

CHAPTER I

1. INTRODUCTION

1.1 General Background

Nepal is the most beautiful charming wonderful Country in Asia. The snow bounded peaks, teaching of “Lord Buddha” and unbounded bravery and indubitable courage of Gorkhas and the main charms of pride of the Country.

Nepal lies between China in North and India in South, East and West. The kingdom is situated in the northern hemisphere of between 80.4 east and 88.12 east longitude with the latitude of 26.22 north and 30.27 north. Nepal is landlocked and developing country covering 47181 square kilometer. Nepal is extended from east to west with a length of about 885 km and width 193 km from north to south. It comprises three parallel 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 Himalayas¹.

Nepal is a developing country with \$220 per capital income. It has agro based economy. Approximately 86% of the total population stays in rural areas without having minimum facilities needed for the human beings. The Nepalese economy has been passing through vary difficult times then the last few years. New Industries have not come up. Agricultural production has remained more or less static. Foreign aid which used to take the form of outright grants has mostly turned into loans that have to be repaid. Debt, payment is eating up an increasing portion of the budget. In such and economic climate, the public enterprises are the backbone for the industrialization and development of the country.

The dairy development activities in Nepal started in the Tusul-9, village of the Kavre district in 2009 B.S. as experimental basis with a small scale of milk pouring plant under the department of agriculture. In the year 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 guarantee for milk to the rural farmers with fair price.
2. Supply pasteurized milk and milk products to urban customers.
3. Develop organize milk collection system to meet increasing demand for pasteurized milk and milk products.
4. Develop an organized marketing system for milk and milk products in urban areas.

¹ -HMG Nepal, **Statistical pocket book**, (Kathmandu: Bureau of Statistics, 2002)

1.2. Public Enterprises

Public enterprises defined by different authorities are as follows:

“Public enterprises 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 activities².”

“Public enterprises are autonomous bodies which are owned and managed by the government and which provides goods and service for a price. The ownership with the government should be 51% or more to make an entity PEs³.”

“Public enterprises 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 enterprises.”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 enterprises of Nepal were established in 1994 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.

² -Shyam Joshi, **Public Enterprises Management, 3rd edition**, (Kathmandu: Taleju Prakassan, 2054)

³ -Laxmi Narayan, **Principles and practice of Public Management 4th Edition** (New Delhi: Sultan Chand & Co. Ltd. 1997) Page 42

⁴ - Shyam Joshi, **op. Cit**, Page 4

4. Autonomous in daily functioning.
5. Financing by the 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 the country. Due to the various causes private sectors are unable to invest sufficient capital for aggregate development of the country so the 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 goals and objectives.

Nepal Bank Ltd. a commercial Bank was established in 1994 B.S. which is the first public enterprises to have a separate legal position in Nepal which Nepal started its planned economic development in 2013 B.S. with the launching of 1st five year plan since then the numbers of public enterprises has increased substantially in the various fields of national economy. The various public enterprises have established in the different fields as follows:

- ❖ Manufacturing sector
- ❖ Commercial sector
- ❖ Service sector
- ❖ Financial sector
- ❖ Public utilities
- ❖ Social service

The study of the economic plan, economic survey and the foundation of these enterprises 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. Provisionary of public utilities

But after adopting liberalizations policy by the government of Nepal, the rate of public enterprises in Nepal is shifted towards the private sector. Nowadays public enterprises are known as problem created sources 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. Analysis of financial performance of existing public enterprises shows 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 of their daily expenses and they are operated by the government subsidy therefore almost all except one or two public enterprises be come 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 sectors 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 sector 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. Now days, 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 one of the manufacturing public enterprises 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 theses 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 the sales budgeting in the profitability of the enterprises, 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:

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

1.4. Objectives of the Study

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 special objectives are as follows:

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

1.5. Significance of the Study

The 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 the study lies in the role of sales budgeting in the profitability of the public enterprises with special reference to Dairy Development Corporation. The study tries to analyze the performance of the corporation upon its budgeted figure 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. Limitation 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 five fiscal year from 058/059 to 063/064.
4. The accuracy of the study is based on the data provided by 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 1: Introduction:

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

Chapter 2: 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 3: Research Methodology:

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

Chapter 4: 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 5: Summery, Conclusion and Recommendations:

It includes summery 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 originally established with the function of an accountant. At its 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. It is the compound of overall planning of every organization.

2.1.1 Profit

Profit is the primary measure of the success of the organization 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 says the profit is a return for uncertainty bearing and reward for an innovation. But in accounting sense, profit is the excess of revenue over all expenditure related to it. Some of the important definitions related to profits are as follows:

“Profit is the primary measure of a business. In the view of the heavy investment which is necessary for the success of most enterprises, profit in the accounting sense tends to become a long range objective which measures not only of the product but also the development of the market for it.”⁵

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 cooperative sources of wealth on which national prosperity depends, the basic financial objectives of companies is to maximize the profit within socially acceptable limits, profit from 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 incur losses. The survival measure of the effective performance of the business is its profit.”⁶

⁵ - P.V. Kulkarni; **Financial Management 3rd edition**, Bombay : Himalaya Publishing House 1985. pp-245

⁶-R.L. Verseny &K.L. Moheshwari, **Management Economics 11th Edition**, (delhi; Sultan Chand & Sons, 1990) p- 36

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 risks of owing something in the hope of selling it later. If it cannot obtain it cannot operate because it is the lifeblood for every organization. Therefore, profit is the matter of prime importance for every business.

2.1.2 Planning

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 frame work of planning.

“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 my 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”⁷

“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 form. Formal planning is certainly better informal planning. No planning is of course, worse informal planning. It should be realized that too much over formulation if also dangerous. A reasonable balance be struck between the formal and informal planning “⁸.

Planning is the process of developing enterprises 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.

⁷ - A.W.Wills More, **Accounting for Management Control**, (Delhi, Pitam Publication, 1971), p- 74

⁸ - I.M. Panday, **Financial Management** (New Delhi: Vicas Publication House Pvt. Ltd., 1988) p- 55

3. Selecting a course of action for accomplishing the objective.
4. Initiating activities necessary to translate plan into action, and
5. Current re-planning to correct deficiency.⁹

Planning is a financial or quantitative statement prepared and approved 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 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 of 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 for accomplishing a planning coordinating and control responsibilities of the management.”¹⁰

“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

⁹ - Glenn A Welsch, Ronal W Hillten, Paul M gordan, **Op. Cit**, p- 3

¹⁰ - IBID, 4th Edition, p- 3

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 analysis, variable budget, time and motion study, standard cost accounting ratio analysis, strategic planning management by objectives, organizational, manpower planning and cost control.”¹¹

“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.”¹²

“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 broad 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.
6. Development of follow-up procedures.”¹³

“The main purpose of profit planning and control as follow:

1. To state the firm’s expectations in clear and formal terms to avoid confusion and to facilitate 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 use of resource maximized.

¹¹ -IBID, 4th Edition, p- 4

¹² -S.P. Gupta, **Management Accounting**, (Agra: Shitya Bhawan, 1992) p- 521

¹³ -IBID, p- 30

5. To provide the mean of measuring and controlling the performance of the basis of the necessary corrective actions can be taken.”¹⁴

“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 from the top of the lowest organizational levels in the enterprises?”¹⁵

In summery, 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 Planning

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

1. Strategic (Long Range) profit plan.
2. Tactical (Short Range) profit plan.

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 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.”¹⁶

¹⁴ -I.M. Panday Op. Cit, p-557/558

¹⁵ -I.M. Panday, **Management Accounting**, (New Delhi: Vikas Publication House) p- 241

¹⁶ -IBID, p- 132

“The development of strategic and tactical plans each year is a process that involves managerial decisions and ideally high level of managerial participation.”¹⁷

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 Management 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 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 on future.”¹⁸

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 considerations of the possible course of events in the future and to provide a means for the

¹⁷ -IBID, p- 134

¹⁸ -M. Khan & P.K. Jain, **Management Accounting**, (New Delhi: Mc Grew Publishing Co. Ltd., 1989) p- 296

constant comparison of actual progress. Budgets not only compare the performance. Company controls operation through its budgeting and responsibility reporting system. To executives are able to control every area of the organization through a system of budgetary planning and control reporting responsibility area.

2.3.1. Requirement for Effective Budgeting:

Development of effective budgeting is not easy. Some requirement for effective budgeting is 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.

Basic Elements of Profit Planning:

Basic elements of the profit planning and control are as follows:

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 monetary 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.

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 plan:

- a. Sales cost and profit projection
- b. Major projects and capital additions
- c. Cash flow and financing
- d. Personal requirements

Tactical short-term profit plan;

- a. Operation plan
 - Sales plan
 - Production plan
 - Administrative expensive plan
 - Distribution plan
- 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 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. Development and evaluation of project plan
6. Executive management planning instruction
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 Profit Planning Control

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 enterprises
3. It complex all members of the organization from top o to participate in the establishment of goals and plans
4. It compels the department managers to take in harmony with the 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 needs to remove the cloud of uncertainty that exists 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 check 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:

1. It is difficult, estimate revenue and expenditure.
2. Out management should not have interest in the entire estimates and schedules, our strictly informal systems are better and work well.
3. Budgeting places to great demand on management time, especially to revise budgets constantly. It needs much paper work.
4. It takes away management flexibility.
5. It creates all kinds of behavioral problem.
6. 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.”¹⁹

“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 planned. The manpower requirement, the production level, and other important operational aspects depend on volume on sales. In harmony with the comprehensive profit plan both strategic and tactical sales plan must be developed. Thus are commonly observed five year strategic sales plan. Many management decisions commit a large amount of resources involving life span of many

¹⁹ -W. Hohemes, R.A. Meir & D.F. Pabser, **Accounting For control and decisions**, (USA: Austin Business Publishing 1970) p- 687

years. Basic strategies are major moves often involve irreversible commitment of resources and long time span.”²⁰

“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 expenses plan.”²¹

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.
3. The sales surplus.

“The primary purpose 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.
4. To facilitate management’s control of sales activities.”²²

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. 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. /it contrast, a sales plan incorporates management decisions that are based on the forecast , other inputs and management5 judgments about such related items a 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”²³

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:

²⁰ -Wwelsch, Glen & Ronald, 4th Edition, p- 139- 140

²¹ - IBID, P- 135

²² - IBID, p- 172

²³ - IBID, p- 172

- 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 as policies to be pursued in future.
- b. Budgeting begins when forecasting ends. In fact more 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 Budget:

Comprehensive sales plan can be classified into two types:

-Strategic plan

-Tactical plan

1. Strategic Sales Plan

It is known as long-range profit plan. Usually it is 5 to 10 years. It is to be developed in broad and general management policed 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 known as short-range sales plan. It is also 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 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 purpose. It is also necessary for completing other components of profit plan.

2.9.3. Components of comprehensive sales Budget:

Various components of sales planning are as follows:²⁴

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

2.9.4. Developing of Comprehensive Sales Budget:

There are 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. The guideline helps for co-ordination and uniformity in sales planning process.

The guidelines should emphasize enterprises objectives goal and sales strategy. It includes general policies, 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 far sales planning should be collected and evaluated. That information are as follows:

a. Manufacturing capacity.

²⁴ - G Fago, Profit Planning and Control, (Kathmandu: Buddha Academic Publisher & Distributor Pvt. Ltd; 2003) p- 8

- 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 terms provide major consideration for planning and controlling purpose. It is also necessary for completing other components of profit plan.

