CHAPTER – I
INTRODUCTION

1.1 General Background

Ever- growing economic development of a country has become first and foremost priority of every country. Every effort is directed towards the achievement of this goal. Social and economic securities with better life are the requirement of every nation. Every nation has its own resources, competency and way of functioning supported by its own internal mechanism. The present day world has made it possible to share the advantages of competency and resources of every nation with each other. Effective and efficient utilization of the resources that a country possesses and sharing the benefits of the global economy in the interest of the people have become the realities of the world. All those challenges and opportunities can be met and utilized efficiently in desired way only through the effective plan .Today, global economy is estimated to have grown by 5.1% in 2004, highest in the decade, because of the strong economic growth of U.S.A, China, India emerging market economics and other developing countries. India and China have leading growth rates in Asian countries recording 6.70%and 9.50%resply. Even though, Nepalese growth rate was near about 3.50%.. Hence, growth rate is low affecting on the wealth of nation.

China and India have a target to be a leading nation by 2025 A.D. Nepal can take advantages from such economic. Market of India and China covers 2.5 million populations. Manufacturing sectors is one of the leading sectors which accelerate the G.D.P of nation.

Nepal is landlocked country wedged between two neighboring economic powers India and China. Its economy is high cost economy due to indirect access to sea.

The economy is encapsulated by high transportation cost leading to increasing dependence on India. Nepal's trade deficit is more than 60% with India. Though Nepalese consumers are hard hit for large quantity of necessary, intermediate and luxury goods are imported from India and overseas, which are expenses. In Recent Year Chinese goods have strongly penetrated Nepalese markets for their assured quality and prices match with interest of Nepalese consumers.

Poverty is intergeneration ally transmitted rural phenomenon and an intractable problem with existence of large degree of rural indebtedness in Nepal. A high extent of poverty is attributed to lack of assets to resources to sustain household economy with large size of families. More than 32% of the people live in subsistence economy receiving less than US $1 per day. Poverty migrates from south to north in Nepal. It is more acute in hills and mountains as compared to terai and the Katmandu valley. Poverty in Nepal has a strong co-relation with ecological conditions as well as socio- economic variables such as caste, occupation, sector of employment, education level, composition of income and family size.

Due to acute poverty line, Nepalese youth are moving in search of blue color jobs in different nation like Gulf countries, Malaysia, South Korea and others parts of the world due to the fall in the effective demand for employment at home. Therefore, it is envisaged that Nepalese youth are moving from north to south and poverty moves from north to south. Hence, the major concern is that Nepalese cheap labor must be utilized in modernizing the Nepalese industry. Yes, there is a proverb that "single time food is enough as possible to development of nation but it is also not possible". Yes, today the nation has a higher remittance which sustained the economy in spite of political crises and civil war.

In spite of rugged topography and terrible high altitude lands, there become effort to attain growth and development of the total 147,000 sq. km, land area limits 17.0 percent, which is not at all time suitable for cultivation of food and cash crops throughout the kingdom, except in the Terai. Mid- hill is specifically appropriate only for tropical products. Although Nepal is rich in bio- diversity its resource base is poor. The commercial potential of bio- diversity comprising eco- system and species is not yet estimated and exact status of sub terrain resource is not known. So, industrialization is necessary to manufacture and identification of resources.

Heavy dependency is identified in agricultural farming. True and modern method of development is not yet known by Nepalese farmers. People have no jobs other than farming. More than 79.0 percent people of the nation are involved in farming. True and expected economic growth is in evitable reason but such thing is not for seen in Nepalese economy.

To reduce the over burden contents on Nepalese economy, there would require modernizing the manufacturing industry under new method of industrialization. Manufacturing industry is only mean to reduce underemployment, employment and reduce the import of goods as well as increases the internal foreign currency.

For the industrialization planning, focuses on four key considerations are essential.

1. Balanced development of various sector of the economy
2. Reasonable rate of industrial growth
3. Order of priority in which industries are established
4. Extent of industrialization act.

It is realized that industrialization can bring the social change, employment, increments in social status, true purchasing power etc.

Industrialization in developing countries requires more rapid social transformation than that which was required in the early stages of western industrialization. Thus, it remains true that "industrialization is not merely a technological revolution; it involves profound social changes which must be fully taken into account if the process is to result in higher material standard and a greater degree of human welfare". Hence, many factories, industry under industrialization can accelerate the economy, employment, social status etc. Therefore, a consent planning is an evitable course of planning for the least developing, developing nation.

1.1.1 Introduction of Himalayan Distillery Limited

Jawlakhel Distillery promotes the Himalayan Distillery Ltd., which is the largest player in Nepal's liquor market. The founding chairman, VK Shah, is a well qualified specialist in the field of alcoholic beverage and the family has been in the alcoholic business for the last six generations.

The Himalayan Distillery Ltd. is a culmination of a perfectionist's dream. It is a modern distillery but also a research unit. While constructing this distillery, the promoter have given paramount importance to selecting the best quality equipment with the sole aim of producing alcoholic beverage of superfine grade making them the benchmark of quality in the market. The distillery has started its initial operation since January 1996 (http://www.himalayandistillery.com/profile.htm).

The distillery is located in serene surrounding at the foothills of he Himalayas in the southern part of Nepal. Its registered office is situated at Parsa district, V.D.C. Lipnibirta-7, Parwanipur. The distillation unit stands as a landmark and is accessible by road. The local airport (i.e. Simra) is only minutes away and the nearest India Border Birgunj to Raxaul is 12 Kms from the factory site. The Indian Broad Guage, Railway head terminals at Raxaul boarder. The contact office of the company is stayed at Satdobato Chowk of Lalitpur.

The distillery, which in presents value, would cost around Rs. 800 million. It’s authorized capital is Rs. 900 million and issued capital is Rs. 60.18 million. The par value of the share has fixed Rs. 100 each. The company has separated 41,30,000 equity shares for issue, out of authorized capital and provisions are not made for issue of preference shares. The promoters retained 58%equity shares (i.e. 23,95,000 equity shares) and remaining 42% (i.e. 17,34,600 equity shares) shares were offered to public (Memorandum and Articles of HDL).

Himalayan Distillery, sister concern of Jawalakhel Distillery subscribers with the same philosophy of setting new benchmarks. The company's penchant for quality has seen it tie-up with Seagram's one of the well-known name in the liquor world to produce and market Seagram's Royal Stag and Imperial blue in the first phase and other brands in the second phase (http://www.himalayndistillery.com/sis.htm).

The company takes utmost care that not a drop of whisky, Vodka, Rum, Brandy and Gin leaves distillery until it has been sealed in it' s bottle ready to be drunk and enjoyed. Even the flavors used in the preparation of products are directly imported from Europe. The labels are printed in Thailand and Shrink-wraps are used. There is no room for recycled bottles which insures that the products is genuine, has not been refilled and not counterfeited.

The HDL and Seagram Manufacturing Ltd (SML) have entered into a Technical and Marketing Support Agreement in November 5, 1999. The company is producing and marketing Seagram's products in Nepal.

As per the agreement Seagram Manufacturing Ltd.(SML) has agreed to render the following services to the HDL: (http://ww.himalayndistillery.com/agreement.htm).

- Technical support for blending and bottling process including quality control and supervision,

- Brand management and marketing support services, for this purpose SML's marketing and sales executives will visit Nepal on regular basis to render the support and assist in marketing and promotional activity,
- SML will provide marketing and promotional materials to be used in the kingdom of Nepal for promoting sales of the products,
- These products will be exported to India etc.

So, it is a state of the art facility and is the only grain unit in Nepal. The company is about eight times bigger than Jawalakhel Distillery.

The company uses some raw materials to produce finished products. Some raw materials like rectified spirits and Starch are produced and re-used, others are taken from Nepalese suppliers and special materials are imported from abroad.

Firmly believing in the ethics of total quality management, the company makes their products go through a series of stringent quality control test to enhance their appeal among their esteemed and highly valued customers. Since inception, it's been their endeavor to render high quality products and services to customers. To achieve quality objectives, each one is always on the look out to tap the latest technology doing rounds worldwide.

Keeping a close watch on the winds of changes and insuring products innovations, the company has achieved an enviable reputation in a very short period of time. All the while carrying forward the rich and tremendous legacy of sister company Jawalakhel Distillery Pvt. Ltd, of excellent, commitment and perfection are manufactured (http://www.himalayandistillery.com/technology.htm).

Product Lines of the Company

The company manufactures multiple products. The product lines of the company are shown in the following table:

1	ENA	2	Bonni Charles
3	Royal Stage	4	Ultimate
5	Emperial Blue	6	Play Boy
7	Ruslan White	8	Ruslan Vodka
9	Cleopatra	10	Dry Gin
11	Triple Cross	12	Blue Diamond etc.

Source: Annual Reports of HDL (FY 2060-61 To FY 2064-65)

1.1.2 Contribution of Manufacturing Sectors in Nepalese Economy

Various industrial policies promulgated since the sixties encouraged private sector to participate in industrial activities. The industrial policy 1992 embarked upon encouraging industrial development through the operation of market forces, substance reduction in licensing and strengthening support institutions. The industrial enterprises Act 1996 reduced tax incentives but created new avenues for enhancing private sector participation.

The share of manufacturing sector in GDP estimated to be less than 10% declined to 8.097% and 7.98% in the F/Y 2004/05, 2003/04 reply. This decline largely attributed to on going conflict engulfed by recursion in the economy. The private sector provided employment to 313,123 persons including workers, administrations and technical, composing 191,853 persons from large manufacturing establishments and 121,270 persons from small manufacture establishment as of census 2001 (BS, 2002).

The manufacturing and small manufacturing establishments were largely undertaken by private sectors. The state owned enterprises run by the government are also in the process of privatization. The major industrial groups operating under private sector are involved in various industries relating to food, beverage, tobacco, textile, leather, and leather products footwear, wood and wood products, paper and paper products, chemical products, rubber products, manufacture of curtly, hand tools etc. and manufacturer of electrical, industrial machinery apparatus and appliances.

In addition to large and small size manufacturing units, cottage and industries have made revenue contribution for the country. A total of 10 industries are in the hands of private sector and are in operations at a very small scale. This sector has been instrumental to address the problem of unemployment and poverty and to boost up export trade of the country. Hand looms, woolen carpets, hand knife products, woolen products, pashmina, handmade paper, ornaments and jewelries, artistic products, rural tanning and leather goods, cargo goods etc. are the few examples which fall in this category. Total firms registered under this sector during the F/Y 2001/02 were 9890 with total investment of Rs. 7720 million. In the first eight months of the F/Y 2002/03 additional 5116 industries of this scale have been registered with the capital investment of Rs. 3000 million.

1.2 Statement of the Problem

Manufacturing industries play vital role in the economic growth of developing countries. It is evidence that savings of foreign currency can be made by reducing imports of daily usage goods. Hence, the fund available can benefit to establish the manufacturing industry. it will help to make conducive environment for the manufacturing sectors. Today, identification of scarce resources inside the country is one of the challenges and other challenges are to use management tools for efficient utilization of scarce resource.

Today, modernization of industry can benefit the efficient use of resources. Nepal has unfavorable balance of payments.

Globalization is one of important phenomenon which must be enjoyed so frequently. Nepal has entered into BIMESTIC, SAFTA and in WTO. Nepal has adopted liberal economy. Hence, to strengthen the economy has become a big challenge. It should be attainable after continuous use of management tools. Budgeting is one of the important management tool defined as a "comprehensive and coordinated plan, expressed in financial terms, for the operations of an enterprise for some specified period in the future.

Private investment has so much prominently found in Nepal. Reviewing the history, manufacturing industry is backbone of countries. Nepal has a cheap-labor, cheap resources. Hence, effective utilization of resources makes product prize competitive.

1.3 Objectives of the Study

The developing countries are emphasizing industrialization, out of which, manufacturing is one of the sector which helps to made industrialization. Hence, the study has following objectives.

1. To examine the practice of PPC in Nepalese manufacturing organizations.
2. To examine the private contribution require meeting with BIMESTEC, W.T.O and other regional co-operations and treaties.
3. To recommend the findings during research investigation.

1.4 Limitations of the Study

The study is concerned with the use of profit planning and control in manufacturing companies. The study is not free from the following limitations.

1. The study does not explore economic aspects and political issues.
2. The study doesn’t care non- trading concerns.

3. The research is based on secondary data.
4. The Study is made on use of the profit planning and control in specific industries

1.5 Organization of the Study

The study has the purpose of examining, analyzing and interpreting the profit planning and control system in fifty respondent manufacturing companies. The study is organized within the framework of fifty respondent manufacturing companies.

Chapter - I Introduction

It contained a brief history of development of manufacturing sectors in Nepal. It also covered the economic growth attained during the periods onward 2046 B.S.

Chapter -II Review of Literature

The chapter contained the theories about profit planning and its tools such as, sales budget , production budget, material purchase budget, labor budget, overhead budget, capital expenditure budget, cash receipt and disbursement budget, activity based budgeting, zero based budgeting, flexible budgeting. The chapter also contained previous research performed by others**.**

Chapter -III Research Methodology

The chapter contained the tools and methods used to gather the data and procedure used to analyze as well interpreter the data.

Chapter -IV Data Presentation and Analysis

The chapter contained the presentation of the data gathered from primary sources. The result drawn after analysis was arranged in table formats. The techniques applied were also shown. Decisions were attached together in each table. Major findings were drawn together with test.

Chapter -V Summary, Conclusion and Recommendations

The chapter contained summary of the research topic. It helps to overview the subject matter. Conclusion and recommendations about profit planning practices in manufacturing sectors were presented.

CHAPTER - II

REVIEW OF LITERATURE

2.1 General Concept of Profit Planning and Control

The growth and success of every organization depend upon the profit earned by it. Usually profit does not just happen. Profit is the output of well manage activities. When management performs its activities in an organized manner for profit of an organization then it is known as profit planning. Profit planning is a major component of overall planning process of an organization. It is a plan of the firm's expectation and is used as a basis of measuring the actual performance of manager and their units. Profit planning is a comprehensive and coordinated plan express in financial terms for the operation and resources of an enterprise for some specific period in the future.

Profit

Profit is the primary measure of success of all business enterprise. Although in modern days many alternatives objectives of firm have been used, but no organization has been able to completely wipe out the profit maximization objectives or the objective of earning reasonable rate of profit. Profits are the main test of the business enterprise's performance. Simply profit starts from the excess of income over cost of production, but the term profit is very controversial and there are several different interpretation about this “an economist will say that the profit is the reward of efficient labor has produced and that it provides a base for negotiating a wage increase. An internal revenue agent might regard it as a base for determining income tax. The accounts will define it simply the excess of firm's revenue over expenditure. Management thinks profit as: a tangible expression of the goals it has set for the firm.

a. A measure of the performance towards the achievement of goals

b. A means of maintaining the health, growth and continuity of the company.

Economist theories on profits may be put in three broad groups. The first looks upon profit as the reward for bearing risk and uncertainties; the second views profits as the consequence of frictions and imperfection in competitive adjustments of the company to dynamic changes; the third sees profit as the reward for successful innovation (Dean, 1977:6).

Profit is the reward for bearing risk, of enterprise, the risk of venturing in business, the risk of owning sometimes in hope of selling it later However all the economists do not agree that profits arise due to risk and uncertainties.

"For the dynamic manufacturing industries, the most suitable definitions are profits depict them as the gains in national income that are generated by the managerial drive for distinction through creative innovation" (Dean, 1977:12).

F. B. Hawley defines 'profit' as the reward for taking business. J. M. Keynes held the view that profits resulted from favorable movements of general price level.

Planning

Every business needs a detailed plan of the activities, which are to be performed. Planning is a systematic way to achieve the pre-determined objectives and targeted goal of business. By the mean of planning process, one can determine what is going to do. Planning means deciding in advance what is to be done in future. It is a method of thinking out acts and purpose before hand. Planning starts from forecasting and determination of future events. It is the first essence of management and all other functions are performed in advance of doing actions in future. Planning is the process of developing enterprise objectives and selecting future course of action to accomplish them. It includes

a. Establishing enterprises objectives

b. Developing premises about the environment in which they are to be accomplished
c. Selecting a course of action for accomplishing the objectives
d. Initiating activities necessary to translate plans into action and
e. Current re-planning to correct current deficiencies (Welsch, 1992:3)

Planning is continuous process to be performed in organization. In the passage of time an organization should make the new plans and re-plans of the existing plans.

A forecast is prediction of future event, condition or situation. Where as plan includes a program of intended future actions and desired results. Forecasting predicts the future events in such a manner that the planning process can be performed more accurately.

“When company starts to develop policy then it wills starts, the forecasting of the company plan. This means planning the strategy and tactics to be used in achieving the objectives should be based on forecasting and policy” (Halsall, 1974:4).

John J. Hampton in his words, planning is the specific process of setting goals and developing way to reach them. Stated another way, planning represents the firm's efforts to predict future events and be prepared to deal with them.

Planning is an imagination, foresight, sound judgment etc. that is mental and intellectual process. The top level, medium level and lower level manager or all level managers participate in planning task, but planning differs as per the level. Planning is deciding in advance what is to be done in future. Planning is not only to make plan, rather it should be implemented by better utilization of resources for targeted & predetermined goal achievement.

Planning is the feed forward process to reduce uncertainty about future. The planning process is based on the conviction that management can plan its objectives and condition that state of the enterprise that determines its density after analyzing and defining planning concepts, the following features of planning can be drawn:

- Planning is goal oriented task.
- Planning is primary function of management.
- Planning includes all managerial activities.
- Planning is an intellectual process of management.
- Planning includes both short range and long range time span
- Planning is used to reduce the uncertainty about future.
- Planning is directed towards efficiency.
- Planning is for to achieve pre-determined objectives and targeted goals.

For successful planning, following condition requires in the business organization:

- Effective administration.
- Effective Management Information System (MIS)
- Reliable statically and other data.
- Central planning authority.
- Specific objectives and targeted goals and their priority basis.
- Strong and stable government and policy.

Planning is performed for a specific period. It is divided into two types based on the period covered.

2.1.1 Strategic Long Range Planning

Strategic planning is a top management function. Mission and overall objectives and policies are formulated by top management .A long range planning is closely concerned with the concept of corporation as a long living institution. It refers to the selection of company objectives and most likely to accomplish those objective. Long range planning cover 5-10 years varying with the objective and type of the organization. It is one of the most difficult time span involved in planning as many problems of short range planning can be traced to the absence of clear sense of direction and the practice which a compressive long range plan practices.

The main purposes of long range planning are:-

- To provide a clear picture of how the company is handled.
- To keep enterprise in strong position.
- For evaluating management personnel.
- To expedite new financing.
- To be alert towards new techniques.
- For focusing long-term opportunities.

2.1.2 Tactical Short Range Planning

The short range planning is selected to conform to fiscal quarters or years. Because of the practical need for comforting plans to accounting periods and some what arbitrary limitations of the long range it is usually based on the prevailing beliefs that the degree of uncertainty over long period makes planning of questionable value.

Tactical short range plans cover about a year and are less formal and detailed a long range plans. It is done at all levels and involves directing the organization activities, overall strategies objectives consisting with the organization mission and policies. Single plans are developed for unique situation so it provides consistency for on going operations.

The main purpose of tactical planning is:

1. To acquire and facilitate resources, personnel and raw materials.

2. To control cost through planned acquisition and avoid higher cost purchasing.
3. To create new opportunities through assessing the environment and evaluating resources.
4. To avoid problems related to red tape.

2.1.3 Profit Planning and Control

Profit plan is estimation and predetermination of revenues and expenses that estimate how much income will be generated and how it should be spent in order to meet investment and profit requirements. In the case of institutional operation it presents a plan for spending income in a manner that does not result in a loss.

Hence Profit planning represents an overall plan of operations, covers a definite period of time and formulates the planning definitions of management.

"Profit planning is a well though out operational plan with its financial implications expressed at both long and short range profit plans and budgets in the forms of financial statements, including balance sheet, income statement and cash and working capital projections" (Matz and F.usury, 1985:472).

Whenever any person translates his operating plans into financial terms and used his estimates of the probable income, expenses and profit as a guide in planning and conducting the operation of a business, he is in fact profit planning.

Profit planning is a part of an overall planning process and is an area in which the finance functions plays a major role.

The term comprehensive profit planning and control is defined as a systematic and formalized approach for performing significant phase of management planning and control function.

Especially it includes

1. The development and application of board and long range objectives for the enterprise.
2. The specification of enterprise goals.
3. A long range profit plan developed in board terms.
4. Short range profit plan detailed by assigned responsibilities (division, products and projects)
5. A system of periodic performance reports detailed by assigned responsibilities, and
6. Follow up procedures

The term comprehensive profit planning may be broadly defined as a systematic and formulated approach for accomplishing the planning, coordination and control responsibility of management.

In modern age, profit plan and control is a very important tool of management and decision making for any business organization. I.M. Pandey gives very appropriate and suitable definition of PPC. In his words, “a profit planning or budget is the formal expression of the enterprise's plan and objectives, stated in financial terms for a specified future period of time.” Profit planning and control represents an overall plan of operations. It covers a definite period of time and formulates the planning decision of management.

