

CHAPTER – I

INTRODUCTION

1.1 Background of the study

Cost reduction or profit improvement is a must for every firm not only to survive in the short term but also to be remaining in the long run. Profit is not an ugly word after satisfying employees and shareholders, purposefully fulfilling legal and social obligation, playing a dominant part in the society we belong, setting standard of excellence in the market, yet after satisfying all these, a company has every right to make profit. Managers of business firms are vitally concerned with profits.

The primary purpose of planning in business is to increase the chance of making a profit. Profit planning is one of the most important managerial tools used to plan and control business operations. Profit plan, clearly states the future state of affairs of a firm and set up the best possible way to get there. Profit plan is a financial plan prepared as a guide to control future business conditions. Profit planning is a systematic approach for attaining effective management performance. The concept of comprehensive profit planning and control encompasses and fully depends upon as to what extent the management follows proper planning, effective co-ordination and dynamic control. This requires that management must plan for future financial and physical requirements to maintain profit ability and productivity of the business organization. Thus, the procedure for preparing plan in respect of future financial and physical requirements is generally called profit planning.

Profit planning has the objective of attaining the optimum profit as indicated by many successful applications. To manage the enterprise with the objective to achieving the maximum profit is perhaps the most

difficult job of managers as the profit does not just happen so every enterprise should systematically plan for profit in a proper way.

DDC was established with the objectives of processing the milk purchased from farmer and supply pure dairy product to the urban people. Though, it was established about three decades ago the DDC is still at the stage of infancy, with respect to its financial standing because of its continuous failure to generate surpluses for the many years. It has to depend always on the government financial burden on the government. The situation has become even worse that it has not been able to repay its foreign loan. It is also alleged that the inefficient performance of the DDC has lead it to add the cost of efficiency in the price of its product. So the customers are made to pay higher price, which is in contrary to the social obligation of the DDC. Further the position of DDC is not altogether easy due to the possibility of entrance of new firms and this requires the DDC to plan not only for short period but also for long term.

Milk and milk related products are popular all over the world. The corporation like DDC must identify and grab this opportunity in the best interest of organization. With the Profit planning and control important managerial tools would be a helpful means to identify, collect process, store, and marketing the plants.

In this context this study is a small attempt to evaluate the state of profit planning in DDC and to provide the tools and techniques that enhance the planning in the corporation.

1.2 Statement of the problems

Most of the manufacturing PEs is showing Loss instead of success or failure of any business enterprises is measured by capacity of generating surplus over expenditure. It is universally accepted that in the absence of profit, no enterprises may survive nor can compete. But the financial performances of Management enterprise in Nepal are quite dismal and have not been able to contribute toward the generation of surplus.

Major enterprises do not prepare long and short range plans but the plan they prepare is adhoc type. The problem of DDC are similar with them. The present study highlights the detail problems in relation to DDC with special reference to planning for profit. Most of the time, it has been operating at loss since the establishment it is perhaps due to the improper planning. This is the very issue this study has addressed. Further this study has tried to analyze and examine the profit planning, performance and its application in DDC. More specifically this study has been carried out to address the following issues:

-) What extent is the process of profit planting being followed by DDC?
-) What steps should be taken to improve the profit planning system in the manufacturing companies like DDC?
-) What is the condition of firm's profitability and financial aspects?
-) Is there any variance between budgeted and actual financial figure?
-) What is the relationship between different kinds of financial and cost components those are instrumental for profit planning?

1.3 Objectives of the study

The main objective of this study is to analyze and examine the profit planning and its application of DDC. Besides, the following are the specific objectives.

-) To analyze the financial budgets and profit planning practice that is followed in DDC.
-) To examine the financial position of the concern.
-) To evaluate the variance between budgeted and actual financial progress of DDC.
-) To find out the relationship among financial variables those are instrumental in profit planning.

1.4 Significance of the study

This study has primarily focused on profit planning and control aspect of manufacturing companies like DDC. The systematic and scientific approaches of profit planning and budgeting furnished here would be of immense help to the concerned company to collect, produce and market herbs and herbal materials. The companies like DDC can prepare, appraise and evaluate the profit planning which intern help to prepare overall strategic planning, implementation and control. The relationship among financial variables that has been described in the study would give very insightful explanation of how a given variable affect another financial variable. This would be significant to manager to produce desire effect on some variable changing another one.

Likewise, government may take advantage of the study to review their policy reforms. Moreover students, researchers, scholars, and other interested parties those are interested this field may take advantage of the study.

Likewise this study is designed to conduct from management perspective, planners and policy makers will find its results important. This research will also be fruitful because research is related to DDC with respect to profit planning perspective.

Without proper planning, profit will not just happen. So, every commercial enterprise should systematically plan for profits in a proper manner. Various functional budgets are the basic tools for proper planning of profit and control over them. The present study will try to analyze and examine the budgeting system and its uses as tools of profit planning in DDC.

It is only from profit that investors can be compensated for risking their capital. It ensures jobs for workers, customer for suppliers of raw materials and product for consumers. Hence, it is the primary obligation for management of the firm to maximize the firm's profit over the long term by satisfying its social responsibility. Profit planning process considerably contributes to improve the profitability of enterprises as to improve the overall financial performance of an organization by the help of best and effective utilization of resources and thereby an improvement in the industrialization process of a country.

Accomplishment of objectives in every organization depends upon the application of resources. This availability of resources is scarce and the financial performance of an organization depends purely on the use of its resources. Budgeting is the key to productive financial planning. So all the organizations are running under commercial principle has to give regard to these most important single tools while managing their physical and financial targets. If the planning process of an organization is effective and result oriented, the pace of development naturally steps forward.

1.5 Limitations of the study

This study is subject to some constraints as none of the study can go beyond the boundary of some limitations. This study does not cover all the manufacturing companies of Nepal. Data available up to the year 2008 will be employed for analysis purpose. Beyond the time and resource constraints some of the unavoidable hindrances may come in course of study are as follows:

-) This study is primarily based on secondary data of five fiscal years.
-) Secondary data have extensively been used. The reliability of results depends on these data.
-) Analysis has been focused upon financial and accounting aspect.
-) There were innumerable variables having some degree of relationship each other but some of them have only been taken into consideration.
-) Only selected financial and statistical tools have been employed for analysis purpose.

1.6 Organization of the study

This study have been divided into five chapters, they are:

Chapter I: Introduction

This Chapter includes background of the study, focus of the study, statement of the problem, objectives of the study, Limitation of the study, significance of the study and organization of the study.

Chapter II: Review of Literature

This Chapter includes theoretical analysis and brief review of related and pertinent literature available. It includes a discussion on the conceptual framework of the major studies.

Chapter III: Research methodology

This Chapter includes research design, nature and sources of data, population and sample and data analysis tools.

Chapter IV: Data presentation and analysis

This Chapter deals with analysis and Interpretation of data using Accounting and Statistical tool, which is described in Chapter III.

Chapter V: Summary, Conclusion and Recommendation

This Chapter includes the major findings of the study. This Chapter is gist of the study, findings, summary and recommendation will include in this Chapter.

CHAPTER II

REVIEW OF LITERATURE

Literature review is basically a "Stock taking" of available literature in one's field of research. The literature survey thus provides the knowledge of the status of their field of research. The library is a rich storage base for all kinds of published materials including theses, dissertations, business reports and government publications. The purpose of literature review is thus find out what research studies have been conducted in one's chosen field of study, and what remains to be done. It provides foundation for developing a comprehensive theoretical framework from which hypothesis can be developed for testing.

2.1 Conceptual Framework

Every one desires for rapid socio-economic development of the country by utilizing the scarce resources. Public enterprise is one of the most important means of socio-economic development of the country. The rationale behind the establishment of public enterprises are basically to accelerate the rate of economic growth, to build infrastructures of development, to make provision of public utility, to generate employment opportunity, to supply essential commodities and service; and to reduce trade imbalance of the country. But in fact, operational efficiency of the Nepalese public enterprises does not seem satisfactory in accomplishing their objectives. In this context, a study of profit planning in manufacturing public enterprises in Nepal with a special reference DDC has been undertaken as a case study to analyze the various financial budgets that are prepared by DDC, to sketch the trend of the profitability, to evaluate the variance between budget and actual of the concern and to examine practice and effectiveness of profit

planning. Further, reason as to why profitability has been negative, and the factors responsible for such a state of affairs have been explored.

The present chapter, conceptual framework has been made with a view to recapitulate the basic concept of literature to show how to complete the present line of study. They have analyzed and searched using appropriate tools and techniques. The chapter mainly incorporates concept of profit and profit planning, important and limitation of profit planning development of profit planning. Level of forecasting, corporate planning, budgets and budgeting, process of profit planning and the fundamentals of profit planning are the subjects to be dealt here.

2.1.1 Concept of Profit and Profit Planning

Generally, profit planning is known as planning for profit, which is planned by the management of the concern. The task should be implemented according to plan, so it directs the organization toward achieving profit. Before going into the in-depth view of profit planning the researcher has to get some idea about profit and planning.

2.1.1.1 Concept of Profit

Dictionary meaning of profit is the money that you make in business or by selling things, especially after paying costs involved, the advantage that you get from doing something (Hornby, 2000; 1011).

Profit is essential to survive in any business concern for its successful operation, future expansion and growth. It is the primary measures of success of business organization. It is the excess income over the cost of production. The word profit implies a comparison of the operations of business between two dates, which are usually separated by an interval of one year. The term profit is very controversial and there are several different interpretation about it. It has various dimension and views to be realized. The researcher can say very frankly that, it has not yet been

defined as such definition can solely, wholly and fully be accepted. The researcher has already accepted the view of Lynch and Williamson, an economist, labour leader, investor, revenue agent and an accountant of the concern has different view about profit. An economist will say that profit is the reward for entrepreneurship for risk taking. A labour leader might say that it is a measure of how efficiently labour has produced and that it provides a base for negotiating a wage increase. An investor will view it as a gauge of the return on his or her money. An internal revenue agent might regard it is the base for determining income taxes. The account will define it simply as the excess of a firm's revenue over the expense of producing revenue in a given fiscal period.

Profit is the reward for risk taking in business. An entrepreneur earns profit as reward for his innovations. It also is resulted from favorable moments of the general price level. The greater degree of monopoly power, the greater profit made by the enterprise (Joshi, 1993;10). Economist's argues on profit may be put in three broad groups. The first looks upon profit as the reward for bearing risks and uncertainties, the second views profit as the consequence of perfection and in-perfection in the competitive adjustment of the economy to dynamic change, the third sees profit as the reward for successful innovation (Joel, 1997; 6). It could be noted that profit is residual income left after the payment of the contractual rewards to other factors of production (Joshi, 1985; 45).

Profit is the primary measure of operational efficiency of a business firm. The success of business depends largely upon the profit earned by the business. In other word, the managerial efficiency of any concern is reflected upon the volume of profit. So, profit is a signal for the allocation of resources and a yardstick for judging managerial efficiency (Kulkarni, 1985; 45).

In the definitions, the researcher can conclude that there is no definite definition of profit. It depends on the definer's views; and their interest. The researcher would use the profit as revenue after cost of production. Under the cost of production, all factors of production should be considered for e.g. house rent, labour wage, material cost, machine cost, cost of capital as well a opportunity cost of capital.

2.1.1.2 Concept of Planning

Planning consists of setting goals for the firm, both immediate and long range; considering the various means by which such goals may be achieved and deciding which of any available means would be best suited to the attainment of the goals sought under the condition expected to prevail (Lynch & Williamson, 1996; 5). Dictionary meaning of planning is the act or process of making plans for something (for example, curriculum, financial and family planning also) and plan means something that you inter to do or achieve, a set of things to do in order to achieve something, especially one that has been considered in detail in advance and way of investing money for the future: a saving plan (Hornby, 2000; 962).

Planning consists in setting goals for the firm, both immediate and long range; considering the various means by which such goals may be achieved; and deciding which of any available alternative means would be best suited to the attainment of the goals sought under the conditions expected to prevail (Lynch & Williamson, 1996; 5). Planning means deciding in advance what is to do in future. It is a method of thinking out acts and purpose before hand. Planning is the concrete recognition of the futurity of present decisions.

Planning is process of developing enterprise objectives and selecting a future course of action to accomplish them. It includes (a) establishing enterprise objectives, (b) developing premises about the environment in

which they are to be accomplished, (c) selecting a courses of action for accomplishing the objectives, (d) initiating activities necessary to translate plans in to action and (e) re-planning to correct current deficiencies (Wesch et. al, 1992; 3).

It is a continuous process to be performed in an organization. In the passage of time an organization should make the new plans and re-plans of the existing plans. Existing plans must be revised as continuous change and new information becomes available.

The definition of planning deals it as process which is a system approach of management. Planning is the best tool of operational and financial control of an organization. Management planning and control systems play the vital role in operation, financial any and other area of the management of the organization. Following are the role of management planning and control systems.

Management planning and control begins with the establishment of the fundamental objectives of the organization, and continues as the process by which necessary resources are provided and employed effectively and efficiently toward achievement of the goals. A management planning and control system provides the comprehensive framework within which this process is carried out. Such a system encompasses all aspects of an organization's operations, and thus is seen as a 'total' system.

To help reduce this massive concept to workable proportions, it is convenient to view it in terms of three subsystems.

- a) Strategic Planning
- b) Management Control
- c) Operational Control

a) Strategic Planning

Strategic planning is along range in its time perspective and complete in its breadth of scope and depth of penetration. Involving as it does the determination and periodic change of organizational objectives, the acquisition and use of the resources required for their attainment and the establishment of the basic policies, which guide the goals oriented activities of the organization, strategic planning is necessarily a top management function. It is highly creative and therefore relatively unstructured in character. Its timing is irregular and opportunistic. It must be tuned in to the external environment within which the organization presently functions, as well as to the direction in which that environment is heading and to the changes that are likely to occur. Thus, there must be a strong external orientation, with sensitivity to social, economic, political, and international and myriads of other influences.

Plans, policies and decisions for an industrial concern might typically involve selection of plan sites; acquisitions and mergers; new product development; changes in markets and distribution channels; changes in fundamental capital structure; formulation of long range policy; expanding into multinational business activities. Indeed, it might be said that strategic planning established the fundamental internal environment within which all the activities of the organization will be carried on.

b) Management Control

Management control is carried on within the environment established by strategic planning. Its primary emphasis is on carrying out the policies resulting from strategic planning, rather than on setting them. Its time span tends to be short to intermediate term. The activity is some what rhythmic in its patterns of activity and scheduling. Because of the pervasive nature of this function, the participation of management at all levels of the organization is usually required. Its goals are tangible

within the broad frame work of overall organizational objectives, and it's focus is on line management which participates in the formulation of near-term plans and the criteria by which the line manger's performance is to be measured.

Thus, within the scope of the total operations of the organization, the management control system must comprise an integrated structure of related subsystems, setting forth the plans and standards of measurement for each and all functioning units of the organization. In contrast with the creative approach to planning characteristic of strategic planning, management control requires administrative and persuasive skills in its successful implementation. Typical of the form taken by the plans flowing from the management control system are the detailed budgets for all units of the organization for the next year, and the three to five years plans as an extension there-of.

c) Operational Control

Operational control is employed to assure that management planning is carried to fruition effective and efficiently in the organizations. Its scope and focus involve the operating unit. It is executed principally at the level of front line supervision. Its goals are invariably short-term and rather rigidly structured, as are the criteria for measuring performance toward their achievement. Its activity patterns are highly repetitive, and they are characterized by the close adherence to directions, with little exercise of initiative. Some of the typical ways in which operational control systems are implemented are inventory control systems, sales quotas, and sales personnel's reports, credit and collection systems, production scheduling, departmental overhead reports, daily production reports, daily reports of bank balance, responsibility reporting systems measuring actual costs incurred against budget allowances by departments, and the like (Lynch & Willamson, 1996; 139).

Planning should start by deciding and defining the objectives of the company, making sure in the process that there are comparative with the skills and resources of the undertaking.

2.1.3 Concept of Profit Planning

After having some concept of profit and planning, the researcher thinks that it is necessary to know some concept about profit planning. Generally speaking planning for profit is known as profit planning. Profit planning directs the organization toward achieving profit because the task should implement according to plan. In other word if a management plans for profit for a certain period of time it is called profit plans.

The term comprehensive profit planning and control is defined as a systematic and formalized approach for performing significant phases of the management planning and control functions. Specifically, it involves (1) the development and application of broad and long range objectives for the enterprise; (2) the specification of enterprise goals; (3) a long range profit plan developed in board terms; (4) a short-range profit plan detailed by assigned responsibilities (division, products, projects); (5) a system of periodic performance reports detailed by assigned responsibilities; and (6) follow up procedures (Wesch, et. al., 1992; 1).

When management of a concern plans for profit for certain period of time, it is called profit planning. "It is defined as an estimation and predetermination of revenues and expenses that estimate how much income will be generated and how it should be spent in order to meet investment and profit requirement. In the case of institution operation it presents a plan for spending incomes in manner that does not result in a loss." Explaining the use of budget and profit plans they further mention

once developed managers know that when actual expenses exceed budget limitations there may be problems. The profit plan tells managers how much money remains to be spent in each expense category. Profit plan along with actual accounting information, becomes the basis for developing the next fiscal (accounting) years' budgets (Jack and Raymond, 1998; 133).

The profit planning is used the development and acceptance of objective and goals and moving an organization efficiently to achieve the objectives and goals. It is not a separate technique that can be thought of operated independently of the total management possess. Rather than broad concept of profit planning entails an integration of numerous managerial approaches and techniques.

Profit planning is played vital role in management of an organization and it is guided with some principles and proposes. The main principles and purposes of profit planning are as follows (Kellar & Ferrara, 1992; 389).

- a) To provide of realistic estimate of income and expenses for a period and of the financial position at the close of the period, detailed by areas of management responsibility.
- b) To provide a co-ordinate plan of action which is designed to achieve the estimates reflected in the budget.
- c) To provide a comparison of actual results with those budgeted and an analysis and interpretation of deviation by areas of responsibility to indicate courses of corrective action and to lead to improvement in procedures in building future plans.
- d) To provides a guide for management decision in adjusting plans and objectives an uncontrollable conditions change.
- e) To provides a ready basic for making forecasts during the budget period to guide management in making day to today decisions.

Comprehensive profit planning is a new term in literature of business. It is defined as a process designed to help management effectively perform significant phase of the planning function. The profit planning model includes development and application of broad and long range objectives of enterprise, specification of enterprise goals, development of long range profit plan in broad terms, specification of tactical short range profit plan detailed by assigned responsibilities (like division, department, projects) and follow up procedures.

2.2 Important and Limitation of Profit Planning

Important and limitation of any subject help to clear their concept. Keeping the fact in mind, the researcher is going to deal about important and limitation of profit planning in the present section.