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 of 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 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 authority of the management.

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.

| Months | Historical sales | Cyclical variances | Adj. sales | Seasonal variances | Adj. sales | Price Variance | Budget sales |
|--------|------------------|--------------------|------------|--------------------|------------|----------------|--------------|
| Ref. | Input=1 | Input=2 | Input=3 | Input=4 | 3x4=5 | Input=6 | 5x6=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 and dependent variable.

C. Historical analogical 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:

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 etc.

2.9.6. Sales Budget and Profitability:

Sales budget consist of detail marketing plan or 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 or revenue over all types if expenses.

2.10. Production Budget:

When a tentative sales plan is completed, the next step is to build the short range profit plan that is to develop a 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.”²⁵

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

²⁵ - S.P. Gupta, **Management Accounting**, (New Delhi: Mc Grew Hill Publication; 1992) p- 513

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 he 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 and factory overhead budgets.

2.10.1. Purpose of production budgets;

The major purposes are:

A. For direct market sales:

When the production is based only with the market demand, no need of production planning because the production process starts often the demand goals 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 are 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:
 $\text{Sales} + \text{closing stock} - \text{opening stock} = \text{Production.}$

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 material 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:**

The 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 responsibility centre. Material and parts qualities are determined as follows:

$\text{Budget} = \text{Production budget} \times \text{Standard usage rate}$

b. **Material and 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 of material can be determined as follows:

$\text{Purchase of material} = \text{material wage of raw material} + \text{closing stock of raw material} - \text{opening stock of raw material}$

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 requirement as specified in the material budget and the purchase budget shown the increase and decrease in the inventory budget. Inventor of the material can be computed as bellow:

Closing stock of raw material = Opening stock + purchase of raw material
– material usage of raw material

d. Cost of raw material and parts use budget:

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

Material cost = Material usage x material cost per unit

2.12. Direct Labour Cost Budget:

Planning and controlling direct labour refers to the area of personnel needs, requirement training, job description and evaluating, performance evaluation, union negotiations of wages and salary administration. 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 budget is employees needed, labour cost of each product and investment requirements. The following authorities are responsible for planning and controlling direct labour of enterprise.

- i. Chief Executive
- ii. Production manager
- iii. Financial manager
- iv. Personnel 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 give information for cash budget.
- e. To give information for cost budget.
- f. To control the labour budget.

2.12.2: Components of Direct Labour Cost Budgets

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 type of labour hour by product and responsibility centre.

Planned production X standard DLH

b. Direct labour cost (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 Budget

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 proposal; 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."²⁶

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 expenditure 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.

²⁶ - James C. Van Horne, **Financial Management and Policy**, (New Delhi: Printace Hall of India Pvt. Ltd. 1976) p- 66

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

“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, 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.”²⁷

“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.”²⁸

2.15.1: The Primary Purpose of Cash Budget

The primary purposes of the cash budget are as follows:²⁹

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/or 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.

²⁷ - Welsch, Hilton & Gordon, 5th Edition, op. cit. p- 433

²⁸ - S.P. Gupta, **Management Accounting**_Op. Cit. p- 607

²⁹ - Welsch, Hilton & Gordon, 5th Op. Cit. p- 434

5. Establish a sound basis for continues monitoring of the cash position.

Preparation of the cash budget should be the responsibility of the company treasurers. 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.”³⁰

1. Review the lag from the date 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 date that customers pay by check and the date 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 early 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

³⁰ - IBID, p- 454/455

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."³¹

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 completes 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 report. Actual results compared with goals and budget plans. These reports are designed to pinpoint both efficient and inefficient performance."³²

"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."³³

³¹ - IBID, p- 417/418

³² - S.P. Gupta, **Management Accounting**, Op. Cit. p- 543

³³ - Welsch, Glen & Ronald , 4th Edition, Op. Cit, p- 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.

1. 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;³⁴

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."³⁵

"Comparison of actual results with planned or budget goals has been emphasized as an integral part of the control process. A basic feature of

³⁴ - IBID, p- 490

³⁵ - Richard M. Lynch, 4th Edition, Op. Cit, p- 570

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 is numerous way to study or investigate variances to determine the underlying causes. Some of the primary approaches are the following.”³⁶

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. One 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; favorable and unfavorable variances further should be classified as controllable and non-controllable. If unfavorable variances are arise due to controllable

³⁶ - Welsch, Gleen & Ronald, 4th Edition, p- 570

causes, and then related centre or managers should be accounted for responsibility.

2.18: Review of Previous Research Studies

2.18.1. Profit Planning In Manufacturing Public Enterprises Of Nepal

(Written by Mr. Puskar Prasad Pokhrel at the Date 2001, May)

Objectives:

The following are the specific objectives of this thesis

1. To study the achievement of sales and production budgets of milk and milk products
2. To show the capacity utilization of DDC
3. To assess the financial performance/ analysis of DDC
4. To examine the various between targets and actual production and sales
5. To recommend suitable measure for improving the profit plan

Major findings

The Major findings of this thesis are as follows

1. Standard should be developed for materials, labours, overheads yields sales and profit
2. Comparison between actual results and standard should be made to find out variances
3. Causes should be analyzed and diagnosed as controllable and uncontrollable
4. Responsibility and accountability should be assigned to related center and authorized personnel should be made accountable for controllable causes of unfavorable variances
5. Necessary corrective action should be taken to improve unfavorable variance

Recommendations

Recommendations of this thesis are as follows:

1. Sales budget should be prepared on the realistic ground
2. The profitability of the enterprises is low. So the unnecessary expenses should be cut
3. Role of budgets should be understood by every manager of the DDC
4. DDC should develop the systematic periodic performance reports
5. Planning experts should be developed

2.18.2 A Study OF Leverage Analysis Of Dairy Development Corporation

(Written by Mr. Jaya Raj Panta at the Date March, 2006)

Objectives:

The major objective of this these are as follows:

1. To study the present leverage position of DDC
2. To analyses the financial structure of DDC
3. To assess debt servicing capacity of DDC
4. To analyses the profitability condition of DDC
5. To provide appropriate recommendations on the basis of the study

Major Findings

The major findings of this thesis are as follows:

1. The study shows that like in other public enterprises DDC is also not having any special and specific and specific objectives for the comprehensive financial statement. So, capital structure is not based on realistic expectation. Either it is unrealistic or over ambiguous
2. DDC is suffering from the loss and loss is in increasing trends with sales
3. The combined leverage is unfavorable for DDC
4. In total debt the proportion of long term debt is sometimes more than 50% and some times less than 50% which indicates DDC using secured loan with maturity period one year and more than one year
5. Return on capital employed ratios are in negative. Its average ratio is - 5.24%; which is not satisfactory performance of DDC

Recommendations

The Major recommendations are s follows:

1. The corporation should give more attenuations to the proper financial structure with effective source of fund
2. DDC should reduce debt capital and increase equity in their financial structure. They should reduce their accumulated loss by well management
3. The corporation should concentrate not only on increasing debt but also sales volume as well as assets efficiency
4. To increase ROE, DDC increase profit margin as well as assets turnover, which it is possible only after increasing sales revenue
5. The debt servicing capacity of corporation has very badly. Due to highest interest rate of low EBIT. So this corporation is recommended that to increase EBIT and maintain sound debt service capacity

2.18.3. Profitability Analysis Of Public Enterprises

(Written by Sanjaya Kumar Jha at the Date June, 2005)

Objectives

The Main objectives of this thesis are as follows:

1. To analyze the functional budgets on sales and production sector of the concern

2. To analyze the profitability and efficiency of the concern
3. To analyze target and its achievement along with their reason of deviation
4. To find out material used by DDC
5. To point out valuable recommendations and suggestions based on analysis

Major findings

1. Dairy Development Corporation is suffering from the loss and loss is in increasing trends with sales
2. Return on share holder's equity for DDC shows the negative value. Due to the fixed burden and low sales
3. The corporation prepared its financial statement on the traditional basis
4. Overall, the return on working capital is disappointing indicating drastic down fall of the corporation. The average return on working capital has been calculated -6.10%
5. The fluctuating trend of financial structure shows that DDC has been facing problems of financial structure

Recommendations

The major recommendations of this thesis are as follows:

1. The informal is gathered through market research, production and marketing should be made smoothly according to market demand
2. Purchase and collection expenses should be analyzed with collection of quantity and sales revenue
3. Long-term objectives should be clearly formulated so as to make clear distinction between motive and social motive and entrepreneurship is the first for any business success
4. The products should be made widely available everywhere. The depending on valley and cities is not sufficient
5. Management by objective technique should be followed for planning to maintain co-ordination, co-operation and self-motivation among the department and employees

2.18.4. Cost Volume Profit Analysis Of Kathmandu Dairy

(Written by Miss. Rajini Manandhar at the Date June, 2007)

Objectives

The main objectives of this thesis are as follows:

1. To analyze the different component of cost
2. To analyze the impact of fixed and variable cost on profit
3. To compute break even point, contribution margin, margin of safety and cost volume profit of Kathmandu dairy and its impact in profit planning
4. To evaluate the profitability financial position and sensitivity of Kathmandu dairy's activities

5. To suggest different measure to improve sales and profit of Kathmandu dairy

Major Findings:

Major finding of this thesis are as follows:

1. The company has failed to achieve budgeted sales during the study period
2. The company has not practiced to apply appropriate and effective sales forecasting techniques like, survey method and statistical method. It uses market studies and experimentation method for sales forecasting
3. The highest achievement of budgeted sales is 95.40 percent in FY 2061/62 and lowest achievement is 87.13 percent in FY2062/63
4. The company has not applied any special technique for segregation of costs into fixed and variable costs
5. There is no separate costing system for allocation of expenses to each product

Recommendations

Following things are recommended for this thesis

1. KD should formulate strategic programs and policies according to the basic objectives , missions and goals
2. A systematic approach should be made towards comprehensive profit planning. This can considerably contribute to the increase in profitability of Kathmandu Dairy
3. The KD should use survey method and statistical method for sales forecasting and adopt promotional tools to achieve the budgeted sales
4. KD is not able to earn high profit as desired due to high operating cost. That's why it should apply the cost reduction and cost control techniques in its operation to earn high profit. It should make a specific framework and responsibility centre for classification of expenses such as variable costs, which helps to control and reduce the costs
5. KD should try to use optimal capacity and modern equipments to maintain the level of customers demand and to increase the profitability

2.18.5. Effectiveness of Distribution System of Dairy Development Corporation

(Written by Mr. Rakesh Sharma at the Date August, 2007)

Objective

The main objectives of this thesis are as follows

1. To fulfill the curriculum requirement of an MBS program of Kathmandu University School of Management

2. To familiarize with working mechanism of each distribution channel of DDC to identify logic of establishing three different systems of distribution, specially with regard to distributor system and franchise
3. To identify practical problems inherent in distribution system from the perspective of distributors, franchisees, and retail stores
4. To provide necessary recommendations or steps to be followed to ensure effectiveness of distribution system

Major Findings

While conducting survey, few other findings were also discovered which are discussed below:

1. In all retail stores where survey was conducted, customer specifically asked for DDC products. Retailers said that this was conducted, customer specifically asked for DDC products. Retailers said that this was the case because people have already become aware that DDC products are available in those stores
2. Where retail stores were asked to rank the products based on their turnover, ghee was found to be one of the top three selling products in 70% of the retail stores. Similarly, cheese was found to be one of the top three selling products in 50% of the stores, and butter and paneer in 45% of the stores. Ghee has been the highest selling product in the FYs 2061/62 and 2062/63. Butter had been the second highest selling product and cheese third highest in FY 2061/62, but exchanged their position in FY 2062/63. Yoghurt has been the fourth highest selling product in both fiscal years. Refer to Appendix 13 for the product-wise sales figures of Milk Product Production and Supply Scheme for FY 2061/62 and FY 2062/63.
3. Customers were found to be indifferent to whether they bought DDC products from sales centers of retail stores as only 20% of the retailers agreed that customers perceive products to be less fresh in retail stores. This is found to be in contrast with what was said earlier that in 69% of the stores which received customers complains, complain concerned the freshness of products. This need a bit of explanation. The reason for such difference could be that customers perceive freshness of products is low not because they are buying it from retail stores

Recommendations

Following things are recommended for this thesis

Maintenance of central database is of utmost importance to keep track of product-wise distribution from different systems. Currently, data are maintained manually and are dispersed across different departments. As a result, composite picture of different aspects of distribution is difficult is difficult to obtain

DDC has provided its sales centers and franchises with billing software as a result of which category-wise sales figure is easily available from each of these channel members. DDC could take a step further from here and establish a system that connects franchises, sales center, and distributor with the central sales and distribution center to improve the communication of this information.

