CHAPTER - I

INTRODUCTION

1.1 General Background of the Study

“Nepal is one of the most beautiful charming and wonderful country. The snow bounded peaks, teaching of 'Lord Buddha' and unbounded bravery and indubitable courage of Gorkhas are the main charms of pride of the country.

Nepal is an independent kingdom lies between China in north and India in south, east and west. The kingdom is situated in the northern hemisphere of between 80.4’e and 88.12’e longitude with the latitude of 26.22’n and 30.27’n. It has a total area of 1, 47,181 square kilometers. Nepal is extended from east to west with a length of about 885km and width 193km from north to south. It comprises three parallels ecological regions namely Himalayas, Hill and Terai from 160 to 8848 meters of the Himalayas range. It covers 15% Himalayas, 68% Hill and 17% Terai respectively. It is a small kingdom, rich in natural beauty and Himalayas.

There are numbers of peaks, river and lakes in Nepal. The highest is called Mount Everest of height 8848m in Nepal. There are eight peaks more than 8000m height. Nepal has three major rivers which are Koshi, Ghandaki, Karnali. They give more water for irrigation, electricity and drinking water. Nearly 83000 megawatt electricity produced from these rivers. There are most beautiful lakes in Nepal like as Phewa, Rupa, phoksundo Tilicho and Begnas etc (Central Bureau of statistics, Nepal in figure in 2004).

Nepal is a least developed or one of the poorest countries in the world in finance but reaches per capital income of Nepalese people is around in US $470”. Industrial development started very lately and due to various causes private sector is unable to invest sufficient capital for aggregate development of the country. So that government owned enterprises plays a vital role in the sector of development. The government owned enterprises are known as public enterprises. Public enterprises are the backbone for the industrialization and development of the country.

Dairy Development Corporation is an important corporation of Nepal representing the basic agricultural industry engaged in the production and distribution of milk and milk products (Nepal Government, Central Bureau of Statistics).

Dairy Development Corporation was constituted to carryout the task of dairy development activities in the Nepal started in the Tusal – 9, village of the Kavre district in BS 2010(1952) on experimental basis with a small scale of milk processing plant under the department of agriculture. In the year0 2010/11 B.S under the initiative of Dairy Development Board, the central dairy plant was established and it started milk collection, processing and marketing activities from the year 2014 B.S Dairy Development Corporation (DDC) was established in 2016 B.S Shrawan 1st with the following objectives.

1. To provide a guaranteed market for milk to the rural farmers with fair price.
2. Supply pasteurized milk and milk products to urban customers.
3. Develop organized milk collection system to meet increasing demand for pasteurized milk and milk products.
4. Develop and organized marketing system for milk and milk products in urban areas.

Dairy Development Corporation provides quantitative milk and milk products to customers at national level. All of people like children, adults, and old person are very much used the dairy products of its good taste and quality. The demand of the milk is increasing day by day because of high quality and hygiene. DDC buys milk is responsible price on regular basis and supplies milk with safe market donors for the corporation.

1.2 Public Enterprise

Public enterprises are autonomous bodies which are owned and managed by the government should 51% or more to make an entity Public enterprises (Laxman Wanda]

United nation has defined public enterprise as those organizations, namely governmental enterprises and public corporations which are entirely or mainly owned and controlled by the public authorities consisting of establishments which by the virtue of their kinds of activities, technology and more of operation are institute operating a service. Public enterprises is an institution operating service of an economic or social character on behalf of the government, but as an independent legal entity, legally autonomous in its Management though government and parliaments and subject to direction by the Government quipped on the other hand with independent and separate funds of its own and The legal and commercial enterprises.

Only the private sector investor does not take a leading role in a rapid socio-industrial development of the country due to lack of resources both financial as well as non- financial including sufficient human resources in comparison of entrepreneurs so that Public enterprises are the back bone of industrialization and economic development of the Country .public enterprises are operating for the over all development of a country with different goals and objectives.

Public enterprise defined by different authorities is as follows:-

“Public enterprise are generally owned and controlled by government and are usually autonomously organized with the government providing the initial capital and being responsible for a continuous overview of their activities” (Shyam Joshi, 2054:3).

Public enterprises are autonomous bodies which are owned and managed by the government and which provides goods or service for a price. The ownership with the government should be 51% or more to make an entity PEs” (Laxmi Narauyan, 1997:42).

“Public enterprise is an institution operating a service of an economic or social character, on behalf of the government, but as an independent legal entity, legally autonomous in its management, through responsible to the public, through government and parliament and subject to some direction, by the government equipped on the other hand with independent and separate funds of its own the legal and commercial attributer of a commercial enterprise” (Shyam Joshi, 2054: 4).

By the above definition we can say that public enterprises should play vital role by supporting government's policies and programs for the socioeconomic development and another for their own survivability and growth.

In the developing countries, we find that public enterprises are established for rapid economic development of the country. Public enterprises have to maintain proper balance between social and profit motive. Government of the developing countries found it necessary to take substantial initiation in promoting economic and social development of public sector activities. There fore public enterprises are attached to important due to both economic and social region. A first public enterprise of the world was established in the port of the London authority of the Britain, which was formed in 1908. The first public enterprise of Nepal was established in1994 B.S, which is Nepal Bank Limited.

The major characteristics of the public enterprises are as follows:

1. Government ownership must be 51% or more.
2. Control, direction and management by the government.
3. Public accountability and service oriented.
4. Autonomous in daily functioning.
5. Financing by the4 government
6. Legally independent agent
7. Legal and commercial attributer of commercial enterprises.

1.2.1 Public Enterprises in Nepal

Nepal is a developing country and adopting the mixed economy. Public enterprises in Nepal play a vital role for the socio economic development of country. Due to the various causes private sectors are unable to invest sufficient capital for aggregate development of the country. So that public enterprises are the backbone for industrialization and development of the country. They have been established in many sectors for the overall development of the country with different goal's and objectives.

The concept of public enterprises in Nepal for the first time emerged in 1932 then the Nepal Government gave the character to set up the Nepal Trading Corporation in Katmandu in order to promote government trading in Nepal. But the step towards the incorporation of PE was only initiated in 1953.When the Nepal Rastra Bank Limited established in 1973 in private sector was restructured as a PE. Since the inception of the first five year plan in 1956 when the NBL remained as a single

PE, the role of PE's has been projected as an essential instrument, philosophy as well as strategy of the nation development. Nepal has been started its planned economic development in 1956 by launching of first five year plan. Since than the number of public enterprises has been increased substantially in the various fields of HMG/N and now there are 43 public enterprises. Some of them are in privatization process. Public enterprises can be classified as follows:

- Manufacturing PE's
- Commercial PE's
- Financial PE's
- Public PE's
- PE's engaged in social service
- Development or services of PE's

The study of economic plan, economic survey, and the foundation act of these enterprise helps to summaries the main objectives of Nepalese public enterprises are as follows:

1. Accelerating the rate of economic growth.
2. Producing and supplying essential commodities
3. Mobilization of the funds for development plan.
4. Developing and expanding the infrastructures.
5. Achieving the objectives of national plan.
6. Establishing welfare and preventing from monopoly.
7. Generating employment opportunities.
8. Minimizing the import of goods.
9. Making available essential goods and service cheaply and adequately.
10. Using the local resources.
11. Provisioning of public utilities.

But after adopting liberalization policy by the government of Nepal, the role of public enterprise in Nepal is shifted toward the private sector. Nowadays public enterprises are known as problem created source for the government, use by the higher political interference make the condition of these enterprises very bad. Almost 80% of the established public enterprises of Nepal were closed down or privatized and 90% of remaining public enterprises are in huge amount of loss every year. Analyses of financial performance of existing public enterprises show that financial positions of most public enterprises are not satisfactory. The investment in public enterprises has increased rapidly. Almost public enterprises are not able to generate the revenue for their daily expenses and they are operated by the government subsidy therefore almost all except one or two public enterprises become burden to the national resources and they consumed significant amount of the national budget.

1.3 Statement of the Problem

Public enterprises are established as a mean of economic development of the country. They are established in various sectors such as industrial, commercial, public utility, and service, financial and social sector to develop the economic infrastructure of the country. It also may be expected that public enterprises also encourage to the private sector for investment in various sectors of the public interest. But actually the performance and financial condition of the most public enterprises has discouraged or the new investors. Almost all public enterprises are incurring losses every year. Nowadays, most of the public enterprises are operated by the government subsidy or investment. The accumulated investment reached more than Rs 70 billion in the form share capital and loan investment but the return is nominal. Viewing these data the experts of the public sector has concluded that public enterprises become unsustainable in terms of fiscal drain in Nepal.

DDC is the one manufacturing public enterprise established in Nepal to fulfill the need of milk and milk products. Despite of absolute monopoly enjoyed by DDC in the market for long period, DDC is continuously suffering losses. It is true that the success of any operation depends upon planning system. There may be various causes of these losses and the major one is poor adaptation of managerial principle and lack of the knowledge of profit planning and control system.

So this research tried to analyze the role of sales budgeting in the profitability of the enterprise, because sales budget is the foundation of the entire functional budget under profit planning system. The research also tried to analyze the performance report of enterprise to know the cause of deviation from the planned performance. The present study tried to answer the following questions:

- What are the major problems faced by DDC in developing and implementing the profit plan?
- What is the present practice of sales and other related planning and its effectiveness in profit?
- What are the trends of overall profit of DDC?
- To what extend of DDC has been successful in maintaining profitability by applying profit planning and control
- What are the major causes of the deviation in the actual and budgeted target of DDC?
- What steps should be taken to improve the profit planning and control system of the DDC?

1.4 Objectives of the Study

DDC is one of the major enterprises of the country and has played vital role for economic growth and help to uplift the economic status through dairy business and provides healthy milk to people of country. The main objectives of present study is to examine the techniques or approaches of sales budgeting as a major tools of profit planning system applied by the DDC and to test the achievement of planning. The major objectives are as follows:

- To examine the sales budgeting process adopted by DDC
- To analyzed the relationship between sales and profitability of DDC.
- To compare the performance status of sales budgeting system of DDC.
- To find out the cause of deviation on sales budget of DDC.
- To provide suitable suggestions and recommendations on the basis of study.

1.5 Significance of the Study

This research study is related with the aspects of budgeting or profit planning which is the vital and important tool in the field of the managerial decision-making in the business enterprises. The main focus of this study lies in the role of sales budgeting in the profitability of the public enterprise with special reference to Dairy Development Corporation. The study tries to analyze the performance of the corporation upon its budgeted figure and find out the causes of the ineffective performance.

This study uses the primary data to find out the cause of deviation between budgeted and actual sales as well as production figure of the corporation, which provides venue for further research in the similar field.

The study will serve the general interest of various people, public enterprises, researchers as well as other business enterprises related with dairy products. The major significance of the study is that it is much more important for the management of the DDC to improve its budgeting practice and implementation on the basis of given recommendations.

1.6 Limitations of the Study

The limitations of the study are as follows:

1. The study is confined to Dairy Development Corporation.
2. The study confines only to the profit planning of DDC and it does not analyze the other sector of the corporation.
3. The study covers the six fiscal years from FY 58/59 to 63/ 64
4. The accuracy of the study is based on the data provided by the DDC management and published financial documents, planning documents and annual reports of DDC.

1.7 Scheme of the Study

This study is divided into five chapters, which are as follows:

Chapter -I: Introduction

It includes the introduction and general background, statement of the problems objectives of the study and significance and limitations of the study.

Chapter -II: Review of Literature

It includes, concept of profit planning, fundamental concept, process, advantage and limitations of the profit planning. This chapter also analyzes the sales and other functional budgets as a step of profit planning as well as control process of the organization. It also includes the review of the past study in related topic and their major finding with recommendation.

Chapter -III: Research Methodology

It includes the research design, source of the data, data collection procedure, general introduction of tools used in the research and other.

Chapter -IV: Data Presentation and Analysis

It includes the presentation of various data related to study and analysis as requirement of objectives as well as major findings.

Chapter -V: Summary, Conclusion and Recommendations

It includes summary and conclusion of the study and suitable recommendations on the basis of the study.

CHAPTER - II

REVIEW OF LITERATURE

2.1 General Concept

The concept of budgeting was the originally established with the function of an accountant. At it's the function of budgeting was assigned to the accountant but in modern days budgeting is given more importance. It is regarded as a basic technique of decision-making and is given the name "Profit Planning and Control".

Usually profit does not just happen; profit is managed and planned by management so it is known as profit planning. Profit planning is the compound of overall planning process of every organization.

2.1.1 Profit

Profit is the primary measure of the business success in economy of country. It doesn't just happen profit; it can't achieve capital for very long. It is the acid test of business. Profit is obtained by subtracting the total expenses from total revenue. In the perfect competition market, profit is earned with the help of innovation. So this motive is residual after distributing the reward to all the future.

Profit is the primary measure of the success of the Organizations or business enterprises. It is the basic element of the profit planning. Profit is the excess of the revenue over the cost of production. But the term profit has several interpretations. Some say that profit is the rent of ability of the earner, another say that profit is a return for uncertainty bearing and reward for an innovation. But in accounting sense, profit is the excess of revenue over all expenditures related to it. Some of the important definitions related to profit are as follow.

“Profit is the primary measure of a business. In the view of the heavy investment which is necessary for the success to most enterprises, profit in the accounting scenes tends to become a long rang objective which measures not only of the product but also the development of the market for it” (Kulkarni, P.V., 1985:245).

“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 cooperate source of wealth on which national prosperity depends, the basis financial objectives of companies is to maximize the profit.

Within socially acceptable limits, profit form the use of funds, employed by them. The maximization of profit within socially acceptable limits implies that a proper regard to public interest has been paid. No company can survive long without profit. The ultimate measure of the effectiveness in a capitalist society, there is no future for private enterprises, which always incurs losses. The survival measure of the effective performance of the business is its profit" (Ibid: 245).

“Profit is a signal for the allocation of resource and yard stick for judging management” (Kulkarni, P.V., 1981: 187).

“Profit is the acid test of the individual firm’s performance” (Dean, Joel, 1982:3).
“An investor will view it is a gauge of the return on his or her money. An internal revenue agent might regard it as the base for determining income taxes. The account will define it simply as the excess of firm’s revenue over the expense of producing revenue in a given fiscal period” (Richard M. Lynch and Robert W. Williamson, Accounting for management" (Khan. M., and Jain P.K., 1989: 99-100).

It can be concluded that profit is the primary measure of the success of the business and it is the primary objective of business. Without profit, no firm can operate and can hold capital for long period. Profit is the reward for the bearing risk, the risk of enterprise, the risk of venturing in business, the risk of owing something in the hope of selling it latter. If it cannot obtain capital it cannot operate because it is the lifeblood for every organization. Therefore, profit is the matter of prime importance for every business.

From the above definition of the different author, we can easily conclude that profit is the excess of income over the cost of production. It is clarify from the following formula

Profit = Total Revenue – Total Cost

2.1.2 Planning

Planning is the deciding in advance about where we are and where we want to go. Thus it works as a bridge to achieve the objectives of the organization. Planning is done on the basis of past experience, present information and future expectations.

Planning helps of direct action in desired way of performing that task planning concentrates on setting and achieving objectives of an organization. Planning is the first management function to be performed in the process of management.

Planning means deciding in advance what is to do in future. It is the method of thinking out acts and purpose before. Planning starts with forecasting and complete with determination of future events. It is the first essence of management and all other functions are performed within the framework of planning. Some definition given by various authors is as follows.

“Planning is the systematic way of perceiving how business, industries or any organization will get where it should go by examining future alternative course of action open to any organization and choosing them. In choosing most feasible and desirable course of action, a perspective a frame of reference of establish for current decision. In this process, planning is examined. The involving chains cause and effect likely to result. In the future and respectively exploit or combat them the case may be” (R.L., Verseny & K.L. Moheshwari, 1990: 336).

“Planning is the basic function of management. It may be defined as the selection from among alternative of course for future action. It is a function by which manager decides what goals are to be accomplish and how they are to be reached" (A.W. Wills More, 1971:74).

“Planning is the continuous process. Business condition does not remain static; they change rapidly and therefore plans should be revised and per formulated to adapt to the changed condition. The planning process may be formal or informal. The formal plans are properly structured and are express in written from. Formal planning is certainly better than informal planning. No planning is of course, worse informal planning. It should be realized that too much over formulization if also dangerous. A reasonable balance should be struck between the formal and informal planning” (I.M. Pandey, 1988: 555).

“Planning means setting goals for the firm, considering various ways of meeting those goals, and picking out what appears to be the best way to meet the goal” (Lynch, R.M. and Williamson, R.W., 1993:18).

“To plan is to look ahead and chart out of the future course of operation, it is the determination of a course of action to achieve a desired result “(Bhusan, Y.K., 1995: 43).

“Planning is the process of developing enterprise objectives and selecting future course of action to accomplish them. It includes:

1. Establishing enterprises objectives
2. Developing premises about the environment in which they are to be accomplished
3. Selecting a course of action for accomplishing the objective
4. Initiating activities necessary to translate plans into action and
5. Current re-planning to correct deficiency" (Glenn A Welsch, Ronal W Hilten, Paul M. Gordan: 3).

Planning is a financial or quantitative statement prepared and approve prior to a definite period of time. Planning is the primary function of management activities. Without proper and efficient planning, an organization cannot accomplish its predetermined goals and objectives. Planning is the intellectual process, rational, a systematic, goal oriented task. It provides all management activities, which is directed towards efficiency and success. So, planning means setting goal for the firm, considering various ways of meeting those goals and picking out the best way to meet the goals.

2.1.3 Profit Planning

Profit planning means the development and acceptance of objective and moving organization efficiency to achieve the objectives and goals. Profit planning is planning for future operation in such a way as to maximize the profit or to maintain a special level of profit. A comprehensive profit planning is also known as broad budgeting schedule developed in financial statements. Profit planning deals with the developments of objectives, specification of short term goal, development of strategic and tactical profit plan. In other word profit plan is details expression of the expected result for the planning decision. Profit planning is an important approach developed to facilitate for the effective performance of management process like as planning, organization, staffing, controlling etc. profit planning is established to compare regularly the actual performance and accomplishments. Profit planning is that tools, which manage all the factor efficiently and effectively".

Profit planning can be taken as control theme of management planning. Without proper planning, profit will not just happen. Profit planning covers all the major activities of the business activities towards the achievement of the business objectives including social responsibilities. Various functional budgets are the basic tools for the proper planning of profit and control.

"Profit planning in fact is a managerial technique and a profit is such a written plan in which all aspects of the business operation with respects to the definite future period are included. It is a formal statement of the policy, plan, objectives and goals established by the top management in respect to some future period. It is a predetermined details plan of action developed and distributed as a guide to current operation and as a partial basis for subsequent evaluation of performance. Thus, we can say that profit planning is a tool, which may be used by the management in planning the future course of actions and in consulting the actual performance, the term comprehensive profit planning may be broadly defined as a systematic and formulized approach for accomplishing a planning, coordinating and control responsibilities of the management" (Ibid, 4th Edition: 3).