2.2.1 Important of Profit Planning

Profit planning is a base of the management process. Management requires a variety of information to plan, to control and to make decision. The information and guidance are given by profit planning and management & profit planning are closely inter-linked. Profit planning is very important to any business organization. The following main argument are usually given for profit planning and control (Wesch, et. al., 1992; 60):

- 1) It forces early consideration of basic policies.
- 2) It requires adequate and sound organization structure; that is, there must be a definite assignment of responsibility for each function of the enterprise.
- 3) It compels all members of management from the top to down to participate in the establishment of goals and plans.
- 4) It compels departmental managers to make plans in harmony with the plans of other departments and of the entire enterprise.

- 5) It requires that management put own in figures what is necessary for satisfactory performance.
- 6) It requires adequate and appropriate historical accounting data.
- 7) It compels management to plan for the most economical use of labour material and capital.
- 8) It instills at all levels of management the habit of timely, careful, and adequate consideration of the relevant factors before reaching important decisions.
- 9) It reduces cost by increasing the span of control because fewer supervisors are needed.
- 10) It frees executives from many day to day internal problems through predetermined policies and clear cut authority relationship. It there by provides more executive time for planning and creative thinking.
- 11) It tends to remove the cloud of uncertainty that exists in many organizations, especially among lower levels of management, relative to basic policies and enterprise objectives.
- 12) It pinpoints efficiency and inefficiency.
- 13) It promotes understanding among members of management of their co-workers' problems.
- 14) It forces management to give adequate attention to the effect of general business conditions.
- 15) It forces a periodic self analysis of the company.
- 16) It aids in obtaining bank credit; banks commonly require a projection of future operations and cash flows to support large loan.
- 17) It checks progress or lack of progress toward the objectives of the enterprise.
- 18) If forces recognition and corrective action (including rewards).
- 19) It rewards high performance and seeks to correct unfavourable performance.

- 20) It forces management to consider expected future trends and conditions.

2.2.2 Limitations of Profit Planning

Profit is primary measure of operational efficiency of any business organization. Profit do not just happen, profit are managed which is know as profit planning. Profit planning is one of the most important management tools which is used to plan and control business organization. But profit planning has some argument as limitations.

The following main arguments are usually given against profit planning and control (Wesch, et. al., 1992).

- 1) It is difficult, if not impossible, to estimate revenues and expenses in our company realistically.
- 2) Our management has no interest in all the estimates and schedules. Our strictly informal system is better and works well.
- 3) It is not realistic to write out and distribute our goals, policies and guidelines to all the supervisors.
- 4) Budgeting places too great a demand on management time, especially to revise budgets constantly. Too much paper work is required.
- 5) It takes away management flexibility.
- 6) It creates all kinds of behavioural problems.
- 7) It places the management in a straitjacket.
- 8) It adds a level of complexity that is not needed.
- 9) It is too costly, aside from management time.
- 10) The managers, supervisors, and other employees hate budgets.

2.3 Development of Profit Planning

The preceding section gives an overview of a comprehensive profit planning. The initiating management decisions, in developing the plan were the statements of broad, objectives, specific goals, basic strategies, and premises. Following those activities and decision, the strategic (long range) and tactical (short range) profit plans are developed. These profit plans are based on a structured planning process that includes a series of sequential steps. The end result is called a comprehensive profit plan (Wech, 1992; 171). Development of profit planning relates about sales plans, production plan, materials purchase budget, labour budget, overhead budget, capital expenditure and capital addition budget for strategic (long range) as well as tactical (short range).

2.3.1 Sales Plan

Sales plan is the starting point in the proportion of the comprehensive profit planning and control. All the other plans and budgets depend upon the sales budget. The budget is usually presented both in units and dollars 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 (Arthur and Meir, 1970; 684).

The sales plan should be worked out on a sound and reasonably detailed basis. It should reflect seasonal influences and any anticipated irregularities in sales. It should be broken down not only into time periods but also into geographical or a responsibility area by the use of sales quotes. A well developed sales plan is generally built up on a quota basis in the first place. So, that the double check by individual quota on total plan is inherent in the building. In a multi-plant situation, where there is a choice of manufacturing product items in more than one plant, the geographical distribution of sales is of special importance for

production planning. Adequate sales planning is basic fundamental to profit planning program (William, 1989; 502).

Unless there is a realistic sales plan, partially all other elements of a profit plan will be out of writer with reality. The sales plan is the foundation for periodic planning in the firm because practically all other enterprise planning is built on it. The primary source of cash in sales; the capital additions needed the amount of expense to be planned, the manpower requirements, the production levels and other important operational aspects depend on the volume of sales. In harmony with the comprehensive profit plan, both strategic (long-term) and tactical (short-term) sales plans must be developed. Thus one commonly observes a five years strategic sales plan many management decision commit a large amount of resources involving a life span of many years. Basic strategic and major moves often involve irreversible commitments of resources and long time span (Welsch et. al., 1992; 139).

The strategic and tactical sales plans have three distinct parts (i) the planned volume of sales at the planned sales price per unit for each product, (ii) the sales promotional plan (advertising and other promotional costs) and (iii) the sale (distribution) expenses plan (Welsch et. al., 1992; 139). The primary purpose of sales plan are (a) to reduce uncertainty about revenues, (b) to incorporate management, judgements and decisions in to the planning process (e.g. in the marketing plans), (c) to provides necessary information for developing other elements of a comprehensive profit plan, and (d) to facilitate management's control of sales activities (Welsch et. al., 1992; 172).

2.3.1.1 Sales Planning and Forecasting

Sales planning and forecasting often are confused. Although related, they have distinctly different purposes. A 'forecast' is not a plan; rather it is a statement and/or a quantified assessment of future conditions

about a particular subject (e.g. sales revenue) based on one or more explicit assumptions. A forecast should always state the assumption upon which it is based. A forecast should be viewed as only one input in to the development of a sales plan. The management of a company may accept, modify, or reject the forecast. In contrast, a 'sales plan' incorporates management decisions that are based on forecast, other inputs, and management judgments about such related items as sales volume, prices, sales efforts, production, and financing (Welsch et. al., 1992; 172).

The short-term sales forecast provides the base for the current years sales plan and finished goods inventory plan. At the same time the influence of the long-term sales forecast is reflected in the capital expenditure plan and in the finished goods inventory plan. The long-term forecast serves at what might be called the anchor end of the finished goods inventory plan. Since inventory at the end of this year is the beginning inventory for next year business it is necessarily influenced by the long-term sales thinking as well as the current year's short-term forecast. The long-term sales forecast provides the base for developing, in rough out line, the capital expenditure plan. The portion of the plan falling within the current year is reflected in the capital expenditure budget (William, 1989; 502).

It is important to make a distinction between the sales forecast and the sales plan primarily because the internal technical staff should not be expected or permitted to make the fundamental management decisions and judgments implicit in every sales plan (Welsch et. al., 1992; 172).

2.3.1.2 Strategic and Tactical Sales Plan

As a practical approach, a company may schedule completion of the strategic (long-term) sales plan as one of the first steps in the overall planning process. For example, a company operating on a calendar year

may complete a long-term sales plan at least in tentative form, by the end of July because this gives sufficient lead time for interim considerations essential to development of next year's comprehensive short-term profit plan during the latter part of the proceeding calendar year. Long-term sales plans are usually developed as annual amounts. The long-term sales plan uses broad grouping of products (product lines) with separate consideration of major and new products and services. Long-term sale plans usually involve in depth analyses of future market potentials, which may be build up form a basic foundation such a population changes, state of the economy, industry projections, and finally company objectives. Long-term managerial strategies would affect such areas as long-term pricing policy, development of new products, and innovations of present products, new directions in marketing efforts, expansion or changes in distribution channels and cost patterns. The influence of managerial strategy decisions is explicitly brought to bear on the long-term sales plan primarily on a judgmental basis (Welsch et. al., 1992; 173).

Tactical sales plan is a short range sales plan which is prepared for a year in the future. According to Welsch, "A common approach used for short time horizons in a company is to plan sales for twelve months in to the future, detailing the plan initially by quarters and by months for the first quarter. At the end of each month or quarter throughout the year, the sales plan is restudied and revised by adding a period in the future and by dropping the period just ended. Thus, tactical sales plans are usually subject to review and revision on a quarterly basis. The short-term sales plan includes a detailed plan for each major product and for groupings of minor products. Short-term sales plans are usually developed in term of physical units (or jobs) and in sales and/or service dollars. Short-term sales plan must also be structured by marketing responsibility (e.g. by sales districts) for planning and control purposes.

Short-term sales plan may involve the application of technical analyses; however, managerial judgment plays a large part in their determination. The amount of detail in a tactical sales plan is a function of the company's environment and characteristics. A short-range sales plan should include considerable detail where as a long range plan should be in broad term (Welsch et. al., 1992; 174).

2.3.1.3 Developing a Comprehensive Sales Plan

For developing a comprehensive sales plan, generally following step should be taken.

- Step 1st: Develop management guidelines for sales planning.
- Step 2nd: Prepare sales forecast.
- Step 3rd: Assemble relevant data.
 -) Manufacturing capacity.
 -) Sources of raw materials and supplies.
 -) Availability of key people and labour force.
 -) Capital availability.
 -) Availability of alternatives distribution channels.
- Step 4th: Develop strategic and tactical sales plans.
- Step 5th: Consideration of alternatives.
- Step 6th: Develop pricing policies.
- Step 7th: Develop product line consideration.
- Step 8th : Price cost volume consideration.

2.3.1.4 Methods of Projecting Sales

Following four methods are used in projecting sales (Welsch et. al., 1992; 155).

1. *Judgement Methods*

-) Sales force composite,
-) Sales division supervisors composite,
-) Executive opinion method.

2. *Statistical Methods*

-) Economic rhythm method,
-) Cyclical sequence method,
-) Special historical analogy,
-) Cross out method.

3. *Special Purpose Methods*

-) Industry analysis,
-) Product-line analysis,
-) End-use analysis.

4. *Combination Methods*

2.3.2 Production Plan

When the sales plan is completed, the next step in building the short range profit plan for superior manufacturing company is to develop a production plan. The production plan involves determining the number of units of each product that must be manufactured to meet planned sales and maintain the planned inventory levels of finished goods. Planning production requirements necessitates another decisional input, that is the management decision about inventory levels of finished goods that are to be planned (Welsch et. al., 1992; 136).

Production planning and scheduling are factory functions involving determination of the amount of goods to produce and production timing; therefore the production plan is the primary responsibility of the

manufacturing vice-president. It is prepared on the basis of sales budget, plant capacity, opening inventory of finished goods, required closing inventory of finished goods and production policy of management.

Once sales and inventory requirements have been established, the logical first step in the production area is a facility survey. This survey should determine that all planned produced on existing or contemplated equipment and that they can be made in the volumes required. In this initial stage availability of labour supply and skill are considered. Bottle-necks caused by lack of skills or equipments are frequently uncovered. At this point decisions must be made either to eliminate bottle necks or to reduce planned volume (William, 1989; 508). Economic batch quantity delivery schedules, seasonal conditions, optimum utilization of plant capacity, reduction of bottlenecks such as shortage of manpower, materials etc., stock of requirements; and work in progress are also considerable factor of the production planning.

This entails the development of the policies about efficient production levels, use of productive facilities and inventory re-levels (finished goods and work-in-process inventory). The quantities specified in the marketing plan, adjusted to conform to production and inventory policies, give the volume of goods that must be manufactured by product and interim time period. Thus, the production budget can be represented in this way: production requirement = sales volume \pm goods inventory change (Welsch et. al., 1992; 210).

The production budget specifies the planned quantity of goods to be manufactured during the budget period. To develop the production budget, the first step is to establish policies for inventory levels. The next step is to plan to total quantity of each product that is to be manufactured during the budget period. The third step is to schedule this production by interim period. A complete production plan should shown

budget data classified. By (a) products to be manufactured, (b) interim time periods; and (c) activities of each responsibility centre in the manufacturing process (Welsch et. al., 1992; 212).

2.3.2.1 Responsibility for Production Planning

The completed marketing plan should be given to the manufacturing executive who is responsible for translating it into a production program consistent with managerial policies and subject to certain constraints. Planning, scheduling and dispatching of the actual production throughout the year are functions of the production department; therefore, it is essential that responsibility for the planning and control of these functions be performed by the production managers. These managers have firsthand knowledge of the plant and personnel capacities, availability of materials and production process. Although responsibility rests directly upon the production managers, top management policies must be considered in such matters as inventory levels, stability of production and capital additions (plant capacity) (Welsch et. al., 1992; 211).

2.3.2.2 General Consideration in Planning Production and Inventory Level

The production plan does not aim to set the precise amounts and timing of actual production during the budget period. Rather, the production plan represents the implications of planned sales volume for planned production volume as a basis for planning the various aspects of the manufacturing function plant capacity requirements, direct material and component requirements, timing of purchases, direct labour requirement and costs and factory overhead.

The production budget should be developed in terms of quantities of physical units of finished goods. Therefore, when it is possible to plan

sales volume by units as well as by dollar amounts, production budgeting is simplified. To develop the production plan, manufacturing executives must resolve the problem of coordinating sales, inventories, and production. So that the lowest possible overall cost results. The importance of coordination of production planning cannot be overemphasized, because it affects so many decisions relating to cost, capital commitments, employees, and so on. Decisions required to develop the production plan include the following:

1. Total production requirements (by product) for the budget period.
2. Inventory policies about levels of finished goods, work-in-progress and the costs of carrying inventory.
3. Plant capacity policies, such as the limits of permissible departures from a stable production level throughout the year.
4. Adequacy of manufacturing facilities (expansion, contraction of plant capacity).
5. Availability of direct materials, purchased components, and labour.
6. Length of the processing time.
7. Economic lots and runs.
8. Timing of production throughout the budget period by responsibility centres (Welsch et. al., 1992; 213).

2.3.2.3 Developing the Production Plan

Production managers must translate the quantities in the sales budget into unit production requirements for the budget period for each product while considering management inventory policies. The budgeted production for the budget period has been determined, the next problem is prorating this producing by interim periods during the budget year. Interim production must be planned to (1) provide sufficient goods to meet interim sales requirements, (2) keep interim inventory levels

within policy constraints and (3) manufactured the goods as economically possible (Welsch et. al., 1992; 213).

Generally, the following table method is used to obtained the planned production of a business concern.

Requirement for sales (in units)	XXX
Add; desired final inventory level of finished goods	<u>+XXX</u>
Total required production	<u>XXXX</u>
Less; opening stock of finished good	-XXX
Planned production for the year	<u>XXXX</u>

2.3.2.4 Setting Inventory Policy

In most business, inventories represent a relatively high investment and may have a significant impact on the major functions of the enterprise and its profit. If the level of inventory is greater than requirement, it is a sign of under utilization of their fund and cost of capital burden. If the level of inventory is lower than requirement it loses the opportunity of profit by unsuccessful to fulfill of the market demand. So, inventory and requirement of production must be at balance position. In other word, the objectives of inventory policies should be to plan the optimal level of inventory, investment and through control to reasonably maintain these optimal levels.

To determine inventory polices for finished goods, management should consider these factors (Welsch et. al., 1992; 220):

1. Quantities (in units) needed to meet sales requirements. Resolving this problem entails consideration of the sales budget and seasonal demand. The sales department executives should be directly involved in this problem.
2. Perish ability of items.
3. Length of the production period.

4. Storage facilities.
5. Adequacy of capital to finance inventory production some time in advance of sales.
6. Distribution time requirement.
7. Cost of holding inventory. Frequently there are numerous and significant costs connected with stocking large quantities of goods. The principle holding costs involved are labour, insurance, taxes, rent, depreciation, transportation, and handling.
8. Protection against district material and component shortages.
9. Protection against labour shortages.
10. Protection against materials and parts price increases.
11. Risks in involved in inventory:
 -) Price declines,
 -) Obsolescence of stock,
 -) Casualty loss and theft,
 -) Lack of demand,
 -) Customers return policies.

2.3.2.5 Setting Production Policies

Seasonal sales are typical in most companies. Yet production efficiency is usually enhanced by relatively by stable production levels. In many companies where sales of the primary product are seasonal, production levels are stabilized by developing new products that can be stored or that have inverse seasonal parterres. Inventory fluctuation provides a tempting method of leveling production, yet as previously discussed, certain pitfalls should be considered. Stabilization of production is desirable for a number of completing reasons and generally results in significant reductions of costs and improvements in operations. The advantages of stable production levels can be outlined as follows (Welsch et. al., 1992; 223):

1. Stability of employment, resulting in:
 -) Improved morale and hence greater worker efficiency,
 -) Less labor turnover,
 -) Attraction of better employees,
 -) Reduction of expense for training new employees.
2. Economic in purchasing raw materials and components as a result of:
 -) Availability,
 -) Volume discounts,
 -) Simplified storage problems,
 -) Smaller capital requirements,
 -) Reduced inventory risk.
3. Better utilization of plant facilities, which tends to:
 -) Reduce the capacity required to meet peak seasons.
 -) Avoid the capacity.

2.3.3 Material Purchase and Usage Budget

2.3.3.1 Concept of Materials Purchase Budget

After having the concept of sales plan and production plan the next step in the budget process involves the determination of material purchase and usage budget. The determination of materials usage leads to the solution of the problem of when and how much to purchase of each material. Material purchase and usage budget demonstrates the build up of the quantities of each material to be used by quarters, based on the production budget. The material cost is also considered in material purchase budget. Material budget should be also budgeted by types of raw material and parts, by user responsibility, by interim period and by types of finished goods.

Ruthmen viewed "after the sales and production has estimated, the next step's to prepare material purchase budget, when the production budget is completed than the requirement of raw materials and components to be used in the process of manufacturing the finished products could be estimated. A purchase budget gives the details of materials purchase to be made in the budget period (Ruthmen, 1994; 5).

A comprehensive profit planning and control program includes planning and controlling raw material and component used in the manufacturing of finished products. Adequate co-ordination and balance should be planned and controlled in between (1) factory requirements for raw materials, (2) raw materials inventory levels, and (3) purchase of raw materials.

To assure that right amounts of raw materials will be on hand at the time required and to plan for the costs of such materials, it is essential that the tactical (short-term) profit plan includes (1) detailed budget specifying quantity and cost of materials required and (2) a related budget of raw materials purchase. Thus planning raw materials usually requires four sub budget namely, (1) material budget, (2) purchase budget, (3) materials inventory budget, and (4) cost of materials used budget (Welsch et. al., 1992; 211).

1. Material Budget

This budget specifies the planned quantities of each raw materials and part required for planned production. It should specify by time, by product, and by using responsibility.

2. Purchase Budget

The material budget specifies the quantities and timing of each raw materials need therefore a plan for material purchase must be developed. The purchases budget specifies the estimated quantities of raw materials

and parts to be purchased and their estimated cost as well as delivery dates.

3. Material Inventory Budget

The budget reports the planned levels of raw materials inventory items of quantities and cost. The difference in units between materials requirements as specified in materials budget and the purchase budget is reflected as in increases or decreases in the inventory budget.