“Profit planning in fact is a managerial techniques and a profit plan is such a written plan, in which all aspects of business operation with respect to definite future period are included. It is a formal statement of policy, plan, objectives, and goal established by the top management in respect of some future period. Profit planning is a predetermined detailed plan of action developed and distributed as a guide to current operation and as a basis for a subsequent evaluation of performance" (Gupta, 1992:521).

"Profit planning is a comprehensive plan expressed in financial terms by which an operating program is effective for a given period of time. Business managers are continually involved in planning, organizing and controlling the operation of both large and small business organizations" (Bajracharya, 2004:344).

The profit planning and control is used for the development and acceptance of objective and goals and moving an organization efficiently, systematically and timely to achieve the predetermined objectives and targeted goal. It is not a separate technique that can be thought of an operated independently of the total management process. Rather the broad concept of profit planning entails integration of numerous management approaches and techniques. Profit planning and control can be reviewed as one of the major valuable approaches that have been developed to facilitate effective performance of the overall management process.

"Success is not matter of chance. It happens through a systematic planning. In business profit does not just happen. It is to be managed .profit planning is the numerical planning for profits covering the areas of future revenues and costs" (Bajracharya, 2004:344).

There are three most relevant aspects of the PPC, they are:

a. PPC required major planning decisions by management
b. PPC entails pervasive management control activities and

c. PPC recognizes many of the critical behavior implications throughout the organization.

“The main purpose and principle of profit planning are as follows:

- To provide a realistic estimation of income and expenses for a period and of the financial position at the close of period, detailed by areas of management responsibility.
- To provide a coordinated plan of action, this is designed to achieve the estimates, reflected in the budget.
- To provide a comparison of actual results with those budgeted and an analysis and interpretation of deviation by areas of responsibility to indicate courses of corrective action and to lead to improvement in procedures in building future plans.
- To provide a guide for management decision in adjusting plans and objectives as uncontrollable condition change.
- To provide a ready basis for making forecasts during the budget period to guide management in making day to day decisions (Keller and Lferrara, 1996:389).

2.1.4 Decision Making on Profit Planning & Control

a. Manipulation of inflows
b. Manipulation of outflows
c. Generation of Profit

Inflows Mean Money Medical Machine Managed Manipulation Outflow goods services. To attain long range objective of an organization (to maximum profit or return on investment), management has to take proper decision on manipulation of inflow and outflow through management process (planning, coordinates, activating and control).

Planning Inflow and Outflows of and Enterprises

Managerial Manipulation of Inflow Outflow People Capital Material Products Services Contribution Planning & Control Enterprises Operation Planning Decision Activating Decision Control Follow up.

Profit Investment Return on Investment

To attain long range objective of an organization (to maximum profit or return on investment), management has to take proper decision on manipulation of inflow and outflow through management process.

Decision Must Show Self Confidence

Decision making requires

a. Courage
b. Imagination
c. Creation
d. Seize of positive opportunity
e. Escape of the on set of decline

Decision Making Involves

a. Manipulation of the relevant controllable variables
b. Taking advantages from the situation of relevant non controllable variables

Controllable Variables

These variables that can be actively planned and manipulated by management decision.

Uncontrollable Variables

Those variables that cannot be manipulated or influenced by managerial decisions. They are external to business environment.

The Essence of Managerial Control

As with planning and controlling, control is performed continuously. Therefore, there is control process that should always be in operating environment of enterprise. Controlling can be defined as a process of measuring and calculating actual performance of each. Organizational component of an enterprise and imitating corrective action when necessary to ensure efficient accomplishment of enterprises objectives, goals, policies and standard for planning achieves the objectives, goals, policies and themes of an enterprise.

Control is exercised by using personal evaluation, periodic performance reports and special reports. Another view that identifies the types of control as follows:

1. Preliminary Control (Feed forward): Used prior to action to ensure that resources and personnel are prepared and ready to start activities.
2. Concurrent Control (Usually provide performance reports): Monitoring (by using personnel Observation and reports) of current activities to ensure that goals are being met, and policies and procedures are being followed during action.
3. Feedback Control : Expert action (pre planning for using on part result to control future activities) (Weslch, 1999:15).

Management control is carried on within the environment established by strategic planning. Its primary emphasis is on carrying out the policies resulting from strategic planning, rather than on setting them, its time span tends to be short to intermediate term. The activity is some what rhyme in its pattern of activity and scheduling. Because of the pervasive nature of tax function, the participation of management at all levels of the organization is usually required. Its goals are tangible within the broad framework of overall organization objectives and its focus is on line management which participates in the formulation of terminal plan and the criteria by which the line manager performances is to be measured (Lynch, 1983:140).

The Fundamental of Profit Planning

The concept of budgeting was originally established with the function of an accountant. At its origin the function was assigned to the accountant. But in modern day budgeting is given much more importance and is regarded as a way to management and in more important sense is regarded as a base technique of decision making and is given the home of profit planning & control program.

The Mechanism of Profit Planning and Control

Mechanism of profit planning includes the matter related with design of budget schedules, clerical computation of such schedules and routine computation and checks of such schedules.

In Modern day budgeting is given much more importance rather as a way of management and in more important sense is regarded as basic techniques of decision making and is given of profit planning & control program.

A well established and well understood profit planning and control concept leads an organization to ultimate success. The review of planning and control is more understand by as follow:

1. **The Techniques of Profit Planning & Control**

Those approaches like forecasting sales volume, a frequent application in operation research (approach in resolving the sales, production, inventory problems, break-even-analysis, resources determination) which can be developed and used for managerial decision making process is known as techniques.

2. **The Fundamentals of Profit Planning and Control**

The fundamentals are concerned with effective application of the theory at management process it is applied for desirable management orientations.

Following are the some of the important fundamentals of profit planning and control.

a. Managerial Involvement and Commitment
b. Organizational Adoption
c. Responsibility Accounting
d. Full Communication
e. Realistic Expectation
f. Timeless
g. Flexible application
h. Behavior management
i. Follow up

2.1.5 The Profit Planning & Control Process

Introduction

Regardless of the type of endeavor, the management task is essentially the same that is to create and maintain an internal environment in which individual working together as groups attain efficient performance in conformity with the broad objective of the enterprises. The environment should motivate individuals to make their maximum contribution to the efforts of the groups. Because economic, political, social and technological factors operating in the external environment have a significant impact. The management must understand and try to harmonize the internal environment with them.

The management generally adopts one of the basic view points.

Management by Objectives (MBO)

This is a management view point that emphasizes the planning function. The specification of enterprises objectives, goals, and plans is viewed as the aspiring race that integrates financial resources, production activities and performance by people. It leads to the control function.

Management Control System (MCS)

This is a management view point that emphasizes the control function. These view points first specify the necessity for purpose of control (Welsch, 1999:72).

2.1.6 Process of Profit Planning

A profit-planning program includes more a traditional idea of a periodic or master budget. The term comprehensive means (a) The application of the broad concept of profit planning and control to all phases of operation in an enterprises and (b) The application of total system approach.

The profit planning process should involve periodic consistent and in-depth re-planning so that all the aspect of operations is carefully reexamined and re-evaluated.

There are eleven steps in profit planning processes which are discussed below:

a. Identification and Evaluation of External Variables

The variable- identification phase of the PPC process focuses on (a) identifying and (b) evaluating the effects of the external variables. Identification also involves separate consideration of variables that are non-controllable and those that are controllable. This means that management planning must focus on how to manipulate the controllable variables. Moreover there must be managerial planning of how to work with the non-controllable variables. By relevant variables we mean those that will have a direct and significant impact on the enterprise. For long business with a national market, the relevant variables would be broad in scope, whereas a small business would be concerned primarily with regional and local variables operating within the narrow environment of the enterprise. Analysis and evaluation of the environmental variables must be a continuing concern of management. This activity should involve all executive managers, who in turn should export various staff groups to provide data and recommendations. A particularly significant phase of this analysis includes an evaluation of the present strength and weakness of the enterprise.

b. Development of the Broad Objectives for the Enterprises

On the basis of evaluation of the enterprises and practical assessment of strength and weakness of the enterprises management is in a position to develop the realistic objective of the enterprises.

Development of the broad objectives of enterprises is a relevant variable and an assessment of the strength and weakness of the organization executive management can specify this phase of profit planning. "The statement of broad objective should express the mission, vision and norms of the enterprise.

c. Development of Specific Goals for the Enterprise

It should express the mission, vision and rational attitude of the enterprises. It is a responsibility of executive management and also can specify or restate the profit planning process on the basis of evaluated variables and an assessment of the strong and weakness of the organization. The purpose of phase is to provide enterprise. Identify continuing of purpose and definition.

d. Development and Evaluation of Company Strategies

The strategies are the basic thrust, ways and tactic that will be used to attain planned objective and goals. A particular strategy may be short or long term. The purpose of development of strategies is to find the best alternatives for attaining the planned broad objectives and specific goals. It focuses on how to Plan. Here is some example of basic strategies.

- Increase long-term market penetration by using technological to develop new products and improve current products.
- Emphasize produce quality and price for 'top' of the market.
- Market with low price to expand volume.
- Use both industrial and local advertising programs to build market.
- Improve employee moral and productivity by initiating a behavior management Program.

e. Executive Management Planning Instructions

The process involves communication of the substantive plan to middle and lower management levels. It explains the broad objectives, enterprise goals, enterprise strategies, and any other executive management instruction needed to develop the strategic and tactical profit plans. It is also called the statement of planning premises or the statement of planning guidelines.

The executive planning instructions, issued by top management, communicate the planning foundation that is necessary for the participation of all levels of management in development of the strategic and tactical profit plans for the upcoming budget year. Executive leadership is fundamental in developing and articulating this planning foundation, including the formulation of relevant strategies. Consequently, at this point in the planning process, the foundation has been established to articulate the broad specific objectives of the enterprise and the strategies that facilitate their attainment.

f. Preparation and Evaluation of Project Plans

Periodic and Project plans are different in nature and function, project plan encompass variable time horizons, because each project has a unique time dimension. Project plans encompass such items far improvement of present production, new and expanded physical facilities etc. The natures of project are such that they must be planned as separate units. In planning for such a project the time span considered most normally is the anticipated life span of the project. The preparation and evaluation of current and future project plans are essentially depends on a formal plan basis.

g. Development and Approval of Strategic and Tactical Profit Plans

When the managers of the various responsibility centers in the enterprise receive the executive management planning instructions and the project plans they can begin intensive activities to develop their respective strategic and tactical profit plans. The strategic long-range plan and the tactical short-range profit plan are usually developed concurrently. It is possible that executive management or the chief financial executive will develop the strategic and tactical profit plans. This approach is seldom advisable because it denies full participation in the planning process by middle managers. Lack of participation can cause unfavorable behavioral effects.

h. Implementation of Profit Plans

Implementation of management plan that have been developed and approved in the planning process, the management function of leading subordinates in attaining enterprise objective and goals. Thus effective management at all levels require that enterprise objectives, goals, strategies, policies be communicated and understood by subordinates. There are many facts involved in management leadership. However, a comprehensive profit-planning program may subordinate on performing this function, plan strategies, and policies developed through significant participation, establish the foundation for effective communication. The plan should have been developed with the managerial convention that they are going to be met or exceeded in all major respects. If these principles are effective in the development process various executive and supervisor will have a clear understanding of their responsibilities and the expected level of performance.

i. Use of Periodic Performance Reports

As profit plans are being implemented during the period of time specified in the tactical plan, periodic performance reports are needed. This performance reports are prepared by the accounting department on a monthly basis, also some special performance reports are prepared more often on an "as needed basis."

A clear distinction must be made between external and internal financial reports. Internal reports can be further classified as (a) statistical reports that give the basic quantitative internal statistics about the operation of the enterprise. (b) Special managerial reports about nonrecurring and special problems; and (c) Periodic performance reports. This later reports focus on dynamic and continuous control tailored to the assigned managerial responsibilities.

j. Use of Flexible Expenses Budgets

The flexible expenses budget is also referred to as the variable budget, sliding scale budget, expense control budget, and formula budget. Flexible budget give realistic information about expenses that make it possible to compute budget amounts for various output volumes or rates of activity in each responsibility center.

k. Implementation of Follow-Up

Performance reports are the bases for effective follow-up action. This is a Part of effective control. It is important to distinguish between cause and effect. The performance variations are effects (the results); the management must determine the underlying cause, the identification of causes is primarily a responsibility of line management. Analysis to determine the underlying causes of both favorable and unfavorable performance variances should be given immediate priority. In the case of unfavorable performance variances, after identifying the basic causes, as opposed to the results, an alternative for corrective action must be selected. Then the corrective action must be implemented. In the case of favorable performance variances, the underlying causes should also be identified (Welsch, 1999:75).

Table 2.1

Overview of Profit Planning and Control

Management Function	Sequential Phase of the PPC Process	Primary Responsibility
Planning	**External Relevant Variables:** Identity and Evaluate	Executive Middle Mgmt
	Broad Objectives of the Business: Develop or Revise	
	Specific Enterprise Goals: Develop Consistent with item 2 above	
	Enterprise Strategies: Specify major trusts to attain the objectives and goals	
	Executive Management Planning Instruction: Specify Planning Premises (or guidelines) for managers (based on item 1-4 above)	
	Project Plan: Develop or overate for each project	
	Strategic Profit Plan (Long Range): Develop for 3.5 or 10 years	
Leading	**Tactical Profit Plan (Short Range):** Develop for upcoming year	All Mgmt Levels
	Implementation of Profit Plans: Implement throughout the budget year	
Controlling	**Performance Reports:** Prepare monthly responsibility	All Mgmt Levels
	Follow up: Provide feedback, takes corrective action and re-plan.	

Outline of the Components of a Typical PPC Program

A. The substantive Plan

1. Broad objectives of the enterprises
2. Specific enterprises goals
3. Enterprises strategies
4. Executive management planning instruction (planning premise)

B. The Financial Plan

1. Strategic Long-Range Profit Plan:

a. Sales, cost, and profit projections
b. Major projects and capital additions
c. Cash flow and financing
d. Personnel requirements

2. Tactical Short-Range (Annual) Profit Plan:

a. Operating Plan:

Planned Income Statement:

i. Sales plan
ii. Production (or merchandise purchases) plan
iii. Administrative expense budget
iv. Distribution expense budget
v. Appropriation-type budgets (e.g., research and development, promotion, advertising)

b. Financial-Position Plan

Planned Balance Sheet

i. Assets
ii. Liabilities
iii. Owners' equity

c. Cash Flow Plan

C. Variable Expense Budgets

Output-Expense Formulas

D. Supplementary Data

(e.g., Cost-volume profit analyses, Ratio analyses)

E. Performance Reports

(Including any special reports)—each month-end and as needed.

F. Follow-up, Corrective Action, and Preplanning Reports

As well as the outline of PPC component is defined as follow:

Substantive Plan

It represents the broad objectives, strategies, specific plan and programs of the organization and by the concurrent commitment of management to long range accomplishment of there objectives and plans. It can be categorized as the "Prose part" of the plan rather than the number part of the plan.

Financial Plan

Quantifies the planned financial results of implementing managerial objectives, planned strategies, plans and policies. The financial plan then represents a translation into financial terms of objectives, goal and strategies of management for specific periods of goals.

Variable Expenses Plan

Under the guideline of sub plan & financial plan, there would be preparation of expenses plan i.e. called variable expenses plan.

Supplementary Data

It reveals the necessary in formation require for preparation of plan like by understanding break even point of company and company is financial ratio.

Performance Reports

It includes comparison of developed plans and actual achievement. And it provides the information either the goals is achieved or not. As well as it helps to control the expenses therefore, it is a necessary component of PPC.

Follow up, Corrective Action and Re-planning Reports

A developed plan helps to follow the goal strategies to achieve the target. As well as necessary action to achieve the set targets and re-planning necessary achievements therefore a significant combination is require to achieve the objectives of management.

To prepare comprehensive profit plan, there would necessary to prepare following plans like: Sales Plan, Production Plan, Material Purchase Plan, Labor Plan, Overhead Expenses Plan, Capital Expenses Plan, CVP Analysis, Cash Receipt & Distribution Budget, Activity Base Budgeting, Zero Base Budgeting and Flexible Expense Budget. These are describing one by one continuously.

2.2 Sales Budget

Introduction

Business Endeavors have various specific objectives. Out of them, profit is an important objective. Sales Budget is prepared after a brief preparation of sales plan. Under sales plan there should be a continuous survey of demand and supply of products. Sales plan ensures either to penetrate the new market, or launch new products. It is one of the important tools among the profit planning control (budgeting). It reveals the idea to prepare the other budgets like production budget labor budgets, overhead budgets, capital expenditure budgets, cash receipt & deposit budgets etc. This is a serious task to control over market. It can be made possible by survey, looking the activities of competitors, perception of consumer about products. Sales strategies are building up after a brief survey of these things.

Hence sales budget is a backbone of profit planning & control tools. It can be prepared after a brief survey of market, such that sales forecasting or planning techniques with coordination to responsible management who has full responsibility.

2.2.1 Meanings

Comprehensive Sales Planning

The sales planning process is necessary component of PPC because (a) It provides for the basic management decisions about marketing and (b) Based on those decisions, it is an organized approach for developing comprehensive sales plan. If the sales plan is not realistic, most if not at all of the other parts of the overall profit plan also are not realistic. Therefore if the management believes that a realistic sales plan cannot be developed, there is a little justification for PPC. Despite the views of a particular management, such a conclusion may be an implicit admission of incompetence. Simply, if it is really impossible to assess the future revenue potential of a business, there would be little incentive for investment in the business initially or for continuation of it except for purely speculative ventures that most managers and inventors prefer to avoid.

A comprehensive sales plan includes two separate built related plans- the strategic and tactical sales plan. A comprehensive sales plan incorporates such a management decision as objectives, goals, strategies and premises. These translate into planning decision about planned volume (units or jobs) of goods and services, prices, promotion and selling efforts.

The primary purpose of sales plan is (a) to reduce uncertainty about future revenues (b) to incorporate management judgments and decisions into the planning process (c) to provide necessary information for developing other elements of a comprehensive profit plan (d) to relate management control of sales activities (Welsch, 1999:172).

Therefore a comprehensive sales plan encompasses both revenue (that is sales volume) and selling cost components for profit planning & control purpose, it is useful to view sales planning as encompassing a sellers of components parts that can be as follow.

Establish the foundation by developing.

1. Enterprise Objectives
2. Enterprise strategies
3. Sales forecast Build the sales plan by developing goals specified
4. A promotion and advertising plan
5. A selling expense plan
6. A marketing plan

The primary objective of a sales plan is to express the best judgment of the management on potential future sales revenue based up on

1. Present knowledge of the company
2. The environment
3. The impact on the firm of enterprise objectives
4. Management strategies, both in the long run & short run

- **Enterprises Objectives**

It provides the broad goals around which the sales plan is developed.

- **Managerial Strategies**

It provides a basis for judgments of the impact of aggressive company actions.

- **Sales Forecast**

It provides technical projections of customer demand under certain assumptions.

- **Promotion, Advertising, Selling Plans**

Express planned commitments of resources necessary to attain the volume of business included in the final marketing plan.

- **Marketing Plan**

It represents sales volume and sales revenue expectation to be generated by the planned commitment of company resources in the sales effort (Welsch, 1972:75).

Sales Planning may be Strategic Sales Plan and Tactical Sales Plan

Strategic sales plan consist with five, ten years of planning and tactical sales planning consists with quarter, monthly and yearly planning.

Components of Comprehensive Sales Planning

A comprehensive sales plan should satisfy the requirements of, and be consistent with, the overall comprehensive PPC program. The components of comprehensive sales planning are as,

Table 2.2

Components of Comprehensive Sales Planning

S.N.	Components	Strategic Plan	Tactical Plan
1.	Management policies and assumptions	Broad and general	Detailed and specific for year
2.	Marketing Plan (Sales and services revenues)	Annual amounts; major groups	Detailed; by products and responsibility
3.	Advertising and promotion plan	General; by year	Detailed and specific for year
4.	Distribution (Selling exp. Plan)	Total fixed and total variable expenses; by year	Fixed and variable exp. by month and by responsibility

Developing a Comprehensive Sales Plan

Starting with the foundation of a comprehensive sales plan, a basic question is: How should a company proceed to prepare a comprehensive plan? The components of the plan listed provide guidance that can be generalized for discussion purposes as follows:

Step 1: Develop management guidelines specific to sales planning including the sales planning process and planning responsibility.

Step 2: Prepare one (or more) sales (market) forecast consistent with specified forecasting guideline including assumptions.

Step 3: Assemble all the other data that will be relevant in developing a comprehensive sales Plan.

Step 4: Based on steps 1, 2, and 3 above, apply management evaluation and judgment to develop a comprehensive sales Plan.

Step 5: Secure managerial commitment to attain the goals specified in the comprehensive sales plan (Welsch, 1999:176).

