

# **CHAPTER-I**

## **INTRODUCTION**

### **1.1 General Background**

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

As Nepal is bestowed with a wide range of geo-climatic conditions and with Variety of medicinal herbs plants, organizations like Herbs Production and Processing Company Ltd. (HPPCL) require to exploit these natural resources at the best interest of nation. For this HPPCL must have sound profit planning system through which it can rightly address the need of production, sales, cost and marketing of medicinal plants. If profit planning is rightly followed, HPPCL can increase its efficiency and this will improve the total quality of the organization.

Medicinal and Aromatic plants are the valuable forest resources of Nepal. From the very ancient periods there are varieties of medicinal plants. There are above 700 varieties of herb of nation to be processed domestically balancing their depletion in natural regeneration. Profit planning and control an important

managerial tool would be a helpful means to identify collect process, store, and marketing the plans.

Realising the facts above, this study is carried out to identify the process and methods of planning profit in this organization and to check whether or not there were any flaws in such planning and to give effective planning and forecasting techniques.

### **1.2 Statement of the Problem**

Profit is one of the major objectives of the company. It is essential for an organization not only to survive in the short-run but also to grow and operate in the future successfully. Profit is usually influenced by planning and control system of any concern. It is known that profit do not just happen it should be managed. That is why commercial enterprises should systematically plan for profit in a manner that enhances overall efficiency of the firm and in a manner that provides a tool for practical administration of a business as a whole.

It is apparent that almost all the enterprises established in public sector are facing huge losses. HPPCL is one of the public enterprises in industrial sector facing the same problem of dismal performance and financial position of the enterprise is getting worse day by day. So this study is designed to identify the planning and performances aspects of the company. Following are the main issues to be dealt in respect of this company:

- )] What is the condition of company's profitability and financial aspects?
- )] Is there any variance between budgeted and actual financial figure?
- )] To what extent is the process of master budgeting being followed by HPPCL?
- )] What steps should be taken to improve the master budget system in the manufacturing companies like HPPCL?

### **1.3 Objective of the Study**

The basic objective of this study is to examine the Master budgeting aspects of HPPCL and the impact of these in company's overall performance. Keeping the above-mentioned problems in view, following are the main objectives for which this study has been carried out.

- J To analyze the master budget and profit planning practice of HPPCL.
- J To sketch the financial position of the concern.
- J To evaluate the variance between budgeted and actual financial progress of HPPCL.
- J To find out the relationship among financial variables which are instrumental in profit planning.

### **1.4 Significance of the Study**

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

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

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

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

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

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

### **1.5 Limitation of the Study**

This study is concerned to master budgeting and profit planning of HPPCL. Beyond the resource and time constraints followings are some of the hindrances that may occur in course of conducting research.

- ) This study is primarily based on secondary data of five fiscal years. The reliability of results depends on these data.
- ) Analysis has been focused upon financial and accounting aspect.

- ) There were innumerable variables having some degree of relationship each other but some of them have only been taken into consideration.
- ) Only selected financial and statistical tools have been employed for analysis purpose.

## **1.6 Organization of the Study**

This study has been organized into following six different chapters.

### **Chapter I: Introduction**

- Background of the study
- Statement of the problem
- Objective of the study
- Significance of the study
- Limitation of the study
- Organization of the study

### **Chapter II: Review of Literature**

This chapter consists of conceptual framework which includes the concept of profit planning, process of profit planning, significance and constraint of profit planning etc. This chapter is also related to demonstration of workings of earlier researchers in respect of this field. This gives a strong foundation to move ahead for searching solutions of the problems identified.

### **Chapter III: Research Methodology**

This chapter deals with the followings related to plan and scheme of research.

- Research Design
- Period Covered
- Source of Data
- Data Collection Procedures
- Tools Use
- Research Questions
- Research Variables

#### **Chapter IV: Data Presentation and Analysis**

In this section, data collected from secondary sources are presented and analyzed to explore the profit planning and its different issues and to draw major findings in this regard.

#### **Chapter V: Summary, Conclusion and Recommendation**

This chapter is for summary, conclusion and recommendation.

Bibliography and appendixes are incorporated at the end of the study.

