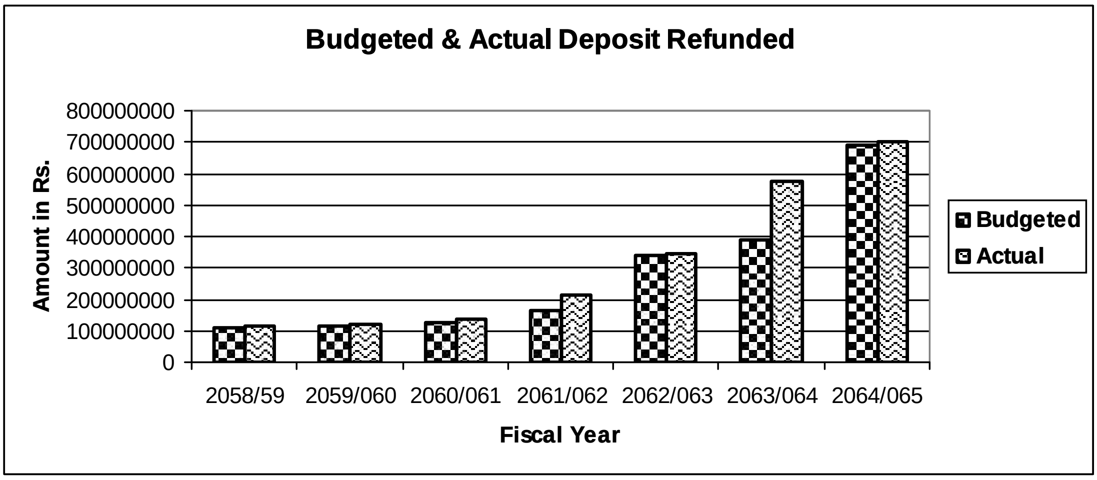
Amount in Rs.

Fiscal Year	Budgeted	Actual	Achievements %
2058/059	11,00,00,000	11,53,10,891	104.83%
2059/060	11,65,07,427	11,88,92,246	102.05%
2060/061	12,78,78,479	13,94,20,306	109.03%
2061/062	16,36,66,012	21,35,04,904	130.45%
2062/063	34,00,00,000	34,45,26,107	101.33%
2063/064	38,85,00,000	57,45,90,498	147.90%
2064/065	69,00,00,000	69,99,17,770	101.44%

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

Diagram No. 5

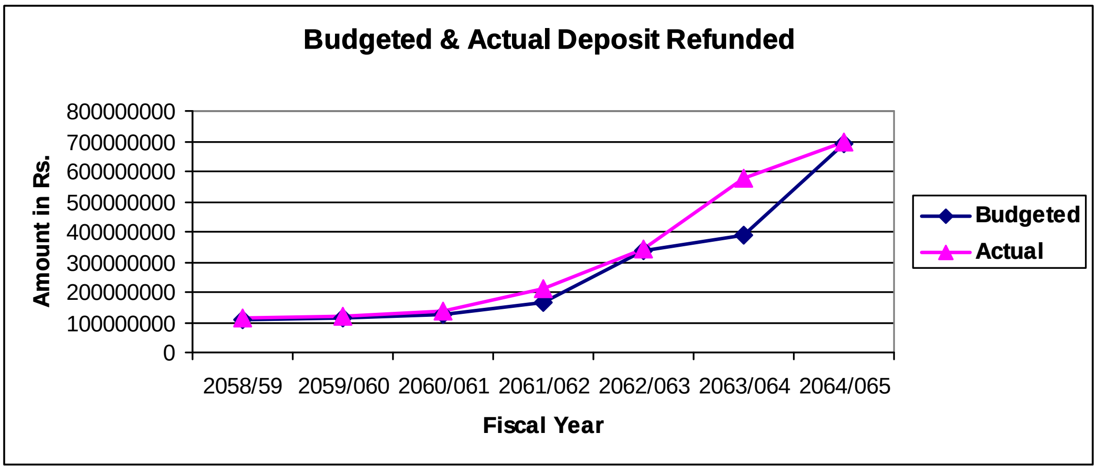
Bar Diagram of Budgeted and Actual Deposit Refunded



(Sources: Table No. 6)

Diagram No. 6

Line graph of Budgeted and Actual Deposit Refunded



(Sources: Table No. 6)

The table shows that the Deposit Refund target was achieved every year recording 104.83% in the first fiscal year 2058/59, 102.05% in fiscal year 2059/060, 109.03% in fiscal year 2060/061, 130.45% in fiscal year 2061/062, 101.33% in fiscal year 2062/063, 147.90% in fiscal year 2063/064 and 101.44% in fiscal year 2064/065 and this picture shows the high level of achievement made by the NMC in deposit refunded budget. The Bar diagram shows the achievement level remaining higher than the budgeted level. Similarly, in the line diagram, the actual line is running higher than the budgeted line.

Table No. 7

Relationship between Budgeted and Actual Deposit Refunded

Statistical Tools	Budgeted Deposit Refunded (00000)	Actual Deposit Refunded (00000)
Mean ($\overline{X}$)	2766.50	3151.66
Standard deviation (σ)	1984.58	2190.51
C.V.	71.74%	69.50%

Source: -Appendix 2

The table no. 7 shows the average budgeted deposit refund and the average actual deposit refund of NMC. According to the above table, the average budgeted and the average actual deposit refud is 2766.50 rupees and 3151.66 rupees respectively. More deviation is occurring into the actual figure in comparison to the figure of the budgeted deposit refund. Coefficient variation of budgeted deposit refund is 71.74 percent and the actual deposit refund is 69.50 percent. More variation takes place on budgeted figure than the actual. Over ambitious budget can be taken as one of the main reason for generating such fluctuation.

Significance of correlation of (r) is tested with probable error PE. The detail calculation of 'r' and probable error PE was made in appendix 2. From that appendix the calculated value of r was 0.9575. This figure 'r' shows that there was positively perfect correlation between budgeted deposit refund and actual deposit refund. It means that the budgeted and the actual deposit refund figure have the positive correlation of 95.75 percent. The obtained positive correlation has 0.0212 probable error (PEr) and it indicates a minor error between to two figures.

4.2 Loan Investment Budget of NMC

The following table shows the budgeted amount of loan investment which has been find out following the time series approach was adopted to ascertain the budgeted figure for loan investment from F/Y 2058/059 to F/Y 2064/065. Realizing its significance the NMC has started to prepare budget statement. The actual amount of loan investment and achievement of it on the budgeted amount is given in the table.

Table No. 8

Budgeted and Actual Loan Investment

From FY 2058/059 to 2064/065

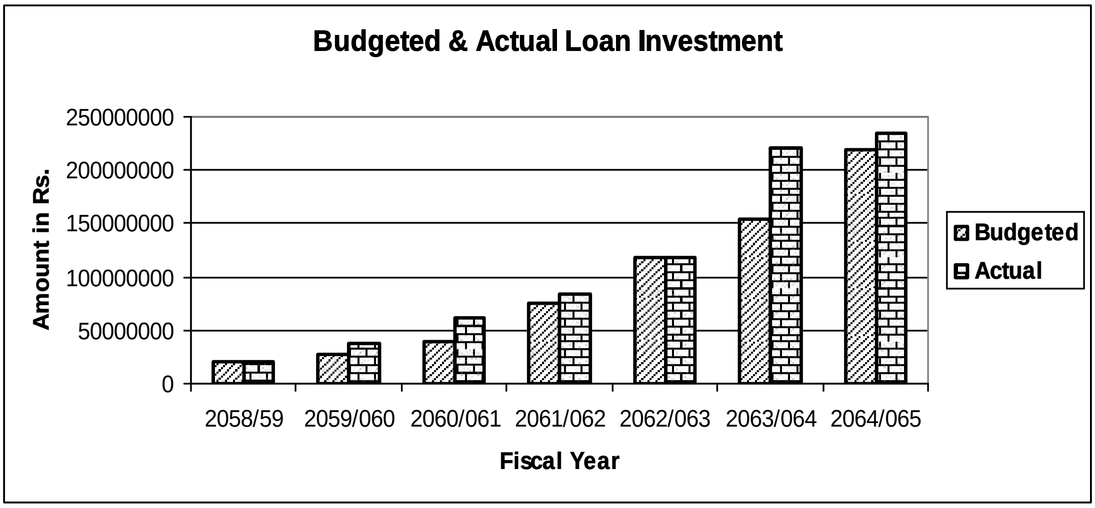
Amount in Rs.

Fiscal Year	Budgeted	Actual	Achievements %
2058/059	2,00,00,000	2,04,99,789	102.50%
2059/060	2,75,00,000	3,81,99,783	138.91%
2060/061	4,00,00,000	6,14,63,574	153.66%
2061/062	7,53,76,396	8,30,76,843	110.22%
2062/063	11,80,00,000	11,80,76,179	100.06%
2063/064	15,45,00,000	22,03,23,790	142.60%
2064/065	22,00,00,000	23,44,39,812	106.56%

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

Diagram No. 7

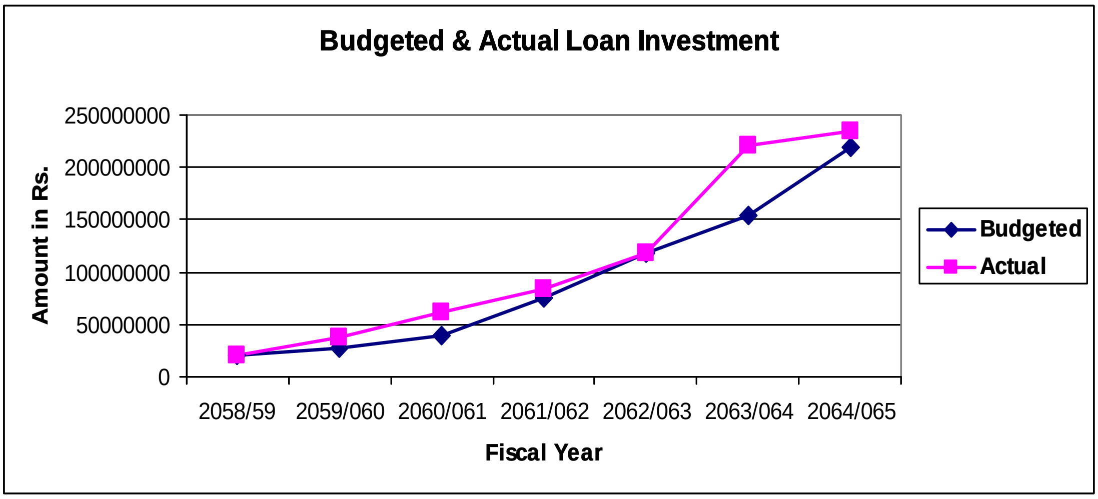
Bar Diagram of Budgeted and Actual Loan Investment



(Sources: Table No. 8)

Diagram No. 8

Line graph of Budgeted and Actual loan Investment



(Sources: Table No. 8)

The table shows that the loan investment target was achieved every year recording 102.50% in the first fiscal year 2058/59, 138.91% in fiscal year 2059/060, 153.66% in fiscal year 2060/061, 110.22% in fiscal year 2061/062, 100.06% in fiscal year 2062/063, 142.60% in fiscal year 2063/064 and 106.56% in fiscal year 2064/065 and this picture shows the high level of achievement made by the NMC in loan investment budget. The Bar diagram shows the achievement level remaining higher than the budgeted level. Similarly, in the line diagram, the actual line is running higher than the budgeted line.

Table No. 9

Relationship between Budgeted and Actual Loan Investment

Statistical Tools	Budgeted Loan Investment (00000)	Actual Loan Investment (00000)
Mean ($\overline{X}$)	936.25	1108.69
Standard deviation (σ)	689.43	792.49
C.V.	73.64%	71.48%

Source: -Appendix 3

The table no. 9 shows the average budgeted loan investment and the average actual loan investment of NMC. According to the above table, the average budgeted and the average actual loan investment is 936.25 rupees and 1108.69 rupees respectively. More deviation is occurring into the actual figure in comparison to the figure of the budgeted loan investment. Coefficient variation of budgeted loan investment is 73.64 percent and the actual loan investment is 71.48 percent. More variation takes place on budgeted figure than the actual. Over ambitious budget can be taken as one of the main reason for generating such fluctuation.

Karl person's coefficient correlation was used to find correlation between actual loan investment and budgeted loan investment. Karl person's coefficient of correlation is denoted by (r). By calculating (r) correlation between budgeted loan investment and actual loan investment can be known. Significance of correlation of (r) is tested with probable error PE. The detail calculation of 'r' and probable error PE was made in appendix 3. From that appendix the calculated value of r was 0.9693. This figure 'r' shows that there was positively perfect correlation between budgeted loan investment and actual loan investment. It means that the budgeted and the actual loan investment figure have the positive correlation of 96.93 percent. The obtained positive correlation has 0.0154 probable error (PEr) and it indicates a minor error between to two figures.

4.3 Loan Collection Budget of NMC

The following table shows the budgeted amount of loan Collection which has been find out following the time series approach was adopted to ascertain the budgeted figure for loan recovery from F/Y 2058/059 to F/Y 2064/065. Realizing its significance the NMC has started to prepare budget statement. The actual amount of loan collection and achievement of it on the budgeted amount is given in the table.

Table No. 10

Budgeted and Actual Loan Collection

From FY 2058/059 to 2064/065

Amount in Rs.

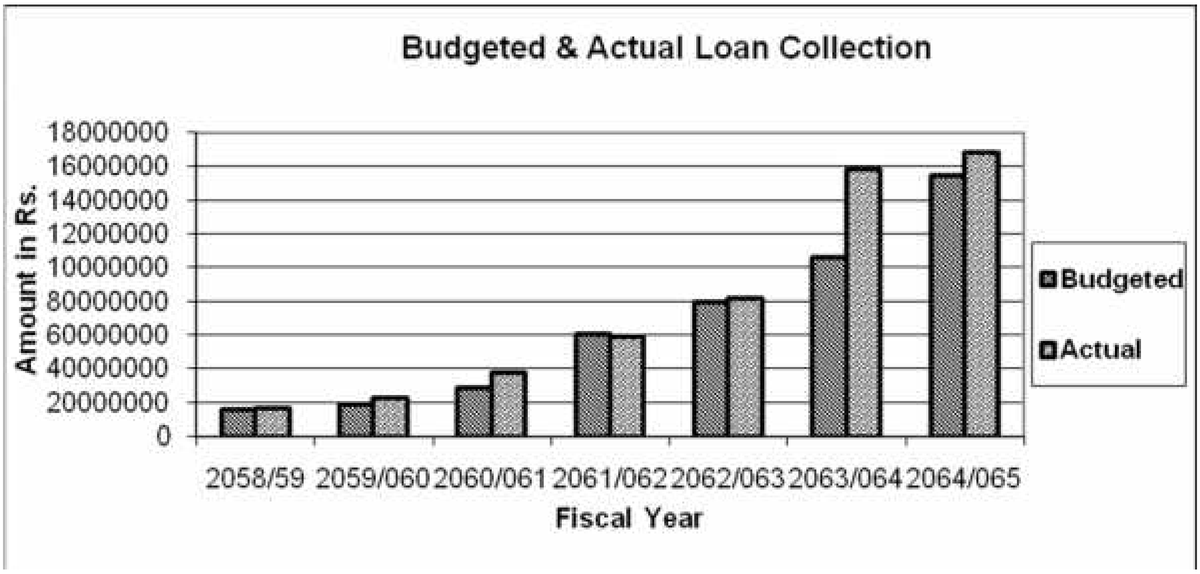
Fiscal Year	Budgeted	Actual	Achievements %
2058/059	1,60,00,000	1,69,54,029	105.96%

2059/060	1,90,46,253	2,27,14,016	119.26%
2060/061	2,90,32,020	3,80,46,120	131.05%
2061/062	6,07,27,235	5,90,26,601	97.20%
2062/063	8,00,00,000	8,20,59,412	102.57%
2063/064	10,60,00,000	15,84,69,904	149.50%
2064/065	15,50,00,000	16,88,39,941	108.93%