4. Cost of Materials Used Budget

This budget reports the estimated cost of the materials planned for the materials budget observe that the materials budget cannot be costed unit the planned cost of purchases. It specifies the planned cost of the materials and parts that will be used in the production process.

2.3.3.2 Materials and Parts Inventory Policies

The quantity differential planned between the materials and parts budget and the purchases budget is accounted for by the change in materials and parts inventory levels. As with the finished goods inventory budget, with respect to sales and production, the materials and parts inventory budget provides a cushion between materials and parts requirements and purchases. If materials and parts requirements are seasonal, a stable materials and parts inventory level means that purchases must exactly parallel factory material and parts requirement. Yet, in the same case, purchase can be at a uniform level only if inventory is allowed to absorb variations in materials and part requirements. The optimal purchasing plan will generally be between these two extremes. The timing of purchases will depend on inventory policies. The primary consideration in setting inventory policies for materials and parts are:

1. Timing and quality of manufacturing needs.

2. Economics in purchasing through quantity discounts.
3. Availability of materials and parts.
4. Lead time (order and delivery).
5. Perish ability of materials and parts.
6. Storage facilities needed.
7. Capital requirement to finance inventory.
8. Costs of storage.
9. Expected changes in the cost of materials and parts.
10. Protection against shortages.
11. Risks involved in inventories.
12. Opportunity costs (inadequate inventory) (Welsch et. al., 1992; 243).

2.3.3.3 Purchasing Policy

Purchasing is the most important function of materials management as the moment an order is placed for the purchase of materials, a substantial part of the company's finance is committed which affects cash flow position of the company. So, the purchasing policy should be included the answer of some question like, what to purchase ?, when to purchase ?, where to purchase?, from where purchase ?, how much to purchase ?, and at what price to purchase ?

Management policy with respect to purchases and inventory should be specified. The two basic timing factors are (i) how much to purchase at a time and (ii) when to purchase (Welsch et. al., 1992; 244). To solve the first question (How much to purchase at a time), there is a well-known approach. The approach is known as economic order quantity 'EOQ'. An economic order quantity is the number of units per order to be purchase that will resulting in the lowest total of order costs and carrying cost of a annual's supply of the product. Such as quantity seeks

to balance the cost of inventory acquisition the cost of inventory possession.

For the calculation of 'EOQ', the following formula is used:

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

Where,

- A = Annual quantity used in units
- O = Average annual cost of placing an order
- C = Annual caring cost of one unit in inventory for one year
(e.g. storage insurance, return as investment in inventory).

Another approach which is a recent development in materials' and parts' inventory control is called Just-in-time (JIT), purchasing and manufacturing. Its primary objective is to minimize inventory level and the resulting cost. In this approach, materials and parts are not purchased until needed for production, there by minimizing inventory holding costs. In such an approach, it is critical to anticipate exactly when the materials and parts will be needed for production so that the acquisition can be reflected in the materials and parts budget for profit planning and control (PPC) purposes (Welsch et. al., 1992; 245).

2.3.4 Direct Labour Budget

2.3.4.1 Concept of Direct Labour Budget

Direct labour is all labour expended in altering the construction, composition, confirmation or condition of the product. In other word, it is that labour which can be conveniently identified or attributed wholly to a particular job, product or process or expended in converting raw materials into finished goods. It includes payment made to labour

engaged on the actual production of the product or in carrying out of an operation or process, labour engaged in aiding the manufacturing by way of supervision, maintenance, tool setting, transportation of material and inspectors, analysts etc. Specially required for such production. But wages paid to supervisors, inspectors etc. is not direct labour, can be treated as direct labour if they are directly engaged on specific product or process and they spend their time on it can be directly measured without much of an effort. Similarly where the cost is not significant like the wages of trainees or apprentice, their labour though directly spent on a product is not treated as direct labour.

After having the concept of direct labour the researcher is going to recapitulate the concept of 'direct labour budget'. Generally a plan about the direct labour is called the 'direct labour budget' which is prepared after completed the production budget. The direct labour budget is developed in a manner similar to that of the material purchase budgets. The main difference lies in the fact that labour is not purchased and stored in inventory as raw materials are direct labour is used at the time of purchase (i.e. it is incurred only at the time of production). Thus, to develop the direct labour input (i.e. incurred), it is necessary only to know the amount of time required by production departments and the wage rate prevailing in the production department.

Welsch views, the direct labour budget includes the planned direct labour requirements necessary to produce the types and quantities of outputs planned in the production budget. This budget may give details about direct labour cost are about both direct labour hours cost. Planning and controlling labour cost involve major and complex problem areas: (a) personnel needs, (b) re-measurement, (c) training, (d) job description and evaluation, (e) performance measurement, (f) union negotiations and (g) wage and salary administration.

1. Labour generally classified as direct and indirect. Direct labour cost includes the wages paid to employees who work directly on specific productive output. As with direct material costs, labour costs that can be directly traced to z.
2. Estimate ratios direct labour cost to some measure of output that can be planned realistically.
3. Develop personnel tables by enumerating personnel requirements (including) for direct labour in each responsibility centre.

2.3.4.2 Planning Standard Labour Time

An important function of industrial engineers is to develop standard labour time for various operations and products. In some cases, it is impractical to estimate direct labour time expect in terms of averages based on experience. The following four approaches are commonly used for planning standard labour time.

1. Time and Motion Studies

These studies are usually made by industrial engineers. They analyze the operations required on a product (by cost centres). By observation (and by actual timing with a stop watch), a standard time for each specific operation is determined. The industrial engineer must decide (frequently along with the union) whether the fastest, slowest, or average employees time should be used. Never the time and motion studies can provide reliable information about the labour time needed to perform each specific operation. The results of time and motion studies can provide basic input data for developing the direct labour hours needed to meet planned production.

2. Standard Costs

If a standard cost accounting system is used, careful analyzes of direct labour hour requirements per unit of production will generally have

been made. In such cases, the standard labour time per unit of product used to derive labour hour requirements.

3. Direct Estimate by Supervisors

Some companies ask the manager of each productive operation to estimate the direct labour hours required for the planned output. In making such estimates, the manager must rely on (1) Judgement, (2) recent past performance of the department, (3) assistance from the next level of management, and (4) technical staff personal.

4. Statistical Estimates by a Staff Group

Cost accounting records of past performance usually provide useful information for converting production requirements to direct labour hours. This approach is frequently used for producing departments that process several products simultaneously. The historical ratio of direct labour hours to some measure of physical output is computed and then adjusted for planned changes in the responsibility centre. The accuracy of this method depends on the reliability of the cost records and the uniformity of the production process from period to period. However, it is questionable because past in efficiencies will often be projected into the future. Even though some other method of estimating direct labour hours in used historical ratios of direct labour hours to productive output are frequently good checks on the accuracy of other methods used (Welsch et. al., 1992; 282).

2.3.5 Overhead Budgets

2.3.5.1 Concept of Overhead Budget

Cost may be divided into two portions direct and indirect. The indirect portion of total cost is overhead. Which is the aggregate of indirect material, indirect labour and indirect expenses? Overheads comprise all

expenditure incurred for or in connection with the general organization of the whole or part of the undertaking i.e. the cost of operating supplies and services used by the undertaking including the maintenance of capital assets. There are three main types of the overhead namely, manufacturing/ factory overhead, selling and distribution overhead and office and overhead.

After having the concept of the overhead, the researcher is going to recapitulate the concept of overhead budget. Welsch viewed, "Expenses planning should not focus on decreasing expenses, but rather on better utilization of limited resources. Viewed in this light, expense planning and control may cause either decreased or increased expenditures. Expenses planning and control should focus on the relationship between expenditures and the benefits should be viewed as goals, and sufficient resources must be planned to support the operating activities essential for their accomplishment (Welsch et. al., 1992; 302).

The overhead budget should be in detail for each responsibility centre and by interim time period. The budget can be divided into three sub-budget namely, manufacturing factory overhead budget, selling distribution expenses budget, and office and administrative, expenses budget.

2.3.5.2 Manufacturing/Factory Overhead Budget

Manufacturing overhead is that part of total production cost not directly identifiable with (traceable to) specific products or jobs. Manufacturing overhead consists of (1) indirect material, (2) indirect labour (including salaries), and other miscellaneous factory expenses; such as taxes, insurance, depreciation, supplies, utilities and repairs. Manufacturing overhead includes many dissimilar expenses; therefore, it causes problems in the allocation of those cost to products. Since there are many different types of expenses, control responsibility often widely

diffused. For example, such items are depreciation, taxes, and insurance are usually not subject to direct control by factory managers, but rather by higher level management (Welsch et. al., 1992; 307).

Manufacturing overhead/factory overhead budget gives an estimate of the worker overhead expenses to be incurred in a budget period to achieve the production target. The budget includes the cost of indirect material, indirect labour, and indirect worker expenses. The calculation of the manufacturing overhead, made by the using the following methods.

Indirect materials	XXX
Add: Indirect labour	+XXX
Add: Indirect Worker expenses	<u>XXX</u>
(Indirect Factory cost)	
Total manufacturing overheard	XXX

Manufacturing overhead budgets are developed immediately of let the production budget, as tentatively approved, has been converted to expected out put (however measured) for each producing and service department in the factory (Welsch et. al., 1992; 306). When developing the manufacturing overhead budget, the following steps should be taken.

- Step 1:** Translate the requirements specified in the production plan in to output in each department.
- Step 2:** Plan departmental overhead expenses.
- Step 3:** Allocate the planned departmental expenses to the producing department.
- Step 4:** Allocate the producing department expenses to be products the product.

After these above steps, per unit overhead rate for each product could be computed and by adding the direct material cost and indirect labour cost

for each product. The position is in to compute the cost of goods manufactured.

The budget may be classified into fixed cost and semi variable cost. It can be broken into department overhead budget to facilitate control. In preparing the budget, fixed works overhead can be estimated on the basis of past information after taking into consideration the expected changes which may occur during the budget period. Variable cost is on the basis of the budget output because these expenses are bound to change with the change in output.

2.3.5.3 Selling and Distribution Overhead Budget

Selling and distribution expenses include all cost related to selling, distribution and delivery of products to customers. The expenses are not cost and are not allocated to specific product. Welsch viewed, "fundamentally, the top marketing executive has the direct responsibility for planning the optimum economic balance (for profit potential) between (1) the sales budget, (2) the advertising budget and the distribution expenses budget. Therefore profit planning and control views sales, advertising, and distribution expenses as one basic problem rather than as three separate problems. This view is logical because of the interrelationship between them (Welsch et. al., 1992; 314). There are two type of selling expenses namely (1) sales office expenses which cover the cost of sales man and their administrative support; and (2) sales direction and promotion expenses which cover the cost of directing the sales efforts and promotional changes such as advertising.

The distribution expenses budget should be planned by responsibility centre, district or by the products. The top marketing executive has the overall responsibility for developing the distribution expenses budgets; the promotion manager should be responsible for developing the promotion plan, and the field. Sales managers should be responsible for

developing both their marketing plan and their distribution expenses budget. The budget should separately identify controllable and non controllable expenses, and these budgets should be detailed by interim time period (Welsch et. al., 1992; 315).

2.3.5.4 Administrative Office and Administrative Overhead Budget

Administrative expenses include those expenses other than manufacturing and distribution. They are incurred in the responsibility centres that provide supervision of and service to all factions of the enterprise, rather than in the performance of any one function. Because a large portion of administrative expenses are fixed rather than variable, the notion persists that they can not be controlled (Welsch et. al., 1992; 316).

Administrative expenses budget covers the expenses incurred in framing policies, directing the organization and controlling the business operation. The budget provides an estimate of the expenses of the control office and of manager salaries. The budget can be prepared with the help of past experience and anticipated changes. Much difficulty is experienced when the planner is not experienced in developing such budget as most of the administration expenses are of a fixed nature. Although fixed expenses remain constant and are not related to sales volume in the short run, they are dependent upon sales in the long-run with a small change in output, they do not change. However, reduced by discharging the services of some member of the staff and lacking other economy measures. On the other hand with persistent increase in output or business activity, administration expenses will increase but they may lag behind business activity. According to Welsch, "It is advisable to base budgeted administrative expenses on specific plans and programs. Past experience, adjusted for anticipated changes in management policy and

general economic conditions is helpful. Because most administrative expenses are fixed, an analysis of the historical record will often provide a sound basis for budgeting them (Welsch et. al., 1992; 317).

2.3.6 Capital Expenditure Budget

2.3.6.1 Concept and Capital Budget

A capital expenditure is the use of funds (e.g. cash) to obtain operational assets that will (a) help earn future revenues or (b) reduce future costs. Capital expenditure includes such fixed (i.e. operational) assets as property, plant, equipment, major renovations and patents. Typically, capital expenditures projects involve large amount of cash, other resource and debt that are tied up for relatively long periods of time, capital expenditures are investments because they require the commitment benefit today to receive higher economic benefits (i.e. profit) in the future. Capital expenditure become expenses in the future as their related goods future profits from future revenues or to achieve future cost savings (Welsch et. al., 1992; 395).

A major issue in planning capital expenditure is the problem of ensuring that a company has the capacity to produce, acquire, or be able to deliver the goods and services that will be needed to meet its sales and services plans (Welsch et. al., 1992; 632). A major issue in control in the actual expenditure of funds is the problem of ensuring that the actual expenditures are consistent with the plans and that funds are available when the expenditures are incurred. The capital expenditure is an important part of comprehensive profit plan. The capital expenditure budget is variously referred to as the capital additions budget, plant and equipment budget, construction budget, capital outlay budget, investment budget or plant additions budgets.

The capital budgeting decisions, as already pointed out, pertain to fixed assets or long-term assets which by definition refer to assets which are in operation, and yield a return, over a period of time, usually exceeding one year. The capital budgeting decision, therefore, involves a current outlay or series of outlays of cash resources in return for an anticipated flow of future benefits (Quirin, 1967; 2). Capital expenditure management, therefore, includes addition disposition, modification and replacement of fixed assets. From the preceding discussion may be deduced the following basic feature of capital budgeting. (1) Potentially large anticipated benefits; (2) a relatively high degree of risk; and (3) a relatively long time period between the initial outlay and the anticipated return (Oster, 1974; 4). Capital budgeting is the planning of expenditure whose return will be available beyond one year time interval. It is the process of deciding in advance whether a concern should commit its resources to a project or not whose benefits would be spread over several time periods (Jain & Narang, 1984; 231). It may be defined as the decision making process by which firms evaluate the purchase of major fixed assets, including building, machinery, and equipment. It is part of the firms formal planning process for the acquisition and investment of capital (Hampton, 1976; 245).

Capital budgeting involves the entire process of planning expenditures whose returns are expected to extend beyond one year. The choice of one year is arbitrary, of course, but it is a convenient cut off point for distinguishing between kinds of expenditures (Weston & Brigham; 1978: P. 144). Capital budgeting involves the generation of investment proposals. The estimate of cash flows for the proposals; the evaluation of cash flows, the selection of projects based upon an acceptance criterion and finally the continual revaluation of investment projects after their acceptance (Van Horne, 1997; 148).

A capital budgeting is the process of determining which capital investments will be undertaken. There are three stages of capital budgeting namely (i) proposal generation, (ii) analysis, and (iii) implementation. Capital budgeting is the analysis of proposal long-term investments, it is the decision making process that determines the types of plan and equipment firm will own. How much will be invested in such assets and when the expenditure will be made (Henderson et. al., 1995; 118).

2.3.6.2 Method for Evaluation of Capital Budgeting

To examine the various investment proposals, the necessary information should have collected and evaluated them. The all investment proposals have some risk or quality. The investment proposals does not differ form the risk of existing investment projects of a firm and that the acceptance of any proposal or group of a investment proposal does not change the relative business risk of the firm. The investment decision will be either to accept or to reject the proposal. About the method for evaluation of capital budgeting. Van Horne suggests "we evaluate four method of capital budgeting (1) average rate of return, (2) payback period, (3) internal rate of return, and (4) net present value (Van Horne, 1997; 149).

A brief introduction of the above mentioned method is given below:

a. Average Rate of Return (ARR)

This accounting measure represents the ratio of the average annual profits after tax to the investment in the project (Varn Horne, 1997; 149) ARR is calculated by the following formula.

$$\text{ARR} = \frac{\text{Average Annual Profit (After Tax)}}{\text{Average Investment Over the Life of the Project}} \times 100\%$$

The method of evaluating proposal capital expenditure is also known as the accounting rate of return method. It is based upon accounting information rather than cash flow. The most important advantage of the method is its simplicity in calculation and it make use of readily available accounting information. But it does not take into consideration the timing of cash inflows and out flows. The method ignores the time value of money to consider of the project evaluation. The higher the ARR is better to the firm.

1. Pay Back Period (PBP)

The pay back period of an investment project tell us the number of years required to recover our initial cash investment. It is the ratio of initial fixed investment over the annual cash inflows for the recovery period (Var Horne, 1997; 150). Pay back period is calculated by the following the formula.

$$\text{Payback Period} = \frac{\text{Cost of the Investment}}{\text{Net Cash Inflow Per Year}}$$

The method is based on the idea that the original cost of investment must be recovered if the company is to remain in effective existence. The method is also simple to understand and easy to calculation. It is also ignore the time value of money.

2. Internal Rate of Return (IRR)

Because of the various short comings in the average rate of return and payback methods, it is generally that discounted cash flow methods provide a more objective base for evaluating and selecting investment projects. These methods take account of both the magnitude and the timing of expected cash flows in each period of a project life. The internal rate of return for an investment proposal is the discount rate that equates the present value of the expected cash flows with the present

value of the expected inflows (Var Horne, 1997; 150). A discounted cash flow or time value adjusted method for appraising capital investment decision is the internal rate of return method. The IRR depends entirely on the initial outlay and the cash proceeds of the project which is being evaluated for acceptance or rejection. It is defined as the discount rate which equates the aggregate present value of the net cash inflows (cash flow after taxes) within the aggregate present value cash out flows of a project. It is represented by 'r' and calculated by the following formula.

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

Where,

A_0 = The initial outlay

A_1, A_2, A_n = Stream of future net cash flows

r = Internal rate of return

If there are a number of alternative proposals, the internal rate of return of all alternatives should be compared and the alternative which gives the maximum internal rate should be selected as the most profitable one. The main difficulty of the method lies with the calculation it which will equate present value of net cash flows with that of initial cost of the project.

3. Net Present Value (NPV)

The present value method is a discounted cash flow approach to capital budgeting. With the present value method, all cash flows are discounted to present value, using the required rate of return. The net present value is calculated by the following formula (Var Horne, 1997; 152).

$$NPV = \sum_{t=0}^n \frac{A_t}{(1+r)^t}$$

Where,

K = Overall cost of capital

t = No. of year (no of period)

A = The stream of cash flows including initial cash outlay.

From the above formula, NPV may be defined as the summation of the present values of the cash flow after tax in each year minus the summation of present values of the net cash outflows in each year. The method has some merits (like, it explicitly) recognizes the time value of money, it considers the total benefits arising out of proposal over its life time; the method is particularly useful for selection of mutually exclusive projects.