2.2.2 Sales Forecasting:

It is the preliminary stage of the sales planning. A sales forecast, as distinguished from a sales plan, is a technical projection of the potential customers demand for a specified time horizon and with specified underlying assumption. A sales forecast is converted to a sales plan for which management has to bear on it with judgment, planned strategies, commitments of resources, and the managerial commitment to aggressive actions to attain the sales goals.

Though, the technically trained staffs involved in analyzing the various models such as trend fitting, correlation analysis, mathematical models, exponential something, and operations research techniques. Today, computer programs are also involved in analyzing the complex data.

Therefore, the importance of sales forecast is towards the attainment of managerial activity for developing a sales plan. It is the preliminary step feels into the planning process, that management judgment and strategy are brought to bear. The forecast is revised in the planning process to take into account management objectives. Strategies and resources commitment (advertising, promotion and other sales efforts) so that a realistic sales plan results.

Sales forecast is essential for the direct commitment in such areas like plant expansion, prices change, promotional program, production scheduling expansion or contraction of monetary activities and other resource commitments. Hence, sales forecast is the initial stage for the developments of sales plans.

2.2.3 Methods of Projecting Sales

Although projecting sales is a difficult task. So there are various approaches involved in classification of projecting sales. Under the first classification there would be two approaches. One is the causal approaches; under this approach the underlying variables that have a causal influence on future sales are identified. In casual variables there are 1) Causal Variables over which the company has no control, such as population, gross national product, and general economic conditions; 2) causal variables over which the company has control, such as product lines, prices, advertising and promotion expenditures, size of the sales force and sales areas.

The second category may be designated as the non causal approach; under this approach historical sales of the company are analyzed in depth and an expression of the historical events are plotted in order to project future sales.

Another useful classification of method involves two approaches, they are direct and indirect. Under the indirect method of projecting future sales, industry sales are projected, followed by a projection of the company's share of the industry total. In contract, the direct method involves straight forward approaches to develop company sales estimates without a proper projection for the industry as a whole. Both the direct and indirect method may utilize the causal or non causal approaches.

The third classification of method of projecting sales may be generally outlined as follows:

1. Judgmental Methods (Non Statistical)
   a. Sale force Composite
   b. Sales division supervisors Composite.
   c. Executive opinion method (Welsch, 1972:185)
2. Statistical Methods
   a. Economic rhythm method (trend analysis)
   b. Cyclical Sequence method (correlation analysis)
   c. Special historical method
   d. Cross cut method
3. Special Purpose Method
   a. Industry analysis
   b. Product line analysis
   c. End use analysis
4. Combination of Methods (Welsch, 1972:185).

2.2.4 Control of Sales and Related Expenses

The development of and top management commitment to a realistic sales plan provides the foundation for effective control of sales efforts and distribution expenses. The sales goals (volume and revenue in rupees), promotion plans (Planned expenditures) and distribution activities (exp.) are basic goals. These are relatively broad goals, which suggest the need for numerous short term and specific standards as part of the total control effort of the management. Examples of specific standards that may be used for sales control purpose are:

1. Number of calls per period per sales person
2. Number of new qualified prospects
3. Number of new customers
4. Rupees of direct selling expenses per sales person
5. Selling exp as a percentage of sales Rupees
6. Average size of orders
7. Number of orders not honored.
8. Number of orders per call made
9. Rupees sales quotas per sales person per period (Welsch, 1999:186)

2.2.5 Preparing Distribution Selling Expenses Budgets

Distribution expenses are not product costs and are not allocated to specific products. A separate distribution expenses plan should be developed for each responsibility centre in the distribution function. Typically, this would on compares “home-office” centre and “field centre”. The top marketing executive has the overall responsibility for developing the distribution expenses plans or budgets. Following the principle of participation, the manager of each responsibility centre should be assigned direct responsibility for that department distributions expense plan.

2.2.6 Consideration of Alternatives in Developing a Realistic Sales Plan

Developing a realistic sales plan involves consideration of numerous policies and related alternatives and a final choice by executive among many possible course of action. Important decision must be made about such issues as new products, discontinuous of present products, pricing, expansion or contraction of sales areas, size of sales force, new direct channels, distribution cost limitation and advertising and other promotional policies. A realistic sales plan includes a complex set of interrelated management decision.

For illustrative purposes, it will be desirable to consider two pervasive sales planning problems:

a) Price Cost Volume Alternatives
b) Product Line Alternatives

a) Price Cost Volume Alternatives

It is a vital part of sales planning, in a competitive market price and sales volume are mutually interdependent. Because sales volume and prices are so closely tied together, a complicated problem is posed for the management of almost every company. Hence, two basic relationships are necessarily required to develop 1) estimation of the demand curve, that is, the extent to which sales volume varies at different offering prices, 2) the unit cost curve which varies with the level of productive output (Welsch, 1999:186).

b) Product Line Consideration in Sales Planning

Determination of the number and variety of products that a company will plan to sell is crucial in the development of sales plan. Both the strategic and tactical sales plans must include tentative decision about new product lines to be introduced, old product lines to be dropped, innovations and product mix.

There are being various problem areas, which needs to be planning and control of the distribution expenses. Hence, such includes increase in sales increase in traveling expenses as well as reduction in sales and reduction in traveling expense. This is primary approach developed by same companies. But rather the account of like this is varying in practical. Because reduction in sales should require more travel expenses to advertise. Therefore special area must be analyzed, planned and controlled separately other special problems in planning distribution costs relate to freight entertainment, warehousing, returned goods, and special allowances.

Development of a promotion and advertising plan is a complex endeavor that should involve most of the marketing managers. Company requires meeting with requirement of the promotion & advertising expenses. Hence, there would require a manager who will responsible for such expenses and planned them so that it would have a better result.

The approaches useful in course of the promotion and advertising are a) arbitrary appropriation b) all available funds c) competitive parity d) percentage of sales e) fixed sum per unit f) previous year's profits g) return on investment h) task method.

Planning Administrative Expenses

Administrative expenses include those expenses other than manufacturing and selling and distribution. They are incurred in the responsibility centers that provide supervision of and service to all function of the enterprise, rather than in the performance of any one function. Because a large portion of administrative expenses are fixed rather than variable, the notion persists that they cannot be controlled. Aside from certain top management salaries, most administrative expenses are determined by management decisions. It is common to find administrative expenses “top heavy” when measured by the volume of business done (Welsch, 1999:185).

2.3 Planning and Controlling Production: Work in Process and Finished Goods Inventories

2.3.1 Introduction

To develop a full-sketched spectrum of PPC, it needs to develop first a sales budget. It opens the door to develop the production plan and budget. It reveals the real spectrum of a company like for service company, develop a service capability requirements ,for a retail or whole sale enterprises the sales plan must be translated into merchandise purchase requirements, and for a manufacturing enterprise, the sales plan must be converted to production (Manu) requirements. The plan includes sub budgets for the production, finished goods and work in process inventories, and manufacturing overhead. Many of the concepts of inventory planning are applicable to non manufacturing settings.

2.3.2 Overview of Production Planning

The marketing plan specifies the planned volume of each product (or groups of similar products) for each time period throughout the planning period. The further step is to plan for production. This entails the development of policies about efficient production levels, use of productive facilities, and inventory levels (Finished Goods and W-I-P Inventory). The quantities specified in the marketing plan, adjusted to conform to production and inventory policies, give the volume of goods that must be manufactured by product and by interim time period. Thus, the production budget can be represented in this way, **sales volume** ± **finished goods inventory change** = **production requirements**. The flow of planning activities from sales through the manufacturing plan, in addition to the manufacturing plan, there is a need for budgets that plan costs in the non manufacturing functions of products promotion, selling and administration (Welsch, 1999:210).

2.3.3 Responsibility for Production Planning

The completed marketing plan should be given to the manufacturing executive who is responsible for translating it into a production program consistent with managerial polices and subject to certain constraints. Planning, scheduling and dispatching of the actual production throughout the year are function of the production department; therefore, it is essential that responsibility for the planning and control of these functions be performed by the production managers. These managers have firsthand knowledge of the plant and personal capacities, availability of materials and production process. Although responsibility rests directly upon the production manager, top management policies must be considered in such matters as inventory levels, stability of production, and capital additional (plant capacity). An efficient and coordinated production plan requires the careful attention of executive management, particularly where there is multi - plant production requiring the determination of both time and place of production.

With respect to production planning, the managers must plan an optimum coordination between sales, inventory and production levels. An efficient and coordinated production plan is necessary for economical manufacturing. Lower Production costs usually result from standardization of products and stable production levels. Sales managers are usually aggressive in requesting new products and changes in the old products. There may be pressure from both sales and manufacturing for high inventory levels. Therefore, there must be coordination between sales plans, production plans and inventory policies. The production budget and inventory policies provide the basis for obtaining this coordination. Today, some new inventory systems are developed in production and inventory scheduling systems known as MRP system and Just in Time (JIT) manufacturing system (Welsch, 1999:211).

Production Budget

The budget related with planned quantity of goods to be manufactured during the budget period. In course of preparing budget,

- The 1st plan is in about inventory levels
- The 2nd Plan is in about goods to be manufactured during the budget period.
- The 3rd Plan is to scheduling this production by interim periods.

A Complete Budget Express About

a. Products to be manufactured.
b. Interim time periods
c. Activities of each responsibility centre in the manufacturing process.

The initial step is to prepare the production budget in manufacturing operations. In addition to the production budget, three other principal budgets are relevant to manufacturing

1. The direct material and purchased components
2. The labor budget, which shows the planned quantity and cost of direct labor.
3. The manufacturing expenses or factory overhead budget which includes the plans for all factory costs other than direct materials and direct labor (Welsch, 1999:213).

2.3.4 General Considerations in Planning Production and Inventory Levels

The production plan does not aim to set precise amounts and timing of actual production during the budget period. Most prominently, the production plan is depending upon the sales volume developed by marketing plan. But, most frequently, manufacturing concerns looks about plant capacity requirements, direct materials, components requirements, timing of purchase, direct labor requirements and costs, and factory overhead.

The production budget should be developed in terms of quantities of physical units of finished goods, therefore, when it is possible to plan sales volume by units as well as by rupees amounts, production budgeting is simplified.

2.3.4.1 Developing the Production Plan

Sales budget must be translated into unit production requirements for the budget period for each product while considering inventory policies.

Because the production plan is developed prior to the end of the current year, the beginning inventory for the budget period must be estimated. The estimate is based on the status of the inventory at the date of the budget is being prepared, and it is adjusted for planned operation for the balance of the current year. Normally, there will be little difficulty in estimating this inventory with in reasonable units.
When the budgeted production for the budget period has been determined, the second problem is prorating this production by interim periods during the budget year. Interim production must be planned to:

1. Provide sufficient goods to meet interim sales requirements.
2. Keep interim inventory levels with in policy constraints.
3. Manufactures the goods as economically.

These three objectives may not always be in complete harmony for example, assuming seasonal sales. It is possible to maintain a stable production level only if inventories are allowed to fluctuate inversely with sales. On the other hands, a stable inventory level is possible only if production is allowed to fluctuate directly with sales from the point of economic operation. Hence, the major decisions concerns about the preparation of production budget are follows.

1. Total production required (by product) for the budget period.
2. Inventory policies about levels of finished goods, work in process, and the cost of carrying inventory.

3. Plant capacity policies, such as the limits of permissible departures from a stable production level throughout the year.
4. Adequacy of manufacturing facilities (expansion or contraction of plant capacity)
5. Availability of direct materials, purchased components and labor
6. Length of processing time.
7. Economic lots or runs.
8. Timing of production throughout the budget period, by product and by responsibility centers (Welsch, 1999:215).

2.3.4.2 Time Dimensions of Production Planning

Production planning is either tactical or strategic. It depends upon the capacity of industry to plan itself. Broad range of planning (strategic plan) requires broad line of broad estimates to plan for plant capacity requirements (involving capital additions), factory cost structures, personnel requirements and cash flows. For strategic plan, the increase or decrease in inventory is to be taken in account.

Short-range-plan is an operational plan. Thus, major operational concern requires meeting with the market. The short-range production plan should be in harmony with the time dimensions used in the short range profit plan. It is generally desirable to keep inventories and production stable, a situation that is impossible given seasonal sales. Thus, an efficient production plan should represent the optimum coordination between sales requirements, essential inventory levels and stable production levels (Welsch, 1999:216).

2.3.4.3 Developing Inventory Policies

Inventories require a higher-degree of investment and may have a significant impact on the major functions of the enterprises and its profit. Each of the related functions causes different and frequently inconsistent, inventory demands, such as the following:

1. **Sales**

Large inventories of finished goods are needed to meet market needs readily.

2. **Production**

Large inventories of raw materials and purchased components are needs to ensure availability for manufacturing activities. Also, a flexible inventory policy for finished goods is needed to facilitate the attainment of stable production levels.

3. **Purchasing**

Large purchases minimize unit cost and overall purchasing expenses, therefore, a flexible inventory policy for materials and purchased components is desirable.

4. **Finance**

Low inventory levels minimize investment requirement (cash) and reduce carrying costs (storage, obsolescence, risks etc). The objectives of inventory policies should be:

1. To plan optimal level of inventory management.
2. Through control, to reasonable maintain these optimal levels (Welsch, 1999:220).

2.3.4.4 Inventory levels should be maintained between Two Extremes

An Excessive Inventory level causing excessive carrying costs, risks and investment and an inadequate level to meet sales and production demands promptly (high stock out cost). An important consideration while planning and controlling inventories is that they must absorb the difference in stock between sales volume and production (or purchase) levels.

Setting Production Policies

Seasonal sales are typical in most companies. Yet production efficiency is usually enhanced by relatively stable production levels. In many companies where sales of the primary product are seasonal, production levels are stabilized by developing new products that can be stored or that have inverse seasonal patterns. Inventory fluctuation provides a tempting method of leveling production, yet as previously discussed, certain pitfalls should be considered. Stabilization of production is desirable for a number of compelling reasons and generally results in significant reductions of cost and improvements in operations.

1. Stability of Employment, Resulting in:

a. Improved morale and hence greater worker efficiency.
b. Less labor turnover
c. Attraction of better employees
d. Reduction of expenses for training new employees

2. Economics in purchasing raw materials and components as a result of

a. Availability
b. Volume discounts
c. Simplified Storage Problems
d. Smaller Capital requirements
e. Reduced inventory risk

3. Better utilization of plant facilities, which tends to

a. Reduce the capacity required to meet peak seasons
b. Avoid idle capacity

2.3.4.5 Adequacy of Manufacturing Facilities

An efficient production depends largely in the adequacy of manufacturing facilities. Sufficient capacity must be maintained to produce the planned volume of goods and to meet peak loads during the planning period. The production capacity of individual departments, process and machines should be assessed and coordinated in the production budget to avoid production bottlenecks and idle capacity.

Plant and department capacities for each responsibility centre should be analyzed by production managers in terms of potential or maximum plant capacity and normal or practical capacity.

Maximum Capacity: May be thought as the "theoretical" engineering capacity.

Practical Capacity: In some what less, representing the level at which the plant or department can operate most efficiency.

Breakeven Capacity is the rate of activity at which the sales value of the goods produced is equal to the cost of producing and selling those goods.

In other circumstances, capacity must be measured in terms of some common denominator of output, such as direct labor hrs, direct machine hrs, rupees sales of goods, produced, rupees cost of goods produced and total weight production planning is directly related to the capital expenditure budget with respect to:

1. Plant addition required
2. Extraordinary repairs and rearrangements
3. Retirement or disposal of excess plant capacity

2.3.4.6 Availability of Raw Materials and Labor

In some cases, the production plan can be significantly influenced by the availability of the required raw materials, components, and labor. Raw materials availability may be affected by such factors as process perishes ability economics in purchasing and quality considerations. The availability of skilled labor and the time and cost to train employees, are important variables that should be considered in planning production.

2.3.4.7 Length of Production Period

A direct conversion from the sales budget to the production budget, in appropriate if the manufacturing time is relatively short in situation where production requires several weeks or months. It is necessary to prepare additional plans indicating the timing of the units to be started and the timing of the units to complete. If the product consists of many components parts that are manufactured by the company, it is necessary to prepare a separate components parts production budget that shows the timing of (1) parts to be started (2) parts to be completed.

The schedules indicating starting and completion dates provide essential data for the purchasing department in planning raw materials purchase. MRP systems constitute one types of approach used to resolve the production planning problem.

Another factor influencing production planning is the W-I-P inventory. If no significant fluctuation is planned in this inventory during the year, there will be no significant effect on production. Therefore, in this case, inventory fluctuation can be planned in the Work-In-Process Inventory; the changes must be taken into account in production planning. Two approaches are used to resolve this problem, depending on the circumstances. In cases where the processing time in short, a change in Work-In-Process Inventory can be incorporated into the usual production budget.

2.3.4.8 Materials Requirements Planning (MRP)

In Modern production operation, production is usually coordinated throughout the various production stages. Material requirements planning or MRP is a technique for coordinating production in multistage production environments with many parts, materials, subassemblies, components and finished products. An MRP system begins with a master schedule for the end products needed. It then backup through the production process to determine when and how much of each material, part or sub assembly will be required because the requirements for parts and material are determined from the production schedule of the finished product, these inputs have interdependent demands.

2.4. Planning and Controlling Purchased and Materials Usage

2.4.1 Introduction and Purpose

A comprehensive profit planning and control program includes planning and controlling raw materials and components used in the manufacturing of finishes products. And, similar, the co-ordination to be planned and controlled in among (1) production requirement for materials and component parts (2) raw materials and parts inventory levels (3) purchases of raw materials. When the required quantities of such product to be manufactured are specified in the production plan, the next step planning the manufacturing program involves consideration of the various production requirements and cost of direct materials and component parts, direct labors and factory overhead.

2.4.2 The Raw Materials and Component Parts Budget

To ensure that the appropriate amounts of raw materials and component parts will be on hand at the time required and to plan for the cost of such materials and parts, the tactical short term profit plan should include

1. A detailed budget that specifies the quantity and cost of such materials and parts.

2. A related budget of materials and parts purchased.

Planning raw materials and parts usually requires the following four sub budget.

1. Materials and Parts Budget

This Budget specifies the planned quantities of each raw material and part required for planned production. It should specify quantities of each raw material and part by time, product and responsibility center.

2. Materials and Parts Purchase Budget

The materials and parts budget specifies the quantities and timing of each raw material and component parts needed; therefore a plan for purchases must be developed. The purchases and parts budget specifies the planned quantities of materials and parts to be purchased, the estimated cost, and the required delivery dates.

3. Materials and Parts Inventory Budget

This budget specifies the planned levels of raw materials and parts inventory in terms of quantities and cost. The difference in units between the requirements as specified in the materials Budget and the purchases budget is shown as planned increase or decrease in the materials and parts inventory budget (Welsch, 1999:240).

4. Cost of Materials and Parts Used Budget

The budget specifies the planned cost of the materials and parts that will be used in the productive process. Notice that this budget cannot be completed until the planned cost of purchases is developed.

The Four separated sub budgets listed above are directly related. Collectively, they can be viewed as the materials and purchase budget. In simple situations, all four may be combined; are frequently combined. In more complex situation, separate budgets, are essential especially when the related budget data must be developed sequential form.

In designing each of these materials and parts budgets, two basic objectives, in addition to planning are over riding.

1. Control

Raw material and part costs are subject to direct control at the point of usage; therefore, the related activities and costs should be budgeted in terms of responsibility centre and by interim time periods.

2. Product Costing

Direct materials and part cost are included in manufacturing costs (Products costs); therefore, they must be identified by product.

Because of these two basic objectives, direct materials, and component parts should be budgeted by type of raw material and parts, by responsibility centre, by interim periods, and by type of finished product. There multiple classifications tend to complicate the budgeting format used (Welsch, 1999:241).

2.5 Direct Labor Budget

2.5.1 Introduction and Purpose

In some companies labor costs are greater than all other costs combined. Even when this is not the case, effective planning and systematic control of labor costs are essential. Planning and controlling, labor costs involve major and complex problem areas: 1) Personnel Needs 2) Recruitment 3) Training 4) Job Description and Evaluation 5) Performance Measurement 6) Union Negotiation 7) Wage and Salary Administration. Each of these problems may dominate in various situations. A comprehensive profit planning and control program should incorporate appropriate approaches applicable to each problem area. A profit planning and control program cannot resolve special personnel problems, but it directs careful consideration to them and aids in placing them in perspective. Effective planning and control of long-term and short-term labor costs will benefit both the company and its employees.

Labor costs include all expenditures for employees: Top executives, middle-management personnel, staff officers, supervisors, and skilled and unskilled employees. To plan and control labor costs effectively, the different types of labor costs must be separately considered.

Labor generally is classified as direct or indirect. Direct labor costs include the wages paid to employees who work directly on specific productive output, as with direct material costs. Labor costs that can be directly traced to specific production are defined as direct. Indirect labor involves all other costs, Such as supervisory salaries and wages paid to tool makers.