"Profit planning means the development and acceptance of the objectives and goals and moving and organization the efficiency to achieve the objective and goals. Profit is not separate technique; that can be though and operate independently of the total management process. The broad concept of the profit planning entails, an integration of numerous managerial approaches and techniques that might be exploited, such as sales forecasting, sales quota system capital budgeting, cash flow analysis, cost volume profit analysis, variable budget, time and motion study, standard cost accounting, strategic planning management by objectives, organizational, planning, manpower planning and cost control" (Ibid, 4th Edition: 4).

"Profit planning is one of the most important management tools used to plan business operation budget to profit plans are financial plans prepared as a guidelines to the control of future operation" (S.P. Gupta, 1992: 521).

"Profit planning involves developments and application of broad and long range objectives of the enterprise the major component of profit planning and control model are:-

1. Development and application of broad and long-range objectives of the enterprise.
2. Specifications of enterprises goal.
3. Development of strategic long range profit plan in board terms
4. Specification of tactical short-range profit plan detailed by assigned responsibilities (division, department, project etc).
5. Establishment of system of periodic performance reports detailed by assigned responsibilities. And
6. Development of follow – up procedures" (Ibid: 30)

Profit planning has to resolve a number of conflicting issues before expressing the established directions and decisions made by top management. Conflicting aims should be brought into produce more sales and profit, but many investors also increase the investment in working capital and the risk of bad debts" (Holmes Arthur W., Meier Robert and Dahast Donald F., 1970:682).

“Therefore the profit planning is a fundamental part of the overall management functions and is a vital part of the total budgeting process. The management determines the profit, goals and prepares budget that will lead them to the realization of these goals. Profit planning can be done only, when the management has the information about the cost of the products both fixed and variables, and the selling price at which it will be in a position to sell the products of the company” (Maheshwari, 2000:171).

2.1.4 Profit Planning and Control

Profit planning and control, is viewed as a process of designed to help management effectively perform significant phases of the planning and control functions. The PPC model involves (1) development and application of board and long range objectives of the enterprise; goals (3) development of strategic long range profit plan in board terms; (4) specification of a tactical short range profit plan detailed by assigned responsibilities (decision, departments, projects); (5) establishment of a system of periodic performance reports detailed by assigned responsibilities; (6) development of follow- up procedures.

The PPC concept is: **-** (a) PPC requires major planning decisions by management, (b) PPC entails pervasive management control activities, and (c) PPC recognizes many of the critical behavioral implications through out the origination.

PPC is one of the more important approaches that have been developed to facilitate effective performance of the management process. The concept and techniques of profit planning and control have wide application in individual business enterprises, governmental units, charitable originations, and virtually all group endeavors. In modern-day business except in very small companies, it is virtually impossible for the top manager to have firsthand knowledge of all relevant factors operating through out a business. Nor can a single lower level manager be expected to have range of knowledge, experience and competence to make all the decisions for the large segments of a company, either as a source of reliable information or as a participant in decision making.

"Profit planning and control rest upon the conviction that management can plan and control the long-range destiny of the enterprise by making a continue stream of well conceived decisions. The concept speaks to plan prosperity as opposed to unplanned happenstance. For long-range success, the stream of managerial decisions must generate plans and actions to provide the essential inflows that are necessary to support the planed outflows of the enterprise so that reasonable levels of profit and return on investment are earned. Continuing generation or profit by managerial manipulation of the inflows and outflows provides substance of profit planning and control" (Fayol, 1949:19)

"The term comprehensive profit planning and control is defined as a systematic and formalized approach for performing significant phase of the management planning and control function" (Welsh, Hilton and Gordon, 1990:4).

"The main purpose of profit planning and control are as follow:

1. To state the firm's expectations in clear and formal terms to avoid confusion and to facilitate their attainability.
2. To communicate expectations to all concerned with the management of the firms so that is understood, supported and implemented.
3. To provide a detailed plan of action for reducing uncertainty and the proper direction of individual and group efforts to achieve goals.
4. To co-ordinate the activities effort in such a way that the use of resource maximized.

To provide the mean of measuring and controlling the performance of the basis of the necessary corrective actions can be taken" (I.M. Panday, 1998: 557-558).

“A profit planning and control program helps the management perform its planning function by developing a strategic profit planning and tactical profit plan. Both of these plans include monetary expectations for assets, liabilities, profit, and return on investment. The foundation of strategic profit plan includes the objectives, broad goals, planning premises and strategies of the enterprises as developed by top management. The tactical profit plan actually should be viewed as the 1st year of the strategic profit planning. It helps the management to perform its control functions by providing realistic goals and standard that are implemented and compared with actual results of measuring performance. Under profit planning and control this performance measurement extends form the top to the lowest organizational levels in the enterprise” (I.M. Panday, 1998: 241).

In summary, profit planning has ultimate objectives of achieving the optimum profit. It is concerned with the development of objectives and goals, assignment of responsibilities to fulfill the objectives, implementations of plans and the follow up procedures for correction and adjustment in planning.

2.2. Long Range and Short Range Profit Planning

Two types of profit plans are developed while preparing a systematic profit plan.

1. Strategic (Long Range) Profit Plan

Strategic plan is a development of broad and long-term objective that specifies the detailed goals of the enterprises. **“**Strategic plan involves the determination and periodic change of organization objectives, the acquisition and use of the resources required for their attainment and the establishment of the basic policies, which guide the goal-oriented activities of the organization, strategic planning is necessarily a top management function. It is highly creative and therefore relatively unstructured in character. Its timing is irregular and opportunistic. It must be tuned in to the external environment within which that environment is heading and to the changes that are likely to occur" (R.M. Lynch & R.W. Williamson, 1993:140).

The formal portion of long-term plan includes the following components detailed by each year:

a. Income statement
b. Balance sheet
c. Capital expenditure plan
d. Personnel requirement
e. Research plan
f. Long term market penetration plan

2. Tactical (Short Range) Profit Plan

Tactical plans are the development of short term and definite objectives that pasteurizes the results for a period for not exceeding a year. It is executed principally at the level of frontline of supervision. Its goals are invariably short term and rather rigidly structured, as are the criteria for measuring performance toward their achievement.

"Here forecasting is limited to short period, usually not more than one year. It relates to policies regarding sales, purchasing, pricing, and finance. Hence the reference is only to the existing production capacity of the firm" (Shyam Joshi, 2057:171).

Some of the ways in tactical plans are as follows:

- Development of periodical performance report by the concerned responsible department for control purpose.
- Preparation of regular follows up of system.
- Correction of plans, activities or objectives or plan as a whole.
- Preparation of a new plan based upon the experience gained from past plan.

In summary, Strategic profit plan is normally broad and encompasses three or more years in future, where as tactical profit plan is detailed and encompasses one-year time horizon (the coming year). The chief financial executive will develop strategic and tactical profit plan.

“The long range plan covers all the key areas of anticipated activity; sales, expenses, research and development, capital expenditure, cash, profit and return on investment” (IBID: 132)

“The development of strategic and tactical plans each year is a process that involves managerial decisions and ideally high level of managerial participation” (IBID: 134).

A scenario of developing profit can be presented as under.

Activity	Information Flow	Approval Sequence	Primary Participant
Entity objectives	↓	↑	BOD. Chief Executive Officer
Entity Goals, Planning Premises and Strategies	↓	↑	Top Mgmt. Group.
Strategic (Long Range) Profit Plan	↓	↑	Middle Managers
Tactical (Short Range) Profit Plan	↓	↑	Operating Managers

2.3 Budgeting: As a Tool of Profit Planning

A budget is a formal expression, of policies, plans, objectives and goals laid down in advance by top management for the undertaking as a whole and for every sub-division therefore. Budget is expressed in financial form for a period in future.

“Budget, a tool of planning and control, is closely related to the broader system of planning and control on an organization. Planning involves the specification of the basis objectives that will guide it in operational terms. It involves the step of setting objectives that will guide it in operational terms. It involves the step of setting objectives, specifying goals, formulating strategies and expressing budgets. A budget is a comprehensive and coordinated plan expressed in financial terms, for the operations and resources of an enterprise for some specified period in future” (M. Khan & P.K. Jain, 1989: 296).

“Simply the process of preparing and using budgets to achieve management objectives is called budgeting” (I.M. Pandey: 556). “More specifically, a comprehensive profit planning or budgeting is a systematic and formulized approach for stating and communicating the firm’s expectation and accomplishing the planning. Coordination and control responsibility of management in such a way to maximize the use of given resource” (IBID: 557).

Budgeting is a process of preparing future financial and physical requirement for development of plan. “A budget is quantitative expression of a plan of action and aid to coordination and implementation. Budgets may be formulated for the organization as a whole or for any sub-unit. Budgeting includes sales, production, distribution and financial aspect of an organization. Budget programs are designed to carry out a variety of functions, evaluating performance, coordinating activities, implementing plans, communicating and authorizing actions” (Charles T. Hongren, 1977: 123).

Budgeting control is a system of controlling costs, which includes preparing budgets, coordinating the departments and establishing the responsibilities comparing actual performance with budget and acting upon results to achieve maximum profitability. Thus, budget is concerned with policy making while budgetary control results from the implementation of the policy. The common objectives of budgetary control are to formulate policies aimed after the consideration of the possible course of events in the future and to provide a means for the constant comparison of actual progress. Budgets not only compare the actual results with those of budgeted but also provide a standard of the performance. Company controls operation through its budgeting and responsibility reporting system. Top executives are able to control every area of the organization through a system of budgetary planning and control reporting by responsibility area.

2.3.1 Requirements for Effective Budgeting

Development of effective budgeting is not easy. Some requirements for effective budgeting are to be fulfilled. They are as follows:

1. Support of top management while developing budget programmer and implementing it.
2. Accurate and clear accounting system.
3. Unambiguous policy.
4. Preparation of responsible executives.
5. Logical and sequential process in preparation. Submission and review of budget.
6. Immediate action in variance between actual and budgeted results.
7. Continues budget education to employees of the undertaking on the objectives, potentials and techniques of budgeting.
8. Flexibility for both possible and unforeseen circumstances requires essentially in budgeting.

2.4 Basic Elements of Profit Planning

Basic elements of the profit planning and control are-

1. Comprehensive and Co-Ordinate Plan

The profit planning considers all activities and operations of an organization. The budget prepared by the different departments inside in the organization given to be complied or co-ordinate. Firstly, the entire department's budget has to be complied and that is known as comprehensive budget of profit planning.

2. Financial Terms

It is expressed in financial terms. All activities covered by budgets are related with funds. Therefore, the budget has to be expressed in menetory units i.e. in rupees.

3. Operation and Resource Plan

It is a planning for day to day business operation relating to working capital management. There are two aspects of operation. They are revenue and expenses. The budget must plan for quantity, revenue and expenses related with specific operation. Planning should not be done for revenue and expenses; it should be for carry out operations. The planning for resources will include planning of assets and source of fund.

4. Specific Period

A plan is designed for a specific period. It has certain time horizon of some specific period.

2.5 Components of Profit Planning and Control

The components of the Profit planning and Control are as follows

A. Substantive Plan

a. Broad objectives of the enterprise
b. Specific enterprise goal
c. Enterprise strategy
d. Executive management planning instruction

B. The Financial Plan

Strategic long-range profit plan:-

1. Sales cost and profit projection
2. Major projects and capital additions
3. Cash flow and financing
4. Personal requirements

Tactical short-term profit plan:

a. Operating plan:

- Sales plan
- Production plan
- Administrative expensive plan
- Distribution type budget

b. Financial position plan (Planned Balance sheet)

- Assets
- Liabilities
- Owner's equity

c. Cash flow plan

C. Variable expenses plan (output expenses formulation)

D. Supplementary data (Cost volume profit analysis, ratio analysis)

E. Performance report (By each month and as need)

F. Follow up corrective action and re-planning reports.

2.6 Profit Planning Process

The profit planning process should involve periodic, consistent and in depth re-planning so that all aspects of operation can be carefully re-examined and re-evaluated. There are certain process of Profit Planning and control, which are as follows:-

1. Identification and evaluation of external relevant variable
2. Development or revision of the broad objectives of the enterprises
3. Development of specific goals for the enterprises
4. Specific action and evaluation of enterprises
5. Executive management planning instruction
6. Development and evaluation of project plan
7. Development and approval of strategic and tactical profit plan
8. Implementation of profit plan
9. Preparation of periodic performance report.
10. Follow up (provide feedback, take corrective action and re-plan).

2.7 Importance of the PPC

The following are some of the more significant importance usually given for profit planning and control.

1. It forces early consideration of basis policies.
2. It requires adequate and sound organizational structure that is these must be definite assignment as responsibility for each functions of the enterprise.
3. It complex all members of the organization from top to participate in the establishment of goals and plans,
4. It compels the department managers to take in harmony with he plans of other departmental and entire enterprise.
5. It requires adequate and appropriate historical accounting data.

6. It requires that management to put down in cold figure what is necessary for satisfactory performance.
7. It compels management to plan for the most economic use of the labour material and capital.
8. It freely executive from many day to day internal problems by though predetermined policy and clear-cut authority relationship. It provides more executive for planning and creative thinking.
9. It tends to remove the cloud of uncertainty that exits in many organizations, especially among lower level of management of basic policies and objectives of enterprises.
10. It promotes the understanding among the member of management of their workers problem.
11. It forces management to give adequate attention the effect of general business condition.
12. To checks progress or lack of progress towards objectives of enterprise.
13. It rewards high performance and seek to correct unfavorable performance
14. It forces management to consider expected future trends.

2.8 Limitation of Profit Planning and Control

The following main limitation is given against profit planning and control:-

- It is difficult, estimate revenue and expenditure.
- Out management should not have interest in the entire estimates and schedules, our strictly informal system are better and work well
- Budgeting places to great demand on management time, especially to revise budgets constantly. It need much paper work.
- It takes away management flexibility.
- It creates all kinds of behavioral problem.
- It is too costly, aside from management time.

2.9 Sales Plan or Budget

"Sales plan is the starting point in the preparation of the comprehensive profit planning and control. All the other plans and budgets are depending upon the sales budget. The budget is usually presented both in unit and dollar of the sales revenue or sales volume the preparation of sales plan is based upon the sales forecast. A variety of methods are used to forecast the sales for the planning period" (W. Hohemes, R.A. Meir and D.F. Pabser, 1970: 687).

"Unless there is a realistic sales plan, practically all other elements of a profit plan will be real. The sales plan is the foundation for periodic planning in the firms because practically all other enterprise planning is built on it. The primary source of cash is sales, the capital additions needed, the amount of expenses to be planed. The manpower requirement, the production level, and other important operational aspects depend on volume of sales. In harmony with the comprehensive profit plan both strategic and tactical sales plan must be developed.

Thus are commonly observed five years strategic sales plan. Many management decisions commit a large amount of resources involving life span of many years. Basic strategies and major moves often involve irreversible commitment of resources and long time span" (Welsch, Glen & Ronald, 4th Edition:139-140).

"The sales plan has three distinct parts:-

1. The planned volume of sales at the planned sales price per unit for each product.
2. The sales promotion plan (advertising and other promotional cost)
3. The sales (or distribution) expenses plan" (Ibid: 135).

So, sales budget itself is an estimate of three main figures.

1. The income that will be earned from sales.
2. The cost and expenses of making sales and,
3. The sales surplus.

“The primary purposes of sales plan are:-

1. To reduce uncertainty about future revenues.
2. To incorporate management judgments and decisions into the planning process.
3. To provide necessary information for developing other elements of a comprehensive profit plan, and
4. To facilitate management’s control of sales activities” (Ibid :172).

2.9.1 Sales Planning Vs Sales Forecasting

Although sales planning and sales forecasting are related and they have distinct purpose, a forecast is not a plan. It is a statement and or a quantified assessment of future conditions about the particular subject based on one or more explicit assumption. A forecast should always state the assumption up on which it is based. A forecast should be viewed as only one input in to the development of sales plan. The management of the company should accept, modify or reject the forecast. In contrast, a sales plan incorporates management decisions that are based on the forecast, other inputs and management judgments about such related items as sales volume price, sales efforts, production and financing.

“It is important to make a distinction between the sales plan and sales forecast preliminary because the internal technical staff should not be expected or permitted to make the fundamental management decisions and judgments implicit in every sales plan” (Ibid: 172).

Therefore, a sales plan is not conditional but forecast is conditional. It is also technical staff function.

The difference between sales budget and sales forecast can be explained as follows:

a. Forecast are merely well educated estimates or inference about future probable events whereas a budget relates to planned events and is the quantitative expression of business plan and policies to be pursued in future.
b. Budgeting begins when forecasting ends. In fact fore forecasting provides the logical basic for preparing the budgets.
c. A budget provides standard for comparison with the results actually achieved, thus it is important control device of management, whereas forecasting represents merely a probable events over which no control can be exercised.

2.9.2 Strategic Vs Tactical Sales Budget

Comprehensive sales plan can be classified into two types.

- Strategic sales plan.
- Tactical sales plan.

1. Strategic Sales Plan

It is also known as long-range profit plan. Usually it is of 5 to 10 years. It is to be developed in broad and general management policies and assumptions by year and annual amount. Usually it is prepared by considering future market potential, population changes, state of economy, industry projections company objectives and long-term strategies because they affect in such area as pricing, development of new product line, innovation of product, expansion of distribution channel, cost pattern.

2. Tactical Sales Plan

It is also known as short-range sales plan. It is to be developed for short period detailed by products, months and quarters for future 12 months.

Tactical sales plan includes detailed of major products. Short-term plans are usually developed in terms of physical units or jobs and in sales. For planning and controlling purpose, short-term sales plans must be developed by sales responsibility because short-term profit plan provides major consideration for planning and controlling purposes. It is also necessary for completing other components of profit plan.

2.9.3 Components of Comprehension Sales Budget

Various components of sales planning are as follows" (G. Fago, 2003: 8).

Components	Strategic	Tactical
➢ Management policies and assumptions. ➢ Marketing plan (sales and sales service) ➢ Advertising and sales plan. ➢ Distribution (selling expenses) plan.	➢ Broad and general ➢ Annual amounts of major groups ➢ General by year ➢ Total fixed and total variable expenses by year.	➢ Detailed and specific by year ➢ Detailed by product and responsibilities. ➢ Detailed and specific for the year ➢ Fixed and variable by months and responsibilities

2.9.4 Developing of Comprehensive Sales Budget

There may involve many steps in development of sales plan, some specific steps are given below-

1. Developing management guidelines for Sales Planning

The guidelines should be prepared for management participant in the sales planning. There guidelines should specify sales planning responsibilities. This guideline helps for co-ordination and uniformity in sales planning process.

The guidelines should emphasize enterprises objectives goal and sales strategy. It includes general polices, major market thrusts, marketing strategies and competitive position.

2. Prepare Sales Forecast

One or more sales should be prepared. Each separate forecast use different assumptions, which should be clearly explains in the forecast. The forecast should include strategic and tactical forecast that are consistent with the time dimensions used in comprehensive profit plan.

3. Assemble Other Relevant Data

The information which is relevant for sales planning should be collected and evaluated. That information is as follows:

a. Manufacturing capacity.
b. Source of raw material supplies or goods for resale.
c. Availability of key people and labour force.
d. Capital availability.
e. Availability of the alternative distribution channels.

4. Developing of a Strategic and Tactical Sales Plan

Using the information provided by step 1, 2 and 3, the management develops the comprehensive sales plan. A comprehensive sales plan has generally two dimensions;

- Strategic sales plan.
- Tactical sales plan.