After having a brief introduction of the four methods of capital budgeting decision, the decision criteria can be summarized the following ways:

S.N.	Name of methods	Accept/Reject Rule
1.	Average Rate of Return (ARR)	Highest/Higher the ARR is accepted and vice versa.
2.	Pay Back Period (PBP)	Lowest/lower the pay back period is accepted and vice-versa.
3.	Internal Rate of Return (IRR)	IRR should be higher than overall cost of capital (K_0) is accepted and vice versa.
4.	Net Present Value (NPV)	Highest/higher the NPV is accepted and vice versa (only the positive).

2.3.7 Cash Budget

The cash budget is a forecast of expected cash receipts and payments for a future period (Ruthman, 1994; 275). A cash shows the planned cash inflows, outflows and ending position by interim periods for a specific time span. A cash budget basically includes two parts. First part is the planned cash receipts (inflows) and second part is the planned cash disbursement (outflow). It prepared after all of the other budgets have been completed. It is the most important part of the firm's budget programmer. It consists of three parts namely – (1) estimates of cash receipts, (2) estimates of cash disbursements and (3) cash balances of each budget period.

Van Horne viewed, "a cash budget is arrived at through a projection of future cash receipts and cash disbursements of the firm over various intervals of time. It reveals the timing and amount of expected cash inflows and outflows over the period studied (Var Horne, 1997; 806). Cash budget may be made for almost any period of time for near term, forecast, monthly periods – probably are most frequently used because they take into account seasonal variations in cash flow ----- . When cash flows are relatively stable, budgeting at quarterly or even longer intervals may be justified (Var Horne, 1997; 807).

Planning cash inflows and cash outflows gives, the planned beginning and ending cash position for the budget period. Planning the cash inflows and outflows will indicate (1) the need for financing probable cash deficits or (2) the need for investment planning to put excess cash to profitable use. The cash budget is directly related to other plans. Such as the sales plan, account receivable and expenses budgets and the capital expenditures budget.

The primary purpose of the cash budget are to:

1. Give the probable cash position at the end of each period as a result of planned operations;
2. Identify cash excess or shortage by time periods;
3. Established the need for financing and/or the availability of idle cash for investments;
4. Coordinate cash with total working capital;
 - a) Sales Revenue,
 - B) Expenses,
 - C) Investment, and
 - D) Liabilities;
5. Establish a sound basis for continuous monitoring of the cash position (Welsch et. al., 1992; 434).

A comprehensive profit planning and control programme establishes the foundation for a realistic cash budget. There must be a balance between available cash and the cash demanding activities operations, Capital expenditures and so on (Welsch et. al., 1992; 435).

2.3.7.1 Approaches used to Develop a Cash Budget

There are two primary approaches are used to develop the cash budget. They are following:

1. Cash receipts and disbursement approach.
2. Financial accounting approach.

1. Cash Receipts and Disbursement Approach

Cash receipts and disbursement approach is based on a detailed analysis of the increases and decreases in the budgeted cash account that should reflect all cash inflows and outflows from such budgets as sales,

expenses, and capital expenditures (Welsch et. al., 1992; 436). So, that, it is also called the direct or cash account method. It is often used for short-term cash planning as a part of the annual profit plan. Generally, the approach is not appropriate for the more long-term profit plan. The underlying budgets the cause cash inflow and out flows are carefully analyzed to translate them from an accrual basis to a cash basis.

Cash inflows arise from cash sales, collection of accounts, notes receivable, interest received on investment, sales of capital assets and miscellaneous income resources; and cash outflows arise from purchase (in cash), payment of loan, increase in investment, repurchase of the common share, payment of salaries payment of rent, payment of taxes, losses and miscellaneous expenditures.

2. Financial Accounting Approach

The starting point in this approach is planned net income shown on the budgeted income statement. Basically, planned net income is converted from an accrual basis to cash basis (that is, adjusted for changes in the non cash working capital accounts such as inventories, receivables, prepaid expenses, accruals, and deferrals). This approach requires less supporting detail and provides less detail about the cash inflows and outflows. It is useful for making long-ranges cash projections.

This approach is also known as the indirect to or income statement approach. It is used for analytical purpose to develop the annual cash budget. However, it is used more of ten for long-term cash planning. Basically the method develops cash flows starting with net incomes; adjustment to net income are made for non cash items affecting accrual basis net income. The other cash inflows and outflows are estimated for non operating items such as sale of fixed assets, capital additions, and payment of debt and dividends. These estimates are computed much like the cash receipts and disbursements methods. For a common set of

underlying plans, the cash receipts and disbursements approach and the financial accounting approach derive the same cash flow results (Welsch et. al., 1992; 447).

2.3.7.2 Techniques for Improving Cash Flow

Improving cash flow basically involves increasing the amount of available cash on day to day basis. To accomplish the objectives the management should focus on (a) cash collection process, (b) cash payment process, and (c) investment policies.

A number of methods have been employed to speed up the collection process of cash and maximize available cash. These methods are designed to do one or all of the following.

- a) Speed the mailing time of payments from customers to the firm;
- b) Reduce the time during which payments received by the firm remain uncollected funds;
- c) Speed the movement of funds to disbursements banks.

In the connection, Shafer viewed, some of the ways often used to improve the efficiency of the cash collection process are as follows.

1. Review the lag from the date of sales of good and services on credit to the mailing of (a) invoices and (b) the first billing, to the extent feasible, invoices should be designed to also be the first billing to encourage immediate payment by the customer. The time lag here can avoid a significance adverse after on early collection.
2. If cash discounts are given to customers for early payments, review their effect on early cash collection and whether the discount is too high or too low. Also, monitor whether the discount policy is being violated in the company. Alternatively, if

discounts are not given, does the company assess an 'interest' penalty for late payment ? How much cash inflows is lost by not charging for late payment ?

3. Review the credit granting process to determine whether bad credit risks are being screened out. Also, are delinquent receivables being identified early and collection action taken before the receivable becomes an uncorrectable?
4. Consider ways to 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. This time is called 'float' and it may vary from one day to ten days. Float can be very costly because (a) the cash inflow is slow and (b) the opportunity to earn interest on the cash during the float period is lost (Shafer, 1987; 114).

2.4 Forecasting

2.4.1 Concept of Forecasting

A forecast should always state the assumptions upon which it is based, a forecast should be viewed as only one input into the development of a plan. The management of a firm may accept, modify, or reject the forecast. Forecasts are indispensable factors in planning. Forecasts are statements of expected future conditions, definite statements of what will actually happen are patently impracticable. Expectations depend upon the assumptions. If the assumptions are plausible, the forecast has a better chance of being useful. Gupta viewed, "when estimates of future conditions are made on a systematic and the figure or statement obtained is known as 'forecast'" (Gupta, 1993; 82).

Forecasting is the integral part of decision making activities of management. An organization establishes goals, and objectives, seeks to predict the environmental factors, then selects actions that it hopes will result in attainment of goals and objectives. The need for forecasting is increasing as management attempts to decrease its dependence on chance and becomes more scientific in dealing with its environments. Since, each area of an organization is related to all others, a good or bad forecast can effect the entire organization (Makridarkis et. al., 1985; 4).

2.4.2 Level of Forecasting

A large number of forecasting methods are available to management today. To handle the increasing variety and complexity of managerial forecasting problems, the different level of forecasting and different forecasting techniques have been developed in recent years. The selection of level of forecasting depends upon many of factors like the context of forecasts, the relevance and availability factors, the degree of accuracy of the data, the desirable time period to be forecast, the time available for making the forecast, and the cost of the forecasting. There are three levels of forecasting namely (1) short-term forecasting (2) intermediate-term forecasting, and (3) long-term forecasting.

2.4.2.1 Short-Term Forecasting

The short-term forecasting is a predication extending a maximum of two years into the future. The short-term forecasting provides more rationally ordered information an a sound base for decision making to the management. The short-term forecast of general business conditions often important in deriving a short-term sales forecast is useful in making internal estimates of the company operations. The internal estimates made by the adjoining department in the large enterprises can be integrated with up to date.

2.4.2.2 Intermediate-Term Forecasting

The intermediate-term forecasting covers from three to five years in to the future. This is one of the least developed area of prediction because the forecaster does not have the advantage of surveys of consumer and business intentions. Neither can be extrapolate long-term trends nor one is in a particularly good position to rank the importance spending intentions are of vital assistance in the development of short run predications.

2.4.2.3 Long-Term Forecasting

Forecast are frequently made in the form of long range projection that compete an economic situation with a minimum of five year into the future with present circumstances or with those of the relevant past. The prospects a picture that has some empirical foundation, sought is reasonable statement of the most probable out come of an explicit combination of assumptions. Some times these assumptions are varied to yield a range of possible result. Typically, long-range aggregate projections have been set in a gross national production frame work. Once an appraisal has been made of the growth potential of the aggregate economy. Consideration may be given first to the magnitude of future industry sales by product or services line as well as total.

The purpose of long-range projection is to give a rough picture of future prospects, long range aggregate projection have been set in a gross national product frame work. Long range forecast may indicate the volume of investment necessary in plant and equipment.

2.4.3 Planning Verses Forecasting

Sales planning and forecasting often are confused. Although related, they have distinctly different purposes. A forecast is not a plan; rather it is a statement and or a quantified assessment of future conditions about

a particular subject (e.g. sales revenue) based on one or more explicit assumptions. A forecast should always state the assumptions upon which it is based. A forecast should be viewed as only one input into the development of a sales plan. The management of a company may accept, modify or reject the forecast. In contrast, a sales plan incorporates management decisions that are based on the forecast, other inputs and management judgements about such related items as sales volume, prices, sales efforts, production and financing (Welsch et. al., 1992; 172).

The distinction between forecasting and planning is not an easy; forecasting is our best thinking about what will happen to us in the future. In forecasting we define situations and recognize problems and opportunities. In planning we develop our objectives in practical detail and we correspondingly develop schemes of action to achieve these objectives. Many companies prepare and use forecast but do not have disciplined planning procedures other companies have planning without using such procedures. Actually forecasting is important part of the total planning procedure.

2.5 Budget and Budgeting

2.5.1 Budget

A budget is a comprehensive and co-ordinated plan expressed in the financial terms, for the operation and resources of an enterprise for some specific period in future (Pandey, 1993; 465). Budgeting is an amalgamation of managerial techniques and approaches where as the budget is a financial expression for ascertain period for certain field, it is more numerical rather than theory. A budget is a predetermined statement of management policy during a given period, which provides a standard for comparison with the results actually achieved.

A budget is the plan of the firm's expectations in the future as stated previously, planning involves the control and main pulsation of relevant variables controllable and non controllable; and reduces the impact of uncertainty. A budget expresses the plan informal forma and help to realise the firm's expectation. It is a comprehensive plan in the sense that all activities and operations are considered when it is prepared as a whole. Budgets are indeed prepared for various segment of the enterprises but they are the components of the total of the master budget (Pandey, 1993; 466).

A budget is the monetary or quantitative expansion of business plans and policies to be pursued in the future period procedures for planning, coordination and control of business concern. Many types of budgets are in use today in business. Among them main budget are (a) expenses budget (b) profit budget (c) financial budget and (d) capital expenditure budget. The profit budget is used to plan of profit and to control actual performance. The financial budgets concerned with expenditures for fixed assets.

2.5.2 Budgeting

Budgetion as a tool of planning is closely related to the broader system of planning in an organization. Planning involves the specification of the basic objectives that the organization will peruse and fundamental policies that will guide it. Generally, budgeting may be taken as the action as controlling tools of overall management and with support to later argument, the concept of budgetary control should make clear as far.

The objective of budgetary control and standard costing is to enable management to conduct business in the most efficient manner. For this purpose, it must show where and to what extent profit or losses and why not they are being realized. The system should supply the answer to the

'why' and 'how' of management. Let's then first set out, what management wants to know? (Management sometimes have to be educated before), what management should, how and what management wants to know? Coincide (Welsch et. al., 1992; 466).

Management is done through others in the some way budgetary control is not possible by owner of the concern. There should be various personnel. The personnel should i.e. taken different levels or position of the firm. For budgetary control purpose the information will be suitable analyzed or summarized according to the use to which it is to be put. All information should show, what's as command with what should be". In other word, actual as compared with budget (standard). This undoubtedly the most useful information can be given to the management.

In conclusion, the budget involves the statement of plan, the coordination of these plans in to well balanced programmes and the stable watching of actual operations to ensure that they are kept in line with the predetermined plan. In this way, limits are set an expenditure, standard of performance are established, and forward thinking is more an essential part of business management. Core must be taken, however no to fall in to the error of regarding the budget as an end in itself. It is a means to an end. It is not a method a business management, but an aid to clear thinking, and its fundamental object is to enable considered intention to be substitute for opportunism in management (Willsmore, 1971; 9).

2.5.3 Objectives of Budget and Budgeting

The basic objective of the budget is to ensure the planned profit of the concern. So, it is considered as tools of planning and controlling of profits. One of the primary objective of an annual budgets to measure the profit expectation for the next fiscal year with due regard to all the

circumstances favourable and unfavourable. That can influence of the trading prospects. There are four basic objective of budget.

- i. A plan setting out the proposals and decisions of those running the organization.
- ii. To forecast of the results expected.
- iii. An authorization, the instrument where by supreme governing body sanctions. The raising the revenue or incurring the expenditure.
- iv. A yard stick of what expenditure or revenue ought to be if the organization is working efficiently.

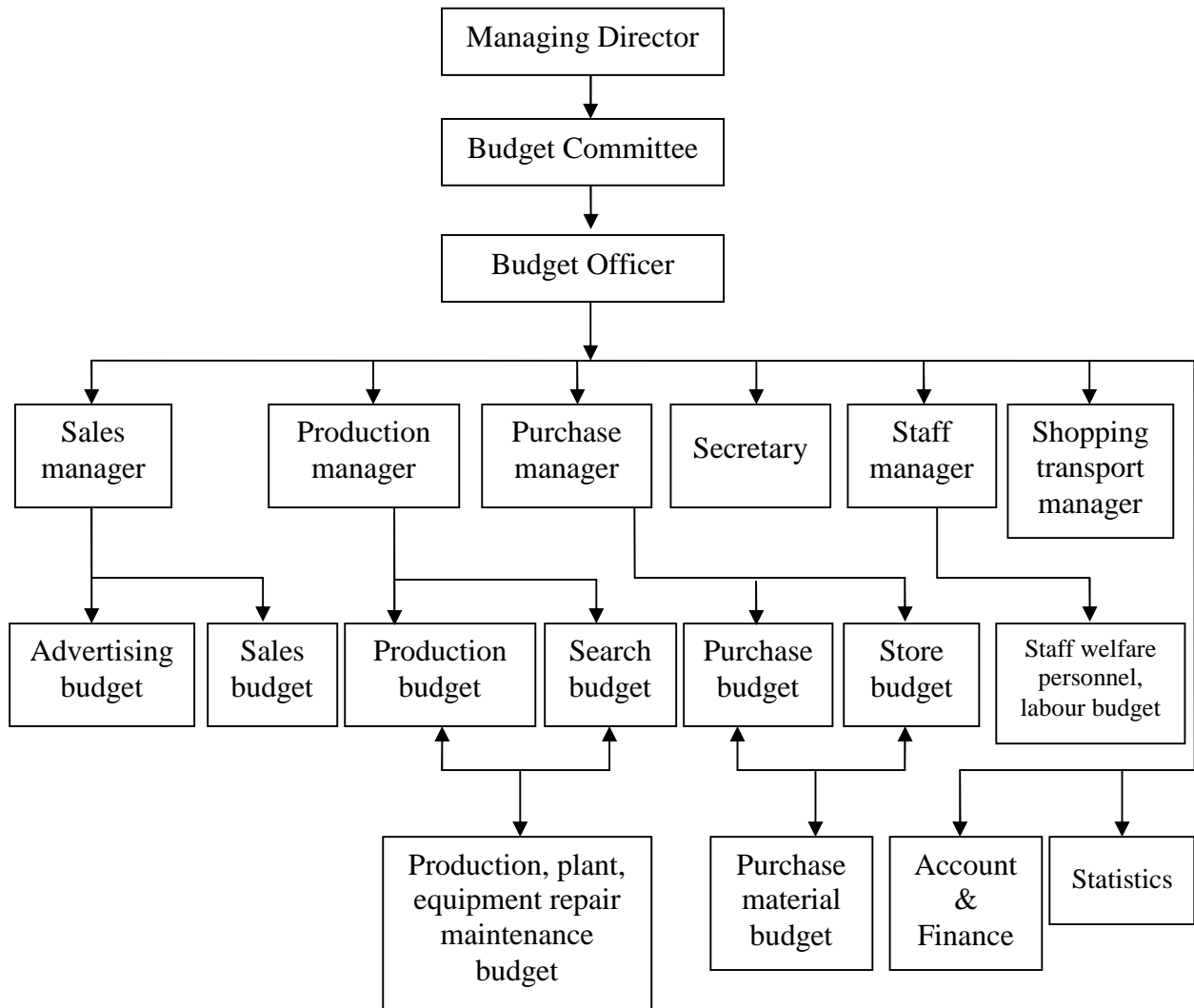
The purpose of budgeting in the context of an annual budget is to projects as accountably as possible the sales, incomes expenditures and profit for ensuring year. This principle objectives and all other requirements of budgeting system from it.

2.5.4 Budgetary Control

Budgetary control is the process of determining various budgeted figures for the enterprise for the future period than campaign the budgeted figures with the actual performance for calculating variance. Budgetary control is a system of controlling cost which includes the preparation of budgets coordinating the departments and establishing responsibilities, company actual perform with the budget and outing upon results to achieve maximum profitability.

Budgetary control involves (i) the budget is set by preparing budgets, (ii) the business is deviled into various responsibility centres for preparing various budgets, (iii) the actual figures are recorded, (iv) the budgeted and actual figures are compared for studying the performance of different cost centres, and (v) it actual performance less than the budgeted norms a remedial action is taken immediately.

A Structure of Organization Plan



2.6 Concept of Surplus and Case for Profitability

2.6.1 Concept of Surplus and Generation of Surplus

The term 'surplus' refers to the balance of earning expected to be available with an enterprise after providing for its working expenses, interest payment and various provision for liability. In other words, surplus is the amount of resources left with an enterprises to be retained in the enterprise for future growth and expansion or to be distributed to the owners of enterprise as dividend or for both purpose. Although profit is an absolute concept and profitability is a relative concept for

the purpose of the analysis, the researcher use the term 'profit' and 'profitability' interchangeable refers to generation of surplus.

2.6.1.1 Need and Essence of Surplus Generation

Surplus generation for public enterprises is an important as well as essential due to the following reasons:

1. The evaluation of public enterprise performance in financial terms would be facilitated.
2. The enterprises would be less dependent upon public money and as result they could plan their productive programme independently.
3. A prescribed minimum rate of return would help their expansion, diversity and growth.