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

Diagram No. 9

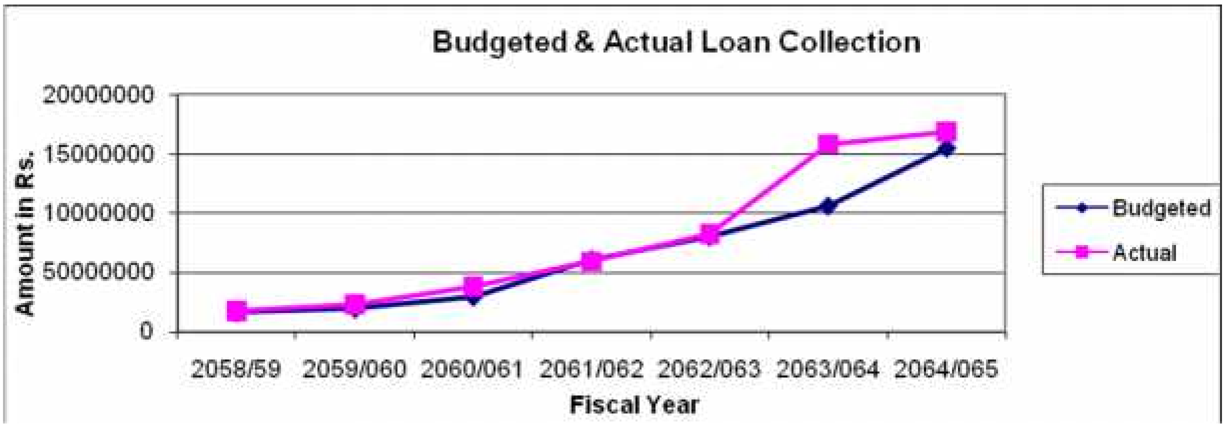
Bar Diagram of Budgeted and Actual Loan Collection



(Sources: Table No. 10)

Diagram No. 10

Line graph of Budgeted and Actual loan Collection



(Sources: Table No. 10)

The table shows that the loan collection target was achieved every year except fiscal year 2061/062 with the achievement of only 97.20%. Other achievement recording 105.96% in the first fiscal year 2058/59, 119.26% in fiscal year 2059/060, 131.05% in fiscal year 2060/061, 102.57% in fiscal year 2062/063, 149.50% in fiscal year 2063/064 and 108.93% in fiscal year 2064/065 and this picture shows the high level of achievement made by the NMC in loan collection budget. The Bar diagram shows the achievement level remaining higher than the budgeted level except in fiscal year 2061/062. Similarly, in the line diagram, the actual line is running higher than the budgeted line except in fiscal year 2061/062.

Table No. 11

Relationship between Budgeted and Actual Loan Collection

Statistical Tools	Budgeted Loan Collection (00000)	Actual Loan Collection (00000)
Mean ($\overline{X}$)	665.44	780.16
Standard deviation (σ)	475.30	579.20
C.V.	71.43%	74.24%

Source: -Appendix 4

The table no. 11 shows the average budgeted loan collection and the average actual loan collection of NMC. According to the above table, the average budgeted and the average actual loan collection is 665.44 rupees and 780.16 rupees respectively. More deviation is occurring into the actual figure in comparison to the figure of the budgeted loan collection.

Coefficient variation of budgeted loan collection is 71.43 percent and the actual loan collection is 74.24 percent. More variation takes place on actual figure than the budgeted.

Karl person’s coefficient correlation was used to find correlation between actual loan collection and budgeted loan collection. Karl person’s coefficient of correlation is denoted by (r). By calculating (r) correlation between budgeted loan collection and actual loan collection can be known. Significance of correlation of (r) is tested with probable error PE. The detail calculation of ‘r’ and probable error PE was made in appendix 4. From that appendix the calculated value of r was 0.9644. This figure ‘r’ shows that there was positively perfect correlation between budgeted loan collection and actual loan collection. It means that the budgeted and the actual loan collection figure have the positive correlation of 96.44 percent. The obtained positive correlation has 0.0178 probable error (PEr) and it indicates a minor error between to two figures.

4.3.1 Actual Deposit Collection Vs Loan Investment of NMC

The major source of resources mobilized of NMC was the customer deposit and similarly the major outlet for deployment loan investment

The following table shows the actual balance of customer deposit mobilized by the NMC and actual position of deployment of resources towards loan and the ratio of the Loan to Deposit (CD Ratio).

Table No. 12

Status of Actual Deposit Vs Actual Loan of NMC

From FY 2058/059 to 2064/065

Amount in Rs.

Fiscal Year	Actual Deposit	Actual Loan	CD Ratio
2058/059	11,95,17,307	2,04,99,789	17.15%

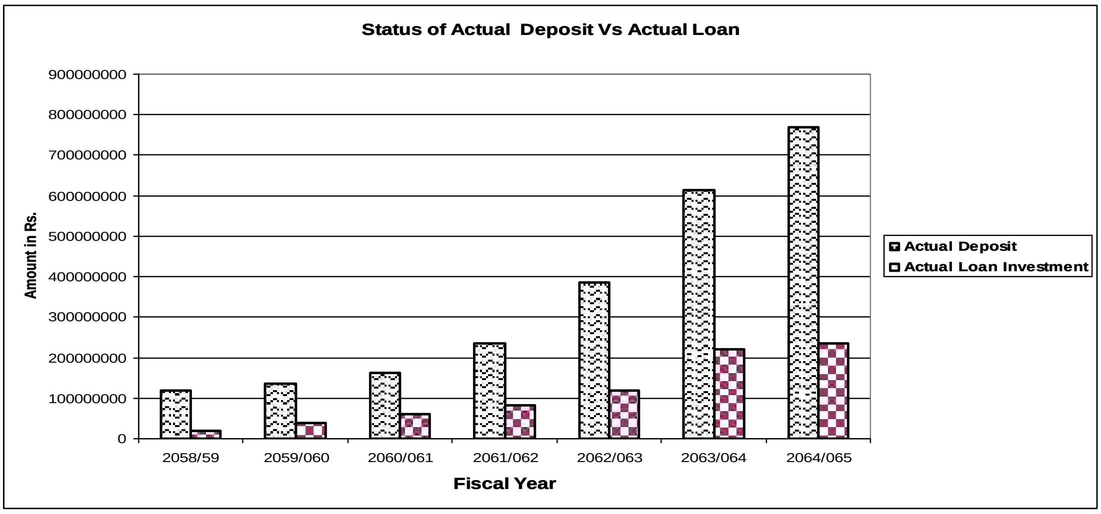
2059/060	13,52,63,297	3,81,99,783	28.24%
2060/061	16,14,74,474	6,14,63,574	38.06%
2061/062	23,63,53,247	8,30,76,843	35.15%
2062/063	38,61,22,532	11,80,76,179	30.58%
2063/064	61,29,02,898	22,03,23,790	35.95%
2064/065	76,96,85,431	23,44,39,812	30.46%
Average CD Ratio			30.80%

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

It can be found that both the Deposit and loan investment increased during the period. The average CD ratio over the period of last seven years was 30.80%. It is significant to analyze the relationship between deposits and loan investment. In order to find out the variability, of actual deposits and actual loan investment of different years, the arithmetic mean, standard deviation and coefficient of variation technique and correlation of coefficient. The details calculation was presented in appendix no.5.

Diagram No. 11

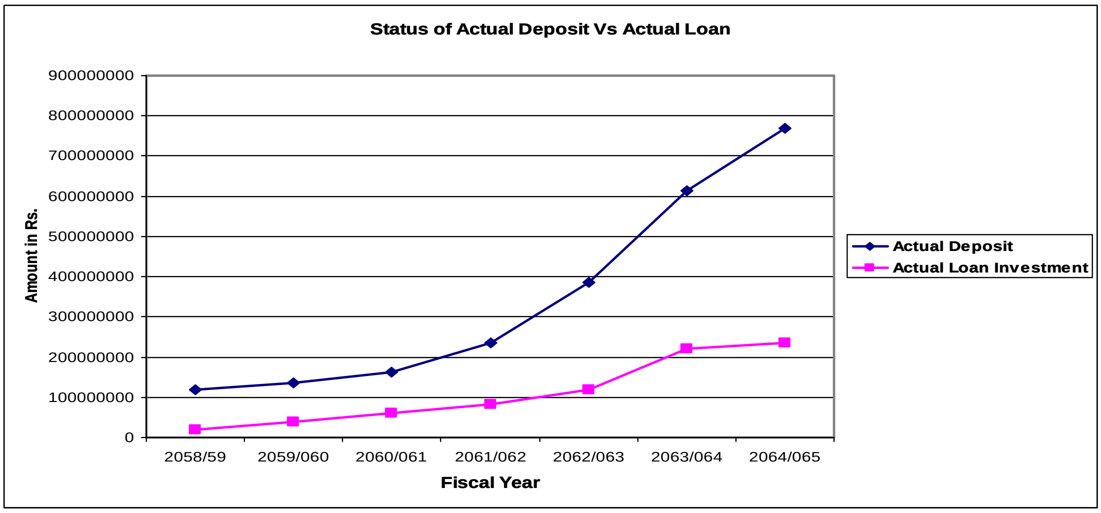
Bar Diagram of Actual Deposit and Actual Loan Investment



(Sources: Table No. 12)

Diagram No. 12

Line graph of Actual Deposit and Actual loan Investment



(Sources: Table No. 12)

Table No. 13

Relationship between Actual Deposit and Actual Loan Investment

Statistical Tools	Actual Deposit (00000)	Actual Loan (00000)
Mean ($\bar{X}$)	3459.03	1108.69
Standard deviation (σ)	2372.86	792.49
C.V.	68.60%	71.48%

Source: -Appendix 5

The above results showed that actual loan investment was more variable than actual deposits. Hence the coefficient of variation of actual loan investment was higher than that of actual deposits. Another statistical tool, correlation of coefficient was used to analyze the relationship between actual deposits and actual loan investment. The actual deposits increased as the actual loan investment increased. To find out correlation between actual deposits and actual loan investment, Karl person's coefficient of correlation denoted by 'r' we can examine whether there was positive correlation between actual deposits and actual loan investment or not. For this purpose, actual deposits were assumed to be independent variable and actual loan investment is assumed to be dependent variable. After this significance of 'r' was tested with probable error of 'r' the detail calculation of 'r' and probable of 'r' was presented in appendix 5. The value of r and P.E respectively 0.9861 and 0.007.

Since r was greater than 6PE . So, the value of 'r' was significant. There is perfect correlation between actual deposits and actual Loan investment.

4.4 Expenditure Budget of NMC

Planning for expenses is most essential to maintain reasonable levels to support the objectives & planned programs of the NMC. Expenses planning focus on the relationship between expenditure & the benefits derived from these expenditures. NMC has started preparing expenditure and revenue budget from the F/Y 2057/058. The following table shows the budgeted and actual expenses incurred by the NMC for the study period:

Table No. 14

Budgeted and Actual Expenses of NMC

From FY 2058/059 to 2064/065

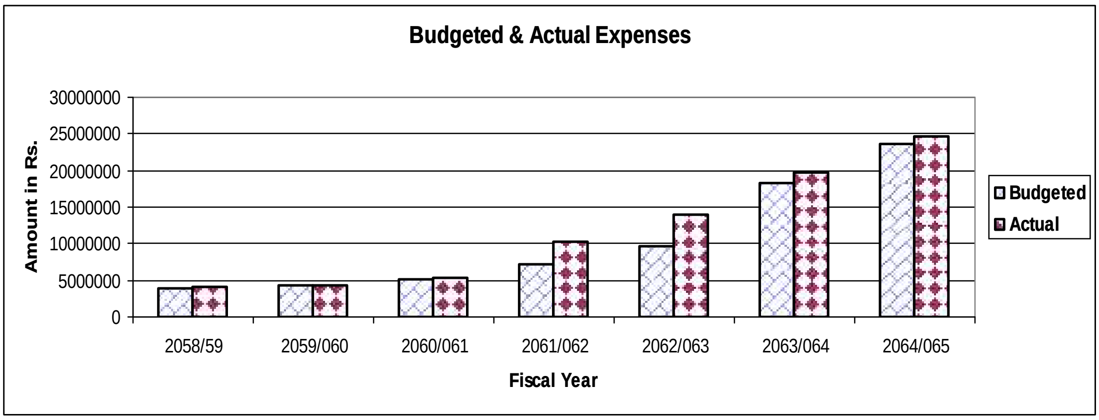
Amount in Rs.

Fiscal Year	Budgeted Expenses	Actual Expenses	Variance		Remarks
			Amount	%	
2058/059	39,64,580	41,51,760	(1,87,180)	-4.72%	Unfavourable
2059/060	43,20,000	43,56,336	(36,336)	-0.84%	Unfavourable
2060/061	52,35,550	53,65,772	(1,30,222)	-2.49%	Unfavourable
2061/062	70,92,018	1,02,99,997	(32,07,979)	-45.23%	Unfavourable
2062/063	97,29,100	1,39,86,016	(42,56,916)	-43.75%	Unfavourable
2063/064	1,83,16,061	1,96,85,299	(13,69,238)	-7.48%	Unfavourable
2064/065	2,36,36,441	2,46,45,471	(10,09,030)	-4.27%	Unfavourable

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

Diagram No. 13

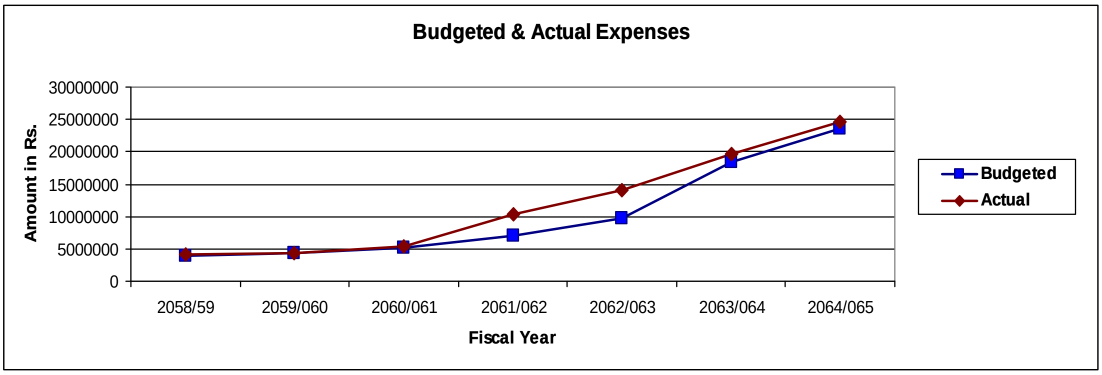
Bar Diagram of Budgeted and Actual Expenses



(Sources: Table No. 14)

Diagram No. 14

Line graph of Budgeted and Actual Expenses



(Sources: Table No. 14)

The table shows that the expenses target was not achieved every year recording unfavourable variance of -4.72% in the first fiscal year 2058/59, -0.84% in fiscal year 2059/060, -2.49% in fiscal year 2060/061, -45.23% in the fiscal year 2061/062, -43.75% in fiscal year 2062/063, -7.48% in fiscal year 2063/064 and -4.27% in fiscal year 2064/065 and this picture shows the low level of achievement made by the NMC in expenses budget. The Bar diagram shows the achievement level remaining lower than the budgeted level. Similarly, in the line diagram, the actual line is running lower than the budgeted line.