Presence of central database system would prove to be helpful in the following areas:

1. Finding out effectiveness of each distribution channel by obtaining information on their sales and geographical coverage
2. Forecasting the demand of each distribution channel for each category of products, as well as variety of products within each category which would help to align production schedule with demand condition. As indicated by survey, interaction with distributors and franchisees, and observation at sales centers, one of the important issues facing DDC has been inability to meet demand accurately. This problem could largely be solved if hand-on information is available regarding demand condition.
3. It would improve communication with different channel members. Enhanced communication would enable DDC to be more informed about daily demand for different categories of products, existing and changing consumer preference, geographical reaches, etc. Monitoring of each channel member becomes less cumbersome and more effective.

2.18.6. 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. is 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 the corporation. Therefore, this study has tried to do something new on the field of regular research related with the 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. Introduction

It is well known fact that public enterprises are established for rapid socio economic development of the country. Public enterprises have to maintain proper balance between profit motive and service motive. Profit oriented manufacturing public enterprises should adopt profit planning control program 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 public enterprises with special reference to DDC. For the 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.

Research Design

Research design is the plan, structure and strategy investigation conceived so as to obtain answers to research questions and control variance. It helps the investor to obtain answer to the questions of research and also helps him to control the experimental, extraneous and error variance of particular research problem under study. In this study descriptive cum analytical research design has been applied. The design for this research will make by collection of information from different sources and the data will be tabulated and analyzed by using various financial statistical tools etc.

3.3. The Population and the Sample

This research work is related with profit planning aspects in public enterprises in Nepal. So the total present number of public enterprises in Nepal is the population of this study. Oldest Dairy in Nepal is selected as sample among the population. „Dairy Development Corporation,“ is selected for the purpose of research work. The total number of PEs in Nepal is forty one at present. So the sample covered 2.44 percent of population or total PEs.

3.4. Period Covered

Profit planning has two time dimensions, long range and short range. For long range planning; it has analyzed six year trend in Dairy Development Corporation. Long range trends are taken from FY 2058/059 to 2063/064. The actual details are taken the accounting record of FY 2063/064 in Dairy Development Corporation. For short range plan the data are taken from the FY 2059/060.

3.5. Nature and Sources 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 as developed supplementary questions 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, publication of National Planning Commission, statistical survey, previous dissertations of the officials accounting and planning records of Dairy Development Corporation. The questionnaires are shown in the appendix at the end of the study.

3.6. 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.

3.7. 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 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

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 enterprises 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" are the prime root. Profit is output of profit planning. This study intends to show the effect 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. A sale budgeting is known 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, Particularly 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 enterprises planning are 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 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 overall 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 FY2058/059 to FY 2063/064

Sales Planning Process of DDC

Dairy Development Corporation has the system of preparing sales budget byproduct and responsibility over all sales planning process of corporation is as below:

4.2.1. Methods of Sales Forecasting

DDC has not followed forecasting technique to forecast the sales but in practice, DC 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 the various sales division (Milk Production & Distribution Plants). On the basis of guidelines provided by the headoffice, each scheme or plant prepares sales budget for future by products and submitted to head office. Headoffice finalize the budget after making necessary adjustment on the figure submitted by the plant along with some economic information of respective markets

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 2064/65 is as follows:

4.2.2.1 Sales Budget Summary

The sales budget summary of the corporation for FY 2064/65 is as follows:

Table no: 1
Sales budget summary
For the FY2063/64
(By Product)

In 000

| Product | Unit | Rate (average) | Amount(Rs.) | Ratio (%) |
|---------------|---------|----------------|-------------|-----------|
| Ref. | Input=1 | Input=2 | 1*2=3 | 3/Total=4 |
| Milk(Liter) | 104431 | 30 | 3132930 | 77.52% |
| Dahi (Liter) | 1712 | 55 | 94160 | 2.32% |
| Butter(liter) | 562 | 300 | 168600 | 4.17% |
| Cheese(Kg) | 315 | 400 | 126000 | 3.11% |
| Ghee(Kg) | 1412 | 350 | 494200 | 12.22% |

| | | | | |
|------------------|----|-----|---------|-------|
| Paneer(Kg)` | 78 | 220 | 17160 | 0.42% |
| Ice- Cream(Ltr.) | 55 | 150 | 8250 | 0.20% |
| Total | | | 4041300 | 100% |

The ratio of various products in total sales is computed by using price of product of the six FY 63/64. The results of the ratio of individual product on total sales are given in appendix 2.

Table no.2

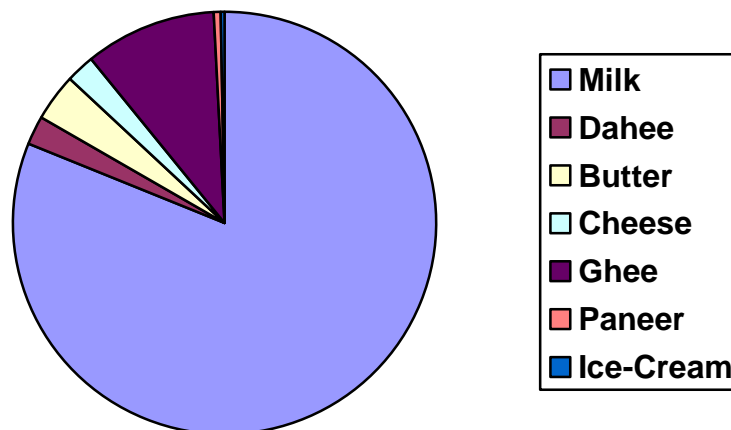
Chart showing the percentage share of products on total sales

In %

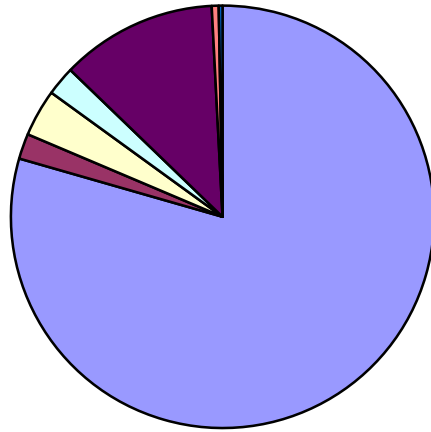
Basic Price FY 2063/64

| Product FY | 2058/59 | 2059/60 | 2060/61 | 2061/62 | 2062/63 | 2063/64 |
|------------|---------|---------|---------|---------|---------|---------|
| Milk | 80.98 | 79.31 | 79.19 | 77.37 | 77.30 | 77.84 |
| Dahee | 2.23 | 2.19 | 2.00 | 2.13 | 2.04 | 2.12 |
| Butter | 3.63 | 3.37 | 3.61 | 4.31 | 4.32 | 5.68 |
| Cheese | 2.37 | 2.37 | 2.81 | 3.38 | 3.43 | 2.84 |
| Ghee | 10.05 | 11.89 | 11.52 | 11.75 | 11.81 | 12.31 |
| Paneer | 0.38 | 0.58 | 0.55 | 0.72 | 0.72 | 0.81 |
| Ice-Cream | 0.36 | 0.29 | 0.32 | 0.34 | 0.38 | 0.51 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |

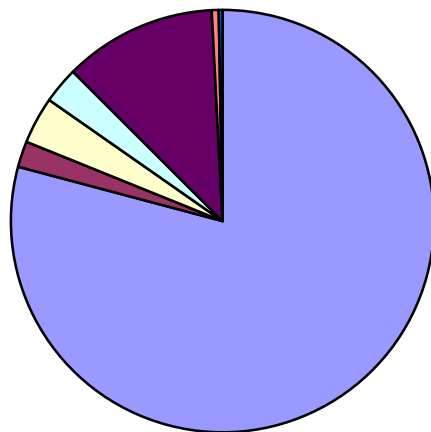
2058/59



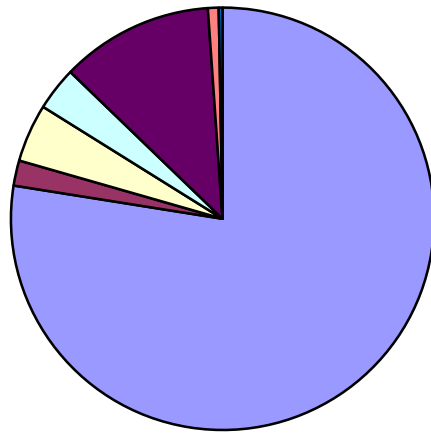
2059/60



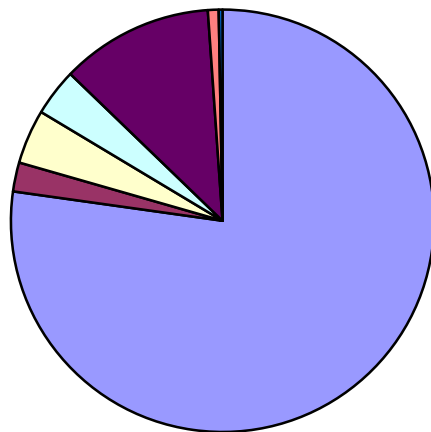
2060/61



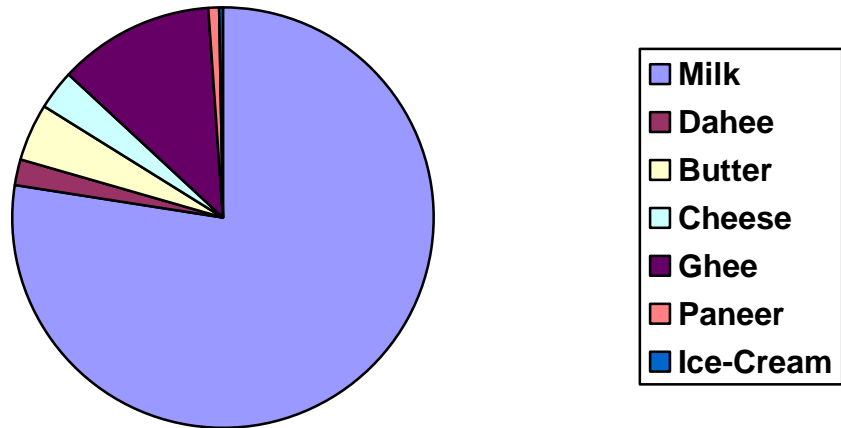
2061/62



2062/63



2063/64



The presentation of sales budget summary and comparative analyses of share of products that on the overall sales of the corporation around 60% was covered by the milk in every year from the FY 2058/059 to FY 2063/064. Dahi covered more than 2% of total sales. The share of butter on total sales decreased from the FY 2057/058 to 2061/062. The share of cheese in total sales was not satisfied in the sense of marketing. After milk the second highest share on total sales was taken by ghee, which ranged between 10% to 12.22%. in almost years. Another two products panir and ice-cream covered less than 1% share every year, It showed that the share of various products expects 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 Maharjan, 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 were decreased. The pasteurized milk was the major earning source of the corporation in comparison to other product.