- **Strategic Sales Plan**

It is long-range profit planning. Usually it is prepared by considering future market potential, population changes, state of economy, industry projections company objectives and long-term strategies.

- **Tactical Sales Plan**

It is short-range sales planning. Short-term plans are usually developed in term of physical units or jobs and in sales. For planning and controlling purpose, short-term provides major consideration for planning and controlling purposes. It is also necessary for completing other components of profit plan.

For preparing strategic sales plan and tactical sales plan, it is better to involve all levels of the sales forces. Generally, the top-level management is appropriate for the strategic sales planning and tactical sales planning where as the middle and lower level management are appropriate for tactical sales planning only.

5. Secure the Managerial Commitment to Attain the Goal in the Comprehensive Sales Plan

Management must be fully committed to attain the sales goals that are specified in the approved sales plan. The commitment to the top sales managers of the goal approved marketing plan and strategies by responsibilities. The commitment must be strong and present in day-to-day operations.

2.9.5 Method of Projecting Sales

Some of the well-known methods of sales projection are as follows:

1. Personal Judgment Method

It is also known as a rule of thumb method or nonmathematical method or directorship method. In this method sales will be projected by the judgment of the management. Under this method, there are three techniques:

A. Sales Force Composite Method

Under this method sale is projected by the employees involving directly in the field of the marketing. On the basis of market observations, sales force project the sales and it is approved by the authority of the management.

B. Sales Department Composite Method

Under this method after collecting all the socio economic information from different sources, sales department project the sales.

C. Chief Executive Composite Method

Based up on the information submitted by the sales forces, sales department and other sector to the chief executive, he/she decides about the amount of sales.

2. Mathematical and Statistical Method

Under this method rule of mathematics and statistics are used to composite the sales. There are three well-known methods, which are as follows:

A. Economic Rhythm Method

It is a method based upon the historical data and analysis of environmental factor for e.g. cycle variance, seasonal variance, price variance etc.

One example:

Months	Historical sales	Cyclical variances	Adj. Sales	Seasonal variances	Adj. Sales	Price Variance	Bud Sale1s
Ref.	Input=1	Input=2	1*2=3	Input=4	3*4=5	Input=6	5*6=7
Jan.	100	0.95	95	0.25	24	1.50	36
Feb.	100	1.10	110	0.35	39	1.20	47
Mar.	100	0.80	80	1.00	80	1.10	88
Total	300	-	285	-	143	-	171

B. Correlation Method

It is widely used statistical technique. In this method, sales are projected by analyzing the relationship between independent (factor affecting the sales) and dependent (sales of the product) variable.

C. Historical Analogical Method

In this method sales are forecasted on the basis of certain past events which are positively to come in near future also. Trend analysis is one of the major examples of the historical method.

3. Specific Purpose Method

In this method, sales are forecasted on the basis of special purpose owned by the management. Under this method, there are three major techniques, which are as follows:

A. Industrial Analysis Method

This method is used in such industries, which have international market and producing high price product and high competitions as well as changing technology, for e.g. automobile industry, locomotive industry, and electronic industry.

B. Product Line Analysis Method

Projects the sales for the industry which has more than one product where as there are made by same or different types of material. For e.g. Petroleum co., Gas co. etc.

C. End use Method

In this method before projecting the sales of own company, the company must project the sales of other company which product is based on your product. For e.g. automobile parts, industry, Glass industry.

2.9.6 Sales Budget and Profitability

Sales budget consist of detail marketing plan of revenue, plan related to various expenses and sales, among the all activities related to operation of the organization. A sale is only one activity which creates revenue but all other activities create expenses. Profit is excess amount of revenue over all types if expenses.

2.10 Production Budget

"After the sales budget has been prepared, production requirements for the forthcoming budget period can determined and organized in the form of a production budget sufficient goods will have to be available to meet sales need and proved for the desired ending inventory. A portion of these goods will already exist in form of beginning inventory. The reminder will have to be produced. Thus, production needed, can be determined by adding budgeted sales units to the desired ending inventory and deducting the beginning inventory from the total"

When a tentative sales plan is completed, the next step is to build the short-range profit plan that is to develop a production plan, production budgets provides the quantity of product to be produced in the future certain period. The fundamental objective of production plan is to produce right type if product both in quantity and quality in the right time using appropriate method of production.

"A production budget incorporates the estimation of the total volume of production with scheduling of operation by days, weeks and months. The production budget is normally prepared in quantitative terms such as units, kg. of output, metric tons of production etc" (S.P. Gupta: 1992: 513).

The production budget is an estimate of the quantity of goods to be manufactured during the budgeted period. In developing production budget, the first step is to establish policies relative to inventory levels, the next step is to determine the total quantity of each product that is to be manufactured during the budget period, and the third step is to schedule or the production to interim periods. Production budget is the initial step in budgeting. For effective planning, the manufacturing executive must have, or overlap, information relative to the manufacturing operation necessary for each product. They must have at hand information relative to the uses and capacities of each manufacturing department. The company's cost accountant should provide certain historical data essential in planning production quantities and cost. The director of profit planning and control should provide staff assistance when needed, when the recommended production is completed by the production department it should be submitted to the executive committee for appraisal and then to the president for tentative approval prior to use as a basis for developing the materials labours and factory overhead budgets.

The production budgeting refers the development of policies about efficient production level, use of production facilities, and inventory levels. The second step of PPC is the production budget. This is a fore cast of production in terms of quantity (unit). It can compute by following adjustment.

Production Budget (units) = Sales (unit) ± Inventory

Production policies are depending upon the size, nature, economic trend and season (time) of business. They are: (a) Stable production policy versus un-stable inventory policy, (b) Un-stable production policy, and (c) Flexibility in both production and inventory

2.10.1 Purpose of Production Budgets

The major purposes are,

a. For direct market sales.
b. For inventory.
c. For sales and inventory.

a. For Direct Market Sales

When the production is based only with market demand, no need of production planning because the production process starts often the demand goods is predetermined of received, in case of job or unit production system production budget is not necessary. The quantity produced is always equal to the quantity sold.

b. For Inventory

When the nature of product is scarce, firm can manufacture goods in full capacity. In other words, when demand is higher than supply, the firm can produce goods as much as possible. Therefore, production budget is not necessary.

c. For Sales and Inventory

Production budget is important when goods ate produced for either selling or storing purposes. In this case, budgeted sales and inventory affects the production volume of the firm. Therefore, the objective of the production should be clear.

2.10.2 Responsibility for Production Planning

- Chief-Executive
- Production Supervisor
- Sales Manager
- Administration Manager
- Production Manager
- Financial Manager

2.10.3 Developing Production Budget

A production budget is a quantity budget, which lays down the quantity of units to be produced. The main purpose of this budget is to maintain the optimum balance between sales, production and inventory position of the firm. The following steps should be followed to develop a production budget.

Step 1:**-** To establish policies for inventory.

Step 2:-To plan the total quantity of each product that is to be manufactured during the budgeted period where the sales unit should be considered.

Step 3:**-** To schedule this production by interim period when the production plan has been complete by the production managers. It should be provided to the executive committee for evaluation and then to present for tentative approval period. It is used as a basis for developing the direct material, direct labour and factory overhead budget.

In simple mathematical term production budget is presented as bellow:**-** Sales + Closing stock – Opening stock = Production.

2.11 Material and Parts Budget

After estimating the sales and production, the next step is to prepare material purchase budget. When the production budget is completed then the requirements of raw materials and components that are used in the process of manufacturing have to estimate.

"A comprehensive profit planning and control program includes planning and controlling raw material and components to be use in the process of manufacturing. Adequate co-ordination and balance should be planned in between (1) materials requirements and components parts (2) raw materials and parts inventory levels (3) purchase of raw material".

2.11.1 Components of Raw Materials and Parts Budget

The following are the main components of material and parts budget-

a. Material and Parts Budget

This budget specifies the planned quantities of each raw materials and parts required for planned production. It should specify quantities of each raw materials and parts by product and by responsibility centre. Material and parts qualities are determined as follows:-

Budget = Production Budget× Standard Usage Rate

b. Material and Parts Purchase Budget

The material and parts budget specifies the quantities and timing of each raw material and part needed. Therefore planning of purchase must be developed. The purchase budget specifies the planned quantities of materials and parts to be purchased in the estimated cost and the required delivery dates. Purchase pf material can be determined as follows:-

Purchase of Material = Material Wage of Raw Material+ Closing Stock of Raw Material – Opening Stock of Raw Material

c. Material and Parts Inventory Budget

This budget specifies the planned of raw materials and parts inventory in terms of quantities and cost. The different between the requirements as specified in the material budget and the purchase budget shown the increase and decrease in the inventory budget. Inventory of the material can be computed as bellow:-

Closing Stock if Raw Material=Opening Stock of Raw Material+ Purchase of Raw Material-Material Usage of Raw Material.

d. Cost of Material and Parts use Budget

This budget specifies the planned cost of the material and parts that will be used in the productive process. It should be computed as bellow:-

Material Cost = Material Usage × Material Cost per Unit

2.12 Direct Labour Cost Budget

Planning and controlling direct labour refers the area of personnel needs, recruitment training, job description and evaluation, performance evaluation, union negotiations of wages and salary administration. A comprehensive profit planning program would incorporate appropriate approaches applicable to each problem area. A planning program can not resolve specific personal problem, but it direct careful consideration to them and aids in placing them in perspective. Effective planning if long term and short term labour cost will benefit both the company and it's complies.

This budget is based upon the production. Hoe many hours and labour are needed to produce finished goods is the basic concept of labour budget. It can be presented separately for different types of labour like: Skilled, Semi-killed, and unskilled labour into hours, no. of labors and monetary terms by following adjustment.

Labour Budget (hours) = Production (Units) × Standard Hour Rate

Labour Budget (Rs) = Labour Hours × Rate Per/H

Direct labour cost occupies a significant portion of total production cost. Therefore labour cost needs systematic planning and control. The basic reason for preparing a separate direct labour budgets are employees needed, labour cost of each product and investment requirements. The following authorities are responsible for planning and controlling direct labour of enterprise,

a. Chief executive
b. Production Managers

c. Financial Managers
d. Personal Manager

2.12.1 Objectives of Direct Labour Budgets

The following objectives of labour budgets are as follows:-

a. To assess labour requirement
b. To prepare manpower planning
c. To estimate per unit labour cost
d. To estimate cash requirement
e. To give information for cash budget
f. To control the labour budget

2.12.2 Components of Direct Labour Cost Budget

a. Direct Labour Hour (D.L.H) Budget

This budget specifies the planning quantities of direct labour hour required for planned production. It should specify quantities of each types of labour hour by product and responsibility centre.

Planned production* std. DLH

b. Direct Labour Cost (DLC) Budget:-

Planned DLH* standard DLC

c. Manpower Budget:-

Planned DLH/ Productive DLH for the period

2.13 Expenses (Overhead) Budget

In developing the tactical profit plan, the next step is to plan the expenses. It is necessary to maintain the expenses levels in reasonable, there are three broad categories of expenses; factory or manufacturing overhead, selling and distribution expenses and general distribution and administrative expenses. And for preparing these separate sub-budgets, knowledge of cost behavior is essential in cost planning and control. Cost behavior is a response of cost to different volume of output.

They are:

a. Fixed cost: - Constant in total regardless of fluctuation in output.
b. Variable cost: - Change in total directly with change in output.
c. Semi-variable cost:- Neither fixed, nor variable change in the same direction of output but not proportionately

2.13.1 Components of Overhead Budget

a. Manufacturing Overhead Budget

Manufacturing overhead represent those expenses which, unlike, raw materials and direct labour costs, cannot easily be identified with separate units of production. Manufacturing overhead is the total of indirect labour, indirect material cost and indirect expenses of the factory.

b. Distributions Expenses Plan

It includes all those expenses, which are related to selling and distribution of products and delivery of products to customers. Development of promotion and advertising plan and development of a selling expenses and advertising plan collectively referred to as the planned distribution expenses. The marketing executive has a direct responsibility of developing the distribution expenses budgets, this budget should be planned by responsibility center and by interim time periods.

c. Administration Expenses Plan

Administrative expenses include operational costs other than manufacturing and distribution. Administrative expenses are fixed rather than variable. General administration expenses are close to top management therefore this is a strong tendency to overlook their magnitude and effects on profits. Each administrative expense identifies with a responsibility center, and that centers manager should be responsible for planning and controlling expenses.

2.14 Capital Expenditure Budgets

A capital expenditure budget will usually be prepared for a long period than other budgets, and is used to cover both capital projected already in place and those to be undertaken. Thus, the budget should be geared to the current production budget. Future expected levels of output and the long-term development of the business, and the industry, as a whole. It may be convenient to classify projects in the capital expenditure budget under separate heading, for example:

- Cost reduction and replacement expenditure
- Expenditure on the expansion of existing product lines.
- New product expenditure
- Health, safety and welfare capital expenditure.

"Capital budgeting involves the generation of investment proposals; the estimate of cash flows for the proposals; the evaluation of cash flows, the selection of projects based upon acceptance criterion; and finally continual revaluation of investment project offer their acceptance" (James C. Van Horne, 1976: 66).

Welsch, Hilton and Gordon have suggested the following processes for planning and controlling capital expenditure.

Phase: 1- Identify and generate capital addition, projects and other needs.

Phase: 2- Develop and redefine capital addition proposal.

Phase: 3- Analyze and evaluate all capital addition proposals and alternatives.

Phase: 4- Make capital expenditures decision to accept the best alternatives and assignment of project designation to selected alternatives.

Phase: 5- Develop the capital expenditure budget.

Phase: 6- Establish control of capital expenditure during the budget year by using period and special performance reports by responsibility concerns.

Phase: 7- Conduct post completion audits and follow-up evaluations of the actual results from capital expenditures in periods offer compilations.

2.14.1 Methods of Evaluation of Investment Decision

There is a various method of evaluation of the project which are as follows:

a. Average rate of return
b. Payback period
c. Discounted cash flow technique
   - Net present value method
   - Internal rate of return
   - Profitability index

2.15 Cash Budget

"Cash budget generally indicates the cash outflow and inflow. The key point in investment analysis is to focus. Exclusively on difference in expected future cash flows are treated the same whether they arise from operation, purchase or sale of equipment or investment in or recovery of working capital. The opportunity cost and the time value of money are tied to cash flowing in or out of the organization not to the source of the cash" (Khan and Jain 1993:175).

Cash budget are necessary in business operation. Payments must be made in cash, and receipts are deposited in the cash account. Cash is a "non-earning" assets in the sense that, although it is needed to pay for labour and materials, to buy fixed assets, to pay taxes, to service department, to pay dividends, and so on. Cash itself earn no interest. Thus, the goal of cash budget is to reduce cash holding to the minimum necessary to conduct business.

"One of the biggest challenges determining those cash flows relevant to decision making. Relevant cash flows are expected future cash flows that differ among alternatives. Capital investment project are typically having five major categories of cash flows.

i. Initial investment in machine and machine and working capital.
ii. Cash flow current disposal of the old machine.
iii. Recurring operating cash flows.
iv. Cash flow terminal disposal of machine and recovery of working capital.
v. Income tax impacts on cash flow" (Dongol and Prajapati, 2001 :837).

"A cash budget shows the planned cash inflows, outflows and editing position by interim periods 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 included in the annual profit plan, a cash budget basically includes two parts (1) the planned cash receipts (inflows) and (2) the planned cash disbursements (outflow). Planning cash inflows and outflows gives the planned beginning and ending cash position for the budget period. Planning the cash inflows and outflows will includes, (1) the need for financing probable the cash deficits (2) the need for investment planning to put excess cash to profitable use" (Welsch, Hilton & Gordon, 5th Edition:433).

"Cash budget is extremely useful as tool for financial planning which embraces arranging new loans and borrowing, replacing the existing debts, cash outlays capital expenditures and dividend payments" (S.P. Gupta:607).

2.15.1 The Primary Purpose of Cash Budget

The primary purposes of the cash budget are as follows: (Welsch, Hilton & Gordon, 5th Edition: 434)

1. Give the provable cash position at the end of each period as a result of planned operations.
2. Identify cash expenses or shortage by time periods.
3. Establish the need for financing and/for the availability of idle cash for investment.
4. Coordinate cash with (a) total working capital, (b) sales revenue, (c) expense (d) investments and (e) liabilities.
5. Establish a sound basis for continues monitoring of the cash position.

Preparation of the cash budget should be the responsibility of the company treasures. The cash budget is based almost exclusively on the other budgets therefore; the treasurer must work closely with the managers whose decisions may directly affect cash flows.

2.15.2 Techniques for Improving Cash Flow

"Improving the cash flow basically involves increasing the amount of available cash on day to day basis. To accomplish these objectives the management should focus on (a) the cash collection process, (b) the cash payment process (c) the investment policies. Some of the ways often used to improve the efficiency of the cash collection process are as follows" (Ibid: 454-455).

1. Review the lag from the data of sale of goods and services on credit to the mailing of (a) invoices and (b) the first billing.
2. If cash discounts are given to customers for early payment, review their effect on early cash collections and whether the discount is too high or too low.
3. Review the credit granting process to determine whether bad credit risk one being screened out.

4. Consider ways decrease the time between the data that customers pay by check and the data that the cash is available for use in the company's bank account.

Some of the ways often used to improve the efficiency of the cash payment process are as follows.

1. Make all payments, on the latest non-penalty day do not early.
2. Make all payments by cheque preferably on Friday.
3. Take all cash discounts allowed for earlu payment.
4. Establish policies and payment process to minimize the possibility of fraudulent payments by company employees.

2.16 Completion of Annual Profit Plan

"The development of annual profit plan ends with the planned income statement, the balance sheet and planned statement of changes in financial position. These three statements summaries and integrate the details of plans developed by management for the planning period. They also report the primary impacts of the detail plans on the financial characteristics of the company. Before redistributing the completed profit plan, it is generally desirable to restate certain budget schedules so that technical accounting mechanics, computation and jargon can be avoided as much as possible. The reproduced and distributed before the first day of the planned budget period. The profit plan completion date is important. Issuance of a profit plan after the beginning of the budget period is one sure way of destroying much of the budget potential. Timely completion of the planning budget suggests the need for a budget calendar" (Ibid: 417- 418).

2.17 Control Process of the Profit Plan

2.17.1 Performance Report

“Performance report constitutes important phase of the control process. This process closes the control cycle. The reporting of the performance complete the control by carrying it to the manager to decide the acceptability of the performance if goals have been attained, he may allow operations to continue without change. If not, he may revise goals or instruction on the means of achieving them.

Performance report is used as a kind of communicating media in organizational hierarchy to stimulate action and force decision. It aims to stimulate the interaction of various discrete units, which constitute the organization. Performance reporting for internal management use is an important part of a comprehensive profit planning and control system. Performance reports are usually prepared on monthly basis and follow a standardized format from period to period. Such reports are designed to facilitate internal control by the management fund anemically. Performance reports actual results compared with goals and budget plans. These reports are designed to pinpoint both efficient and inefficient performance” (S.P. Gupta: 543).