Table No. 15

Relationship between Budgeted and Actual Expenses

Statistical Tools	Budgeted Expenses (00000)	Actual Expenses (00000)
Mean ($\overline{X}$)	103.28	117.84
Standard deviation (σ)	71.14	74.60
C.V.	68.88%	63.31%

Source: -Appendix 6

The table no. 15 shows the average budgeted expenses and the average actual expenses of NMC. According to the above table, the average budgeted and the average actual expenses is 103.28 rupees and 117.84 rupees respectively. More deviation is occurring into the actual figure in comparison to the figure of the budgeted expenses. Coefficient variation of budgeted expenses is 68.88 percent and the actual expenses is 63.31 percent. More variation takes place on budgeted figure than the actual.

Karl person's coefficient correlation was used to find correlation between actual expenses and budgeted expenses. Karl person's coefficient of correlation is denoted by (r). By calculating (r) correlation between budgeted expenses and actual expenses can be known. Significance of correlation of (r) is tested with probable error PE. The detail calculation of 'r' and probable error PE was made in appendix 6. From that appendix the calculated value of r was 0.9789. This figure 'r' shows that there was positively perfect correlation between budgeted expenses and actual expenses. It means that the budgeted and the actual expenses figure have the positive correlation of 97.89 percent. The obtained positive correlation has 0.0106 probable error (PEr) and it indicates a minor error between to two figures.

Table No. 16

Annual Cost Structure of NMC

Amount in Rs.

Expenses	058/59	059/60	060/61	061/62	062/63	063/64	064/65

Interest Expenses	1509166	1891132	2364455	6504580	9529219	14435367	12787242
Employee Expenses	1380948	1768242	2177086	2594642	3041045	3465667	3752937
Office Operational	405101	573616	690674	1020715	1261686	1618034	1735645
Provision for risk	793605	72550	1221553	0	0	735563	5926679
Depreciation	53689	42511	108864	166816	133450	139242	184157
Miscellaneous	9250	8285	24693	13244	20615	26989	7186
Welfare fund	0	0	0	0	0	0	251625
Provision for Tax	0	17630	33309	17439	38783	28599	103413
General Reserve 25%	0	10284	19430	10172	22623	28599	103413
Share & Dividend Fund 25%	0	7713	14573	7629	16967	21449	77560
Capital Reserve 25%	0	7713	14573	7629	16967	21449	77560
Loss Bearing Fund 25%	0	7713	14573	7629	16967	21449	77560
Co-operative Education Fund 10%	0	3085	5829	3051	6787	8579	31024
Co-operative Development Fund 10%	0	3085	5829	3051	6787	8579	31024
Staff Bonus Fund 5%	0	1542	2914	1525	3393	4289	15512
Total	**4151759**	**4415101**	**6698355**	**10358122**	**14115289**	**20563854**	**25162537**

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

The above table shows that the each type of expenditure increased over the period. As the expenses for interest payment was the highest portion of total cost for each year. The total expenses were segregated into interest expense and expenses other than interest (other expenses) for our study.

4.4.1 Interest Expenses

Interest expenses are the expenditure incurred for making payment of interest to the deposit-mobilized by NMC. As the customer deposit holds a major share on total resources of the NMC interest expenses is also higher among others in total expenses of the NMC. The interest expenses to total deposit mobilized by the NMC are given in following table:

Table No. 17

Annual Status of Interest Expenses to total Deposit (Cost of Deposit)

Amount in Rs.

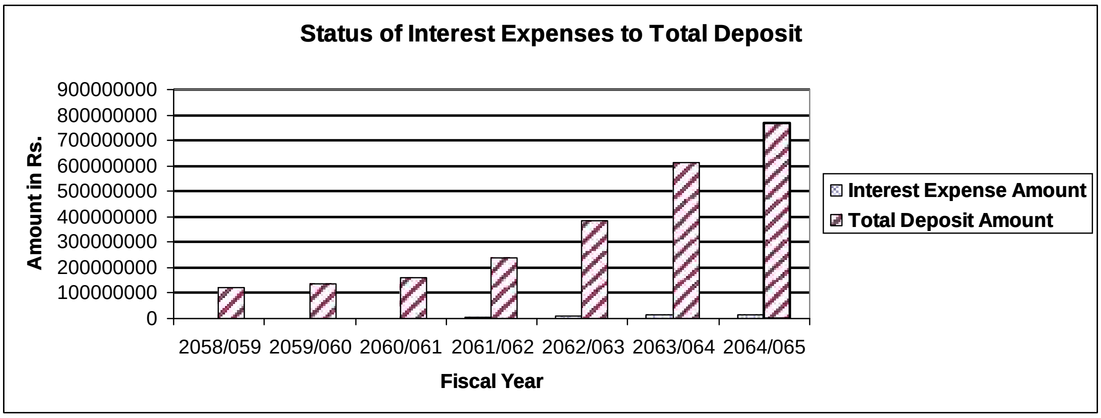
Fiscal Year	Interest Expenses	Total Deposit	Cost of deposit %
2058/059	15,09,166	11,95,17,307	1.26%
2059/060	18,91,132	13,52,63,297	1.40%
2060/061	23,64,455	16,14,74,474	1.46%
2061/062	65,04,580	23,63,53,247	2.75%
2062/063	95,29,219	38,61,22,532	2.47%
2063/064	1,44,35,367	61,29,02,898	2.36%
2064/065	1,27,87,242	76,96,85,431	1.66%
Average COD			1.91%

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

As said earlier, the customer deposit is one of the major sources for resources mobilization by the NMC. For the deposit taken by the NMC, it has to pay interest. There are various kinds of deposit accounts comprising interest free deposit to varying interest deposit accounts. The average cost incurred by the NMC for making interest payment to the depositors is called cost of deposit (COD) of the NMC, The lower COD referred to better position in terms of profitability. The yearly COD of NMC ranged from 1.26% to 2.75% in various years the average COD for the period of this study was 1.91%. The status of total deposit and the COD is shown in the Bar diagram as below:

Diagram No. 15

Bar Diagram of Interest Expenses to total Deposit (Cost of Deposit)



(Sources: Table No. 17)

4.4.2 Expenses Other than Interest Expenses

The operating expenses incurred by the NMC for other than interest payments are included in other expenses for this study. Such expenses include:

a) Expenses for employees
b) Operational expenses
c) Non-operating expenses
d) Provisions

Besides the above, profit appropriation toward staff bonus provision and income tax provision were included in 'Other expenses'. The amount of other expenses incurred by the NMC in various years is as shown in the earlier table no.16.

4.5 Revenue Planning of NMC

NMC generates its revenue from its income earning activities. Such activities are mostly fund-based, based deployment fund, and some portion from non-fund based business activities. Income of NMC can be broadly categorized into two type's viz. Interest income and other income. Interest income is the interest earned from the loan advances and overdraft provided to the borrowers, investments in the government bonds etc. Interest income holds major share in total income portfolio of the NMC. Other income consists of the income other than interest income, which are as follows:

1) Income from Admission Fees
2) Income from Application form

3) Income from Commission & Discounts

4) Various kinds of service Fees & charges etc

Table No. 18

Budgeted and Actual Income of NMC

From FY 2058/059 to 2064/065

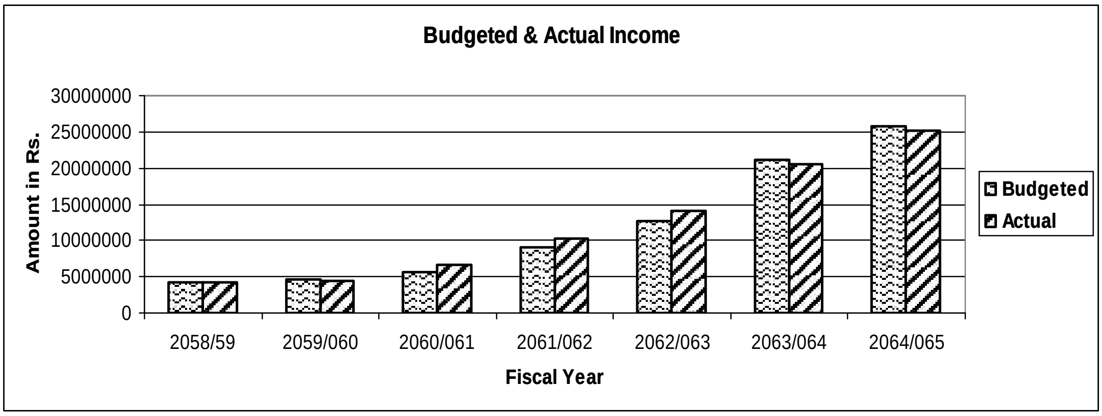
Amount in Rs.

Fiscal Year	Budgeted Income	Actual Income	Variance		Remarks
			Amount	%	
2058/059	42,32,000	41,51,760	(80,240)	-1.90%	Unfavourable
2059/060	47,30,000	44,15,103	(3,14,897)	-6.66%	Unfavourable
2060/061	57,35,550	66,98,358	9,62,808	16.79%	Favourable
2061/062	90,44,250	1,03,58,128	13,13,878	14.53%	Favourable
2062/063	1,26,29,100	1,41,15,295	14,86,195	11.77%	Favourable
2063/064	2,11,83,600	2,05,63,860	(6,19,740)	-2.93%	Unfavourable
2064/065	2,56,78,508	2,51,62,538	(5,15,970)	-2.00%	Unfavourable

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

Diagram No. 16

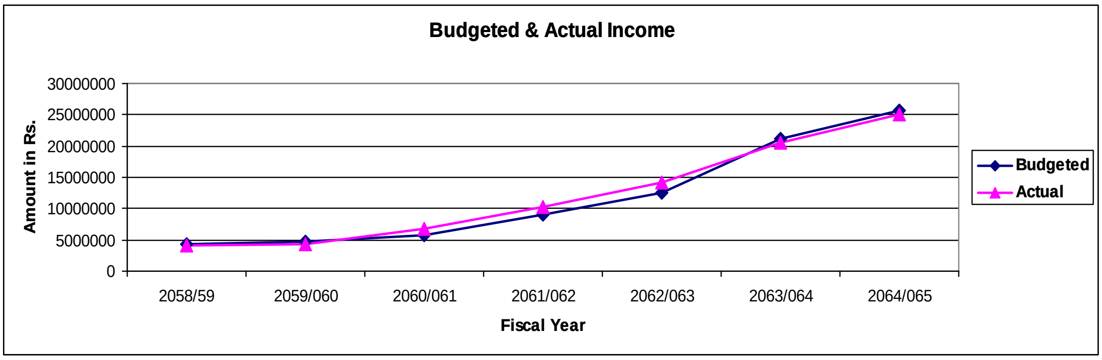
Bar Diagram of Budgeted and Actual Income



(Sources: Table No. 18)

Diagram No. 17

Line graph of Budgeted and Actual Income



(Sources: Table No. 18)

The table shows that the income target was achieved only in fiscal year 2060/061, 2061/062 , 2062/063 recording favourable variance of 16.79% in fiscal year 2060/061, 14.53% in the fiscal year 2061/062, 11.77% in fiscal year 2062/063 and other hand income target was not achieved in remaining fiscal year recording unfavourable variance of -1.90% in the first fiscal year 2058/59, -6.66% in fiscal year 2059/060, -2.93% in fiscal year 2063/064 and -2.00% in fiscal year 2064/065 and this picture shows the low level of achievement made by the NMC in income budget. The Bar diagram shows the achievement level remaining lower than the budgeted level except in fiscal year 2060/061, 2061/062 and 2062/063. Similarly, in the line diagram, the actual line is running lower than the budgeted line except in fiscal year 2060/061, 2061/062 and 2062/063.

Table No. 19

Relationship between Budgeted and Actual Income

Statistical Tools	Budgeted Income (00000)	Actual Income (00000)
Mean ($\overline{X}$)	118.90	122.09
Standard deviation (σ)	78.64	75.66
C.V.	66.14%	61.97%

Source: -Appendix 7

The table no. 19 shows the average budgeted income and the average actual income of NMC. According to the above table, the average budgeted and the average actual income is 118.90 rupees and 122.09 rupees respectively. More deviation is occurring into the budgeted figure in comparison to the figure of the actual income. Coefficient variation of budgeted income is 66.14 percent and the actual income is 61.97 percent. More variation takes place on budgeted figure than the actual.

Karl person's coefficient correlation was used to find correlation between actual income and budgeted income. Karl person's coefficient of correlation is denoted by (r). By calculating (r) correlation between budgeted income and actual income can be known. Significance of correlation of (r) is tested with probable error PE. The detail calculation of 'r' and probable error PE was made in appendix 7. From that appendix the calculated value of r was 0.9949. This figure 'r' shows that there was positively perfect correlation between budgeted income and actual income. It means that the budgeted and the actual income figure have the positive correlation of 99.49 percent. The obtained positive correlation has 0.0026 probable error (PEr) and it indicates a minor error between to two figures.

Table No. 20

Annual Income Structure of NMC

Amount in Rs.

Incomes	058/59	059/60	060/61	061/62	062/63	063/64	064/65
Interest From Loan	3924334	4081075	6311633	9877580	13341758	19590398	23840646
Interest From Investment	21267	27758	67783	100819	288401	417878	627589
Admission Fees	0	123300	149160	181600	166075	208500	208000
Application Forms	0	46284	54780	99226	150810	157161	155066
Account Closing Fees	0	69985	98159	93556	116002	122815	108824
Miscellaneous Income	178362	56701	16842	5346	52249	58345	100871
Commission & Discount	0	10000	0	0	0	8763	121542
Fund Income	27796	0	0	0	0	0	0
Total	**4151759**	**4415103**	**6698357**	**10358127**	**14115295**	**20563860**	**25162538**

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

The above table shows that the revenues increased each year. Income from interest is the highest among the others in total revenue for each year.

4.5.1 Interest Income

As interest income contributes the major portion of total revenue mix, this study attempts to analyze the interest income amount with other relevant data. Interest income is generated out of the loan investment made by the NMC. Therefore this is probably called yield on Fund (YOF). The comparative status of total YOF with the total loan investment were presented with the help of following table and bar, line diagrams.

Table No. 21

Annual Status of Interest Income to total Loan Investment.

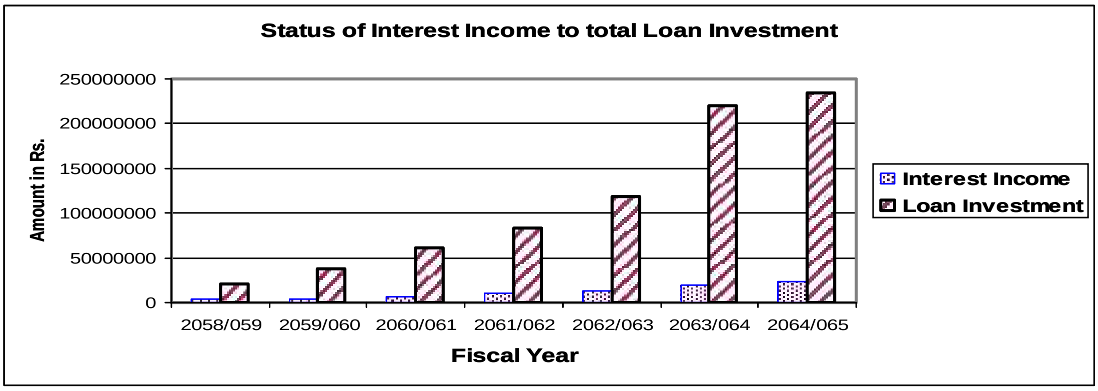
Amount in Rs.