4.2.3. Detailed Sales Plan of DDC

DDC is manufacturing enterprises, 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 FY2063/64 is as bellow.

Table no. 3
Detailed sales plan
(By Product and scheme)
For the FY2063/064

In Rs.000

| Product Scheme/Details | Activities Base | Unit | Rate | Amount(Rs) |
|------------------------|-----------------|---------|---------|------------|
| | Reference | Input=1 | Input=2 | 1X2=3 |

| Milk | Unit (liter) | Price | Total |
|---------------|--------------|-------|---------|
| Kathmandu | 49015 | 30 | 147050 |
| Biratnagar | 5202 | 30 | 156060 |
| Hetauda | 3212 | 30 | 96360 |
| Pokhara | 2032 | 30 | 60960 |
| Lumbini | 2648 | 30 | 79440 |
| MP&DS | | | |
| MPDDS | 554 | 30 | 16620 |
| Total of Milk | 62663 | 30 | 1879890 |

| Dahi | Unit (liter) | Price | Total |
|---------------|--------------|-------|-------|
| Kathmandu | 301 | 55 | 16555 |
| Biratnagar | 178 | 55 | 9790 |
| Hetauda | 181 | 55 | 9955 |
| Pokhara | 193 | 55 | 10615 |
| Lumbini | 13 | 55 | 715 |
| MP&DS | 416 | 55 | 22880 |
| MPDDS | - | 55 | - |
| Total of Dahi | 1282 | 55 | 70510 |

| Butter | Unit (Kg) | Price | Total |
|-----------------|-----------|-------|--------|
| Kathmandu | 127 | 300 | 38100 |
| Biratnagar | 7.6 | 300 | 2280 |
| Hetauda | 8.3 | 300 | 2490 |
| Pokhara | 70 | 300 | 21000 |
| Lumbini | 3.1 | 300 | 930 |
| MP&DS | 186 | 300 | 55800 |
| MPDDS | - | 300 | |
| Total of Butter | 402 | 300 | 120600 |

| Cheese | Unit (Kg) | Price | Total |
|-----------------|-----------|-------|-------|
| Biratnagar | 3.54 | 400 | 1416 |
| Hetauda | 3.7 | 400 | 1480 |
| Pokhara | 29 | 400 | 11600 |
| Lumbini | 2.9 | 400 | 1160 |
| MP&DS | 127 | 400 | 5800 |
| MPDDS | - | 400 | - |
| Total of Cheese | 166 | 400 | 66456 |

| Ghee | Unit (kg) | Price | Total |
|---------------|-----------|-------|--------|
| Biratnagar | 121 | 350 | 42350 |
| Hetauda | 97 | 350 | 33950 |
| Pokhara | 183 | 350 | 64050 |
| Lumbini | 49 | 350 | 17150 |
| MP&DS | 439 | 350 | 153650 |
| MPDDS | 6 | 350 | 2100 |
| Total of Ghee | 825 | 350 | 313250 |

| Paneer | Unit (Kg) | Price | Total |
|---------------|-----------|-------|-------|
| Biratnagar | 7.3 | 220 | 1606 |
| Hetauda | 5.7 | 220 | 1254 |
| Pokhara | 5.1 | 220 | 1122 |
| Lumbini | 4.9 | 220 | 1078 |
| MP&DS | 55 | 220 | 12100 |
| MPDDS | - | 220 | - |
| Total of Milk | 78 | 220 | 17160 |

| Ice-Cream | Unit (liter) | Price | Total |
|---------------|--------------|-------|-------|
| Biratnagar | 5.3 | 150 | 795 |
| Hetauda | 3.1 | 150 | 465 |
| Pokhara | 4.7 | 150 | 705 |
| Lumbini | 1.9 | 150 | 285 |
| MP&DS | 39 | 150 | 5850 |
| MPDDS | - | 150 | - |
| Total of Milk | 65 | 150 | 9750 |

| Total of Product | Unit | Price | Total |
|------------------|--------------|-------|---------|
| Milk | 62663(liter) | 30 | 1879890 |
| Dahi | 1282 (liter) | 55 | 70510 |
| Butter | 402 (Kg) | 300 | 120600 |
| Cheese | 166(Kg) | 400 | 66456 |
| Ghee | 895(Kg) | 350 | 313250 |
| Paneer | 78(Kg) | 220 | 17160 |
| Ice-Cream | 65(Liter) | 150 | 9750 |
| Grand Total | | | 2477616 |

MP&DS = Milk Production and Distribution Scheme

The above Sales Budget detailed by products & scheme demonstrates the sales of corporation for the FY 2064/65. The budget showed that Kathmandu was the leading plant for production & sales of pasteurized milk more than 75% of the total consumption were in Kathmandu Pokhara Hetauda & Biratnagar which were the leading ranks respectively. Lumbini had small share on the total sales of the milk but MP&DS had no share from selling of milk where as MPDDS collected milk & sold it in Hetauda & Pokhara. The sales made by MPDDS in Hetauda & Pokhara were not available separately.

Kathmandu Plant sold milk & demand of the other products in Kathmandu was fulfilled by MP&DS, comprising 43% of Dahee, 56% of butter, 82% of cheese, 50% of ghee, 78% of paneer & 75% of ice-cream in total sales of the corporation. Pokhara is the second leading Plant in terms of sales of various products comprising 20% share of Dahee, 68% share of Butter 13% of Cheeses, 20% of Ghee, 5% of Paneer & 8% of Ice-Cream. Biratnagar had 18% share of Dahee, 2% of Butter, 2% of Cheese, 13% of Ghee, 7% of Paneer & 6% of Ice-Cream. Hetauda has 19% share of Dahee, 2% of Butter, less than 2% of Cheese, 11% of Ghee & 4% of Paneer & Ice-Cream. Lumbini has a small Plant of the corporation with 5% share of Ghee, 1% share of Dahee & Cheese & less than 1% share of Butter & Paneer. MPDDS is a new Plant of the Corporation that collects Milk from framers & sale it to Pokhara & Hetauda. It produces 7846 Kg Ghee for sale in other markets

In the total sales of the Corporation of Rs.2477616, Kathmandu made 60% share amounting to Rs. 1486569.60 by selling milk only. MP&DS is the another leading Plant of the Corporation which sales milk products except pasteurized milk & takes 11% share to Rs. 272537.76, Biratnagar is one of the large Plant of the corporation with 8% share amounting to Rs 30970200. 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

4.2.4 Long Range sales plan of DDC

In general practice, business organization may schedule strategic long-range sales plan as one of the step in the overall planning process DDC prepares annual sales volume of various products where as long term sales plan is developed on annual basis. The sales plan is the foundation for periodic planning for an enterprise, it is considered as cash generating source & basis for development of other functional budget. The volume of final products to be produced is determined by sales unit & all other expenses (cost) related budget is prepared on the basis of production unit. The various products sales budget of DDC from the FY 2058/59 to FY 2063/64 is as below.

**Table no.4
Comparative Sales Budget
(By Product)**

| FY Product | | Milk (liter) | Dahi (liter) | Butter (Kg) | Cheese (Kg) | Ghee (Kg) | Paneer (Kg) | Ice-Cream (liter) |
|------------|------|--------------|--------------|-------------|-------------|-----------|-------------|-------------------|
| 2058/59 | Vol | 54092 | 927 | -279 | 147 | 954 | 49 | 30 |
| | + % | -9.56 | +4.15 | 22.93 | -35.24 | +29.61 | +40 | -30.33 |
| | - | | | | | | | |
| 2059/60 | Vol. | 60262 | 960 | 310 | 181 | 887 | 48 | 39 |
| | + % | +11.41 | +3.56 | +0.11 | +23.12 | -7.02 | -2.00 | +3.00 |
| | - | | | | | | | |
| 2060/61 | Vol. | 61217 | 1011 | 327 | 207 | 893 | 68 | 43 |
| | + % | +0.75 | +5.31 | +5.48 | +14.36 | +0.68 | +41.67 | +10.26 |
| | - | | | | | | | |
| 2061/62 | Vol. | 61969 | 981 | 332 | 213 | 909 | 69 | 49 |
| | + % | +1.23 | -2.97 | +1.53 | +2.90 | +1.79 | +1.47 | +13.95 |
| | - | | | | | | | |
| 2062/63 | Vol. | 67614 | 999 | 380 | 168 | 872 | 58 | 37 |
| | + % | +9.10 | +1.83 | +14.46 | -21.26 | -4.07 | -15.94 | -24.48 |
| | - | | | | | | | |
| 2063/64 | Vol. | 62663 | 1282 | 402 | 166 | 895 | 78 | 55 |
| | + % | -7.32 | +28.32 | +5.79 | -1.20 | +2.64 | +34.48 | +32.72 |
| | - | | | | | | | |

The above table shows that the selling of milk increased from the FY 2058/59 to FY 2063/64 up to 9.10% in except the FY 2060/61 in which budget estimate is less than the previous budget by 7.32% respectively. The budget of Dahi fluctuated during last 6 years in the FY 2058/59,

2059/60, 2060/61, 2062/63 & 2063/64; it increased than the previous budget by 4.15%, 3.15% , 5.31%, 1.85% & 28.32% respectively but estimate sales decrease than the previous budget only in the FY 2061/62. The trend of sales budget of butter wasn't stable. It was decreased in the FY 2058/59 only than the previous budget by 22.93% but increased in the FY 2059/60, 2060/61, 2061/62, 2062/63, 2063/64 by 0.11%, 5.48%, 1.53%, 14.56% & 5.79% respectively. The sales budget of cheese shows that decreased in the FY 2058/59, 2062/63 & 2063/64 by 35.24%, 21.26% & 1.20% respectively than the previous budget. The sales of Ghee was in fluctuating that it increased except in the FY 2059/60 & 2062/63 by 7.02% & 4.07% respectively. The sales of Paneer increased than the previous estimation in FY 2058/59, 2060/61, 2061/62, 2063/64 by 40%, 41.675, 1.47% & 34.48% but decreased in FY 2059/60, & 2062/63 by 2% & 15.94%. The trend of Ice-Cream increased than the previous estimation in FY 2059/60, 2060/61, 2061/62 & 2063/64 by 3%, 10.26%, 13.95% & 32.72% but decreased in FY 2058/59 & 2062/63 by 30.33% & 24.28%. The major cause of increase or decrease beyond 10% is because of the estimation of the department or head office on the basis of previous actual result or information of market. But increase or decrease by more than 10% is cause of exchange in fixed assets (i.e. installation of new plant or huge problem arises in the plant.). Government import & export policy, policy related to farmers, to attract donor organization. Sometimes it is also seen because of unsystematic budgeting process & 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 Paneer is the cause of increasing demand in the market.