“In short, performance report serves as an instrument of communication, the nervous system of organization anatomy. Performance report is an important tool to provide necessary information, as it reports the performance of every responsibility centre. The main objective of such reports is the communication of performance measurement, actual results and the related variances. To indicate the extensive reporting requirements a business must fulfill and to focus on performance reporting, the following broad classification of reports is presented and briefly explained” (Welsch, Glen & Ronald, 4th Edition: 487).

1. External Reporting

These are the traditional annual reports to the government agencies, regulatory commission, creditors, investigative agencies and other groups' external to the active management. Frequently, these reports are quite extensive and comprise a significant portion at the overall reporting activities of the business.

- **Reports to Owners**

These are the traditional annual reports to the owners and other special reports prepared for the owners concerning special problem items of interest. These reports, by and large, are based up on "generally accepted accounting principles" and generally report data that have been subject to audit by an independent C.P.A.

2. Internal Report

These are reports prepared with in the company for internal use only. They may be considered confidential reports. They do not have to meet the needs of external groups, nor the text of "generally accepted accounting", but rather the test of internal management needs.

2.17.2 Essential Features of Performance Reports

Performance reports should be: (Ibid: 490).

1. Tailored to the organizational structure and controllability.
2. Designed to implement the exception principle in management.
3. Repetitive and relate to short time spans.
4. Adapted to the requirement of the principle user.
5. Simple, understandable, and report only essential information.
6. Accurate and expressive of significant distinctions.
7. Prepare and presented promptly.
8. Constructive in tone.

2.17.3 Analysis of Budget Variance

“The difference (deviation) between planned goals and actual results is called variance. The performance report shows such variances. Then the next step comes to analyze such variances to identify the underlying causes behind them for managerial planning and control purpose” (Richard M. Lynch, 4^{th} Edition: 570).

“Comparison of actual results with planned or budget goals has been emphasized as an integral part of the control process. A basic feature of performance reports is the reporting of variance between actual results and planned or budget goals. If a variance is significant, a careful management study should be made to determine the underlying causes. The underlying causes, rather than the actual results, should lead to remedies through appropriate corrective action by management. There are numerous ways to study or investigate variances to determine the underlying causes. Some of the primary approaches are the following” (Welsch, Gleen & Ronald, 4^{th} Edition: 570).

1. Conferences with responsibility centre managers, supervisors, and other employees in the particular responsibility centre involved.
2. Analyses of the work situation including the flow of work, coordination of activities, effectiveness of supervision, and other prevailing circumstances.
3. Direct observation.
4. On the spot investigation by line managers
5. Internal audits.
6. Special studies
7. Investigation by staff group.
8. Variances analysis.

Variance analysis involves a mathematical analysis of two sets of data in order to gain insight into the underlying causes of a variance. On amount is treated as the base, standard, or reference point. Variance analysis has wide application in financial reporting.

Variances are analyzed in the following areas.

1. Material variances.
2. Labour variances.
3. Overhead variances.
4. Sales variances.
5. Profit variances.

Variance is the deviation between actual and budget or standard results.

Following are the basic steps in analyzing variances:

1. Setting standards.
2. Measurement of performance.
3. Analyzing variances.
4. Taking corrective action.

Variance should be broadly grouped under two categories; favourable and unfavourable variances further should be classified as controllable and non-controllable. If unfavorable variances are arise due to controllable causes, then related centre or managers should be accounted for responsibility.

2.18 Review of Previous Research Studies

There are many researches have been made by the students of T.U. in the area of Profit Planning and Control, for e.g. sales plan, production plan and other plans. But these researches are not in depth in every area. Some of the researches related to profit planning and Control, their major finding and recommendation are presented as bellow:-

Khagendra Prasad Ojha (1995) has tried to point out some feature and problems of Profit Planning and Control in the context of Nepalese Manufacturing Enterprises, in his research work, “Profit Planning in Public Enterprises in Nepal” (A Comparative Study of Royal Drugs Limited and Herb’s Production and Processing Industry). Ojha has focused his basic objectives of the study was to highlight the current practice of profit planning and its effectiveness in Nepalese public enterprises.

Ojha has listed the following Major Finding

1. The objectives of the Nepalese PEs are not clear. Conflicts between social and profit-oriented objectives are hindering to profit planning program in PEs.
2. Lack of co-ordination between different departments. Conflicts have been raised due to lack of defining the ling and staff responsibility clearly.
3. Inadequate authority and responsibility to planning department, every function requires necessary formalities, which creates delay in decision-making and function.
4. Inadequate planning due to lack of planning expert and skilled planner.
5. Pricing system of the Nepalese PEs is not scientific. PEs adopts traditional pricing methods. Certain products are priced bellow the cost as government circular.
6. Nepalese Pes has lack of entrepreneurship; these enterprises are not operated on commercial basis.
7. CVP relationship is not considered while developing sales plan and pricing strategy.
8. Theoretically, production plan should be based on sales plan. Due to production oriented economy, Nepalese PEs do not consider the sales plan to develop production plan. There is no proper co-ordination between sales, inventories and production.

9. Low productivity due to lack of motivation and incentives is the major cause of too little negative profitability. These companies have not proper planning or programme to motivate employees. All employees are pail on the time basis or fixed salary, so that the qualified and creative personnel are frustration.
10. Various costs are not diagnosed as controllable and non controllable expenses. Therefore, either efforts are not made to reduce controllable expenses or expenses control program are not been effective4.
11. Unrealistic sales plan.
12. One of the major problem in Nepalese PEs is behavioral. But the PEs have no any attempts to solve behavioral problem that arise in organization.

Some major recommendations provided by Ojha on the basis of his study are:

1. Since, external variances expert major influence of the enterprises RDL and HPPC, all PEs should adequately identity and evaluate the variables. These enterprise should adequately identified and evaluate the variables. These enterprises should have in-depth analysis of the company strength and weaknesses.
2. Objectives are the basic guidelines of the enterprises. Nepalese PEs should clearly define their broad objectives.
3. Nepalese public enterprises should attempt to solve the behavioral problem that arises in organization.
4. To eliminate red-tapism, unnecessary formalities should be corrected and avoid which created delays in decision making and functioning.
5. Nepalese public enterprise should be operated on commercial bases, entrepreneurship should be developed with in the enterprises general managers or executive directors should be appointed for some long period and right person should be placed at right place.

6. Planning department should be give adequate authority to decide and create new ideas to formulate various plans.
7. Sales forecasting should be given made on the realistic ground forecast should include strategic and tactical forecasts that are consistent with the time dimensions used in the comprehensive profit plans.
8. Price-cost-volume relationship should be taken into consideration, which developing sales plan and pricing strategies.
9. Programs to improve the employee productivity should be made effective.
10. Policy to finance the cash deficit and to utilize excess funds should be formulated.

Kamal Prasad Dumre (1997) has made a study on “Profit Planning and Control of Dairy Development Corporation”. The major findings pointed by. Dumre are-

1. There are no proper and clearly defined goals and objectives as well as no clear system of planning.
2. The government appoints top managers.
3. Sales plan, production plan are prepared on abhor basis.
4. There is no detail of manpower and systematic approach of labour planning.
5. There is no detail and formal guidelines to the bower level management or departmental managers.
6. Lack of good and scientific communication system.
7. The profitability of DDC low and capacity utilization has been the lowest.
8. There is lack of motivation factors, internal auditing and effective management information system.
9. Corporation has not any effective cost reduction program.

Dumre has recommended various recommendations to improve the profit planning system of the corporation. The major recommendations are-

1. DDC should clearly defined objective target, strategies and programs

2. SWOT (Strength, Weakness Opportunities and threats) analysis should be adopted.
3. Line and staff authority and responsibilities should be clearly defined.
4. Trained and qualified manpower of budgeting and financing should be hired.
5. Market studies on demand and supply should be carried out.
6. DDC should have a proper financing and investment strategies.
7. To alleviate the present poor profitability an attempt should be more to more efficient use of inventory and apply suitable inventory policy.
8. It is advised to utilize the financial resources properly and also advised to reduce the debt financing.

In order to implement the above recommendations Dumre has suggested that, “A committee of the board, consisting of board members, ministry representatives and Dairy Development Corporation officers should be formed. This committee should be given full authority by the board to work out on implementation plan of recommendation and should organize review meeting of the officers of Dairy Development Corporation and concerned government agencies.”

Prakash Pahari (2000) has presented his thesis entitled “Profit Planning and control in Dairy Development Corporation”. The primary objective of his study is to explore the profit planning procedures followed by the corporation. He finds the following facts regarding to the DDC:-

1. DDC has planed only short-term plan rather than long term planning. The time covered only for one year.
2. The collection, Production and sales of milk and milk products has smoothly increasing trend.
3. DDC has not proper practice of segregating the cost into controllable and non-controllable on fixed or variable.

4. The pricing policy of the corporation is not scientific and the government directly interference to the price of raw milk and milk products.
5. There is not proper co-ordination between collection, production, inventory and sales department. Due to above cause sometime the supply is lower than demand and sometimes they destroyed their products.
6. DDC has cover utilized its plants or capacity.
7. The corporation has not trying to meet BEP, in facts actual sales is lower than BEP sales.
8. DDC has not applied any inventory policy, the inventory is create only when the production is greater than sales.
9. The top level executives are only involved in planning and decision making task and lower level participation is not encouraged.
10. There is no performance reporting system.
11. No trying to adopt the new technology.

The recommendations has presented by him are as follows:-

1. Broad objectives should clearly define with duties and responsibilities of the various level of management.
2. Must be defined long range plan with detail programs, strategies, goals, targets, policies etc.
3. Profit planning manuals should be communicated from top to lower levels.
4. HMG intervention should not be made for functional aspects and decision-making process.
5. Classification of expense items as controllable and non-controllable or fixed and variable must be made with in a specific framework of responsibility and time.
6. System of periodical performance reports should be sticky followed to be conscious about poor performance and take corrective action immediately and timely.

7. Cost control department separately should be established, which divided the cost by product and control the cost.
8. It is necessary to cutout unproductive expenses.
9. To eliminate red-tapism, political justification, government intervention and unnecessary formalities.
10. Must be applied scientific pricing policy rather than traditional method and government never interfere its pricing.

Bibek Kharel (2003) has submitted his thesis on the topic of “Comprehensive Budgeting in PE’s of Nepal (Sales and Production Budgeting Process of Dairy Development Corporation)”. The primary purpose of his study was to analyze the sales and production budgeting process of public enterprises of Nepal with special reference with DDC. He has found following points in his research:-

1. DDC has planned only short term or coming FY plan.
2. DDC has not clearly defined its annual goal or target briefly. It has planning only for production and sales for coming fiscal year not in various areas i.e. expansion of markets, development of product, profit margin etc.
3. The boards of directors or top-level executives are only involved in planning and decision-making.
4. Not separate planning department and planning experts.
5. All milks offered by the farmers have not collected by DDC.
6. It has not able to grant the loan to the farmer's requirement.
7. DDC has a face competition to the private diaries.
8. DDC has not practice of variance analysis
9. DDC has suffering the political pressure on employee’s selection.

Kharal has recommended various recommendations to improve the comprehensive budgeting system of the corporation, they are-

1. DDC should define short-term and long-term plan of its program, strategies, goals targets etc.
2. DDC should be encouraged to middle and lower level employees for planning and decision making task.
3. DDC should consider demand, market study while making the plan.
4. Government should not interface DDC.
5. DDC should consider the variance analyses. The cause of unfavorable variance should be investigated and correct them. ‘
6. DDC should consider its assets. High assets are the idle investment. DDC should invest its capital on returnable sectors.
7. DDC should cut down the unproductive expenses.
8. DDC should consider the sales plan on the time of planning production.
9. DDC should install the new plant for its production.

2.19 Research Gap

All the research studies mentioned above gave focus on overall profit planning of the public enterprises and have pointed out that there is no proper planning system and has made recommendations for the effective implementation of profit planning system.

This study is different from the previous studies. This study focused only on specific area of overall profit planning i.e. sales planning, taking the special reference of Dairy Development Corporation. This study is mainly focused on the sales budgeting process adopted by Dairy Development Corporation and its performance on the overall profitability. It also tries to identify the cause of deviation in Dairy Development Corporation and role of Budgeting in the effective formulation and implementation of the profit planning system. Similarly, the study attempted to analyze the relationship between sales and profitability of the corporation. Therefore, this study has tried to do something new on the field of regular research related with Profit Planning and Control. This study used the relevant data through primary sources to analyze the cause of deviation in between budgeted and actual achievement of the corporation.

CHAPTER - III

RESEARCH METHODOLOGY

3.1 General Introduction

It is well known fact that PEs is established for rapid socio economic development of the country. PEs have to maintain proper balance between profit motive and service motive. Profit oriented manufacturing public enterprises should adopt profit planning control programme to run in more competitive business environment.

The main objectives of this research are to analyze, examine and interpret the role of sales budgeting in the profitability of the PEs with special reference to Dairy Development Corporation. For this various statistical tools and accounting terms are used. A specific research methodology is followed to achieve the basic objectives and goals of research work. The major contains of the research methodology followed in course of this study are as follows.

3.2 Research Design

Research design is the plan structure and strategy to the obtain answer to research question through investigation and analysis. The research design of this study is descriptive as well as analytical. This study is closely related to sales budgeting system and actual achievements. The available information from the primary and secondary sources are used to examine, explain and evaluate the sales budgeting system and its effect on profitability of the corporation.

3.3 Period Covered

Profit planning has two time dimensions, long range and short range. For long range planning, it has analyzed six years financial data of Dairy Development Corporation. For short range-planning 12 months period is covered. Long range planning covers the FY 2058/059 to FY2063/064 and for short-range plan covers the FY 2063/064.

3.4 Nature and Source of Data

Since, information is the lifeblood of any research work. To fulfill the objectives of this study secondary data as well as primary data have been used. Primary data are collected through interview with the officials and as well developed supplementary questionnaire targeted to the officials of Dairy Development Corporation and other private dairies. Secondary data have been taken from the published documents of the Dairy Development Corporation, magazines, publications of national planning commission, statistical survey, previous dissertations and the officials accounting and planning records of Dairy Development Corporation. The questionnaires are shown in the appendix at the end of the study.

3.5 Research Variables

The research variables of this study are mainly related with the accounting statements of Dairy Development Corporation. Long range and short range sales plan, production plan, profit and loss account, balance sheet etc are the main research variables of this study.

3.6 Tools used for Analysis

Data collected from various sources are managed, analyzed and presented in proper table and formats. Interpretations and explanations are made wherever necessary. To analyze the collected data, financial and statistical tools are used. Financial tools used are flexible budgeting and cost volume profit analysis. Similarly, the statistical tools used are mean, standard deviation, correlation coefficient, regression line, time series analysis, coefficient of variance percentage, graphs, diagrams as well as pie charts.

CHAPTER - IV

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

Profit planning can be viewed as a process designed to help management for attaining effective management performance. Since, the effective budgeting is a primary measure of the business success for any enterprises; the primary purpose of the profit planning in business is to increase the chance of making profit. Comprehensive profit planning and control continues to be of prime importance on virtually all organizations. Planning involves the control and arrangement of the relevant variable (controllable and uncontrollable) and reduces the impact of uncertainty so that the enterprise could be saved from the chance of going into losses.

The concept and techniques of profit planning have wide application in individual business enterprises, government units, and charitable organization and virtually in all groups endeavors.

Among the various components of profit planning, sales' "budgeting" is the prime root. Profit is the output of profit planning. This study intends to show the effect of sales budgeting system in the profitability of an organization with special reference to Dairy Development Corporation, one of the leading manufacturing enterprises of the country, established in public sectors. Sales budgeting is know as means and ends of profit planning because sales is only one activity of the organization which creates revenue, and all other activities are related to create cost. Due to revenue creation activity of sales, it can be explained that profit is directly relate to sales (which is excess of revenue over total cost), In the words of Welsch Hilton, and Gordon, "Unless there is a realistic sales plan, practically all other elements of a profit plan will be out of kilter with reality. The sales plan is the foundation for periodic planning in the firms because practically all other enterprise planning is built on it. The primary source of cash is sales, the capital additions needed, the amount of expenses to be important manpower requirement, the production level, and other important operational aspects depend on volume of sales. In harmony with the comprehensive profit both strategic and tactical sales plan must be developed. Thus are commonly observed five years strategic sales plan. Many management decisions commit a large amount of resources involving life span of many years. Basic strategies and major moves often involve irreversible commitment of resources and long time span".

Generally there are two types of sales planning, one is long range and another is short range. In the DDC, there is only a system of short range sales planning for one year. Due to lack of long range planning, this study, make a comparative study of 6 years tactical sales plan. The present study mainly focused on tactical sales planning of the corporation and its profit creation activity for last 6 years. To know the over all economic and financial trends and to estimate the possible future trends of the Dairy Development Corporation, the study covers the periods of 6 years from the FY 2058/059 to FY 2063/64.

4.2 Sales Planning Process of DDC

Dairy Development Corporation has the system of preparing sales budget by product and responsibility. Over all sales planning processes of corporation are as bellow:

4.2.1 Methods of Sales Forecasting

DDC has not followed forecasting technique to forecast the sales but in practice, DDC used the combination of following three methods:

a. Sales division or department composite
b. Sales executive decision
c. Product line Method

For forecasting sales of the various products, head office used to prepare a criteria or guideline about the forecasting which was applied by various sales division (milk production and distribution plants). On the basis of guidelines provided by the head office, each scheme or plant prepares sales budget for future by products and submitted to head office. Head office finalizes the budget after making necessary adjustment on the figure submitted by the plant along with some economic information of respective markets.

4.2.2 Tactical Sales Plan

Tactical sales plan represents the sales plan for short period. DDC has a system of preparing the sales plan for one year by product and various milk distribution schemes. Sales budget summary of the corporation for the FY 63/64 is as follows.

4.2.2.1 Sales Budget Summary

The sales budget summary of the corporation for FY 63/64 is as follows:

Table 4.1
Sales Budget Summary
For the FY 2063/064 (By Product)

(in 000)

Products	Unit	Rate (average)	Amount (Rs)	Ratio (%)
Ref.	Input=1	Input=2	1×2=3	3/Total =4
Milk (Liter)	65327	28	1829156	77.56
Dahi (Liter)	1854	75	139050	5.83
Butter (Liter)	224	275	61600	2.58
Cheese (Kg)	165	280	46200	1.94
Ghee (Kg)	982	275	270050	11.32
Panir (Kg)	85	280	23800	0.99

Ice cream (Liter)	62	250	15500	0.65
Total	-	-	2385356	100

Source: Appendix

The ratio of various products in total sales is computed by using price of product of the six fiscal year unto FY 63/64. The results of the ratio of individual products on total sales are given in Appendix-II.