Repair personnel, storekeepers, and custodians. Direct material and direct labor costs are frequently referred to collectively as the prime cost of product.

The direct labor budget includes the planned direct labor requirements necessary to produce the types and quantities of output planned in the production budget. Although some companies prepare a labor budget that includes both direct and indirect labor, it is usually preferable to prepare a separate direct labor budget and to include indirect labor in the factory overhead budgets. This procedure is consistent with the usual cost accountancy treatment of indirect labor costs as a component of manufacturing overhead. Also, over time and premium pay related to direct labor should be budgeted as separate costs.

The primary reasons for using a separate direct labor budget are to provide planning data about the amount of direct labor required, number of direct labor employees needed, labor costs of each product unit and cash flow requirements. Another purpose of the direct labor budget is to establish a basis for control of direct labor.

The responsibility for preparing the direct labor budget should be assigned to the executive responsible for the manufacturing functions. The cost accountancy and personnel departments provide support and supplementary information, when the direct labor budget is completed by the manufacturing managers. It should be given to the budget manager for review and next submitted to executive committee. When the direct labor budget is tentatively approved it becomes part of the profit plan (Welsch, 1999:280).

2.5.2 Approaches used in Planning Direct Labor Costs

For the annual profit plan, the direct labor budget should be developed by responsibility centers, interim periods and products classification by organizational responsibility and interim period is essential for control purpose classification by product in necessary for planning the cost of producing each product.

The approach used to develop the direct labor budget depends primarily on the (1) method of wage payment (2) type of production process involved (3) availability of standard labor times (4) adequacy of the cost accounting records relating to direct labor costs.

Basically, three approaches are used to develop the direct labor Budget

1. Estimate the standard direct labor an hour required for each unit of each product, and then estimates the average wage rates by department, cost center or operation. Multiply the standard time per unit of product by the average hourly wage rate, giving the direct labor cost per unit of output for the

department, cost center or operation centers. Multiply the units of output planned for the department, cost center or operation by the unit direct labor cost rate to obtain the total direct labor cost by product.

2. Estimate ratios of direct labor cost to some measure of output that can be planned realistically.
3. Develop personnel table by enumerating personnel requirements (including costs) for direct labor in each responsibility center.

2.5.3 Planning Direct Labor Hours

Internal conditions will determine it is feasible to relate planned production in producing department to direct labor hours (productivities) similarly, internal factors may indicate the most practical approach to use for planning direct labor hours.

An important function of industrial engineers is to develop standard labor times for various operation and products. In some producing departments, labor time standards can be developed. In some cases, it is impractical to estimate direct labor time except in terms of averages based on experience.

Four approaches commonly used in planning standard labor times are the following:

- Time and Motion studies
- Standard Costs
- Direct Estimate by supervisors
- Statistical Estimates by a staff Group (Welsch, 1999:281)

2.5.4 Use of Learning Curves

One concept that is sometimes used in planning labor cost is the learning curve. Considerable experience indicates that in some manufacturing settings, there is a constant percentage reduction in the average direct labor input time per unit of product as the cumulative output doubles.

Learning curves are foremost used extensively in industries such as aircraft, ship building, and home appliances. The learning curve concept is especially applicable in industries when labor cost is large component of total production costs and production operation is complex.

The learning curve concept has also been applied by some companies to all production costs, rather than just labor costs. When applied to all production costs, the learning curve is called the "experience curve".

2.5.5 Planning Wage Rates

If it is possible to relate planned production to direct labor hours and to plan wage rates realistically for each productive department, computation of planned direct labor cost involves multiplying planned labor hours by planned wage rates.

Determination of average direct labor wage rates in a productive department or cost center frequently may not be a serious problem. The preferred approach is to plan such rates by enumerating the direct labor employees in the departments or operation and their expected individual wage rates and then compute an average out of various approach, Following are foremost

- A less reliable approach involves computing the historical ration between wages paid and direct labor hours worked in the department.
- In some cases, the size of the department, the diversity of its work, and the variations in its hourly wages may be of such significance that the department or responsibility center should be sub-divided into cost centers. Separate estimated direct labor hours and average wage rates would then be planned for each cost center.

- If a standard cost system is used in the cost accounting department, the standard wage rates developed for that purpose can be used for budgeting purpose. It may be desirable, however to budget contain wage rate variances between standard allowances and planned budget allowances.
- Two planning inputs hours and wage rates necessary to develop the direct labor budget. This approach has definite advantages. This method involves making an estimate of total direct cost and then allocating it to (1) units of production (2) some other measure of output, such as machine hours, direct material cost or processing time.
- If a straight piece-rate system of compensating labors is used, the labor cost per unit of production is known. The piece-rate system bases the compensation on the quantity produced. Various bonus system of wage payments complete the planning of direct labor costs. In such cases, ratios are generally used.

Control of Direct labor costs: - The two primary elements of control of direct labor costs are (1) day to day attention to such costs (2) Performance reporting and evaluation of results (Welsch, 1999:287).

2.6 Flexible Expense Budgets: Concept, Development and Application

2.6.1 Introduction & Purpose

The objective of flexible expense budgets is to plan for tactical profit plan. The focus will be on both planned expenses and the control of expenses. The flexible budgets for expenses have two functions:

1. To provide expense plans for the tactical profit plan.
2. To provide expense plans adjusted to actual output; for comparison with actual expenses in periodic performance reports.

The flexible expense budgets directing relate only to expense and (costs). Flexible budgets are also called variable, dynamic, activity and output adjusted expense budgets.

Earlier we explained the concept of budgeting and incorporating standard cost and cost-volume-profit concepts for the purpose of developing a better technique for cost control (Welsch, 1999:343).

The following emphases are:

- Controlling costs as volume changes
- Reporting performance against the flexible budgets
- The concept of capacity
- The distinction between standard overhead rate and flexible budgeting
- The analyses of three overhead variance- spending, efficiency and capacity- and the accounting treatment (Lynch, 1983:220).

2.6.2 Concept of Flexible Expense Budgets

The fundamental concept of flexible budgets for expenses is that expenses are incurred because:

1. The passage of time
2. Output or productive activity
3. A combination for time and output or activity

Hence, the concepts helps to develop the mathematical formulation from which expense plans can be computed for planning and control. So, the concept helps to:

1. Expenses must be identified as to their fixed and variable components when related to output or productive activity.
2. Expense must be reasonable related to output or productive activity.
3. Output or productive activity must be reliable by measurable.

4. Flexible budgets formulate for each expense must be for a specified time period and for a specified relevant range of output or productive activity.
5. For planning and control purposes, flexible budget formulas must be developed for each expense in each responsibility center in an enterprise (Welsch, 1983:344).

2.6.3 Relationship of Expenses to output or Productive Activity

The foundation underlying flexible budgets for expenses (and costs) is the concept of expense variability. The concepts focus on the effect on expense of the passage of time and output or productive activity.

The terms activities and activity base to include output and productive activities. Costs are expenditures that are capitalized as assets and later become expenses. When the related goods and services are used or the manufactured goods are sold.

According to the behavior of expenses, the expenses are classified into three categories.

1. Fixed expenses
2. Variable expenses
3. Semi-variable expenses (Welsch, 1999:344).

2.6.3.1 Fixed Expenses Defined

Fixed expenses are those that do not vary with output or productive activity. They accrue primarily with the passage of time, that is, they are time expenses. They remain constant in amount for a given short-term period with in a relevant range of activity. Fixed expenses are caused by the holding of assets and the other factors of the production in asset of “readiness to produce”; therefore, they are frequently called capacity costs fixed expenses are of two principal types.

First, executive management decisions establish commitments to certain fixed expenses. Such as salaries, advertising expenditure, and research expenditure fall into this category.

It may be change due to basic structure of the business, operating methods, and discretionary change in management policy.

1. Relationship to Output Activity

Fixed expenses result from the capacity to produce or to perform some activity. They may be influenced by factors other than the passage of time, but not by output or the performance of activity.

2. Relevant Range

Fixed expenses must be related to a relevant range of activity. Few, many, expenses would remain constant over the wide range of output or activity from zero to full capacity.

3. Time Costs

Because fixed expense primarily accrues with the passage of time, the amount of fixed expense must also be related to a specified period of time. For budget purposes, fixed expense should be related to the annual accounting period and expensed as a constant amount per month.

4. Management Regulated

The costs incurred due to the decisional input of the management. Such costs are implied due to decision taken by the management bodies. They are relying on change of decisions.

5. Fixed in total but Variable Percent

The cost which remain constant in total amount each period, and variable effect on unit cost whenever different level of units are produced, however per unit fixed cost varies but in total the sum remain fixed. As well as, per unit fixed cost change as per output produced changes.

***6.* Practical Application**

Practical considerations do not require an expense to be absolutely fixed (Welsch, 1999:346).

All fixed expenses are controllable over the life span of the company. Some, but not all, fixed expense is subject to short run-management control. Numerous fixed expenses are determined annually by the discretionary management policies. Depreciation Exp in a short time Period is subject to very little control. Control was exercised when the asset was acquired and when the depreciation rate was set.

2.6.3.2 Variable Expenses Defined

Variable expenses vary in direct proportion to change in output or activity in a responsibility center. Variable expenses are activity based because they are incurred as a direct result of output, productive activity or work done. The following list explains the primary characteristics of a company should consider in establishing.

1. Proportionally Related to Activity

Variable expenses changes with only volume or production units but there would no direct relationship with passage of time. This is happens due to direct relationship with change in output or productivity. Therefore, it is constant on per unit basis when related to measure of activity.

2. Relevant Range

Variable expenses must be related to activity with in relevant range of operations. Outside this normal range, the pattern of variable expenses will actually change.

3. Activity Costs

Because variable expenses fluctuate in proportion to change in output or activity. It is important that a reliable measure of activity be selected.

4. Management Regulated

Most variable expenses can be affected due to the discretionary decision taken by the Management.

5. Variable in Total but Fixed per Unit

A variable expense or cost is variable when related to output; however, when viewed as a unit cost it is constant.

6. Practical Considerations

A variable expense need not be absolutely variable in application for all practical purposes; variable expenses are controllable at some responsibility level (Welsch, 1999:348).

2.6.3.3 Semi-Variable Expenses Defined

Semi-variable or semi fixed expenses and costs increase or decrease as output or activity increases or decreases, but not in proportion to changes in the activity base. Under this definition, semi variable expenses have same of the characteristics of both fixed and variable costs.

The variability of semi variable expenses is caused by the combined effect of (a) passage of time (b) activity or output (c) discretionary management decisions.

There are four kinds of semi-variable expenses. They are

1. Semi variable expense with straight line characteristics for a fixed component and variable component.
2. Step expense having both fixed and variable characteristics.
3. Curved expenses Complex cost characteristics and the application of a straight line assumption for budget purposed are shown (Welsch, 1999:350).

2.6.3.4 Analysis of Variable and Semi-Variable Expenses

The significant problem in developing flexible expense budget is the determination of fixed and variable expenses. The analysis of variable and semi-variable expenses to determine the fixed and variable components requires the following.

- Precise definition of expenses
- Careful selection of an activity base for each responsibility center that realistically measures the output or productive activity.
- Identification of relevant range of output or productive activity.
- Selection of appropriate methods to analyze expenses to separately identify the fixed and variable components of semi variables expenses.
  - Activity Base
  - Identifying the relevant range of activity (Welsch, 1999:350)

2.6.3.5 Methods of Determining Cost Variability

The various approaches are available to segregate fixed and variable expenses. Among them following are most widely used.

1. Direct estimate method
2. Budgeted high and low point method
3. Correlation method

1. Direct Estimate Method

The direct estimate method involves special techniques of cost analysis used only in special cases. Basically, a direct estimate implies a concentrated attack upon particular expenses. Two variations of the direct estimate method:

a. Industrial engineering studies
b. Direct analysis of historical data coupled with interpretation of related managerial policies.

a. Industrial Engineering Studies

Engineering studies are necessary when historical expense data are not available, but even when such data are available, engineering studies are preferable in many situation. In such cases, analysis of historical data can also be used to check the reasonableness of engineering estimates. Conversely, when estimates are based primarily on an analysis of historical expense data, engineering studies should be made periodically to check the analyses of past experience.

b. Direct-Analysis of Historical Data and Management Policies

Usually when the direct analysis approach is used, a direct judgmental estimate of the variability of an expense is made by means of (1) an inspection of the historical activity of the expense (2) an interpretation of relevant management policies (3) an evaluation of the nature and cause of the expense.

2 Budgeted High and Low Point Method

The budgeted high and low point method is based on the concepts of developing two expenses budget allowances at two different assumed level of activity for certain expense in a responsibility center.

Level Activity Low Level Activity High Level Activity Lower at Cost –level activity higher at Cost V =CPU

Fixed Cost = Total Cost - Total Variable Cost

3. Correlation Methods

Correlation methods are widely used in the analysis of expenses and costs. These method analyze historical expenses data in relation to historical output or activity data to determine how cost have varied with output in the part, which is intern, the basis for estimating how costs should vary with output or activity in the future. Because correlation techniques are historical data, a critical problem arises. When changes in accounting, classification, operation, method of manufacturing, management policies, and other such changes tend to make historical data “non representative of future expectation.”

Correlation techniques use monthly historical data for analytic purpose. Monthly data for the past twelve to eighteen months are preferable because that generally avoids major distortion. Correlation methods in general, involve the following methods

a. Graphical Method: Scatter Graph
b. Regression Analysis: Method of Least Squares

a. Graphical Method

The graphical method uses scatter graphs to determine usually the fixed and variable component of an expense. The analysis involves the preparation of graph with historical expenses data plotted on the vertical scale (y-axis) and output or activity data (however measured) on the horizontal scale (x-axis). After the historical data are plotted on the graph, a visual trend line is drawn through the plotted points. The trend line is positioned through the points to show the relationship between the two variables expenses and activity. The point at which the trend are intersects the vertical scale (at zero activity) indicates the fixed component of the expenses, and the slope of the trend line represents the variable components.

b. Regression Analysis using the method of Least Squares

In the analysis of historical cost and output data, the statistical method of least square can be used to compute the trend line. The method can be adopted for curved cost; however, the straight line adoption is usually adequate for describing the underlying expenses activity relationship for budgeting purposes (Welsch, 1999:359).

2.6.3.6 Flexible Budget Format

Flexible expenses budgets can be formulated as follows:

1. Table Format

This format shows budget expenses for second different levels of output or activity within the relevant range. This format of expressing flexible budgets is frequently used for instrumental purpose. However, the format appears to be more widely used in actual practice.

2. Formula Format

This format provides a formula for each expenses account in each responsibility center. The formula gives the fixed amount and the variable rate. This is more compact and generally more useful because the components of each expense are given. The formula format gives straight line relationship.

3. Graphical Format

This format is sometimes used for step or non linear expenses, budget amount are reveals directly from the graph. This method is sometimes useful when step or non linear expenses are not to be used on straight line relationship basis.

2.6.3.7 Uses of Flexible Budgets

The primary purpose of flexible budgets is to enhance expenses control. Therefore, we can identify three specific uses of flexible budgets.

1. To facilitate preparation of the expenses budgets for the responsibility centers for inclusion in the tactical profit plan.

2. To provide expenses goals for the managers of responsibility centers during the period covered by profit plan.
3. To provide budget expenses amounts adjusted to actual activity for comparison purpose (against actual expense) in the monthly performance reports.

Flexible expenses budgets can be applied in all the functions in company manufacturing, selling and administrative although they are more frequently used in the responsibility center in manufacturing function. They are especially appropriate in responsibility centers where (i) operations tend to be repetitive (ii) there are numerous heterogeneous expenses and (iii) output or activity can be realistically measured. The major importance of FBB is

1. Preparing the expenses budgets for the tactical profit plan.
2. Provide expenses goals to prepare the monthly performance report (Welsch, 1999:359)

2.7 Manufacturing Overhead, Product Quality Costs and Distribution and Administrate Expenses

2.7.1 Introduction and Purpose

Expenses planning and controlling is a necessary part of business entities. Because the reasonable levels to support and maintains the objectives of the enterprises. Expense planning should not focus on decreasing expenses, but rather on better utilization of limited resources from the prospective, expenses planning and control may cause either decreased or increased expenditures. Hence, it can focus on the relationship between expenditures and the benefits derived from those expenditures. The desired benefits should be viewed as goals, and sufficient resource must be planned to support the operating activities essential for their accomplishment.

Some of the industries cut expenses without considering the effects on benefits. Others do not commit sufficient resources to the maintenance of assets such as equipment and building. In considering, such short-range-decisions, although temporarily reducing expenses, soon cause even higher costs because of breaks-down, inefficient machines, frosted employees, faculty machine to learners, major repair costs, and shortened asset lives.

“Cost control should be firmly tied to (1) future goals and planned operations” the essence of expense control is the concept of a standard. A standard is the amount that an expense should be under a given set of conditions (such as work programs, products, management policies and environmental unable).

The brief discussion about manufacturing overhead, distribution expenses and general administrative expenses are as follow

1. Manufacturing Expenses
2. Product Quality Expenses
3. Distribution or Selling Expenses
4. General Administrative Expenses
5. Financial and Other Expenses (Welsch, 1999:302)

2.7.2 Cost versus Expenses

For financial accounting purposes, cost is defined as an expenditure that is entirely recorded as an asset and becomes an expense when it is ‘used up’ thus; a cost account is an asset account (e.g. inventory).

Expense is defined an expenditure that is currently consumed or cost that has been “used up”.

For a management accounting purpose, these terms are not rigidly defined they are used to mean "sometimes an asset and sometimes an Expense."

2.7.3 Classification of Costs by Responsibility Centers

Because control is exercised thought responsibilities, it is necessary that costs are planned by organizational responsibility centers, are useful for financial accounting purpose for control of cost.

Cost Behavior

Knowledge of cost Behavior that is the response of a cost different volume of output is essential in cost planning and control. Cost behavior can be viewed from the vantage point of the entire enterprise (as in cost-volume-profit analysis) or in the context of a specific responsibility center (as is necessary in planning and controlling costs when expenses (or costs) are viewed in relation in output, three distinct expense categories emerges.

1. **Fixed Expense:** Those expenses that are constant in total from month to month
2. **Variable Expenses:** That change in total directly with change in output or volume of work done.
3. **Semi Variable Expenses:** These expenses that are neither fixed nor variable because they posses some characteristics of both.

2.7.4 Controllable and Non-Controllable Expenses

Controllable expenses are those that are subject to the authority and responsibility of a specific manager. Cost must be exercised because the classification of an expense item as controllable or non-controllable must be made costs in a specific framework of responsibility and time.

Controllable events are inner to organization. And uncontrollable events are outside to organization. Thus manipulation is necessary to take benefit from such activities.

2.7.5 Cost Reduction and Cost Control

In view of the imprecision of cost terminology, it is useful to make a distinction between two related concepts, cost reduction and cost control. Cost (or Expense) reduction programs are directed toward specific efforts to reduce costs by improving methods, work arrangements and products.

A. Cost Reduction

Cost Reduction program are directed toward specific efforts to reduce costs by improving methods, work arrangement and products.

B. Cost Control

In abroad sense, cost control includes cost reduction. In a narrower sense, cost control may be thought of as managerial efforts to attain cost goals within a particular operational environment. Management should attack costs in several ways, such as cost reduction programs, cost planning and controlling and continuous attention to cost-incurring decisions.

Planning Expenses

When developing the tactical profit plan, the expenses for each responsibility center should be carefully assessed. In harmony with the concept of participation, expense planning should involve all levels of management. Participation is essential in developing realistic expense budgets for each responsibility center. In planning expenses for a responsibility center, the output or activity for that center must be planned. For example, to develop an expense plan for the power department, the expected demands for power first must be planned. An expenditure plan for research and development must be related to the type and extent of research activities planned. Thus, expense planning should be based on planned outputs.

With respect to formal development of the tactical short-term-profit plan, there would be expected to develop a separate expense budget for each responsibility center. Previously, a brief discussion about direct material budget and direct labor budgets on this basis. To develop the manufacturing plans to be incorporated into the short-term-profit plan, the following budget separate is typical.

1. Direct material and labor cost budget
2. Manufacturing or factory overhead budgets
3. Distribution expense budget
4. Administrative expense budgets

Detailed expense budgets for each responsibility center should be included in the short-term-profit plan for a member of reasons, principally there:

1. So that the effects of various planned revenues and related expenses can be aggregated in a planned income statement.
2. So that the cash out flow required for costs and expenses can be realistically planned.
3. So that initial objective can be provided for each responsibility center.
4. So that a standard can be provided and used during the period covered by the profit plan for each expense in each responsibility center for comparison with actual expenses on the performance reports (Welsch, 1999:305).

2.7.6 Planning Manufacturing of Factory Overhead

After the production plan has been completed, expense budgets should be developed for each responsibility center in the organization. These expense budgets should be interim time periods (months or quarters) for the three categories.