Fiscal Year	Interest Income Amount	Total Loan Investment	Average Yield in Loan Investment
2058/059	39,24,334	2,04,99,789	19.14%
2059/060	40,81,075	3,81,99,783	10.68%
2060/061	63,11,633	6,14,63,574	10.27%
2061/062	98,77,580	8,30,76,843	11.89%
2062/063	1,33,41,758	11,80,76,179	11.30%
2063/064	1,95,90,398	22,03,23,790	8.89%
2064/065	2,38,40,646	23,44,39,812	10.17%
Average YOF			11.76%

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

Diagram No.18

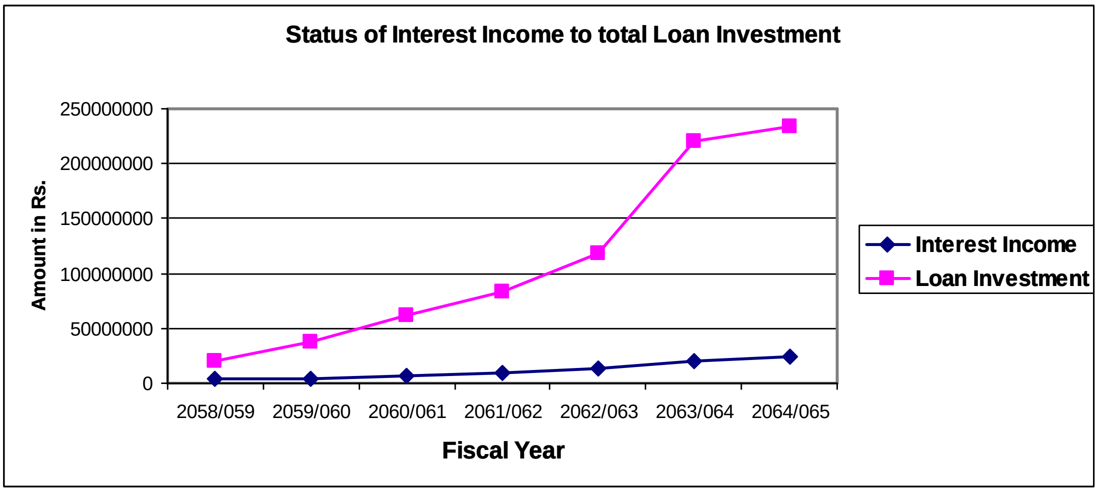
Bar Diagram of Interest Income to total Loan Investment



(Sources: Table No. 21)

Diagram No.19

Line diagram of Interest Income to total Loan Investment



(Sources: Table No. 21)

The above table shows that the yearly YOF of NMC ranges from 8.89% to 19.14% in various years. The average YOF for the period of study was 11.76%. It is significant to analyze the relationship between Loan investment and interest income (YOF). The figures of loan investment amount and interest income amount were presented in tabular form above.

4.5.2 Income Other Than Interest Income

Income earned by NMC other than interest income is called other income. Most part of such incomes are earned from non fund based activities in the form of admission fees, application form, account closing fees, commissions, remittance fees, service charges etc. The amount of other income earned by the NMC in various years is as shown in the earlier table no.20.

4.6 Interest Spread

Interest spread is the difference amount obtained by subtracting total interest expenses amount from the total interest earned. In other words, it is the margin on interest or net interest income of the NMC. The following table gives the status of interest income, interest expenses, and spread of the NMC during the study period.

Table No. 22

Annual Spread of NMC

Amount in Rs.

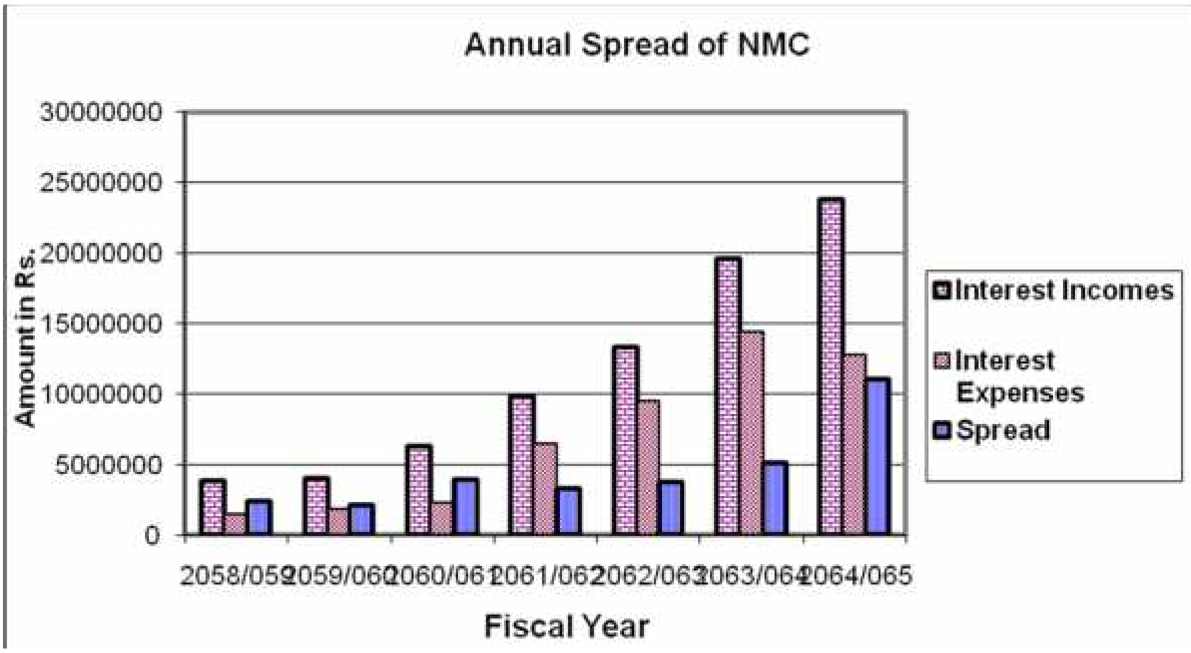
Fiscal Year	Interest Income	Interest Expenses	Spread
2058/059	39,24,334	15,09,166	24,15,168
2059/060	40,81,075	18,91,132	21,89,943
2060/061	63,11,633	23,64,455	39,47,178
2061/062	98,77,580	65,04,580	33,73,000
2062/063	1,33,41,758	95,29,219	38,12,539
2063/064	1,95,90,398	1,44,35,367	51,55,031
2064/065	2,38,40,646	1,27,87,242	1,10,53,404

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

The above table shows the interest income and expenses till fiscal year 2064/065. The trend of both income and expenses was increasing till fiscal year 2063/064 but increment in income and decrease in expenses in fiscal year 2064/065 which are fruitful to the NMC.

Diagram No. 20

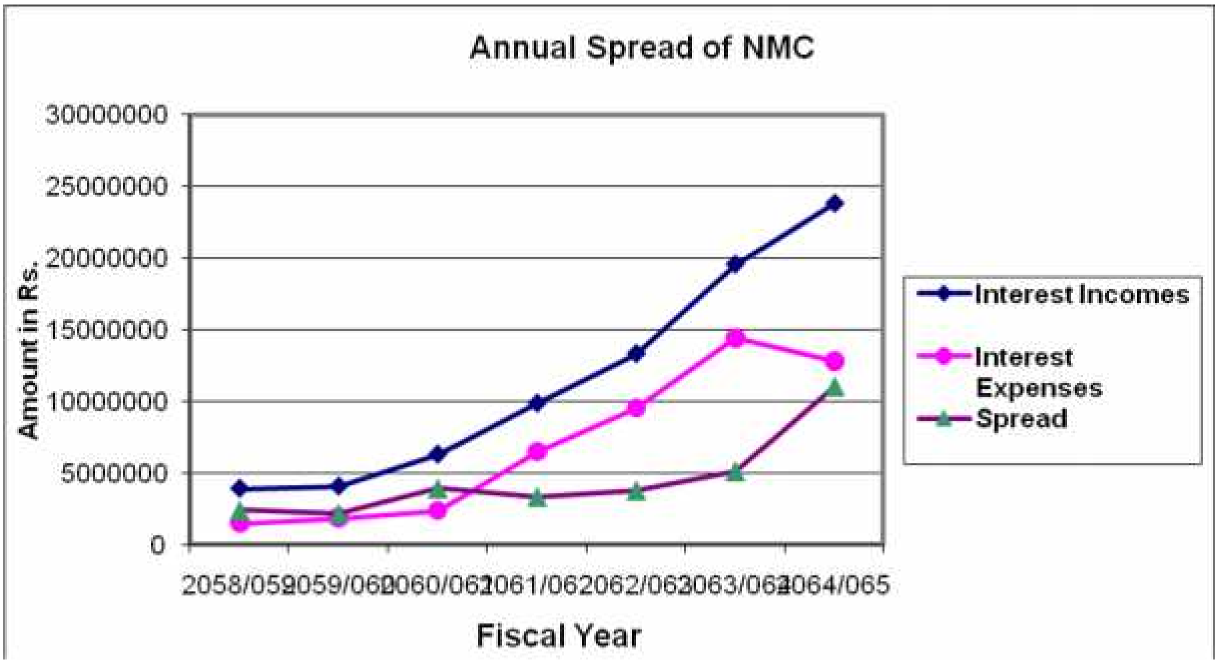
Bar Diagram of Annual Spread of NMC



(Sources: Table No. 22)

Diagram No. 21

Line Diagram of Annual Spread of NMC



(Sources: Table No. 22)

4.7 Burden

Burden is the overall expenses of the NMC excepting interest expenses incurred for the payment of deposit interest. That is the operating cost of the NMC excepting interest cost is called the burden. The net burden is the net amount of burden cost obtained which is the difference between other expenses and other income. The nature of this cost is semi fixed where as interest cost is variable cost. The following table shows the status of net burden in the NMC over the period of study:

Table No. 23

Table showing burden of NMC

Amount in Rs

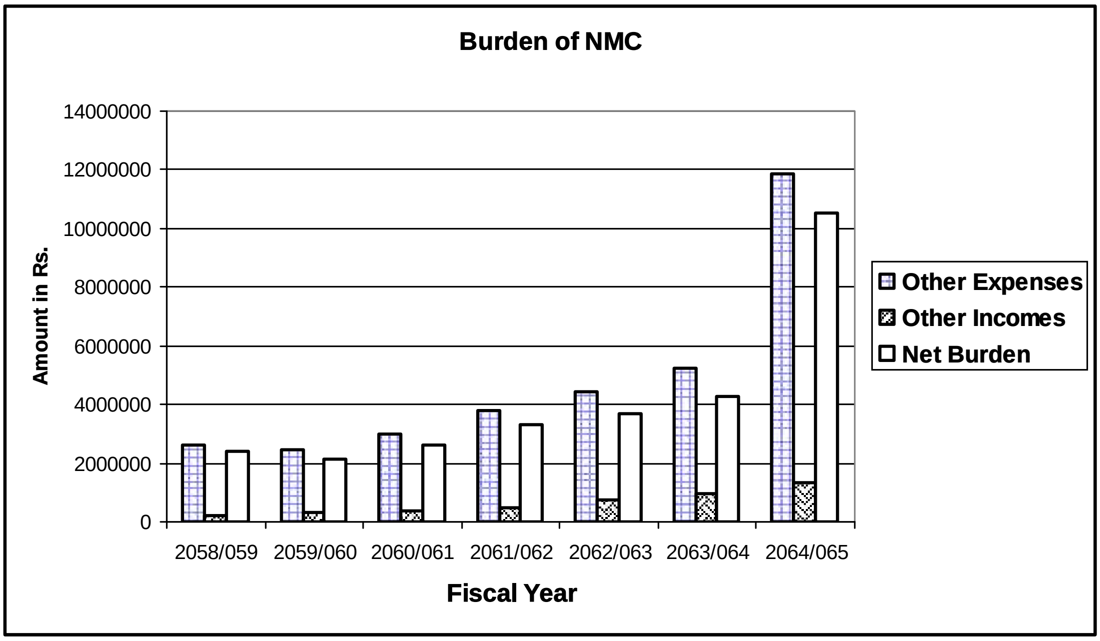
Fiscal Year	Other Expenses	Other Incomes	Net Burden
2058/059	26,42,594	2,27,426	24,15,168
2059/060	24,65,204	3,34,028	21,31,176
2060/061	30,01,317	3,86,725	26,14,592
2061/062	37,95,417	4,80,548	33,14,869
2062/063	44,56,797	7,73,537	36,83,260
2063/064	52,49,932	9,73,462	42,76,470
2064/065	1,18,58,229	13,21,892	1,05,36,337

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

The above table showed the expenses and income of the NMC during the study period. Expenses showed the increasing trend than income which was not good for the NMC.

Diagram No. 22

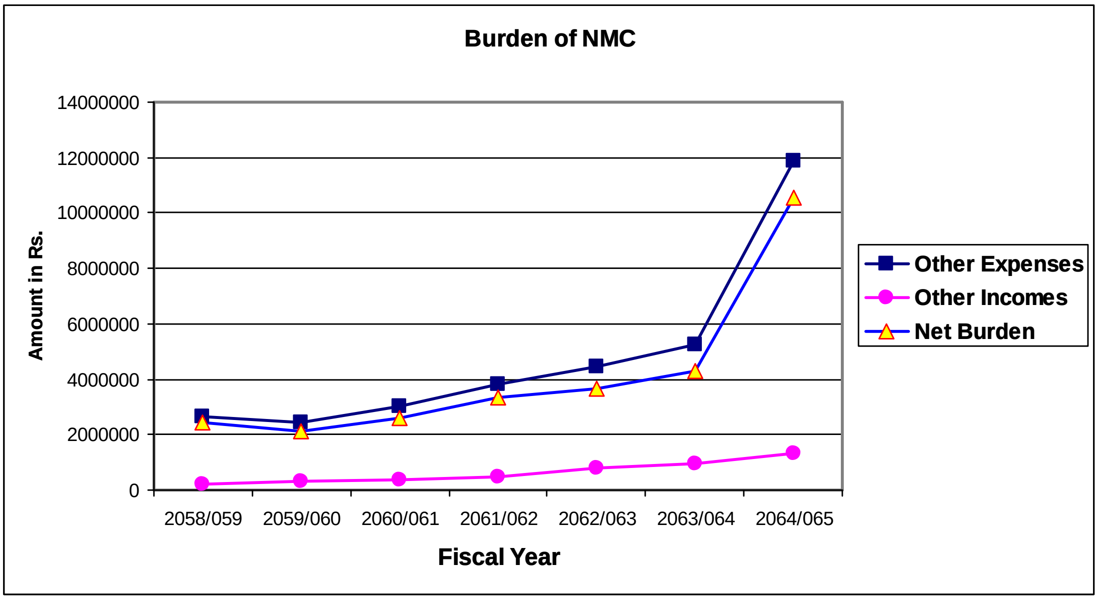
Bar Diagram showing burden of NMC



(Sources: Table No. 23)

Diagram No. 23

Line Diagram showing burden of NMC



(Sources: Table No. 23)

4.8 Profit Budget of NMC.

Profit is excess of income over expenses. When income becomes more than expenses, the organization earns profit. The table given below shows the budgeted and actual operation profit and variance between them.

Table No. 24

Budgeted and Actual Profit of NMC

From FY 2058/059 to 2064/065

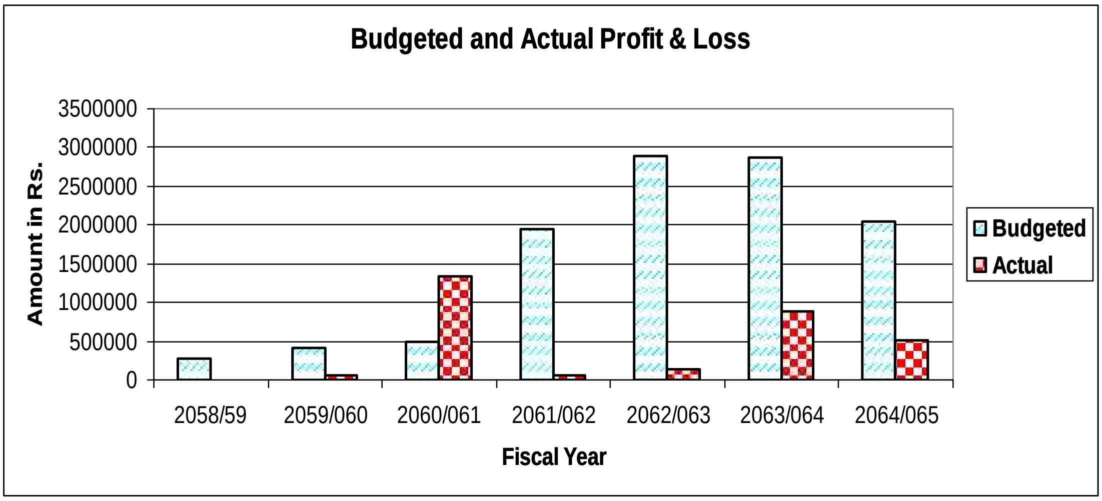
Amount in Rs.

