CHAPTER - I
INTRODUCTION

1.1 General Background of the Study

Nepal is a developing country. It has a total area of 1,47,181 square kilometres, extended from east to west with a length of about 885 km and the average width of 193 km from north to south surrounded by China in north and India in the south, east and west. Total area of Nepal is about 0.03% of the world and 0.3% of Asia.

Nepal is an agricultural country, since 80% of the total production depends on agriculture sector. This sector contributes more than 40% of GDP. More than 80% of the population are depending on agriculture to fulfil their needs. People produced agriculture goods in bulk quantity but they hardly sell in the market due to lack of advertising. So they are facing many problems in selling agriculture products.

The history of industrial development begins in the year 1936 A.D. when the first industry was established in the country. However, the real attention was given to the industrial development of the country only after the dawn of democracy; particularly after the introduction of first five years plan in year 1956 A.D. The government then decided to speed up and support industrial development in the country. Then different acts and policies were enacted to encourage the industries to come up and to regulate the industrial system.

Nepal is just moving towards industrialization with very small manufacturing sectors. The globalization, privatization and liberalization processes have made a world wide pressure on planners and policy makers to design towards rapid growth. Nepal is facing a critical juncture in its modern economic situation.

Industrialization is the process of enabling the idle human and other manufacturing resources in order to develop the nation without worsening the economic condition of the nation. Mixed economy is prevailing in Nepal where both state controls cum private participation in the country's economy would become possible. Both the government and private sector are putting their efforts to enhance the condition of the economy from their respects.

In recent years the growth rate is more satisfactory; however the manufacturing sector has to face different problems which have acted as constraints in the growth of manufacturing company. Mainly such problems are: landlocked situations of the country, lack of infrastructure, under developed situation of transportation and communication, lack of trained and skilled personnel, lack of required capital, small size of market, non-availability of assured energy power at reasonable rates, higher cost of production, low productivity, non-stability in government plans and policies, etc.

1.2 Introduction of Company

NEBICO Private Limited, initially under the name 'National Biscuit and Confectionery Pvt. Ltd.; Kathmandu, Nepal was incorporated in 1964 A.D. with the objective of manufacturing quality biscuits and confectioneries in Nepal. NEBICO Private Limited established in the year 1966 A.D. and started its operation as the pioneer biscuit and confectionery manufacture of Nepal in 1967 A.D. The Company is situated at Balaju Industrial District, Balaju, Kathmandu occupying 73,000 Sq. ft. of land. With the semi-automatic machine the NEBICO Company is the first to manufacture biscuits and confectionery. At the time of establishment its capacity was only 2 metric tons per day on eight hours per day basis. In 1968, the nomenclature of the Company was changed to the present one, i.e. NEBICO Pvt. Ltd. along with the capacity expansion to 5 metric tons per day per shift. Later in 1980, the company joined hands with Britannia Industries

Limited, India in the areas of technical collaboration as well as production know how which is still being continued. Presently, the production of biscuit is done on two shifts each of eight hours basis with a capacity of 5 metric tons per shift. Annual production capacity of the biscuits of the company at present is around 2200 metric tons and that of confectioneries is around 120 metric tons.

The company has been certified for ISO 9001:2000 and has voluntarily adopted ISO 14001:1996. Besides, NEBICO Pvt. Ltd. has subscribed to the 'Global Compact' company. Presently, the products of this factory are sold within the country in seven territories through 27 distributors, 96 dealers and 1 sales department at Balaju, Kathmandu.

The products are marketed throughout the country and the marketing territories are divided into seven territories of the country. Such as:

a. Kathmandu
b. Sub-Kathmandu
c. Central
d. Midwestern
e. Western
f. Far-Western
g. Eastern regions.

The direct and indirect personnel employed in this company are 187 comprising technical 119 and non-technical 68 where 153 are male and 34 are female.

The authorised capital of NEBICO is Rs.10,000,000 and paid up capital is Rs.6,035,000. The company's raw materials are wheat, sugar, fats, other chemicals, packing paper, etc. It uses qualitative raw materials only. It is the first biscuit factory to get 'Nepal Standard Mark' since 1984 A.D. with the following achievements:

Achievements of NEBICO Pvt. Ltd

S.No	Title of Prize/Award	Status	Awarded by	Years
1	BEST INDUSTRY FOR THE YEAR	Third	B.I.D./H.M.G., Nepal	1978, 1980
2	BEST INDUSTRY FOR THE YEAR	Second	B.I.D./H.M.G., Nepal	1982,1984, 1989,1993
3	BEST INDUSTRY FOR THE YEAR	First	B.I.D./H.M.G., Nepal	1985
4	NEPAL STANDARD MARK	First Time	Nepal Bureau of Standards and Metrology, HMG/N	1984
5	MANAGER OF THE YEAR		Management Association of Nepal	1988
6	QUALITY AWARD	Second	NBSM, HMG/N	2000
7	OCCUPATIONAL SAFETY & HEALTH AWARD	Second	Occupational safety and health committee HMG/N	2001
8	ISO 9001:2000	Certified	The TUV CERT Certification body of TUV Anlagentechnik GmbH, Rhieinland Berlin	
9	THE GLOBAL COMPACT	Enlisted	U.N. Secretary General Vision about Globalization	2002
10	QUALITY AWARD	Second	NBSM, HMG/N	2003
11	FOOD PROCESSING	First	3rd World Food Day Committee	2003
12	NS QUALITY AWARD	First	NBSM, HMG/N	2004

Source: Annual Report of NEBICO

1.2.1 Objectives of the Company

The basic objective of running any business organization is to earn profit. Main objectives of the company are as follows:

- To manufacture quality biscuits and confectionery in the country itself and substitute imported biscuits and confectionary.
- To make available quality goods at reasonable price as well as be self sufficient in itself and try to export in other countries.
- To provide innovative and quality products to the entire consumers to meet their satisfaction.
- To make necessary contract and agreement with different national and international governments, departments, offices and bodies to increase production and capabilities.
- To make available suitable technical services, repairs and maintenance services for machines.
- To purchase, hire and receive necessary tools and equipment through suitable method in order to operate their services.

  (Source: Company's Profile)

1.2.2 Functions of the Company

NEBICO Pvt. Ltd. operates the following necessary activities to achieve its set up objectives:

- To import, purchase and maintain necessary raw materials, machines or tools.
- To receive and use all movable and immovable properties for company use.
- To manage training for its staffs for their development and improvement and also to reduce the gap of non-availability of specialist when required by company: through development of manpower, technicians and other personnel.

- To manage the non-technical and technical staffs from outside and inside for the company.
- To sell the products in different parts of the country.

  (Source: Company's Profile)

1.2.3 Products of the Company

NEBICO Pvt. Ltd. has been manufacturing different types of qualitative biscuits and confectioneries. According to the government record, company's biscuits capture about approximately 25% market share in total biscuit market but the company's claims its only 15% of the market share in the financial year 2064/65 within the country. In Kathmandu valley, the company's total market share of biscuits is about approximately 35%. The company has not concentrated with confectioneries; however, approximately total 1% market is shared in the total confectionery market.

NEBICO Pvt. Ltd. has adopted different strategies for different marketing territories accordingly market demand. NEBICO Pvt. Ltd. has been manufacturing five types of biscuits i.e.

a. Sweet
b. Premium sweet
c. Semi-sweet
d. Sweet & Salt and
e. Salt

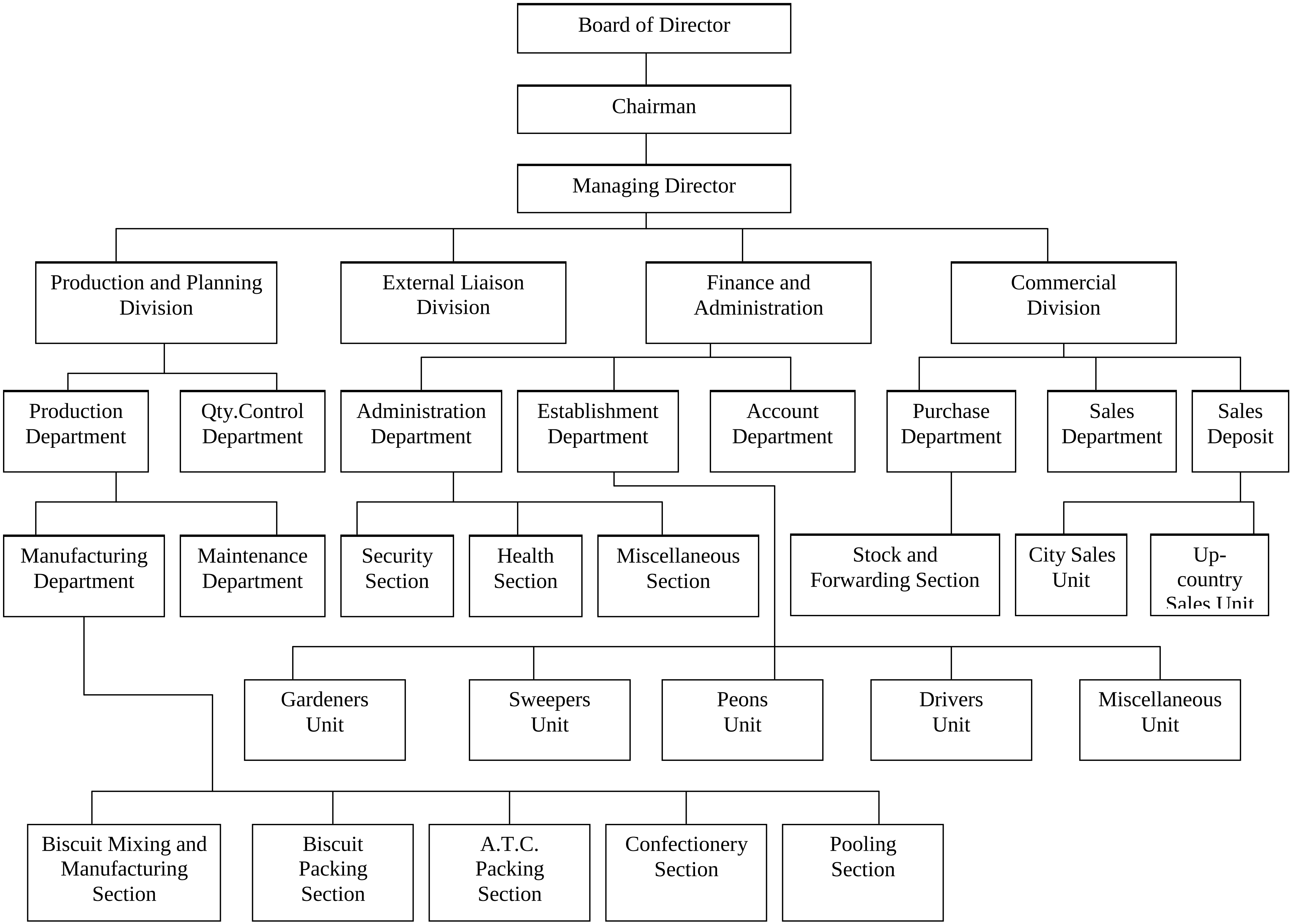
The brand names of the company's product are as follows:

- Biscuits: The different biscuits have different brands. Such as Thin Arrowroot, Malt Glucose, Glucose, Khaja, Chaja, Marie, Nice, Coconut Crunches, Digestive, One-2-One, Rhino, Eton, Temple Cream(Orange, Nectar, Custard), Trekker's Choice.

- Confectioneries: NEBICO Pvt. Ltd. produces different types of confectioneries. Such as Milk Coconut, Strawberry, Fruit bar, Milk bonbon, Mix sweet, Fruit Cream (Strawberry, Mango and Caramel).

1.2.4 Organization Chart

The organization chart indicates that Board of Director is the head of the company. The chairman and managing directors are in the operation of the industry. Four divisions are under the managing directors i.e. Production and Planning, External Liaison, Finance and Administration, Commercial divisions that controls eight departments. The organization chart is:


Board of Director
Chairman
Managing Director
Production and Planning Division
External Liaison Division
Finance and Administration
Commercial Division
Production Department
Qty.Control Department
Administration Department
Establishment Department
Account Department
Purchase Department
Sales Department
Sales Deposit
Manufacturing Department
Maintenance Department
Security Section
Health Section
Miscellaneous Section
Stock and Forwarding Section
City Sales Unit
Up-country Sales Unit
Gardeners Unit
Sweepers Unit
Peons Unit
Drivers Unit
Miscellaneous Unit
Biscuit Mixing and Manufacturing Section
Biscuit Packing Section
A.T.C. Packing Section
Confectionery Section
Pooling Section

1.3 Statement of the Problems

It has been observed that the company has sufficient capacity to fulfil the demand of customer but due to the uneven demand throughout the year, the company has not been able to fulfil it because of lack of raw materials. Most of the raw materials are not available in Nepal. So, they are heavily depended on the imports from India. Because of this problem, the company does not meet its target production.