2.7 Review of previous research work

In the context of Nepal, some research have been made in the areas of profit planning whatever have been made are also not to depth. None of the previous study have attempted to analysis the profit planning of public Ltd. Co. most of them are concentrated to state owned public enterprises but this study has tried to present the practice and the problem in the profit planning system of manufacturing public company which will be useful to all industrial enterprises. So far to the best of my knowledge previous research work on profit planning system of DDC (Dairy Development Corporation) Ltd. has been made. Some desertions on profit planning in Nepalese PEs have been prepared and submitted to the faculty of management, T.U.

Mr. Badu (1998) has conducted a research about profit planning in manufacturing public enterprises in his research. He has tired to point

out some feature and problem of profit planning in Nepalese manufacturing PEs for this study one enterprise has been selected for study of “Dairy Development Corporation”. He has discussed some features and problem of profit planning. Prevailing practices and premises for implementing profit planning in Nepalese PEs .The main objectives of this research work are:

- (a) To analyze the various functional budgets adopted in those enterprises.
- (b) To examine the capacity utilization of DDC.
- (c) To asses the financial performance of DDC using BEP analyses.

For accomplishing the above state objective Mr. Badu has made his research covering the time period of five year from 2049/50 to 2053/54. Research methodology was followed through secondary procedure but for the others essential information primary data are also used major finding regarding of DDC.

- (a) DDC has practiced short term planning rather than long tern planning.
- (b) The corporation has no proper practice of segregating cost into fixed and variable.
- (c) There is not separate planning development and expert planner is prepared a tradition and adhoc basis.
- (d) No proper management to supply milk in the urban areas became of the difficult in collecting surplus milk in rural market.
- (e) Financial position of the DDC is not good.
- (f) DDC has problem of maintaining the quality of the products.

In this study he has recommended the followings:

1. DDC should develop its specific goal may be not profit no sales net profit no capital employed. Sales revenue etc without such goals the operating of the company may not be effective.

2. The DDC should from long term planning on specific and practicable basis.
3. At decision making level. Competent and capable persons should be involved for this political interference should be avoided.
4. The storing system of milk should be made more effective.
5. There should be good transportation system for collection rural milks.

Mr. Dumre (1997) has submitted a thesis the faculty of management, central department, T.U. in course of his partial fulfillment of degree in Business administration, is mainly concerned with the appraisal of dairy development corporation and examine that is what extend the company is applying profit planning system .

The main objectives of this research work are

- (a) Describe the scenario of DDC & analyze the statistics on DDC as well as various functional budget adopted in the DDC.
- (b) To analyze the trend of milk and milk product and examine the practice of effectiveness of profit planning in DDC.
- (c) To evaluate and variance between targets & actual of the enterprises & provide necessary suggestions recommendation for improving the profit plan.

Major findings of this study are as follows:

- (a) There is no proper & Clearly defined goals and objectives as well as no clear system of planning.
- (b) Top managers are appointed by the Government in this situation the Chief executive of the DDC (PEs) is not free to take any decisions.
- (c) Plans sales, production plan etc. are prepared on adhoc basis.
- (d) There is no detail & formal guidelines to the lower level management or departmental managers.
- (e) Lack of good & scientific communication system.

- (f) Government intervention in pricing has in variably can adverse impact on finance of DDC.
- (g) There is no detail plan of manpower and systematic approach of labour planning.
- (h) The profitability of DDC is low & Capacity utilization has been the lowest.
- (i) DDC has lack of budgeting experts, skilled planners and entrepreneurship.
- (j) Planning department of DDC no adequate authority to decide and create new ideas to formulate various plans.

In this study he has recommended the followings:

- (a) DDC should clearly define objectives, target, strategies & programs.
- (b) SWOT analysis should be adopted.
- (c) Line and staff authority & responsibilities should be clearly defined.
- (d) There should be good co-ordination, motivation, participation in departmental manager, communication and management information system.
- (e) Trained and qualified manpower of budgeting and planning should be hired.
- (f) Market studies on demand & supply should be carried out
- (g) DDC should have a proper financing and investment strategy.
- (h) To initiate the present poor profitability an attempt should be made to more efficient use of inventory and apply suitable inventory mgmt.
- (i) It is advised to utilize the financial resources properly and also advised to reduce the debt financing.
- (j) Promotion and distribution activities should be scientific as well as reasonable way.

Parajuli (2058) has submitted a study entitled “profit planning in Public enterprise in Nepal (Specific reference to Bansbari leather and shoe factory and dairy development corporation). In this study he has tried to point out some features and problems of profit planning and also present the nature of management practices of profit planning. He spiraled the data of seven year from 2038/2039 to 2044/045. He has used the primary as well as secondary data. He found these enterprises were adopting profit planning on unrealistic premises which only promote irrational optimism and undue conservation. He also pointed out that there were no plans and no any practice of profit planning.

In this study he has recommended the followings:

- (a) The goal and objectives should clearly and adequately spell out.
- (b) The enterprises should develop short-rang profit plan and the systematic performance reports detailed by assigned responsibilities.
- (c) There is necessary to develop of basic strategies by the executive management.

Mr. Gyawali (2054) has given some insight in the aspect of profit planning" Profit & sales plan & their achievement in DDC with special reference to milk production,".. The main objective of this study were achievement of sales and production budget of milk, analyze material & labor budget & variance between targets and actual achievement of DDC.

Major Findings of this study are as follows:

- (a) Not preparation of strategic (Long range) Objectives. Of budgeting experts, planners, no effective program to attain goal.
- (b) Sales budget are not prepare, profit pattern is poor, faculty financial & investment decisions, improper management,

unscientific milk collection & distribution policy etc. low utilization of capacity.

In this study he has recommended the followings:

- (a) Formulate strategic plan & programmer, Prepare of different budget.
- (b) Optimum capacity utilization, proper management system and policies. Establish separate costing section etc.

Joshi (2058) has submitted a study entitled "Profit planning in Dairy Development corporation" The main objectives of this study were to analyze the various functional budgets adopted to examine the capacity utilization, to assess the financial performance & to provide required suggestion on profit planning.

Thapa (2058) has submitted a study entitled "Profit planning in manufacturing enterprises in Nepal. (A comparative study in Dairy Development Corporation & Sitaram Dairy Industry.) The main objectives of this study were to analysis to functional budgets on sales & production sector of the concern, to analyze various accounting ratios to measure the profitability & efficiency of concern, to study of present process to find its usefulness and limitation & to analyze of budget target and its achievement along with reason of deviation if any etc.

Major Findings of this study are as follows:

1. DDC has concentrates its whole effort to the survival of the company & SRD has been trying to minimize the loss. Both industries have no in depth analysis of company's strength & weakness.
2. Employees are more careful of their duties & responsibility in SRD than DDC no fair system of reward & punishment to them on the basic of their performance is maintained in both industries.
3. SRD's Capacity utilization is proper than DDC's capacity utilization.

4. Both companies are positive correlation between target & actual sales.
5. Both companies have not proposed PP except sales & production plan.

In this study he has recommended the followings:

1. Long-term objectives should be clearly formulated as to make a clear distinction between profit motive & social motive & entrepreneurship is the firms requirement for any business success.
2. HMG, Intervention should not be made full for function aspect of enterprise management should be given full authority responsibility and accountability for routine & major operation.
3. These companies are facing the problem of under capitalization by which production is affected, so to enhance the production capacity the necessary financial arrangement should be over viewed.
4. Periodic review of financial health of the corporation should be made by using financial analytical tools & techniques like ratio analysis fund flow analysis, trend analysis etc. This helps the top management to evaluate the effects of its financial policies/Strategies & to take necessary steps to avoid risks on time.

Bhata (1999) has submitted a dissertation on the topic "profit planning in Royal Drugs Limited" this research of Mr. Bhatta was mainly concerned with the current practice of profit planning and examine that in. What extent the RDL is apply profit planning system. The study covers only five years period of time from FY 2049/50 to 2053/54. Primary as well as secondary data have been used in the research reporters. The main objectives of Mr. Bhatta's research work were to:

- a. To analyze the various functional budgets that is prepared in public enterprise of Royal Drugs Limited.
- b. To sketch the trend of profit or loss.

- c. To evaluate the variance between budgeted and actual of the enterprise.
- d. To examine practice and effectiveness of profit planning.

Major Findings of this study are as follows:

-) Objective of RDL are not clear, whatever it aims to minimize profits or to maximize social service is not clearly distinguished.
-) There is a lack of entrepreneurship and business in the operation of the enterprise.
-) Authority and responsibilities are not clear among the department management and working managers.
-) There is a more conflict and lack of co-ordination between departments.
-) Responsibility counters to control of cost are not clearly defined.
-) Internal and external variables providing opportunities threats and strengths and weaknesses are not identified.

In this study he has recommended the followings:

-) HMG/N intervention should not be made for functional aspect of enterprise. Management should be given full authority, responsibility and accountability for routine one major both operation.
-) RDL should develop specific program to face the competition. Quality aspect of the products should be high lighted rather than price aspects.
-) RDL should maintain co-ordination between production and market demand.
-) RDL should improve its liquidity position raising long term capital.
-) Management by objective (MBO) technique should be followed for planning to maintain co-ordination, co-operation and self motivation among departments and employers.
-) RDL should be operated on rarely commercial basis.

-) Responsibility centre should be clearly defined.
-) Reward on punishment system for the performance of related responsibility centre should be maintained.

Mishra (1999) has a significant contribution on the topic "Profit Planning in Tokla Tea Estate (TTE)". The data were collected from both primary and secondary sources. The period covered was for five years from FY 2049/50 to 2053/54. The basic objectives of this research proper are to examine how far the different functional budgets are being applied as tools of profit planning in the estate. Regarding the basic objective, other sub objectives are:

- a. To interpret the trend of profit/loss and cost of the company in the light of profit plan.
- b. To identify the sales plan for the company in the high of strategic and tactical sales plan.
- c. To analyze the production plan and actual production trend of the company.
- d. To review the Tokla tea estate's profit planning on the basis of overall managerial budgeting.

Major Findings of this study are as follows:

-) Inadequate evaluation of relevant internal and external variables.
-) Problems of maintaining the quality of the products.
-) Inadequate profit and productively due to lack of skilled manpower, excessive fixed cost and inventory.
-) Unrealistic sales for casts etc.

In this study he has recommended the followings:

-) Effective budget education, management participation and good working environment prior to budget initiation and implementation.

-) Careful planning by top management prior to budget initiation and implementation.
-) Specify the broad objectives of profits planning programs and management responsibilities in planning and controlling.
-) TTE must identify the controllable and uncontrollable expenses like variable cost fixed cost and semi-variable cost, etc.
-) TTE must consider current estimates of future performance like flexible expenses budgets, cost volume profit analysis continuous budgeting, variance analysis and budget revision.

CHAPTER III

RESEARCH METHODOLOGY

This chapter stands for the overall approach to the research process, systematic framework of research plan and scheme. Specially this chapter has focused on research design, nature and sources of data, sample, population and tools for analysis etc.

3.1 Research Design

This research can preferably be said descriptive and explanatory as its attempts to describe and explore various aspects and dimensions of profit planning of DDC. This study is quantitative since the quantitative data have extensively employed. Trends of profitability, planning methods and practices, financial relationship among financial variables etc. are the main issues to be dealt throughout the research. The data collected using the different methods are tabulated and analyzed using different financial and statistical tools to find out reap condition of profit planning in DDC.

3.2 Nature and Sources of Data

The data upon which this study is made are basically secondary in nature. The secondary data have been collected from financial statements, annual reports, and other published and unpublished official records of concerned companies. All the collected data and information have been properly arranged, synthesized, tabulated and calculated to arrive at the realistic analytical steps.

3.3 Sample

This study specially focuses upon profit planning of DDC following are the years and total number of observations employed here in this study.

Years of Observations	No. of Observations
2004	1
2005	1
2006	1
2007	1
2008	1
Total Number of Observations	5

3.4 Research Variables

The research variables of this present study are mainly sales, production, inventories, capacity utilization, raw materials, profit and loss, overhead, cash flow, capital expenditure etc.

3.5 Tools for Analysis

Both of financial and statistical tools have been employed here in this research work.

3.5.1 Financial Tools

1. Financial Ratio Analysis

Financial ratio is an arithmetical relationship between two or more financial variables. Company's short-term and long term solvency position, assets and debt management, and profitability have been measured through following ratios.

) **Current Ratio**

Current ratio measures the company's ability to pay its short-term obligations when they become due.

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

) **Inventory Turnover Ratio**

This ratio helps to assess the velocity of company's inventories to turn out into sales.

$$\text{Inventory Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Inventory}}$$

) **Total Assets Turnover Ratio**

Total assets turnover indicates how effectively the assets are utilized to generate sales revenue.

$$\text{Total Assets Turnover} = \frac{\text{Sales}}{\text{Total Assets}}$$

) **Net Profit Margin**

Net profit margin is the profit per Rs. sales indicating the overall cost effectiveness of a company.

$$\text{Net Profit Margin} = \frac{\text{Net Profit}}{\text{Sales}}$$

) **Return on Assets**

Return on assets measures how efficient the firm is in order to manage its total assets and to generate profit.

$$\text{Return on Assets} = \frac{\text{Net Profit}}{\text{Total Assets}}$$

) **Return on Capital Employed**

Return on capital employed is a ratio which denotes return per Rs. of capital employed.

$$\text{Return on Capital Employed} = \frac{\text{Net Profit}}{\text{Capital Employed}}$$

) **Debt/Equity Ratio**

It is the relationship of borrowed fund and owner's capital.

$$\text{Debt-Equity Ratio} = \frac{\text{Debt}}{\text{Equity}}$$

2. Cost – Volume of Profit Analysis

Cost-volume-profit analysis is the analytical tool for studying the relationship between sales volume, cost and profit. These three factors depend upon each other because profit depends upon sales, selling price to a greater extent will depend upon cost and cost depends upon volume of production.

) **Profit volume ratio (P/V Ratio)**

It is the ratio of contribution margin to sales revenue.

$$\text{P/V Ratio} = 1 - \frac{\text{Variable Cost}}{\text{Sales Revenue}}$$

) Break even point (BEP)

BEP is the level of output at which total costs equal total sales revenue hence company will be in a position of neither loss nor profit.

$$\text{BEP (in Rs.)} = \frac{\text{Total Fixed Cost}}{\text{P/V Ratio}}$$

3. Percentage of sales method

It is emphasized to forecasting firm's two key financial statements: balance sheet and income statement as these provide a good picture of the firm's operations.

It has seen that sales to assets turnover is an important control variable and reflects a fundamentally important proposition in planning – that the volume of firm's sales is a good predictor of the required investment in assets.

The percent of sales method provides a practical method of forecasting financial statement. There is a basic logic behind sales and the behavior of individual asset items. For example, in order to make sales, a firm must have an investment in plant and equipment to produce goods. Inventories of work-in-progress and finished goods are needed to make sales when sales are made, there is usually an interval before payments are received. This results in the generation of debtors or accounts receivable. Note that investments in fixed assets and inventories lead sales, while investment in receivables lags sales. With sales fluctuations, these lead and lag relationships result in complex patterns that are understood only when the underlying logic of the relationships is kept in mind.

3.5.2 Statistical Tools

I) Standard Deviation (SD)

Standard deviation measures the dispersion of the outcomes from the expected value" (It is the measure of absolute dispersion of the mass of figures in a series. We can know the volatility of the outcomes by calculating the S.D. To illustrate, let's suppose that $x_1 + x_2 + \dots + x_n$ is a set of 'n' observation then its S.D. is given by

$$\sigma = \sqrt{\frac{\sum (X - \bar{X})^2}{n}}$$

Where,

σ = Standard deviation

\bar{X} = Arithmetic mean

n = total no. of observation

II) Arithmetic Mean

Arithmetic mean is the average return over periods. Arithmetic mean of a given set of observation is their sum divided by the number of observations. To illustrate it, let's suppose that $x_1, x_2, x_3 \dots x_n$ denote return of given 'n' number of securities (here, common stock) and \bar{X} is the arithmetic mean of the given observation. It is calculated by,

$$\bar{X} = \frac{X_1 + X_2 + X_3 + \dots + X_n}{n}$$

$$\text{Or, } \bar{X} = \frac{X}{n}$$

Where,

\bar{X} = Arithmetic mean return

$x_1, x_2, x_3 \dots \dots \dots x_n$ = Set of observations

n = total no. of observations

X = Sum of given observation

III) Coefficient of Variation (CV)

Coefficient of variation (C.V) is the standard deviation (S.D) per unit average of the given variable. Unlike S.D it is the relative measure of dispersion.

$$\text{Coefficient of Variation} = \frac{\text{S.D.}}{\text{Mean}}$$

IV) Correlation Coefficient

Correlation is defined as the relationship (or association) between (or among) the one dependent variable (or factor) and one (or more than one) independent variable(s) or factor(s) (Shrestha & Silwal, 2057: 315). It is the statistical tool which can be used to describe the degree to which one variable is linearly related to another and measures the directions of relationship between two set of figures. Correlation coefficient can be either positive or negative. More precisely, if both variables are changing in the same direction, then correlation is said to be positive. On the other hand, if both variables are changing oppositely to each other, then correlation is known as negative. Correlation can be seen between or among several variables.

V) Coefficient of Multiple Determinants (R^2)

Coefficient of multiple determinations is very useful tool in interpreting the value of multiple correlation coefficients. It is denoted by ' R^2 ' and can be obtained by squaring the coefficient of multiple correlations. R^2 measures the degree (extent or strength) of linear association or correlation between two variables. One of which happens to be independent and other being dependent variable (s). More precisely, it measures the total variation in dependent variables, which is expressed as percentage..
variable.

VI) Simple Linear Regression Model

Regression is the statistical tool which is used to determine the statistical relationship between two (or more) variables and to make estimation (or production) of one variable on the basic of the other variable. The equation of simple linear regression model is $y = a + bx$. The variable to predict is called the dependent variable and the variable on which the prediction is based is called the independent variable.

VII) Multiple Regression Model

Multiple regression equation describes the average relationship between one dependent variable and two or more independent variables and this relationship is used to predict (or control) the dependent variable. Thus, a multiple regression equation is an equation for estimating a dependent variable from the independent variables. The multiple regression equation of dependent variable X_1 on three independent variables X_2 , X_3 , X_4 is given by

$$X_1 = a + b_1 X_2 + b_2 X_3 + b_3 X_4$$

Where,

X = Dependent variable

X_2, X_3 and X_4 = independent variables

a = Intercept of the regression line

b_1, b_2 and b_3 = Slope of the regression line.

VIII) F-test

To test the significance of regression model F-test is utilized. F-test facilitates to identify whether the model is significant or not.