Table no.5
Comparative Sales Budget

In '000

| FY | 2058/59 | 2059/60 | 2060/61 | 2061/62 | 2062/63 | 2063/64 |
|--------------|---------|---------|---------|---------|---------|---------|
| Sales Target | 164678 | 168250 | 189887 | 192393 | 194527 | 198247 |
| ±% | --- | +2.17 | +12.86 | +1.32 | +1.11 | +1.92 |

±%- 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 increasing market of DDC from above past budget amount. To estimate future trends for corporation least square method was use. Least square method will show the relationship of time & budgeted sales.

Table no.6
Time Series Analysis
Fitting Straight Line Trends by Least Square Method

In “000

| FY | Budgeted Sales (Y) | X | XY | X ² |
|---------|--------------------|-----|---------|--------------------|
| 2058/59 | 164678 | -5 | -823390 | 25 |
| 2059/60 | 168250 | -3 | -504750 | 9 |
| 2060/61 | 189887 | -1 | -189887 | 1 |
| 2061/62 | 192393 | 1 | 192393 | 1 |
| 2062/63 | 194527 | 3 | 583581 | 9 |
| 2063/64 | 198247 | 5 | 991235 | 25 |
| N=6 | Y=1107982 | X=0 | =249182 | X ² =70 |

2059/60 & 2060/61 is assumed to be base year

Straight line trends $Y=a+bx$

Where,

$$a = \bar{y} = 1107982/6 = \text{Rs. } 184663.67$$

$$b = \frac{\sum xy}{\sum x^2} = 249182/70 = 3559.74$$

The trend line shows the positive budgeted sales figure of Rs. 3559.74 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 2063/64 will be,

$$Y = 184663.67 + 3559.74 X 7$$

$$Y = 209581.87$$

Therefore, on the basis of past records, an estimated sales figure the FY 2064/65 will be Rs. 2095818700

4.2.5 Actual Performance of the Corporation

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

Table no.7
Sales Plan & Achievement
For 6 year period
(By Products)

In"000

| Year/ Product | | Milk | Dahi | Butter | Cheese | Ghee | Panir | Ice- Cream |
|------------------|----------|--------|--------|--------|--------|--------|--------|---------------|
| 2058/59 | Target | 54092 | 960 | 310 | 181 | 787 | 48 | 39 |
| | Actual % | 57764 | 1057 | 289 | 150 | 732 | 64 | 32 |
| | | 106.79 | 110 | 93.23 | 82.87 | 107.51 | 133.30 | 82.03 |
| 2059/60 | Target | 60262 | 1011 | 327 | 207 | 793 | 68 | 43 |
| | Actual % | 60275 | 1102 | 232 | 161 | 704 | 70 | 38 |
| | | 113.30 | 109 | 70.94 | 77.77 | 112.64 | 102.90 | 88.37 |
| 2060/61 | Target | 61216 | 1081 | 332 | 213 | 809 | 69 | 49 |
| | Actual % | 61817 | 1097 | 308 | 194 | 879 | 73 | 42 |
| | | 100.98 | 101.48 | 70.95 | 91.08 | 108.65 | 105.80 | 85.71 |
| 2061/62 | Target | 61972 | 1153 | 365 | 235 | 825 | 72 | 55 |
| | Actual % | 62343 | 1167 | 376 | 140 | 838 | 76 | 58 |
| | | 100.60 | 101.21 | 103.01 | 91.07 | 101.58 | 105.56 | 105.45 |
| 2062/63 | Target | 62153 | 1189 | 387 | 160 | 867 | 75 | 60 |
| | Actual % | 63878 | 1205 | 381 | 168 | 877 | 78 | 64 |
| | | 102.78 | 101.34 | 94.44 | 105 | 101.15 | 104 | 106.67 |
| 2063/64 | Target | 62663 | 1282 | 402 | 166 | 895 | 78 | 65 |
| | Actual % | 99363 | 1589 | 393 | 193 | 915 | 86 | 72 |
| | | 158.57 | 123.95 | 97.77 | 116.26 | 102.23 | 110.25 | 110.76 |

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 worse in the budgeting process but in above table it shows that there is variation up to 40% in between budget & actual sales of the various products. The achievement of target sales of milk is satisfactory. The corporation can achieve the target in FY 2058/59, 2059/60, 2060/61, 2061/62, 2062/63 & 2063/64 by 106.79%, 113.30%, 100.98%, 100.60%, 102.78% & 158.57% respectively. The target on the sales of Dahi is mostly achieved in every year by 110%, 109%, 101.48%, 101.21%, 101.34% & 123.95%.

The corporation completely fails to achieve the target of butter sales. The failure rate of the corporation is 6.77% in FY 2058/59, 29.05% in 2059/60, 7.22% in 2060/61, 1.55% in 2062/63, 2.23% in 2063/64 & sales 3.01% more than target in FY 2061/62.

The cause of this failure is only an ineffectiveness of the management basically budgeting sector as well as implement sector. The target of Cheese is also not achieved by the corporation on these six years. The corporation almost all in 6 years couldn't achieve its budgeted figures. It shows that the budgeting department of the corporation prepares the budget not systematically. The target of Ghee sales is achieved by the

corporation during FY 2060/61, 2061/62, 2062/63 & 2063/64 but failure to achieve the target in FY 2058/59 & 2059/60. In the process of achieving target sales of Paneer corporation get over sales of every 6 years. Corporation makes the excess sales of the Ice-Cream in FY 2061/62, 2062/63 & 2063/64 but failure to achieve the target in FY 2058/59, 2059/60 & 2060/61 respectively.

The above comparison shows that there is no effective system of budgeting in the corporation & the estimation of the demand for the future period is not based on the real grounds. 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, huge political & economic problems.

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

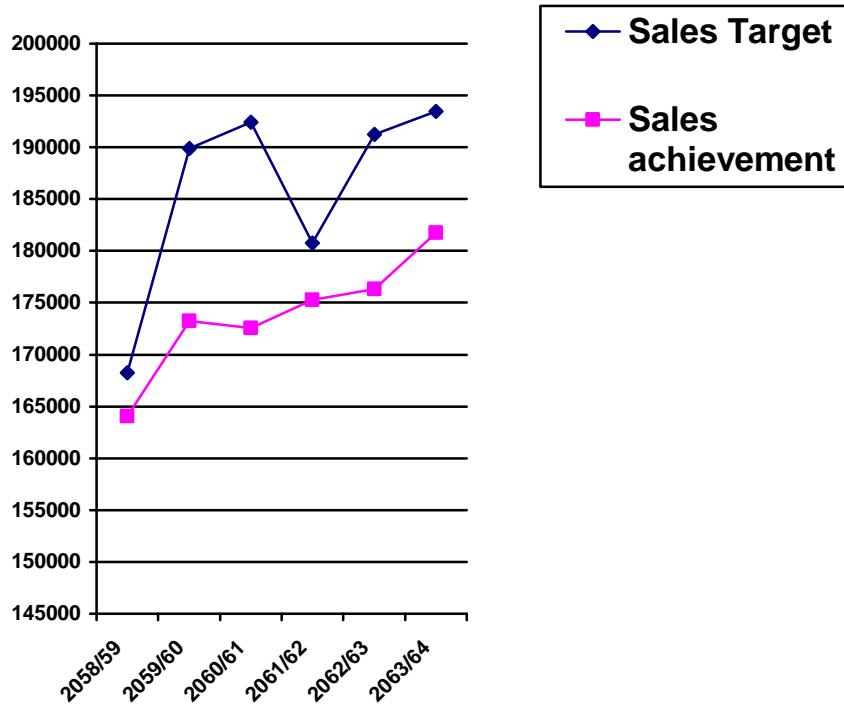
Table no.8
Sales Plan & Achievement
(Milk & Milk Products)

In “000

| Fiscal Year | Sales Target | Sales Achievement | Achievement (%) |
|-------------|--------------|-------------------|-----------------|
| 2058/59 | 168250 | 164061 | 97.51 |
| 2059/60 | 189887 | 173234 | 91.23 |
| 2060/61 | 192393 | 172557 | 89.69 |
| 2061/62 | 180754 | 175260 | 96.97 |
| 2062/63 | 191275 | 176297 | 92.16 |
| 2063/64 | 193482 | 181758 | 93.94 |

Analysis of the above sales figure shows that the actual sales of the corporation are always less than the targeted sales. In the FY 2058/59, 2059/60, 2060/61, 2061/62, 2062/63 & 2063/64 sales achievement are 97.51%, 91.23%, 89.69%, 96.97%, 92.16% & 93.94% respectively of estimated sales. So comparison of sales plan & actual achievement of DDC shows that, there is lack of expert’s planner & lack of good research of market areas where milk products can be sold.

The actual & target sales also can be shown by graphical representation as follows:



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

The arithmetical means & standard deviation with there coefficient of variation of sales target & achievement for 6 years period from FY 2058/59 to FY 2063/64. The above graphical presentation shows that actual sales are always less than budgeted sales & both are increasing trends.

The arithmetical means & standard deviation with there coefficient of variation of sales target & achievement for 6 years period from FY 2058/59 to FY 2063/64 are calculated in appendix no.2 & summary is presented as below:

Summary of Calculation

| Particulars | Budgeted Sales(X) In Rs.'000 | Actual Sales(Y) In Rs.'000 |
|--------------------|---------------------------------|----------------------------------|
| Mean | 186006.83 | 173861.17 |
| Standard Deviation | 8966.32 | 5297.60 |
| C.V | 4.82 % | 3.04 % |
| $r=0.977$ | $r^2=0.63841$ | Probable error of $r=0.09957$ |

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

To find correlation between target & actual sales, Karl Pearson's coefficient of correlation is calculated for this purpose target sales (X) as assumed to be independent variable & sales achievement (Y) as assumed to be dependent variable, It is assumed that achievement will increase as target increase or decrease. The calculation of (r) & its probable errors is shown in appendix 2, the value of (r) is 0.799 & this figure (r) denotes that there is positive correlation between sales target & achievement. In other words sales achievement is going on the similar way of the sales target. The significant of (r) can be tested by the help of probable error. Probable error of (r) = 0.09957

Since (r) > 6 i.e. PE (0.799 > 6 X 0.09957), the value of r is definitely significant, so it can be said that achievement will go same direction that of target sales.