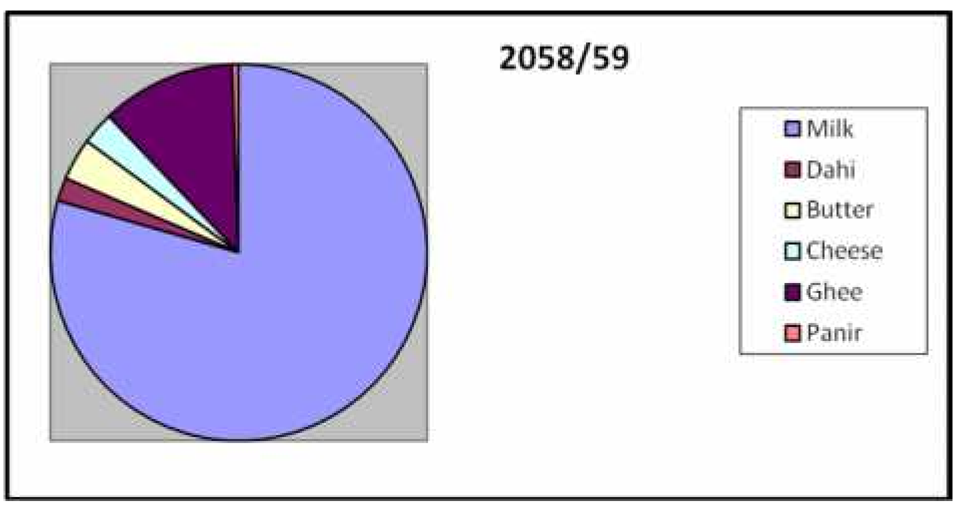
Table 4.2

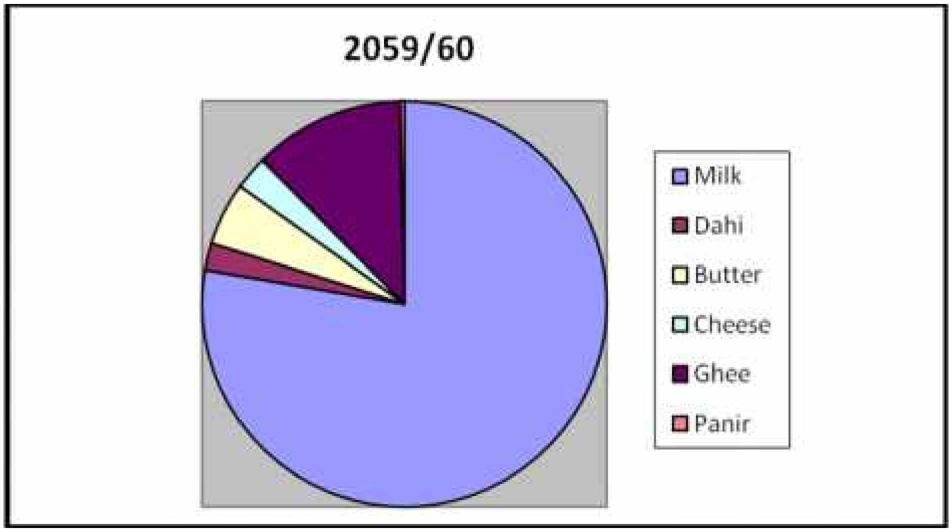
Chart Showing the Percentage Share of Products on Total Sales

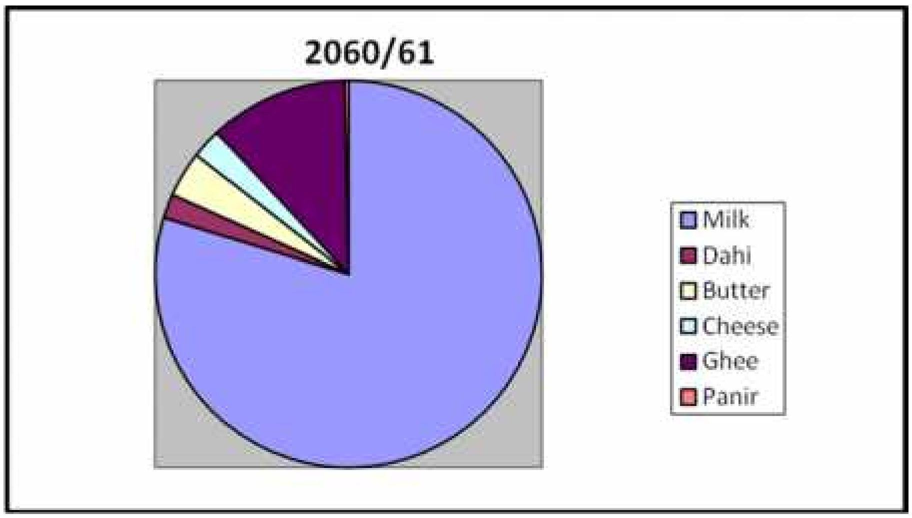
Basic Price –FY 2063/64

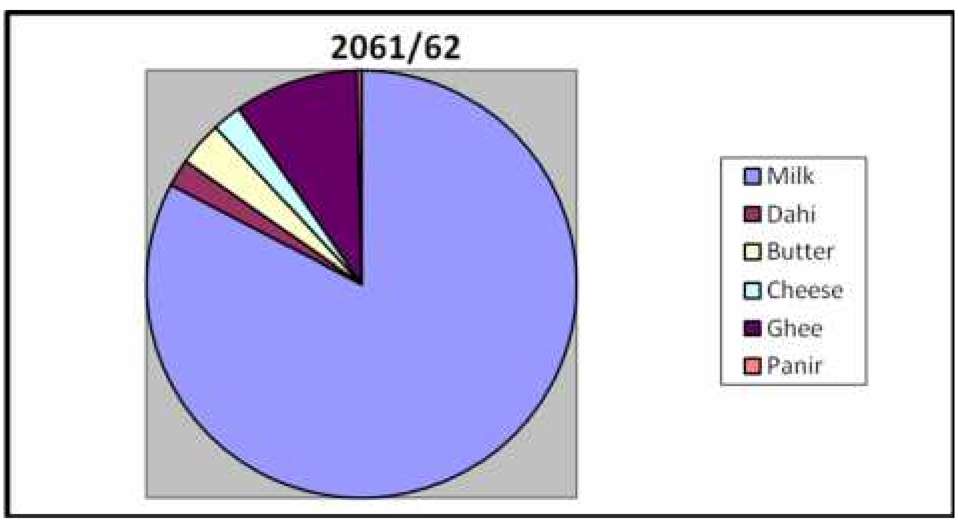
(In Percentage)

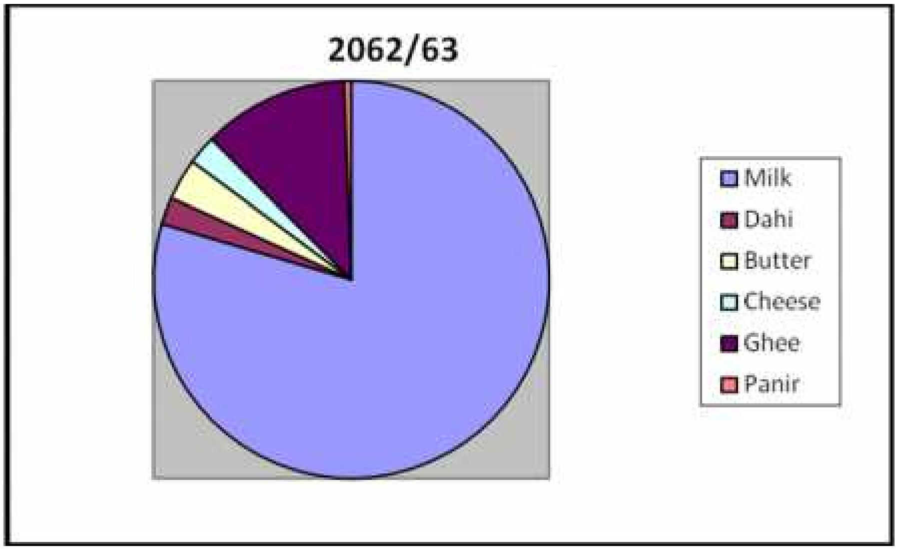
Product/FY	2058/59	2059/60	2060/61	2061/62	2062/63	2063/64
Milk	79.31	79.19	77.30	77.86	78.76	77.56
Dahi	2.19	2.00	2.04	2.02	9.66	5.83
Butter	3.37	3.61	4.32	9.11	2.56	2.58
Cheese	2.37	2.81	3.43	1.93	1.93	1.94
Ghee	11.89	11.52	11.81	8.08	10.59	10.59
Panir	0.58	0.55	0.72	0.57	0.98	0.99
Ice cream	0.29	0.32	0.38	0.41	0.52	0.65
Total	100	100	100	100	100	100

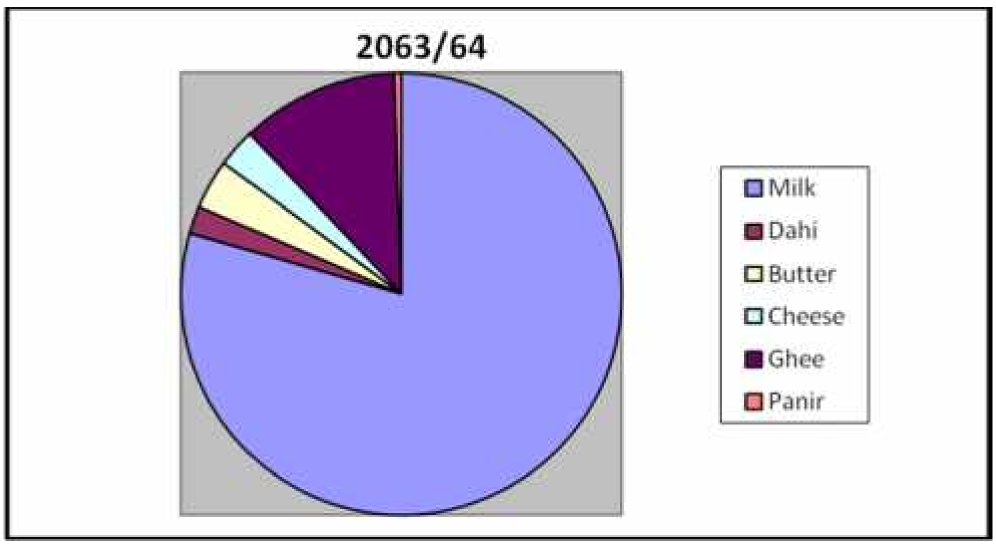



2059/60
Milk
Dahi
Butter
Cheese
Ghee
Panir


2060/61
Milk
Dahi
Butter
Cheese
Ghee
Panir


2061/62
Milk
Dahi
Butter
Cheese
Ghee
Panir





The presentation of sales budget summary and comparative analyses of share of products showed that, on the overall sales of the corporation around 80% was covered by milk in every year from the FY 2058/59 to FY 2063/64. Dahi covered more than 2% and less 2.5% in the FY 2058/59 to 2061/62 of total sales and it increased to 9.66% and 5.83% in the FY2062/63 to 2063/64. The share of Butter on total sales increased from the FY 2058/059 to FY 2061/62 from 3.37% to 9.11% then after it decreased to 2.56% and 2.58% in the FY 2062/63 to 2063/64. The share of Cheese in total sales was improving up to 2060/61 and after than it was decreased. After milk, the second highest share on total sales was taken by Ghee, which ranged between 10% and 12.0% in almost years. Another two products, Panir and Ice cream covered less than one percent share every year. It showed that the share of various products expect Butter and Ghee, remain stable in each year, there is no high variation on the share of various products. Some fluctuation in ghee and butter was on account of level of milk collection. According to senior economist of DDC Mrs. Bimala Mahargan, due to variation in collection of milk from farmers, the shares of butter and ghee have fluctuated. The corporation makes required milk by using skim milk powder and butter oil when milk from farmers with 5% to 5.5% fat was not available. The production and sales of butter and ghee, therefore has decreased The Pasteurized milk was the major earning source of the corporation in comparison to other product.

4.2.2.2 Detailed Sales Plan of DDC

DDC is a manufacturing enterprise, which prepares the annual sales plan based on various products and different milk distribution scheme of the corporation. Detailed sales plan of the corporation for the FY 63/64 is as bellow.

Table 4.3

Detailed Sales Plan

(By Product and scheme)

For the FY 2063/064 (in 000)

Product scheme/Details	Activities Base	Unit	Rate	Amount(Rs)
	Ref	Input=1	Input=2	1×2=3
Milk:-	Liter			
Kathmandu		58281	28	1631868
Biratnagar		3893	28	109004
Hetauda		2875	28	80500
Lumbini		276	28	7728
Total of Milk		65326	28	18291280

Dahi:-	Liter			
Kathmandu		-	-	
Biratnagar		883	75	66225
Hetauda		359	75	26925
Lumbini		36	75	2700
MP&DS		576	75	43200
Total of Dahi		1854	75	139050
Butter :-	Kg			
Kathmandu	-			
Biratnagar		10	275	2750
Hetauda		9	275	2475
Lumbini		8	275	2200
MP&DS		297	275	81675
Total of Butter		224	275	61600
Cheese :-		Kg		
Kathmandu		-		
Biratnagar		4	280	1120
Hetauda		5	280	1400
Lumbini		4	280	1120
MP&DS		152	280	42560
Total of Cheese		165	280	46200
Ghee :-		Kg		
Kathmandu		22	275	6050
Biratnagar		152	275	41800
Hetauda		103	275	28325
Lumbini		64	275	17600
MP&DS		641	275	176275
Total of Ghee		982	275	270050
Panir : -		Kg		
Kathmandu		-		
Biratnagar		12	280	3360
Hetauda		8	280	2240
Lumbini		3	280	840
MP&DS		62	280	17360
Total of Panir		85	280	23800
Ice-cream :-		Liter		
		-		

Kathmandu Biratnagar Hetauda Lumbini MP&DS		2 8 - 52	250 250 - 250	500 2000 - 13000
Total of Ice-cream		62	250	15500
Total for Company :Milk Dahi Butter Cheese Ghee Panir Ice-cream	Liter	62327 1854 224 165 982 85 62	28 75 275 280 275 280 280	1829156 139050 61600 46200 270050 23800 15500
Grand total				2385356

MP&DS = Milk production and distribution scheme (Lainchaur)

The above sales budget detailed by products and scheme, demonstrates the sales of the corporation for the FY 2063/64. The budget showed that Kathmandu was the leading plant for production and sales of Pasteurized milk. More than 76 percent of the total milk sales were in Kathmandu. Hetuada and Biratnagar ranked the second and third position respectively in the sales of milk. Lumbini had small share on the total sales of the milk but MP&DS had no share on selling of milk where as MPDDS collected milk and sold it in Hetauda and .

Kathmandu plant sold milk and demand of the other products in Kathmandu was fulfilled by MP&DS, comprising 43% of Dahi, 56% of Butter, 82% of Cheese, 50% of Ghee, 78% of Panir and 75% of Ice cream in total sales of the corporation. Biratnagar had 18% share of Dahi, 2% of Butter, less than 2% of Cheese, 13%of Ghee, 7% of Panir and 6% of Ice cream. Hetauda has 19%share of Dahi, 2% of Butter, less than 2% of Cheese, 11% of Ghee and 4% of Panir and Ice cream. Lumbini is a small plant of the corporation with 5% share of Ghee, 1% share of

Dahi and Cheese and less than 1% share of Butter and Panir. MPDDS is a new plant of the corporation that collects milk from farmers and sales it to Hetauda. It produces 6000 Kg Ghee for sale in other market.

In the total sales of the corporation of Rs. 2385356,000, Kathmandu made 68.41% share amounting to Rs. 1631868,000 by selling milk only. MP&DS is the another leading plant of the corporation which sales milk products except pasteurized milk and takes 12.87% share amounting to Rs. 307142,000, Biratnagar is one of the large plant of the corporation with 9.27% share amounting to Rs 221235,000. The cause of its fewer shares on sales of various products is the use of collected milk for production of skim milk powder which use internally in the slack collection season, Hetauda and Lumbini has share of 5.94% and 1.34% amounting to Rs. 141865,000 and Rs. 32188,000 respectively.

4.2.3 Long Range Sales Plan of DDC

In general practice, a business organization may schedule strategic long-range sales plan as one of the first step in the overall planning process DDC prepares annual sales volume of various products where as long term sales plan is developed on annual amount basis. The sales plan is the foundation for periodic planning for an enterprise, it is considered as cash generating source and basis for development of other functional budget. The volume of final products to be produced is determined by sales unit and all other expenses (cost) related budget is prepared on the basis of production unit. The various products sales budget of DDC from the FY 2058/059 to FY 2063/064 is as bellow.

Table 4.4

Comparative Sales Budget

For 6 years (2058/059 to 2063/064)

(By Products) (in 000)

FY Product		Milk (Liter)	Dahi (Liter)	Butter (Kg)	Cheese (Kg)	Ghee (Kg)	Panir (Kg)	Ice-cream
2058/059	Vol.	54,092	927	279	147	954	49	30
		-	-	-	-	-	-	-
2059/060	Vol.	60,262	960	310	181	887	48	39
	+%	+11.41	+3.56	+0.11	+23.12	-7.02	-2.00	+3.00
2060/61	Vol.	61,217	1,011	327	207	893	68	43
	+%	+ 0.75	+ 5.31	+ 5.48	+ 14.36	0.68	41.67	+10.26
2061/62	Vol.	68214	1064	798	156	708	54	43
	+%	+11.43	+5.24	+144.03	-24.64	-21.72	-20.59	-
2062/063	Vol.	65484	1841	223	161	921	87	56
	+%	+4	+73.02	-72.06	+3.21	+30.08	+61.11	+30.23
2063/064	Vol.	62327	1854	224	165	982	85	62
	+%	+4.82	+.071	+0.44	+2.48	+6.62	-2.30	+10.71

The above table shows that selling of milk increased from the FY 2058/059 to FY 2061/062 and comparatively it increased slowly in other fiscal year and then it decreased in fiscal year 2062/63 and 2063/64 In other words budget estimate is less than the previous budget. The budget of Dahi fluctuated during last 6 year, in the FY 2059/05 to 2060/061 it increased than the budget by 3.56% and 5.31% respectively, but estimate sales decreased than the previous budget in the FY 2061/062 to 5.24 and estimated sales increased by 73.02% in FY 2062/63 and decreased in fiscal year 2063/64 by 0.71% The trend of sales budget of butter was not stable. It is increased in the FY 2059/060, 2060/61and 2061/6.3 by 0.11%, 5.48% and 144.03% but decreased in the FY 2062/63 by 72.02%. The sales budget of cheese shows that decreased in the FY 206/06 by 24.64% than the previous budget. The sales of Ghee were in fluctuating. The budgeted sales of Ghee were decreased by 7.02% and 21.64% in F.Y.2059/60 and 2061/62 and then increased in other fiscal year. The sales of Panir increased than the previous estimation in FY 2060/061, 2062/63 by 41.67% and61.11% respectively but then it decreased in FY 2059/060, 2061/62 and 2063/64 by 2.00%, 20.59% and 2.3%. The estimated sales of Ice cream increased in every fiscal year.

The major cause of increase or decrease beyond 10% is because of the estimation of the department or head office on the basis previous actual result and other information of market. But increase or decrease by more than 10% is the cause of change in fixed assets (i.e. installment of new plant or huge problem arise in the plant), government import and export policy, policy related to farmers, to attract donor organization. Some time it is also seen because of unsystematic budgeting process and the increase of price of milk. According to senior economist of DDC Mrs. Bimala Maharjan, the higher percentage of increase in the sales estimation of Panir is the cause of increasing demand in the market but she has no sufficient cause about high fluctuating trends of Ice cream.