Five years budgeted and actual production of NEBICO:

Table 1.1

Budgeted and Actual Production (in Metric Ton)

Fiscal Year	Budgeted	Actual	Achievement %
2060/61	1813.93	1554.61	85.70
2061/62	1635.61	1393.73	85.21
2062/63	1596.08	1256.70	78.74
2063/64	1889.12	1514.29	80.16
2064/65	1897.76	1498.63	78.97

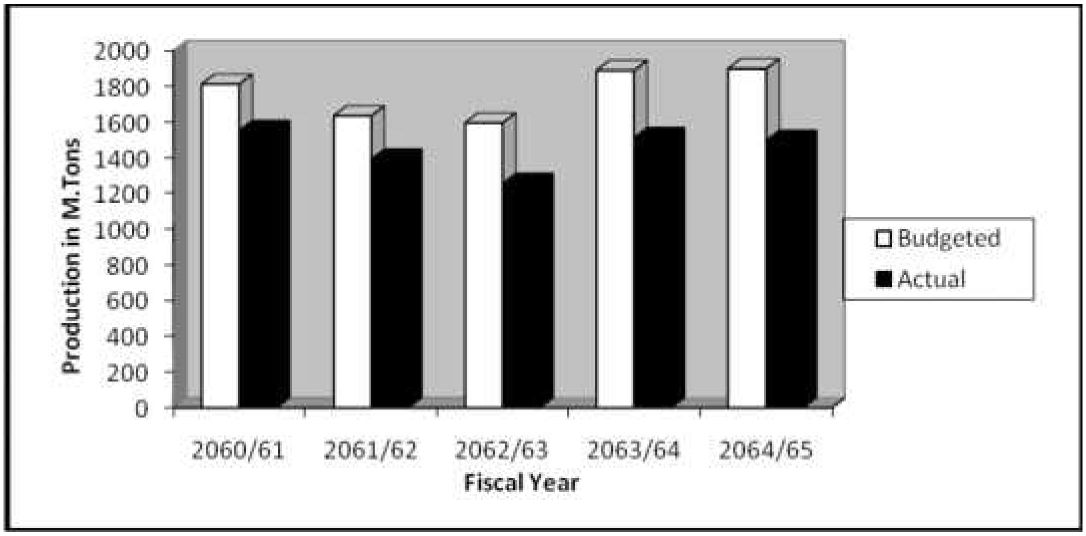
Source: Annual Report of NEBICO

The actual productions were lower than the budgeted productions during the fiscal year 2060/61 to 2064/65. From the table, it shows that the highest achievement in fiscal year 2060/61 which is 85.70%. The company's achievement is in risky trend but there exists no consistent in achievement. So, the company's actual productions were in decreasing trend. It reflects the symbol of inefficient management.

The following graphical presentation shows the budgeted production and actual production.

Diagram 1.1

Budgeted Production and Actual Production



1.4 Objectives of the Study

This study attempted to make analysis of capacity operation, operating efficiency and the financial position of NEBICO Pvt. Ltd. The primary objective of the research study is to evaluate and highlight the degree of application of PPC in NEBICO Pvt. Ltd. Other objectives are as follows:

- To examine annual production budget with Sales budget.
- To analyze the absolute profit and loss of NEBICO Pvt. Ltd.
- To examine the sales and production planning system used by NEBICO.
- To examine and analyze the various functional budgets prepared by NEBICO Pvt. Ltd.
- To evaluate the variance between target and actual sales of NEBICO Pvt. Ltd.
- To assess financial performance of NEBICO in terms of various financial ratios and cost structure.

To provide recommendations and suggestions for improvement of production budget of NEBICO Pvt. Ltd.

1.5 Need and significance of the Study

The need of the study is to examine whether NEBICO Pvt. Ltd. is applying PPC system properly or not. The profit planning process significantly contributes to improving the profitability as well as the overall financial performance of an organization by optimizing resources. An accomplishment of objective in every industry depends upon the efficient utilization of scarce resources. The financial performance of an organization depends on the basis of its use of resources. Budget is the key for profit planning. Most of industries run under commercial principles. If the planning process of industries is made effective, the result and pace of development naturally steps forwards. Profit is the most important indicator of judging managerial efficiency and performance of industries. So, there is a need for study to examine the production budget in terms of achieving the set up goal of the company.

1.6 Focus of the Study

Every manufacturing industry should apply comprehensive profit planning and control for good performance and efficiency. For this reason, this study was made to examine the role of budgets and corporate planning system for the effective implementation of profit planning and control in NEBICO. The study was focused in examining how far the different Sales and Production budgets were being applied as tools for profit planning and control by the company.

Strategic (long range) profit plan and tactical (short range) profit plan are the two plans of profit planning and control that coordinates entire activities of an organization. Both of them are equally important in PPC model but tactical profit plan is more specific and detailed than strategic profit plan. This study was made to examine tactical profit planning’s effectiveness.

1.7 Limitations of the Study

The present study examines the application of production budget in profit planning practices only. It has not been possible to study all the aspects at a time. So it has its own limitations. The limitations of the study are as follows:

- The study was based on the data available from the management of NEBICO Pvt. Ltd., Balaju.
- The study is based upon the planning documents, published books, booklet and magazine that were available in market and related fields.
- Analysis was concerned on some managerial and financial accounting aspects and it did not cover other areas of the industry.
- It was concerned only with PPC aspects of NEBICO Pvt. Ltd.
- The secondary data were used in the study.

1.8 Scheme of the Study

This study is organized on the following standardized pattern in order to make the study easy to understand:

Chapter I- Introduction

Chapter II- Review of Literature

Chapter III- Research Methodology

Chapter IV- Data Presentation and Analysis

Chapter V- Summary, Conclusion and Recommendations

The introduction chapter includes general background, introduction of company, objectives of the company, functions of the company, products of the company, statement of the company, objectives of the study, need and significance of the study, focus of the study and limitations of the study.

In the second chapter, profit, planning, profit planning, types of planning, strategic or long range profit planning, tactical or short range profit planning, profit planning process, importance, purpose, limitations, components of profit planning and control, major tools used in profit planning and control, development of budgeting, classification of budgets, production budget and analysis of budget variance.

Similarly, the third chapter discusses the methodologies used in the study. This chapter deals with the research designing, period covered, nature and sources of data, data collection and analysis and scheme of the study.

In the fourth chapter, presentation and analysis of secondary and primary data are examined. Major finding from both types of data have been presented in the last portion of this chapter. And the last chapter contains summary, conclusion and recommendation with bibliography and appendices.

CHAPTER - II
REVIEW OF LITERATURE

2.1 Conceptual Framework

2.1.1 Profit

Profit is the primary measure of business success in any economy because it is acid test of individual of firm's operation. Those organizations are thought to be successful, which can generate profit. Profit is a measure of tangible expression of performance toward achievement of entity objectives and goals. The existence of all the resources employed in the enterprise is possible only when there is profit. Profit doesn't happen but it is managed. If a firm can not make profit, it can not generate capital for the future. The more profitable enterprises are more attractive to the holders of the available capital. Since these enterprises can attract capital they have the money needed to buy other resources. The key here is that capital and other resources are scare they are allocated to the profit makers in roughly descending order of the profit potential. Our economy performs this allocation function through a relatively free and open market system (Gray, Jack & Johnston, 1992:3).

Profit is the excess or residual income left after cost of production or the payment of the contractual reward to other for production. But the term profit is controversial and interpreted as thus:

- An economist says that profit is the reward for entrepreneurship for risk taking.
- An investor will view it as a gauge of the return on his money.
- A labour leader might say that it is a measure of how efficiently labour produced and that it provides a base for negotiating a wage increase.
- Through the accounts measuring stick, profit is a tangible expression of the goals it has set for the firm.

- A yardstick for judging the competence and efficiency of the management.
- A mean s of maintaining the health, growth and continuity of the company.

Profit is the primary objectives of business in view of the heave investment which is necessary for the success of most enterprises. Profit in the accounting sense, trends to become a long term objectives which measure not only the success of product but also of the development market of it (Kulkarni, 1985:245).

In the opinion of Gray, Jack and Johnston, "The primary purpose of planning in business then is to increase the channels of making of profit. The budget is the primary operating planning document. Committed performance budgets are called profit plan. Each managers and subordinates has the authority, in varying degrees, to make decisions which will affect the profit of the firm, he has commensurate responsibility for making decisions, the result of which will most nearly accomplish or better his budgetary targets (Gray, Jack & Johnston, 1992:27).

George R. Terry says that "Profit Planning involves stream lining activities in order to get employees profit minded on to secure maximum benefit from minimum effort and expenditure. Best result seems to be obtained by assessing a profit planner to investigate the entire factor affecting the profit obtained form the product. The organization, the model of operations, the pricing, the marketing or any other factor of making and selling the product that is in judgment affects profits accruing from one group to another and to obtain concerned profit budgeting efforts are the fundamental factors that contribute the success of profit planning"(Terry, 1968:62).

Profit is the dominant goal in business and profit making should be the main objectives in terms of which the general effectiveness of organization is measured. In other word profit is obtained by subtracting the cost from revenue. According to economist, profit is the reward for bearing risk of enterprise, the risk of venturing in business, the risk of owing something in hopes of selling in later.

Dean Joel clearly distinguishes the views of Accountants and Economist about profit in the following ways. “The most important point of difference between Economist and Accountant approaches centre on.

1. The business of costs, i.e. what should be subtracted from revenue to get profit.
2. The treatment of capital gains and losses, and perhaps more important.
3. The meaning of depreciation.

The price level basis for valuation of Assets”(Dean, 1992:3).

In short words it can be said that profit is the primary of business success in any economy. If a firm cannot make profit it will collapse in future. So the profit is the matter of prime important in any business.

2.1.2 Planning

Planning is the primary essence of management and all others functions are performed within the framework of planning. Planning means deciding what is to be done in future. It is the method of thinking out acts and purpose before hand. Defining the planning its simplest terms as the determination of anything in advance of action, it is essentially a decision making process that provides a basis for economical and defective action in future. It is the first essence of management and all other functions are performed within the framework of planning. Planning is the basic foundation of profit plans. Planning includes the establishing enterprises’ objectives, developing promise about the environment in which they are to be accomplished, selecting a course of action for accomplishing the objectives, initiating activities necessary to translate plans into actions and current re-planning to correct deficiency.

Planning is essential to accomplish goals; it reduces uncertainty and provides direction to the employees by determining the course of action in advance. Formal planning indicates the responsibility of management and provides an alternative to grouping without direction. Planning on the other hand involves the determination of what should be done, how the goal may be reached and what individuals or units are to assume responsibility and be held accountable.

Planning is the process of developing enterprise objectives and selecting future course of action to accomplish them, it includes:

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

Planning is the first function of management. It is performed continuously because the time demands both re-planning and making new plans. Management planning is process that includes following four stages:

1. Objectives: It is the first stage in the planning and control system, which are defined as the broad and line range of desired state or position in the future. They are motivational or directional in nature and are expressed in qualitative terms (Welch, Hilton & Gordon, 1992:75).

2. Goals: The second stage in the planning process is specifying the goals. The term goals as an element in planning represent targets, specified in quantitative terms to be achieved in a specific period of time (Welch, Hilton & Gordon, 1992:77).

3. Strategies: The next step involves laying down the strategies. Strategies devote specific methods or course of actions to achieve the goals, strategies are the basic thrusts way and tactics that will be used to attain planned objectives and goals. A particular strategy may be short-term and long term strategies focus (Khan and Jain, 1993:575).

4. Budgets/Plan: The final step is the preparation of budget/plan. Basically budgeting is the periodic planning to implement the alternative during a particular fiscal period, usually one year. It converts goals and strategic during into annual operating plan.

2.1.3 Profit Planning

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

D. N. Chorafas considering the profit planning as a means of resolving conflict. According to him "Profit planning has to resolve a number of conflicting is issues before expressing the established directions and decisions made by top management, conflicting aims should be brought into produce more sales and profit, but many investors also increase the investment in working capital and the risk of bad debts" (Chorafas, 1990:244).

Profit planning is an example of short range planning. This planning focuses an improving the profit especially from a particular product over a relatively short period. Therefore as used here, it is not the same as corporate planning of a cost rendition program" (Terry, 1992:521).

Profit planning infect is managerial technique and profit plans is such a written plan in which all aspects of business operation with respect to define future period are included. It is a formal statement of policy, plan, objective and goal established by top management in respect of some future period. Profit planning is a predetermined detail plan of action developed and distributed as guide to current operations and as a partial basis for the subsequent evaluation of performance. Thus we can say that profit planning is a tool which may be used by the management in planning the future course of actins and in controlling the actual performance. The profit planning model includes the following activities:

- The development and application of broad and long range objectives of the enterprise.
- The specification of enterprises goals.
- The development of strategic long range profit plan in broad terms.
- The specification of tactical short range project plan detailed by assigned responsibility.
- The development of follow up process.
- A system of periodic performance report detailed by assigned responsibilities.

Profit planning and control is flexible task, which depends upon the size of firms. Thus the formats and rules regarding profit planning also vary according to the nature of business organization. Profit plan is prepared on the environment of relevant variables, strength and weaknesses. Organization broad objective are defined and also specified are communicated to all department managers. Generally, there are two types of profit planning:

- Tactical or short range profit planning
- Strategic or long range profit planning

A profit plan is a detail expression of the expected result from the planning decision. In summary profit planning means the development and acceptance of objectives and goals and moving an organization efficiently to achieve the objectives and goals.

2.1.4 Types of Planning

There are two types of profit plan, one strategic and other tactical. The strategic profit plan is board and it usually encompasses a one year time horizon, the up coming year. Tactical profit plan is a limited time dimension; usually it covers one year time period. The development of tactical and strategic plan of each year in a process involves managerial decision and ideally a high level of managerial participation.

2.1.5 Strategic or Long Range Profit Planning

Strategic or long range planning usually covers a period of more than one years depending upon the size of enterprise and nature of its activities. Strategic planning is a top management function in which the organizations' purpose, mission and overall objectives and policies are developed to position the organization advantageously in its operating environment. It refers to the selection of company's objective and the determination of the growth or at least constant and competitive policies that are most likely to accomplish those objectives. It is a carried out with the highest policy making level of the organization. According to Peter F. Drucker, "Long range planning is the continuous process of making present decision systematically and with best possible knowledge of their futurity, organizing systematically the efforts needed to carry out these decisions and measuring the result of these decisions against the expectations through organized, systematic feedback" (Drucker, 1995:240).