Fiscal Year	Budgeted Profit	Actual Profit	Variance		Remarks
			Amount	%	
2058/059	2,67,420	0	(2,67,420)	-100%	Unfavourable
2059/060	4,10,000	58,767	(3,51,233)	-85.67%	Unfavourable
2060/061	5,00,000	13,32,586	8,32,586	166.52%	Favourable
2061/062	19,52,232	58,131	(18,94,101)	-97.02%	Unfavourable
2062/063	29,00,000	1,29,279	(27,70,721)	-95.54%	Unfavourable
2063/064	28,67,539	8,78,561	(19,88,978)	-69.36%	Unfavourable
2064/065	20,42,067	5,17,067	(15,25,000)	-74.68%	Unfavourable

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

Diagram No. 24

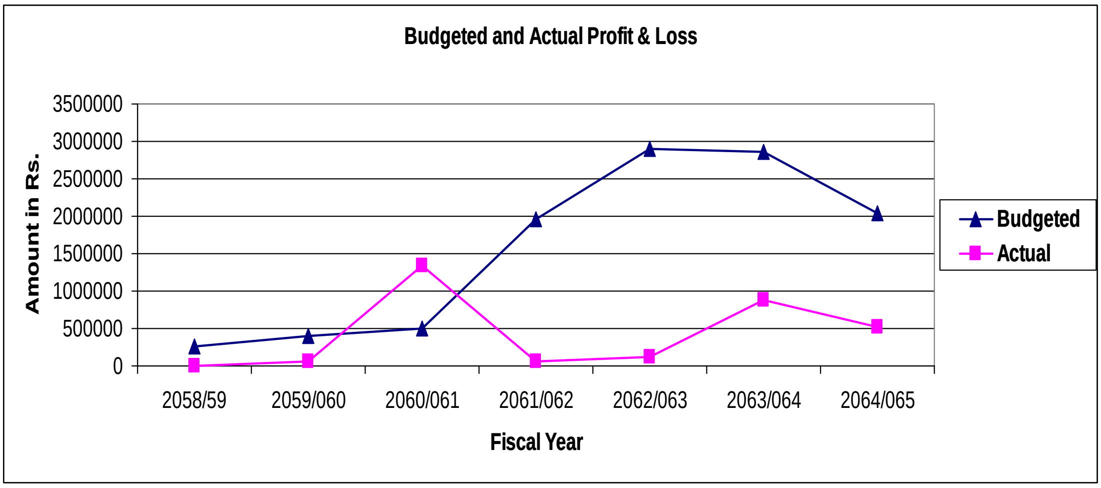
Bar Diagram of Budgeted and Actual Profit



(Sources: Table No. 24)

Diagram No. 25

Line graph of Budgeted and Actual Profit



(Sources: Table No. 24)

The table shows that the operation Profit target was achieved only in fiscal year 2060/061 recording favourable variance of 166.52% but in other fiscal year couldn't achieve target. The table and diagram shows that NMC is very poor in profit planning. The operation profit target was not achieved in remaining fiscal year recording unfavourable variance of -100% in the first fiscal year 2058/59, -85.67% in fiscal year 2059/060, -97.02% in fiscal year 261/062, -95.54 in fiscal year 2062/063, -69.36 in fiscal year 2063/064 and -74.68% in fiscal year 2064/065 and this picture shows the very low level of achievement made by the NMC in profit budget. The Bar diagram shows the achievement level remaining very lower than the budgeted level except in fiscal year 2060/061. Similarly, in the line diagram, the actual line is running very lower than the budgeted line except in fiscal year 2060/061.

We can present the operation profit achieved by NMC another way also. In this context, the operation profit was taken being the excess spread over the net burden. Spread is the net interest income (excess interest income over the interest expenses), and the net burden is the difference amount from other expenses and other income. The following table and graphs show the status of spread, Burden and operation Profit of various year of the study.

Table No. 25

Annual profit Status of NMC

Amount in Rs.

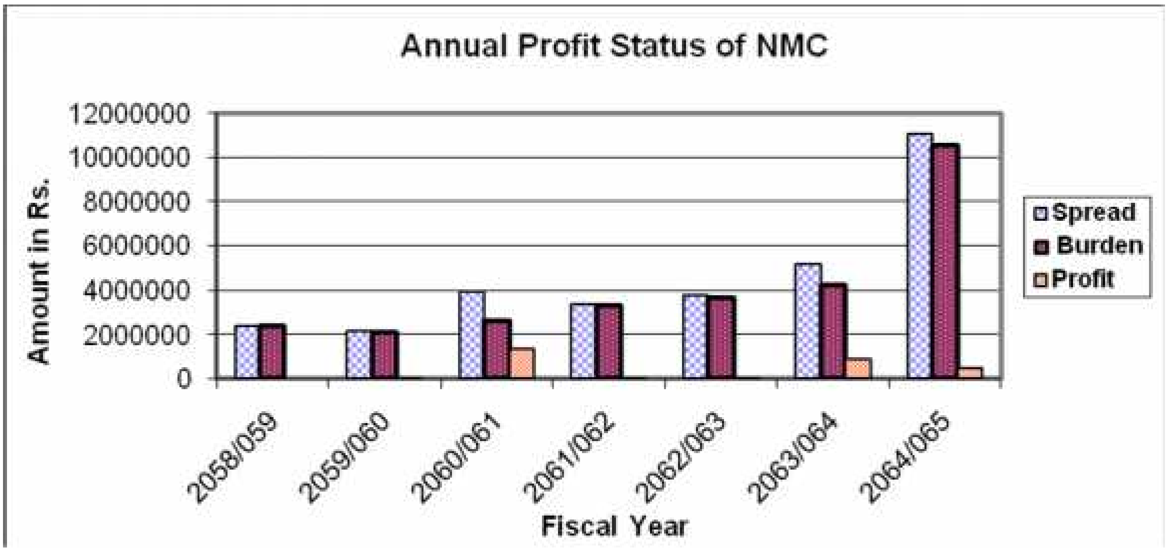
Fiscal Year	Spread	Burden	Profit
2058/059	24,15,168	24,15,168	0
2059/060	21,89,943	21,31,176	58,767
2060/061	39,47,178	26,14,592	13,32,586
2061/062	33,73,000	33,14,869	58,131
2062/063	38,12,539	36,83,260	1,29,279
2063/064	51,55,031	42,76,470	8,78,561
2064/065	1,10,53,404	1,05,36,337	5,17,067

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

The above table showed the position operation profit of the NMC. It followed the decreasing trend.

Diagram No. 26

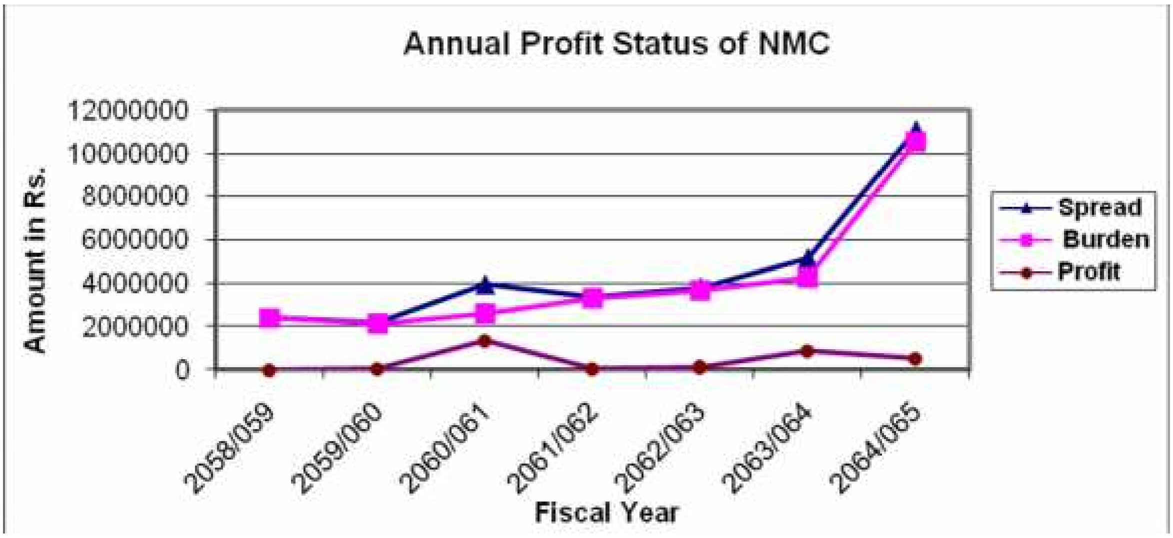
Bar Diagram of Annual profit Status of NMC



(Sources: Table No. 25)

Diagram No. 27

Line Diagram of Annual profit Status of NMC



(Sources: Table No. 25)

4.9 Performance Evaluation of NMC

The performance evaluation for internal management use is an important aspect of a comprehensive profit planning & control-system (Welsch-1999). All companies regardless of their size have reporting requirements to show their overall performance. Performance reporting is an important phase of control process. The various techniques & criteria were used to evaluate performance of NMC, which are as follows:

1) Ratio Analysis
2) Cost Volume Profit Analysis.

4.9.1 Ratio Analysis

An arithmetic relationship between two figures is known as ratio. Ratio Analysis is a financial device to measure the financial positions, major strengths, and weaknesses of a firm. To evaluate the performance of an organization by creating the ratios from the figures of different account consisting in balance sheet and income statement is known as ratio analysis. Ratio can be classified for the purpose of exposition into four broad groups:

a) Liquidity Ratio
b) Capital Structure Ratio
c) Activity Ratio

d) Profitability Ratio

4.9.1.1 Liquidity Ratio

The ability of a firm to meet its obligation in the short term is known as liquidity. It reflects the short-term financial strength of the firm. Now the current ratio to measure relationship of current assets & current liabilities of NMC were used. It is calculated by dividing the total current assets by current liabilities.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Table No. 26

Calculation of Current Ratio of NMC

From FY 2058/059 to 2064/065

Amount in Rs

Fiscal Year	Current Assets	Current Liabilities	Ratios
2058/059	6046247	1411081	4.28:1
2059/060	8150481	1941205	4.20:1
2060/061	10593005	3489342	3.04:1
2061/062	14934471	5741340	2.60:1
2062/063	27798125	8958855	3.10:1
2063/064	13379733	15285941	0.88:1
2064/065	32859401	30438435	1.08:1
Average			**2.74:1**

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

The table no. 26 represents the detailed charts of liquidity ratio of NMC for the years from fiscal year 2058/059 to 2064/065. The standard of current ratio is 2:1. The Current ratio of NMC was remarkable except in fiscal year 2063/064 and 2064/065 because it was less than standard ratio. But average current ratio was better because it was more than standard ratio. It showed that NMC's solvency position was better.

4.9.1.2 Capital Structure Ratio

To judge the long-term financial position of NMC the leverage ratio were calculated. The following two ratios are calculated in Capital Structure Ratio.

a) Debt to equity Ratio
b) Total Debt Ratio
c) Interest Coverage Ratio

A. Debt to equity ratio: The relationship between total debt and owner's equity is known as debt equity ratio. The amount of deposit was taken as long-term debt for the NMC. It is calculated by dividing the total debt by equity.

$$\text{Debt to Equity Ratio} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

Table No. 27

Calculation of Debt to Equity Ratio of NMC

From FY 2058/059 to 2064/065

Amount in Rs

Fiscal Year	Total Debt	Equity	Ratios
2058/059	27918508	4429953	6.30
2059/060	44819684	5366203	8.35
2060/061	68421989	7930434	8.63
2061/062	93522330	11110360	8.42
2062/063	138305321	15227418	9.08
2063/064	182944807	19553338	9.36
2064/065	267864962	27599546	9.71
Average			**8.55**

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

B. Debt ratio: This ratio shows the relationship between total debt and total assets of NMC. This ratio can be calculated by dividing the total debt by total assets.

$$\text{Total Debt Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

Table No. 28

Calculation of Total Debt Ratio of NMC

From FY 2058/059 to 2064/065

Amount in Rs

Fiscal Year	Total Debt	Total Assets	Ratios
2058/059	27918508	32348462	0.86
2059/060	44819684	50185888	0.89
2060/061	68421989	76352425	0.90
2061/062	93522330	104632691	0.89
2062/063	138305321	153532740	0.90
2063/064	182944807	202498146	0.90
2064/065	267864962	295464510	0.91
Average			**0.89**

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

Above table no. 28 signifies that debt ratio of NMC. The debt ratio of NMC can be considered as satisfactory by finding out the above result.

B. Interest Coverage Ratio: This ratio measures the Interest payment capacity of NMC. It is computed by dividing Net Profit before interest & Tax by interest expenses amount.

$$\text{Interest Coverage Ratio} = \frac{\text{NPBIT}}{\text{Interest Expenses}}$$

Table No. 29

Calculation of Interest Coverage Ratio of NMC

From FY 2058/059 to 2064/065

Amount in Rs

Fiscal Year	NPBIT	Interest Expenses	Ratios
2058/059	1509166	1509166	1.00
2059/060	1949899	1891132	1.03
2060/061	2475487	2364455	1.05

2061/062	6562711	6504580	1.00
2062/063	9658498	9529219	1.01
2063/064	14578365	14435367	1.00
2064/065	13304309	12787242	1.04
Average			**1.02**

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

Interest coverage Ratio of NMC was in increasing trend year by year, which was favorable for NMC.

4.9.1.3 Activity Ratio: Activity ratios are employed to evaluate the efficiency with which the firm managers utilize its assets. This ratio is also called turn over ratio because it indicates the speed with which assets being converted or turned over into revenue. Activity ratio, thus, involves a relation between revenue and the various assets, and presumes that there exist an appropriate balance between revenue and the various assets. Normally, NMC uses total asset turnover ratio, fixed assets turn over ratio and capital employed turnover ratio.

A. Total Assets Turnover Ratio

Total assets turnover ratio establishes the relationship between the amount of revenue and total assets. This ratio indicates how well the NMC's total assets are being used to generate its revenue. On the other hand, it also tells us to manage fixed and current assets to generate maximum revenue through their proper utilization. This ratio can be calculated by dividing the total revenue by total assets.

$$\text{Total Asset Turnover Ratio} = \frac{\text{Total Revenue}}{\text{Total Assets}}$$

Table No. 30

Computation of Total Assets Turnover Ratio of NMC

From FY 2058/059 to 2064/065

Amount in Rs.

Fiscal Year	Total Revenue	Total Assets	Ratios
2058/059	4151760	32348462	0.13 Times
2059/060	4415103	50185888	0.09 Times
2060/061	6698358	76352425	0.09 Times
2061/062	10358128	104632691	0.10 Times
2062/063	14115295	153532740	0.09 Times

2063/064	20563860	202498146	0.10 Times
2064/065	25162538	295464510	0.09 Times
Average			**0.10 Times**

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

Above table no. 30 shows that total assets turnover ratio of NMC. This ratio is a significant ratio since it shows that NMC's ability of generating revenue from all the financial resources committed to firm. In FY 2058/059 the total assets turnover is 0.13 times and instead of increasing, it was decreasing every year. It has proved that it is not utilizing its available assets properly. It is suggested that NMC should use its total assets more than now to increase its existing revenue.