## **CHAPTER – II**

### **CONCEPTUAL FRAMEWORK AND REVIEW OF LITERATURE**

#### **2.1 Conceptual Review**

Review of literature is supported to revise the eminent literature relating to the study. Various books articles general bulleted, reports news statement and thesis etc are the best for preparing it. Some philosopher, writer or researchers have given the contribution on it since many years.

Planning and controlling are the primary function of business. A business can't success or live a minute in competitive or global environment with out it. In must cases revenue planning is not only the must important but also the must difficult to prepare. Revenue plan provides basic management decision about marketing and based on those decisions, it is an organized approach for developing comprehensive sales plan.

Budget is the key function of planning. It is the heart of business. A business can be run with out proper planning but with in a minute by lack of little money. We can say about cash in one sentence. 'Cash is the life blood of businesses. Cash is the most liquid assets: it is one measure responsibility of management to plan, control and safe guard of the cash of enterprises.

Business manager are continuously involved in organizing, planning, staffing and controlling the operation of both large and small organization.

Planning is the process of developing enterprises objective and selecting of future course of action to accomplish. 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 and accomplishing the objectives
- d. Initiating activities necessary to translate, plans in to action
- e. Current re planning to correct current deficiencies (Welsh et.al, 1999: 29-30).

Planning is directed to word the establishment of desirable future objectives and the formation of an organizational structure to follow in achieving them. Control result from the valuation of individual and group effort in term of the predetermine goals. The effective discharge of these functions essential to sound business management and successful operation” (Rathnam,1994:38). A profit plan is an advance decision of aspect achievement based on the must efficient operation standard of time. It is established against which actual accomplishment a regular is compared. Profit is an out come of effective and efficient management, which is effectively.

Sound and intelligent planning of profits cost and sales is both more important and more difficult then ever before in this age of rapid technology changes. Modern profit planning encourages action and recognizes the deviational and departmental authority and responsibility of manager, motivating them to strive for attainment of the corporate goal. Profit planning is directed to the final objectives of the objectives of the business and general includes all of its important elements. Profit planning is especially effective in enabling middle management to help plan profit and control cost. Profit is management’s primary tools to accomplish it objectives (Jain, et. al. 1984: 56).

The foundation for profit planning and control then, is that management must have confidence in its ability to establish realistic objectives and to devise efficient strategies to attain these objectives. The market theory argues very little for the concept of profit planning and control. There are conceptual or



philosophical disagreement as to the real role of management in both business and non business entities. A brief look at the extreme pole has been labeled the market theory at the extreme positions in these conceptual disagreements many add to our insights. One extreme pole has been labeled the market theory at the opposite end of the spectrum is the planning and control theory (Welsh, Hilton and Gordo, 1993: 7).

These Two opposing philosophies are presented as follows:

**Theoretical views of the Role of Management**

<b>Market Theory</b>	<b>Planning and Controlling Theory</b>
1. Management is solely at the whim of prevailing economic, social, and political forces(environment)	1. The future destiny of the enterprises can be manipulated : hence, it can be planned and controlled by the management
2. As a consequence , management essential fills the role of a fortune teller reading the environment	2. Good managers can contrive realistic ways to achieve the objectives
3. When the environment is read , reactive managerial decision are made	3. Management can manipulate the controllable variables and plan for the non controllable variables.
4. Therefore ,Managerial competence (success) depends on an ability to read the environment and to react wisely  Reactive (Ex Post ) Decisions: Management reads events that are happening and then to them	4. Therefore, the quality of managerial planning decisions determines managerial competence.  Active (Ex Ante) Decisions: Management anticipates future events and plans for them.

Profit planning and control rests upon the conviction that management can plan and control rests upon the conviction that management can plan and control the long range destiny of the enterprises by making a continuing stream of well conceived decisions. The concept speaks to plan prosperity as opposed to

unplanned happenstance. For long range success, the stream of managerial decision must generate plans and actions to provide the essential inflows that are necessary to support the planned outflows of the enterprises so that reasonable levels of profit and return on investment are earned. Continuing generation of profit by managerial manipulation of the inflows and outflows provides the substances of profit planning and control (Welsch, 1999: 125).