Strategic planning does not predict the future, but for a manager, it can

- Assist in copying effectively with future contingencies
- Provide an early opportunity to correct inevitable mistakes.
- Help in making decisions about the right things at the right time and
- Focus on what actins to take in order to shape the future as desired (Terry and Stephen, 1993:155).

Long Range Planning 5 to 10 years varying with the enterprise some times extended to 10 years. It is one of the most difficult time span involved in planning as many problems in short range planning can be traced is the absence of clear sense of direction and the practice which a comprehensive long range plan provides (Chorafas, 1990:7-8).

The planner most includes the following factors in the plan form the analysis of available information:

a. Probable future opportunity
b. Uncertainty and
c. Challenges

Strategic planning is a particular business function which is higher and more general management function. It is the focal point of long range profit planning.

2.1.6 Tactical or Short Range Profit Planning

Tactical or short range planning is a limited time dimension and usually it covers one year time period. A tactical plans, covers about a year, and are less formal and detailed than strategic plans, which usually covers more than three months, it is used by management as substantial parts of strategic and medium strategic planning. A tactical planning is done at all levels and involves directing the activities to achieve overall strategic objectives consistent with the organization's mission and policies. Standing plans provides consistency and efficiency for on going operations and single use plans are developed for unique situation.

The short term plan is synonymous with the classical budgetary period of one year. The short range planning is made after a freeze is taken on the consideration of possible alternative course of action. Such courses are outlines for the medium range plan, which does not concern implementation. Its aims is weeding out a plethora of possibilities which are for the most part long on premises and short on feasible, tangible result.

Tactical planning to support strategic planning provides a charter as it related to the future of an enterprise. By means of strategic and tactical planning, it is possible for employees to understand the various activities of the enterprise and how their individual's jobs relate to the overall objectives, growth direction and profitability of the firm.

The short range planning is selected to conform to fiscal quarter or years. Because of the practical needed for conforming plans to accounting periods and the some what arbitrary limitation of the long-range to three to five years is usually based as has been indicated on the prevailing belief that the degree of uncertainty over long period makes planning of questionable value (Koont and Donnell, 1964:37).

2.2 Profit Planning Process

The planning process should involve periodic consistent and in depth re-planning, is that all aspects of operations are carefully re-examined and re-evaluated. This prevents a budgeting planning approach that involves only justification of increase over the prior-period. The concept of re-evaluation and necessary of justifying all aspects of the plans periodically finds its strongest support in what has been called zero-base budgeting.

Consistency between the process and components of PPC is vital. There is certain process of PPC and this is repeated each budget year. The purpose of repeating the process on an annual basis is to review and evaluate the basic steps annually. The following ten steps used are as follows:

1. Identification and evaluation of external variables.
2. Development of broad objectives of the enterprise.
3. Development of specific goals for the enterprise.
4. Development and evaluation of company strategy.
5. Executive management planning instruction.
6. Preparation and evaluation of project plan.
7. Development and approval of strategic and tactics profit planning.
8. Implementation of profit plan.
9. Use of periodic performance report.
10. Implementation of follow-up.

2.3 Importance, Purpose and Limitation of Profit Planning and Control

2.3.1 Importance of Profit Planning

“Profit planning and control can be adapted to any (profit or non profit service or manufacturing) regardless of size, special circumstances, or conditions. Profit planning is very important to emphasize on developing positive reinforcement, improving motivation, developing goals, copying with the effect of budgetary pressure, resolving budget padding problems and using budget for control. Some of the major points for profit planning and control that show the importance of profit planning and controls are:

1. It forces early consideration of basic policies.
2. It requires adequate and sound organization structure; that is, there must be definite assignment of responsibility for each function of the enterprise.
3. It compels all members of management, form the top 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 down 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 instils at all levels of management the habit of timely, careful and adequate consideration of the relevant factors before reaching importance decisions.
9. It reduces cost by increasing the span of control because fewer supervision are needed.
10. It frees executive from many day-to-day internal problems through predetermined policies and clear-cut authority relationships. It thereby provides more executive time for planning and creative thinking.
11. It trends to remove there 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 operation and cash flows to support large loans.
17. It checks progress or lack of progress toward the objective of the enterprises.
18. It forces recognition and corrective action (including regards).
19. It rewards high performance and seeks to correct unfavourable performance.
20. It forces management to consider expected future trends and conditions.

2.3.2 Purpose of Profit Planning

Profit planning has the ultimate objectives of attaining the optimum profit. As indicated by many successful applications, the must reasonable approach to attaining optimum profits is to plan them as a percentage of capital employed to produce them and to manage the enterprises with the objectives of achieving the planned percentage.

Keller and Ferrara further stares about the principles and purpose of profit planning in the following:

1. To provide a 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.
2. To provide a coordinated plan of action which is designed to achieve the estimates reflected in the budget.
3. To provide a comparison of actual results with those budgeted on an analysis and interpretation of deviation by areas of responsibility to indicate course of corrective action and to lead to improvement in procedures in building future plan.
4. To provide a guide for management decision in adjusting plans and objectives as uncontrollable plans and objectives as uncontrollable conditions change.

5. To provide a ready basic for making forecasts during the budget period to guide management in making day to day decision (Issac & Williams, 1989:389).

Some other purpose for the application of profit planning:

1. To state the firm’s expectation in clear and facilitate for attainability.
2. To provide a means of measuring the performance of individuals and units and to supply information on the basis of which the necessary corrective action can be taken.
3. To provide a detail plan of action for reducing uncertainty and for the direction of individual and group efforts to achieve goals.
4. To communicate expectations to all concerned with the management of the firm so that they are understood, supported and implemented.
5. To coordinated the activities and efforts in such a way that the use of resources is maximized.

2.3.3 Limitation of Profit Planning

The following main limitations of the profit plans are:

1. It is difficult, if not impossible, to estimate revenues and express in our company realistically.
2. Our management has not interest in all the estimate and schedules. Our strictly informational system is better and works well.
3. It is not realistic to write out and distribute our goals, policies and guideline to all the supervisors.
4. Budgeting places too great a demand or management time, especially to revise budgets constantly too much paper work in required.
5. It takes away management flexibility.
6. It creates all kinds of behavioural problems.
7. It places the management in a strait jacket.

8. It adds a level of complexity that is not needed.
9. It is too costly, aside form management time.
10. The managers, supervisors and other employees hate budgets.

2.4 Components of Profit Planning and Control

Components of profit planning and control are bones of a business which help it operate properly, efficiently and effectively. The components of PPC are as follows:

1. **The Substantive Plan**
   - Broad objectives, missions and short term goals of the enterprise.
   - Specified enterprise goals, structure, responsibility, authority
   - Enterprise policies and strategies
   - Instructions and communication of executive management planning

2. **The Financial Plan**

   a) Strategic Long-Range Profit Plan
   - Sales, cost and profit projections
   - Major projects and capital additions
   - Cash flow and financing

   b) Tactical Short-Range Profit Plan
   - **Operating Plan:** It includes planned income statement, sales plan, production for merchandise purchase plan, administrative expenses budget and appropriation type budget
   - **Financial Position Plan:** It includes planned balance sheet(i.e. Assets, liabilities, owner’s equity).

- **Cash flow plan:** It includes flows from operating activities, flows from investing activities and flow from financing activities.

3. **Variable Expenses Budgets(i.e. Output-Expenses Formula)**
4. **supplementary Data(i.e. CVP analysis, Ratio analysis)**
5. **Performance Reports**
6. **Follow up, Corrective Action and Preplanning Reports**.

2.5 Major Tools used in Profit Planning and Control

Profit planning and control represent on overhaul plan of operations which covers a definite period and formulates of planning decision of management. It consists of three main budgets, which are:

1. Operating Budget

The operating budget covers revenue and expenses. In other words, operating budget relates to the physical activities or operations of a firm such as sales, production, purchased, labour and other different expenses budgets. In specific term an operating budget has the following term:

(i) **Sales Budget:** The sales budget is a detailed schedule of expected sales for the coming period which is usually expressed in both amounts and units. Once the sales budget has been set, a decision can be made on the level of production that will be needed to support sales and the production budget can be set well. The sales budget is constructed by multiplying the expected sales in units by the sales price.

(ii) **Production Budget:** After the sales budget has been prepared, the production requirements for the forth coming budget period can be determined and organized in the form of a production budget sufficient goods will have to be available to meet sales need and provides for the desired ending inventory. A portion of these goods will already exist in the form of beginning inventory. The remainder will have to be produced. Thus, production need can be determined by adding budgeted sales units to be desired ending inventory and deducting the beginning inventory from the total.

(iii) Purchased Budget: In case of merchandising firm, instead of preparing purchase budget showing the amount of goods to be purchased from its suppliers during the period. The merchandise purchase budget is in the same basic format as the production budget, except that, it shows goods to be purchased rather than goods to be produced.

(iv) Direct Material Budget: After the production needs have been computed, a direct material budget should be prepared to show the materials that will be required in the production process. Sufficient raw materials will have to be available to meet productions needs and to provide for the desired ending raw material inventory for the budget period part of this raw materials requirement will already exist in the form of a beginning raw material inventory. The remainder will have to be purchased from supplier.

(v) Direct Labour Budget: The direct labour budget is also developed on the basis of production budget. Direct labour requirements must be computed so that the company will know whether sufficient labour time is available to meet production needs. Just knowing in advance, the company can develop plan to adjust the labour forces as the situation may require. Direct labour requirement can be computed multiplying product to be produced by each period by the number of direct labour-hours required to produce a single unit. Many different types of labour may be involved. If so, then computation should be by type of labour needed. The hours of direct labour time resulting from these computations can then by multiplied by the direct labour cost per hour to obtain budgeted total direct labour cost.

(vi) **Manufacturing Overhead Budget:** The manufacturing overhead budget provide a schedule of all costs of production other than direct material and direct labour. These costs should be broken down by cost behaviour for budgeting purposes and a predetermined overhead rate developed. This rate will be used to apply manufacturing overhead to units of product throughout the budget period.

(vii) **Selling and Administration Overhead Budget:** The selling and administrative expenses overhead budget contains a listing of anticipated expenses for the budget period that will be incurred in areas other than manufacturing the budget will be made up of many. Smaller, individual budgets submitted by various persons having responsibility for cost control in selling and administrative matters. If the number of expenses item is very large, separate budgets may be needed for the selling and administrative function.

2. Financial Budgets

Financial budgets are concerned with expected cash receipts/disbursement financial position and result of operations. The components of financial budget are:

(i) **Budgeted Income Statement:** The budgeted income statement is one of the key schedules in the budget process. It is the document that tells how profitable operations are anticipated to be in the forth-coming period. After it has been prepared, it stands as a benchmark against which subsequent company performance can be measured.

(ii) Cash Budget: Cash budget is the detail of a statement showing cash receipt, cash disbursement and the balance cash. The cash budget is composed of four major sections. The receipts sections, the disbursement section, the cash excess or deficiency section, and the financial section. The receipts section consists of the opening balance of cash added to whatever is expected in the way of cash receipts during the budget period. The disbursement section consists of cash payment that is planned for the budget period. The cash excess or deficiency section consists of the difference between the cash receipts section. The financing section provides a detailed account of he borrowing and repayments projected to take place during the budget period. It is also includes a detail interest payment that will due as money borrowed.

(iii) Budgeted Balance Sheet: Budgeted balance sheet is a statement of assets and liabilities prepared after the preparation of operating budgets and financial budget. It is based on functional or operating budgets, cash budget, projected income statement and the previous year's assets and liabilities. In other words, budgeted balance sheets develop by beginning with the current balance sheet and adjusting it for the data contained in the other budgets.

3. Appropriation Budget

The appropriation budget covers all types of expenditure on advertising and research sectors. A part from above budgets, PPC also has relationship with following additional budgets, CVP analysis, and completion of profit plan and performance reports.

- **Flexible Budgets:** Flexible expenses budgets relate only to expenses or costs. They are also called dynamic, activity or output adjusted expenses budgets. The concept of flexible expenses budget is that all expenses are incurred because of passage of time, output, activity or combination of time and output or activity. Therefore, it is complementary to tactical profit plan which helps to provide an expenses plan. They should be adjusted to actual output for comparison with actual expenses in periodic performance report. Expenses or costs must be identified into fixed and variable expenses or costs in flexible budget.

- **Capital Expenditure Budget:** Capital expenditure budgeting is a process of planning and controlling of the long-term and short-term expenditure for expansion, replacement and contraction of fixed assets. Capital budgeting is useful to earn future profit and reduce future costs. The major elements of a capital expenditure budget are cash outflow a cash inflows. Cash outflow includes the cost of the project as cash out lays at different times during the life of a project. The cash outflows are affected by the provision of residual value of old equipment, tax position, addition working capital needed etc. cash inflows are expected cash revenue during the life of a project. The non-cash expenses like depreciation and tax position can affect the cash inflows.

- **Zero Base Budgeting:** Zero base budgeting is the method of budgeting in which managers are required to start at zero budget levels every year and to justify all cost as if the programmes involved were being initiated for the first time. No costs are viewed as being on going in nature; the manager must start at the ground level each year and present justification for all costs in the proposed budget regardless of the type of cost involved. Zero base budgeting differs from traditional budgeting in which budgets are generally initiated on an incremental basis, the managers start with last year's budget and simply adds to it according to anticipated needs. The manager's doesn't have to start at the ground each year and justify on going costs for existing programmes.

- **Activity Based Budgeting:** Activity based costing can lead to improve decision making. Activity based budgeting focuses on the cost of activities to produce and sell products and services. It separates indirect costs into separate homogeneous activity cost pools. Management uses the cause and effect criterion to identify to cost drives for each of these indirect cost pools.