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

Here,

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

$$Y - \bar{Y} = r \times \frac{s_{dy}}{s_{dx}} (x - \bar{X})$$

When,

Mean of X = 186006.83

Mean of Y = 173861.17

Standard deviation of X = 8966.32

Standard deviation of Y = 5297.60

Correlation of Coefficient (r) = 0.799

or, $Y - 173861.17 = 0.799 [5297.60/8966.32] (X - 186006.83)$

or, $Y - 173861.17 = 0.472075 (X - 186006.83)$

or, $Y = 0.472075X - 87809.30 + 173861.17$

or, $Y = 0.472075X + 86051.85$

So, $\bar{X} = 186006.83$ $\bar{Y} = 173861.17$

s.d (X) = 8966.32 s.d (Y) = 5297.60

$$r = 0.799$$

So, $(Y - \bar{Y}) = r \frac{dy}{dx} (X - \bar{X})$

or, $Y - 173861.17 = 0.799 (5297.60/8966.32) (X - 186006.83)$

or, $Y = 0.472075 (X - 186006.83) + 173861.17$

or, $Y = 0.472075X - 87809.30 + 173861.17$

or, $Y = 0.472075X + 86051.85$

Here, 86051.85 is called the y- intercepts because its value is the point in which the regression crosses the Y-axis i.e. vertical axis. 0.4720 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) & above regression equation shows that the positive relationship between target & actual sales.

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

Table no.9
Fitting Straight Line Trends by Least Square Method

| FY | Actual Sales(Y) | X | XY | X ² |
|---------|-----------------|----|---------|----------------|
| 2058/59 | 164061 | -5 | -820305 | 25 |
| 2059/60 | 173234 | -3 | -519702 | 9 |
| 2060/61 | 172557 | -1 | -172557 | 1 |
| 2061/62 | 175260 | 1 | 175260 | 1 |
| 2062/63 | 176297 | 3 | 528891 | 9 |
| 2063/64 | 181758 | 5 | 9087790 | 25 |
| Total | 1043167 | 0 | 100377 | 70 |

Fiscal year 2060/61 & 2061/62 are assumed as base year.

Straight line trend $Y = a + bx$

$$a = \frac{y}{n} = \frac{1043167}{6} = 173861.16$$

$$b = \frac{xy}{x^2} = \frac{100377}{70} = 1433.95$$

Therefore,

$$y = 173861.16 + 1433.95 x$$

The trend line shows the positive sales figure of Rs. 1433.95 which increase the sales every year. If sales trend of past years for future then sales of FY 2064/65 will be

$$y = 173861.16 + 1433.95 \times 7$$

$$y = 173861.16 + 10037.70$$

$$y = 183898.86$$

Therefore, on the basis of past records estimated sales for the FY 2064/65 will be Rs. 1838988600.00.

Sales & Profitability of the Corporation

Profit means excess of revenue than cost. In production process, there are various cost incurred by the producers on behalf of product & get revenue from sales of such products. Profit & 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 below

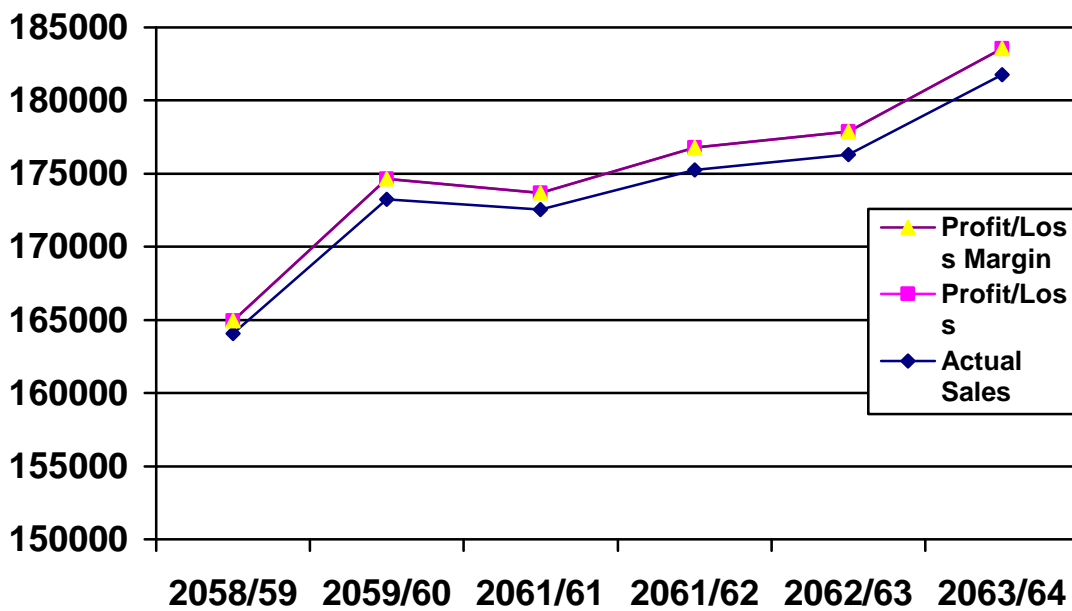
Table no. 10
Actual Sales & Profit/Loss
 (For 6-year period)

In “000

| FY | Actual Sales | Profit/Loss | Profit/Loss Margin |
|---------|--------------|-------------|--------------------|
| 2058/59 | 164061 | 893 | 0.5443 |
| 2059/60 | 173234 | 1412 | 0.8150 |
| 2060/61 | 172557 | 1126 | 0.6525 |
| 2061/62 | 175260 | 1534 | 0.8752 |
| 2062/63 | 176297 | 1596 | 0.9052 |
| 2063/64 | 181758 | 1779 | 0.9787 |

The above table shows the actual & profit/loss status of the corporation in which accrued profit in year 2058/59 to 2063/64. For further analysis, above data is presented in graphical figure as below:

Sales & Profit Loss of the Corporation



The table shows that the trends of the actual sales are in increasing trends but the trends of the profit fluctuating trends while the corporation succeeds to increase its as requirement of the budget but can't success to increase the sufficient profit.

To find the correlation between actual sales & profit/loss Karl Pearson's coefficient of correlation (r) is calculated. For this purpose actual sales (x) is assumed to be independent variables. The calculation of r & its

probable errors as well as standard deviation & coefficient of variation is calculated in appendix 3 & summarized as below

Summary of the Calculation

In “000

| Particulars | Actual Sales (X) | Profit/Loss (Y) |
|-------------|------------------|-----------------|
| Mean | 173861.16 | 1390 |
| S.d | 8966.32 | 297.68 |
| C.V | 3.04 % | 21.41 % |
| r=0.9486 | r^2 | PE(r)=0.027540 |

For the calculation it has been found that the value of r is 0.9486, which denotes that there is negative correlation between actual sales & profit/loss. In other words, the sales of profit/loss are not going on the similar way as rate of actual sales. The significant of r can be tested by the help of probable error of r. We have probable of r = 0.027540
 $R < P.E.$ i.e. $(0.027540 < 0.9486)$

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

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

So, the regression line of profit/loss(Y) on actual sales (X) is regression line of Y on X.

$$Y - \bar{Y} = S.D. (Y) / S.D. (X) (X - \bar{X})$$

Substituting the value of formula:

$$Y - 1390 = 297.68/8966.32 (X-173861.16)$$

or, $Y = 0.0331997 (X - 173861.16) + 1390$
or, $Y = 0.0331997 X - 5772 + 1390$
or, $Y = 0.0331997X - 4382$

Here, 4382 is called Y – intercepts because its value is the point at which regression crosses the Y- axis i.e. vertical axis. 0.0331997 is the slope of

line it represents the change of the dependent variable X & above regression equation shows that the negative relationship.

4.4 Sales, Cost & Profit Relationship

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

To know about such diversion between sales & profit, a comparative study of sales, cost & profit for 6 years period is prepared which is presented as below:

Table no.11
Sales, Cost & Profit Relationship

In Rs. ‘0000

| FY | Sales | | Cost | | Profit/Loss | |
|---------|--------|---------|--------|------|-------------|-------|
| | Figure | ± % () | Figure | ± % | Figure | ± % |
| 2058/59 | 164061 | - | 160051 | - | 893 | - |
| 2059/60 | 173234 | 5.59 | 171822 | 7.35 | 1412 | 58.11 |
| 2060/61 | 172557 | -0.39 | 171931 | 0.06 | 1126 | -2025 |
| 2061/62 | 175260 | 1.57 | 173726 | 1.04 | 1534 | 36.23 |
| 2062/63 | 176297 | 0.59 | 174305 | 0.33 | 1596 | 4.04 |
| 2063/64 | 181758 | 3.09 | 179979 | 3.25 | 1779 | 11.46 |

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

In FY 2059/60 sales increased by 5.59% than the previous year & cost increased by 7.35% which creates 58.11% increasing in profit of the corporation than the previous year. In FY 2060/61 sales is decreased by 0.39% where cost only increased by 0.06% than previous which creates 2.25% decreased in the loss than the previous year. In FY 2061/62 sales of the corporation increased by 1.57% where as cost increased by 1.04% than the previous year which creates 36.23% increase in profit. In FY 2062/63 sales increased by 0.59% cost also increased by 0.33% & which creates only 4.04% profit than previous year. In FY 2063/64 sales of the

corporation increased by 3.09% cost also increased by 3.25% & which creates profit by 11.46% than previous year.

4.5. Production Budget

Production is the basis of sales in the manufacturing enterprises without production any manufacturing can't able to goods & services to the customer. On this view, this study wants to show production budget & achievement of the corporation as subsidiary points of our objectives.. The 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, weeks & months. It is the estimation of the quality of goods to be produced during the planned period. A comparison between actual & budgeted production of various products of DDC is presented as below:

Table no: 12

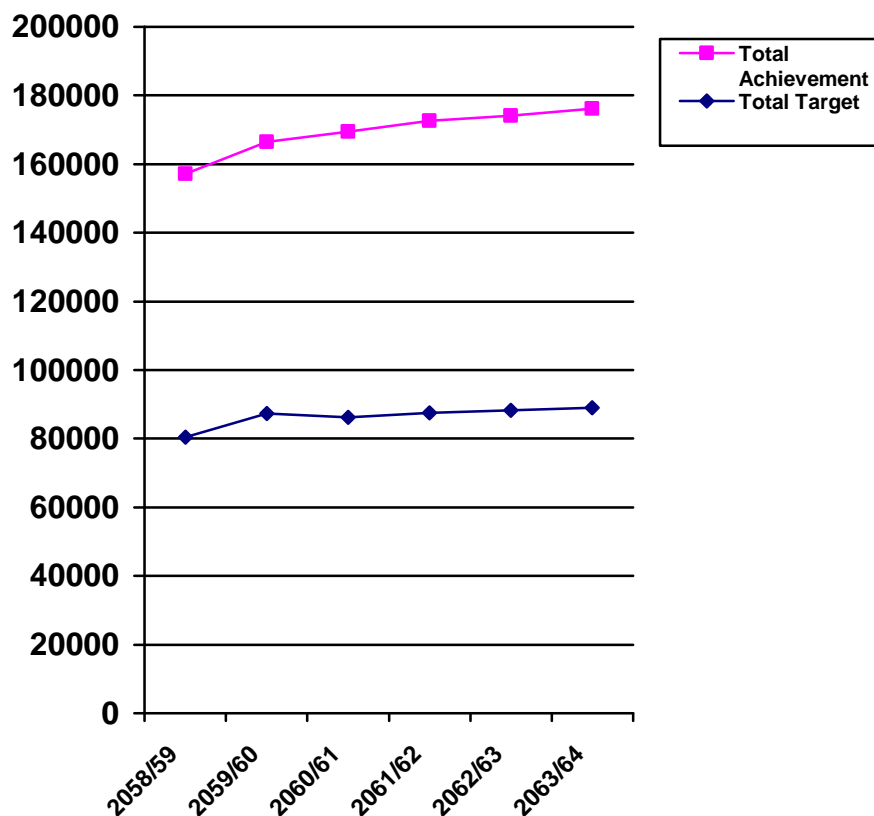
Target Production & Achievement
By Year

In '0000

| FY | Total Target | Total Achievement | % of Achievement |
|---------|--------------|-------------------|------------------|
| 2058/59 | 80473 | 76678 | 95.25 |
| 2059/60 | 87367 | 79136 | 90.57 |
| 2060/61 | 86263 | 83139 | 96.37 |
| 2061/62 | 87498 | 85132 | 97.29 |
| 2062/63 | 88176 | 86021 | 97.55 |
| 2063/64 | 88982 | 87239 | 98.04 |
| | | | |

The above table shows that achievement is higher in FY 2063/64 which is 98.04% to target production & FY 2059/60 achievement is lowest which is 90.57 to target production. Likewise in FY 2058/59, 2060/61, 2061/62 & 2062/63 the achievement is 95.28%, 96.37%, 97.29% & 97.25% of the targeted production respectively.