Planning is first function of management. It is performed continuously because the passage of time demands both re-planning and making new plans. Moreover, current feedback often necessitates newly planned action to a) correct performance deficiencies, b) cope with unanticipated events that are unfavorable, and c) take advantage of new developments. Managements planning is a process that includes (1)establishing enterprises objectives and goals ,(2)developing premises about the environment of the entity (3) making decision about course of action (4)initiating actions to activate the plans and (5)evaluation performance feedback. Management planning provides the basis for performing the four other functions –organizing, staffing, leading, and controlling (Welsh et.al, 1999: 30-31).

The planning processes both short and long term, is the most crucial component of the whole system. it is both the foundation and the bond for the other elements because it is through the planning process that we determine what we are going to do, how we are going to do it, and who is going to do it. It operates as the brain center of an organization and like the brain, it both reasons and communicates.

Fundamentally, then, managerial decision making entails the task of (1)manipulating the relevant controllable variables ,and (2)taking advantage of the relevant non controllable variables that may influence long run operational success. The relevant variables affecting the enterprise are presented in a three way classification like: external versus internal; time; and controllable

variables planned and planning and budgetary concept; a) revenue planning and budget required major planning decisions by management (b) It entails pervasive management control activities (c)It recognizes many of the critical behavioral implications throughout the organization .The fundamental purpose of revenue planning as a budgetary tools are to provide a feed forward process for operation and for control.

Planning and management decision are inter dependent and must be portioned in conformity with the operational or organizational sub division of the entity. Therefore planning and management follows the lines of authority and responsibility in the enterprises'. This sub division means that there is sub set of planning and management decision for is manager in the entity from the highest to the lowest management levels.

First generation planning means that the firm chooses the most probable appraisal and diagnosis to the future environment and to its owned strengths and weakness from this it envelope the best strategies for the match of the environment and the firm singular plan for the most likely future today's approaches is called strategies planning or more frequently strategy management.

Strategy management focuses on second generation planning that is analysis of the business and the preparation of several scenarios for prepare for each of these likely future scenarios (Lynch, et. al. 1984: 136).

The business budget has three fundamental purposes (1) planning future operation (2) coordinating all the companies activities and (3) controlling management. Comprehensive profit planning and control is viewed as process design to help management effectively performance significance phases of the planning and control function. The PPC model involves (1) Development and application of broad and long range objectives of the enterprises (2)

specification of enterprises goal (3) Development of a strategies long run profit plan in broad term (4) specification of a tactical short range ,profit range profit plan detail by assigned responsibility (Division, department profit) (5) establishment of a system, of periodic performance report detailed by assign responsibility, and (6)development of follow of procedure (Welsch, Hilcon and Gordon 1993: 7).

### **2.1.1 Master Budgeting as a Tool of Profit Planning**

Proper planning is indispensable to achieve the goal of maximum profit. For the implementation of such a plan, budget is regarded as the most effective device. A budget is effectively used for control purpose. It is a quantitative expression of a plan of action prepared in advance for the period to which it relates. In simple word, budget is a statement showing the planned income and expenditure for a future period prepared in terms of money or quantity or both. Budgeting is not a new concept. It has been in use for a very long time. Everybody is familiar with budget. Knowingly or unknowingly people make plans for their revenue and expenses. Some people do their planning entirely in their heads and express it orally. Other puts it in written form. For example, a house wife prepares ‘family budget’ every month and endeavors to keep the actual expenditure within the budget. It is also a preliminary concept of budget (Dangol & Dangol, 2062: 266).

### **2.1.2 Profit**

Generally, Profit may be defined as difference between revenue & cost incurred or the excess of income over expenditure during a particular period of time. Profit is what’s left after all outgo has been deducted from income. Profit is the ultimate yardstick of management’s ability to coordinate, plan and act in the interest of the consumer (Reekie & Crook, 1983: 380).

The term profit has been defined by different people taking into consideration of different aspects. “An economist says profit is the reward for

entrepreneurship for risk taking. A labor leader might say it as a measure of how efficiently labor has produced and that it provides a base for negotiating a wage increases. An investor views it as a gauge of the return on his or her money. An internal revenue agent might regard it as the base for determining taxes. The accountant may define it simply as the excess of the firm's revenue over the expenses incurred for creating such revenue in a given fiscal period. Using the accountant's measuring stick, management think of profit as:

- ) A tangible expression of the goals it has set for the firm.
- ) A measure of the performance toward the achievement of its goals.
- ) A means of maintaining the health, growth and continuity of the company.