1. Direct Material
2. Direct Labor
3. Manufacturing Overhead

- Manufacturing overhead is that part of total production cost not directly identifiable with (traceable to) specific products or jobs. Manufacturing overhead consists of
  1. Indirect Material
  2. Indirect Labor
  3. All other miscellaneous factory expense, such as taxes, insurance, depreciation, supplies, utilities and repairs.

- Manufacturing overhead includes many dissimilar expenses; therefore it causes problem in the allocation of these costs to products. Since there are many different types of expenses, control responsibility is often widely-diffused. For e.g. such items as depreciation, taxes and insurance are usually net subject to direct control by factory managers, but rather by higher-level-management.
- For both budgeting and cost accounting purposes, manufacturing overhead involves the following two problems.
  - Control of manufacturing or factory overhead.
  - Allocation of menu or factory overhead to products manufactured (product costing)

2.7.7 Control of Manufacturing Overhead

The expense control identification of expense controllability with each responsibility center manager. So the non-controllable costs should not be identified as responsibility of the manager of the center. Hence, to control manufacturing overhead, “clean” expenses must be considered, that is, direct expenses only, exclusive of any allocated expenses.

2.7.8 Product Costing

To plan cost of goods manufactured by product, it is necessary that all indirect factory overhead costs be allocated to production. The two objectives, cost control and product costing, are resolved by using a separate approach for each objective. Costs are accumulated and reported for control purposes to allocation, product costing then follow by using allocation procedures.

For the short term profit plan, the overall manufacturing expense budget includes a budget of expense for each department in the factory following the expense classification used in time cost accounting department. The reliability with which the expense plans can be made depends on

1. The reliability of the accounting records
2. Seriousness of management attitudes toward expense planning (Welsch, 1999:308)

Electing the Activity Base

The measure of output or activity selected is called the activity base. The different activities used are as follows.

Producing Departments Service Departments

a. Units of output a. Repaired maintenance- D.L.H
b. Direct labor hour b. Power department - kilowatt/hrs
c. Direct machine hour c. Purchase departments – no. purchase or rupees
d. Direct labor rupees d. General factory administration- total direct labor hours or number of employees in the factory
e. Raw materials units consume
f. Process time (Welsch, 1999:313)

Distribution Expenses Includes Two Types

1. Home-office expenses
2. Field expenses from the planning and control point of view, these expenses must be planned by responsibility center. In all cases, the planning structure

should follow the basis on which the sales efforts are organized. The concepts of controllable versus non-controllable costs, fixed versus variable costs, and itemization by types of expenditure.

2.7.9 Preparing Distribution (Selling) Expenses Budgets

Distribution expenses are not product costs and are not allocated to specific products. A separate distribution expense plan should be developed for each responsibility center in the distribution function. Typically, this would encompass "home-office" centers and "Field" centers. The top marketing executive has the overall responsibility for developing the distribution expense plans or budgets. Following the principal of participation, the manager of each responsibility center should be assigned direct responsibility for that department's distribution expense plans or budgets. Thus, the promotion manager should be responsible for developing the promotion plan, and the field sales manager should be responsible for developing both their marketing plans and their distribution expense budgets.

The distribution expense budgets should separately identify controllable and non-controllable expenses, and those budgets should be detailed by interim time period. The distribution expense budgets prepared by the sales manager should be base on a planned volume of activity or output.

2.7.10 Planning Distribution (Selling) Expenses

Distribution expenses include all costs related to selling, distribution and delivery of products to customers. In many companies, this cost is a significant percentage of total expenses. Careful planning of such expenses affects the profit potential of the firm.

The two primary aspects of planning distribution expense are as follow (Welsch, 1999:313)

1. **Planning and Coordination**

In the development of the tactical profit plan, it is essential that a favorable “economic” balance to achieved between sales efforts (expense) and sales results (revenue)

2. **Control of Distribution Expense**

Aside from planning consideration, it is important that serious effort be given to controlling distribution expenses. Control is especially important, since (a) distribution expense are frequently a significant portion of total expense and (b) both sales management and sales personnel tend to view such expenses lightly, in some cases extravagantly, such as entertainment expenditures. Distribution expense control includes the same principles of control as manufacturing overhead. Control must be built around the concept of (a) Responsibility centers (b) expense objectives (Welsch, 1999:317).

2.8 Capital Expenditure Techniques

2.8.1 Introduction

One of the elements of profit plan is capital budgeting. It discuss about the plan about long term and short term capital expenditures for expansion and contraction of investments in operating (fixed) assets.

Therefore, it has an importance to provide a overviewed in and around to project/investment either investor not. Hence, long term planning is essential part of profit plan.

2.8.2 Meaning of Capital Expenditure Budget

The expenditure on fixed assets such as land and building, plant and machinery, furniture and fixtures, vehicles etc, is called Capital Expenditure. The service life if such assets are more than one year. Hence, capital budgeting can be referred as long term planning. It is also known as investment decision making, capital expenditure decision (Dongol, 2062:896).

Charles, T. Hon green has defined it as "Long term planning for making and financing proposal for capital out lay."

Gitman, L J has defined capital budgeting as the total process of generating, evaluating, selecting and following up on capital expenditure alternatives.

A Capital Expenditure is the use of funds (e.g. Cash) to obtain operational assets that will (a) help earn future revenues or (b) reduce future costs.

Capital expenditures are investments because they require the commitment of resources today to receive higher economic benefits in the future. Capital expenditures become expenses in the future as their related goods and services are being used to earn higher future profit from future revenues to or to achieve.

Future cost savings. As well as there is become two crucial planning are (1) investments (2) Expenses

A major issue in planning capital expenditure is the problem of ensuring that a company has the capacity to produce, acquire or be able to delivers the food and services that will be needed to meet its sales and services plans.

A major issue in controlling the actual expenditure of funds in the problem of ensuring that the actual expenditures are consistent with the plans and that fund are available when the expenditure reinsured (Welsch, 1999:394).

2.8.3 Characteristics of Capital Expenditures Budget

The Capital expenditure budget is an important part of a comprehensive profit plan. It is directly associated with company's operating assets, especially land, equipment, and other operational assets and cash. It can be classified as followed:

Major Capital Addition Projects

These projects usually require large commitments of funds for operational assets that have lives that extend over a long period of time. They tend to be unique, non recurring projects that represent new directions and major steps and technology improvements and maintenance. Each major project is assigned a special designation.

Minor or Small Capital Expenditure

There are small, low cost, recurring and ordinary capital expenditures. Like replacement and maintenance of operational assets, and the purchase of special tools and attachments that contribute to future revenues or cost savings.

Time Dimension

It completely depends upon the timing taken by projects. Therefore, a) strategic capital expenditure budget, b) a tactical (short term) capital expenditure budget should be essential (Welsch, 1999:396).

2.8.4 Benefits of a Capital Expenditure Budgets

The capital expenditure budget provides the idea to the management how would the scarce resources be utilized to meet a benefit like customer demands, meet competitive demands, and ensure growth. The budget provides idea to coordinate a comprehensive profit plan. The budget process for capital addition is essential for management to avoid a) idle operating capacity b) Excess capacity and c) investments in capacity that will earn less than an adequate return on the funds invested.

The development of a strategic and tactical capital expenditure budget is beneficial because it provides sound managerial decision to management. It provides an alternative decision package to the business organization. As well as, it provides idea about to change the project or continuity to ongoing projects etc (Welsch, 1999:399).

2.9. Cash Receipt and Disbursement Budget

2.9.1 Introduction

One of the major responsibilities of management is to plan, and safeguard the resources of the enterprises. Two kinds of resources flow through many businesses cash and non cash assets.

The major issue of cash flows is to forecast the cash receipt and cash payment require in future. It can provide detailed information about the deficit and excess of cash. So, business entity must have to plan and control the cash inflows, cash outflows and the related financing as well as if the enterprises have excess cash, how the investment require.

As well as, Cash budgeting is the process of forecasting the expected receipts and expected payment (outflows) of cash to meet the future obligation. Cash budget is a mere forecast of cash position of an undertaking for a definite period (Welsch, 1999:434)

2.9.2 The focus of Cash Planning

A cash budget shows the planned cash inflow, outflow and ending position by interim periods for a specific time span. The cash budget should be on period basis such as long term and short term. The short term cash budget should be included in the annual profit plan. A cash budget should be basically includes two parts (1) the planned cash receipts (inflow) (2) the planned cash disbursement (outflow).

2.9.3 The Primary Purpose of Cash Budget

Give the probable cash position at the end of each period as a result of planned operation.

1. Identify cash excess or shortage by time periods.
2. Establish the need for financing or the availability idle Cash For investment
3. Coordinate cash with (a) total W/C (b) Sales revenue (c) expenses (d) investment (e) liabilities
4. Establish a sound basis for continuous monitoring of the cash position.

2.9.4 Time Horizons in Cash Planning and Control

Business entity needs to manage the cash because cash management facilitates the business with the goodwill. Timing of payment to employees, workers, wholesalers, creditors, shareholder makes a positive attitude of the company. So that, the characteristic and importance of cash requirements and structure of business entities is to prepare plan and control according to the basis of timing horizons such as, long term, short term and immediate term horizon basis.

Long term Cash Horizon: It should be consistent with the time dimensions of the (a) strategic long-term profit plan (b) capital expenditure projects. Planning for long-range cash inflow (Primarily from sales, services and financing) and long range cash out flows (primarily for expenses, capital expenditure and payment of debt) is fundamentals to sound financial decisions and to the optimum use of cash and long term Credit. Long range cash planning focuses on the major outflows and inflow.

The short term cash horizon should be consistent with the tactical (short term) profit plan. Cash planning for this time horizon requires detailed plans for cash inflows and outflows that are directly related to the annual profit plan (e.g. cash from sales and cash to pay for new equipment).

The immediate time horizon is use in many enterprises primarily to assess, control and manage cash inflows and outflows, often on a continuing daily basis. Its primary focus is to ensure that cash shortages and excessive cash balances, do not occur. It minimizes interest cost by taking all cash discounts on payables and meeting cash payment deadlines. It minimizes the opportunity cost of excess cash balances by allowing timely investment if cash accumulates (Welsch, 1999:434).

2.9.5 Approaches Used to Develop a Cash Budget

As mentioned by Welsch, there is become two types of approach are more significantly in use like,

a. Cash Receipt & Disbursement method.
b. Financial Accounting Approach (Welsch, 1999:435)

As S.C. Gupta mentioned three kinds of cash budget approaches like

a. Budgeted Balance sheet method or cash forecast at a point of time.
b. Cash flow method or profit cash forecast method
c. Cash Account method or receipts & payment method.

2.9.5.1 Cash Receipts & Disbursement Approach

Cash Budget is the budget where forecasting of receipt and payment cash is maintained such as monthly basis, quarterly basis, annual basis, five year basis. The forecast of actual receipts and payments and various time horizons is the main stream of the cash budget. Likely the approach used under such receipts & payments are as follows.

The inclusive of the receipts terms for the actual forecast are as follows

1. Opening Balances of cash in hand and at bank.
2. Cash Sales
3. Credit Sales i.e. collection from debtors.
4. Collection from bills receivables
5. Interest on advances and loans given
6. Dividend received
7. Sale proceeds from capital assets
8. Proceeds of issue of shares and debentures
9. Other services.

The other sources like interest, dividend and sale of capital asset etc. As well as credit sales, the lag between point of sale and realization of cash cause a problem. The primary approach to the problem is based on past collection experience- the average period between the data of sale and the data of the related cash collection. The manager responsible for credit and collection should regularly determine.

Planning Cash Payments (Outflows)

Planning for cash payment is an important management effort for forecasting of payment to such materials, direct labor, direct expenses, capital additions, retirement of debt and dividends paid to stock holders. The budget for these items provides the basis for computing the planned cash outflows. The cash receipts and disbursement approach requires elimination of non cash items such as depreciation, from the appropriate expenses budgets already prepared. Experience and company policy on purchase discounts must be taken into account in estimating the time lag between the incurrence of A/P and the subsequent cash payment of these payables. Accruals and pre-payments must be taken into account to determine the timing of related cash payments. Interest payments on debts and property taxes can be estimated. Cash requirements for dividends may be a problem, but Many Corporation follows a consistent dividend policy that simplifies this problem. As well as, dividends payment must be planned by top management according to all information available.

As well as, the following payment items are as follow (Welsch, 1999:439).

- Cash purchases
- Payments to Creditors or payable
- Payment to Bills payables
- Payment to employees i.e. wages and salaries
- Manufacturing, Selling and distribution administration expenses
- Repayments of bank loan and special obligation such as bonus, donation, advances to suppliers
- Interest and dividend payments
- Capital expenditures for acquiring assets of enduring benefits
- Payments of tax liability etc
- Other expenses of periodic nature

2.9.6 Control of the Cash Position

The financial officer is responsible for direct control of the cash position. There is become difference in between actual cash receipts and payments during the budget period which will be expressed in profit plan. The difference in between occurs due to

1. Changing variables that affect cash
2. Sudden and unexpected events that influence operation
3. Lack of cash control

An effective and systematic approach of control of cash is very crucial for the responsible management. Frequently, it is possible for management to make decision or to alter existing policies so that the cash position is enhanced. Like: unexpected change in day to day operation, may direct change in serious cash shortage, but management may be able to avoid, or at least to minimize, the undesirable situation by

1. Increasing efforts to collect receivables
2. Reducing cash expenses
3. Deferring capital expenditures
4. Deferring payment of selected liabilities
5. Reducing Inventories
6. Altering timing of operation that affect cash

2.10 Zero Base Budgeting (Priority Based Budgeting)

This is a cost benefit analysis approach. The budget is for formulated under the basis of benefit and costs. Usually the cost allowance for an item is zero. And manager is responsible to identify the costs and the benefits from such expenditure. The approach contains the allocation of resources to what level in future benefits from a day to day expenditure have. And other budgets have continuity under previous expenditures. This feature is called incremental budget approach.

It can be defined as**:** A method of budgeting when requires each cost element to be specifically justified as though the activities to which the budget refers were being undertaken for the first time. Without approval the budget allowance is zero (Lucey, 1983:152).

The cost benefit approaches have a technique of evaluating, attempting and ensuring “value of money”. It is systematic tool conditioning for a future low-range-production with a examining of cost benefit for such an investment proposal and abandoning any unproductive projects. For such a reason, the disinvestment in disqualified projects is net prioritized.

2.10.1 Application of Zero Based Budgeting

ZBB is applicable is bush profit setting organization and non profit lacking organization also. It was f first pioneered by P. Phyrr in the United States in the early 1970s. But it is got wide publicity when President Zimmy Carter directed to all us government departments to adopt. This is most suited in discretionary types of costs and support activities. With discretionary management has some discretion as to the amount it will budget for the particular activity in question. Examples of discretionary costs include advertising, research and development and training costs. There is no relationship between inputs and outputs for costs. Furthermore, they are not predetermined by some previous commitment. In effect, management can determine what quantity of service it wishes to purchase and there is no established method for determining the appropriate amount to be spent in particular periods. It can be applied in local and government organization where the predetermined costs are of discretionary nature. In contrast, direct production and service costs where input-output relationship exists are more suited to traditional (conventional Budgeting) using standard costs.

ZBB involves the following three stages

- A description of each organizational activity
- The evaluation and ranking of a decision packages in order of priority.
- Allocation of resources based on order of priority up to the spending cut off level (Drury, 2000:575).

As well as Lucey Terry Explained

In manufacturing firm, ZBB is best applied to service and support expenditure including, administration marketing, personal, information and computer services, research and development, finance and accounting, production planning and soon. These activities are less easily quantifiable by conventional methods and are more discretionary in return. As well as, its successfulness depends up on service industries and to a wide range of non profit seeking organizations for example, local and central government department, educational establishments, hospitals and so on. ZBB could be applied in any organization where alternative levels of provision for each activity are possible and the costs and benefits can be separately identified. ZBB is directly related with alternatives and means that established activities have to be compared with alternative uses of the save resources (Lucey, 1992:153).

2.10.2 Implementing Zero Based Budgeting

The reason behind application of ZBB depends up on the various questions raised by all concerned. Authority .Because there must be a “value for money” approach which challenges existing practices and expenditures and searching questions must be asked at each stage: typical of which are as follow:

a. Does the activity read to be carried out at all? What could be the effects, if any, if it ceased?
b. How does the activity existing or proposed contribute to the organization objectives?
c. What is the correct level of provision? How too much or too little been provided in the past?
d. What is the best way to provide the function have? How much should be activity cost? Is this expenditure worth is the activity essential or one of the frills? (Lucey, 1992:153).

2.10.3 Stages in Implementation Zero Based Budgeting

The ZBB can be implementing in three processes:

a. Definition of Decision Packages

The decision packages contain a full comprehensive description about organization with a facet of activities or functions individually evaluated. It can be evaluated by are responsible manager with details of anticipated costs and benefits expected in terms of tasks accomplished and benefits achieved.

There are two types of decision packages

- **Actually exclusive decisions packages:**

To complete the same job, there are become various kinds of activities tasks and expenditure incurred. Among them, the best one would selected for accomplishing the objectives of JOB. Under the basis of cost benefit analysis, the best alternative has such kinds of assumption to complete same functions.

- **Incremental decision Packages**

These packages reflect different levels of effort in dealing with a particular activity. There will be what is known as the base package, which represents the minimum feasible level of activity and other packages which describe higher activity levels at given cost and resulting benefits.

And ranking has importance on such jobs activities that are most required use prioritized promptly.

b. Packages are Evaluated and Ranked

After completion, the formulation of decision packages the management has a responsibility to rank the entire package on the basis of cost benefit of the organization. Simply, the procedure is useful for the allocation of scarce resources to different activities, some of which already exist- and some are new.

Minimum requirements which are essential to get the job done and activities necessary to meet legal or a safety obligation will naturally receive high priority. It will be found that the ranking process focuses management's attention on discretionary or optional activities.

Because of the large number of packages prepared throughout the organization the ranking process can become onerous and time consuming for senior management. The solution of such a problem is become ranking the packages on their own budget center by lower managers and finally, it becomes consolidation with others at the next level up to the hierarchy.

c. Resource are Allocated

Package decisions are allocated resources on the basis of ranking number.

Where the ranking of lower cost packages has been delegated to department the proportion of the expenditure budget remaining after the more expensive packages have been ranked would be allocated to individual departments. The departments would then rank their own small package up to their allocated expenditure level (Lucey, 1992:155).

2.11 Activity Based Budgeting

2.11.1 Introduction

ABB some times termed activity cost management is a planning and control system which seeks to support the objectives of continues improvement. It is a development of conventional budgeting systems and is based on activity analysis techniques. It will be recalled that these were described when activity based costing (ABC) was covered previously. This required the identification of the activities of the organization, establishing the factors which cause costs, the cost drivers and then collecting the cost of the activities in cost pools.

The formal definition ABB is :

A method of budgeting based on an activity framework and utilizing cost driver data in the budget setting and variance feedback process (Lucey, 1992:157).

ABB is to authorize the supply of only those resources that are needed to perform activities required to meet the budgeted production and sales volume. Where as ABC assigns resources expenses to activities and then uses activity cost drivers to assign activity costs to cost objects (such as products, or customers). This ABB is reverse of ABC (Drury, 2000:568).

2.11.2 Activity Based Budgeting Recognizes that:

a. It has an assumption to control the causes of costs (drivers) directly rather than cost them. For the long run point of view, costs will be managed and better understood.
b. Not all activities add value so it is essential to differentiate and examine activities for their value adding potential.
c. The activities are drafted due to the requirement and decision taken by management. To take the immediate action over the budget.
d. ABB has a more reliable and immediate performance report that will easily obtain than conventional budgeting.

It has a better link between the organization strategic objectives and the objectives of the individual activities wish in business for which department manage are more responsible. Other importance of ABB is to line between cross organizational issues by a participative approach and activity techniques all of which promote continuous improvements.

As outline of Activity Based Budgeting is shown

Strategy planning guidelines activity analysis improvement options budget proposals priority lists implement plans activity based budgets actual activity based costing control

a. A clear link between strategic objective and planning and the tactical planning of the ABB process.
b. The use of activity analysis to relate costs to activities.
c. The identification of cost improvement opportunities.
d. Focused, participative approaches by all levels to guide and sustain continuous improvements (Lucey, 1992:157).

2.12 Review of Profit Planning Practices in Nepalese Context

2.12.1 Review of Previous Thesis

A Brief survey is conducted in Manufacturing sectors is usually absent till now. Hence, the Research depends totally upon a primary survey considering private and public enterprises. Today, private sectors are an emerging sector and have a dominant role in economy of the nation. Therefore, the survey mainly organized in such sector. Previously, there would be a number of research were organized usually in secondary data as well as a primary survey on a such single company. Hence, previous research has also identified some problems and solution at that period covered. Therefore, the challenges content then and now also an important fact. Because the solution require for that period is now attained or not. As well as the new challenges emerges now also an important factor. An attempt is made here to review some of the researches, which have been submitted in profit planning and control in the context of Nepal.