B. Fixed Assets Turnover Ratio

The fixed assets turnover ratio measures the efficiency with which the firm is utilizing its investment in fixed assets. It also indicates the adequacy of revenue in relation to the investment in fixed assets. The fixed assets turnover ratio is calculated by dividing total revenue by net fixed assets (i.e. by the depreciated value of fixed assets).

$$\text{Fixed Asset Turnover Ratio} = \frac{\text{Total Revenue}}{\text{Net Fixed Assets}}$$

Table No. 31
Computation of Fixed Assets Turnover Ratio of NMC
From FY 2058/059 to 2064/065

Amount in Rs.

Fiscal Year	Total Revenue	Net Fixed Assets	Ratios
2058/059	4151760	1603947	2.59 Times
2059/060	4415103	1851373	2.38 Times
2060/061	6698358	2157932	3.10 Times
2061/062	10358128	2046540	5.06 Times
2062/063	14115295	2066168	6.83 Times
2063/064	20563860	3656081	5.62 Times
2064/065	25162538	12619918	1.99 Times
Average			**3.94 Times**

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

This table no. 31 shows the fixed assets turnover ratio of NMC. In FY 2058/059 the ratio was 2.59 times, like wise in last FY 2064/065 is 1.99 times. It shows the increasing trend of the ratio continuously.

C. Capital Employed Turnover Ratios

Capital employed turnover ratio establishes the relationship between the amount of revenue and capital employed. It shows how efficiently capital employed has been utilized in generating its revenue. This ratio can be calculated by dividing the total revenue by capital employed.

$$\text{Capital Employed Turnover Ratio} = \frac{\text{Total Revenue}}{\text{Capital Employed}}$$

Table No. 32

Computation of Capital Employed Turnover Ratio of NMC

From FY 2058/059 to 2064/065 **Amount in Rs**

Fiscal Year	Total Revenue	Capital Employed	Ratios
2058/059	4151760	30937380	0.13 times
2059/060	4415103	48244682	0.09 times
2060/061	6698358	72863081	0.09 times
2061/062	10358128	98891350	0.10 times
2062/063	14115295	144573884	0.10 times
2063/064	20563860	187212204	0.10 times
2064/065	25162538	265026073	0.09 times

Average	**0.10 times**

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

The table no. 32 shows the capital employed turnover ratio of NMC. These ratios are not in increasing trend in every fiscal year. In FY 2058/059, the ratio was 0.13 times and 0.09 times in FY 2059/060 , 2060/061 and 0.10 times in FY 2061/062, 2062/063, 2063/064 and in FY 2064/065, it came to 0.09 times. This ratio proves that higher the capital employed turnover ratio the more efficient term of creditor’s fund. So, it can not be considered as satisfactory by finding out the above result of NMC

4.9.1.4 Profitability Ratio

An organization should earn profit to survive and grow over a long period of time. Profit is essential, but it would be wrong to assume that every action initiated by management of an organization should be aimed at maximizing profit. Though, the profitability shows overall efficiency of a organization. Profitability ratios are measure of its overall efficiency. Generally, profitability ratios can be calculated in terms of the company’s sales, investment and earning and dividends. Applying the profitability ratio, profit position of NMC can be found. The following are the important profitability ratios in relation to NMC:

A. Return on Total Assets

The relation between net ratio and utilization of total assets of the organization is known as return on assets. The main objective of this ratio is to determine how efficiency the fund supplied by the total assets have been used by the management. This ratio is calculated by using the following formula:-

$$\text{Return on Total Assets} = \frac{\text{Net profit after tax}}{\text{Total Assets}} \times 100$$

Table No. 33

Computation of Return on Total Assets of NMC

From FY 2058/059 to 2064/065

Amount in Rs.

Fiscal Year	Net Profit	Total Assets	Ratios
2058/059	0	32348462	0%
2059/060	41136	50185888	0.08%
2060/061	77722	76352425	0.10%
2061/062	40691	104632691	0.04%
2062/063	90495	153532740	0.06%
2063/064	114398	202498146	0.06%
2064/065	413653	295464510	0.14%
Average			**0.07%**

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

This table shows the return on total assets ratio of NMC. The amount of total assets is increasing every year but its return on total assets ratios are some time increasing and some time decreasing that too is fluctuating too much. It reflects the low productivity of assets. I would like to suggest the management group of NMC to manage its available assets in the way of increasing its productivity.

B. Return on Capital Employed Ratio

This ratio measures the relationship between capital employed and net profit after tax. It indicates how well the management has used the fund supplied by the creditors and the owners. Higher ratio indicates the efficient utilization of fund and makes it entrust able to the members and the shareholders. This ratio is calculated by using the following formula.

$$\text{Return on Capital Employed Ratio} = \frac{\text{Net profit after tax}}{\text{Capital Employed}} \times 100$$

Table No. 34

Computation of Return on Capital Employed Ratio of NMC

From FY 2058/059 to 2064/065

Amount in Rs.

Fiscal Year	Net Profit	Capital Employed	Ratios
2058/059	0	30937380	0%
2059/060	41136	48244682	0.09%
2060/061	77722	72863081	0.11%
2061/062	40691	98891350	0.04%
2062/063	90495	144573884	0.06%
2063/064	114398	187212204	0.06%
2064/065	413653	265026073	0.16%
Average			**0.07%**

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

The above table shows the return on capital employed ratio of NMC. During the period covered by the study, capital employed is found to be very fluctuating and decreasing every year. It means the capital employed is in risk. Return on capital employed ratios are not satisfactory in every years. NMC has not been able to increase it. In FY 2058/059 ratio was 0 percent and at last, it found to be 0.16 percent. I would like to suggest the management group of NMC to manage its capital effectively so as to increase its return ratio.

C. Net Profit Ratio

This ratio is also called net profit margin. This ratio measures the overall profitability of a business by establishing the relationship between net profit and net revenue. Net profit is obtained by subtracting operating expenses and income tax from the gross profit. The net profit ratio is measured by dividing the net profit after tax by total revenue.

$$\text{Net Profit Ratio} = \frac{\text{Net Profit After Tax}}{\text{Total Revenue}} \times 100$$

Table No. 35

Computation of Net Profit Ratio of NMC

From FY 2058/059 to 2064/065

Amount in Rs.

Fiscal Year	Net Profit	Total Revenue	Ratios
2058/059	0	4151760	0%
2059/060	41136	4415103	0.93%

2060/061	77722	6698358	1.16%
2061/062	40691	10358128	0.39%
2062/063	90495	14115295	0.64%
2063/064	114398	20563860	0.56%
2064/065	413653	25162538	1.64%
Average			**0.76%**

(Sources: NMC, Annual Reports, 2058/059 to 2064/065)

The above table shows the net profit ratio of NMC. It is very less in every year. This indicates the position of NMC is not satisfactory. NMC shall reduce its unnecessary expenses to increase its profit. Other wise, it will also lose the existence. The table shows that, net profit ratio of NMC in different fiscal year.

4.10. Major Findings

The major findings of this research study on role of budgeting in management of co-operative organization , a study of NMC are as follows:

1. Resource Mobilizations

a) Major resources mobilization of NMC was at deposit. In this respect they incurred higher cost toward deposit mobilizations.
b) Deposit mobilized by the NMC was found to be considerably growing every year. The average growth over the period of last seven years beings as high as Rs. 9,28,81,657.
c) The targets set for deposit mobilization by the NMC were being well met every year.
d) From the data analysis of deposit budget and actual achievements, by coefficient of variance, it is found that, the actual deposits were less variable than the budgeted one.

2. Deposit Refund

a) Deposit refund target was achieved every year.
b) More deviation is occurring into the actual figure in comparison to the figure of the budgeted deposit refund.
c) More variation takes place on budgeted figure than the actual.

d) There was positively perfect correlation between budgeted deposit refund and actual deposit refund.

3. Loan Investment

NMC's resources deployment for non-yielding liquid assets (cash and bank balance) increased every year. Thus making supportive to meeting liquidity requirements of the NMC.

a. Major portion of the resources were deployed in loan investment.
b. The targets of deployment of fund on loan investment were met every year.
c. Loan investment of the NMC were in increasing trend in every years. From the analysis of Budgeted and Actual loan investment with the help of co-efficient of variance, it was found that, the actual loan investment was less variable than the budgeted one.
d. CD Ratio (Credit to Deposit Ratio, ratio of Loan investment on total Deposit expressed in percent term) of the NMC was high. The average CD ratio of the NMC for the period of last seven years was as high as 30.80%
e. The data analysis of LDO and deposit, with help of Karl Person's co-efficient of correlation showed that, the deposit and the LDO were perfectly correlated.
f. The data analysis of Deposit and loan investment with the help of coefficient of variation showed that loan investment was more variable than the Deposit.

4. Loan Collection

a) Loan recovery target was achieved every year.
b) More deviation is occurring into the actual figure in comparison to the figure of the budgeted loan recovery.
c) More variation takes place on actual figure than the budgeted.
d) There was positively perfect correlation between budgeted loan recovery and actual loan recovery.

5. Expenditure

a) Interest expenses amount were the highest among total expenses item of the NMC every year.

b) The interest expenses of the NMC were found increasing each year corresponding to the increase in deposit. The interest expenses were perfectly and positively correlated with deposit.

c) Average cost of deposit (calculated as the ratio of total interest expenses during a year on the outstanding deposit as of the year and expressed in percent term) of the NMC was found to be increasing during the first four years of operations but it has reduced gradually from 2.75% to 1.66%.

d) Other expenses of the NMC were also in increasing trend every year.

e) A huge amount of money has been transferred to risk bearing fund during the study period and that was treated as expenses in profit and loss account which decreased the profit of NMC.

6. Revenue

a) Interest income amount of the NMC was the highest among other income items in the total Revenue.

b) The amount of interest increased every year corresponding to increase in loan investment.

c) More deviation is occurring into the budgeted figure in comparison to the figure of the actual income.

d) More variation takes place on budgeted figure than the actual.

e) there was positively perfect correlation between budgeted income and actual income.

f) Average yield on loan investment (ratio of interest on total loan investment expressed in percent term) was the highest level of 19.14% in first year and lowest level of 8.89% in the sixth year. The average yield on investment for last seven year remained at 11.76%

g) The other income of NMC was also in increasing trend.

h) The interest spread or the amount of interest margin was found to be increasing every year.

i) Net burden of the NMC was in increasing trend every year, and the average rate of other income was lower than that of other expenses.

7**. Ratio Analysis**

a) The average current ratio of the NMC found to be always higher than the standard ratio of 2:1, which showed the satisfactory liquidity position of the NMC.

b) Generally the debt equity ratio of the NMC was higher because they mobilized fixed deposit much more times of their capital fund. NMC was also not exception to it.

c) The average Interest Coverage Ratio of the NMC was 1.02 times during the study period.

d) The average total assets turnover ratio and fixed assets turnover ratio are 0.10 and 3.94 times respectively during the study period.

e) The average capital employed turnover ratio of the NMC was 0.10 times during the study period

f) The amount of total assets is increasing every year but its return on total assets ratios are some time increasing and some time decreasing too is that fluctuating too much.

g) During the period covered by the study, capital employed is found to be very fluctuating and decreasing every year.

h) Net profit ratio is very less in every year. This indicates the position of NMC is not satisfactory.

CHAPTER - V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Co-operative organizations play a vital role in the development of an economy and living standard of people. The role of Co-operative organization differs from country to country basically due to political philosophy of existing government but the basic principle of Co-operative organizations are same in all over the world. Usually it comes into existence either by the way of deliberating policy of the government to bring certain activities. In Nepal, the purpose of establishing Co-operative organization was to make control over economy and to develop the living standard of members by providing basic goods and services that are neglected by the private sector, to the citizens. They are found to be success in their goals basically up to the government launched the policy of free economy. Co-operative sector occupied 7% of total national economy. Thus, Co-operative organizations are very essential to improve the national economy.

Managerial budgeting is the important tool of business operation. It helps to achieve objectives and goals to the enterprise. Profit is the essential part of every business organization. What we said earlier was that without profit, any enterprises cannot run for long term as a living being can not live even a second without blood.

Managerial budgeting can be broadly divided in to two group viz. functional and financial plan. Functional plan includes sales plan, production plan, material plan and overhead plan etc. Financial plan includes cash flow plan, capital expenditure plan, projected income statement and projected balance sheet.

Time dimension is one of the important considerations for managerial budgeting. There are mainly two types of managerial budgeting that are being prepared and are: Strategic plan for 5 or more than five years and the tactical plan for the period of one year. Both of them are considered to be equally important for effective implementation. On the other hand difference between actual and budgeted figure shall be noted strictly to take corrective action immediately to get the desired profit in future.

Nepal Multipurpose Co-operative Society Ltd. is a fast growing Co-operative society, which has expanded its transaction throughout the Jhapa district. It has mainly concentrated functions towards banking transaction for which it has taken permission from Nepal Rastra Bank. It has been collecting scattered money from number of depositors and members. It has been forming capital, which it provides to its members to utilize in productive works. It has been providing 6% to 7% interest on deposit and charging 16% interest on loan provided to the members.

Considering the last seven years data. It is seen that the organization has been increasing its loan investment every year from which numbers of people have been benefited. Average recovery of loan seem very poor, which may be due to lack of effective management and efforts towards loan investment and recovery and lack of proper utilization of loan by borrower.

In order to improve recovery position, it has adopted the following strategies in fiscal year 063/064:

- Extension of limit of loan repayments.
- Decrease in interest rate from 16% to 15%. It has also added two more sectors of loan investment since 064. They are- Foreign employment loan and House construction loan.

Organization is successful in achieving target in respect of loan flow and recovery for last seven years, so management's performance towards achieving target estimate of loan flow and recovery is satisfactory.

The main objective of the present study is to examine the current practice, application and the result of managerial budgeting approach in Co-operative Organization by taking a case study of NMC.

The study has been organized in five main chapters consisting of introduction, Review of literature, Research methodology, and Presentation and analysis of data, and Summary, conclusion and recommendation.

5.2 Conclusions

After analysing in detail in relation to the present practice of managerial budgeting process and its role in management of Co-operative Organization by taking a case study of NMC, I have made the conclusions stated as below:

1. NMC has the practice of preparing two types of managerial budgeting, which are tactical and strategic. Tactical plan prepared for external purpose but strategic plan is made only for top-level management or internal purpose.
2. NMC is achieving deposit collection target. The deposit collection achievement percentages of amount are 100.01, 108.21, 115.34, 134.42, 101.61, 142.54 and 102.62 percentage for the fiscal year 058/059, 059/060, 060/061, 061/062, 062/063, 063/064 and 064/065 respectively.
3. The statistical tools shows that there is perfect correlation between budgeted and actual deposit collection as well as actual deposit refund with budgeted deposit refund and C.V. indicate that, the actual deposits collection were less variable than the budgeted one and more deviation is occurring into the actual figure in comparison to the figure of the budgeted deposit refund.
4. Actual loan investment is increasing in every fiscal year period and found of reaching up to Rs 23,44,39,812 in FY 2064/065. Like wise, actual loan recovery is also in the increasing trend and found of reaching up to Rs. 16,88,39, in FY 2064/065.
5. The data analysis of actual deposit collection and actual loan investment with the help of coefficient of variation showed that loan investment was more variable than the Deposit collection.
6. CD Ratio (Credit to Deposit Ratio, ratio of Loan investment on total Deposit expressed in percent term) of the NMC was high. The average CD ratio of the NMC for the period of last seven years was as high as 30.80%
7. The actual expenses of NMC is in increasing trend due to higher amount of fixed expenses and office operational expenses. As well as it has not segregated its cost systematically that is suggested by Accounting Standard.
8. Operating costs have not been controlled effectively. In fiscal year 2058/059, it was Rs 26,42,594 and reached to Rs 1,18,58,229 in the fiscal year 2064/065.