- **Cost Volume Profit Analysis:** The analysis of relationship between cost, volume and profit is known as cost volume profit analysis. It is an analytical tool for studying the relationship between volume, cost, price and profit. CVP analysis is great helpful in managerial decision making. Specially, cost control and profit planning is possible with the help of cost volume profit analysis.

- **Completion of Profit Plan:** The principal output of a budgeting is a comprehensive profit plan that ties together all phases of an organization's operations. The completion of profit plan is comprised of man separate budgets, or schedules, that are interdependent. In other words, completion of profit plan means the process of profit planning ends with the planned income statement and planned balance sheet.

- **Performance Report:** Performance report is an important portion of a comprehensive PPC system. The performance reporting phase of a comprehensive PPC programmed significantly influences the extent to which the organization's planned goals and objectives are attained. Performance reports deal with control aspect of PPC or management control function of management defined as "the action necessary to assure the objectives plan, policies and standards are being attend" or in other word, the objectives of control is to guarantee the achievement of the planned objectives of the management by introducing periodic systematic correction measure. Performance report is one of the vital tools of management to exercise its control function effectively.

2.6 Development of Budgeting

2.6.1 Budgeting

Profit plans are developed with the help of functional budgets. A budget is comprehensive and coordinate plan expressed in financial terms for the operations and resources of an organization for some specific period in the future. So, the budget is the plan of the firm's expectation in the future. A broader definition recommended by the institute of cost and works accounts is as a financial or quantitative statement prepared prior to a definite period of time of the policy to be persuaded during that time for the purpose of attaining a given objectives.

A budget is a quantitative expression of a plan of action and an aid to co-ordination and implementation. Budget may be formulated for the organization as a whole or may submit. Budgeting includes sales, production, distribution and financial aspects of an organization. Budget programs are designed to carryout a variety of function, planning evaluating, performance, coordinating activities, implementations plans, communicating, motivate and authority actions (Hongren, 1976:720).

Budget as a tool of planning and control in clearly related to the broader system of planning and control in an organization. Planning involves the specification of basis objectives that will guide it, in operation terms. It involves the step of setting objectives, specifying goals, formulating strategies and expressing budgets. A budget is a comprehensive and coordinated plan expressed in financial terms, for the operations and resources of an enterprise for some specified period in future (Khan and Jain, 1993: 296).

The concept of comprehensive budget covers its use in planning, organizing and controlling all the financial and operating activities of the firm in the forthcoming period. Budgeting summarize the estimated results of the future transaction for the entire company in much the same manner as the accounting process records and summarize the results of completed transactions.

The process of preparing budget is known as budgeting. This is the process of planning future business actions and expressing those plans in a formal manner is called budgeting. It serves to coordinate the organization's many activities.

Budgeting, if followed properly, can increase the chances of making profits within the given environment. A systematic budget should encompass the procedures of evaluation the business environment, setting objectives, setting specific goals, identify potential strategies, communicating the planning guidelines, developing the long term and short term plans, implementation of budgets, and periodic performance reporting and follow-up. The main objective of a business firm is to make excess of revenue over expenses so as to maximize profits.

Budgeting should be regarded, not as a master, but as a servant. It is one of the best tools yet devised for advancing the affairs of a company and the individuals in their various spheres of managerial activity. It is not assumed that any budget is perfect. The most important consideration is to make sure, by intelligent use of budget, that all attainable benefits are derived from the plans as rendered.

2.6.2 Objective of Budgeting

The main objective of budgeting is to ensure the planned profit of the enterprise. So, it is considered as a tax of planning and controlling the profit. One of the primary objectives of an annual budgets is to measure the profit expectation for the next financial year with due regard to all the circumstance favourable and unfavourable that can influence the trading prospect (Regineld, and Gerge, 1982:17).

The main objective of budgeting may summarized as follows:

1. It is a plan, which reflects the policy of a business in financial terms.
2. It is a plan of action serves as a declaration of policies.
3. It is a control document by which management can monitor actual performance.
4. It is the plan to forecast for future to avoid loss and to maximize profit, i.e. to help in planning.
5. It is a plan to state the firm's expectation (goals) in clear, formal terms to avoid confusion and to faculties their attainability.
6. It defined the objectives for all the executives' communications.
7. It is a plan to bring about coordination between different functions of an enterprise, i.e. to help in coordination.
8. It is a plan to communicate expectations to all concerned with the management of the firm so that they are understood, supported and implemented.
9. It facts as a motivator of employees.
10. It provides a means of coordination and communication.
11. It is a measure against which to evaluate the quality of management.
12. Budget facilities centralize control with delegated authority and responsibility.

2.6.3 Characteristics of Good Budgeting

The characteristics of good budgeting are as follows:

1. Budgets may be formulated for the organization as a whole or for any sub-unit.
2. A good system of accounting is also essential to make the budgeting useful.
3. A budget is a quantitative expression of the plan of action and aid to coordination and implementation.
4. A good budgeting system should involve persons at different levels while preparing the budget. The subordinate should not feel only imposition on term.
5. Budgets are designed to carry out a variety of functions, planning, evaluating activities, implementation plans, communicating, motivating and authorizing actions.

2.6.4 Classification of Budgets

Budgets may be classified from various viewpoints depending upon various bases adopted for such classification. The following bases of classification are generally in use.

1. On the basis of time
2. On the basis of function
3. On the basis of flexibility
4. On the basis of nature of business activity

1. On the basis of time

On the basis of time, there are three types of budgets:

a. **Long Term Budget:** These budgets normally cover a prospective of five to ten years.

b. **Short Term Budget:** These budgets are usually for a period of one year to two. These are prepared for production and purchase of materials.

c. **Current Budget:** Those budgets are usually for one to twelve months and are the short terms budgets adjusted to current conditions or prevailing circumstance.

2. On the basis of Function

According to the functions, budget may be classified for each function in a business concern. The various forecasts for individual functions are coordinated then consolidated to show the total effect of all the functions. Budgets correspond and are co-terminus, with the particular functions and integrated with the master budget of the business. These budgets whose number depends on the size and nature of the business are called functional budget.

Normally, following types of functional budgets are prepared:

a. **Sales Budget:** It is primary budget of PPC. This is a forecast of total sales classified according to group of products, salesman and geographical locations.

b. **Production Budget:** Production budget is transformation process of sales budget. It is forecast based on sales productive capacity requirements of investors, etc.

c. **Production Cost Budget:** Production cost budget is related to cost of production including direct material cost, direct labour cost and expenses fixed, variable and semi variable.

d. **Purchase Budget:** After having prepared the budget, the material usage and the purchase can be easily constructed. Purchase would include both direct and indirect materials and goods. Non-manufacturing company have to prepare purchase budget according to sales unit.

e. **Personnel Budget:** It can be prepared from data given in the production/sales budget. This has reference to the utilization of men or labour employed in productive activity. It would be spilt up between direct and indirect labour.

f. **Selling and Distribution Cost Budget:** It is concerned with an estimate of the cost of selling and distributions of goods.

g. **Research Budget:** Research budget is related to improvement in the quality of the products or research for new products, of the purpose of satisfying the customers.

h. **Plant Utilization Budget:** Plant utilization budget covers the plant and machinery requirements to meet the budgeted production during the budget period. Schedule will be produced showing the available load in each department expressed in standard hours or unit.

i. **Cash Budget:** Cash budget is the planning of cash flows and cash requirement for the budgeted period.

j. **Office and Administration Budget:** This budget represent cost of all administrative expenses such as managing director's salary, staff salary and expenses of office management like lighting an heating.

k. **Capital Budget:** Capital budget is forecast of outlay on fixed assets as also sources of capital budget may differ form that of other budgets, as such expenditure in frequently planned a number of year in advance.

l. **Master Budget:** Master budget is the systematically express of financial plan of the firm. It is the budget of all budget or summary budget of all budgets. It includes estimated profit and loss account for the future period and estimated balance sheet as the end of budget period.

3. On the basis of Flexibility

Flexibility refers to change the budget allocating amount according to the volume of activity. So, there are two types of budget from this point of views:

a. Static Budget: It shows only one activity level at one. They don't be changed according to the volume of activity. Such budgets are usually prepared from one to three months in advance of the fiscal year to which they are applicable.

b. Flexible Budget: It shows the series of activity level. The main objectives of flexible budget are to select least lost combination for the firm. In case of such budgets, revenue and cost targets are set in respect of different level of activity even from zero to hundred percent of production volume.

4. On the basis of nature of Business Activity

Budget may also be classified on the basis of nature of business activity. These are as follows:

a. **Capital Expenditure Budget:** Capital expenditure budget is needed to compute or plan the cost of capital and appraise the project. Such budgets assume more significance in the case of large and progressive manufacturing concerns.

b. **Operating and Revenue Budget:** Operating and revenue budget deals with the plans for routine activities. These budgets are based on forecast like sales, reproduction costs, revenue etc.

2.6.5 Budgetary Control

Budgetary control is a system of controlling cost, which includes the preparation of budgets coordinating the departments and establishing responsibilities, comparing actual performance with the budgeted and outline upon results to achieve maximum profitability (Sharma, Gupta & Sahi, 1982:782).

i. Preparing budgets sets the budget.
ii. The actual figures are recorded.
iii. The budgeted and actual figures are compared for studying the performance of different cost centres.
iv. If actual performance is less than the budgeted norms a remedial action is taken immediately.
v. The business is divided into various responsibility centres for preparing various budgets.

2.6.6 Problems and Limitations of Budgeting

Budgeting is not fast proof; it can suffer from certain problems and limitation.

The major problems of budgeting system are as follows:

1. Developing meaning forecast and plant especially the sales plan.
2. Seeking the support and involvement of all levels of management.
3. Establishing realistic objectives, policies, procedures and standards of desired performance.
4. Maintaining effective follow up procedures and adapting the budgeting system wherever the circumstances changes.
5. Applying the budgeting system in a flexible manner.
6. Educating all individuals to be involved in the budgeting process and joining their full participation.

The following are the limitation of budgeting system:

1. Budgeting is not exact science. It success lings upon the precision of estimates.
2. The installation of a perfect system of budgeting is not possible in a short period. Budgeting has to be a continuous exercise. It is a dynamic process.
3. The success of the budgetary programmed is to understand by all and that manager and subordinates put concerned effort for accomplishing the budget goals.
4. Budgeting will be ineffective and expensive, if it is unnecessary detailed and complicated. It should be flexible and rigid in application.
5. The presence of budgeting system should not make management complacence. To get the best results of management, management should use budgeting with intelligence and foresight. It can not replace management.
6. The purpose of budgeting will be defeated if carelessly budget goals conflict with enterprise objectives.
7. Budgeting will hide inefficiencies through a proper evaluation system.
8. Budgeting will lower moral and productivity if unrealistic targets are set and it is used as a pressure tactic.

2.7 Production Budget/Plan

After the sales budget has been prepared, the production requirements for the forth-coming budget period can be determined and organized in the form of a production budget. While preparing production budget, the managers must have an optimum coordination between sales, inventory and production levels. Sufficient goods will have to be available to meet sales needs and for the desired ending inventory. A portion of these goods will have already existed in the firm of beginning inventory. The remainder will have to be produced. Thus, production needs can be determined b adding the budgeted sales units to the desired ending inventory and deducting the beginning inventory from the total.

In developing a comprehensive profit plan, the requirements of the sale plan must be translated into the supporting activities of the major functions. In the case of manufacturing enterprise, the sales plan must be converted to production requirements. To plan production effectively, the manufacturing must develop information about the manufacturing operations necessary for each product. The manager should develop information about the uses and output capacities of each manufacturing department.

The production plan involves determining the number of units of each product that must be manufactured to meet planned sales and maintained the planned inventory levels of finished goods. Once the sales and inventory requirements have been established, the first logical step in the production area is a facility survey. This survey should determine that all planned products can be produced by means of the existing or contemplated equipment, and that they can be produced in the volumes required. In this initial stage, the availability of labour supply and skills are considered. Bottleneck caused by lack of skills or equipment is frequently uncovered. At this point decisions must be made either to eliminate bottlenecks or to reduce the planned volume.

Production plan must consider for each production the quantity which is now on hand in inventory. The quantity required to meet projected sales and quantity desired to produce in inventory at the end of the budget period. The desired inventory quantity plus the quantity required to meet projected sales yields the quantity which must be made available for sales during the planning period or the production budget in terms of units for the product.