Comparative sales budget of the corporation for 6 years in amounts is presents as bellows.

Table 4.5

Comparative Sales Budget

(in 0000)

FY	2058/59	2059/60	2060/61	2061/62	2062/63	2063/64
Sales target	164,678	168,250	189,887	210245	217378	238536
±%	-------	+2.17	+12.86	+10.72	+3.39	+9.74

Source: Appendix

±%**-** increase or decrease as previous budget. It can be seen in the above table that sales increased than the previous budget in each year. It presents the increasing market of DDC from above past budget amount. To estimate the future budget trends for corporation least square method was used. Least square method will show the relationship of time (years) and budgeted sales.

Table 4.6

Time Series Analysis

Fitting Straight Line Trends by Least Square Method

(in 000)

FY	Budgeted Sales (Y)	X=2(Y-2061.5)	XY	X^2
2058/59	164,678	-5	-823390	25
2059/60	168,250	-3	-504750	9
2060/61	189,887	-1	-189887	1
2061/62	210245	1	210245	1
2062/63	217368	3	652104	9
2063/64	238536	5	1192680	25
N=6	ΣY=1164126	ΣX=0	ΣXY=537002	$\Sigma X^2=70$

Since number of year is even, so the deviation are taken from middle of the year 2061 and 2062.

Straight line trends Y=a+bx

Where,

$$a = \frac{\Sigma y}{n} = \frac{1010821}{6} = \text{Rs. } 194021$$

$$b = \frac{\Sigma xy}{\Sigma x^2} = \frac{365891}{70} = 7671.46$$

The trend line shows the positive budgeted sales figure of Rs. 7671.46 will increase in the budget sales every year. If budgeted trends of the past year continue for the future, then budgeted sales for the FY 2065/66 will be,

$$Y = 194021 + 7671.46 \times 9$$

$$Y = 263064.14$$

Therefore, on the basis of past records, an estimated sale for the FY 2065/66 will be Rs. 293064.14

4.2.4 Actual Performance of the Corporation

Following table shows the sales target and sales achievement of various products of DDC from FY 2058/59 to 2063/64.

Table 4.7

Sales Plan and Achievement

For 6 Year Period (by Products)

(000)

Year/ Product		Milk (Ltr)	Dahi (Ltr)	Butter (Kg)	Cheese (Kg)	Ghee (Kg)	Panir (Kg)	Ice cream (Ltr)
2058/059	Target	54,092	927	279	147	954	49	30
	Actual	57,764	1,007	277	146	876	49	31
	Percent (%)	106.79	108.62	99.28	99.31	91.82	100.0	103.33
2059/060	Target	60,262	960	310	181	887	48	39
	Actual	60,275	1,057	289	150	832	64	32
	Percent (%)	100.02	110.11	93.22	82.87	93.80	133.3	82.05
2060/61	Target	61,216	1,011	327	207	893	68	43
	Actual	57,492	1,102	232	161	704	70	38
	Percent (%)	93.92	102	70.95	77.78	78.84	102.9	88.37
2061/62	Target	68214	1,064	798	156	708	54	43
	Actual	59317	985	710	143	644	50	39
	Percent (%)	86.96	92.57	88.97	91.67	90.96	92.59	90.69
2062/63	Target	65848	1841	223	161	921	87	56
	Actual	53328	1274	150	143	658	58	37
	Percent (%)	80.98	69.20	67.26	88.82	71.44	66.67	66.07
2063/64	target	65327	1854	224	165	982	85	62
	Actual	52262	1705	201	148	823	78	51.54
	Percent (%)	80.00	91.96	89.73	88.09	83.80	91.76	83.13

Above table presents the overall performance of the corporation on sales of various products. The principle of profit planning views that the deviation of 5% is not so worst in the budgeting process, but in above table it shows that, there is a variation up to 35% in between budget and actual sales of the various products.

The achievement of target on sales of milk is not satisfactory. The corporation can't achieve the target in FY 2060/061, 2061/062, 2062/63 and 2063/64 by 6.07%, 13.04%, 19.02% and 20% respectively. It just achieves the target in FY 2058/059 and 2059/060 by 6.02% and 0.02% more than actual sales. The target on the sales of Dahi is mostly achieved FY 2061/062, 2062/063, and 2063/064 by 7.43%, 30.8%, and 8.04%. It sales more than target in FY 2058/59, 2059/060, 2060/061 by 8.62%, 10.11%, and 2% respectively.

The corporation completely fails to achieve the target of Butter sales. The failure rate of the corporation is 0.72% in FY 2058/059, 6.78% in FY 2059/060, 29.05% in FY 2060/061, 11.03% in FY 2061/062, 32.74% and 10.91% in 2062/63 & 2063/64 respectively The cause of this failure is only a ineffectiveness of the management basically budgeting sector as well as implementation sector. The target of Cheese and Ghee is also not achieved by the corporation in these 6 years. The corporation almost all in 6 year couldn’t achieve its budgeted figure. It shows that the budgeting department of the corporation prepares the budget not systematically. In the process of achieving target sales of Panir, corporation gets over sales of 33.3%, 2.94% in FY 2059/60 and 2060/61 respectively. but failure to achieve target by 7.41%, 33.33% and 8.24% in FY 2061/062, 2062/63 and 2063/064 respectively and just achieve the target in FY 2058/059. Corporation makes excess sales of the Ice cream in 2058/059 3.33% but failure to achieve the target in 2059/60, 2060/061, 2061/062, 2062/63 and 2063/064 by 17.95%, 11.63%, 9.31%, 33.93% and 16.87% respectively

The above comparison shows that there is no effective system of budgeting in the corporation, and the estimation of the demand for the future period is not based on the real ground. It only presents the work of unqualified staff of the corporation. In this point senior economist of the corporation Mrs. Bimala Maharjan comments that it is due to lack of capacity to collect the sufficient target material and huge political and economic problems.

The comparison between targeted and actual amount of sales and to fond the correlation between them, following table presents the performance of the corporation in amount.

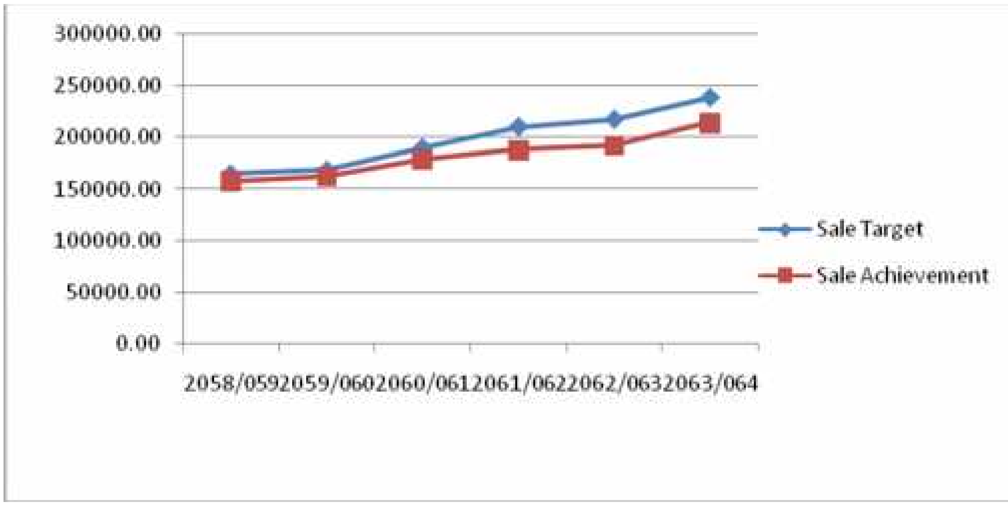
Table 4.8
Sales Plan and Achievement
(Milk and Milk Products)

(Rs.0000)

Fiscal Year	Sale Target	Sale Achievement	% of achievement
2058/059	164,678	157218	95.47
2059/060	168,250	161823	96.18
2060/061	189,887	178513	94.01
2061/062	210245	187602	89.23
2062/063	217378	191931	88.30
2063/064	238536	213943	89.69

Analysis of the above sales figure shows that the actual sales of the corporation are always less than targeted sales. In the FY 058/059, 2059/060, 2060/061, 2061/062, 2062/063, 2063/064 sales achievement are 95.47%, 96.18%, 94.01%, 89.23%, 88.30% and 89.69 respectively of estimated sales. Thus, comparison of sales plan and actual achievement of DDC shows that, there is lack of expert's planner and lack of good research of market areas where milk products can be sold.

The actual and target sales also can be shown by graphical presentation as follows.



The above graphical presentation shows that actual sales are always less than budgeted sales and both are in increasing trends.

The arithmetical means and standard deviation with their co-efficient of variation of sales target and achievement for 6 years period from FY 2058/059 to FY 2063/064 are calculated in appendix no: 2 and summary is presented as bellows.

Summary of the Calculation

Particular	Budgeted sales (X) in “Rs.0000”	Actual Sales (Y) in “Rs.0000”
Mean	198162.33	181838.33
Standard Deviation	26550.87	19074.13
C.V.	13.39%	10.49%
r=0.990	r^2=0.9801	Probable error of r=0.008124

This analysis shows that actual and target sales seems to be fluctuating from year to year, however it is in increasing trends The mean value of budgeted sales is higher than actual sales and coefficient of variation and standard deviation are too as well.

To find correlation between target and actual sales, Karl parson's coefficient of correlation ® is calculated, for this purpose target sales (x) as assumed to be independent variable and sales achievement (y) is assumed to be dependent variable. It is assumed that achievement will increase as target increase or decrease. The calculation of (r) and its probable errors is shown in appendix-3, the value of (r) is 0.990, and this figure of (r) denotes that there is positive correlation between sales target and achievement. In other words sales achievement is going on the similar way of sales target. The significant of (r) can be tested by the help of probable error of (r). Probable error of (r) =0.008124.

Since (r) >6 i.e. PE (0.99>6×0.008124), the value of 'r' is definitely significant, so it can be say that achievement of sales will go on same direction that of target sales.

A regression line can be also filled to show the relationship between target sales and actual sales and to forecast the achievement with given target. For this purpose achievement has been assumed to be dependent upon target sales, which is independent.

Here,

The regression line of achievement (y) on the target (x)

$$Y-\overline{Y} = r \times \frac{SDy}{SDx} \ (\times -\overline{X})$$

When,

Mean of X = 198162.33

Mean of Y = 181838.33

Standard deviation of X = 26550.87

Standard deviation of Y = 19077.13

Correlation of coefficient (r) = 0.99

Or $Y - 181838.33 = 099 \left(\frac{19074.13}{26550.87}\right) (X-198162.33)$

Or Y = 0.7112x – 140936.11 + 181838.33

Or Y = 0.7112x + 40902.22

So $\bar{X}$ = 198162.33 $\bar{Y}$ = 181838.33

SD(x) = 18192.05 SD(y) = 13616.95 r = 0.977

So $(Y - \bar{Y}) = r \frac{dy}{dn} (n - \bar{X})$

Or Y – 181838.33 = 0.99 $\left(\frac{19074.13}{26550.87}\right)$(X-198162.33)

Or Y – 181838.33 = 0.7112 (X-198162.33)

Or Y = 0.7112x + 40902.22

Here, 40902.22 are called the Y-intercepts because its value is the point in which the regression line crosses the Y-axis that is vertical axis. 0.7112 is the slope of line, It represents how much unit change of the independent variable X (target sales) changes the dependent variable Y (sales achievement) and above regression equation shows that the positive relationship between target and actual sales.

Least square method can be used to analyze the trends of actual sales and to estimate the possible sales figure for a given time of years. Least square method will show the relationship of time (years) and actual sales.

Table 4.9

Fitting Straight Line Trends by Least Square Method

FY	Actual sales(Y)	X	XY	X^2
2058/59	157218	-5	-786090	25
2059/60	161823	-3	-485469	9
2060/61	178513	-1	-178513	1
2061/62	187602	1	187602	1
2062/63	191931	3	575793	9
2063/64	213943	5	1069715	25
Total	1091030	0	383038	70

FY 2060/61 and 2061/62 is assumed as base year

Straight line trend Y=a+bX

$$a = \frac{\Sigma y}{N} = \frac{1091030}{6} = 181838.33$$

$$b = \frac{\Sigma \times y}{\Sigma \times 2} = \frac{383038}{70} = 5471.97$$

Therefore,

$$y = 181838.33 + 5471.97x.$$

The trend line shows the positive sales figure of Rs. 5471.97 which increase the sales every year. If sales trends of past years continue for future, then sales for FY2064/065 will be

$$y = 181838.97 + 5471.97 \times 7$$

$$y = 220142.12$$

Therefore, on the basis of past records, estimated sales for the FY 2063/064 will be Rs. 220142.12.

4.3 Sales and Profitability of the Corporation

Profit means excess of revenue than cost. In production process, there are various cost incurred by the producers in behalf of product and get revenue from sales of such products. Profit and sales are interrelated, without sales there is no profit. So, it can say that profit depends up on sales. The trends of profit/ loss and actual sales of the corporation are as bellow.

Table 4.10
Actual Sales and Profit/Loss
(For 6-Year Period)

FY	Actual Sales	Profit/loss	Profit/loss margin
2058/059	157218	(7,613)	-5.3115%
2059/060	161823	893	-7.1328%

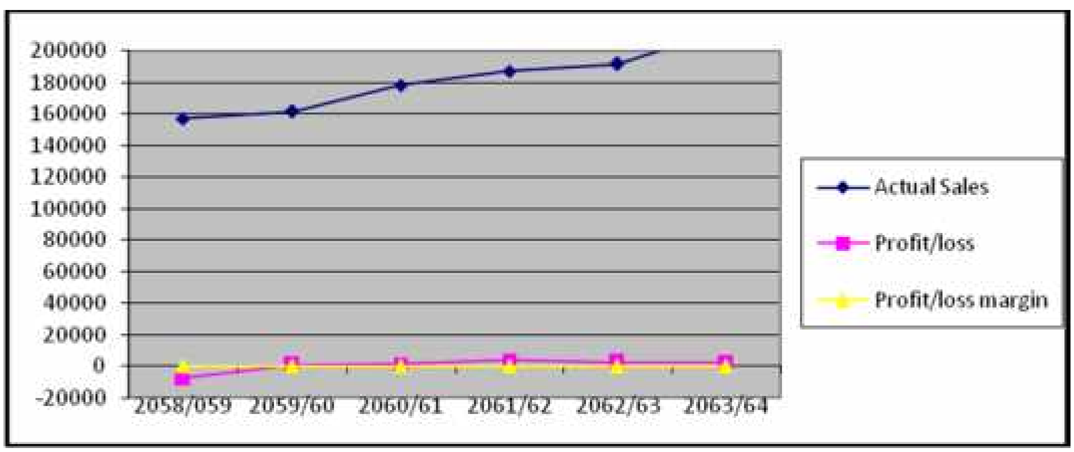
2060/061	178513	1412	-4.9172%
2061/062	187602	3792	-0.5443%
2062/63	191931	2554	0.815
2063/64	213943	2756	0.6525

(in 0000)

Source: Appendix

The above table shows the actual sales and profit/loss status of the corporation in which corporation incurred losses in year 56/57 to…… 59/60. The trends of loss are in increasing trends from 2056/057 to 2058/059 then after there is certain % of profit. For further analysis, above data is presented in graphical figure as bellows.

Sales and Profit/Loss of the Corporation



The table shows that the trends of the actual sales are in increasing trends but the trends of the loss in fluctuating trends. While the corporation is succeed to increase its sales as requirement of the budget but can't success to increase the profit. But there is little way to home satisfied but to profit in last 3 years.

To find the correlation between actual sales and profit/loss, Karl Person's coefficient of correlation (r) is calculated. For this purpose actual sales (X) is assumed to be independent variables. The calculation of 'r' and Its probable errors as well as standard deviation and coefficient of variation is calculated in appendix-III and summarized as bellow.

Summary of the Calculation

(in 0000)

Particular	Actual sales (X)	Profit & Loss (Y)
Mean	181838.33	632.33
Standard Deviation	19077.13	17348.73
C.V	10.49%	2743.62
r = 0.6911	r^2 = 47.46%	PE(r) = 0.2132

Source: Appendix

For the calculation it has been found that the value of (r) is 0.6911 which denotes that there is negative correlation between actual sales and profit/loss. In other words, the trends of profit/loss are not going on the similar way as the rate of actual sales. The significant of (r) can be tested by the help of probable error of (r). We have probable error of 'r' = 0.3911

r < PE(r) i.e. (0.6911< 0.2132)

The value of the 'r' is not significant so it can be said that profit and loss will go on different direction that of actual sales. To know about such diversion between sales and profitability, a separate analysis related to comparison between sales revenue, cost and profit of the corporation is required which is presented below.

It can also measure the degree of relationship between sales and profit/loss through a regression line. By using the regression line it is also possible to forecast the possible profit and loss with given figure of actual sales. For this purpose, profit/loss assume as dependent upon the actual sales

So the regression line of profit and loss (Y) on actual sales (X) is Regression line of Y on X

$$Y-\overline{Y}=\frac{S.D.(Y)}{S.D.(X)}(X-\overline{X})$$

Substitution the value on formula:-

$$Y-632.33 = \frac{17348.73}{19077.13}(X-181838.33)$$

$$\text{Or } Y = 0.9093x - 165363.66 + 632.33$$

$$\text{Or } Y = 0.9093x - 164732.33$$

Here 164732.33 is called Y-intercept because Its value is the point at which regression line crosses the Y-axis that is vertical axis. 0.9093 is the slope of line, it represents the change of the independent variable X (Actual sales) change the dependent variable Y (Profit & loss a/c) and above regression equation shows that the negative relationship.

4.4 Sales, Cost and Profit Relationship

In the correlation and regression analysis, it shows that profit of the corporation is not increase as sales. But losses of the corporation also increase with increase in sales, which is not suitable for performance of the corporation.

To know about such diversion between sales and profit, a comparative study of sales cost and profit for six years period is prepared which is presented as bellow.

Table 4.11

Sales, Cost and Profit Relationship

(In Rs. '0000')

FY	Sales		Cost		Profit / Loss	
	Figure	**± %**	**Figure**	**± %**	**Figure**	**± %**
2058/059	157218		149605		(7613)	
2059/060	161823	+2.92	162716	+2.14	893	+111.73%
2060/061	178513	+10.31	179925	+ 7.35	1412	+58.12%
2061/062	187602	+5.09	191331	+6.34	3729	+164.09%
2062/63	191931	+2.31	194485	+1.65	2554	+40.89%
2063/64	213943	+11.46	216699	+11.42	2756	+7.91%

Source: Appendix

In the above table, it shows the position of sales, cost and profit for 6 years study period. Actual sale of the corporation is in increasing trends along with cost causing the increase in loss also in first 3 years and small profit then after.

In FY 2059/060, sales increased by 10.31% than the previous year and cost increased by 2.14% which creates 111.73% increasing in profit of the corporation than previous year. In FY 2060/061 sales is increased by 4.29% where cost only increased by 7.35% than previous year which creates 58.12% increase in the profit than previous year. In FY 20621/062 sales of the corporation increases by 5.09% where as cost increased by 6.34% than previous year, which creates 164.09% increase in profit. In FY 2060/061, sales increases by 2.31% but cost increases by 1.65% only, which increase the profit by 40.89% than previous year. In FY 2062/063 sales of the corporation is increases by 11.46% and cost increase by 11.42% which produced the profit of the corporation by 7.91% than previous year.