9. Profit target was achieved only in fiscal year 2060/061 recording favourable variance of 166.52% but in other fiscal year couldn't achieve target.
10. It is not considering CVP analysis as a tool for developing the revenue plan and strategy.
11. The amount of total assets is increasing every year but its return on total assets ratios are some time increasing and some time decreasing. It is fluctuating too much.
12. During the period covered by the study, capital employed is found to be very fluctuating and decreasing every year.
13. Net profit ratio is very low in every year. This indicates the position of NMC is not satisfactory due to the a huge amount transferred to risk bearing fund as treated as expenses in profit and loss account. To avoid tax burden they may have done so.
14. NMC has no practice of preparing monthly budget, which is assumed to be the key of overall managerial budgeting.
15. It has been practicing of analyzing strengths, weakness, opportunities and threats but not done in depth at the time of preparing managerial budget and that is why, it is facing a tough competition from other competitive co-operative organization.

5.3 Recommendations

Most of the above conclusion points are seemed to be unfavourable; those should be made correction as soon as possible. I suggest the following to NMC and to all of the Co-operative Organizations who are facing the above-mentioned problems respectively, to change unfavourable points into favourable:

1. NMC should develop an efficient management system to get control over expenses. It must classify the expenses into fixed expenses and variable to maintain the Accounting Standard.
2. To achieve the targeted growth rate in revenue, NMC should make realistic forecast. Revenue forecasting should be made after analyzing all variable that affect the revenue. NMC should consider the living standard of members and their participatioon in economic activities.

3. NMC should give emphasise over cost volume profit relationship while developing the revenue plan and strategy. To maintain the level of BEP, it shall minimize its fixed expenses and variable expenses as well as increase the revenue.
4. NMC should follow a strict loan recovery policy to collect loan which is given to the members.
5. NMC should utilization its optimum capacity by importing the latest technology around the world and by making a group of management standby for it.
6. NMC should maintain its periodic performance report systematically.
7. NMC should maintain a sound liquidity position by the help of increasing current assets and/or by decreasing current liabilities.
8. The NMC should maintain optimum level of staffs scientifically. It will help to reduce unnecessary expenses and to increase efficiency.
9. It should develop sound relation between departments and branches and encourage the participatory management system in setting the overall objectives of the NMC. NMC should undertake regular supervision and monitoring from top level management.
10. NMC should adopt systematic approach of managerial budgeting that is essential to increase the profitability and for that the planners should be trained properly. It should also try to adopt the managerial calendar as well.
11. The NMC should develop a proper co-ordination between budget formulation, implementation and evaluation of achievement.
12. NMC management should adopt the policy of appropriate authority delegation at all level of management in order to save the valued time of the Managing director for other productive use.
13. Employee training at advance level should be given more focus in order to keep the manpower updated with the changing practices and technologies.
14. Branch monitoring and controlling mechanism should be made very effective in order to ensure the better functioning of the branch offices located at such locations, which are far from the Head office.
15. Objectives of the NMC should be clearly defined in order to avoid the risk of it being misinterpreted.

16. The average cost of deposit of the NMC is high, therefore NMC should try to lower it by mobilizing more and more low cost or cost free deposits thereby reducing the interest cost because due to the high cost of deposit, NMC is forced to invest its fund more on highly yielding assets, which are generally not liquid and obviously risky for the NMC.
17. NMC CD ratios are high, which is rather a compulsion for the NMC to meet the cost of high cost deposits. Higher CD ratio although gives better return in short term, it hampers the liquidity and is more risky for the NMC also get hampered on the long run, Therefore the NMC should improve its position from lowering the deposit cost and increase the investments in liquid assets although they are of low yield.
18. The Nepal Rastra Bank has put the restriction on the difference of average rate of interest income and average rate of interest expenses of the NMC (i.e. Spread) not to exceed 5%. Therefore the NMC has to put more focus on the other kind of non-funded activities by which it shall increasing income from other sources than interest to increase its profitability.
19. Expenses cannot be avoided and always are growing with increasing activities, but it should be optimize and should be related with the income generating activities. NMC should minimize those expenses, which are not related to income earning. Other expenses than interest from a burden to the gross profit margin (interest margin) of the NMC, therefore lowering the other expenses the NMC should enhance its profit.
20. Net profit of the NMC is the amount, which is obtained by subtracting the amount of net burden from the amount of gross interest margin. Therefore, NMC shall attempt to lower the burden cost, by increasing the other income and decreasing the other expenses. At the same time it should take a policy to make the interest margin at the maximum extent as allowed by the central bank’s norm.
21. NMC should implement its activities with prior planning; there must be budgeting system, which enables it to achieve its objectives. With the abovementioned summary, Major Findings from the study and the recommendations suggested, the report is concluded.

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WEBSITES:

www.deoc.gov.np

www.sahakarinepal.com

APPENDIX – 1

Calculation of Mean, S.D., C.V., r & Pe of Budgeted and Actual Deposit Collection

Amount in Rs. (00000)

FY	Budgeted			Actual			$[X_B - \bar{X}_B][X_A - \bar{X}_A]$
	X_B	$X_B - \bar{X}_B$	$(X_B - \bar{X}_B)^2$	X_A	$X_A - \bar{X}_A$	$(X_A - \bar{X}_A)^2$	
2058/59	1195.00000	-1834.04571	3363723.681	1195.17307	-2263.85434	5125036.468	4152012.34
2059/60	1250.00000	-1779.04571	3165003.653	1352.63297	-2106.39444	4436897.533	3747371.992
2060/61	1400.00000	-1629.04571	2653789.938	1614.74474	-1844.28267	3401378.563	3004420.772
2061/62	1758.32000	-1270.72571	1614743.84	2363.53247	-1095.49494	1200109.161	1392073.585
2062/63	3800.00000	770.954286	594370.5111	3861.22532	402.197911	161763.1596	310076.2033
2063/64	4300.00000	1270.954286	1615324.797	6129.02898	2670.001571	7128908.389	3393449.94
2064/65	7500.00000	4470.954286	19989432.23	7696.85431	4237.826901	17959176.84	18947130.35
	$\sum X_B =$ **21203.32000**		$\sum(X_B - \bar{X}_B)^2 =$ **32996388.65**	$\sum X_A =$ **24213.19186**		$\sum(X_A - \bar{X}_A)^2 =$ **39413270.11**	$\sum[X_B - \bar{X}_B][X_A - \bar{X}_A] =$ **34946535.18**

(1) Calculation of Arithmetic Mean

$$\bar{X}_B = \frac{\sum X_B}{N} = \frac{21203.32}{7} = 3029.045714 \text{ i.e. } 3029.05$$

$$\bar{X}_A = \frac{\sum X_A}{N} = \frac{24213.19186}{7} = 3459.027409 \text{ i.e. } 3459.03$$

(2) Calculation of Standard Deviation (σ)

$$\sigma_{X_B} = \sqrt{\frac{\sum(X_B - \bar{X}_B)^2}{N}} = \sqrt{\frac{32996388.65}{7}} = 2171.12$$

$$\sigma_{X_A} = \sqrt{\frac{\sum(X_A - \bar{X}_A)^2}{N}} = \sqrt{\frac{39413270.11}{7}} = 2372.86$$

(3) Calculation of correlation coefficient

$$r = \frac{\sum[X_B-\bar{X}_B][X_A-\bar{X}_A]}{\sqrt{\sum(X_B-\bar{X}_B)^2\times\sum(X_A-\bar{X}_A)^2}} = \frac{34946535.18}{\sqrt{32996388.65\times39413270.11}} = 0.9691 \text{ i.e } 96.91\%$$

(4) Calculation of Probable errors

$$Pe = \frac{0.6745(1-r^2)}{\sqrt{n}} = \frac{0.6745(1-0.9691^2)}{\sqrt{7}} = 1.55\%$$

(5) Calculation of coefficient of variance

$$\text{CV of } X_B = \frac{\sigma_{X_B}}{\bar{X}_B} = \frac{2171.12}{3029.05} = 71.68\%$$

$$\text{CV of } X_A = \frac{\sigma_{X_A}}{\bar{X}_A} = \frac{2372.86}{3459.03} = 68.60\%$$

<u>APPENDIX – 2</u>

Calculation of Mean, S.D., C.V., r & Pe of Budgeted and Actual Deposit Refund

Amount in Rs. (00000)

FY	Budgeted			Actual			$[X_B-\bar{X}_B][X_A-\bar{X}_A]$
	X_B	$X_B-\bar{X}_B$	$(X_B-\bar{X}_B)^2$	X_A	$X_A-\bar{X}_A$	$(X_A-\bar{X}_A)^2$	
2058/59	1100.00000	-1666.50274	2777231.382	1153.10891	-1998.55212	3994210.58	3330592.584
2059/60	1165.07427	-1601.42847	2564573.145	1188.92246	-1962.73857	3852342.698	3143185.425
2060/61	1278.78479	-1487.71795	2213304.699	1394.20306	-1757.45797	3088658.52	2614601.768
2061/62	1636.66012	-1129.84262	1276544.346	2135.04904	-1016.61199	1033499.94	1148611.554
2062/63	3400.00000	633.49726	401318.7784	3445.26107	293.600039	86200.9829	185994.8202
2063/64	3850.00000	1083.49726	1251036.121	5745.90498	2594.243949	6730101.667	2810856.211
2064/65	6900.00000	4133.49726	17085799.6	6999.17770	3847.516669	14803384.52	15903699.61
	$\sum X_B =$ **19365.51918**		$\sum(X_B-\bar{X}_B)^2=$ **27569808.07**	$\sum X_A=$ **22061.62722**		$\sum(X_A-\bar{X}_A)^2=$ **33588398.91**	$\sum[X_B-\bar{X}_B][X_A-\bar{X}_A]=$ **29137541.97**

(1) Calculation of Arithmetic Mean

$$\bar{X}_B = \frac{\sum X_B}{N} = \frac{19365.51918}{7} = 2766.50274 \ i.e. 2766.50$$

$$\bar{X}_A = \frac{\sum X_A}{N} = \frac{22061.62722}{7} = 3151.661031 \ i.e. 3151.66$$

(2) Calculation of Standard Deviation (σ)

$$\sigma_{X_B} = \sqrt{\frac{\sum(X_B-\bar{X}_B)^2}{N}} = \sqrt{\frac{27569808.07}{7}} = 1984.58$$

$$\sigma_{X_A} = \sqrt{\frac{\sum(X_A-\bar{X}_A)^2}{N}} = \sqrt{\frac{33588398.91}{7}} = 2190.51$$

(3) Calculation of correlation coefficient

$$r = \frac{\sum[X_B - \bar{X}_B][X_A - \bar{X}_A]}{\sqrt{\sum(X_B - \bar{X}_B)^2 \times \sum(X_A - \bar{X}_A)^2}} \quad = \frac{29137541.97}{\sqrt{27569808.07 \times 33588398.91}} \quad = 0.9575 \text{ i.e } 95.75\%$$

(4) Calculation of Probable errors

$$Pe = \frac{0.6745(1-r^2)}{\sqrt{n}} \quad = \frac{0.6745(1-0.9575^2)}{\sqrt{7}} \quad = 2.12\%$$

(5) Calculation of coefficient of variance

$$\text{CV of } X_B = \frac{\sigma_{X_B}}{\bar{X}_B} \quad = \frac{1984.58}{2766.50} \quad = 71.74\%$$

$$\text{CV of } X_A = \frac{\sigma_{X_A}}{\bar{X}_A} \quad = \frac{2190.51}{3151.66} \quad = 69.50\%$$

APPENDIX – 3

Calculation of Mean, S.D., C.V., r & Pe of Budgeted and Actual Loan Investment

Amount in Rs. (00000)

FY	Budgeted			Actual			$[X_B-\bar{X}_B][X_A-\bar{X}_A]$
	X_B	$X_B-\bar{X}_B$	$(X_B-\bar{X}_B)^2$	X_A	$X_A-\bar{X}_A$	$(X_A-\bar{X}_A)^2$	
2058/59	200.00000	-736.251994	542066.9991	204.99789	-903.687496	816651.0904	665341.7209
2059/60	275.00000	-661.251994	437254.2	381.99783	-726.687556	528074.804	480523.5954
2060/61	400.00000	-536.251994	287566.2014	614.63574	-494.049646	244085.0527	264935.1078
2061/62	753.76396	-182.488034	33301.88266	830.76843	-277.916956	77237.83443	50705.40224
2062/63	1180.00000	243.7480057	59413.09028	1180.76179	72.076404	5195.008014	17568.47973
2063/64	1545.00000	608.7480057	370574.1344	2203.23790	1094.552514	1198045.206	666306.66
2064/65	2200.00000	1263.748006	1597059.022	2344.39812	1235.712734	1526985.961	1561629.504
	$\sum X_B=$ **6553.76396**		$\sum(X_B-\bar{X}_B)^2=$ **3327235.53**	$\sum X_A=$ **7760.7977**		$\sum(X_A-\bar{X}_A)^2=$ **4396274.957**	$\sum[X_B-\bar{X}_B][X_A-\bar{X}_A]=$ **3707010.47**

(1) Calculation of Arithmetic Mean

$$\bar{X}_B=\frac{\sum X_B}{N}=\frac{6553.76396}{7}=936.2519943\ i.e.\ 936.25$$

$$\bar{X}_A=\frac{\sum X_A}{N}=\frac{7760.7977}{7}=1108.685386\ i.e.\ 1108.69$$

(2) Calculation of Standard Deviation (σ)

$$\sigma_{X_B}=\sqrt{\frac{\sum(X_B-\bar{X}_B)^2}{N}}=\sqrt{\frac{3327235.53}{7}}=689.43$$

$$\sigma_{X_A}=\sqrt{\frac{\sum(X_A-\bar{X}_A)^2}{N}}=\sqrt{\frac{4396274.957}{7}}=792.49$$

(3) **Calculation of correlation coefficient**

$$r = \frac{\sum[X_B - \bar{X}_B][X_A - \bar{X}_A]}{\sqrt{\sum(X_B - \bar{X}_B)^2 \times \sum(X_A - \bar{X}_A)^2}} \quad = \frac{3707010.47}{\sqrt{3327235.53 \times 4396274.957}} \quad = 0.9693 \text{ i.e } 96.93\%$$

(4) **Calculation of Probable errors**

$$Pe = \frac{0.6745(1 - r^2)}{\sqrt{n}} \quad = \frac{0.6745(1 - 0.9693^2)}{\sqrt{7}} \quad = 1.54\%$$

(5) **Calculation of coefficient of variance**

$$\text{CV of } X_B = \frac{\sigma_{X_B}}{\bar{X}_B} \quad = \frac{689.43}{936.25} \quad = 73.64\%$$

$$\text{CV of } X_A = \frac{\sigma_{X_A}}{\bar{X}_A} \quad = \frac{792.49}{1108.69} \quad = 71.48\%$$

<u>APPENDIX – 4</u>

Calculation of Mean, S.D., C.V., r & Pe of Budgeted and Actual Loan Recovery

Amount in Rs. (00000)

FY	Budgeted			Actual			$[X_B - \bar{X}_B][X_A - \bar{X}_A]$
	X_B	$X_B - \bar{X}_B$	$(X_B - \bar{X}_B)^2$	X_A	$X_A - \bar{X}_A$	$(X_A - \bar{X}_A)^2$	
2058/59	160.00000	-505.43644	255465.9949	169.54029	-610.616886	372852.9811	308628.0251
2059/60	190.46253	-474.97391	225600.2152	227.14016	-553.017016	305827.8197	262668.6544
2060/61	290.32020	-375.11624	140712.1935	380.46120	-399.695976	159756.873	149932.4517
2061/62	607.27235	-58.16409	3383.061366	590.26601	-189.891166	36058.65481	11044.84687
2062/63	800.00000	134.56356	18107.35168	820.59412	40.4369443	1635.146464	5441.339181
2063/64	1060.00000	394.56356	155680.4029	1584.69904	804.5418643	647287.6114	317442.9021
2064/65	1550.00000	884.56356	782452.6917	1688.39941	908.2422343	824903.9562	803397.9841
	$\sum X_B =$ **4658.05508**		$\sum(X_B - \bar{X}_B)^2=$ **1581401.911**	$\sum X_A=$ **5461.10023**		$\sum(X_A - \bar{X}_A)^2=$ **2348323.043**	$\sum[X_B - \bar{X}_B][X_A - \bar{X}_A]=$ **1858556.203**