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



It is obvious from the above graph that the actual production for a FY 2061/62, 2062/63 & 2063/64 is higher than the targeted production & FY 2058/59, 2059/60 & 2060/61 it is higher than budgeted production.

Above table shows that corporation is failure achieve the target production of Cheese, Ghee & Butter in every year from FY 2058/59 to FY 2063/64. The rate of failure is 5.25%, 7.03%, 2.85%, 1.57%, 0.05% & 1.33% respectively.

4.6. Analysis of the Primary Data

To find out the reason for existing discrepancies between planned & actual achievement in the field of sales & production budgeting of the DDC, opinion pole of 52 sample employees of the corporation of various level (20-officers & 32- other staffs among of total 52 officer level & 79 other staffs of central office of the corporation, lainchour) were made through specific questionnaire & result derived from the same are as follows:

Table no: 13

Cause of Deviation on Budgeting

| S.N | Items of Cause | No. of Employees | Percentage |
|-----|----------------------------|------------------|------------|
| 1. | Lack of effective planning | 26 | 50 |
| 2. | Political instability | 8 | 15.39 |

| | | | |
|----|----------------------------------|----|-------|
| 3. | Lack of capacity | 6 | 11.54 |
| 4. | Competitive market | 4 | 7.69 |
| 5. | Lack of effective administration | 4 | 7.69 |
| 6. | Others | 4 | 7.69 |
| 7. | Total | 52 | 100 |

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 the total employees. Another reason founded from the research is lack of effective administration, competition in the market & others which are followed by the 7.69% of the total employees respectively.

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

4.7. Identification of Cost Variability

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

1. Fixed cost: Fixed cost is those cost that is constant in total with in the relevant range but per unit fixed cost rate is different. Example of the fixed cost is rent, insurance, salary etc.
2. Variable cost: Variable are those cost that change in total for different level of output cost etc. is variable.
3. Semi-Variable cost: Those expenses which are neither fixed nor variable because they possess some characteristics of both known as semi-variable cost. Telephone expenses, electricity bills etc. examples of semi-variable cost.

Identification of cost variability according to accounting department of DDC is presented in the following table:

Table no: 14
Cost Classification
Based on FY 2063/64

| Cost Item` | Fixed Cost (Rs.) | Variable Cost | |
|---------------------------------|------------------|---------------|------------|
| | | Rs. | % of Sales |
| Collection expenses | | 1127668155.15 | |
| Processing expenses | | 233860039.03 | |
| Selling & Distribution expenses | | 3945277.33 | |
| Administration expenses | 61146047.38 | | |
| Gratuity | 17465023.17 | | |
| Depreciation | 30008611.51 | | |
| Interest on loan | 4334401.26 | 95.54 | |
| Total cost | 112954083.32 | 1365473471.51 | 95.54 |

Annual Sales: Rs. 1547411197.21

Total fixed of DDC is Rs. 1547411197.21 & total variation cost is Rs. 1365473471.51 which is 95.94% of total sales & only 7.46% of sales are available to meet the fixed cost. It indicates that the company is running below BEP point & needs either to sales without increasing fixed cost or has to take measure to reduce cost.

4.8. Flexible Budget

A flexible budget is a tactical plan that estimates first at different level of activities. It provides expenses adjusted plan to assume 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.

DDC doesn't prepare flexible budget. On the basis of cost & other data of the FY 2063/64 a flexible budget of DDC has been prepared as below. To prepare sales revenue has been assumed to remaining same ratio as it is in the FY 2063/64. Similar variable cost ratio will remain unchanged & fixed cost remains constant.

Table no: 15
Flexible Budget of Dairy Development Corporation

In Rs.'00000

| Particulars | Activity Levels | | | | | |
|-----------------------------|-----------------|-------|-------|-------|-------|-------|
| | 75% | 100% | 150% | 200% | 250% | 300% |
| Sales Revenue | 14692 | 19589 | 29383 | 39178 | 48972 | 58767 |
| Less: V.C @ 95.54% of Sales | 14036 | 18715 | 28072 | 37430 | 46615 | 56146 |
| Contribution Margin | 656 | 874 | 1311 | 1748 | 2357 | 2621 |
| Less:F.C | 1224 | 1224 | 1224 | 1224 | 1224 | 1224 |
| Profit/Loss | (568) | (350) | 87 | 524 | 1133 | 1397 |

The above calculation shows that DDC is incurring the large amount of fixed cost. Contribution margin of DDC is 6.46% of sales revenue. It is difficult to cover fixed cost at 100% of capacity utilization. The profit comes into picture, if DDC operates at 150%, which is difficult to utilize the current capacity. So, DDC is supposed to reduce fixed cost.

4.9. Cost-Volume-Profit (CVP) Analysis

Cost Volume Profit Analysis is an analytical technique for studying the relationship between volumes, cost, prices & 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.

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

CVP relationship of DDC is based on the following assumption:

1. CVP analysis is based on the accounting data of the FY 2063/64 of DDC.
2. Opening & closing balance of the finished products are ignored.
3. Activity base in terms of sales revenue.
4. Non-operating incomes & expenses are excluded from the CVP relationship.
5. Selling price, variable cost ratio & fixed cost per year are assumed to remain constant.
6. Computation is made on total cost basis not in product wise.
7. DDC's total cost has been divided into fixed & variable cost.

The profit & loss account of DDC of the FY 2063/64 is taken as basis for the following figures:

In Rs. '00000'

Sales revenue(S) = Rs.19589

Total fixed cost (F) = Rs.1224

Total variable cost (V) = Rs.18715

Calculation of BEP,

Profit Volume ratio (P/V ratio) = $1 - V/S$

Where,

V = Variable cost

S = Sales revenue

or, P/V ratio = $1 - 18715/19589 = 1 - 0.95538 = 0.0446 = 4.46\%$

We have,

BEP = fixed cost / P/V ratio = $1224/0.0446 = \text{Rs. } 27443.78$

The above calculation shows that the present revenues less than the BEP (Rs.) DDC's BEP are Rs. 27443.78 ('00000). So, the DDC went into loss. It indicates that either DDC 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 & 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. 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. Dairy Development Corporation followed short-term tactical sales plan rather than long term strategic sales plan.

DDC 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.

The top –level executives were only involved in planning and decision making and low level employee's participation was not encouraged.

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.

Sales and production of the DDC increased each year but the rate of growth was disproportionate.

There was no proper sales forecasting were done on the basis of personnel judgment of high level mgmt of various responsibility centers.

The actual sales were always lower than budgeted sales. There was positive correlation coefficient and positive regression equation (line) for budgeted and actual sales.

More than 75% of total sales revenue covered by sales of milk and less than 25% from other milk products.

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.

DDC was unable to collect all milk offered by the farmers. The collection structure of the DDC with 1041 MPCs and 74 MPAs were not sufficient for collection of milk from farmers.

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.

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.

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 sigh of lack of effective planning mechanism and implementation capability of the corporation.

DDC was at loss and it increased up to 3rd year and made profit in the succeeding year.

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.

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.

DDC is operation 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.

DDC will earn profit at 140% of current operation, which is impossible. The major caused for inconsistency between planning and achievements were lack of effective planning, lack of capacity, political disturbance etc.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATION

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 budgets 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.

DDC 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. DDC is producing eight types of milk and milk products. There are six projects and forty-three chilling center under DDC, which covered about 150000 farmers of various parts of Nepal. The marketing network of DDC 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 DDC, the study has tried to answer certain questions started in statement of problems. This study mainly focused on the sales budgeting process adopted by DDC and its performance on the budget. It also tries to identify the cause of deviation in budgeted and actual performance of DDC. 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.

DDC 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. DDC 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 face, middle and lower level employees perform the main operation tasks of the enterprises.

DDC does not have separate planning department. Overall responsibility of preparing profit plan is under account department. However, such department does not show performance.

Collection network of the DDC covers 43 chilling centres, 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 booths 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 DDC but Corporation was not success to collect all milk offered by farmers.

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 2061/62, corporation make less sales than budget by 6.78% of butter, 17.13% of Cheese, 6.20% of Ghee and 17.95% of Icecream but make over sales by 33.33% of Panir and 10.11% of Dahi which 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.

DDC 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.

DDC 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.

DDC 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. DDC has in depth analysis of the industry's strengths and weakness. However, this research found the following strength and weakness of the corporation.

Strengths.

Quality products.

Directly related to basis commodity.

Government undertaking.

Job security for employees.

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 DDC, following recommendation will help to improve DDC's planning performance.

DDC 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 DDC may not be effective.

DDC must apply the overall concepts of profit planning and Control by preparing plan for future.

DDC 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.

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.

DDC 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.

Make consistency in the trend of sales budgeting. High fluctuation in every years target is not suitable.

Apply the suitable sales forecasting technique. The combination of economic rhythms method and correlation methods is suitable for the corporation.

To meet the target of the sales, sales budget should be prepared after depth analysis of environmental factor and prepare the effective implementation structure. DDC should consider the sales plan while planning production.

DDC must prepare the strong structure for distribution of milk of making a co-ordination with private sector to avoid unnecessary competition between dairies.

DDC 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.

Scientific pricing policies should be adopted. Remove unnecessary government interferes on pricing system.

Cost control is the only way to increase the industry's profitability. Therefore, cost reduction programmers should be introduced for each responsibility centers.

DDC 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.

DDC 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.

In DDC, 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.

System of periodic performance report should be strictly followed, to be conscious toward poor performance and to take corrective action timely. DDC 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.