IX) T-test

T-test is used as a tool to determine the explaining power of independent variable. When, t-value is significant, the variable under consideration can best explain the variation in dependent variable.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

This chapter stands for presenting and analyzing data to explore the solutions of the problems mentioned previously. For analysis purpose, various statistical and accounting tools have been employed as per necessary. Profit planning and its various dimensions, financial budgets and practices, trends of profitability and assets management, variance of budgeted and actual plan, relationship of financial variables etc. are the main issues to be dealt here in this chapter.

4.1 Sales Plan

Sales plan is the basic plan at which other plans depend. The Table below presents budgeted sales and actual sales of DDC over the study periods.

Table 4.1

Actual and Budgeted sales (in Rs. lakh)

Year	Budgeted sales	Actual sales	Percentage achieved
2060/61	1481.75	1348.39	0.91
2061/62	1668.28	1484.77	0.89
2062/63	2064.32	1548.24	0.75
2063/64	1813.53	1595.91	0.88
2064/65	1706.46	1535.81	0.90
Mean	1747	1503	
S.D.	214.08	94.86	
C.V.	0.12	0.06	

Source: Annual Reports of DDC

DDC prepares its sales plan for coming year. To identify the sales trend of past and to forecast the future trend historical actual sales figures have been presented against the budgeted sales figures. The company's percentage sales achievement against target sales is 91 percent in FY 2060/61, the highest achievement of all the study period. DDC has recorded highest sales of Rs. 1595.91 lakhs in 2063/64 followed by Rs. 1548.24 lakhs in 2062/63 and Rs. 1535.81 lakhs in 2064/65. Over the study periods the company has been able to increase its sales revenue.

Comparison of actual and budgeted sales figures reveals that there are considerable gap between budgeted and actual sales. Moreover the gap happened to be inconsistent. Such huge gap must be addressed through the coordination and integration of efforts of all the branches and departments.

Above figure shows that there are gap between budget and achievement this high deviation creates difficulty to forecast sales.

Last three rows of table 5.1 presents mean standard deviation and coefficient of variation of actual and budgeted sales. As indicated by standard deviation and C.V., the company's budgeted sale fluctuates more than actual sales. On the other way budgeted sales is more inconsistent.

4.1.1 Sales Forecasting

Regression analysis represents a more general method of forecasting sales and is said less subject to potential pitfalls of the other statistical methods. So regression equations are developed to forecast sales for coming year.

i. Regression Equation of Actual Sales on Budgeted Sales

A regression model is developed taking actual sales (AS) as dependent variable and budgeted sales (BS) as independent variable. Detailed regression results are presented in following table.

Table 4.2
Regression Results

Model	a	b ₁	R	R ²	F	F-sign.
AS = a + b ₁ BS	915.13	0.336 (2.019) [0.14]	0.759	0.58	4.07	0.14

Note: (i) Figures in parenthesis () and [] represent t-value and level of it being significance.

(ii) For detail please see appendix 1

Coefficient of determination, R² of this model is 0.58, which indicates that 58 percent variation between the two variables can be explained by the regression line. Regression coefficient, b₁ indicates that for every Rs. change in budgeted sales, actual sales will change by Rs. 0.336. F-value of the model and t-value of regression coefficient are both insignificant at 5 percent level of significance. Thus the model can not best explain the variation in actual sales.

For forecasting purpose, regression equation is AS = a + b₁ BS. Now, a budgeted sale for coming year is Rs. 1748.64. So actual sales would come to be:

$$AS = 915.13 + 0.336 \times B.S.$$

$$\text{Or, AS} = 915.13 + 0.336 \times 1748.64$$

$$= 1502.67$$

Thus a forecasted sale for coming year is Rs. 1502.67 lakh.

ii. Time Series Analysis

In this, time factor is taken as independent variable whereas actual sales is taken as dependent variable.

Table 4.3
Regression Results

Model	a	b ₁	R	R ²	F	F-sign.
AS = a + b ₁ t	1356.83	48.60 (2.39) [0.096]	0.81	0.66	5.73	0.096

Above table shows the regression of actual sales on time factor. Coefficient of determination, R² is 0.66. Value of regression coefficient, b₁ is positive. It indicates that sales increases for each of the subsequent periods. Since correlation coefficient is strongly positive the result is more supportive.

To forecast regression by the way of time series, Regression equation is AS = a + b₁ × t or AS = 1356.83 + 48.6 × t. Since a sale is to be forecasted for 6th year, forecasted sales would be as: AS = 1356.83 + 48.6 × 6 = Rs. 1648.43.

Observing the f-values and t-value regression of equation of actual sales on budgeted sales is less relevant than time series equation. It is because f-value for second model is significant at 10 percent level while it is significant only at 14 percent level in case of (ii) model.

4.1.2 Sales by product

Profit planning is also affected by how sales is distributed among the different products the company is producing. Table 5.4 shows the sales distribution among different products.

Table 4.4
Sales by different products

Year	Products						
	Milk (in Lakh ltr.)	Butter (In K.G.)	Cord (In ltr.)	Cheese (InK.G)	Ghee (InK.G)	Panir (In K.G.)	Ice cream (In ltr.)
2060/61	693.07	1262945	911087	160368	537775	25063	32563
2061/62	726.78	1433782	1011836	167235	722956	31560	27411
2062/63	767.43	1372563	1215863	174532	830123	41258	30431
2063/64	868.89	1532321	1518492	182162	769362	45688	28561
2064/65	998.88	1668634	1621582	183246	893265	30332	27630

Source: Annual Reports of DDC

Sales by product is also a key factor to sales plan that helps to identify how the sales is distributed among different products that in turn helps to develop overall production and product development plan.

The trend of milk production has been increasing over the years. The milk production is 693.07 lakh liter in FY 2060/61 and it has increased

continuously to level up to 998.88 lakh liter In FY 2061/62. The production of butter has also increased from the year 2060/61 to 2061/62 and has decreased in 2062/63 and again started to increase to reach to 1668634 k.g. in the FY 2064/65. the production of Cord, Cheese and Ghee have also increasing during the year however the trend of production of ice cream shows fluctuating trend that has been decreased sharply in the latter two years.

4.2 Production Budget

When the sales plan is completed the next step in comprehensive profit planning process is the formulation of production plan. Simply a production budget is an estimate of the number of units of each product that will be produced in the budget period to meet planned sales and inventory level of finished goods. All activities in the manufacturing cycle must be planned, coordinated and controlled. To achieve this objective, manufacturing activities are categorized into two parts i.e. pre-production and production activities. Pre-production activities consist of those functions that must be performed before production and this phase ensures all the required resources for production at the right time and at the right quantities. Production activities are the conversion of these input resources into the desired final product. While developing production plan, factors that affect in production planning should be identified and appropriate production plan should be developed.

4.2.1 Production Budget in DDC

So far as the production budget of DDC is concerned, there is no effective preparation of long and short range production plan. DDC deals with various types milk and milk related products in processed and unprocessed form. So the products of DDC are highly heterogeneous. By the nature of the DDC, it is very difficult to pre-determine the units

to be produced in long-term. Other factors that create complication in production plan is the lack of skilful manpower and effective co-ordination between the branches. The production of DDC is highly depended upon the availability of crude milk that the enterprise purchases from farmer. Following table shows the actual production by types of products from FY 2060/61 to 2064/65.

Table 4.4
Production Budget in DDC

S.N.	Products	Unit	2060/61		2061/62		2062/63		2063/64		2064/65	
			Budgeted	Actual	Budgeted	Actual	Budgeted	Actual	Budgeted	Actual	Budgeted	Actual
1	Milk	Lakh liter	693.07	708.74 [102.26%]	679.20	726.78 [107.00%]	741.69	767.43 [103.47%]	796.23	805.52 [101.17%]	886.02	932.35 [105.23%]
2	Butter	K.G.	1383000	1262945 [91.31%]	1362004	1433782 [105.27%]	1101136	1372126 [124.61%]	1522000	1372129 [90.15%]	1330789	1405313 [105.60%]
3	Cheese	K.G.	203900	160348 [79%]	192000	167824 [87.40%]	260286.56	174000 [66.67%]	210000	206000 [98.10%]	241482	20581.51 [85.51%]
4	Curd	liter	459241.49	911087 [94%]	892500	1011836 [113.37%]	1123146	1143217 [101.87%]	1224671	1232178 [100.07%]	1238978	1237657 [99.87%]
5	Ghee	K.G.	809000	804721 [99%]	818400	537775 [66%]	736000	722956 [98.22%]	830897	914651.41 [110.08%]	79623.00	80552 [101.17%]
6	SMP	K.G.	565000	590677 [105%]	635500	541375 [85.20%]	577900	434200 [75%]	536000	547700 [102.18%]	570993.18	637000 [111.56%]
7	Ice cream	liter	64500	32423 [50%]	50000	36293 [73%]	46300	32563 [70%]	40000	27411 [66.85%]	56866	49865 [87.68]

Source: Annual Reports of DDC

Production of milk has increased each year from FY 060/61 to 064/65. However production trend of butter shows fluctuating trend it has increased during the fiscal year 060/61 to 061/62, decreased in the FY 062/63 and again increased in the FY 063/64 and FY 064/65. Likewise production of cheese has increased over the study periods from 160348 K. G. in 060/61 to 20581.51 in 2064/65. Production of curd has gone up regularly from 911087 Ltr. in 2060/61 to 1237657 Ltr. in 2064/65.

Production of ghee and scheme milk powder shows fluctuating trend that will create difficulty in further planning and controlling the production of these products of the enterprises. Unlike production other products, production of Ice cream has been decreasing over the study periods and has increased at once in the FY 2064/65.

DDC does not prepare systematic product budget. All the product of DDC is not produced but some of them it purchased. Likewise what it produces and purchases are highly uncertain to forecast precisely. DDC also does not consider inventory while preparing production. Production level is forecasted on the basis of previous years' sales and by judgmental approach.

4.3 Inventory Consideration

A certain level of inventory is needed for smooth sales activities of industry, finished goods inventory is cushion between sales and production. When production exceeds sales, then the excess production is kept into store and the inventory level will increase. The inventory level decreases when sales exceed production. According to the nature of product, Seasonality, production process, permissibility and other so many factors determine the level of inventory.

DDC follows no any predictable inventory policy. It is a multi-product company producing and purchasing multi-type products. Table 5.8 reveals the inventory level of the company for the 5 year periods.

Table 4.5
Inventory in (Rs. Lakh) and its Turnover
(Inventory Turnover = CGS/AV Inv.)

FY	Opening inventory	Closing Inventory	Average Inventory	Cost of goods sold	Inventory turnover
2060/61	110.65	168.79	139.72	1257.7	9.00
2061/62	168.79	58.28	113.54	1390.09	12.24
2062/63	58.28	620.63	339.45	1415.57	4.17
2063/64	620.63	622.63	621.63	1469.8	2.36
2064/65	622.63	258.62	440.62	1361.5	3.09

Source: Annual Reports of DDC

Inventory level of DDC varies randomly between Rs 113.54 lakh to 621.63 lakh indicating no any consistent inventory policy. Last column of above table is the company's inventory turnover ratio for 5 years' period. During the last 3 years, company's turnover of inventory is very poor indicating very slow moving inventories of the company. However there are sizable turnover during first two years' of study period which is 12.24 times in FY 2061/62 and 9 times in FY 2060/61. This indicates that company has been able to convert its inventory into sales in the previous years faster than that in the latter years.

4.4 Trend of Cost of Goods Sold and Estimation

Production is known as cost of goods sold. It is the aggregate of material cost, direct labour cost and factory cost. Cost of goods sold and gross profit have inverse relationship i.e. If cost of goods sold increases gross profit decreases and vice-versa. As such cost of goods sold is calculated by using the formula:

$$\text{Cost of goods sold} = \text{Sales} - \text{Gross Profit}$$

Following table shows cost of goods sold and gross profit of DDC.

Table 4.5
Cost of Goods Sold

(In Rs. 'lakh)

FY	Sales	Gross profit	Cost of goods sold
2060/61	1348.39	90.69	1257.7
2061/62	1484.77	94.68	1390.09
2062/63	1548.24	132.67	1415.57
2063/64	1595.91	126.11	1469.8
2064/65	1535.81	174.31	1361.5

Source: Annual Report of DDC

Cost of goods sold and gross profit show the production efficiency of a firm. Cost of goods sold of the company has increased during the year 2062 the sales figure increases more than the increase in cost of goods sold this has caused the gross profit to increase from Rs. 90.69 lakh to Rs. 94.68 lakh. In fiscal year 2062/63 cost of goods has increased as compare to the previous year's cost of goods sold however increased sales figure again compensates this and resulted in higher profits than that of previous year. In fiscal year 2063/64 cost of goods sold has come to be Rs. 1469.8 lakh the highest ever recorded in company's

account, this causes the gross profit to decrease at Rs. 126.11. At the last year or in fiscal year 2064/65 the cost of goods sold again has decreased to 1361.5 lakh . This has caused the gross profit to increase to Rs. 174.31 thousands the highest gross profit the company has ever achieved.

4.4.1 Estimation of Cost of Goods Sold

Regression equation is widely accepted as a best tool to forecast given dependent variable based on the chosen1 independent variable. On this ground, cost of goods sold is estimated using regression analysis. Regression equation is $\text{Cost of goods sold} = a + b_1 \times \text{sales}$. The results of regression are portrayed in the table below.

Table 4.6
Results of Regression of CGS on Sales

Regression equation	A	b_1	R^2	R	F	F-sign.
CGS = a + b_1 sales	207.087	0.780 (4.813) [0.02]	0.847	0.885	23.12	0.02

Note: 1) Figures in parenthesis () and [] indicate t-value and level of it being significant respectively.

Coefficient of determination, R^2 of the above model is 0.847 indicates that out of total variation in sales, CGS can explain 84.7 percent. Value of regression coefficient, b_1 is 0.78 indicates that for every rupee value change in sales CGS changes by Rs. 0.78. The positive sign and correlation coefficient (R) indicates the positive relationship. This result is significant as t-value is significant at 5 percent level of significance. Likewise this model can best explain the CGS as f-value is also significant at 5 percent level.

Since company has estimated to achieve sales revenue Rs. 1748.64 lakh during the year 2065/66, its cost of good sold would be:

$$\begin{aligned}
\text{CGS} &= a + b_1 \times \text{sales} \\
&= 207.087 + 0.78 \times \text{Sales} \\
&= 207.087 + 0.78 \times 1748.64 \\
&= \text{Rs. } 1571.03
\end{aligned}$$

4.5 Expenditure Budget of DDC

Profit is certainly a function of expenses. In this regard planning of profit includes plan for expenses also. In planning process, the knowledge of costs for each responsibility centre should be pinpointed. Total costs of company can be subdivided into following ways:

- I. Prime cost
- II. Factory overhead
- III. Administrative
- IV. Selling and distribution overhead
- V. Other expenses

Prime costs include direct material, direct labor and other direct charges. Factory overhead includes all costs associated to manufacture products and to factory. Administrative costs include those expenses other than manufacturing and distribution. Selling and distribution expenses include all costs related to provide and sale products to customers. Besides these expenses, other operating and non-operating expenses are also incurred in the manufacturing and processing enterprises. According to plan and policy, such expenses are treated as miscellaneous expenses and these expenses are estimated separately.

Following table shows how total costs of the company are apportioned in different cost centres.

Table 4.7
Expenses of DDC

Particulars	2060/61	2061/62	2062/63	2063/64	2064/65	Average	S.D.	CV
Prime cost	1257.70	1390.09	1415.57	1469.80	1361.5	1378.93	78.62	0.06
selling exp	34.64	38.37	38.63	40.90	39.302	38.37	2.31	0.06
Administration	53.28	69.08	83.00	79.998	61.131	69.29	12.51	0.18
Depreciation	34.68	32.13	30.00	29.428	29.99	31.24	2.18	0.07
Interest	11.80	11.68	11.633	11.583	43.194	17.97	14.10	0.78
Total	1392.09	1541.36	1578.83	1631.72	1535.12			

Source: Annual Reports of DDC

From the above table one can observe that prime cost of DDC is more than all other costs averaging to Rs. 1378.93 lakh for over the 5 year periods. Administrative costs of the company occupies second large amount which averages to 69.29 lakh. Selling expenses bear its third position in terms of the costs of the company. Likewise depreciation of the company is 29.99 lakh in an average.

Prime cost and selling expenses of the company is more inconsistent showing CV of 0.06. Followed by depreciation (C.V. = 0.07) and administrative overhead (0.18). In an absolute term factory and selling overhead is dispersed more from its average costs as it has highest C.V. of 0.78.

4.6 Planning of Cash

Cash budget is effective way to plan and control the cash flows, assess cash needs and effectively use of excess cash. A cash budget shows the planned cash inflows, outflows and ending cash position by the interim period for a specific time span. The basic two parts of cash budget are the planned cash receipts and planned cash disbursements. It coordinates cash with total working capital, sale revenue, expenses, investments and liabilities.

DDC do not have systematic and scientific practice of cash budget. It has not developed any systematic cash planning formal. But it is clear that the main source of cash of DDC is cash sales, the main items of cash used are purchases of herbs and containers, salaries, production and processing expenses, administrative salaries etc. To analyze the major cash application and sources following cash-flow statement is prepared with the help of balance sheet and income statement of the year.

Table 4.8
Cash Flow Statement for FY 2063/64

Particulars	Amount
A. Cash from operating activities:	
Net profit during the year	14117594.06
Depreciation	29993611.51
Cash decrease from increase in current assets	-13107596.81
writing off deferred expenditure	2826500
Decrease in current liabilities	-42945313.4
A.Cash from operating activities	-9115204.64
B. Cash from investing activities:	
Purchase of Fixed assets	-18608552.23
C. Cash from financing activities	50940713.18
Cash increase during the year (A + B + C)	33216956.31
Plus : Cash at the beginning:	
In hand 3400444.60	
At Bank 36316.40	3436761
F. Cash at the end	26653717.31

* Cash at the end includes cash in bank Rs. 18569745 and in hand, Rs. 8083972.31

From the statement above firm's financing activities is the main source from where cash comes and financing activities is the net result of firm's cash inflow and outflow in long term liabilities. On the other main outflows are for direct expenses administrative, manufacturing and selling expenses as the cash from operating activities shows huge amount of outflows. The company has purchased total fixed assets of Rs. 18608552.23 in FY 2064/65 and it is the

only item of outflow in the heading of investing activities. During the year company has achieved positive cash change of Rs. 33216956.31 thus has achieved ending cash balance of Rs. 26653717.31. Out of which Rs18569745 is in bank and balance is in hand.

4.7 Forecasting of Financial Statements: Percentage of Sales Method

It is emphasized to forecasting firm's two key financial statements: balance sheet and income statement as these provide a good picture of the firm's operations.

It has seen that sales to assets turnover is an important control variable and reflects a fundamentally important proposition in planning – that the volume of firm's sales is a good predictor of the required investment in assets.