Khangendra Prashad Ojha (1995 A.D.) had conducted a research in the topic *"Profit Planning in Manufacturing Public Enterprise; A Case Study of Royal Drugs Limited and Herbal Production and Processing Company Limited"*. This research of Ojha was mainly centered with the current practice of profit planning and its effectiveness in RDL and HPPCL.

The time period covered by this research was six years from F/Y 046/47 to F/Y 051/52. The data and other necessary information were collected by using secondary as well as primary source of data. In his research Ojha has pointed out various findings and recommendations some remarkable findings were as follows:

- Inadequate planning of profit due to lack of skilled planner
- Inadequate authority and responsibility to planning department.
- Failure in achievements due to inadequate evaluation of internal and external varieties.
- Failure due to inadequate forecasting system.
- Lack of Entrepreneurship and Commercial concepts in overall operation of the enterprises.

Ojha summarized his findings by stating plans are formulated on traditional ad-hoc basis due to lack of budgeting experts and semi skilled planners. Some functional budgets are prepared but not in a systematic way. They have not followed a system of periodical performance report.

Govinda Raj Joshi (1996 A.D.) entitled *"Budgeting: Profit Planning in Nepal Rosin and Turpentine Ltd.(NEROT)"* Joshi had mainly focused on the practice and effectiveness of Budgeting in NEROT.

The time period covered by this research was five years from f/y 049/050 to f/y 053/054. The data and other necessary information were collected by using secondary sources of data. In his research Joshi had pointed out various findings and recommendations. Some remarkable findings were as follows:

- There is not adequate planning of profit due to lack of skilled planners, executive management planning institution and effective communication system in the company.
- There is not adequate authority and responsibility to planning department and fair as well as effective personal management.
- Existence of nation and favoritism, lack of environmental analysis and discouraging of participating management approach are the root cause for the proper practice of budgeting system.

Surya Prasad Poudel (1997 A.D.) entitled *"Profit Planning in manufacturing Company; A case study of Himal Cement Company Ltd."*. Poudel had mainly centered his study on the application of profit planning concept in HCCL.

The time period covered by this research was six years from F/Y 043/044 to F/Y 048/049. The data and other necessary information were collected by using secondary sources of data in his research Poudel had pointed out various findings and recommendation same remarkable findings well as follows:

- Company had fluctuation trend in targeted production
- Invariable cost structure, sales commission has the dominant role
- In fixed cost structure salary has occupied the dominant role
- Actual sale of the company seems to be more than 50 percent of plan sales in most of years during the six years period.

Prem Prasad Acharya (2000 A.D.) on the topic *"Profit Planning in Nepalese PEs" (A case study of Herbs Production and Processing Co. Ltd.).* The basic objectives of his research were to see how far the different functional budgets are being applied as a tool for profit planning in manufacturing and business enterprise. Other objectives are as follows:

1. To show profits plans and examine the practice and effectiveness of comprehensive Profit plans and control system of Herbs production processing Ltd.
2. To examine the present planning provision adopted by HPPCL on the basis of budgeting.
3. To access the BEP analysis of HPPCL.

Acharaya concluded his research with some findings, and recommendations. His major findings were:

1. The company has been suffering at loss since established to now due to unscientific and imperfect budgets prepared.
2. The company has facing marketing problem in international markets as well as Indian Market.
3. Achievements and the analysis of CVP and flexible budgeting shows the HPPC has been suffering with various internal and external problems in the process of formulating and implementing profit plan.

Acharaya has recommended various suggestions to improve the profit planning system of HPPCL, which are as follows:

1. Profit planning system should be systematic with a clear objective executives should be well versed with business knowledge.
2. Profit planning manual should be communicated from top level to lower level.
3. The company should hire trained and qualified manpower of budgeting and planning and present manpower should be developed.
4. Marketing specialist should be appointed to develop effective marketing policies for sales expansion and for availability and regular supply of raw material.

5. The company should develop sales strategy in domestic and international market.
6. The company should try to reduce investment in current assets to avoid idle working capital.

Ishwor Raj Chalise (2001 A.D.) research on the topic *"Profit Planning in Nepal Lever Limited" (A Case Study of Nepal lever Limited)"* The main objective of the study is:

1. To examine the practices and effectiveness of profit planning in NLL.
2. To analyze the various functional: plans formulated and implemented in NLL.
3. Evaluate the variance between targets and actual of NILL.
4. To evaluate the profit planning process applied in NLL with conceptual perspective.
5. To point out feasible suggestion and recommendation to make betterment of Nepalese manufacturing enterprises with speed reference to NLL.

Major Findings

1. General Manager with mutual cooperation of other top level managers and which the board of directors finally approves prepare yearly budget for income and expenditure.
2. NLL has been suffering from many internal and external factors in formulating and implementing plans.
3. The company is unable to appoint sufficient number of reliable agents/dealers to improve its sales performance.
4. In NLL there is detail plan of manpower and systematic approach of labor planning. The company plans for direct hours and direct labor cost needed to produce the planned quantities of goods.

Recommendations:

1. For better performance, company should prepare strategic long range and tactical short range profit plans. Trained and qualified manpower of profit planning should be hired and present manpower should be trained to develop and implement the profit plans effectively.
2. The company should improve the productivity of its products by providing sufficient technical staff and technical equipments.
3. The company should prepare raw material budget and purchasing policy or raw materials on the basis of economic order quantity label.
4. NLL should consider its product line to improve its profit.

Dilip Kumar Dhakal (2003 A.D.) has conducted research in PPC in manufacturing sectors of Nepal *“A case study of Herbs Production & Processing Company Ltd.”* The research was centered in and on, the perfect use of tools of PPC and awareness of the system.

The major findings of the study revealed that “HPPCL lacks professional managers: there is a lack of skilled planners and budgeting experts. This is clearly visible in the operation of the company. Budgets are irrationally, unsystematically and unscientifically as well as there would be lack of follow up of action performed.”

Indira Ghimire (2004 A.D.) has conducted research in profit planning & controls (Budgeting). In manufacturing sectors of Nepal *“A Case Study in Bottlers Nepal Pvt. Ltd.”* The study was centered in around and around the practice of PPC in secondary data.

The major findings of the study had revealed that "The lack of expertise for perfect planning cause the complex comprehensive budgeting system." As usual, there would be a one year plan prepared.

Niraj Acharya (2006 A.D.) has conducted research in PPC in manufacturing sales of Nepal *"A comprehensive study of Herbs Production and Processing Ltd."* The researches were centered in and around, practices of PPC and the tools are effectively practiced or not.

The findings of the researches are as follows:

1. Budgets are prepared on traditional basis because of lack of skilled planners and budgeting expenses.
2. HPPCL has no systematic and scientific sales plans. Sales plans are not made by considering all the components of affecting sales.
3. There is lack of use in inventory policy and techniques.
4. There is lack of use in labor cost budgets and lack of use of cash budgets.

Therefore, in overall the company has no good practices of profit planning and controls (Budgeting). As well as, the company is not using the techniques of analyzing various performance reports. Therefore company is unable to use the skilled manpower require for the industry.

Pawn Chandra Adhikari (2007 A.D.) had conducted research in the topic *"A Study on the Effectiveness of Profit Planning & Control of Unilever Nepal Ltd."* The researches were centered in and on, the perfect use of tools of PPC and awareness of the systematic approach of developing the budget.

The key findings of the research revealed that "Unilever Nepal Ltd. does not prepare strategies and policies for long term. Even it has mentioned the objectives of servicing people to every where and everyday. It has no proper systematic use of overall profit plan. UNL is also carrying to achieve social needs if the common people by organizing various programs."

Production of UNL is not segmented to various products and departments. There is lack of effective coordination among various departments. It is not able to prepare raw materials requirement and purchase budget systematically nor, it has proper records of raw material consumed. There is no optimal inventory policy.

The company ignored the environmental factors and it has not adequately considered controllable and uncontrollable variables affecting the company. Moreover the company has no in depth analysis.

2.13 Research Gap

There is gap between the present research and previous researches. Previous researches conducted on profit planning and control covered only the budgeting practices in manufacturing companies. They were organized either in a single company or comparative studies were in between two companies. The findings were mostly in secondary data. Previous researches were unable to recommend about particular tools uses and why. Thus to full- fill the gap, the current research is organized. The research is survey type of research. It is completely based on the primary sources of data. It examines the current practices of profit planning and control tools. It has disclosed the reasons about not practice the PPC tools and why. The number of Companies during primary survey used found practices of PPC tools were also disclosed. As well as recommendations are provided to concern level how the PPC practices are made more usual. Probably this might be the first research conducted on primary survey of PPC topic in Nepal

CHAPTER - III

RESEARCH METHODOLOGY

3.1 Research Design

A research design is a specification of methods and procedures for acquiring the information needed. It is the overall operational pattern of frame work for the project that stipulates what information is to be collected, from which sources and by what procedures.

The research design of this study is descriptive as well as analytical. This study is an examination and evaluation of budgeting procedure in the process of profit plan of Himalayan Distillery Company limited. The study is closely related with the various functional budgets and other proposed accounting statements as well as the actual result over the budgets. This information is used to analyze and evaluate the profit planning system of HDL.

3.2 Period Covered

The study covered the period of 5 years from the fiscal year 2004/05 to 2008/09. Data were taken from HDL and the analysis was made on the basis of these five years' data. Both budgeted and actual data were taken since the fiscal year 2004/05 to 2008/09.

3.3 Source of Data

Both primary data and secondary were used in this study. The primary data was collected from the HDL staff whereas secondary data was collected from HDL as well as from other sources.

3.4 Data Collection Procedures

a. Primary Data

The primary data were collected from the field directly during survey period. The researcher conducted interview, discussion, and made direct observation to obtain required information.

b. Secondary Data

The secondary data were collected from the secondary sources. These secondary sources consist of two sources.

i. **Internal Sources:**

- Annual general meeting report of HDL from the fiscal year 2004/05 to 2008/09.
- Prospectus of HDL
- Website of HDL (www.hdl.com)
- Booklets etc.

ii. External Sources:

- Books and publications
- Accounting & financial statistics
- Journal article, articles from newspaper.
- Local newspaper.
- Previous reports etc.

3.5 Tools used

Different tools were used to enlighten the factual matters of HDL.

a) PPC tools:

- Sales budget

- Production budget
- Material budget
- Labor budget
- Overhead budget
- Income statement
- Cash Flow statement
- Balance sheet

b) Financial Tools:

- Current ratio
- Quick ratio
- Total assets turnover ratio
- Capital employed turnover ratio
- Net profit margin
- Return on shareholders' equity

c) Statistical Tools:

- Mean
- Standard deviation
- Coefficient of variance
- Karl person's correlation coefficient
- Least square method
- Regression analysis
- Percentage
- Multiple bar diagrams
- Pie chart
- Graph

3.6 Research Questions

The fundamental objectives of this study is to examine how far the different functional budgets were being applied as tools for profit planning and control and in what extent they impact on profitability. The research questions were designed to answer the following:

a. To what extent the profit planning was followed in HDL?
b. What steps should be followed to improve profit planning and control system in HDL?
c. What are the overall managerial problems and what suggestion can be recommended for their proper solution?

3.7 Research Variables

This research work is mainly related to the PPC process of HDL. Financial and physical targets for specific goals relating different types of budget and related to budgets are the main research variable of this research work. Sales, production, overhead, material, labor, income statement and balance sheet are the main research variables of present study.

CHAPTER - IV

DATA PRESENTATION AND ANALYSIS

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

4.1 Sales Plan in HDL

Sales refer to exchange of goods and service for money. Selling goods and services at a price higher than their cost achieve the profit-making objective of a business. If each unit of product is sold at a relatively low contribution margin, profit can be made only by selling in large quantities. This situation prevails when the fixed costs are high.

HDL is the multi-product manufacturing company producing and selling different products. The following table presents the budgeted and actual sales achievement from fiscal year 2004/05 to 2008/09.

Table 4.1

The Budgeted and Actual Sale Volume of HDL

(Rs in '0000')

Year	Budgeted Sales	Actual Sales	Achievement in %
2004/05	64684.68	9486.50	14.67
2005/06	54314.80	20358.51	37.48
2006/07	46931.20	31457.86	67.03
2007/08	69442.58	64099.38	92.30
2008/09	75034.33	64322.83	85.72

Source: Annual Reports of HDL 2004/05 to 2008/09

The actual sales shown on the table above are according at invoice price. The sales do not included excise duty, VAT and other tax. The taxation and charges were shown in the balance sheet of the company.

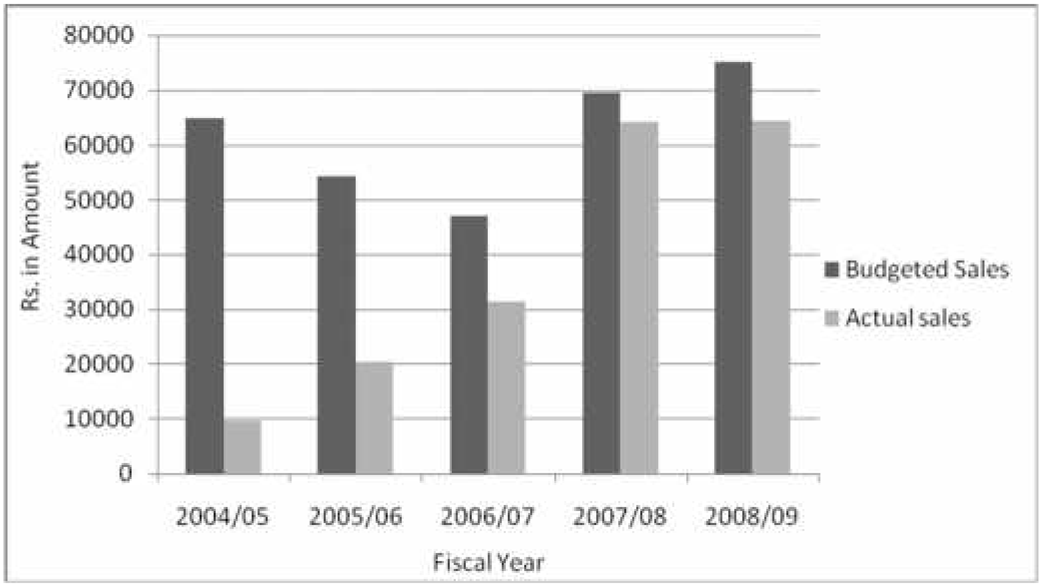
The sales revenue of HDL was fluctuating. There are various reasons, which cause the variation on sales revenue. The significant factors responsible for the variation in sales revenue were demand conditions of the products, cost of the products, political situations of the company, political conflicts, government policy, socio-cultural condition of the country, top competition with imported products etc. There are other national and international reasons such as depression in international economic activities, transportation problem due to insecurity etc. directly or indirectly cause the fluctuation of sales.

The above table shows that there is high gap between actual sales and budgeted sales. The actual sales trends were unfavorable because the actual sales of all the fiscal year were very less than the budgeted sales. But the percentage of variance has decreased. So, it can be expected that the gap between actual sales and budgeted sales will be less in future. The highest achievement % is 92.30% in fiscal 2007/08 and lowest achievement % is 14.67% in fiscal year 2004/05.

The sales target and sales achievement of HDL can be shown from the following diagram:

Figure 4.1

The Budgeted and Actual Sale Volume of HDL



In order to find out the nature of variability of budgeted and actual sales in different years, it is necessary to calculate the arithmetic mean, standard deviation and coefficient of variance of budgeted and actual sales for the research year. The detail calculation of these statistical tools is presented in Appendix – I and the results are as follows.

Table 4.2

Budgeted and Actual Sales Comparison

Statistical Tools	**Budgeted Sales (Rs)**	**Actual Sales (Rs)**
Mean	6208.15	3794.5
Standard Deviation (б)	1018.42	2254.37
Coefficient of Variance (C.V.)	16.40%	59.41%

(Source: Appendix – I)

Table 4.2 showed the result of Appendix – I. The calculated mean of budgeted sales and actual sales are Rs 6208.15 and 3794.5 respectively. The coefficient of variance of budgeted sales and actual sales are 16.40% and 59.41% respectively. The standard deviation of budgeted sales and actual sales are Rs 1018.42 and Rs 2254.67 respectively. The greater coefficient of variance and standard deviation of actual sales than budgeted sales indicated that actual sales were more risky than budgeted sales. Hence, the management should endeavor to trace the causes behind the variability otherwise it may jeopardize.

4.1.1 Correlation between Budgeted and Actual Sales

"Correlation analysis is defined as the statistical technique which measures the degree of relationship between variables" (Sharma & Silwal, 2061: 246). Karl Pearson's Correlation Coefficient (r) is applied here to measure the degree of relationship between the budgeted sales (say X) and actual sales (say Y).

where, $r = \frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}}$ = + 0.60541 *(from Appendix – I)*

Since, the value of r = + 0.60541 which is positive, the correlation coefficient between the budgeted sales and actual sales is positive. It means that actual sales increased with the increase in budgeted sales and vice versa which showed a good effort of management. In scientific term, actual sales is directly proportional to budgeted sales.

Now, the Probable Error is used to measure the reliability and the test of significance of correlation coefficient which is calculated by using following formula.

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

Where, N = No. of pairs of observations

r = the value of correlation coefficient

P.E. is used in interpretation whether the calculated value of ‘r’ is significant or not. If,

a. If r < P.E., it is insignificant, i.e. there is evidence of correlation.

b. If r > 6 P.E., it is significant.

c. If P.E.< r > 6 P.E. nothing can be concluded.

Hence, the significance of the value of ‘r’ is examined by using P.E. is,

P.E. = 0.6745 $\times \frac{1-r^2}{\sqrt{N}}$

$$= 0.6745 \times \frac{1-(0.60541)^2}{\sqrt{5}}$$

$$= 0.1910$$

Here, 6 x P.E. = 6 x 0.1910 = 1.146

Since, 6 P.E > r (i.e. r = +0.60541 and 6 x P.E. = 1.146) then the value of 'r' is insignificant i.e. there was not perfect correlation between budgeted and actual sales.

4.1.2 Regression Analysis between Budgeted and Actual sales

Similarly, regression analysis can also be used to show the relationship between budgeted and actual sales. For this purpose, actual sales (the dependent variable) and budgeted sales (the independent variable) are assumed to be Y and X respectively. Then the regression line of actual sales(Y) on budgeted sales(X) is as below:

$$(Y-\overline{Y}) = \frac{r_{xy}(X-\overline{X})\sigma_y}{\sigma_x}$$

where, X = 6208.15

Y = 3794.5

$б_x$ = 1018.42

$б_y$ = 2254.37

r_{xy} = 0.60541 *(from Appendix – I)*

Then,

$$Y - 3794.5 = \frac{0.60541\,(X - 6208.15) \times 2254.37}{1018.42}$$

or, $Y - 3794.5 = 1.340\,(X - 6208.15)$

or, $Y - 3794.5 = 1.340\,X - 8318.92$

or, $Y = -4524.421 + 1.340\,X$

From this regression equation it is clear that there is positive relation between budgeted and actual sales. The actual sales increased by Rs 1.340 per one rupee change in budgeted sales.

4.1.3 Fitting Straight Line Trend of Actual Sales

Likewise, a straight line trend can also be fitted by using Least Square Method (Time Series Analysis) to show the relationship between year and actual sales of the relevant year. It shows the trend of actual sales and is an important tool to forecast sales for future. The straight line of actual sales (Y) is expressed as follows:

Y_c = a + bX ………………….. (i)

where, Y_c = Actual sales

a = Fixed value

b = Variable value

Now, the straight line is fitted by using least square method, assuming 2006/07 as base year.

Table 4.3

Fitting Straight Line Trend of Actual Sales

Using Least Square Method from the Fiscal Year 2004/05 to 2008/09

FY	Mid Value (X)	Actual Sales (Y)	X^2	XY
2004/05	-2	948.650	4	-1897
2005/06	-1	2035.851	1	-2035.851
2006/07	0	3145.786	0	0
2007/08	1	6409.938	1	6409.938
2008/09	2	6432.283	4	12864.566
		∑Y = 18972.508	**$\sum X^2$ = 10**	**∑XY = 15341.65**

Now, a $= \frac{\sum Y}{N} = \frac{18972.508}{5} = 3794.50$

b $= \frac{\sum XY}{\sum X^2} = \frac{15341.65}{10} = 1534.165$

Putting the value of a and b in equation 'i',

$Y_c = 3794.50 + 1534.165\,X$

The above calculation showed that Rs 1534.16 will increase in actual sales in every year if the trend of past years continues in future also. With the help of the above equation the value of actual sales for the fiscal year 2009/10 can be calculated as follows, where value of 'X' is 3.

Estimated Actual sales for the fiscal year 2009/10 is,

$$Y_{2009/10} = 3794.50 + 1534.16 \times 3$$

$$= \text{Rs } 8396.98$$

4.2 Production Plan in HDL

HDL has the practice of preparing short term production budget. The production manager prepares the production plan based upon the adequacy or availability of raw material, sales target and targeted inventory. The following tables show the planned and actual production activities from the fiscal year 2004/05 to 2008/09.