The production budget is prepared on the basis of:

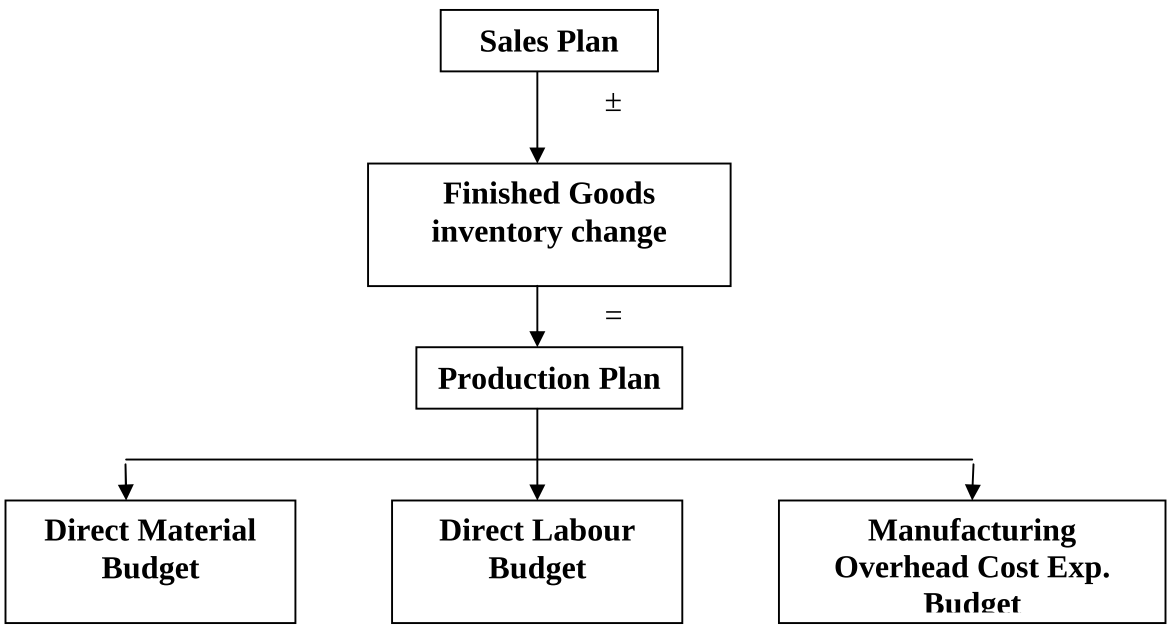
a. Sales budget
b. Plant capacity
c. Opening inventory of finished goods
d. Required closing inventory of goods
e. Policy of the management

Production budget is solely divided into monthly budgets for the purpose of production planning. In production planning, the following factors are considered:

a. Economic batch quantity
b. Delivery schedules
c. Seasonal conditions
d. Optimum utilization of plant capacity
e. Optimum utilization of labour without much over time and idle time
f. Reduction of bottlenecks such as shortage of man, materials
g. Stock requirements
h. Work in progress

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

The flow of planning activities from sales through the manufacturing plan can be presented in this order:



2.7.1 Objectives of Production Plan

The objectives of production plan or budget are:

1. To plan and control the operations being carried out to implement policies decided upon.
2. To make prevision for materials at right time and place.
3. To plan the sequence of operations required for economical production.
4. To coordinate the various aspects of factory operation as to make them a vita link in the chain of profitable programs

5. To bring to a common focus all the necessary to establish policies and to determine operations.
6. To project these establish policies into future by an analysis past performances (Goyal, 1997:49).

2.7.2 Responsibility for Production Planning

Production managers are responsible for the develop meet of production plan. The completed marketing plan should be given to the manufacturing executive who is responsible for translating it into a balanced production program consistent with managerial policies and subject to certain internal limitations. Planning, scheduling, and carrying out of the actual production process throughout the year are functions of production department. So it is essential that the responsibility for the planning and control of these functions be performed by production executives. These executives, top management policies must be considered in such matters as inventory levels, stability of production, and capital additions. In case of multi-plant production, a balanced and coordinated production programmed is required and careful attention of top management is also required. With respect to planning, the planners must determine an optimum balance between sales inventory and production level.

2.7.3 Developing the Production Budget

The production executive must translate quantities called for in the sales budget into unit production requirements for the budget period for each product while considering the management's inventory policies. The budgeted production having been developed for the budget period, the next problem is scheduling this production by interim periods during the year. Interim production must be planned so as to; (1) have sufficient goods to meet interim sales requirements; (2) keep interim inventory levels within reasonable limits; and (3) manufacturing the goods as economically as possible.

The following formula is generally used to calculate the planned production for the enterprises:

	Sales (units)	XXXX
Add:	Desired Ending inventory of finished goods	XXXX
	Total required production (units)	XXXX
Less:	Beginning inventory of finished goods	XXXX
	Planned production for the year	XXXX

2.7.4 General Consideration in Planning Production and Inventory Level

1. Total production requirements (by product) for the budget period.
2. Inventory policies relative to levels of finished goods an work in process.
3. Plant capacity policies such as the limits of permissible departures from a stable production level throughout the year.
4. Adequacy of manufacturing facilities (expansion or contraction of plant capacity).
5. Availability of raw materials, purchased components, and labour.
6. Economic lots or runs.
7. Timing of production throughout the budget period, by product and by responsibility centres.
8. Length of processing time (Glenn, Ronald & Paul, 1992:214)

2.7.5 Consideration in Developing Inventory Policies

Inventory experts' significant influence on the major functions of the enterprise is considered very important. The objective of inventory policies is to maintain the optimum level of inventory and it must be maintained between two extreme points. Inventory policies should include establishment of inventory standards (maximum and minimum levels) and the application techniques and methods that will ensure conformity with planned inventory standards. It is impossible to develop satisfactory production programs without definite inventory policies.

In determining inventory policies for finished goods, management should consider the following points:

1. Quantities (in units) needed to meet sales requirements. Resolving this problem entails consideration of the sales budget and seasonality of demand. The sales department executives should be directly involved in this problem.
2. Perishability 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 requirements.
7. Cost of holding inventory. Frequently there are numerous and significant costs connected with stocking large quantities of goods. The principal holding costs involved are labour, insurance, taxes, rent, depreciation, transportation and handling.
8. Protection against direct material and components shortages.
9. Protection against labour shortage.
10. Protection against materials and parts price increases.
11. Risks involved in inventory (Price declines, obsolescence of stock, casualty loss and theft, lack of demand, customer return policies)

2.7.6 Setting Production Policies

Seasonal sales are typical in most companies, yet relatively stable production levels usually enhance production efficiency. In many companies where sales of the primary products are seasonal, production levels have been stabilized by developing new products that can be stored or that have opposite seasonal patterns. The inventory provides a rather attractive method of levelling production.

There are certain pitfalls to be considered however. Stabilization of production is desirable for a number of compelling reasons and generally results in significant reductions of costs and improvements in operations. The advantages of relatively stable production levels may be outlined as follows:

1. **Stability of Employment, Resulting in:**
   - Improved morale and hence grater worker efficiency
   - Less labour turnover
   - Attraction of better workers
   - Reduction of expenses for training new workers

2. **Economy in Purchasing Raw Materials as a result of:**
   - Availability
   - Volume discounts
   - Simplified storage problems
   - Smaller capital requirement
   - Reduced inventory risk

3. **Better Utilization of Plant Facilities, which tends to:**
   - Reduce the capacity required to meet peak season demands
   - Avoid idle capacity

2.7.7 The Production Budget as a Planning, Coordinating and Control Tool

The production budget contributes to planning, coordinating and control. It is developed and based on a realistic sales plan means that management has analyzed and make specific about the production planning function related problems. The development of a detailed production budget forces planning decisions about production plans, material/component requirements, labour requirements, plant capacity, capital additions and inventory policies to change as per the conditions.

Production planning tends to expose weaknesses and sources of future problems that can be avoided by timely management decisions.

The production plan must be coordinated with plans related to financing, capital additions, product development and sales. A critical problem in all manufacturing situations is that of coordinating the operations of the sales and production departments effectively. The sales executive should be acutely aware of production problems and the production executive must be aware of sales developments. It may be desirable to revise the sales plan to emphasize those products that the factory can readily and efficiently produce. The translation of sales demands into production effort can be complex and if not resolved on a sound basis, may be the cause of considerable inefficiency in the company. Such inefficiencies can usually be attributed to a lack of timely planning and to an indefinite assignment of responsibilities.

The production plan should not be used inflexibly but rather as a guide to the actual, detailed production planning and scheduling carried on by the production department on a day to day or week to week basis. It should not be viewed as an order to proceed with production; actual production should be ordered by the production planning and scheduling department on a current basis that reflects the actual sales trends as they evolve during the budget period. The production plan may be considered as the framework within which current production orders are issued. Variations in actual sales and in other conditions may call for departures from the original production plan.

The production budget is the primary basis for planning raw material and component requirements, labour needs, capital additions, cash requirements and factory planning in general. Therefore, the production plan becomes the foundation for factory planning in general. It gives the factory executives sound data on which to base operational decisions.

An adequate production control system is essential to managerial control of costs, qualities and quantities. The principal procedures involved in production control are as follows:

1. Material control
2. Analysis of production processes by responsibility centres in the production division
3. Routing production
4. Scheduling production
5. Dispatching production
6. Follow-up

2.8 Analysis of Budget Variance

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

1. Conferences with responsibility centre mangers and supervisors and other employees in the particular responsibility centre involved.
2. Analysis of the work situation including the flow of work, coordination of activities, effectiveness of supervision, and other prevailing circumstances.
3. Direct observation.
4. On the spot investigations by the line managers.
5. Investigations by staff groups (carefully specified as to responsibilities).
6. Internal audits.

7. Special studies.
8. Variance analysis.

Variance analysis involves a mathematical analysis of two sets of data in order to gain insight into the underlying causes of a variance. One amount is treated as the box, standard or reference point. Variance analysis has wide application in financial reporting. It is frequently applied in the following situations:

1. Investigation of variance between actual results of the current period and the actual results of prior period. The period is considered the base.
2. Investigation of variance between actual results and standard costs. The standard cost is used as the base.
3. Investigation of variance between actual results and planned or budget goals reflected in the profit plans. The planned or budget goals are used as the base.

2.9 Review of Previous Study

There is no research paper concerning the "Production Budgeting and its impact on Profit Plan". Most of the students of Account group have done the research on the topic of Profit Planning and Control of different public and non public business enterprises. Production Budgeting is the most important portion of the all types of manufacturing enterprises. Without production budget other plan can not be completed. An attempt is made here to review some of the previous related research's findings and the major recommendations.

Madhav Rijal (2005) had conducted a research entitled "C.V.P. Analysis as a tool to measure effectiveness of Profit Planning and Control: A case study of Nebico Private Limited." His research is based on primary data as well as on secondary data and information. Stratified questionnaire method is used to collect primary and raw data. His study has made a great impact in Nepalese organizations, whether Nepalese organizations can practice C.V.P. analysis and make improvement through it or not. C.V.P. Analysis tool is effective for profit planning can be figured out. Through his outstanding research we can find out some recommendable findings and suggestion. Some of the remarkable findings were as follows:

- No clear and defined guideline for objectives, responsibility and duties.
- No classifications of items are done as fixed and variable.
- Lack of decision making power at middle and lower level.
- Lack of effective inventory policy.
- Lack of effective controlling tools to reduce unnecessary costs.
- Need to establish a separate research and development for better result in future.
- Need of a systematic approach towards comprehensive profit planning.

Pratima Dangol (2006) had conducted a research entitle “Profit Planning in Manufacturing Public Enterprises: A case study in Hetauda Cement Industry Limited.” She had focused her studies in the application of profit planning concepts in public enterprises.

Necessary data and other information were collected from both the primary and secondary sources of data. She had figured out some findings in her studies. They are:

- No proper application of any effective sales forecasting technique.
- Decision making powers are centralized.
- Planning of budgeting policy of the company is very poor and there is no system of taking corrective action for pre-planning.
- Lack of clear-cut duties and responsibilities among the employees.

Bal Mukunda Chaguthi (2007) had conducted a research entitled "C.V.P. Analysis of Janak Education Material Center Ltd."(JEMC) His research is based on primary data as well as on secondary data and information. Stratified questionnaires method is used to collect primary and raw data. The objectives of his study are as following:

- To analyze the relationship among C.V.P. of JEMC.
- To evaluate the variance between planned and actual performance.
- To assess financial performance in terms of various financial ratios and cost structure.
- To provide suitable suggestions and recommendation wherever necessary for improvement of planning.

Major findings and remarkable findings of the study were as following:

- JEMC is earning profit and it is in increasing trend.
- The contribution margin is fluctuating trend.
- The P/V ratios are found to be in fluctuating trend ranging from 0.41 to 0.54.
- It was found that the actual sales are grater than the BEP in all the year.
- It was found that the margins of safety are positive for all the study year.

The major and remarkable recommendation of this study is as under:

- JEMC is not applying proper method of CVP analysis. JEMC should use CVP analysis for profit planning.
- BEP analysis should be done by JEMC while planning.
- JEMC should recruit skilled manpower from the job market by using effective selection process.
- On going through the productivity, the resources acquired by JEMC have not been utilized properly. So it will be better to utilize the tangible and

intangible assets as well as resources i.e. man, material and machine in full volume.

2.10 Research Gap

Various dissertations, books, reports and articles available to my knowledge, have been reviewed while preparing this thesis. To be frank all the books have been written professionally and this is natural too. There were very limited books available in the market designed to meet the student requirement for their academic purpose. But now number of books can be found and seen in the market based on production budgeting according to the syllabus of Tribhuvan University and reviewing them in detail is time consuming and hence reviewing of the books has been done briefly.

There are several research studies in the field of profit planning and control. None of them are completely focused on production budgeting. Most of them are focused on C.V.P. and B.E.P.   They have not been able to give clear answer to better results through PPC tools. So this research is focused on the different areas of production budgeting, which include effective inventory control, effective controlling tools to reduce unnecessary costs, proper analysis of environmental variable, segregation of cost into fixed and variable, effective sales forecasting technique, financial performance in terms of various financial ratios and cost structure, effective utilization of available resources. So, this research has been conducted to examines above mentioned areas of production budgeting.

CHAPTER - III
RESEARCH METHODOLOGY

3.1 Research Design

The formidable problem that follows in task of defining the research is the preparation of design of research project popularly known as research design. Research design is the main part of the thesis or any research work. Research design is a blue print for further research. It is a theory building process. According to Kerlinger, "Research design is the plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to control variance".

Research design is the plan structure and strategy of investigation conceived so as to obtain answer to research questions. In order to make any type o research, a well set research design is necessary, which fulfils the objectives of the study. The research design of this study is descriptive as well as analytical. This study attempts to show the production budget and their achievement, CVP analysis for solving the problems that has accursed in NEBICO Pvt. Ltd. This study is an intensive based an analysis of the past financial performance. The present research design specially deals with secondary data.