The percent of sales method provides a practical method of forecasting financial statement. There is a basic logic behind sales and the behavior of individual asset items. For example, in order to make sales, a firm must have an investment in plant and equipment to produce goods. Inventories of work-in-progress and finished goods are needed to make sales when sales are made, there is usually an interval before payments are received. This results in the generation of debtors or accounts receivable. Note that investments in fixed assets and inventories lead sales, while investment in receivables lags sales. With sales fluctuations, these lead and lag relationships result in complex patterns that are understood only when the underlying logic of the relationships is kept in mind.

Table 4.9

Income Statement for FY 2064/65(in lakh)

Sales Revenue	1535.8
Less: cost of goods sold	1361.5
Gross profit	174.31
Less: operating expenses:	
Selling & distribution exp	39.302
Administrative exp	61.131
Operating profit	73.877
Less: Provisions	61.131
Net profit	12.746

Table 4.10**Balance sheet of DDC for the FY 2064/65**

Capital & liabilities			Assets
Corporation Funds	549,452,794.68	Fixed Assets	304,864,159.54
Gratitude Funds	15,45,264.97	Current Assets	463,869,236.92
Revolving Funds	914,210.00	Deferred Exp	3,426,533.67
Long Term Loan	85,201,701.53	Investment of Gratitude funds	1545264.97
Curent Liabilities	344,827,969.21	Profit & Loss A/C	208,236,745.29
Total	981941940.39	Total	981941940.39

To begin with above actual financial statements of DDC are demonstrated. To forecast the company's financial statement for 2065/66 following assumption have been made:

-) Company's all the expenses vary directly with sales.
-) Forecasted sales as forecasted by the company for FY 2065/66 is Rs. 1748.64 lakh, have been taken as a basis for projection purpose.
-) Provisions of the company remain unchanged.
-) Fixed assets and current assets vary directly with change in sales and also current liabilities show same type of behaviour. Besides these all the balance-sheet items remain unaffected.
-) DDC is operating at full capacity.

Now, given the above assumption forecasting precedes in the following manner:

First: Preparation of forecasted income statement:

Table 4.11

Proforma Income Statement for FY 2065/66

Sales Revenue	1748.64
Less: cost of goods sold	1552.11
Gross profit	196.53
Less: operating expenses	
Selling & distribution exp	44.80
Administrative exp	69.69
Operating profit	82.04
Less: Provisions	61.13
Net	20.91

$$*Percentage \text{ change in sales} = \frac{1748.64 - 1535.80}{1535.80} = 0.14$$

Second: Preparation of forecasted balance sheet:

Table 4.12

Proforma Balance Sheet Of DDC for Fiscal Year 2065/66

Assets	Amount (Rs.)	Liabilities	Amount (Rs.)
Fix Assets	347545141.9	Corporation fund	549452794.68
Gratitude Funds Investment	1545264.97	Gratitude fund	1545264.97
Current Assets	528810930.1	Revolving fund	914210.00
Deferred Expenditure	3426533.67	Long term debt	85201701.53
Accumulated Loss	206145745.3	Current liabilities	393103884.9
		External fund needed	57255760.00
Total	1087473616	Total	1087473616.08

* Indicates items those remain unchanged though sales changes.

** Indicates items those change with change in sales.

Observing the above financial statements it is clear that firm's net profit will increase to Rs. 20.91 lakh from base year's (2064/65) net profit of Rs. 12.746 lakh given the sales forecasted by the company and above assumptions are valid.

From the forecasted balance-sheet of the company it is clear that asset will increase by Rs. 107622676. This incremental asset is financed spontaneously with current liabilities of Rs. 48275915.69 and with profit of Rs. 2091000. Out of The total assets the remaining financing of Rs. 5725760 should be raised through external funds.

$$\begin{aligned}\text{External fund needed} &= [\text{Increase assets} - \text{Increased Current} \\ &\quad \text{Liabilities} \\ &\quad - \text{Increased profit}] \\ &= 107622676 - 48275915.69 - 2091000 \\ &= \text{Rs. } 57255760.31\end{aligned}$$

Thus DDC needs Rs. 42680982.3 to finance incremental fixed assets, and Rs. 64941693.2 to financed incremental current assets. Out of these Rs. 48275915.69 will be available to the DDC through incremental current liabilities and balance of Rs. 57255760.31 should it rise from external source.

4.8 Identification of Cost Variability

Identification of variability of cost is necessary in planning and control of the cost. The response of cost to different volume of output should be identified to plan for and control the cost.

DDC being a manufacturing concern, the cost analysis is a matter of vital significance. Classification of cost helps to determine the volume of operation and to maintain the company's profitability. However DDC

has he any practice for classifying its costs into fixed and variable components for decision making purpose. Here, an attempt has been made towards the cost classification. Company's total cost as on the FY 2060/61 is classified into fixed and variable component. All costs are roughly classified into fixed and variable company's total variable cost (VC) during the year is Rs 989.99 lakh and total fixed cost during the year is Rs. 533.074 result into total cost of Rs. 1523.064.

Table 4.13

Total Fixed and VC for FY 2064/65

Particulars	Amount (Rs. In lakh)
Sales Revenue	1535.8
Total Cost	1523.064
Variable Cost	989.99
Fixed cost	533.074

Note: [Detail calculate are provided in Appendix]

Profit volume ratio (P/V ratio) of the company is $(1 - VC/Sales) = 1 - 989.99/1523.064 = 1 - 0.65 = 0.35$. Thus the company would have been BEP at sales level of Rs. 1523.06 (i.e. $BEP = FC/P/V \text{ ratio} = 533.074/0.35 = 1523.06$). in FY 2064/65. If the company would have generated sales of Rs. 1523.06 lakh it would have achieved break-even. Though company seems to be earning operating profit. The company's operating profit could not maintain the interest and other provisional expenses resulted in loss. The company would be better to increase sale volume and price of products it produces to come out of the heavily loss it has been making over the last decades.

4.9 Financial Ratio Analysis:

Financial ratio analysis is the arithmetical relationship between two or more variables of financial statements. Information provided by the ratio analysis is very useful to evaluate financial performance of a firm. It communicates the strengths and weaknesses of the firm. It is also useful for initiating effective control of business. This section focuses on the financial performance of the enterprise on terms of liquidity, profitability, turnover, and capital structure.

Table 4.14

Financial Ratios of DDC

Name of Ratio	2060/61	2061/62	2062/63	2063/64	2064/65
Current Ratio	1.68	3.19	2.85	1.16	1.35
Inventory Turnover Ratio	9.0	12.24	4.17	2.36	3.09
Total Assets Turnover Ratio	0.159	0.151	0.157	0.166	0.156
Return on Capital Employed	-0.024	-0.017	-0.013	0.013	0.014
Debt to Equity Ratio	0.375	0.234	0.231	0.369	0.154
Net Profit Margin	-0.105	-0.093	-0.069	0.048	0.058
Return on Assets	-0.017	-0.0014	-0.011	0.008	0.009

From the table above one can observe that the company's liquidity was satisfactory in FY 2061/62 and 2062/63 in these years the current ratio are 3.19 and 2.85 respectively. However the ratio is not satisfactory over the other years. Moreover the ratio has reached in its worst position in the latter years. Current ratio of in FY 2063/64 is 1.16 and same can not be considered as a good, the ratio has again decreased in FY 2064/65 to 1.35 these decreasing current ratio indicate that the company's ability to pay its debts obligation has seriously been injured.

Inventory turnover of the corporation is very good in the first two years i.e. 9.0 and 12.24 respectively for 2060/61 and 2061/62. Thus the company's ability to convert its inventory into sales is very good and exemplary however same has decreased in the latter years.

Total assets turnover of the company is more or less uniform for all the years which are in the range of 0.151 to 0.166. The ability of the company's assets to generate sales is not good as the turnover of assets is poor. This also indicates the company's inability to manage its assets. Another dismal aspect of the DDC is to have very low and negative return on capital employed. It is to note that the return on capital employed is negative for first three years i.e.-0.024, -0.017, -0.013 for 2060/61, 2061/62, 2062/63 respectively. This negative operating return on capital employed is due to ineffective utilization of capital. However the same ratio is positive and seems to be more satisfactory in the latter two years than the ratio of the corporation in the first three years.

Company employed more of equity capital as indicated by debt- equity ratio. This ratio for the company has been in a fluctuating for all the periods. That means no capital restructuring has been considered in this time period.

Net profit margin and total assets turnover give the return on assets (ROA) if multiplied together. ROA is negative for all the periods. These all the ratio, in absolute term indicates that the company is in a difficult

verge in the latter years and the condition has been improving as the ROA has increased during the FY 2063/64 and 2064/65. the ROA of the company is -0.017, -0.0014, -0.011, 0.008 and 0.009 respectively for FY 2060/61, 2061/62, 2062/63, 2063/64 and 2064/65 respectively.

4.10 Regression Analysis of Net Profit (NP) On Administrative cost (ADMC), Prime Cost (PC) and Depreciation (Depr.)

It is important to identify the association of Net profit with administrative, prime and depreciation cost. This helps to identify the relation of net profit to the different cost variable or what sort of impact the cost have upon the net profit is the key to the planning and controlling this the reason why this multiple regression analysis has performed here in this study. The regression results of this model and various subsets of independent variables are presented in table 4.10. The first three models include one of the three independent variables at a time. Models 4 to 6 include various combinations of two independent variables and model 7 includes all the three independent variables simultaneously. For all the models net profit is designed to be dependent variable.

Table 4.15**Regression Result of NP on ADMC, PC and Depr.**

Models	Intercept (a)	Regression coefficient of			R	R ²	F-value	Sig*.
		ADMC	PC	Depr.				
(1)	-144.57	1.446 [0.271] 0.804**			0.155	0.024	0.074	0.84
(2)	1392.74		0.311 [0.904] 0.433**		0.463	0.214	0.817	0.443
(3)	1146.03 8			-38.098 [-1.75] 0.178**	0.711	0.505	3.061	0.178
(4)	2762.71	-7.956 [-1.915] 0.196**		-72.194 [-3.029] 0.0.094* *	0.908	0.825	4.725	0.175
(5)	- 2735.27 1	-13.506 [-1.371] 0.235**	2.63 [1.679] 0.235**		0.771	0.595	1.469	0.405
(6)	3350.69		-0.935 [-0.699] 0.557**	-67.388 [-1.397] 0.297**	0.776	0.602	1.515	0.398
(7)	1221.03 7	-11.416 [-1.399] 0.395**	0.952 [0.547] 0.681**	-57.199 [-1.419] 0.391**	0.93	0.866	2.146	0.456

Source: Appendix-3

Note: 1) Figures in parenthesis are t- values

2) The sign ** indicates the level of t- value being significance

3) The sign * indicates the level of F value being significance

Result of first three models of above table shows that ADMC and PC have individually positive impact upon Net profit. Regression coefficient of these variables indicates that Net profit will change by 1.446 and 0.311 for every 1 percent change in ADMC and PC respectively. However the negative coefficient of Depr. Indicates a negative relationship of net profit with the depreciation expenses. Observing the test of confirmation of regression coefficient, t- values of the first three models are not significant at 5 percent level likewise F ratio is also insignificant at the same level. Thus it can be concluded that ADMC and PC have individually positive impact upon net profit but depreciation has negative relationship.

Models 4, 5 and 6 are the regression equation of NP on ADMC, PC and Depr. taking two variables at a time as independent variables. Results of all the models are discouraging because t- Values as well as F values of regression coefficients are insignificant at 5 percent level. Though there are negative relationship one can observe between dependent and independent variables, this relationship is statistically insignificant.

Last row of the above table presents the regression results that come while all the variables in consideration are taken simultaneously. Coefficient of determination (R^2) of this model indicates that the model can explain 93 percent variation out of the total variation in net profit. There is positive relationship of NP and PC. However the relationship is negative between the NP and other cost variables. The overall explaining power of the model is not good as F ratio is insignificant at 5 percent level of significance. The t-values of regression coefficients are insignificant for all the independent variables.

Major Findings

This study addresses the behavior and trend of stock market and economic variables. The overall results of the study can briefly be noted out as follows:

-) DDC prepares its sales plan for coming year. The company's percentage sales achievement against target sales is 91 percent in FY 2060/61, the highest achievement of all the study period. DDC has recorded highest sales of Rs. 1595.91 lakhs in 2063/64 followed by Rs. 1548.24 lakhs in 2062/63 and Rs. 1535.81 lakhs in 2064/65. Over the study periods the company has been able to increase its sales revenue.
-) Comparison of actual and budgeted sales figures reveals that there are considerable gap between budgeted and actual sales. Moreover the gap happened to be inconsistent. Such huge gap must be addressed through the coordination and integration of efforts of all the branches and departments. Above figure shows that there are gap between budget and achievement this high deviation creates difficulty to forecast sales. As indicated by standard deviation and C.V., the company's budgeted sale fluctuates more than actual sales. On the other way budgeted sales is more inconsistent.
-) Regression results of Actual sales (AS) on Budgeted Sales(BS) reveals that the coefficient of determination, R^2 of this model is 0.58, which indicates that 58 percent variation between the two variables can be explained by the regression line. Regression coefficient, b_1 indicates that for every Rs. change in budgeted sales, actual sales will change by Rs. 0.336. F-value of the model and t-value of regression coefficient are both insignificant at 5 percent level of significance. Thus the model can not best explain

the variation in actual sales. Now, a budgeted sale for coming year is Rs. 1748.64 produces actual sales of Rs. 1502.67.

) Like wise the regression of actual sales on time factor shows that Coefficient of determination, R^2 is 0.66. Value of regression coefficient, b_1 is positive. It indicates that sales increases for each of the subsequent periods. Since correlation coefficient is strongly positive the result is more supportive. To forecast regression by the way of time series, Regression equation is $AS = a + b_1 \times t$ or $AS = 1356.83 + 48.6 \times t$. Since a sale is to be forecasted for 6th year, forecasted sales would be as: $AS = 1356.83 + 48.6 \times 6 = \text{Rs. } 1648.43$ lakh. Observing the f-values and t-value, regression equation of actual sales on budgeted sales is less relevant than time series equation. It is because f-value for second model is significant at 10 percent level while it is significant only at 14 percent level in case of second model.

) The trend of milk production has been increasing over the years. The milk production is 693.07 lakh liter in FY 2060/61 and it has increased continuously to level up to 998.88 lakh liter In FY 2064/65. The production of butter has also increased from the year 2060/61 to 2061/62 and has decreased in 2062/63 and again started to increase to reach to 1668634 k.g. in the FY 2064/65. the production of Cord, Cheese and Ghee have also increasing during the year however the trend of production of ice cream shows fluctuating trend that has been decreased sharply in the latter two years.

) So far as the production budget of DDC is concerned, there is no effective preparation of long and short range production plan. DDC deals with various types milk and milk related products in processed and unprocessed form. So the products of DDC are

highly heterogeneous. By the nature of the DDC, it is very difficult to pre-determine the units to be produced in long-term. Other factors that create complication in production plan is the lack of skilful manpower and effective co-ordination between the branches. The production of DDC is highly depended upon the availability of crude milk that the enterprise purchases from farmers.

) Production of milk has increased each year from FY 060/61 to 064/65. However production trend of butter shows fluctuating trend it has increased during the from the fiscal year 060/61 to 061/61 decreased in the FY 062/63 and again increased in the FY 063/64 and FY 064/65. Likewise production of cheese has increased over the study periods from 160348 K. G. in 060/61 to 20581.51 in 2064/65. Production of curd has gone up regularly from 911087 Ltr. in 2060/61 to 1237657 Ltr. in 2064/65. Production of ghee and scheme milk powder shows fluctuating trend that will create difficulty in further planning and controlling the production of these products of the enterprises. Unlike production other products, production of Ice cream has been decreasing over the study periods and has increased at once in the FY 2064/65. DDC does not prepare systematic product budget. All the product of DDC is not produced but some of them it purchased. Likewise what it produces and purchases are highly uncertain to forecast precisely. DDC also does not consider inventory while preparing production. Production level is forecasted on the basis of previous years' sales and by judgmental approach.

) Inventory level of DDC varies randomly between Rs 113.54 lakh to 621.63 lakh indicating no any consistent inventory policy. Last column of above table is the company's inventory turnover ratio for 5 years' period. During the last 3 years, company's turnover of

inventory is very poor indicating very slow moving inventories of the company. However there are sizable turnover during first two years' of study period which is 12.24 times in FY 2061/62 and 9 times in FY 2060/61. This indicates that company has been able to convert its inventory into sales in the previous years faster than that in the latter years.

) Cost of goods sold and gross profit show the production efficiency of a firm. Cost of goods sold of the company has increased during the year 2062 the sales figure increases more than the increase in cost of goods sold this has caused the gross profit to increase from Rs. 90.69 lakh to Rs. 94.68 lakh. In fiscal year 2062/63 cost of goods has increased as compare to the previous year's cost of goods sold however increased sales figure again compensates this and resulted in higher profits than that of previous year. In fiscal year 2063/64 cost of goods sold has come to be Rs. 1469.8 lakh the highest ever recorded in company's account, this causes the gross profit to decrease at Rs. 126.11. At the last year or in fiscal year 2064/65 the cost of goods sold again has decreased to 1361.5 lakh. This has caused the gross profit to increase to Rs. 174.31 thousands the highest gross profit the company has ever achieved.

) Regression of CGS on sales shows that Coefficient of determination, R^2 0.847 indicates that out of total variation in sales, CGS can explain 84.7 percent. Value of regression coefficient, b_1 is 0.78 indicates that for every rupee value change in sales CGS changes by Rs. 0.78. The positive sign and correlation coefficient (R) indicates the positive relationship. This result is significant as t-value is significant at 5 percent level of significance. Likewise this model can best explain the CGS as f-value is also significant at 5 percent level. Since company has

estimated to achieve sales revenue Rs. 1748.64 lakh during the year 2065/66, its cost of good sold would be: Rs. 1571.03

) Scrutiny of costs shows that prime cost of DDC is more than all other costs averaging to Rs. 1378.93 lakh for over the 5 year periods. Administrative costs of the company occupies second large amount which averages to 69.29 lakh. Selling expenses bear its third position in terms of the costs of the company. Likewise depreciation of the company is 29.99 lakh in an average. Prime cost and selling expenses of the company is more inconsistent showing CV of 0.06. Followed by depreciation (C.V. = 0.07) and administrative overhead (0.18). In an absolute term factory and selling overhead is dispersed more from its average costs as it has highest C.V. of 0.78.

) Cash flow statement of the firm shows that financing activities is the main source from where cash comes and financing activities is the net result of firm's cash inflow and outflow in long term liabilities. On the other main outflows are for direct expenses administrative, manufacturing and selling expenses as the cash from operating activities shows huge amount of outflows. The company has purchased total fixed assets of Rs. 18608552.23 in FY 2064/65 and it is the only item of outflow in the heading of investing activities. During the year company has achieved positive cash change of Rs. 33216956.31 thus has achieved ending cash balance of Rs. 26653717.31. Out of which Rs18569745 is in bank and balance is in hand.