It is the ultimate objective of management to maximize profit over the long term, consistent with its social responsibility (Lynch & Williamson, 1984: 99-100).

Profit is the most important measure of the firm's performance. In free market economy, profit is a guide for allocating resources effectively. An analysis of the effect of various factors on profit is an essential step of the financial planning and decision making (Pandey, 1979: 238). Profit is a tangible expression of goals it has set for the firm. It is a means of maintaining the good health, growth and continuity of the company. Profit is a signal for the allocation of resources and a yardstick for judging managerial efficiency. (Kulkarni, 1985: 245). In the absence of profit nobody can think about the long term survivability of the organization & all set of objectives for what the organization was established may turn into bundle of magic sticks only covered with dream and imagination. Profit can be expressed as:

$$\text{Profit} = \text{Total Revenue} - \text{Total cost}$$

### **2.1.3 Planning**

Planning is deciding in advance what is to be done (Bhusan, 1995: 552). It is a method of thinking out acts and purposes before hand. Planning starts from forecasting and determination of future events. It is a determination of course of action to achieve a desired result.

Planning is the foundation of business security. It is the means by which the business enterprise ensures tomorrow's solvency. To plan is to determine a forward program for governing the future affairs of an enterprise (Burnett, et. al., 1986:1). Planning is the first and most bases of all the managerial functions. It is a decision making activity that is the foundation of the management process. Planning helps manager set the stage for further decisions on how to organize, lead and control (Schermerhorn, 1984: 108).

A plan is a course of action and planning is the mental process involved in developing and formulating a course of action. Managerial planning is intelligent and systematic based on research and factors. Specifically, it is the mental process involved in the formulation of an intelligent scheme of action designed to accomplish effective and economically a specific objective. Without such planning, the activities of the various components of a firm may well become a series of random actions with meaningless objectives (Claudes, 1964: 6).

Planning is essential to accomplish goals. It reduces uncertainty and provides direction to the employees by determining the course of action in advance. Formal planning indicates the responsibilities of management and provides an alternative to growing without direction. Planning on the other hand involves the determination of what should be done, how the goals may be achieved and what individuals are to assume responsibility and to be hold accountable (Grace, 1964: 102).

### 2.1.3.1 Planning Levels

#### a) Strategic/Long-term Planning

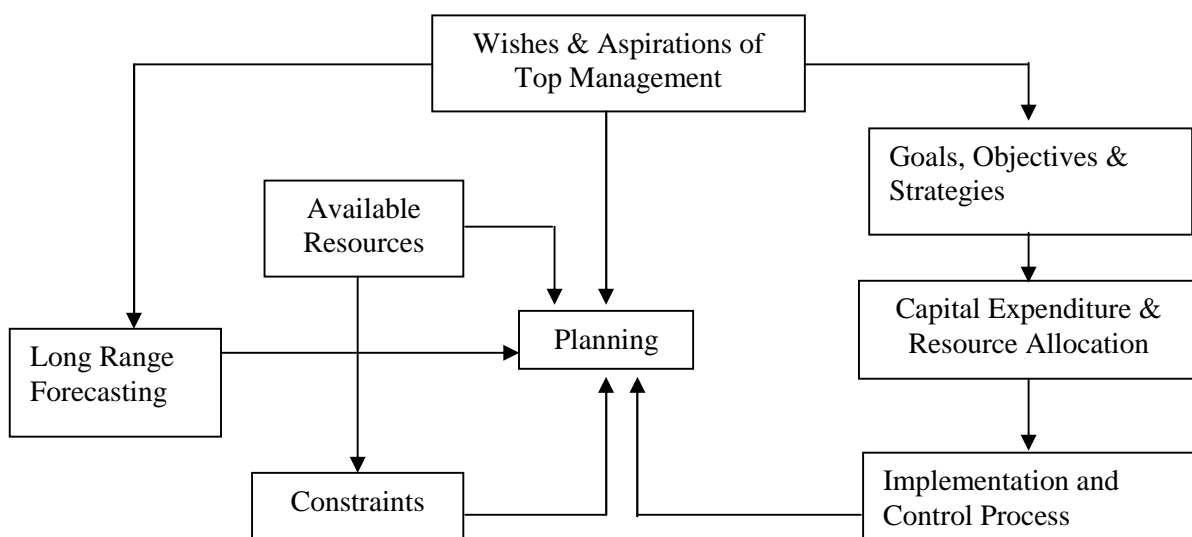
Strategic Long Range planning is generally planned for two years or more, varying with the enterprise and sometimes extended to ten years. “The best long range plan is one that establishes a broad flexible objectives to serve as guideline for subordinate plans and that is not likely to become absolute as a result of rapidity changes in technology (Ewing, 1964: 7).