3.2 Period Covered

Profit planning has two dimensions; strategic or long range and tactical or short range profit plans. Five years data were taken for long range planning. One year data were used for short range planning. Long range trend were taken for the fiscal year from 2060/2061 to 2064/2065.

3.3 Nature and Source of Data

The data used in the study were primary as well as secondary. They were collected from concern authority. For any research work, information is the life blood. Thus, it is the major task to gather the information and data collection. To fulfil the objectives of this study specially secondary data were used. Primary data were collected through questionnaires, interviews and survey were employed.

3.4 Data Collection and Analysis

Collected data from primary and secondary sources were analyzed by using accounting, statistical and mathematical tools. To make this study simpler and easily understandable table, charts, and graphs as per need were used. The accounting tools used were BEP analysis, S.D. Mean, coefficient of variation, variance analysis.

CHAPTER - IV

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

A company should prepare different plans; one of them is production plan. Production plan is the infrastructure of profit plan. So, a profit plan is the formal expression of the enterprises plans, goals and objectives. The main objective of a business is to earn profit. Profit plan is called the pre-plan of revenue and expenditure. It estimates how much income will be generated and how it should be spent in order to meet investment and profit requirement. Profit is the major element of each and every business activities for survival further development and fulfilling social expectation.

Plans should be formulated within a framework of four major parameters, economical, technological, social and political. Generally two types of profit plans are formulated, strategic, long range profit plan and tactical, short range profit plan. Strategic plan of NEBICO is integrated with five years periodic plan. The present study doesn’t evaluate the long range plan because of time and resources constraints. Therefore the study is mainly focused on tactical profit plan.

The main objective of this study was to examine and analyse budgeted and actual sales plan, production plan adopted by NEBICO. Besides these cost plans analysis and cost-volume-profit analysis were analysed. For this analysis, secondary data like profit and loss account, expenses budget sheet, balance sheet, sales and production plans were used.

This study has tried to cover the activities of the NEBICO Pvt. Ltd. for last five years from fiscal year 2060/61 to 2064/65.

4.2 Sales Budget of NEBICO Private Limited

Sales budget is the primary and important step as well as primary source of information, which can be used in functional budgets. The capital additions needed the amount of expenses to be planned; the manpower requirements; materials requirements and cash requirement are based on the sales budget. The sales budget is the basic step, which opens the door of financial plan.

The sales unit determines the volume or quantity of final products to be produced. Labour, production and other expenses budgets are prepared on the basis of production volume. So it can be said that the sales plan is the backbone of the profit plan. Sales are major source of revenue and profit is the amount that all business operations are directly linked with the sales budget. Thus sales budget should be as realistic as possible. If the sales plans are unrealistic then all other elements of profit plans will be out of reality.

The following table shows the sales trend (both planned and actual achievement) of NEBICO. The period covered was between the fiscal years from 2060/61 to 2064/65.

Table 4.1

Sales Budget and Achievement

Fiscal Year	In Units (Metric Tone)			In Rs.'000'		
	Budgeted	Actual	Achieve-ment (%)	Budgeted	Actual	Achieve-ment (%)
2060/61	1837.41	1649.36	89.77	146291.320	131750.725	90.06
2061/62	1586.33	1380.99	87.06	122859	108030	87.93
2062/63	1417.64	1261.91	89.01	104157	93086	89.37
2063/64	1672.06	1518.64	90.82	124782	113727	91.14
2064/65	1697.73	1507.03	88.77	126409	112858	89.28

Source: Annual Report of NEBICO

The above table shows the satisfactory sales performance of NEBICO. In unit basis, sales achievement was 89% on an average. The above table also shows that unit sales are highly consistent in the fiscal year 2063/64. The sales of the fiscal year 2061/62 recorded less. The above table shows the sales achievement is always less than the sales target. In the fiscal year 2063/64 actual sales was 91.14% of sales target, which was best among the five years. Actual sales trend shows the fluctuation in sales. The targets of NEBICO were very optimistic sales.

The above table shows that there is no systematic realistic sales plan and performance of budget and planning section of NEBICO is poor. Budgets were prepared without consideration of market condition or challenge. NEBICO was affected by Nepalese political situations. So, its target and achievement were different.

In order to find out the nature of variability of budgeted sales and actual sales of different years, an arithmetic mean, standard deviation and coefficient of variation were calculated. The details calculation of those statistical tools are presented in appendix-I and here is the summarizing the result.

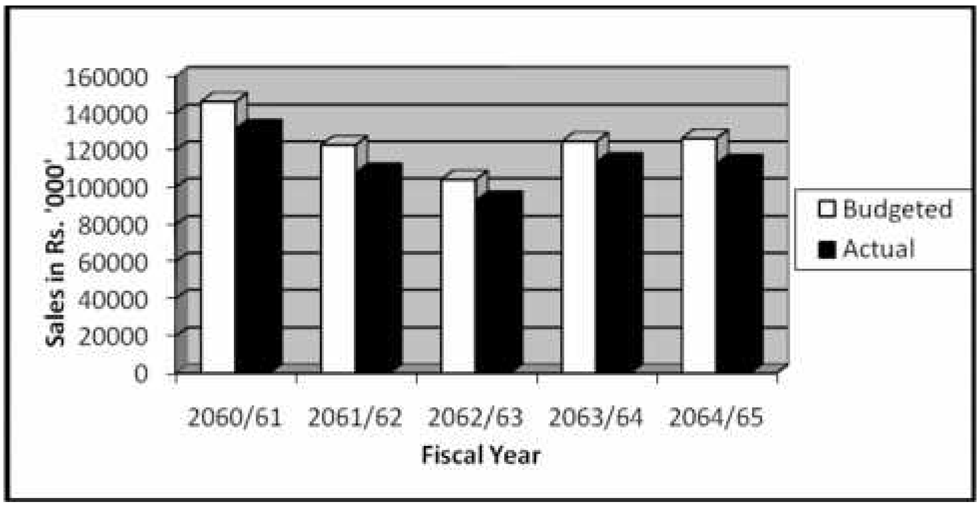
Statistical tools	**Budgeted Sales (X) '00000'**	**Actual Sales (Y) '00000'**
Mean	1248.996	1118.904
Standard Deviation	133.739	123.873
Co-efficient of Variation(C.V.)	10.71%	11.07%
Correlation(r)	0.9948	
Probable Error of Correlation (P.E.r.)	0.0031	

The above table shows that actual sales are more variable than budgeted sales. The calculated mean of actual sales is lower than the budgeted sales. The standard deviation of actual sales is lower than budgeted sales and coefficient of variance of budgeted sales is also less than actual sales.

Therefore, actual sales were the more variable than budgeted sales. The actual sales and budgeted sales are presented with the help of graphical presentation.

Diagram 4.1

Budgeted and Actual Sales



The above graphical presentation shows that the achievement sales always lower than budgeted sales. Actual sales didn't meet the budgeted sales but the actual and targeted sales were not so far due to such indefinite fluctuating nature of sales trend, it was difficult to project the future potential sales.

Other statistical tools, correlation of coefficient can be used to analyze the relationship between budgeted sales and actual sales. There should be positive correlation between budgeted and actual sales. In other words, the sales achievements should increase as budget increase or vice versa. To find out the correlation between budgeted figures and actual figures, Karl Pearson's coefficient of correlation was used, denoted by (r). By calculating (r) correlation between budgeted sales and actual sales can be calculated.

For the calculating ‘r’ budgeted figures denoted by ‘X’ are assumed to be independent variable and actual figures denoted by ‘Y’ are assumed to be dependent variable.

The significant of ‘r’ can be tested by the help of probable error of ‘r’ which is calculated in appendix-I.

The figure of value of ‘r’ shows that there is positive correlation between budgeted and actual sales. There is perfect correlation between budgeted sales and actual sales. The significant of ‘r’ is tested with the help of probable error of ‘r’. The probable error ‘r’=0.9948. Since ‘r’ is greater than probable error of r (0.9948>0.0031). The value of ‘r’ is significant. So, actual sales will go on the same direction that of budgeted sales. The correlation examination makes clear that the budgeted sales are well.

A regression line can also be fitted to show the degree of relationship between budgeted sales and actual sales. Budgeted sales and actual sales forecast the possible actual sales with given budgeted figures. For this purpose actual sales achievements have been assumed to be dependent upon the budgeted sales.

The regression line of actual sales ‘Y’ on budgeted sales ‘X’ or ‘Y’ on ‘X’ is as follows:

$$Y - \overline{Y} = r\frac{\delta Y}{\delta X}(X - \overline{X})$$

Then, $Y - 1118.904 = 0.9948 \times \frac{123.873}{133.739} \times (X - 1248.996)$

Or, $Y - 1118.904 = 0.9948 \times 0.926 \times (X - 1248.996)$

Or, $Y - 1118.904 = 0.9212(X - 1248.996)$

Or, $Y - 1118.904 = 0.9212X - 1150.575$

Or, $Y = 0.9212X - 1150.575 + 1118.904$

Or, $Y = 0.9212X - 31.671$

This regression shows positive relationship between target sales and actual sales. It is clear that the sales are in increasing trend and actual sales will increase by 0.9212 units in budgeted sales units. With the help of this regression equation, the expected sales achievement can be ascertained with given value of budgeted sales say (X) in expected sales achieve of figure 2065/66=1297.34 Lakh.

The expected sales achievement:

$$Y = 0.9212X - 31.671$$
$$\text{Or, } Y = 0.9212 \times 1297.34 - 31.671$$
$$\text{Or, } Y = 1195.11 - 31.671$$
$$Y = \text{Rs.}1163.439 \text{ Lakh}$$

If the relationship between budgeted sales and actual sales remain the same as previous year then the achievement sales for the fiscal year 2065/66 will be Rs. 1163.439 Lakh as stated by the above regression equation.

4.3 Production Budget of NEBICO Private Limited

The next step in formulating short-range profit plan for a manufacturing company is development of production plans. The preparation of production budget needs information concerning the finished product. Normally this pattern will be based on previous years' requirements of the selling department. Besides in sales policy also be taken into account in the preparation of production plan.

A production budget incorporates the estimates of the total volume of production with the scheduling of operations by days, weeks or months. The production budget is normally prepared in quantitative terms such as units of output, tons of production, etc.

The production plan of NEBICO is based upon various controllable factors. It also needs to focus peak season and slack season production. The management of

NEBICO has no hard and fast rules and regulations for production, but the management decides about production. The company has sufficient capacity to produce the goods to meet the budgeted sales but the company is unable to utilize its full capacity.

The budgeted and actual productions of NEBICO for the fiscal year from 2060/61 to 2064/65 are as under:

Table 4.2

Budgeted and Actual Production (in Metric Ton)

Fiscal Year	Budgeted	Actual	Achievement %
2060/61	1813.93	1554.61	85.70
2061/62	1635.61	1393.73	85.21
2062/63	1596.08	1256.70	78.74
2063/64	1889.12	1514.29	80.16
2064/65	1897.76	1498.63	78.97

Source: Annual Report of NEBICO

The above table shows that the actual production was lower than the budgeted production during the period from the fiscal year 2060/61 to 2064/65. The table shows the highest achievement was in the fiscal year 2060/61 recording 85.70%. Besides this period, the actual production decreased than the budgeted production. From the analysis of the above table, it shows that the company's production achievements were not in consistency. It reflects the sign of inefficiency of management.

To find out the nature of variability of budgeted production and actual production, the arithmetic mean, standard deviation and coefficient of variation were used. The detail calculations of the variables are presented in appendix-II.

Budgeted and Actual Production in Metric Ton

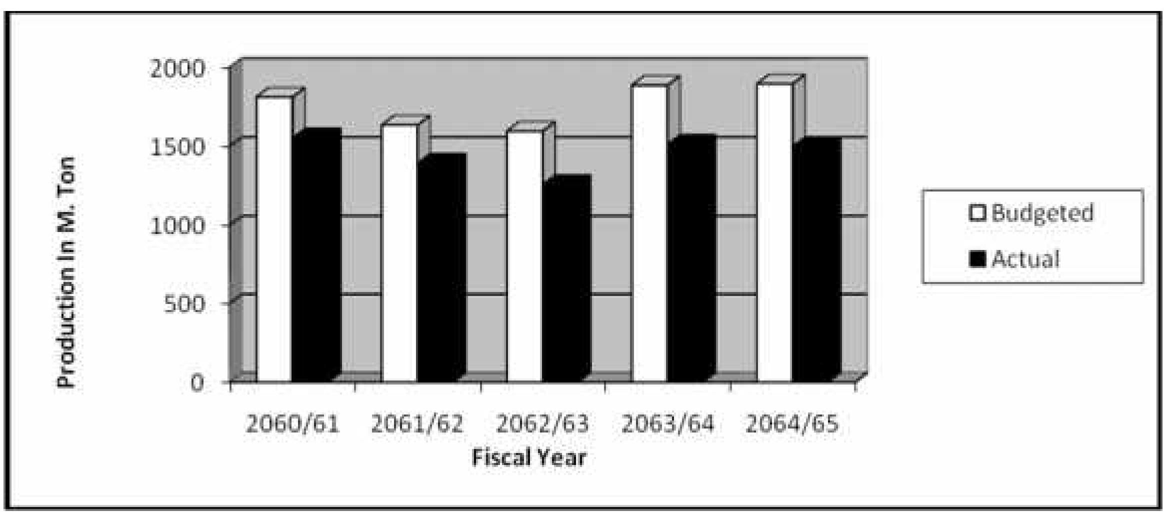
Statistical tools	Budgeted Production (X)	Actual Production (Y)
Mean	1766.5	1443.592
Standard Deviation	127.035	107.487
Co-efficient of Variation(C.V.)	7.19%	7.45%
Correlation(r)	0.872	
Probable Error of Correlation (P.E.r.)	0.0723	

The above analysis shows that the mean of the budgeted production is higher than the actual production and the standard deviation of the actual production is higher than the budgeted production. The coefficient of variation of actual production is higher than the budgeted production. Therefore, the actual production has nature of high variability than the budgeted production.