Table 4.4

Budgeted Production and Actual Production of HDL

(Rs in '0000')

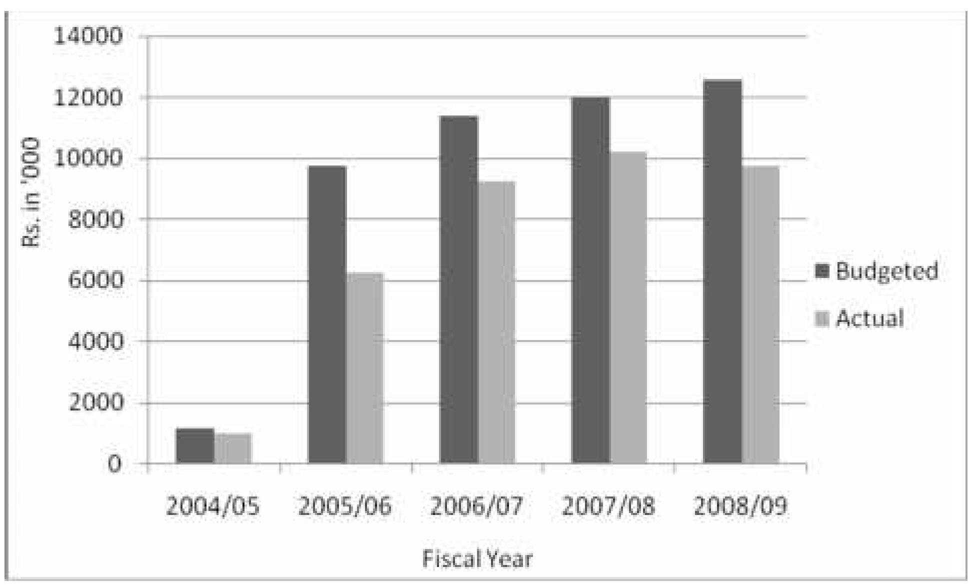
Fiscal Year	Budgeted	Actual	(Actual Production to Budgeted Production)
2004/05	1145.2014	983.2030	85.85%
2005/06	9725.001	6252.012	64.28%
2006/07	11390.0	9220.014	80.94%
2007/08	12005.121	10200.510	84.96%
2008/09	12551.640	9724.523	77.47%

(Source: Annual Report of HDL)

The above Table 4.4 showed that in the fiscal year 2004/05 to 2008/09, the actual production to budgeted production had ranged from 64.28% to 85.85%. Actual production and budgeted production both are in fluctuating trend. And the percentage of actual production to budgeted production is also in fluctuating trend. It was 85.85% in fiscal year 2004/05, 64.28% in 2005/06, 80.94% in 2006/07, 84.96% in 2007/08 and 77.47% in fiscal year 2008/09. The result is presented in following figure 4.2.

Figure 4.2

Actual Production of Overall Products of HDL



4.2.1 Comparison between Actual and Budgeted production

To compare between budgeted production and actual production statistical tools like mean, standard deviation, co- variance, correlation are used. The summary of appendix-II is presented below in table 4.5.

Table 4.5

Budgeted and Actual Production Comparison

Statistical Tools	**Budgeted Production (Rs)**	**Actual Production (Rs)**
Mean	114247.552	90458.178
Standard Deviation (б)	4241.6	6402.43
Coefficient of Variance (C.V.)	3.71%	7.08%

Source Appendix-II

The Table 4.9 showed that actual production was highly variable than budgeted production. The calculated coefficient of variance (i.e. 7.08%) of actual production was higher than those of budgeted production. The standard deviation of Actual production was also higher than Budgeted production, C.V. is considered as the best tool to measure variance. Likewise the mean budgeted production and mean actual production of HDL during the research period were Rs 114247.552 and Rs 90458.178 respectively.

4.2.2 Correlation between Budgeted and Actual Production

Let us assume that the budgeted production and actual production be X and Y respectively in order to find the degree of relationship between them. Then the

Karl Pearson's Correlation Coefficient (r) between budgeted and actual production is calculated as follows:

As we know,

$$r = \frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}} = +0.913 \text{ (from Appendix – II)}$$

Since, the value of r = +0.913 is nearly equal to +1, it is worthwhile to say that there was perfect correlation between budgeted and actual production. Hence, actual production was directly proportional to budgeted production. To test the significance of the value of 'r', we have to find the value of P.E. as follows;

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

$= 0.6745 \times \frac{1-(0.913)^2}{\sqrt{N}}$

$= 0.0502$

Here, 6 x P.E. $= 6 \times 0.0502 = 0.3012$

Since, r > 6 P.E. (i.e. r = +0.913 and 6 x P.E. = 0.3012) then the value of 'r' is significant i.e. there was perfect correlation between budgeted and actual production which indicated that budgeted and actual production went into the same direction.

4.2.3 Regression Analysis between Budgeted and Actual Production

For this purpose, let actual production (the dependent variable) and budgeted production (the independent variable) are Y and X respectively. Then the regression line of actual production(Y) on budgeted production(X) is as below:

$$(Y-\overline{Y}) = \frac{r_{xy}(X-\overline{X})\sigma_y}{\sigma_x}$$

where, X = 114247.55

Y = 90458.17

$б_x$ = 4241.6

$б_y$ = 6402.43

r_{xy} = 0.913 *(from Appendix - II)*

Then, $Y - 90458.17 = \frac{0.913\,(X-114247.55) \times 6402.43}{4241.6}$

or, $Y - 59928.39 = 0.913\,(X-114247.55)$

or, $Y - 59928.39 = 0.913\,X - 104308.01$

or, $Y = -\,44379.62 + 0.9485\,X$

From this regression equation it is clear that there was positive relation between budgeted and actual production. The actual production increased by Rs 0.9485 per one Rupee change in budgeted production.

4.2.4 Fitting Straight Line Trend of Actual Production

Using least square method, the straight line of actual production (Y) is expressed as follows:

$$Y_c = a + bX \quad \text{………………….. (i)}$$

where, Y_c = Actual production

a = Fixed value

b = Variable value

Now, the straight line is fitted using least square method, assuming 2062/063 as base year.

Table 4.6

Fitting Straight Line trend of Actual Production

Using Least Square Method from the Fiscal Year 2004/05 to 2008/09

FY	Mid Value (X)	Actual Production (Y)	X^2	XY
2060/061	-2	98320.30	4	-196640.6

2061/062	-1	62520.12	1	-62520.12
2062/063	0	92200.14	0	0
2063/064	1	102005.10	1	102005.10
2064/065	2	97245.23	4	97245.23
		$\sum Y$ = 452290.89	**$\sum X^2$ = 10**	**$\sum XY$ = -59910.39**

Now, a $= \frac{\sum Y}{N} = \frac{452290.89}{5} = 90458.178$

b $= \frac{\sum XY}{\sum X^2} = \frac{-59910.39}{10} = 5991.039$

Putting the value of a and b in equation 'i',

Y_c = 90458.17- 5991.039 X

The above calculation showed that Rs 5991.039 will decrease in actual production in every year if the trend of past years continues in future also. With the help of the above equation the value of actual production for the fiscal year 2065/066 can be calculated as follows, where value of 'X' is 3.

Estimated Actual production for the fiscal year 2009/10 is,

$Y_{2065/066}$= 90458.17 – 5991.039 x 3

= Rs 72485.053

4.2.4 Correlation between Actual Sales and Actual Production

Let X be the actual sales and Y be the budgeted sales, then the Karl Pearson's correlation coefficient 'r' can be calculated as follows:

Here, r $= \frac{\sum xy}{\sum x^2 \sum y^2}$ = + 0.1987 *(from Appendix – III)*

Since, the value of r = +0.1987, there was Positive correlation between actual sales and actual production. Hence, actual sales increased with the increase in actual production and vice versa. To test the significance of the value of 'r', the value of P.E. is;

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

$= 0.6745 \times \frac{1-(0.1987)^2}{\sqrt{5}}$ = 0.289

Here, 6 x P.E. = 6 x 0.289 = 1.73

Since, 6 P.E > r then the value of 'r' is insignificant that means HDL remained unsuccess in creating a good relationship between actual sales and actual production within this research period.

4.3 Material Purchase Plan

Planning and controlling raw material and its components used in manufacturing of finished goods is the key concept of comprehensive profit plan and control program. The purchase of raw material for overall products by NBBUL during the research period is presented in Table 4.7 below:

Table 4.7

Annual Performance Analysis of Raw Material Purchase

(Rs. in '0000')

Fiscal	Raw Material Purchase		Incurred	Variance in		
Year	Budgeted	Actual	%	Rs.	%	Remarks
2004/05	11343.7857	9409.8436	82.95%	10393.942	17.04	Favourable
2005/06	12678.9765	10324.545	81.43%	2289.805	18.57	Favourable
2006/07	17049.6000	14152.319	83.006%	289.728	16.99	Favourable
2007/08	22864.0000	16246.155	71.06%	6617.844	28.94	Favourable
2008/09	20460.0000	15683.461	76.65%	4776.538	23.35	Favourable

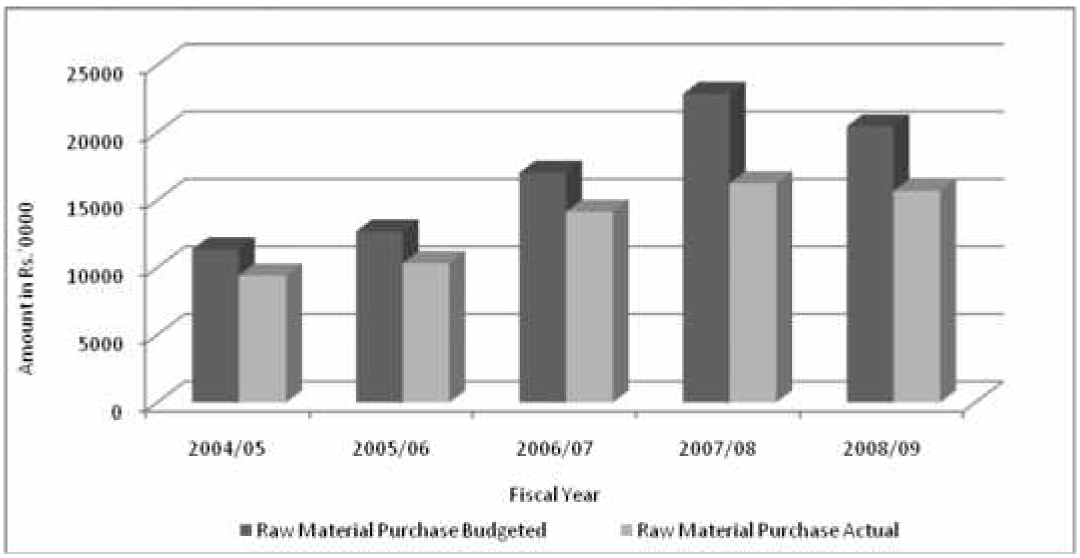
(Source: Annual Report of HDL)

Table 4.7 showed that HDL had good control over raw material purchase. HDLL incurred 82.95%, 81.43%, 83.006%, 71.06% and 76.65% of budgeted purchase as actual purchase of raw material in the fiscal year 2004/05, 2005/06, 2006/07, 2007/08 and 2008/09 respectively. On average, HDL made a purchase of 79.09% of budgeted purchase on reality which was a favorable result. HDL should be aware about the fluctuating market price of raw material while preparing the material purchase plan.

Raw material purchase on product wise couldn't be presented in this research work due to the insufficient data provided by HDL.

Figure 4.3

Annual Performance Analysis of Raw Material Purchase



4.4 Direct Labor Cost Plan

HDL has no practice of planning direct labor hours per unit of product. The company prepares direct labor cost budget by previewing previous year record and the likely changes in coming year. It has totally ignored production and direct labor hours per unit of product. The data provided by HDL as concerned to direct labor cost is presented in Table 4.8 as below:

Table 4.8

Annual Performance Analysis of Direct Labor Cost

(Units in Rs '0000')

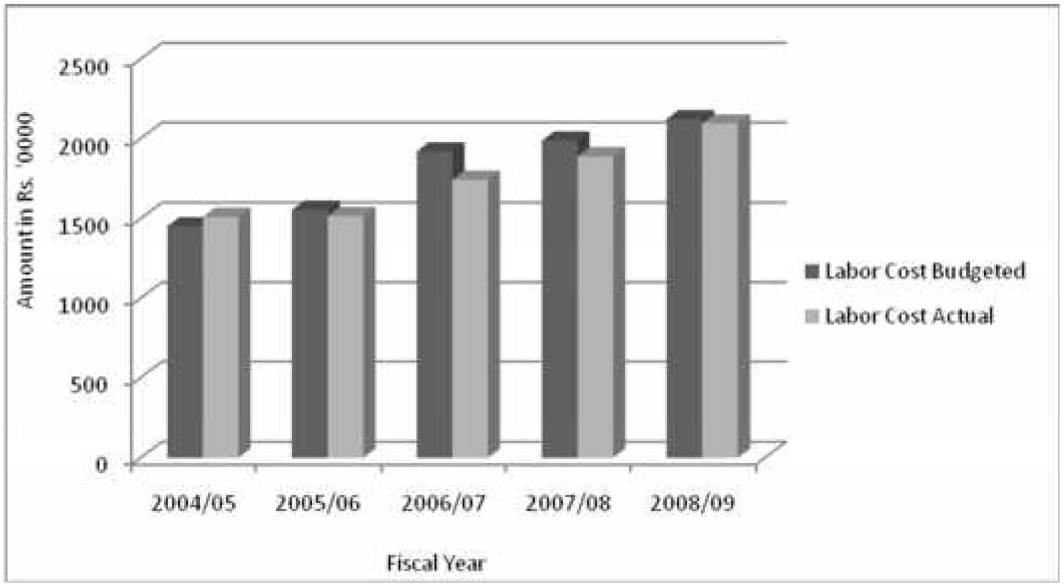
Fiscal	Labor Cost		Incurred	Variance in		
Year	**Budgeted**	**Actual**	**%**	**Rs.**	**%**	**Remarks**
2004/05	1451.257	1511.231	104.13	-599746	-4.13	Unfavourable
2005/06	1554.451	1515.744	97.50	387072	2.5	Favourable
2006/07	1920.000	1744.235	90.84	1757644	19.16	Favourable
2007/08	1986.742	1889.913	95.12	968290	4.82	Favourable
2008/09	2122.234	2094.594	98.69	276398	1.31	Favourable

(Source: Annual Report & Account Department of HDL)

The Table 4.8 showed the variance between budgeted and actual direct labor cost of HDL. HDL incurred 104.13%, 97.50%, 90.84%, 95.12% and 98.69% of planned direct labor cost as actual direct labor cost in the fiscal year 2004/05, 2005/06, 2006/07, 2007/08 and 2008/09 respectively. On average, 97.256% of planned direct labor cost was paid as direct labor cost on reality which was favourable for HDL. In the fiscal year 2004/05, HDL paid 4.13% more than planned as direct labor cost. This is due to ignoring direct labor hour per unit and production quantity while preparing budgeted direct labor cost budget.

Figure 4.4

Annual Performance Analysis of Direct Labor Cost



4.5 Expenses Plan

HDL has no practice of segregating cost on product wide basis. HDL classifies its expenses on factory overhead, administrative overhead and selling and distribution expenses. The details of actual expenses incurred by HDL on overall products during the research year have been listed below:

Table 4.9

Budgeted and Actual Overhead of HDL

Particulars	Budgeted	Actual	Incurred	Variance in	Remarks
Fiscal Year			**%**	**%**	
FY 2004/05					
Factory Overhead	324476.893	35373.397	109.016	-9.016	UF
Administrative Overhead	2403.256	2386.732	99.31	0.68	F
Selling & Distribution Overhead	4958.867	4789.345	96.58	3.41	F
Total Overhead Cost	**39809.813**	**42549.475**	**106.88**	**-6.88**	**UF**
FY 2005/06					
Factory Overhead	42436.754	38765.645	91.34	8.66	F
Administrative Overhead	3114.537	3425.287	109.97	-9.97	UF
Selling & Distribution Overhead	6223.457	5423.745	87.15	12.85	F
Total Overhead Cost	**51774.750**	**47614.679**	**91.96**	**8.04**	**F**
FY 2006/07					
Factory Overhead	51534.537	42674.598	82.80	17.2	F
Administrative Overhead	4327.645	3952.234	91.32	8.68	UF
Selling & Distribution Overhead	6784.598	5756.734	84.85	15.15	F
Total Overhead Cost	**62646.781**	**52383.567**	**83.61**	**16.39**	**F**
FY 2007/08					

Factory Overhead	50342.234	49692.694	98.70	1.30	F
Administrative Overhead	4809.524	4038.507	83.96	16.04	F
Selling & Distribution Overhead	6752.298	6296.555	93.25	6.75	F
Total Overhead Cost	**61904.057**	**60027.757**	**96.96**	**3.04**	**F**
FY 2008/09					
Factory Overhead	49042.452	47852.894	97.57	2.43	F
Administrative Overhead	4952.233	4682.603	94.55	5.45	F
Selling & Distribution Overhead	9434.230	8493.404	90.02	9.98	F
Total Overhead Cost	**63428.915**	**61028.903**	**96.21**	**3.78**	**F**

(Units in Rs.'0000)

(Source: Account Department & Annual Report of HDL)

Table 4.9 showed both total and separate factory, administrative and selling & distribution expenses of HDL from the fiscal year 2004/05 to 2008/09. The total expenses incurred by HDL during the fiscal year 2004/05, 2005/06, 2006/07, 2007/08 and 2008/09 were Rs. 425494754, Rs. 476146791, Rs. 523835674, Rs. 600277575and Rs. 610289030 respectively and the total budgeted expenses for the fiscal year 2004/05, 2005/06, 2006/07, 2007/08 and 2008/09 were Rs. 398098135, Rs. 517747500, Rs. 626467814, Rs. 619040573and Rs. 634289150 respectively. The variance of 3.04% in the fiscal year 2007/08 and 3.78% in the fiscal year 2008/09 verified that HDL was efficient in controlling expenses.

HDL should control the growing ugly head of expenses otherwise it will have to bear a heavy loss in forthcoming year. The company should try to maintain a good relationship between the expenses and the benefit that arises with the increase in expenses.

4.6 Financial Analysis of HDL

Financial efficiency and soundness is a vital element to achieve the predetermined goals of business enterprise. Therefore, every enterprise needs to analyze its financial ratios to acquire knowledge of the financial position of the company. So, to know the exact financial position of HDL, some major financial ratios have been analyzed here.

Table 4.10

Summary of Financial Statement of HDL

(Rs in '0000')

Particulars	**Fiscal Year**	
	2007/08	**2008/09**
Current Assets	20610.806	18257.238
Fixed Assets	36659.624	35572.708
Total Assets	57270.431	53829.947
Current Liabilities	31694.712	35499.990
Net Profit	29627.061	31456.711

Sales	64099.388	64322.839
Capital Employed	57177.905	53360.292
Shareholder Equity	35829.100	36723.400

(Source: Annual Report of HDL)

The above table 4.10 represented the financial status of HDL. These financial indicators are used below to calculate different financial ratios.

4.6.1 Current Ratio

Current ratio is a measure of the firm's short term solvency. It indicates the availability of current assets in rupees for every one rupee of current liability. As a conventional rule, a current ratio of 2-to-1 or more is considered satisfactory. The current ratio is calculated by dividing the current assets by current liabilities.

Table 4.11

Presentation of Current Ratio of HDL

(Units in Rs. '0000')

Fiscal Year	Current Assets (CA)	Current Liabilities (CL)	Current Ratio (CR) = CA/CL
2007/08	20610.806	31694.712	0.65:1
2008/09	18257.238	35499.990	0.51:1

(Source: Annual Report of HDL)

Table 4.11 showed the fluctuating trend of current ratio. None of the current ratios of HDL had met the standard ratio of 2:1. It can be concluded that HDL was not in the position to meet its current obligations and was finding great difficulties while paying bills.

4.6.2 Total Asset Turnover Ratio

This ratio shows the firm's ability in generating sales from all financial resources committed to total assets. It indicates the sales generated per rupee of the investment in total assets. It is calculated by dividing sales by total asset of the firm.

Table 4.12

Presentation of Total Asset Turnover Ratio of HDL

(Units in Rs. '0000')

Fiscal Year	Sales (Rs.)	Total Assets (Rs.)	Ratio = $\frac{\text{Sales}}{\text{Total Assets}}$
2007/08	64099.388	57270.431	1.11
2008/09	64322.839	53829.947	1.19

(Source: Annual Report of HDL)

Total asset turnover ratio of HDL in the fiscal year 2007/08 (i.e. 1.11) and in the fiscal year 2008/09 (i.e. 1.19) were higher than previous year. The company enjoyed high asset turnover ratio in the fiscal year 2008/09 (i.e. 1.19) which means HDL had been able to produce Rs.1.19 sales per rupee of investment in total asset. The company had made better utilization of its assets in this year.