(1) Calculation of Arithmetic Mean

$$\bar{X}_B = \frac{\sum X_B}{N} = \frac{4658.05508}{7} = 665.43644 \text{ i.e. } 665.44$$

$$\bar{X}_A = \frac{\sum X_A}{N} = \frac{5461.10023}{7} = 780.1571757 \text{ i.e. } 780.16$$

(2) Calculation of Standard Deviation (σ)

$$\sigma_{X_B} = \sqrt{\frac{\sum(X_B - \bar{X}_B)^2}{N}} = \sqrt{\frac{1581401.911}{7}} = 475.30$$

$$\sigma_{X_A} = \sqrt{\frac{\sum(X_A - \bar{X}_A)^2}{N}} = \sqrt{\frac{2348323.043}{7}} = 579.20$$

(3) Calculation of correlation coefficient

$$r = \frac{\sum[X_B - \bar{X}_B][X_A - \bar{X}_A]}{\sqrt{\sum(X_B - \bar{X}_B)^2 \times \sum(X_A - \bar{X}_A)^2}} = \frac{1858556.203}{\sqrt{1581401.911 \times 2348323.043}} = 0.9644 \text{ i.e } 96.44\%$$

(4) Calculation of Probable errors

$$Pe = \frac{0.6745(1-r^2)}{\sqrt{n}} = \frac{0.6745(1-0.9644^2)}{\sqrt{7}} = 1.78\%$$

(5) Calculation of coefficient of variance

$$\text{CV of } X_B = \frac{\sigma_{X_B}}{\bar{X}_B} = \frac{475.30}{665.44} = 71.43\%$$

$$\text{CV of } X_A = \frac{\sigma_{X_A}}{\bar{X}_A} = \frac{579.20}{780.16} = 74.24\%$$

<u>APPENDIX – 5</u>

Calculation of Mean, S.D., C.V., r & Pe of Actual Deposit Collection and Actual Loan Investment

Amount in Rs. (00000)

FY	Actual Deposit			Actual Loan			$[X_D - \bar{X}_D][X_L - \bar{X}_L]$
	X_D	$X_D - \bar{X}_D$	$(X_D - \bar{X}_D)^2$	X_L	$X_L - \bar{X}_L$	$(X_L - \bar{X}_L)^2$	
2058/59	1195.17307	-2263.85434	5125036.468	204.99789	-903.687496	816651.0904	2045816.86
2059/60	1352.63297	-2106.39444	4436897.533	381.99783	-726.687556	528074.804	1530690.628
2060/61	1614.74474	-1844.28267	3401378.563	614.63574	-494.049646	244085.0527	911167.2002
2061/62	2363.53247	-1095.49494	1200109.161	830.76843	-277.916956	77237.83443	304456.619
2062/63	3861.22532	402.197911	161763.1596	1180.76179	72.076404	5195.008014	28988.97912
2063/64	6129.02898	2670.001571	7128908.389	2203.23790	1094.552514	1198045.206	2922456.932
2064/65	7696.85431	4237.826901	17959176.84	2344.39812	1235.712734	1526985.961	5236736.666
	$\sum X_D$= **24213.19186**		$\sum(X_D - \bar{X}_D)^2$= **39413270.11**	$\sum X_L$= **7760.7977**		$\sum(X_L - \bar{X}_L)^2$= **4396274.957**	$\sum[X_D - \bar{X}_D][X_L - \bar{X}_L]$= **12980313.88**

(1) Calculation of Arithmetic Mean

$$\bar{X}_B = \frac{\sum X_D}{N} = \frac{24213.19186}{7} = 3459.027409 \text{ i.e. } 3459.03$$

$$\bar{X}_A = \frac{\sum X_L}{N} = \frac{7760.7977}{7} = 1108.685386 \text{ i.e. } 1108.69$$

(2) Calculation of Standard Deviation (σ)

$$\sigma_{X_B} = \sqrt{\frac{\sum(X_D - \bar{X}_D)^2}{N}} = \sqrt{\frac{39413270.11}{7}} = 2372.86$$

$$\sigma_{X_A} = \sqrt{\frac{\sum(X_L - \bar{X}_L)^2}{N}} = \sqrt{\frac{4396274.957}{7}} = 792.49$$

(3) Calculation of correlation coefficient

$$r = \frac{\sum[X_D - \bar{X}_D][X_L - \bar{X}_L]}{\sqrt{\sum(X_D - \bar{X}_D)^2 \times \sum(X_L - \bar{X}_L)^2}} = \frac{12980313.88}{\sqrt{39413270.11 \times 4396274.957}} = 0.9861 \text{ i.e } 98.61\%$$

(4) Calculation of Probable errors

$$Pe = \frac{0.6745(1 - r^2)}{\sqrt{n}} = \frac{0.6745(1 - 0.9861^2)}{\sqrt{7}} = 0.70\%$$

(5) Calculation of coefficient of variance

$$\text{CV of } X_D = \frac{\sigma_{X_D}}{\bar{X}_D} = \frac{2372.86}{3459.03} = 68.60\%$$

$$\text{CV of } X_L = \frac{\sigma_{X_L}}{\bar{X}_L} = \frac{792.49}{1108.69} = 71.48\%$$

APPENDIX – 6

Calculation of Mean, S.D., C.V., r & Pe of Budgeted and Actual Expenses

Amount in Rs. (00000)

FY	Budgeted			Actual			$[X_B - \bar{X}_B][X_A - \bar{X}_A]$
	X_B	$X_B - \bar{X}_B$	$(X_B - \bar{X}_B)^2$	X_A	$X_A - \bar{X}_A$	$(X_A - \bar{X}_A)^2$	
2058/59	39.64580	-63.6309857	4048.902341	41.51760	-76.3261871	5825.686837	4856.71052
2059/60	43.20000	-60.0767857	3609.22018	43.56336	-74.2804271	5517.58185	4462.529301
2060/61	52.35550	-50.9212857	2592.977337	53.65772	-64.1860671	4119.85121	3268.437061
2061/62	70.92018	-32.3566057	1046.949932	102.99997	-14.8438171	220.3389061	480.295537
2062/63	97.29100	-5.9857857	35.82963045	139.86016	22.0163729	484.7206757	-131.7852901
2063/64	183.16061	79.8838243	6381.425385	196.85299	79.0092029	6242.454143	6311.557283
2064/65	236.36441	133.0876243	17712.31574	246.45471	128.6109229	16540.76949	17116.52219
	$\sum X_B =$ **722.9375**		$\sum(X_B - \bar{X}_B)^2 =$ **35427.62055**	$\sum X_A =$ **824.90651**		$\sum(X_A - \bar{X}_A)^2 =$ **38951.40311**	$\sum[X_B - \bar{X}_B][X_A - \bar{X}_A] =$ **36364.2666**

(1) Calculation of Arithmetic Mean

$$\bar{X}_B = \frac{\sum X_B}{N} = \frac{722.9375}{7} = 103.2767857 \; i.e \; 103.28$$

$$\bar{X}_A = \frac{\sum X_A}{N} = \frac{824.90651}{7} = 117.8437871 \; i.e. \; 117.84$$

(2) Calculation of Standard Deviation (σ)

$$\sigma_{X_B} = \sqrt{\frac{\sum(X_B - \bar{X}_B)^2}{N}} = \sqrt{\frac{35427.62055}{7}} = 71.14$$

$$\sigma_{X_A} = \sqrt{\frac{\sum(X_A - \bar{X}_A)^2}{N}} = \sqrt{\frac{38951.40311}{7}} = 74.60$$

(3) Calculation of correlation coefficient

$$r = \frac{\sum[X_B - \bar{X}_B][X_A - \bar{X}_A]}{\sqrt{\sum(X_B - \bar{X}_B)^2 \times \sum(X_A - \bar{X}_A)^2}} \quad = \frac{36364.2666}{\sqrt{35427.62055 \times 38951.40311}} \quad = 0.9789 \text{ i.e } 97.89\%$$

(4) Calculation of Probable errors

$$Pe = \frac{0.6745(1 - r^2)}{\sqrt{n}} \quad = \frac{0.6745(1 - 0.9789^2)}{\sqrt{7}} \quad = 1.06\%$$

(5) Calculation of coefficient of variance

$$\text{CV of } X_B = \frac{\sigma_{X_B}}{\bar{X}_B} \quad = \frac{71.14}{103.28} \quad = 68.88\%$$

$$\text{CV of } X_A = \frac{\sigma_{X_A}}{\bar{X}_A} \quad = \frac{74.60}{117.84} \quad = 63.31\%$$

APPENDIX – 7

Calculation of Mean, S.D., C.V., r & Pe of Budgeted and Actual Income

Amount in Rs. (00000)

FY	Budgeted			Actual			$[X_B - \bar{X}_B][X_A - \bar{X}_A]$
	X_B	$X_B - \bar{X}_B$	$(X_B - \bar{X}_B)^2$	X_A	$X_A - \bar{X}_A$	$(X_A - \bar{X}_A)^2$	
2058/59	42.32000	-76.5842971	5865.154562	41.51760	-80.5753171	6492.381726	6170.804024
2059/60	47.30000	-71.6042971	5127.175363	44.15103	-77.9418871	6074.937765	5580.97404
2060/61	57.35550	-61.5487971	3788.254424	66.98358	-55.1093371	3037.039036	3391.913407
2061/62	90.44250	-28.4617971	810.0738942	103.58128	-18.5116371	342.6807081	526.8744591
2062/63	126.29100	7.3867029	54.56337973	141.15295	19.0600329	363.2848541	140.7908003
2063/64	211.83600	92.9317029	8636.301404	205.63860	83.5456829	6979.881131	7764.042582
2064/65	256.78508	137.8807829	19011.11029	251.62538	129.5324629	16778.65894	17860.0374
	$\sum X_B =$ **832.33008**		$\sum(X_B - \bar{X}_B)^2 =$ **43292.63332**	$\sum X_A =$ **854.65042**		$\sum(X_A - \bar{X}_A)^2 =$ **40068.86416**	$\sum[X_B - \bar{X}_B][X_A - \bar{X}_A] =$ **41435.43671**

(1) Calculation of Arithmetic Mean

$$\bar{X}_B = \frac{\sum X_B}{N} = \frac{832.33008}{7} = 118.9042971 \; i.e. \; 118.90$$

$$\bar{X}_A = \frac{\sum X_A}{N} = \frac{854.65042}{7} = 122.0929171 \text{ i.e. } 122.09$$

(2) Calculation of Standard Deviation (σ)

$$\sigma_{X_B} = \sqrt{\frac{\sum(X_B - \bar{X}_B)^2}{N}} = \sqrt{\frac{43292.63332}{7}} = 78.64$$

$$\sigma_{X_A} = \sqrt{\frac{\sum(X_A - \bar{X}_A)^2}{N}} = \sqrt{\frac{40068.86416}{7}} = 75.66$$

(3) Calculation of correlation coefficient

$$r = \frac{\sum[X_B - \bar{X}_B][X_A - \bar{X}_A]}{\sqrt{\sum(X_B - \bar{X}_B)^2 \times \sum(X_A - \bar{X}_A)^2}} = \frac{41435.43671}{\sqrt{43292.63332 \times 40068.86416}} = 0.9949 \text{ i.e } 99.49\%$$

(4) Calculation of Probable errors

$$Pe = \frac{0.6745(1-r^2)}{\sqrt{n}} = \frac{0.6745(1-0.9949^2)}{\sqrt{7}} = 0.26\%$$

(5) Calculation of coefficient of variance

$$\text{CV of } X_B = \frac{\sigma_{X_B}}{\bar{X}_B} = \frac{78.64}{118.90} = 66.14\%$$

$$\text{CV of } X_A = \frac{\sigma_{X_A}}{\bar{X}_A} = \frac{75.66}{122.09} = 61.97\%$$

APPENDIX – 8

Nepal Multi-purpose Co-operative Society Ltd.
Mechinagar-10, Kakarvitta, Jhapa
Balance Sheet
From FY 2058/059 to 2064/065 (Amount in Rs.)

S.N.	Capital & Liabilities	058/059	059/060	060/061	061/062
1.	Paid up Capital	3624000	4889400	70506270	10645504
2.	Reserve Fund	265690.03	275974.17	295404.86	305577.73
3.	Other Funnds	540263.92	200829.81	128760.62	159279.24
4.	Loan & Advances	-	-	-	-
5.	Deposits	26507427.37	42878479.07	64932647.09	87780990.0
6.	Current Liabilities	1295615.01	1756038.67	3200615.47	5283514.08
7.	Other Liabilitis	115466.13	185167.00	288727.00	457826.00
Total Liabilities		**32348462.46**	**50185888.72**	**76352425.04**	**104632691.1**
	Assets				
1.	Cash	1886965.08	1686699.07	1910130.35	2195792.53
2.	Cash at Bank	3611203.49	4892644.59	7718178.32	11783653.1
3.	Investment	1152013.00	1152013.00	1152013.00	1152013.00
4.	Loan Investment	23546253.50	39032020.50	62449474.31	86499666.3
5.	Fixed Assets	1603947.56	1851373.00	2157932.00	2046540.00
6.	Other Assets	548079.83	1571138.56	964697.06	955026.16
7.	Profit/Loss	-	-	-	-
Total Assets		**32348462.46**	**50185888.72**	**76352425.04**	**104632691.1**

APPENDIX – 9

Nepal Multi-purpose Co-operative Society Ltd.
Mechinagar-10, Kakarvitta, Jhapa
Profit & Loss A/C
From FY 2058/059 to 2064/065 (Amount in Rs.)

S.N.	Income	058/059	059/060	060/061	061/062
1.	Interest From Loan	3924334	4081075	6311633.50	9877580
2.	Interest From Investment	21267.45	27758	67783.73	100819.82
3.	Admission Fees	0	123300	149160	181600
4.	Application Form	0	46284	54780	99226
5.	A/C Closing Fees	0	69985	98159	93556.50
6.	Miscellaneous	178362.38	56701.10	16842	5346

7.	Commission & Discount	0	10000	0	0
8.	Fund Income	27796.45	0	0	0
Total Income (A)		**4151760.28**	**4415103.10**	**6698358.23**	**10358128.32**
Expenditure					
1.	Interest Expenses	1509166	1891132	2364455	6504580
2.	Employee Expenses	1380948	1768242	2177086	2594642
3.	Office Operational	405101.60	573616	690674.53	1020715.62
4.	Provision for risk	793605.29	72550	1221553.12	0
5.	Depreciation	53689.39	42511.56	108864	166816
6.	Miscellaneous	9250	8285	24693	13244
7.	Welfare Fund	0	0	0	0
Total Expenditure (B)		**4151760.28**	**4356336.56**	**6587325.65**	**10299997.62**
Operational Profit/Loss (A-B)		**0**	**58766.54**	**111032.88**	**58130.70**
Provision For Tax		0	17630	33309.77	17439.21
Net Profit After Tax		0	41136.54	77722.81	40691.49
Profit Appropriation		**0**	**41136.54**	**77722.81**	**40691.49**
General Reserve 25%		0	10284.14	19430.69	10172.87
Remaining Profit Appropriation		**0**	**30852.40**	**58292.12**	**30518.62**
Share & Dividend Fund 25%		0	7713.10	14573.03	7629.65
Capital Reserve 25%		0	7713.10	14573.03	7629.65
Loss Bearing Fund 25%		0	7713.10	14573.03	7629.65
Co-operative Education Fund 10%		0	3085.24	5829.21	3051.86
Co-operative Development Fund 10%		0	3085.24	5829.21	3051.87
Staff Bonus Fund 5%		0	1542.62	2914.61	1525.94