The objectives of long range planning given by George R. Terry are as under:

- ) To provide a clear picture of whether the enterprise is handed.
- ) To keep enterprise strong.
- ) To focus on long term opportunities.
- ) To evaluate management personnel.
- ) To expedite new financing.
- ) To bring attention to new techniques (Terry, 1968: 235).

**Figure 2.1**

**A Long Range Planning Model**



### **b) Medium Term Planning**

Medium term planning is used mainly to determine the allocation of resources among competing activities to revise long range plans in view of more recent developments. Medium term planning often takes the form of budgeting in which each division, department or unit is allocated certain resources during the coming year. These allocations are based in part on forecast of demand, cost, financial decisions and competition. With a time horizon of one to two years and critical decisions on resource allocation, medium term planning must correctly predict the general level of economic activity, since that affect such factors as revenues, profits, costs and expenditures.

The importance and infrequency of medium term planning make it worthwhile to spend more effort and employ more elaborate techniques to obtain an accurate prediction that is the case for shorter time horizon. Often it may be wise to use more than one method in order to check and compare the accuracy of results. Some of the methods most frequently used for medium term planning needs are decomposition (Bhandari, 1995: 31).

### **c) Short Term Planning**

The short term plan is synonymous with the classical budgetary period of one year. The short range planning is made after a freeze is taken as the consideration of possible alternative course of action. Such courses are outlines for the medium range plan which doesn't concern implementation; its aim is weeding out a plethora of possibilities which are for the most part long on promises and short on feasible, tangible results (Corafas,1990: 52).

Short range planning is selected to conform to fiscal quarter or years. Because of the practical needed for conforming plans to accounting periods and the some what arbitrary limitation of the long range to three to five years is usually based as has been indicated on the prevailing belief that the degree of



uncertainty overlong period makes planning of questionable value (Koontz & Donnell, 1964: 37).

#### **2.1.4 Control**

Control is the basic managerial function. It is the process of ensuring that actual activities conform to plan activities. It involves guiding and regulating operations towards the predetermined goals. The main object of controlling is to make sure that actual performance is consistent with plans and if there is any deviation taking corrective actions to conform to plans. Thus, without effective control procedures, the organization is not likely to reach its goals.

Controlling is the measurement and correction of performance in order to make sure those enterprise objectives and the plans devised to attain them are accomplished. Thus, controlling is the process of measuring actual performance and comparing with standards, identifying and analyzing deviation if any, and taking corrective action to meet the standards. It assures that the right things are done in the right manner and at the right time. Its purpose is to make sure that actual performance is consistent with plans. In fact, control helps managers monitor the effectiveness of their planning, their organizing, and their directing activities (Shrestha, 2000: 284).