The following graphical presentation shows the budgeted production and actual production.

Diagram 4.2

Budgeted Production and Actual Production



A statistical tool correlation of coefficient (r) can be used to analyze the relationship between the budgeted production and actual production. For this purpose budgeted production are assumed to be independent variable and assigned (X) and actual production are assumed to be dependent variable and assigned (Y).

The above figure of the value of ‘r’ shows that there is negative correlation between the budgeted and actual production. Here r<P.E. i.e. r (0.872) < P.E. (0.0723). So, the value of ‘r’ is not significant at all. Therefore, it is doubtful whether the actual production will go on the same direction of budgeted production.

The regression line of achievement Y on budgeted X or Y on X is as follows:

$$
\begin{aligned}
Y - \overline{Y} &= r\frac{\delta Y}{\delta X}(X - \overline{X}) \\
Y - 1443.592 &= 0.872 \times \frac{107.487}{127.035}(X - 1766.5) \\
Y - 1443.592 &= 0.7378(X - 1766.5) \\
Y - 1443.592 &= 0.7378X - 1303.3237 \\
Y &= 0.7378X + 140.2683
\end{aligned}
$$

By this regression equation, the expected production achievement could be ascertained with given value of target production, say X. If this equation is used to ascertain the expected production achievement for the fiscal year 2065/66, the following result will come out. Budgeted production units for fiscal year 2065/66 will be 1906.58 M. Ton.

The expected production achievements the fiscal year 2065/66:

$$
\begin{aligned}
Y &= 0.7378X + 140.2683 \\
Y &= 0.7378 \times 1906.58 + 140.2683 \\
Y &= 1406.675 + 140.58 \\
Y &= 1547.255\text{M. Ton}
\end{aligned}
$$

If the relationship between the actual production and budgeted production remains in same direction of the previous year, the actual production for the F.Y. 2065/66 will be 1547.255 M. Ton.

4.4 Comparison between Actual Sales and Actual Production

Production budget depend upon the sales budget. Now it is also necessary to analyze whether production meets sales or not and it is significant to analyze the relationship between sales and production. The following table presents the actual production and actual sales of previous years.

Table 4.3

Actual Production and Actual Sales

In M. Ton

Fiscal Year	Actual Production	Actual Sales	Achievement %
2060/61	1554.61	1649.36	106.09%
2061/62	1393.73	1380.99	99.09%
2062/63	1256.70	1261.91	100.41%
2063/64	1514.29	1518.64	100.29%
2064/65	1498.63	1507.03	100.56%

The above table shows that the percentage of achievements were in fluctuation. The higher difference between the actual sales and actual production was 6.09%. The gap is highest in the fiscal year 2060/61 and lowest is in the fiscal year 2061/62. In order to find out the nature of variability, the statistical tools like mean, standard deviation, coefficient of variance and correlation can be calculated. The details of calculations of these figures are shown in Appendix-III. Now summarizing the results of Appendix-III we have,

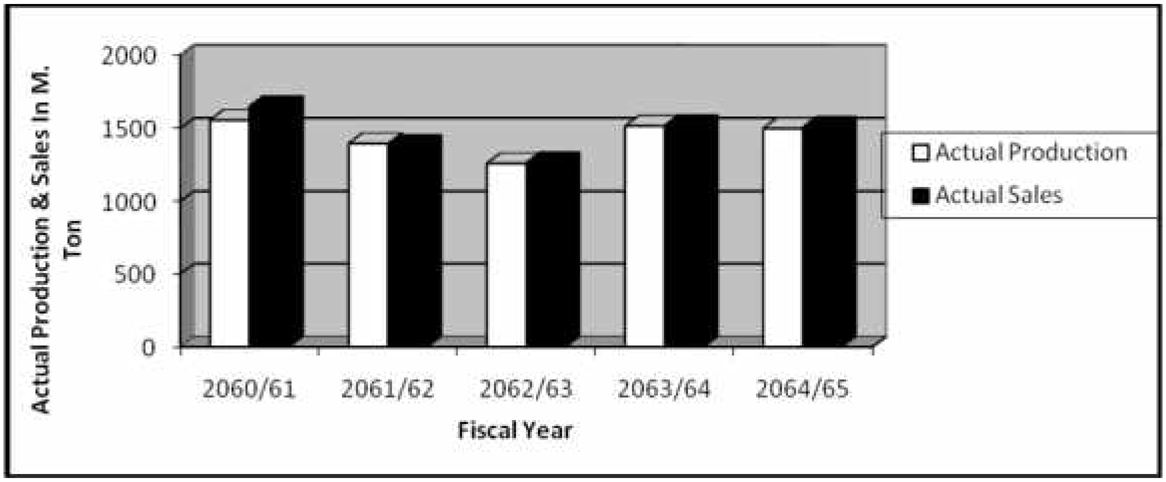
Statistical tools	Actual Production (X)	Actual Sales (Y)
Mean	1443.592	1463.586
Standard Deviation	107.487	131.853
Co-efficient of Variation(C.V.)	7.45%	9.01%
Correlation(r)	0.9697	
Probable Error of Correlation (P.E.r.)	0.018	

The above analysis shows that the actual sales were more variable than the actual production. Since the coefficient of variance of actual sales was high than the actual production that means actual production was more constant or homogeneous.

A statistical tool, correlation of coefficient (r) can be used to analyze the relationship between actual production and actual sales. For this purpose Karl Pearson's formula was used which is denoted by 'r' for coefficient of correlation where X denoted for actual production and Y denoted actual sales. It was assumed that the actual production to be independent variable. Actual sales and production should be positively correlated if the sale is high. Significant of the coefficient of correlation(r) is tested with probable error (P.E.). The details calculation of coefficient of correlation and probable error is shown in Appendix-III.

The above result shows that there is positive correlation between actual sales and actual production. Here, r>P.E., i.e. 0.9697>0.018; the value of 'r' is definitely significant. The data of actual production and actual sales can also be presented in graph.

Diagram 4.3
Actual Production and Actual Sales



4.5 Cost Volume Profit Analysis

The analysis of relationship between cost volume and profit is known as cost volume profit analysis. Cost Volume Profit Analysis (CVP) is an analytical management tool which analyses the relationship between cost, volume and profit. It helps to determine the minimum sales volume required to avoid losses and sales volume to earn desired profit. It shows which volume or level of activity is necessary to stay at break even and to gain a certain amount of profit. It is also helps management to seek the most profitable combination of costs and volume.

Cost volume profit analysis includes both contribution analysis and breakeven analysis. Break-even analysis emphasizes the level of output or productive activities at which sales revenue exactly equal to total costs, making neither profit nor loss. BEP analysis rests upon the foundation of the cost variability as separate identification and measurement of fixed and variable component of costs. It is usually applied on a total organization basis.

To calculate BEP and analyze the relationship of cost, volume and profit, the following figure of the fiscal year 2064/65 are use.

Sales Revenue = Rs.112858000

Variable Cost = Rs.75762862

Fixed Cost = Rs.25003761

1) Variable Cost-Volume Ratio(V/V Ratio)

This ratio shows the proportion of variable cost of each rupee of sales revenue.

$$\text{V/V Ratio} = \frac{\text{Total Variable cost}}{\text{Sales}}$$

$$= \frac{\text{Rs.}75762862}{\text{Rs.}112858000} = 0.67$$

2) Profit Volume Ratio (P/V Ratio)

Profit volume ratio shows the proportion of contribution margin left for fixed cost and profit per Re. of sales.

P/V Ratio = 1- V/V Ratio

= 1- 0.67

= 0.33

3) Break Even Point (Rs)

$$\text{BEP} = \frac{\text{Total Fixed Cost}}{\text{P/V Ratio}}$$

$$= \frac{25003761}{0.33} = \text{Rs.}75768973$$

4) Profit $= \text{Sales Revenue} \times \text{P/V Ratio} - \text{Fixed Cost}$

= 112858000 X 0.33 - 25003761

= Rs.12239379

This analysis shows that for every Re 1 sales, variable costs are 0.67 paisa. If NEBICO can achieve sales of Rs.75768973, it can cover all of its costs and thereafter it can earn profit.

4.6 Variance Analysis

A variance is the difference between the actual results and budgeted results. A basis feature of performance report is reporting of variance between the actual results and budgeted goals. Variance analyses are the determination of the reasons for a reported variance whether it is favourable or unfavourable. If the variance is significant, a careful management study should be made to determine the underlying causes. The underlying causes rather than the actual results, should lead to remedies through appropriate corrective actions by the efficient management. The following steps are taken for analyzing variances:

1. Attainable standard should be developed for labour, overhead, sales, profit, etc.
2. Comparison between actual and budgeted results.
3. Causes should be investigated and diagnosed as controllable and uncontrollable.
4. For controllable causes of unfavourable variances, responsibility and accountability should be assigned.
5. Necessary corrective actions should be taken to improve unfavourable variances.

In the case of NEBICO, it has not well-developed system of predetermining the standard of various expenses and profit. Generally, it has determined the deviation between the budgeted sales and actual sales and the budgeted production and actual production.

Table 4.4
NEBICO Pvt. Ltd.
Sales Variance

In Rs. '000'

Fiscal Year	Budgeted Sales	Actual Sales	Variance	Remarks
2060/61	146291.320	131750.725	14540.595	Unfavourable
2061/62	122859	108030	14829	Unfavourable
2062/63	104157	93086	11071	Unfavourable
2063/64	124782	113727	11055	Unfavourable
2064/65	126409	112858	13551	Unfavourable

The above table shows that there was unfavourable variance in all study period. The cause of unfavourable variance was that the planning was not made on realistic ground and NEBICO didn't make market research, demand forecast etc. So the cause of unfavourable variance should be investigated. It should take corrective action to minimize unfavourable variance.

Table 4.5
NEBICO Pvt. Ltd.
Production Variance

In 'M. Ton'

Fiscal Year	Budgeted Production	Actual Production	Variance	Remarks
2060/61	1813.93	1554.61	259.32	Unfavourable
2061/62	1635.61	1393.73	241.88	Unfavourable
2062/63	1596.08	1256.70	339.38	Unfavourable
2063/64	1889.12	1514.29	374.83	Unfavourable
2064/65	1897.76	1498.63	399.13	Unfavourable

The above table shows that there is unfavourable variance in the study period. The cause of unfavourable variance was under utilization of its capacity and planning did not made on realistic ground. So the cause of unfavourable variance should be investigated properly and responsible department and person should be held accountable for that unfavourable variance. It should take effective correction action to their respective responsibility department to minimize unfavourable variances.

4.7 Major Findings

From the above analysis of data and information, it can be said that NEBICO Private Limited was facing with so many problems in the process of formulation and implementing profit plans. Though the company has been earning profit since many years, the future picture of the company from the view-point of profit was not bright until it reduces unnecessary costs and adopts systematic planning. External and internal factors are also affecting the company's goals. This company was not working at full capacity.

The following are some major findings of NEBICO Pvt. Ltd.

1. The top executives are only involved in planning and decision making and lower participation in not encouraged.
2. Sales and production targets aren't achieving due to defective forecasting.
3. NEBICO isn't achieving full capacity.
4. The company is suffering from poor profit planning due to lack of planning expertise in company.
5. NEBICO has installed new diesel plant for improvement of qualitative products.
6. The pricing policy of the company is unscientific.
7. Company has no financial plan; they have only sales and production plans.
8. There are no any proper criteria for performance evaluation for financial tools.
9. The profit trend of the company is not satisfactory.

10. The company has no detailed any systematic expenses plan. The fixed, variable and mixed expenses plan is the necessary elements for profit planning and control.
11. The inventory policies are not effective and efficient.
12. The company has qualitative biscuits and confectioneries that substitute imported biscuits and confectioneries.
13. The company has not proper practice of segregating the costs into fixed and variable or controllable and non-controllable.

CHAPTER - V
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Profit planning is one of the most important tools of management to be used to plan and control business operations. The effective operation of a business concern resulting into the excess of income over expenditure fully depends upon as to what extent the management follows proper planning, effective coordination and dynamic control. Profit planning plays a vital role in the performance of every organization whether they are small or big. Without proper planning of profits and their implementation, no organization can achieve its goals and objectives more efficiently. Therefore, these days, profit planning has become one of the most important management tool used to plan and control business operations in any sort of business organization.

The sales plan is the most important portion of the profit planning and control for every business organization. It provides the basic management decisions about marketing. It is an organized approach for developing a comprehensive sales plan. If the sales plan is not realistic most of the other portion of profit plan will not be realistic. Therefore, sales plan is the most essential portion of the every business organization. There is relationship between sales plan and profit plan. Profit plan can not be consider without sales plan. Without effective implementation of sales plan with its significant performance the profit plan could not get success.

The production budget is the next step in building the short range profit plan for a manufacturing company. For the purpose of formulation of the profit plan, the requirements of the sales plan must be translated into the supporting activities of other major functions. Analysis and descriptive research design is followed mainly based on primary and secondary source of data. Statistical tools like percentage, mean, standard deviation, correlation coefficient etc were used to analysis the data. Similarly financial tools like CVP analysis and variance analysis were used.

The study was organized in six main chapters consisting of (I) Introduction (II) Review of Literature (III) Research Methodology (IV) Data Presentation and Analysis (V) Summary, Conclusion and Recommendations.