4.6.3 Capital Employed Turnover

Capital Employed may be defined as shareholder’s equity plus long term debt. Higher ratio of capital employed turnover indicates better utilization of owners and long-term creditor’s funds. It is calculated by dividing sales by capital employed. The capital employed turnover of HDL is mentioned in table 4.13 as follows:

Table 4.13

Presentation of Capital Employed Turnover of HDL

(Units in Rs. '0000')

(Source: Annual Report of HDL)

The above table 4.13 showed the capital employed turnover in the fiscal year 2007/08(i.e. 1.12) and in the fiscal year 2008/09 (i.e. 1.20) which means HDL was able to produce Rs.1.12 sales and Rs.1.20 sales per rupee of capital employed in the fiscal year 2007/08 and 2008/09 respectively. Since higher ratio indicates that firm is very efficient on sales activity, the firm remained more efficient in the fiscal year 2008/09.

4.6.4 Net Profit Margin

Net Profit Margin represents the relationship between net profit after tax (NPAT) and sales of business enterprises. This ratio is the overall measure of the firm's ability to turn each rupee of sales into profit. It is obtained by dividing NPAT by sales.

Table 4.14

Presentation of Net Profit Margin of HDL

Fiscal Year	Sales (Rs.)	Capital Employed (CE) (Rs.)	Ratio = Sales/CE
2007/08	64099.388	57177.905	1.12
2008/09	64322.839	53360.292	1.20

(Units in Rs. '0000')

Fiscal Year	Net Profit (Loss) NPAT (Rs.)	Sales (Rs.)	Ratio = NPAT/Sales (%)
2007/08	29627.061	64099.388	0.46
2008/09	31456.711	64322.839	0.48

(Source: Annual Report of HDL)

The above table 4.14 showed that the net profit ratio was high in the fiscal year 2008/09i.e. 3.03%) and positive in other fiscal years. The lower ratio indicated that there may be either poor sales policy or use of high amount of operation expenses as well as high interest cost.

4.6.5 Return on Shareholder's Equity

This ratio measures how well the firm has used the resources of the owner's. It is obtained by dividing net profit after tax (NPAT) by shareholder's equity (SE).

Table 4.15

Presentation of Return on Shareholder's Equity (ROSE) of HDL

(Units in Rs.'0000')

Fiscal Year	Net Profit (Loss) (Rs.)	Shareholder's Equity (Rs.)	Ratio = NPAT/SE (%)
2007/08	29627.061	35829.100	0.82
2008/09	31456.711	36723.400	0.85

(Source: Annual Report of HDL)

Table 4.15 showed the return on shareholder's equity (ROSE) of HDL in the fiscal year 2007/08 & 2008/09. The company showed poor ROSE in the fiscal year 2007/08 (i.e. 0.82%) and in 2008/09 (i.e. 0.85). Since the return on shareholder's equity reflects the overall performance and effectiveness of the company, the ROSE being lower than the industry norm is the result of overall policy errors of the management.

4.7 Major Findings

The major findings after the detailed analysis of profit planning process of HDL are mentioned below.

- HDL did not have any systematic plans for the formulation and implementation of comprehensive profit planning. So that budgeting system was not based on accounting standards.
- HDL produces alcohal and lequire as per the necessity of market.
- Sales revenue of HDL is fluctuating. There are various reasons, which cause the variation on sales revenue. The significant factors responsible for the variation in sales revenue were demand conditions of the products, cost of the products, political situations of the company, political conflicts, government policy, socio-cultural condition of the country, top competition with imported products etc HDL forecasts sales and production giving preference to government budget separated for road construction purpose.
- There is high gap between actual sales and budgeted sales. The actual sales trends were unfavorable because the actual sales of all the fiscal year were very less than the budgeted sales.

- The greater coefficient of variance and standard deviation of actual sales than budgeted sales indicated that actual sales were more risky than budgeted sales.
- The correlation coefficient between the budgeted sales and actual sales is positive. It means that actual sales increased with the increase in budgeted sales and vice versa.
- From this regression equation it is clear that there is positive relation between budgeted and actual sales. The actual sales increased by Rs 1.340 per one rupee change in budgeted sales.
- Using least square method, the estimated sales and production in the fiscal year 2009/10 of HDL will be Rs 8396.98
- Both actual sales and production fluctuated as compared to sales plan and production plan respectively.
- HDL has no practice of setting standards of direct labor hour per unit of each product. As a result, HDL paid 21.29% more than budgeted labor cost.
- Material purchase of HDL has increased and did not reconcile with production quantity.
- The variance of 3.04% in the fiscal year 2007/08 and 3.78% in the fiscal year 2008/09 verified that HDL was efficient in controlling expenses.
- None of the current ratios of HDL had met the standard ratio of 2:1. It can be concluded that HDL was not in the position to meet its current obligations and was finding great difficulties while paying bills.
- The capital employed turnover in the fiscal year 2007/08(i.e. 1.12) and in the fiscal year 2008/09 (i.e. 1.20) which means HDL was able to produce Rs.1.12 sales and Rs.1.20 sales per rupee of capital employed in the fiscal year 2007/08 and 2008/09 respectively

- There is no separate department for planning purposes. The top level executives set up the specific goals and strategy.

CHAPTER - V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Modern liquor industries are a part of agro and forest based industries. These industries are contributing significantly to the production of agro-based products to meet internal as well as external demand. Therefore, the promotion of liquor industries should be a critical element of the growth strategy in Nepal. It contributes about 20% to government revenue (Business Age, April 2004:35).

In Nepalese context, manufacturing organizations are facing so many problems. There are need for a large number of good managers and good managerial decisions. Most of organizations are in loss; profit earning is necessary to survive. Achieving objectives of the business organization needs profit. A firm would be able to obtain funds from the capital market if it earns profit.

Profit planning is the process of determining the required amount from each principal unit of business. A profit plan is a framework of expected achievement at most efficient operating standards. It is established against which actual accomplishment is regularly compared.

Profit planning is the estimation and predetermination of revenues and expenses that estimate how much income will be generated and how it should be spent in order to meet investment and profit requirement. In the case of institutional operation, it presents a plan spending income in a manner that does not result in a loss (Ninemeirer and Schmidgall, 1984: 133). The profit plan tells managers how much money remains to be spent in each expense category. Profit plans are also used to develop new budgets.

The basic objective of the research is to study, evaluate and highlight the degree of application of PPC in HDL. The study could be significant to the management and shareholders of HDL and general public also. For the fulfillment of the objectives of research, various function budgets of HDL from the fiscal year 2004/05 to the fiscal 2008/09 have been utilized and analyzed with the abet of various statistical and financial tools. Major portion of data has been collected from secondary sources such as annual report, prospectus and website of HDL etc. and partially from primary sources by making discussion, phone enquiries and through direct observation etc.

5.2 Conclusion

After analyzing and studying the practice of profit planning in HDL, the researcher considered that there is not complete and comprehensive profit planning system. HDL does not prepare long-term strategic profit plan and has limited its planning system to the short-term tactical profit plan only. Due to lack of skilled planner and budgeting experts, budgets are prepared on traditional basis. The political instability influenced the sales volume in recent years and the actual sales of HDL were more fluctuating than the budgeted sales. However, the company remained success in creating a perfect positive relationship between actual sales and actual production; industry produced goods in accordance with the actual sales. The production department of HDL successfully implemented the production plan; there is perfect positive relation between planned and actual production. The company has no inventory policy. It has given more emphasis on selling goods that has been produced.

HDL has no practice of classifying cost as fixed and variable components. As a result, the break even point and flexible budget has been totally ignored. The company prepares direct labor cost budget by previewing previous year record and the likely changes in coming year. It has totally ignored production and direct labor hours per unit of product. The company has not considered economic order quantity (EOQ) and re-order level also while purchasing material. The expenses are classified as factory expenses, administrative expenses and selling & distribution expenses. It has weak control over expenditure.

The liquidity position of the company was also poor. It suffered from the problem of meeting its obligations. Profit trend of HDL was in fluctuating trend. However, the company is running at profit right now. The company borrowed short term loan to meet the cash deficiency as a result faced the burden of interest and the problem of negative cash flow from operation which indicated the improper cash management and high operating expenses. The company has less emphasis on variance analysis also. The causes of variance had not been properly traced out. Besides that, there was lack of proper coordination between top-level management and lower-level management. HDL did not involve lower-level management while formulating plans and policies.

5.3 Recommendation

On the basis of analysis of the operations of HDL, it needs some suggestions to improve the application of profit planning system for its better operation in future. So the study recommends the following aspects to improve the HDL's planning and performance.

- The company should maximize its production and besides local market, the company should make effort to push its high quality product at international market.
- To make employee sincere in their work, reward and punishment system should be maintained for efficient performance.
- Performance reports should be strictly followed to make conscious towards poor performance and to take corrective action timely.
- A clear-cut and effective program regarding inventory should be introduced.
- The causes of unfavorable variances should be traced out and effective program should be introduced to avoid such variances.
- HDL should plan for acquisition of fixed assets; it should prepare capital expenditure budget taking into consideration the discounted cash flow.
- HDL should disseminate information to various departments and various levels so that communication barriers can be eliminated.

- HDL should establish a separate planning department. Skilled planners and budgeting experts should be hired for planning purpose. The company should also prepare long-term strategic plan.
- Besides government budget, HDL should focus past sales trend and other factors that affect the sales while preparing sales budget.
- Economic order quantity, re-order level and inflation should be considered while formulating raw material purchasing plan.
- The company should consider direct labor hour per unit and direct labor cost rate per hour while planning direct labor cost.
- The industry should pay attention in reducing the overhead costs. It should also try to maintain a good relationship between the expenses and benefit that arises by the increase in expenses.
- HDL should classify cost into fixed and variable and should prepare flexible budget and locate break even point.
- HDL should pay attention in reducing loan in order to get relief from burden of interest.
- A special program should be introduced to maintain a good liquidity position and get relief from the problem of meeting obligations.

BIBLIOGRAPHY

Books

Agrawal, G.R. (2059). *Dynamics of Business Environmental Nepal.* Kathmandu: M.K. Publishers & Distributors, Bhotahity, Nepal.

Bajracharya, P., Ojha, K., Goet, J. & Sharma, S. (2004). *Management Accounting.* (1st ed). Kathmandu: Asmita Books Publishers & Distributors, Putalisadak,

Census of Manufacturing Establishments (2001-2002). *Directory; Central Bureau of Statistics.* Kathmandu: Ram Shah Path, Thapathali, Nepal.

Dahal, M.K. (2004). *Nepalese Economy*. *(1st ed).* Kathmandu: New Hira Books Enterprises.

Dangol, R.M. (2062).*Accounting for Financial Analysis & Planning*. Kathmandu: Talezu Prakashan.

Dean, J. (1977). *Managerial Economics*. New Delhi: Prentice Hall of India Pvt. Ltd.

Drury, C. (2000). *Management Accounting*. Australia: Business Press.

GON (2004/2005). *Economic Survey*. Ministry of Finance.

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

Gupta, S.P. (1996). *Management Accounting*. Agra: Sahitya Bhawan Hospital Road Agra.

Halsall, J.H. (1974). *How to Prepare Operating Budget*. New York: Long Man Group Ltd.

Keller, I.W & Ferrara, L.W. (1996). *Management Accounting for Profit Control*. New York: Tata McGraw Hill.

Khan, M.Y & Jain, P.K. (1996). *Management Accounting*. New Delhi: Tata McGraw Hill Publishing Co.

Lucey, T. (1992). *Management Accounting*. London: DP Publication. Aldine Place, 142-144 Uxbridge Road, Shepherds Bush Green, W12 8 Aw.

Lynch, R.M & Williamson, R.W. (1983). *Accounting for Management. (Planning & Control*). New York: McGraw –Hill Companies, Inc.

Matz, J. & Milton, FU. (1985). *Cost Accounting Planning & Control*. England: Siuth Western Publishing Company West Chicago Bringhton.

Pant, P.R (2006). *Business Environment in Nepal*. Kathmandu: Budha Academic Publishers & Distributors Pvt. Ltd.

Pradhan, R.S. (1984). *Industrialization in Nepal.* New Delhi: Nbo Publishers 'Distributors, Municipal Flat No18, Bunglow Road.

Sharma, P.K & Chaudhary, A.K. (2058). *Statistics Methods*. Kathmandu: Khanal Books Prakashn.

Welsch, G. Hilton, A. (1972) *Budgeting Profit Planning & Control*. New York: Prentice Hall, Inc., Engle Wood Cliffs.

Welsch, G.A., Hilton, R.W., & Gordon, P.N. (1999).*Budgeting Profit Planning & Control*. New York: Prentice Hall Inc.

Weston, J.F. & Bringham, E.F. (1987). *Essential of Managerial Finance*. New York: The Dryden Press.

Journals & Publications

ADB (2001). *Nepal & ADB Sign Partnership Agreement to Fight Poverty:* Kathmandu.

Central Bureau of Statistics (2006). *Statistical Pocket Book 2006*. Kathmandu: Central Bureau of Statistics

Himalayan Distillery Company Limited (2002/03 - 2006/07). *Annual Reports of HDL*. Kathmandu.

Ministry of Finance. *Budget Speeches (Various Years).* Kathmandu: Ministry of Finance, Nepal Government.

Thesis

Acharya, N. (2006). *Profit Planning & Controls (Budgeting) A Comprehensive Study of Herbs Production & Processing Ltd*. Kathmandu: An Unpublished Master Degree Thesis, Submitted to Faculty of Management, T.U.

Acharya, P.P .(2000). *Profit Planning in Nepalese PE's A Case Study of Herbs Production & Processing Co. Ltd*. Kathmandu: An Unpublished Master Degree Thesis, Submitted to Faculty of Management, T.U.

Adhikari, P.C. (2006). *Profit Planning & Controls (Budgeting) A Case Study on the Effectiveness of Profit Planning & Control of Unilever Nepal Ltd*. Kathmandu: An Unpublished Master Degree Thesis, Submitted to Faculty of Management, T.U.

Chalisa, I.R. (2058). *B.S. Profit Planning in Nepal lever Limited. A Case Study of Nepal Lever Limited*. Kathmandu: An Unpublished Master Degree Thesis, Submitted to Faculty of Management, T.U.

Dhakal, D.K.(2003). *Profit Planning & Controls. A Case Study of Herbs Production & Processing Company Ltd*. Kathmandu: An Unpublished Master Degree Thesis, Submitted to Faculty of Management, T.U.

Ghimire, I. (2004). *Profit Planning & Controls (Budgeting) Ltd A Case Study in Bottlers Nepal Pvt .Ltd*. Kathmandu: An Unpublished Master Degree Thesis, Submitted to Faculty of Management, T.U.

Joshi, G.R. (1996) . *Budgeting Profit Planning in Nepal Rosin & Turpentine Ltd. (Nerot).* Kathmandu: An Unpublished Master Degree Thesis, Submitted to Faculty of Management, T.U.

Ojha, K.P. (1995). *Profit Planning in Manufacturing Public Enterprises: A Case Study of Royal Drugs Ltd &Herbal Production and Processing Company Ltd*. Kathmandu: An Unpublished Master Degree Thesis, Submitted to Faculty of Management, T.U.

Poudel, S.P. (1997). *Profit Planning in Manufacturing Company A Case Study of Himal Cement Company Ltd*. Kathmandu: An Unpublished Master Degree Thesis, Submitted to Faculty of Management, T.U.

Website:

http://www.himalayandistillery.com/agreement.htm

http://www.himalayandistillery.com/profile.htm

http://www.himalayandistillery.com/technology.htm

http://www.himalyandistillery.com/sis.htm

APPENDIX - I

Calculation of Correlation Coefficient between budgeted and actual sales by Actual Mean Method

F/Y	X	Y	x = (x-x)	y = (y-y)	x^2	y^2	xy
2004/05	6468.47	948.65	260.3162	-2845.85	67764.524	8098871.33	-740821.27
2005/06	5431.48	2035.851	-776.6718	-1758.65	603219.085	3092851.93	1365894.33
2006/07	4693.12	3145.786	-1515.032	-648.72	2295321.36	420831.93	982824.76
2007/08	6944.26	6409.938	736.1062	2615.44	541852.338	6840507.56	1925238.95
2008/09	7503.43	6432.283	1295.2812	2637.78	1677753.39	6957890.71	3416668.66
Total	**∑X =**	**∑Y =**			**$\sum x^2$ =**	**$\sum y^2$ =**	**∑xy =**
	31040.76	**18972.508**			**5185910.69**	**25410953.47**	**6949805**

Note: Assuming X as Budgeted Sales and Y as Actual Sales

i. Calculation of Airthematic Mean (A.M.)

For Budgeted sales:					For Actual sales:		
	A.M. (x) =	∑X =	31040.759		A.M. (y) =	∑Y =	18972.508
		N	5			N	5
	=	6208.1518			=	3794.50	

ii. Calculation of Standard Deviation (б)

For Budgeted Sales					For Actual sales:		
	$б_x$ =	$\sum (x\text{-}x)^2$ =	5185910.7		$б_y$ =	$\sum (y\text{-}y)^2$ =	25410953.5
		√ N	√ 5			√ N	√ 5
	=	1018.42			=	2254.37	

iii. Calcualtion of Coefficient of Variance (C.V.)

For Budgeted Sales					For Actual sales:		
	$C.V._x$ =	$б_x$ =	1018.42		$C.V._y$ =	$б_y$ =	2254.37

		X	6208.1518			Y	3794.50	
	. =	16.40%			. =	59.41%		

iv. Calculation of Karl Pearson's Correlation Coefficient (r)

r_{xy} =	$\sum xy$ =	6949805		=	0.60541	
	$\sqrt{x^2y^2}$	$\sqrt{5185910.69 \times 25410953.4}$				√

APPENDIX - II

Calculation of Correlation Coefficient between budgeted and actual production by Actual Mean Method

F/Y	X	Y	x = (x-x)	y = (y-y)	x^2	y^2	xy
2004/05	114520	98320.3	272.588	7862.12	74304.2177	61812962	2143120
2005/06	97250	62520.12	-16997.54	-27938	288916434	780535085	474878314
2006/07	113900	92200.14	-347.552	1742	120792.393	3034432	-605422
2007/08	120051	102005.1	5803.658	11547	33682446.2	133331408	67014386
2008/09	125516	97245.23	11268.848	6787	126986935	46064075	76482257
Total	**∑X =**	**∑Y =**			**$\sum x^2$ =**	**$\sum y^2$ =**	**∑xy =**
	571237.8	**452290.89**			**449780912**	**1024777961**	**619912656**

Note: Assuming X as budgeted production and Y as actual production

i. Calculation of Airthematic Mean (A.M.)

For Budgeted production:				For Actual production:		
A.M. (x) =	∑X =	571237.76		A.M. (y) =	∑Y =	452290.89
	N	5			N	5
=	114247.55			=	90458.178	

ii. Calculation of Standard Deviation (б)

For Budgeted production:					For Actual produciton:			
	б$_x$ =	∑ (x-x)^2 =	449780912		б$_y$ =	∑ (y-y)^2 =	1024777961	
		√ N	√ 5			√ N	√ 5	
	=	4241.6			=	6402.43		
iii. Calcualtion of Coefficient of Variance (C.V.)								
For Budgeted production					For Actual production:			
	C.V.$_x$ =	б$_x$ =	4241.6		C.V.$_y$ =	б$_y$ =	6402.43	
		X	114247.55			Y	90458	
	=	3.71%			=	7.08%		
iv. Calculation of Karl Pearson's Correlation Coefficient (r)								
	r$_{xy}$ =	∑xy =	619912656		=	0.913		
		√ x^2y^2	√449780912 x 17030936	1.02E+09				
								r =

APPENDIX - III

Calculation of Correlation Coefficient between actual sales and actua

by Actual mean method

F/Y	X	Y	x = (x-x)	y = (y-y)	x^2	y^2	xy
2004/05	948.65	983.203	-2845.852	-4456.76	8098871.33	19862688	12683271
2005/06	2035.85	6252.012	-1758.651	812	3092851.93	659427	-1428115
2006/07	3145.79	9220.014	-648.7156	3780	420831.93	14288804	-2452180
2007/08	6409.94	1020.051	2615.4364	-4420	6840507.56	19535601	-11559992
2008/09	6432.28	9724.523	2637.7814	4285	6957890.71	18357475	11301739

Total	$\sum X$ =	$\sum Y$ =			$\sum x^2$ =	$\sum y^2$ =	$\sum xy$ =
	18972.51	27199.803			25410953.5	72703995	8544723

Note: Assuming X as Actual Sales and Y as Actual Production

i. Calculation of Airthematic Mean (A.M.)

For Budgeted production:					For Actual production:		
	A.M. (x) =	$\sum X$ =	18972.508		A.M. (y) =	$\sum Y$ =	27199.803
		N	5			N	5
	=	3794.50			=	5439.9606	

ii. Calculation of Karl Pearson's Correlation Coefficient (r)

r_{xy} =	$\sum xy$ =	8544723	
	$\sqrt{x^2y^2}$	$\sqrt{25410953.5 \times 72703995}$	
=	0.1987		