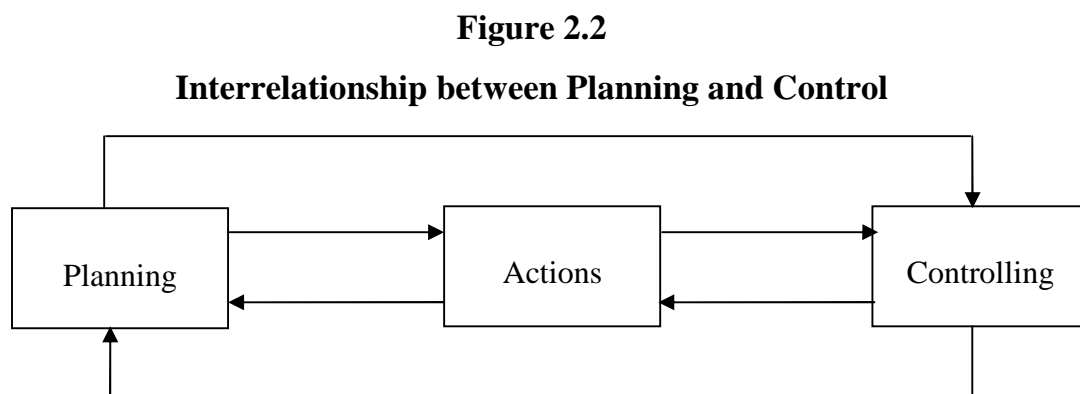
#### **2.1.5 Relationship between Planning and Control**

Planning and control are two important management functions, which are closely interrelated. Planning without control is meaningless and control without planning is aimless. Planning provides the basis of control. Control implies existence of certain standards against which actual performance can be evaluated and planning provides such standards. Thus, the concept of control cannot exist without planning.

Once a plan is brought into effect, control is necessary to measure the progress of work, to detect the deviations from plans and take corrective measures.

Control process involves the measurement and evaluation of actual results with the standards set by the plans. It points out deviations, if any, from standards and ensures operations are according to plans. The analysis of deviations locates the errors and helps to remove them by taking corrective actions. It may also lead to setting of new goals, changes in the organizational structure, improvements in staffing and new action is taken to regulate future events, because past cannot be controlled. Control, therefore, makes planning a meaningful exercise and planning provides the guidelines for control.

In fact, planning and control are inseparable twins of management. Any attempt to control without plan is meaningless since the course one is adopting is unknown. Thus, there is reciprocal relationship between planning and control. This mutual relationship between planning and control is shown as follows:



It is also said that ‘planning is looking ahead and control is looking back.’ The statement is partially correct. Planning is always looking ahead, whereas control evaluates what has happened in the past. It is, therefore, said that control is looking back. But one cannot control the past, which serves the guide to prevent undesirable events in future. In this sense, control is looking back as well as looking ahead. Thus, the statement that planning is looking ahead and control is looking back is partially correct (Shrestha, 2000: 284-287).

### **2.1.6 Profit Planning and Control**

“Profit planning and control is an important approach, mainly in profit-oriented enterprises. Profit planning is merely a tool of management. It is not an end of management or substitute of management. It facilitates the managers to accomplish managerial goals in a systematic way.

The management is efficient if it is able to accomplish the objective of the enterprise. It is effective, when it accomplishes the objectives with minimum effort and cost. In order to attain long-range efficiency and effectiveness, management must chart out its course of action in advance. A systematic approach that facilitates effective management performance is profit planning and control, or budgeting. Budgeting is therefore an integral part of management. In a way, budgetary control system has been described as a historical combination of a goal-setting machine for increasing an enterprises profit, and “goal-achieving, machine for facilitating organizational co-ordination and planning while achieving the budgeted targets (Gautam & Bhattarai, 2004: 1).

Comprehensive profit planning and control is a systematic and formalized approach for accomplishing the planning, co-ordination and control responsibilities of management (Welsch, 1996: 1).

PPC is a comprehensive planning in the corporate environment involving in-depth study of goals, procedures, responsibility, and coordination of planning and control process. It is objective and structuring of planning process, significant problem areas, benchmarks for alternative evaluation processes, and correction and control tools. Comprehensive profit planning and control is viewed as a process designed to help management effectively perform significant phase of the planning and control functions (Gupta, 1996: 31).