5.2 Conclusion

There is not complete and comprehensive budgeting system. NEBICO doesn't prepare long term strategic profit plan but prepare short term profit plan only in term of budget for each year. Lack of skilled planner and budgeting experts. Budgets are prepared on traditional basis. There is no any research and development work for improving company productivity, capacity utilization and cost control. The plans are prepared from top level and later it is communicated to the lower level. There is no planning for purchasing of materials and selling of products. Overhead budget is not prepared in a systematic and scientific manner by NEBICO. All the expenses are shown in general expenditure budget. There is no systematic classification of cost as fixed and variable components.

NEBICO has no systematic forecasting for sales and production budget. The company has not given emphasis for advertisement activity. Advertising activity is not sufficient so more and proper media should be used because advertise plays important role of sale of goods. The company has no marketing specialists. So the company is unable to develop a alternative marketing policy for sales expansion. The main reason for low capacity utilization is due to unavailability of right material of right quantity at right place and at right time. There is significant correlation between sales budget and actual sales but productions budgeted and actual production is insignificant. Mostly employees are demanding high salary. If they get, they are motivated for doing well performance.

NEBICO has no inventory policy. The finished goods inventory levels have been fluctuation each year. There is no any reward and punishment system to employees on the basis of their work. So the employees are not sensitive of their duties and responsibilities. The company has not developed performance evaluation system. The company is earning profit but the profit trend is not increasing.

5.3 Recommendations

After the detail analysis, the following points can be recommended for effective profit plans:

1. The management of the company needs to increase production and sales volume for the utilization of available capacity.
2. Sales and production budget should be prepared in the systematic way after market study.
3. Trained and qualified manpower for budgeting and planning should be hired and present manpower should be trained to develop and implement the profit plans effectively.
4. The company should consider BEP analysis while preparing sales plan, production plan and setting the price of its products.
5. Performance reports should be strictly followed to take required action timely.
6. Effective programs should be initiated to improve the productivity of labour, employees' morale should be increased and incentive plan should be started to motivated employees.
7. Reward and punishment system should be effective and based on work performance. So, internal evaluation must be followed.
8. The company should lunch various new products to fulfil the consumer demand.

9. Efforts should be made to avoid the idle working time. Supervision is necessary to watch and control the wastage of working hour of the employees.
10. The company should adopt more effective advertising system to communicate the significance of product because advertising plays most important role in the marketing.
11. The Company should adopt the effective controlling tools to minimize wasteful materials.
12. Research and development programmes should be lunched for long term profit planning.

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For Budgeted Sales (X)

(i) Mean $(\bar{X}) = \frac{X}{N}$

$$= \frac{6244.98}{5}$$
$$= 1248.996$$

(ii) Standard Deviation $(\delta) = \sqrt{1/N \quad (X - \bar{X})^2}$

$$= \sqrt{1/5\,(89430.64)}$$
$$= 133.739$$

(iii) Coefficient of Variance $(CV) = \frac{\delta}{\bar{X}} \times 100\%$

$$= \frac{133.739}{1248.996} \times 100\%$$
$$= 0.1071$$
$$= 10.71\%$$

For Actual Sales(Y)

(i) Mean $(\bar{Y}) = \frac{Y}{N}$

$$= \frac{5594.52}{5}$$
$$= 1118.904$$

(ii) Standard Deviation $(\delta) = \sqrt{1/N \quad (Y - \bar{Y})^2}$

$$= \sqrt{1/5\,(76722.121)}$$
$$= 123.873$$

(iii) Coefficient of Variance $(CV) = \frac{\delta}{\bar{Y}} \times 100\%$

$$= \frac{123.873}{1118.904} \times 100\%$$
$$= 0.1107$$
$$= 11.07\%$$

Calculation of Correlation Coefficient (r):
Karl Pearson's Correlation Coefficient between X and Y are given by

$$r_{XY} \; X \frac{uv}{\sqrt{u^2}\sqrt{v^2}}$$

$$= \frac{82400.164}{\sqrt{89430.64}\sqrt{76722.121}}$$

$$= \frac{82400.164}{299.05 \mid 276.988}$$

$$= 0.9948$$

… $r_{XY} \; X \; 0.9948$

Probable Error of r (P.E.) = $0.6745 \mid \frac{1 \, Z \, r^2}{\sqrt{N}}$

$$= 0.6745 \mid \frac{1 \, Z \, 0.9896}{\sqrt{5}}$$

$$= 0.0031$$

… r > P.E. The value of r is significant.
0.9948 > 0.0031

For Budgeted Sales (X)

(ii) Mean $(\overline{X})\ X\frac{X}{N}$

$$X\frac{6244.98}{5}$$
$$X1248.996$$

(ii) Standard Deviation $ƒδΑX\sqrt{\frac{1}{N}\quad(X\ Z\ \overline{X})^2}$

$$X\sqrt{\frac{1}{5}(89430.64)}$$
$$X133.739$$

(iii) Coefficient of Variance $(CV)\ \ X\frac{\delta}{\overline{X}}\ |\ 100\%$

$$X\frac{133.739}{1248.996}\ |\ 100\%$$
$$X0.1071$$
$$X10.71\%$$

For Actual Sales(Y)

(i) Mean $(\overline{Y})\ X\frac{Y}{N}$

$$X\frac{5594.52}{5}$$
$$X1118.904$$

(ii) Standard Deviation $ƒδΑX\sqrt{\frac{1}{N}\quad(Y\ Z\overline{Y})^2}$

$$X\sqrt{\frac{1}{5}(76722.121)}$$
$$X123.873$$

(iii) Coefficient of Variance $(CV)\ \ X\frac{\delta}{\overline{Y}}\ |\ 100\%$

$$X\frac{123.873}{1118.904}\ |\ 100\%$$
$$X0.1107$$
$$X11.07\%$$

Calculation of Correlation Coefficient (r):
Karl Pearson's Correlation Coefficient between X and Y are given by

$$r_{XY} \; X \frac{uv}{\sqrt{u^2}\sqrt{v^2}}$$

$$= \frac{82400.164}{\sqrt{89430.64}\sqrt{76722.121}}$$

$$= \frac{82400.164}{299.05 \mid 276.988}$$

$$= 0.9948$$

… r_{XY} X 0.9948

Probable Error of r (P.E.) = $0.6745 \mid \frac{1 Z r^2}{\sqrt{N}}$

$$= 0.6745 \mid \frac{1 Z 0.9896}{\sqrt{5}}$$

$$= 0.0031$$

… r > P.E. The value of r is significant.
0.9948 > 0.0031

For Actual Production (X)

(iii) Mean $(\overline{X}) = \frac{X}{N}$

$$= \frac{7217.96}{5}$$
$$= 1443.592$$

(ii) Standard Deviation $(\delta) = \sqrt{\frac{1}{N} (X - \overline{X})^2}$

$$= \sqrt{\frac{1}{5}(57767.223)}$$
$$= 107.487$$

(iii) Coefficient of Variance $(CV) = \frac{\delta}{\overline{X}} \times 100\%$

$$= \frac{107.487}{1443.592}$$
$$= 7.45\%$$

For Actual Sales(Y)

(i) Mean $(\overline{Y}) = \frac{Y}{N}$

$$= \frac{7317.93}{5}$$
$$= 1463.586$$

(ii) Standard Deviation $(\delta) = \sqrt{\frac{1}{N} (X - \overline{X})^2}$

$$= \sqrt{\frac{1}{5}(86925.611)}$$
$$= 131.853$$

(iii) Coefficient of Variance $(CV) = \frac{\delta}{\overline{Y}} \times 100\%$

$$= \frac{131.853}{1463.586} \times 100\%$$
$$= 9.01\%$$

Calculation of Correlation Coefficient (r):
Karl Pearson's Correlation Coefficient between X and Y are given by

$$r_{XY} \; X \frac{uv}{\sqrt{\;\; u^2}\sqrt{\;\; v^2}}$$

$$= \frac{68717.57}{\sqrt{57767.223} \,|\, \sqrt{86925.611}}$$

$$= \frac{68717\;.57}{240\;.348 \,|\, 294\;.831}$$

$$= 0\,.9697$$

… r_{XY} X 0.9697

Probable Error of r (P.E.) = $0.6745 \;|\; \frac{1\, Z\, r^2}{\sqrt{N}}$

$$= 0.6745 \;|\; \frac{1\, Z\, 0.9403}{\sqrt{5}}$$

$$= 0\,.6745 \;|\; 0\,.0267$$

$$= 0\,.018$$

… r > P.E

APPENDIX- I

Calculation of Standard Deviation, Coefficient of Variance and Correlation Coefficient

Rs.'00000'

Fiscal Year	Budgeted Sales(X)	Actual Sales(Y)	X- $\overline{X}$ = u	Y- $\overline{Y}$ = v	u^2	v^2	uv
2060/61	1462.91	1317.51	213.91	198.6	45757.488	39441.96	42482.526
2061/62	1228.59	1080.30	-20.41	-38.6	416.568	1489.96	787.826
2062/63	1041.57	930.86	-207.43	-188.04	43027.205	35359.042	39005.137
2063/64	1247.82	1137.27	-1.17	18.37	1.369	337.457	-21.493
2064/65	1264.09	1128.58	15.1	9.68	228.01	93.702	146.168
Total	6244.98	5594.52	$\sum u=0$	$\sum v=0$	$\sum u^2=89430.64$	$\sum v^2=76722.121$	$\sum uv=82400.164$

We have,

Mean $(\overline{X})\ X\frac{X}{N}$

Mean $(\overline{Y})\ X\frac{Y}{N}$

Standard Deviation $(\delta\delta X\sqrt{1/N \quad (X\,Z\,\overline{X})^2}$

Coefficient of Variance $(CV)\ X\frac{\delta}{\overline{X}}\ |100\%$

Suppose, X is the Budgeted Sales

Y is the Actual Sales

APPENDIX- II

Calculation of Standard Deviation, Coefficient of Variance and Correlation Coefficient

In '00000'

Fiscal Year	Budgeted Production(X)	Actual Production(Y)	X- $\overline{X}$ = u	Y- $\overline{Y}$ = v	u^2	v^2	uv
2060/61	1813.93	1554.61	47.43	111.018	2249.605	12324.996	5265.584
2061/62	1635.61	1393.73	-130.89	-49.862	17132.192	2486.219	6526.437
2062/63	1596.08	1256.70	-170.42	-186.892	29042.976	34928.62	31850.135
2063/64	1889.12	1514.29	122.62	70.698	15035.664	4998.207	8668.989
2064/65	1897.76	1498.63	131.26	55.038	17229.188	3029.181	7224.288
Total	8832.5	7217.96	∑u=0	∑v=0	$\sum u^2$=80689.625	$\sum v^2$=57767.223	∑uv=59535.433

We have,

Mean $(\overline{X})\, X \frac{X}{N}$

Mean $(\overline{Y})\, X \frac{Y}{N}$

Standard Deviation $(\delta\delta X \sqrt{\tfrac{1}{N} \quad (X\, Z\, \overline{X})^2}$

Coefficient of Variance $(CV)\, X \frac{\delta}{\overline{X}} \,|100\%$

Suppose, X is the Budgeted Production

Y is the Actual Production

APPENDIX- III

Calculation of Standard Deviation, Coefficient of Variance and Correlation Coefficient

In '00000'

Fiscal Year	**Actual Production(X)**	**Actual Sales(Y)**	**X- $\overline{X}$ = u**	**Y- $\overline{Y}$ = v**	**u^2**	**v^2**	**uv**
2060/61	1554.61	1649.36	111.018	185.774	12324.996	34511.979	20624.258
2061/62	1393.73	1380.99	-49.862	-82.596	2486.219	6822.099	4118.402
2062/63	1256.70	1261.91	-186.892	-201.676	34928.62	40673.209	37691.631
2063/64	1514.29	1518.64	70.698	55.054	4998.207	3030.943	3892.208
2064/65	1498.63	1507.03	55.038	43.444	3029.181	1887.381	2391.071
Total	7217.96	7317.93	$\sum u=0$	$\sum v=0$	$\sum u^2=57767.223$	$\sum v^2=86925.611$	$\sum uv=68717.57$

We have,

Mean $(\overline{X}) X \frac{X}{N}$

Mean $(\overline{Y}) X \frac{Y}{N}$

Standard Deviation $(\delta\delta X \sqrt{1/N \quad (X Z \overline{X})^2}$

Coefficient of Variance $(CV) X \frac{¢}{\overline{X}} | 100\%$

Suppose, X is the Actual Production

Y is the Actual Sales

APPENDIX- IV

Income Statement for the year 2060/61 to 2064/65

Details	Years				
	2060/61	2061/62	2062/63	2063/64	2064/65
(A) Sales Amount	**131750725**	**108030000**	**93086000**	**113727000**	**112858000**
(B) Variable Costs:					
Cost of Sales	80570653	77024932	57187884	62529787	65971160
Administrative Costs	2859934	2504605	2089074	3362599	3415927
Distribution Costs	4647565	5858375	4838290	5699987	6375775
Total Variable Cost	**88078152**	**85387912**	**64115248**	**71592373**	**75762862**
(C) Contribution Margin(A-B)	**43672573**	**22642088**	**28970752**	**42134627**	**37095138**
(D) Fixed Costs:					
Cost of Sales	4830321	4919132	5428000	5867489	5904598
Administrative Costs	12505106	14175822	14162952	14869500	15080973
Distribution Costs	1991813	2796447	3359267	4157138	4018190
Total Fixed Costs	**19327240**	**21891401**	**22950219**	**24894127**	**25003761**
Less: Other Income	**(958578)**	**(817627)**	**(683601)**	**(628562)**	**(867325)**
Net Fixed Cost	**18368662**	**21073774**	**22266618**	**24265565**	**24136436**
Profit(C-D)	**25303911**	**1568314**	**6704134**	**17869062**	**12958702**