4.5 Production Budget

Production is the base for sales in the manufacturing enterprises without production any manufacturing companies cannot able to provide goods and services to the customer. On this view, this study wants to show production budget and achievement of the corporation as subsidiary points of our objectives. A production budget is prepared on the basis of sales budget. A production plan incorporates the estimates of total volume of production with the scheduling of operation by days, week and months. It is the estimation of the quality of goods to be produced during the planned period. A comparison between actual and budgeted production of various products of Dairy Development Corporation is presented as bellow.

Table 4.12

Target Production and Achievement by Year

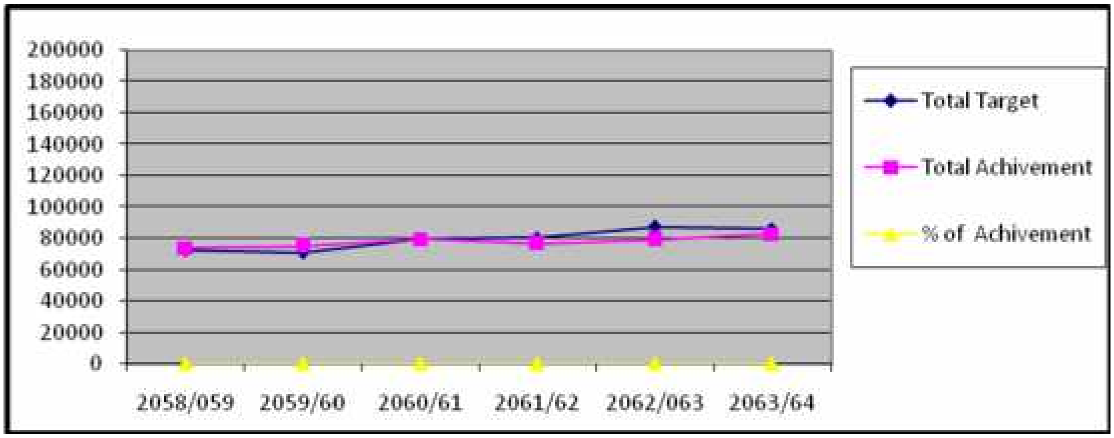
FY	Total Target	Total Achievement	% of Achievement
2058/059	72630.2	73778.65	101.58
2059/060	71142.5	75042.25	105.48
2060/061	79539	79629	100.11
2061/062	80473	76678	95.28
2062/063	87367	79136	90.58
2063/064	86263.4	83139.35	96.34

Source: Appendix

The above table shows that achievement is higher in FY 2059/060 which is 105.48% to target production and in FY 2062/063, achievement is lowest, which is 90.58% to target production, likewise in FY 2058/059, 2060/061, 2061/062 and 2063/064 the achievement is 101.58%, 100.11%, 95.28% and 96.34% of the targeted production respectively.

The budgeted and actual production can be shown by graphical presentation as follows:

Target and Achievement of Production



It is obvious from the above graph that the actual production for FAY 2061/062, 2062/063 to 2063/064 is higher than targeted production and in the FY 2058/059, 59/60 and 2060/61, it is higher than budgeted production

4.6 Analysis of the Primary Data

To find out the reasons for existing discrepancies between planned and actual achievement in the field of sales and production budgeting of the Dairy Development Corporation, opinion poll of 52 sample employees of the corporation of various level (20 officer level and 32 other staff among of total 52 officer level and 79 other staff of central office of the corporation, Lainchour) were made through specific questionnaire and result derived from the same are as follows.

Table 4.13
Cause of Deviation on Budgeting

S. no.	Items of Cause	No. of Employees	Percentage
1	Lack of effective planning	26	50
2	Political Disturbance	8	15.39
3	Lack of capacity	6	11.54
4	Competition in the market	4	7.69
5	Lack of effective administration	4	7.69
6	Other	4	7.69
7	Total	52	100

Source: Appendix

From the result, it becomes clear that major reason for such discrepancies is ineffective planning followed by 50% of the total employees. Another major reason is political disturbances which are followed by 15.39% of total employees. Lack of capacity is another reason of the deviation which is followed by the 11.54% of he total employees. Another reasons founded from the research are lack of effective administration, competition in the market and others which are followed by the 7.69% of the total employees respectively.

It shows that DDC need to take care of facts and develop separate high level planning structure for the effective operation of the corporation, with clearly defined jobs and authority. Besides participatory management system has to be introduced.

4.7 Identification of Cost Variability

Cost variability is considered as tools of planning and controlling of costs. Cost variability is the cost behavior. Cost behavior is the relation to the volume of output. First cost is remain constant regardless of the volume and secondly it change proportionately with the change in output.

Fixed Cost:**-** Fixed costs are those cost that is constant in total within the relevant range but per unit fixed cost rate is different. Example of the fixed costs is rent insurance salary etc.

Variable Cost:**-** Variable costs are those costs that change in total for different level of output costs etc are variable.

Semi-Variable Cost:- those expenses which are neither fixed nor variable because they posses some characteristics of both known as semi-variable cost. Telephone expenses Electricity bills etc are examples of semi-variable cost.

Identification of cost variability according of accounting department of Dairy Development Corporation is presented in the following table.

Table 4.14

Cost Classification

Based on FY2062/63

Cost Item	Fixed Cost (Rs)	Variable Cost	
		(Rs)	% of sales
Collection Expenses		1438726717	
Processing Expenses		298290048.6	
Selling & Distribution Expenses		50132030.33	
Administration Expenses	7798827.01		
Gratuity	2226836.69		
Depreciation	3824638.13		
Interest on loan	551234.29	92.54	
Total cost	143180839.1	1787238158	92.54

Annual Sales:- Rs. 1919314,197.21

Total fixed cost of Dairy Development Corporation is Rs. 143180839.1 & total variation cost is Rs1787238158 which is 92.54% of total sales and only 7.46% of sales is available to meet the fixed cost. It indicates that the company is running bellow the BEF point and needs either to increase sales without increasing fixed cost or have to take measure to reduce cost.

4.8 Flexible Budget

A flexible budget is a tactical plan that estimates cost at different level of activity. It provides expenses adjusted plan to assumed output to locate economical operation.

Flexible budget is also called dynamic, activity or output adjusted expenses budget. The essence of flexible budget is the presentation of estimated cost data in a manner that permits their determination of various levels of volume.

Dairy Development Corporation does not prepare flexible budget. On the basis of cost and other data of the FY 2062/063 a flexible budget of Dairy Development Corporation has been prepared as below. To prepare this budget sales revenue has been assumed to remaining same ratio as it is in the FY 2062/063. Similarly variable cost ratio will remain unchanged and fixed cost remains constant.

Table 4.15

Flexible Budget of Dairy Development Corporation

(in 00,000**)**

Particulars	**Activity levels**					
	75%	100%	150%	200%	250%	300%
Sales revenue	14395	19193	28790	38386	47983	57579
Less:- VC @ 92.54% of sales	13321	17761	26642	35523	44403	53284
Contribution margin	1074	1432	2148	2863	3580	4295
Less:- FC	1432	1432	1432	1432	1432	1432
Profit / (Loss)	(358)	----	716	1431	2184	2863

Source: Appendix

The above calculation shows that Dairy Development Corporation is incurring the large amount of fixed cost. Contribution margin of Dairy Development Corporation is 7.46% percent of sales revenue. It is difficult to cover fixed cost at 100% of capacity utilization. The profit comes into picture, if Dairy Development Corporation operates at 140%, which is difficult to utilize the current capacity. So Dairy Development Corporation is supposed to reduce fixed cost.

4.9 Cost-Volume-Profit (CVP) Analysis

Cost volume profit (CVP) analysis is an analytical technique for studying the relationship between volumes, cost, prices and profit. It is important tool used for profit planning in a business. CVP analysis shows which volumes or level of activity is necessary to break even or to gain a certain amount of profit.

Cost volume profit analysis includes both contribution margin analysis and break-even analysis to locate the level of output or productive activities at which sales revenue is exactly equal to total cost to make the company no profit and no loss organization.

Cost volume profit relationship of Dairy Development Corporation is based on the following assumptions.

1. CVP analysis is based on the accounting data of the FY 2062/063 of Dairy Development Corporation
2. Opining and closing balance of the finished products are ignored
3. Activity base is selected in terms of sales revenue
4. Non-operating incomes and non-operating expenses are excluded from the CVP relationship.
5. Selling price, Variable cost ratio and fixed cost per year are assumed to remain constant.
6. Computation is made on total cost basis not in product wise.
7. Dairy Development Corporation's total cost has been divided into fixed and variable cost.

The profit and loss account of Dairy Development Corporation of the FY 2060/061 is taken as basis for following figures:

<u>in Rs. '00000'</u>

Sales revenue (S) = Rs. 19193

Total fixed cost (F) = Rs.1432

Total variable cost (V) = Rs.17872

<u>Calculation of BEP:</u>

Profit volume ratio (P/V ratio) =1-V/S

Where,

V= Variable cost.

S= Sales revenue.

Or,

$$\text{P/V ratio} = 1 - \frac{17872}{19193} = 1 - 0.9311 = 0.0689 = 6.89\%$$

We have,

$$\text{BEP} = \frac{\text{Fixed Cost}}{\text{P/V ratio}} = \frac{1432}{0.0689} = \text{Rs.}20783.74$$

The above calculation shows that the present revenues less than the BEP (Rs.) Dairy Development Corporation's BEP are Rs. 20783.74 (00000). So the Dairy Development Corporation went into loss. It indicates that either Dairy Development corporation is facing the problem of high cost or low pricing. The main reason of such situation is higher amount of collection, processing, administration, interest on loan and selling expenses.

4.10 Major Finding

The analysis of primary and secondary data and information gathered from the management through observation, informal discussion and supplementary questionnaire, it become clear that Dairy Development Corporation was suffered form a number of internal and external problems. Due to various causes Dairy Development Corporation has been unable to prepare and implement Profit Planning and Control technique. Less participation of middle and lower-level employees and lack of expert manpower in major decision making and planning created the critical situation in the way of preparing and achieving the target effectively.

On the basis of the study, following major findings have been drawn.

1. DDC is not using special plans and specific objectives for the comprehensive profit plan. So, budgeting system was not based on systematic projection. Either it was unrealistic or over ambiguous.
2. Dairy Development Corporation followed short-term tactical sales plan rather than long term strategic sales plan.
3. Dairy Development Corporation didn't have separate planning development, these were lack of expert planner and planning was made on traditional basis. The responsibility of budgeting was given to account department but actual performance was measured by economics department, and these two departments did not have close coordination.
4. The top-level executives were only involved in planning and decision making and low level employee's participation was not encouraged.
5. There was inadequate delegation of authorities and responsibilities to planner. There was no effective communication between various departments related with planning and implementation, and high level and low-level management.
6. Sales and production of the DDC increased each year but the rate of growth was disproportionate.
7. There was no proper sales forecasting method. Sales forecasting were done on the basis of personnel judgment of high level mgmt of various responsibility centers
8. The actual sales were always lower than budgeted sales. There was positive correlation coefficient and positive regression equation (line) for budgeted and actual sales.

9. More than 75% of total sales revenue covered by sales of milk and less than 25% from other milk products.
10. There was no proper management to supply milk in urban areas, only 1833 sales booths and 43 sales centers were involved serving overall urban population of Nepal
11. DDC was unable to collect all milk offered by the farmers. The collection structure of the DDC with 1041 MPCSs and 74 MPAs were not sufficient for collection of milk from farmers.
12. Pricing policies of the corporation was not scientific and the government interfered on the price of raw milk and milk products. The board of Dairy Development Corporation seemed as a showpiece.
13. The rate of the percentage increase in cost is higher than the rate of percentage change in the sales, which made difficult to recover cost.
14. The production performance of the corporation was also not satisfactory. Corporation was not able to get target or achieve more than target, which was a sign of lack of effective planning mechanism and implementation capability of the corporation.
15. Dairy Development Corporation was at loss and it increased upto 3rd year and made profit in the succeeding year.
16. The calculated straight line of future profit trends is negative. It shows that there is inadequate evaluation of relevant internal and external variables. Internal variables are controllable that influences the industry's performance.
17. The corporation has not proper practice of segregating cost into fixed variables, semi-variables, However variables cost is represent 95% of sales, which represent the collection, processing and selling expenses, and fixed cost represent 8% of the sales, which includes Administration expenses, Gratuity, description and interest on loan.

18. Dairy Development Corporation is operating below break even point and it is suffering from high fixed cost and low contribution margin. There is lack of cost classification and cost control system.
19. Dairy Development Corporation will earn profit at 140% of current operation, which is impossible.
20. The major causes for inconsistency between planning and achievements were lack of effective planning, lack of capacity, political disturbance etc.

CHAPTER - V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Profit planning and control is the systematic and continuous process. It is the process of planning organizing, staffing leading, co-ordination and controlling of all the operations of an organization. It is one of the most important management tools, which is used to plan and control business operations. Budgets or plans can be treated as a guide for efficient operations for future. Profit planning is important for success of any types of organization. The success of organization is measured by profit. The profit is the path for the activities of every enterprise.

Sales plan is the starting point in the preparation of the comprehensive profit planning and control. All the other plans and budget depend upon the sales budget. The budget is usually presented both in unit and in amount of the sales revenue or sales volume. Sales planning are the estimation of expected future sales. Success and failure of the organization depends upon sales budgeting, so it is prepared on details basis by product and by interim period. The main purpose of the sales planning is to reduce uncertainty of the future revenue, information and control sales activities.

Sales budget is related with revenue, all other budget are related to cost. Sales budget is prepared by focusing the relevant variables estimated for the future and desire profit of every corporation. Generally, there are two types of comprehensive planning. One is strategic long range planning. It is prepared for more than two year and short range planning is related to one-year period.

In Nepal, public enterprises have been established in order to provide basic services, to produce the required goods, to increase the export items, to create opportunities for employment, increase government revenues, increase the national income and to develop the country as a whole. From the above objectives, Nepalese manufacturing enterprise play crucial role in rapid growth of economic and industrial activities.

But the performances of the entire public enterprises are not satisfactory. Public enterprise provides some goods and services but they are incurring loss every year. The main causes of the losses are ambiguous goals and objectives, inadequate knowledge to use profit planning, government intervention in decision, lack of co-ordination and communication between various departments etc. Nowadays, the public enterprises are becoming the burden for the country's economy.

Dairy Development Corporation is manufacturing public enterprises which are established in B.S.2026. The main objectives of the corporation is to provide services to urban people by supplying hygienic and pasteurized milk and dairy products rather than earning profit. Dairy Development Corporations is producing eight types of milk and milk products. There are six projects and forty-three chilling center under Dairy Development Corporation, which covered about 150000 farmers of various parts of Nepal. The marketing network of Dairy Development Corporation covers 1833 sales both and 43 sales center in the various parts of the country.

The present study has been undertaken to examine the role of sales budgeting on the profitability of public enterprise in Nepal with special reference of Dairy Development Corporation, the study has tried to answer certain questions started in statement of problems. This study mainly focused on the sales budgeting process adopted by Dairy Development Corporation and its performance on the budget. It also tries to identify the cause of deviation in budgeted and actual performance of dairy Development Corporation. Similarly, the study attempts to analyze the relationship between sales and profitability of the corporation.

The study has been organized in five chapters consisting of Introduction, Review of literature, research methodology, Data presentation and analysis and summary, conclusion and recommendation. In this study, secondary as well as primary data are used. Statistical tools like, percentage, mean, standard deviation; Variance, Correlation and regression are used with graphical presentation to analyze the data. Similarly, financial tools like, cost-volume-profit analysis and flexible budgeting are also used.

5.2 Conclusion

Like in other PEs, Objectives of the DDC are not clear. The conflicts between social and profit objective are hindering to profit planning programme of the PEs. Dairy Development Corporation has not any effective programme to increase the profitability.

Dairy Development Corporation does not prepare the long-term strategic sales plan but it prepares tactical short-term sales plan that is usually referred as budget. The time period covered by the budgets is one fiscal year. Dairy Development Corporation does not fix the target and special goal for the budgeted period. For example, growth objectives, capacity, utilization, return on net capital employed etc. is not targeted to achieve some specified level.

In DDC, the top- level management prepares the plans and they ignored the participation of middle and lower level employee. In fact, middle and lower level employees perform the main operation tasks of the enterprises.

Dairy Development Corporation does not have separate planning department. Overall responsibilities of preparing profit plan are under account department. However, such department does not show performance.

Collection network of the Dairy Development Corporation Covers 43 chilling centre, 74 milk producers associations, 1041 milk producers' co-operative societies and about 15000 farmers in various areas of the country. It is not sufficient to social motive of the corporation in an agricultural country where 80% of the total population (23.2million) is engaged in agriculture sector.

Marketing network of the corporation covers 1833 sales booth and 43 sales centers in various urban areas. It is not sufficient in current competitive market.

There is no problem for selling the products of Dairy Development Corporation but Corporation was not success to collect all milk offered by farmers.

8. Sales budgeting system of the corporation is traditional. There is not application of comprehensive Profit Planning and Control to prepare budget.

There is not formal forecasting method applied by the corporation to forecast the future sales of the various products. The estimation of sales only depends upon the judgment of top management.

Milk is the major product of the corporation. About 80% of the total sales are covered by milk and about 20% by other milk products.
Kathmandu is the major marketing area of the corporation. 61% of total sales is covered by MP&DS fully depend upon Kathmandu valley. Which presents that about 72% of the total sales revenue of the corporation is generated from Kathmandu Valley.

Sales budget amount of the corporation, mainly in increasing trends but volume of the sales budget of various products is in fluctuating conduction.

Trends line of the budgeted sales presents the increasing trends of sales figure for future on the basis of the past.

Corporation was not success to achieve the target of sales amount in study period, but high fluctuating to achieve the target of various products. For e.g. in FY 2063/64, corporation make less sales than budget by 10.27% of butter, 11.27% of Cheese, 16.2% of Ghee and 16.87% of Ice cream,20% of milk, 8.04% of Dahi, 8.24% of Panir. This presents that there is not a proper planning.

There is highly positive correlation between budgeted and actual sales regression line also presents the similar direction of target and achievement.
There is positive correlation coefficient between sales and profit, regression line also presents the dissimilar. There is a condition that loss of the corporation was in increasing trends in 1st 3 year but current status shows the positive indication with similar trends of the sales.

The rate of the percentage increase in cost is higher than the rate of percentage change in the sales, which presents the lack of cost control in the corporation.

The production performance of the corporation is also not satisfactory. Corporation is not able to get target or achieve more than target, which denotes the lack of effective planning mechanism and implementation capability of the corporation.

Dairy Development Corporation does not have systematic segregation of costs into fixed and variable cost. The costs are roughly classified which is not scientific and appropriate for preparing budget.

Dairy Development Corporation has operating over capacity but lower than BEP. In current capacity, it is impossible to meet the BEP, so cost control is only one method to reduce.

Dairy development Corporation does not analyze the budget variance, cost volume profit and flexible budget, which are the important tools of profit planning.