) Corporation's financial statement has been forecasted on the basis of percentage of sales method. Observing the forecasted financial statement it is clear that firm's net profit will increase to Rs. 20.91 lakh from base year's (2064/65) net profit of Rs. 12.746 lakh given the sales forecasted by the company and above assumptions are valid. From the forecasted balance-sheet of the

company it is clear that asset will increase by Rs. 107622676. This incremental asset is financed spontaneously with current liabilities of Rs. 48275915.69 and with profit of Rs. 2091000. Out of The total assets the remaining financing of Rs. 5725760 should be raised through external funds. Thus DDC needs Rs. 42680982.3 to finance incremental fixed assets, and Rs. 64941693.2 to financed incremental current assets. Out of these Rs. 48275915.69 will be available to the DDC through incremental current liabilities and balance of Rs. 57255760.31 should it raise from external source.

) Profit volume ratio (P/V ratio) of the company is $(1 - VC/Sales) = 1 - 989.99/1523.064 = 1 - 0.65 = 0.35$. Thus the company would have been BEP at sales level of Rs. 1523.06 (i.e. $BEP = FC/P/V \text{ ratio} = 533.074/0.35 = 1523.06$). in FY 2064/65. If the company would have generated sales of Rs. 1523.06 lakh it would have achieved break-even. Though company seems to be earning operating profit. The company's operating profit could not maintain the interest and other provisional expenses resulted in loss. The company would be better to increase sale volume and price of products it produces to come out of the heavily loss it has been making over the last decades.

) Financial ratio analysis shows that the corporation's liquidity was satisfactory in FY 2061/62 and 2062/63 in these years the current ratio are 3.19 and 2.85 respectively. However the ratio is not satisfactory over the other years. Moreover the ratio has reached in its worst position in the latter years. Current ratio of in FY 2063/64 is 1.16 and same can not be considered as a good, the ratio has again decreased in FY 2064/65 to 1.35 these decreasing current ratio indicate that the company's ability to pay its debts obligation has seriously been injured. Inventory turnover of the corporation is very good in the first two years i.e. 9.0 and 12.24

respectively for 2060/61 and 2061/62. Thus the company's ability to convert its inventory into sales is very good and exemplary however same has decreased in the latter years. Total assets turnover of the company is more or less uniform for all the years which are in the range of 0.151 to 0.166. The ability of the company's assets to generate sales is not good as the turnover of assets is poor. This also indicates the company's inability to manage its assets. Another dismal aspect of the DDC is to have very low and negative return on capital employed. It is to note that the return on capital employed is negative for first three years i.e. -0.024, -0.017, -0.013 for 2060/61, 2061/62, 2062/63 respectively. This negative operating return on capital employed is due to ineffective utilization of capital. However the same ratio is positive and seems to be more satisfactory in the latter two years than the ratio of the corporation in the first three years. Company employed more of equity capital as indicated by debt-equity ratio. This ratio for the company has been in a fluctuating for all the periods. That means no capital restructuring has been considered in this time period. Net profit margin and total assets turnover give the return on assets (ROA) if multiplied together. ROA is negative for all the periods. These all the ratio, in absolute term indicates that the company is in a difficult verge in the latter years and the condition has been improving as the ROA has increased during the FY 2063/64 and 2064/65. The ROA of the company is -0.017, -0.0014, -0.011, 0.008 and 0.009 respectively for FY 2060/61, 2061/62, 2062/63, 2063/64 and 2064/65 respectively.

) Regression Result of NP on ADMC, PC and Depr. Shows that ADMC and PC have individually positive impact upon Net profit. Regression coefficient of these variables indicates that Net profit will change by 1.446 and 0.311 for every 1 percent change

in ADMC and PC respectively. However the negative coefficient of Depr. Indicates a negative relationship of net profit with the depreciation expenses. Observing the tests of confirmation of regression coefficient, t- values of the first three models are not significant at 5 percent level likewise F ratio is also insignificant at the same level. Thus it can be concluded that ADMC and PC have individually positive impact upon net profit but depreciation has negative relationship.

) Regression equation of NP on ADMC, PC and Depr. taking two variables at a time as independent variables shows that all the models are discouraging because t- Values as well as F values of regression coefficients are insignificant at 5 percent level. Though there are negative relationship one can observe between dependent and independent variables, this relationship is statistically insignificant. While all the variables in consideration are taken simultaneously. Coefficient of determination (R^2) of the model indicates that the model can explain 93 percent variation out of the total variation in net profit. There is positive relationship of NP and PC. However the relationship is negative between the NP and other cost variables. The overall explaining power of the model is not good as F ratio is insignificant at 5 percent level of significance. The t-values of regression coefficients are insignificant for all the independent variables.

CHAPTER- V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

In this chapter, an attempt has been made to summarize the whole study. Conclusion of the study is also an issue to be presented here in this chapter. Constructive suggestions and recommendations have also been made those can be of immense help to improve and revise status of profit planning in the corporation.

5.1 Summary

Chapter one describes about the general introduction, objectives, problems and limitations of the study allowing first step to go through the study. In chapter II, relevant literatures as obtained from journals, books, articles and different studies have been incorporated. Chapter third is research methodology which includes plans and strategy like research design, population, sample, sources and types of data, tools to be applied etc. Chapter next to the third is data presentation and analysis.

This study has covered the period of five years being from 2060/61 to 2064/65. Secondary data have been used in analysis process. Both statistical and financial tools have been employed for the purpose of analyzing the data. A sole corporation that is DDC is selected for the study.

DDC prepares its sales plan for coming year. The company's percentage sales achievement against target sales is 91 percent in FY 2060/61, the highest achievement of all the study period. DDC has recorded highest sales of Rs. 1595.91 lakhs in 2063/64 followed by Rs. 1548.24 lakhs in 2062/63 and Rs. 1535.81 lakhs in 2064/65. Over the study periods the

company has been able to increase its sales revenue. Comparison of actual and budgeted sales figures reveals that there are considerable gap between budgeted and actual sales. Regression results of Actual sales (AS) on Budgeted Sales (BS) reveals that the coefficient of determination, R^2 of this model is 0.58, which indicates that 58 percent variation between the two variables can be explained by the regression line. Like wise the regression of actual sales on time factor shows that Coefficient of determination, R^2 is 0.66. Value of regression coefficient, b_1 is positive. It indicates that sales increases for each of the subsequent periods. Since correlation coefficient is strongly positive the result is more supportive. Observing the f-values and t-value, regression equation of actual sales on budgeted sales is less relevant than time series equation. It is because f-value for second model is significant at 10 percent level while it is significant only at 14 percent level in case of second model.

The trend of milk production has been increasing over the years. The milk production is 693.07 lakh liter in FY 2060/61 and it has increased continuously to level up to 998.88 lakh liter In FY 2061/62. The production of butter has also increased from the year 2060/61 to 2061/62 and has decreased in 2062/63 and again started to increase to reach to 1668634 k.g. in the FY 2063/64.

So far as the production budget of DDC is concerned, there is no effective preparation of long and short range production plan. DDC deals with various types milk and milk related products in processed and unprocessed form. So the products of DDC are highly heterogeneous. By the nature of the DDC, it is very difficult to pre-determine the units to be produced in long-term. Other factors that create complication in production plan is the lack of skilful manpower and effective co-ordination between the Production of milk has increased each year from FY 060/61 to 061/62. 063/64 and FY 064/65. Likewise production of

cheese ,curd, ghee and scheme has increased over the study periods in 060/61 to 2064/65. Unlike production other products, production of Ice cream has been decreasing over the study periods and has increased at once in the FY 2064/65.DDC does not prepare systematic product budget. All the product of DDC is not produced but some of them it purchased. Likewise what it produces and purchases are highly uncertain to forecast precisely. DDC also does not consider inventory while preparing production. Production level is forecasted on the basis of previous years' sales and by judgmental approach.

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Cost of goods sold and gross profit show the production efficiency of a firm. Cost of goods sold of the company has increased during the year 2061 the sales figure increases more than the increase in cost of goods sold this has caused the gross profit to increase from Rs. 90.69 lakh to Rs. 94.68 lakh. In fiscal year 2062/63 cost of goods has increased as compare to the previous year's cost of goods sold however increased sales figure again compensates this and resulted in higher profits than that of previous year. In fiscal year 2063/64 cost of goods sold has come to be Rs. 1469.8 lakh the highest ever recorded in company's account, this causes the gross profit to decrease at Rs. 126.11. At the last year or in fiscal year 2060/61 the cost of goods sold again has decreased to

1361.5 lakh . This has caused the gross profit to increase to Rs. 174.31 thousands the highest gross profit the company has ever achieved.

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Cash flow statement of the firm shows that financing activities is the main source from where cash comes and financing activities is the net result of firm's cash inflow and outflow in long term liabilities. On the other main outflows are for direct expenses administrative, manufacturing and selling expenses as the cash from operating activities shows huge amount of outflows. The company has purchased total fixed assets of Rs. 18608552.23 in FY 2064/65 and it is the only item of outflow in the heading of investing activities. During the year company has achieved positive cash change of Rs. 33216956.31 thus has achieved ending cash balance of Rs. 26653717.31. Out of which Rs18569745 is in bank and balance is in hand.

Financial ratio analysis shows that the corporation's liquidity was satisfactory in FY 2061/62 and 2062/63 in these years the current ratio are 3.19 and 2.85 respectively. However the ratio is not satisfactory over the other years. Moreover the ratio has reached in its worst position in the latter years. Current ratio of in FY 2063/64 is 1.16 and same can not be considered as a good, the ratio has again decreased in FY 2064/65 to

1.35 these decreasing current ratio indicate that the company's ability to pay its debts obligation has seriously been injured. Inventory turnover of the corporation is very good in the first two years i.e. 9.0 and 12.24 respectively for 2060/61 and 2061/62. Thus the company's ability to convert its inventory into sales is very good and exemplary however same has decreased in the latter years. Total assets turnover of the company is more or less uniform for all the years which are in the range of 0.151 to 0.166. The ability of the company's assets to generate sales is not good as the turnover of assets is poor. This also indicates the company's inability to manage its assets. Another dismal aspect of the DDC is to have very low and negative return on capital employed. It is to note that the return on capital employed is negative for first three years i.e.-0.024, -0.017, -0.013 for 2060/61, 2061/62, 2062/63 respectively. This negative operating return on capital employed is due to ineffective utilization of capital. However the same ratio is positive and seems to be more satisfactory in the latter two years than the ratio of the corporation in the first three years. Company employed more of equity capital as indicated by debt- equity ratio. This ratio for the company has been in a fluctuating for all the periods. That means no capital restructuring has been considered in this time period. Net profit margin and total assets turnover give the return on assets (ROA) if multiplied together. ROA is negative for all the periods. These all the ratio, in absolute term indicates that the company is in a difficult verge in the latter years and the condition has been improving as the ROA has increased during the FY 2062/63 and 2063/64. The ROA of the company is -0.017, -0.0014, -0.011, 0.008 and 0.009 respectively for FY 2060/61, 2061/62, 2062/63, 2063/64 and 2064/65 respectively.

5.2 Conclusion

Based on basic findings presented at the end of chapter four and summary drawn in this chapter, following conclusion can be made:

-) This study shows that there are gap between budgeted and achieved sales. As indicated by standard deviation and C.V., the company's budgeted sale fluctuates more than actual sales. On the other way budgeted sales is more inconsistent. This high deviation creates difficulty to forecast sales
-) The budgeted sale for coming year is Rs. 1748.64 which produces actual sales of Rs. 1502.67 as per the regression method of sales for casting. According to time series equation the sales for coming year is Rs. 1648.43 lak regression equation of actual sales on budgeted sales is less relevant than time series equation. It is because f-value for second model is significant at 10 percent level while it is significant only at 14 percent level in case of second model.
-) Production of ghee and scheme milk powder shows fluctuating trend that will create difficulty in further planning and controlling the production of these products of the enterprises. Unlike production other products, production of Ice cream has been decreasing over the study periods and has increased at once in the FY 2064/65.DDC does not prepare systematic product budget. All the product of DDC is not produced but some of them it purchased. Likewise what it produces and purchases are highly uncertain to forecast precisely. DDC also does not consider inventory while preparing production. Production level is forecasted on the basis of previous years' sales and by judgmental approach.
-) Value of regression coefficient, b_1 is 0.78 indicates that for every rupee value change in sales CGS changes by Rs. 0.78.

The positive sign and correlation coefficient (R) indicates the positive relationship. This result is significant as t-value is significant at 5 percent level of significance. Likewise this model can best explain the CGS as f-value is also significant at 5 percent level of significance.

-) that prime cost of DDC is more than all other costs averaging to Rs. 1378.93 lakh for over the 5 year periods. Administrative costs of the company occupies second large amount which averages to 69.29 lakh. Selling expenses bear its third position in terms the cost. In an absolute term factory and selling overhead is dispersed more from its average costs as it has highest C.V. of 0.78.
-) Financing activities is the net result of firm's cash inflow and outflow from the long term liabilities the main source of cash is financing activities. on the other main outflows are for direct expenses administrative, manufacturing and selling expenses as the cash from operating activities shows huge amount of outflows. The
-) Out of The total assets to be financed, the remaining financing of Rs. 5725760 should be raised through external funds. Thus DDC needs Rs. 42680982.3 to finance incremental fixed assets, and Rs. 64941693.2 to financed incremental current assets. Out of these Rs. 48275915.69 will be available to the DDC through incremental current liabilities and balance of Rs. 57255760.31 it should raise from external source.
-) The decreasing current ratio indicates that the company's ability to pay its debts obligation has seriously been injured. Inventory turnover of the corporation is very good in the first the company's ability to convert its inventory into sales is very good and exemplary however same has decreased in the

latter years. This also indicates the company's inability to manage its assets. Another dismal aspect of the DDC is to have very low and negative return on capital employed. It is to note that the return on .This negative operating return on capital employed is due to ineffective utilization of capital. However the same ratio is positive and seems to be more Net profit margin and total assets turnover give the return on assets (ROA) if multiplied together. ROA is negative for all the periods. These all the ratio, in absolute term indicates that the company is in a difficult verge in the latter years and the condition has been improving as the ROA has increased during the FY 2063/64 and 2064/65.

) The regression results pave the way to conclude that ADMC and PC have individually positive impact upon Net profit. However the negative coefficient of Depr. Indicates a negative relationship of net profit with the depreciation expenses. Thus it can be concluded that ADMC and PC have individually positive impact upon net profit but depreciation has negative relationship. Like wise there is positive relationship of NP and PC. However the relationship is negative between the NP and other cost variables.

5.3 Recommendation

On basis of the whole study following recommendations are relevant to made:

-) There are huge gap in between the budgeted and actual sales. Such huge gap must be addressed through the coordination and integration of efforts of all the branches and departments. Like wise the company must practice the different methods of forecasting sales so as to arrive at logical forecasting. The company must be careful to forecast sales using regression in regard to the significance of the model.
-) The forecasting of production should not totally based on judgment. However the corporation must use tools like regression model together with the other available approach.
-) The main cost of the corporation is prime cost in terms of the amount. The company should try to lower the cost by adopting the cost reduction techniques this would also help to increase the turnover of the inventory.
-) Financing activities is the main source of funds and cash from operating activities is negative. The corporation must enhance the cash receipt from its operation.
-) The external funds that the corporation needed should be raised through the source that balances cost and return of the funds.
-) Assets and capital utilization of the corporation is not good enough to cope with the changing environment of the modern business. So the corporation must utilize its resources to generate high profitability in terms of both assets and liabilities.
-) The regression results show that there are positive relation of profit with prime cost but negative relation with the

administration and depreciation cost. It means the prime cost is utilized effectively so as to produce positive impact upon the profitability. However the administrative cost and depreciation cost contribute nothing to the profitability as the relation is negative. The corporation must consider this fact while preparing the corporate plan and strategy.

BIBLIOGRAPHY

Books

- Berntein, L.A., & Wild J.J. (1998). *Financial Statement Analysis*. New York: McGraw, Hill Publication.
- Charles, N. Greene, and Others (1985). *Management for Effective Performance*. New York: Englewood Cliffs, N.J. Prentice Hall.
- Gitman, L.J. (1988). *Principal of Managerial Finance*. New York: Harper Collins Publishers.
- Gupta, S.P. (1989). *Statistical Method*. New Delhi: Sultan Sons Company Ltd.
- Gupta, S.P. (1992). *Management Accounting*. Agra: Agra Shatilya Bhawan.
- Hampton, John J. (1976). *Financial Decision Making*. Reston Virgnta: Peston Publishing Company, Inc.
- Henderson, V. Glenn (1995). *An Introduction to Financial Management*. Delhi: Publishing House.
- Hornby, A.S. (2000). *Oxford Advance Learner's Dictionary of Current English*. New York: Oxford University Press.
- Jain, S.P. and Narang, K.L. (1984). *Financial and Management Accountancy*. New Delhi: Kalyani Publishers.
- Joshi, Shyam (1993). *Managerial Economic*. Kathmandu: Taleju Prakashan.
- Kulkarni, P.V. (1985). *Financial Management*. Bombay: Himalayan Publishing House.
- Ruthman P.V. (1994). *Budgeting*. New Delhi: Himalayan Publishing House.
- William, E.T. (1998). *Reading in Const Accounting: Budgeting and Control*. New York: American Accounting Association.
- Wilsmore, A.W (1971). *Accounting for Management Control*. Chicago: Potan Publisher.

Articles & Journals

Arthur, W. Holmes, Rolbert, A Meir and Aanald, F. Pabst (1997).
Accounting for Control and Decision. Texas: Blackwell
Publishers.

National Planning Council (1962). *Three Year Plan*. Kathmandu:
HMG/Nep.

Nepal Rastra Bank (2001). *Economic Review*. Kathmandu: Sihma
Offset Press P. Ltd.

Parajuli, Agnidhar (2058). *Profit Planning in Public Enterprises In
Nepal*. An Unpublished Masters Degree Thesis Submitted To
Central Department T.U.

Pathak, J.K. (1983). *Surplus Generation in Nepalese Public Enterprise*.
The Nepalese Management Review, Vol. IV, No.1, Kathmandu:
Central Department of Management T.U.

Thapa, Chandra (2003). *Managing Banking Risk*. Sunday Post, Vol. 11,
No. 19, Kathmandu.

Thesis

Badu Madan Bahadur (2052), *Profit Planning in Diary Development
Corporation*. An Unpublished Masters Degree Thesis Submitted
to Central Department, T.U.

Joshi, Ramesh Datta (2053), *Profit Planning in Diary Development
Corporation*. An Unpublished Masters Thesis Submitted to
Central Department, T.U.

Mishra, Sagar (1999), *Profit Planning In Tokla Tea Estate (TTE)*. An
Unpublished Masters Thesis Submitted to Central Department,
T.U.

Thapa, Pukar (2059). *Profit Planning In Manufacturing Enterprises In Nepal (A Comparative Study in Dairy Development Corporation & Sitaram Dairy Industry)*. An Unpublished Masters Degree Thesis Submitted to Central Department, T.U.