DDC should have in depth analysis of the corporation's strength and weaknesses. It should try to overcome its weaknesses by using the national fund in current competitive market. Therefore, either government forgives the corporation to the effective management or privatizes it. 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: 1

The comparative positions of the marketing center of DDC
For the last 6 years are as follows:
Computation of the share of the various products on total sales
(By Product)

| | Rate | 2062/63 | | | 2063/64 | | |
|-----------|------|---------|---------|-------|---------|---------|-------|
| | | Unit | Rs. | % | Unit | Rs. | % |
| Milk | 30 | 104431 | 3132930 | 83.13 | 62663 | 1879890 | 85.54 |
| Dahi | 55 | 1012 | 94160 | 2.49 | 1282 | 70510 | 3.20 |
| Butter | 300 | 562 | 168600 | 4.47 | 402 | 120600 | 5.48 |
| Cheese | 400 | 166 | 66400 | 1.76 | 166 | 66456 | 3.02 |
| Ghee | 350 | 803 | 281050 | 7.15 | 895 | 313250 | 14.25 |
| Paneer | 220 | 78 | 17160 | 0.43 | 78 | 17160 | 0.78 |
| Ice-Cream | 150 | 55 | 8250 | 0.22 | 65 | 9750 | 0.44 |

Appendix: 2

Calculation of mean & standard deviation
(Of actual & target sales)

| FY | Sales Target (X) | Actual Sales (Y) | U = (X - \bar{X}) | U ² | V = (Y - \bar{Y}) | V ² | UV |
|---------|------------------|------------------|----------------------|----------------|----------------------|----------------|--------------|
| 2058/59 | 168250 | 164061 | -17756.83 | 315305011.64 | -9800.17 | 96043332.02 | 174019952.66 |
| 2059/60 | 189887 | 173234 | 3880.17 | 15057775.71 | -627.17 | 393342.20 | -2433526.21 |
| 2060/61 | 192393 | 172557 | 6386.17 | 40781367.26 | -1304.17 | 1700859.38 | -8328651.32 |
| 2061/62 | 180754 | 175260 | -5252.83 | 27592223 | 1398.83 | 1956725.36 | -73447816.18 |
| 2062/63 | 191275 | 176297 | 5268.17 | 27753615.14 | 2435.83 | 5933267.78 | 12832366.53 |
| 2063/64 | 193482 | 181758 | 7475.17 | 55878166.52 | 7896.83 | 62359924.04 | 59030146.71 |
| Total | 1116041 | 1043167 | 0 | 482369959.27 | 0 | 168387450.78 | 227772472.19 |

For target sales:

$$\bar{X} = \text{mean of target sales} = X/N = 1116041/6 = 186006.83$$

Standard Deviation (s.d):

$$\text{s.d.} = (1/6 \times 482369959.27)^{1/2} = (80394993.2116)^{1/2} = 8966.32$$

Coefficient of Variation (C.V):

$$\text{C.V} = \text{s.d.}/\bar{X} = 8966.32/186006.83 = 4.82\%$$

For actual sales:

$$\begin{aligned}\bar{Y} &= Y/n = 1043167/6 = 173861.17 \\ \text{s.d} &= (1/n \times V^2)^{1/2} = (1/6 \times 168387450.78)^{1/2} \\ &= (28064575.13)^{1/2} = 5297.60 \\ \text{C.V} &= \text{s.d}/\bar{X} = 5297.60/173861.17 = 3.04\%\end{aligned}$$

Calculation of Correlation Coefficient

$$\begin{aligned}r &= UV / (U^2 \times V^2)^{1/2} \\ &= 227772472.19 / (482369959.27 \times 168387450.78)^{1/2} \\ &= 0.799\end{aligned}$$

Calculation of Probable Error of 'r':

$$\begin{aligned}\text{P.E of } r &= 0.6745 \times 1 - r^2/n^{1/2} = 0.6745 \times 1 - 0.63840/2.44948 \\ &= 0.09957\end{aligned}$$

Calculation of Coefficient of determination

$$r^2 = (0.799)^2 = 0.638401$$

Appendix: 3

Calculation of Correlation coefficient, Mean & Standard deviation
(Of Actual Sales & Profit)

| FY | Actual Sales (X) | Profit & Loss (Y) | U = (X - \bar{X}) | U² | V = (Y - \bar{Y}) | V² | UV |
|--------------|-------------------------|------------------------------|---------------------------------------|----------------------|---------------------------------------|----------------------|----------------|
| 2058/59 | 164061 | 893 | -9800.17 | 9604332.02 | -497 | 247009 | 4870684.49 |
| 2059/60 | 173234 | 1412 | -627.17 | 933402.20 | 22 | 484 | -13797.74 |
| 2060/61 | 172557 | 1126 | -1304.17 | 1700859.38 | -264 | 69696 | 344300.88 |
| 2061/62 | 175260 | 1534 | 1398.83 | 1956725.36 | 144 | 20736 | 201431.52 |
| 2062/63 | 176297 | 1596 | 2435.83 | 5933267.78 | 206 | 42436 | 501780.98 |
| 2063/64 | 181758 | 1779 | 7896.83 | 62359924.04 | 389 | 151321 | 3071866.87 |
| Total | 1043167 | 8340 | 0 | 168387450.78 | 0 | 531682 | 8976267 |

For actual sales: (From Appendix-2)

$$\begin{aligned}\bar{X} &= \text{mean of target sales} = 173861.16 \\ \text{s.d} &= \text{standard deviation} = 8966.32 \\ \text{C.V} &= \text{Coefficient of Variation} = 3.04\%\end{aligned}$$

For Profit & Loss

$$\text{Mean } (\bar{Y}) = Y/n = 8340/6 = 1390$$

$$\begin{aligned}\text{Standard deviation (s.d)} &= [1/n \sum (Y - \bar{Y})^2]^{1/2} \\ &= (1/6 \times 531682)^{1/2} \\ &= 297.68\end{aligned}$$

Calculation of Variation (C.V):

$$\text{C.V} = \text{s.d.}/\bar{Y} = 297.68/1390 = 21.41\%$$

Calculation of Correlation Coefficient (r):

$$\begin{aligned}r &= UV / (\sum U^2 - \sum V^2)^{1/2} \\ &= 8976267 / 9461947.58 = 0.9486\end{aligned}$$

Calculation of Probable Error of r:

$$\begin{aligned}\text{P.E of } r &= 0.6745 \times 1 - r^2/n^{1/2} = 0.6745 \times 0.0408313 \\ &= 0.027540\end{aligned}$$

Calculation of Coefficient of Determination:

$$r^2 = (0.9486)^2 = 0.89984$$

Appendix:4
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 is the method of Sales forecasting?

6. What are the products of DDC?

7. Who prepares the sales budget?
 - a. Sales department ()
 - b. Account department ()
 - c. Board 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 measures its activity?

a. Production unit ()

b. Sales unit ()

c. Sales amount ()

d. Others ()

12. Would you please highlight in brief problem faced by the corporation in formulating & implementing profit planning?

13. What are the mean strength and weakness of the corporation?

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 & actual performance. Please give us your opinion about the cause of such deviation.

- a. Lack of consistency in administration ()
- b. Lack of capacity ()
- c. Government intervention ()
- d. Lack of effective planning ()
- e. Others ()

BIBLIOGRAPHY

BOOKS:

- Agarwal, Govind Ram, (1994) Management Control System for Enterprises in Developing Countries, Kathmandu: CEDA, TU.
- Agarwal Govind Ram, (2002) Dynamics of Business Environment in Nepal, Kathmandu:MK. Publication.
- Bratt. Flmer C., (1998) Business Forecasting, New Delhi: Tata Mc Grew 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., (1992) Management Accounting Agra: Shitya Bhawan Publication.
- Gupta, S.P., (1990), Statistical Method, New Delhi: Tata Mc Grew Hill Publication Co. Ltd.

- Hamdy, H. Taha, (2000), Operation Research, (New Delhi: Printice Hall of India Pvt. Ltd.)
- Hilton, Ronald W (1991), Management Accounting, United States: Mc Grew Hill Inc.
- 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 Mc Grew Hill Publication Co. Ltd
- Kalpan, Robert S. and Atkinson, Anthony A . (1996) Advance Management Accounting, New Delhi: Printace Hall of India Pvt.Ltd.
- Khan.M. and Jain P.K. (1989), Management Accounting, New Delhi: Tata Mc Grew Publishing Co.Ltd.
- Khan.M. and Jain P.K. (1986), Management Accounting, New Delhi: Tata Mc Grew Publishing Co.Ltd.
- Kothari, C.R., (2000), Research Methodology: Methods and Techinques, New Delhi: Vishwa Prakashan
- Kulkari, P.V., (1985), Financial Management, Bombay: Himalaya Publishing House

- Luncey, T., (1998), Management Accounting, U.K: L.D.P. Publication Ltd.
- Lych, R.M., and Williamson, Accounting for Managements Planning and Control, New Delhi: Tata Mc Grew Publishing Co.Ltd.
- Munkarmi, Shiva P., (2003), Management Accounting, Kathmandu: Buddha Academic Publisher and Distributor Pvt. Ltd.
- Manandhar, Narayan, (1987), Issue In Public Enterprise Management, Kathmandu
- Narayan Laxmi, P., (1997), Principle and Practice of Public Enterprise Management, New Delhi: Sultan Chand Co. Ltd.
- Pandey, I.M., (1994), Financial Management, New Delhi: Vikash Publication House Pvt .Ltd.
- Pant P.R., Wolf. H.K., (2002), Social Science Research and Thesis Writing Kathmandu: Buddha Academic Publisher and Distributor Pvt. Ltd.
- Welsch,Glenn A., and Maheshwari K.L., (1990), Management Economics, new Delhi: Sultan Chan and Sons
- Pandey, I.M., (1994), Management Accounting, New Delhi: Vikash Publication House Pvt.Ltd.

THESIS:

- Acharya, Kashi Raj, (1996) “Financial of Dairy Development Cooperation”, Unpublished Master’s Thesis Shanker Dev Campus, T.U.
- Chapagain, K.P., (1998) “Role of Comprehensive Budgeting in profitability of

- Nepalese PEs (special Reference with Royal Drug Ltd.)”, Unpublished Master’s Thesis. Shanker Dev Campus, TU
- Dahal, Narayan Prasad, (1999) “Profit Planning and Control in Nepalese Manufacturing Company (A Case study of Himal Cement Company)”, Unpublished Master’s Thesis: Shanker Dev Campus, T.U.
- Jha, Sanjaya Kumar, (2005) “Profitability Analysis of Public Enterprises.” Unpublished Master’s Thesis Nepal Commerce Campus, T.U.
- Manandhar, Rajini, (2007) “Cost Volume Profit Analysis of Kathmandu Dairy” Unpublished Master’s Thesis Nepal Commerce Campus, T.U.
- Pahari, Prakash, (2000), “Profit Planning and Control in Dairy Development Corporation”, Unpublished Master’s Thesis: Shanker Dev Campus, T.U.
- Panta, Jaya Raj, (2006) “A Study of Leverage Analysis of Dairy Development Corporation” Unpublished Master’s Thesis Nepal Commerce Campus, T.U.
- Pokheral, Puskar Prasad, (2001) “Profit Planning in Manufacturing of Public Enterprises of Nepal”, Unpublished Master’s Thesis Nepal Commerce Campus, T.U.

Ruwali, Surya Prakash,(1999),

“Profit Planning and Control in Public Utility Enterprises in Nepal (A Case study of Gorkhapatra Corporation), Unpublished Master’s Thesis: Shanker Dev Campus, T.U.

Sharma, Rakesh, (2007)

“Effectiveness of Distribution System of Dairy Development Corporation” Unpublished Master’s Thesis Nepal Commerce Campus, T.U.

JOURNAL & OTHERS

Monthly Journals of Dairy Development Corporation

Annual Bulletin of Dairy Development Corporation

Audited Balance sheet of Dairy Development Corporation for FY (2058/59-63/64)

Website: www.nepaldairy.com.np

Website: www.dairydev.com.np

Website: www.kathmandudairy.com.np