Corporation has not adequately considered controllable and non- controllable variables affecting the industry. Dairy Development Corporation has no in depth analysis of the industry's strengths and weaknesses. However, this research found the following strength and weakness of the corporation.

Corporation has not adequately considered controllable and non controllable variables affecting the industry. Dairy Development Corporation has in depth analysis of the industry's strengths and weakness. However, this research found the following strength and weakness of the corporation.

A. Strengths:

- Quality products.
- Directly related to basis commodity.
- Government undertaking.
- Job security for employees.

B. Poor Management:

- Poor management.
- Lack of corporate plan.

- Poor performance.
- Lack of skilled work force.

RDC has no satisfactory achievement of specific goals that were targeted. Achievements were low due to following reasons,

- Lack of effective planning.
- Lack of consistency in administration.
- Government intervention.
- Political disturbance.
- Competition in market.
- Others.

5.3 Recommendations

The analysis of role of sales budgeting on the profitability of PEs in Nepal with special reference to Dairy Development Corporation, following recommendation will help to improve DDC's planning performance.

1. Dairy Development Corporation should set its goals for every budget period. Such goals must express net profit on sales, net profit on capital employed, production, sales, etc. Without such goals the operation of the Dairy Development Corporation may not be effective.
2. Dairy Development Corporation must apply the overall concepts of profit planning and Control by preparing plan for future.
3. Dairy Development Corporation should develop the long-term strategic plans for every aspects of its operation and short-term plan should prepare as a subsidiary of long -range plan.
4. Separate planning department should be formulated with expert planner and forgive the traditional planning system. Management should be given full

authority, responsibility and accountability for planning and control operation.

5. Dairy Development Corporation should apply participative type of planning and decision making in which middle and lower level employees should be encouraged to participate in decision-making process.
6. Make consistency in the trend of sales budgeting. High fluctuation in every years target is not suitable.
7. Apply the suitable sales forecasting technique. The combination of economic rhythms method and correlation methods is suitable for the corporation.
8. To meet the target of the sales, sales budget should be prepared after depth analysis of environmental factor and prepare the effective implementation structure. Dairy Development Corporation should consider the sales plan while planning production.
9. Dairy Development Corporation must prepare the strong structure for distribution of milk of making a co-ordination with private sector to avoid unnecessary competition between dairies.
10. Dairy Development Corporation should reduce the share of milk on total sales and increase the share of other milk products which should increase the profitability of the corporation.
11. Scientific pricing policies should be adopted. Remove unnecessary government interferes on pricing system.
12. Cost control is the only way to increase the industry's profitability. Therefore, cost reduction programmers should be introduced for each responsibility centers.
13. Dairy Development Corporation should focus on milk collection and processing cost because these expenses cover more than 90% of total cost. It would be profitable for the corporation if these costs can be minimized to some extent.

14. Dairy Development Corporation should review the present cost structure and develop effective cost system for perfect profit planning there should be scientific and effective system of separating cost into fixed and variables.
15. In Dairy Development Corporation, the implementation of budgeting programme is in very poor condition and there is no system of taking corrective action for re-planning. Management neglects the experience and evaluation of past results so analyzed in detail of past results and future probable condition to develop the profit plan. Every manager of the corporation should understand role of budgeting. Sales budget as well as other functional budgets should prepare in detail and separately.
16. System of periodic performance report should be strictly followed, to be conscious toward poor performance and to take corrective action timely.
17. Dairy Development Corporation should introduce the system of preparing flexible budgeting. It should analyze BEP for each product and company as a whole for the proper planning of profit.
18. Dairy Development Corporation should have in depth analysis of the corporation's strength and weaknesses. It should try to overcome its weaknesses by using the strength. Corporation should analyze its controllable and non-controllable variables.
19. By the unnecessary government intervention corporation incurred huge amounts of loss every year. It is not in behalf of the country to run a corporation by using the national fund in current competitive market. Therefore, either government forgives the corporation to the effective management or privatizes it.
20. Finally, a systemic approach should be made towards comprehensive profit planning. This can be considerably contributed to increase the profitability and efficiency of the industry. To adopt this approach, planning experts should be hired.

APPENDIX - I

The comparative positions of the marketing center of Dairy Development Corporation for the last five years are as Follows:

Computation of the share of the Various Products on Total Sales

(By Product)

		2060/61				2062/63		
	Rate	Unit	Rs		%			%
M	24	68214	1637136	26	77.86	65848	1712048	80.73
D	40	1064	42560	55	2.02	921	230250	9.66
B	240	789	191520	250	9.11	1841	101255	2.56
C	310	156	40560	260	1.93	161	41860	1.93
G	250	708	169920	250	8.08	56	11200	10.59
P	225	54	12150	245	0.57	87	21315	0.98
I	200	43	8600	200	0.41	223	55750	0.52
Total	2102446			100	2173678			100

APPENDIX - II

Calculation of Mean and Standard Deviation (Of Actual and Target Sales)

F Y	sales Target(X)	Actual Sales (Y)	$U=(X-\bar{X})$	$U^2=(X-\bar{X})^2$	$V=(Y-\bar{Y})$	$V^2=(Y-\bar{Y})^2$	UV
58/59	164678	157218	-33484.33	1121200355.55	-24620.33	606160649.3	824394515.8
29/60	168250	161823	-29912.33	894747486.03	-20015.33	400613435	598705156
60/61	189887	178513	-8275.33	68481086.61	-3325.33	11057819.61	27518203.11
61/62	210245	187602	12082.67	145990914.33	5763.67	33219891.87	69640522.6
2062/63	217378	191931	19215.67	369241973.55	10092.67	101860574.8	193937416.1
2063/64	238536	213943	40373.67	1630033229.26	32104.67	1030709836	1296183352
Total	1188974	1091030		4229695045.67	0.05	2183622207	3010379166

For Target Sales:

$$\bar{X} = \text{Mean of Target Sales} = \frac{\sum X}{N} = \frac{1188974}{6} = 198162.33$$

Stander Deviation (S.D.):-

$$\text{S.D} = \sqrt{\frac{1}{6} \times 1985704522} = \sqrt{704949174.2} = 26550.87$$

Coefficient of Variation (C.V.):-

$$\text{C.V.} = \frac{S.D}{\overline{X}} = \frac{26550.87}{198162.33} \times 100 = 13.39\%$$

For Actual Sales:

$$\text{Mean} \quad \overline{Y} = \frac{\sum Y}{n} = \frac{1091030}{6} = 181838.33$$

Stander Deviation (S.D.):-

$$S.D = \sqrt{\frac{1}{n} \times (Y- \overline{Y})^2} = \sqrt{\frac{1}{6} \times 1112527163}$$

$$\sqrt{363937034.5} = 19077.13$$

Coefficient of Variation (C.V.):-

$$\text{C.V.} = \frac{19077.13}{181838.33} \times 100 = 10.49\%$$

Calculation of Correlation Co-efficient:-

$$(r) = \frac{\sum UV}{\sqrt{\sum U^2}\text{-}\sqrt{\sum V^2}} = \frac{3010379166}{\sqrt{4229695045.67}\sqrt{2183622207}} = \frac{3010379166}{3039088026} = 0.990$$

Calculation of Probable Error of 'r' :-

$$\text{PE of 'r'} = 0.6745 \times \frac{1\text{-}r^2}{\sqrt{n}} = 0.6745 \times \frac{1-(0.99)2}{\sqrt{6}} = 0.008124$$

Calculation of Coefficient of Determination:-

$$r^2 = (0.99)^2 = 0.9801$$

APPENDIX- III

Calculation of Correlation Coefficient, Mean and Standard Deviation

FY	Actual Sales (X)	Profit & Loss (Y)	$U = \left(X - \overline{X}\right)$	$U^2=(X-\overline{X})^2$	$V = (Y - \overline{Y})$	$V^2=(Y-\overline{Y})^2$	UV
2058/59	157218	(7613)	-24620.33	606160649.3	(8245.33)	67985466.81	203002745.6
59/60	161823	893	-20015.33	400613435	260.67	67948.85	(5217396.07)
60/61	178513	1412	-3325.33	11057819.61	779.67	607885.31	(2592660.04)
61/62	187602	3792	5763.67	33219891.87	3159.67	9983514.51	18211295.19
62/63	191931	2554	10092.67	101860574.8	1921.67	3692815.59	19394781.16
63/64	213943	2756	32104.67	1030709836	2123.67	4509974.27	68179724.54
Total	1091030	3794	0.05	2183622207		86847605.34	300978490.4

For actual sales :(From Appendix -III)

$$\overline{X} = \text{Mean of Target Sales} = \frac{\sum X}{N} = 181838.33$$

Stander Deviation (S.D.):-

S.D = 19077.13

Coefficient of Variation (C.V.):-

C.V. = 10.49%

For Profit & Loss

$$\text{Mean} \quad \overline{Y} = \frac{\sum Y}{n} = \frac{3794}{6} = 632.33$$

Standard Deviation (S.D.):-

$$\text{S.D} = \sqrt{\frac{1}{n} \times (Y- \overline{Y})^2} = \sqrt{300978490.4}$$

$$= 17348.73$$

Coefficient of Variation (C.V.):-

$$\text{C.V.} \frac{s.dy}{\overline{Y}} = \frac{17348.73}{632.33} \times 100 = 2743.62\%$$

Calculation of Correlation Co-efficient:-

$$(r) = \frac{\sum UV}{\sqrt{\sum U^2} - \sqrt{\sum V^2}} = \frac{300978490.4}{\sqrt{2183622207} * \sqrt{86847605.34}} = 0.6911$$

Calculation of Probable Error of 'r' :-

$$\text{PE of 'r'} = 0.6745 \times \frac{1-r^2}{\sqrt{n}} = 0.6745 \times \frac{1-(0.6911)2}{\sqrt{6}} = .02132$$

Calculation of Coefficient of Determination:-

$$r^2 = (0.6911)^2 = 0.4776 = 47.76\%$$

APPENDIX- IV

SUPPLEMENTARY QUESTIONNAIRE

(For general information)

Name of the respondent:

Position:

Department:

1- What is the planning approach of DDC?

a. Top level planning or top to down approach [ ]
b. Participatory approach [ ]
c. Others [ ]

2- How do you participate in planning process?

a. Discussion method [ ]
b. Written opinion [ ]
c. Joint working [ ]

3- How do you communicate plan?

a. Meeting [ ]
b. Notice board [ ]
c. Circular [ ]
d. Others [ ]

4- Which department has the overall responsibility of profit planning?

5- What are the products of DDC?

____

6- What is the method of sales forecasting?

a. Personal Judgmental method [ ]
b. Mathematical and statistical method [ ]
c. Specific purpose method [ ]

7- Who prepares the sales budget?

a. Sales department [ ]
b. Account department [ ]
c. Broad of executives [ ]
d. Government [ ]
e. Planning department [ ]

8- Who prepares the production budget?

a. Production department [ ]
b. Account department [ ]
c. Board of executives [ ]
d. Planning Department [ ]

9- Which production policy has been adopted?

a. Seasonal [ ]
b. Flexible [ ]
c. Stable [ ]
d. Others [ ]

10- What pricing method has been adopted?

a. Cost plus pricing method [ ]

b. Marginal cost pricing [ ]
c. Profit oriented [ ]
d. Public oriented [ ]
e. Others [ ]

11- How does DDC measure its activity?

a. production unit [ ]
b. Sales unit [ ]
c. Sales amount [ ]
d. Others [ ]

21- Would you please highlight in brief problem faced by the corporation in formulating and implementing profit planning?

____

22- In your view, what major steps should be taken to improve the performance of the corporation?

____

23- What are the main strength and weaknesses of the corporation?

____

APPENDIX - V

SUPPLEMENTARY QUESTIONNAIRE

(To Collect Primary Data)

Name of the respondent:

Position:

Department:

From the analysis of sales and production budget of the corporation, there is high deviation between budget and actual performance. Please give us your opinion about the cause of such deviation.

a. Lack of consistency in administration [ ]
b. Lack of capacity [ ]
c. Lack of effective planning [ ]
d. Government intervention [ ]
e. Others [ ]

BIBLIOGRAPHY

Agarwal Govind Ram (2002). *Dynamics of Business Environment in Nepal*. Kathmandu: MK. Publication.

Agarwal, Govind Ram (1994). *Management Control System for Enterprises in Developing Countries.* Kathmandu: CEDA, TU.

Bajracharya, Puskar and Shrestha Balkrishna (1983). *Management Problems in Public Sector Manufacturing Enterprises in Nepal.* Kathmandu: CEDA, T.U

Bratt. Flmer C. (1998). *Business Forecasting*. New Delhi: Tata McGraw Hill Book Co. Inc.

Dean, Joel (1992). *Management Economics. (12th Edition Indian Reprint).* New Delhi: Prentice Hall of India.

Drury, Colin (2000). Management and Cost Accounting. U.K.: Business Press Thomson Learning.

Fronger, J.T. (1973). Accounting for Managerial Analysis. Homewood: Richard D. Irwan Inc.

Gautam, Draba Kumar (2003). *Business Policy and Strategic Management*. Kathmandu: Pratibha Prakashan.

Gupta, S.P. (1990). *Statistical Method*. New Delhi: Tat McGraw Hill Publication Co. Ltd.

Gupta, S.P. (1992). *Management Accounting.* Agra: Shitya Bhawan Publication.

Hamdy, H. Taha (2000). *Operation Research.* New Delhi: Prentice Hall of India Pvt. Ltd.

Hilton, Ronald W. (1991). *Management Accounting*. United States: Mc Grew Hill Inc.

Holmes, Author W., Meir Robert A., & Datrald F.P., (1970). *Accounting for Control and Decision*, *Taxes*: Austin Business Publishing House.

Horngren, C.T., Foster G., Datar S.M. (1998). *Cost Accounting: Managerial Emphasis*. New Delhi: Prentice Hall of "India.

Jawahar Lal (1996). *Cost Accounting*. New Delhi: Tata McGraw Hill Publication Co. Ltd.

Kalpan, Robert S. and Atkinson, Anthony A., (1996). *Advance Management Accounting*. New Delhi: Prentice Hall of India Pvt. Ltd.

Khan, M.Y. and Jain P.K., (1986). *Financial Management.* New Delhi: Tata McGraw Publishing Co. Ltd.

Khan. M. and Jain P.K., (1989). *Management Accounting.* New Delhi: Tata McGraw Publishing Co. Ltd.

Kothari, C.R. (2000). *Research Methodology: Methods and Techniques*. New Delhi: Vishwa Prakashan.

Kulkari, P.V. (1985). *Financial Management*. Bombay: Himalaya Publishing House.

Luncey, T. (1998). *Management Accounting*. United Kingdom: L.D.P Publication Ltd.

Lynch, R.M., and Williamson, R.W. (1993). *Accounting for Managements Planning and Control.* New Delhi: Tata McGraw Hill India.

Manandher, Narayan (1987). *Issue in Public Enterprise Management*. Kathmandu.

Munakarmi, Shiva P. (2003). *Management Accounting*. Kathmandu: Buddha Academic Publisher and Distributor Pvt. Ltd.

Narayan Laxmi, P. (1997). *Principle and Practice of Public Enterprise Management*. New Delhi: Sultan Chand and Co. Ltd.

Nepal Government/ National Planning Commission (2002). *Statistical Pocket Book.* Kathmandu: Bureau of Statistics.

Pandey, I.M. (1994). *Financial Management*. New Delhi: Vikas Publication House Pvt. Ltd.

Pandey, I.M. (1998). *Management Accounting*. New Delhi: Vikas Publication House Pvt. Ltd.

Pant, P.R., & Wolf, H.K., (2002). *Social Science Research and Thesis Writing*. Kathmandu: Buddha Academic Publisher and Distributors Pvt. Ltd.

Rathnan, P.V. (1994). *Budgeting.* New Delhi: Himalayan Publishing House.

Sharma, R. K., & Gupta S. K., (1996). *Management Accounting: Principle and Practice*. New Delhi: Kalyani Publications.

Shrestha, Dr. Sunity and D.R. (1999). *Production and Operation Management*. Kathmandu: Teleju Prakashan.

Shrestha, Dr. Sunity and Silwal Dhrub Prasad (1999). *Statistical Methods in Management.* Kathmandu: Taleju Prakashan.

Van-Horne, J.C. (1990). *Financial Management and Policy*. New Delhi: Prentice Hall of India Pvt. Ltd.

Verseny, R.L and Maheshwari K.L., (1990). *Management Economics*. New Delhi: Sultan Chand and Sons.

Welsch, Glenn A., Ronald W. Hilten and Paul N. Gordon, (2000). *Budgeting: Profit Planning and Control. (5th edition).* New Delhi: Prentice hall of India.

Welsch, Glenn A., Ronald W. Hitlen and Paul N. Gordon (1988). *Budgeting: Profit Planning and Control. (4th edition).* New Delhi Prentice Hall of India.

Willmore, A.W. (1997). *Accounting for Management Control*. New Delhi: Pitam Publication.

Thesis

Acharya, Kashi Raj (1996). Financial of Dairy Development Corporation. An Unpublished Master's Degree Thesis Shanker Dev Campus, T.U.

Chapagai, K.P. (1998). *Role of Comprehensive Budgeting in profitability of Nepalese PEs (Special Reference with Royal Drug Ltd).* An Unpublished Master's Degree Thesis. Shanker Dev Campus, TU.

Dahal, Narayan Prasad (1999). *Profit Planning and Control in Nepalese Manufacturing Company (A Case Study of Himal Cement Company).* An Unpublished Master's Degree Thesis. Shanker Dev Campus, T.U.

Dahal, Soniya (1999). A Study on Demand and Supply Situation of Dairy Products in Kathmandu with Reference to Dairy Development Corporation. An Unpublished Master's Degree Thesis. Shanker Dev Campus T.U.

Dumre, K.P. (1997). Profit Planning and Control in Dairy Development Corporation. An Unpublished Master's Degree Thesis. Central Department, Kirtipur T.U.

Kheral, Bibek, (2003). *Comprehensive Budgeting in PEs of Nepal (Sales and Production Budgeting process of Dairy Development Corporation).* An Unpublished Master's Degree Thesis. Shanker Dev Campus, T.U.

Ojha, Khendra Prasad (1995). *Profit Planning in Public Enterprises in Nepal (A Comparative Study of Royal Drugs Limited and Herbs Production and Processing Industry).* An Unpublished Master's Degree Thesis: T.U Kritipur.

Pahari, Prakash, (2000). *Profit Planning and Control in Dairy Development Corporation.* An Unpublished Master's Thesis. Shanker Dev Campus, T.U.

Ruwali, Surya Prasad (1999). *Profit Planning and Control in Public Utility Enterprises in Nepal (A Case Study of Gorkhapatra Corporation*. An Unpublished Master's Degree Thesis. Shanker Dev Campus, T.U.

Sharma, Sagar (2002). *Management Accounting Practice in the Listed Companies of Nepal*. An Unpublished Master's Degree Thesis. Shanker Dev Campus, T.U.

Subedi, Bishwa Raj (1998). *A Study on Milk Collection and Distribution by Dairy Development Corporation in Kathmandu.* An Unpublished Master's Degree Thesis. Shanker Dev Campus, T.U.