### **2.1.6.1 Advantages of PPC**

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

- a. Profit planning and control compels management to plan for future. The profit planning process forces management to look ahead and become more effective and efficient in administering the business operations. It instills into managers the habit of evaluating carefully their problems and related variables before making any decisions.
- b. It facilitates control by providing definite expectations in the planning phase that can be used as a frame of reference for judging the subsequent performance. Undoubtedly, budgeted performance is a more relevant standard for comparison than past performance, since past performance is based on historical factors which are constantly changing.
- c. PPC improves the quality of communication. The enterprise objectives, budget goals, authority and responsibility and procedures to implement plans are clearly written and communicated through budgets to all individuals in the enterprise. This results in better understanding and harmonious relations among managers and subordinates.
- d. It permits to focus management attention on significant matters through budgetary reports; thus, it facilitates management by exception and thereby saves management time and energy considerably.
- e. It measures efficiency, permits management self-evaluation and indicates the progress in attaining the enterprise objectives (Pandey, 1979: 307-308).

### **2.1.6.2 Limitations of PPC**

For running an enterprise systematically, PPC is regarded as the most significant system. It has got so many advantages, which have already been listed above. However, the system suffers from certain limitations. Management must keep them in mind while using this system. Following are the limitations of budgeting system:

#### **a) Based on Estimate**

PPC is an estimate about future. The success or failure of a budget depends upon the accuracy of estimate. Absolute accuracy is not possible in this world, although many statistical techniques are available. Hence, the user of budget must keep in view that budget is based on estimate.

#### **b) Danger of Rigidity**

It is estimation on quantitative expression of all relevant data. So there can be the tendency to attach some sorts of rigidity for finality to them. But rigidity makes it useless. For usefulness, it must be revised with the changing circumstances.

#### **c) Execution is not Automatic**

It should be properly implemented for improving the management of an enterprise. For the success of budgeting system, it is essential to be understood by all the related persons inside the enterprise. Each executive must feel the sense of responsibility and should make efforts to attain the budgeted goals.

#### **d) Tool of Management**

It is not a substitute for management. It is simply a management tool. It is totally wrong to think that the introduction of PPC system is sufficient alone to ensure success and guarantee for budgeted goals.

#### **e) Expensive Technique**

The system involves cost in terms of money, time and energy. Normally, it is so costly that small concern cannot afford it. Even for a large concern it is suggested that there should be some correlation between the cost of operating a PPC system and benefits derived from it. The system should be adopted only when benefits exceed the cost.

#### **f) Morale of the Employees**

PPC targets are sometimes considered as pressure tactics which lowers the morals of the employees. Therefore, unrealistic target should not be set and used as a pressure tactic (Dangol & Dangol, 2062: 267-268).

### **2.1.7 Fundamentals of Profit Planning**

The fundamental concern with effective implementation of the management process is reasonable complex endeavors. The fundamentals represents desirable management orientation, activities and approaches necessary of proficient and sophisticated application of comprehensive profit planning and control. These fundamentals need to be established on a sound foundation of managerial commitment. The major fundamentals are:

#### **2.1.7.1 Managerial Involvement and Commitment**

To success a comprehensive PPC program it must have the full support of each member of management starting with president the impetus and direction must come from the top. Involvement in PPC means to understand, to select, to devote ourselves, to support by all its departments and to evaluate the performance of the PPC. The modern concept of PPC program has emphasized on managerial involvement due to the fact that modern PPC believes on 'Performance expectation' rather than on 'Fiscal expectation' because modern business believes on the principle of attaining set objectives or goals rather than earning short-run more monetary profit (Welsch, 1996: 33).

### **2.1.7.2 Organizational Adaptation**

To increase managerial and operational efficiency practically all enterprise should be structurally disaggregated into organizational subunits. The manager of each subunit should be assigned specific authority and responsibility for the operational activities of those subunits. These subunits are often referred to as decision centers or responsibility centers. Responsibility centers are further classified in respect to the extent of responsibility as follows:

#### **a) Cost Center**

A responsibility center for which a manager is responsible for the controllable costs incurred in the sub unit but is not responsible, in a financial sense, for profit or investment in the center. The lower level and smaller responsibility centers tend to be cost centers.

#### **b) Revenue Center**

A responsibility center for which the manager is responsible for revenue. Sales districts are often designated as revenue centers.

#### **c) Profit Center**

A responsibility center for which the manager is responsible for the revenues, costs and profits of the center. Planning and control focuses on the center's profit figure.

#### **d) Investment Center**

In an investment center, the manager is responsible for revenue, cost, profit and the amount of resources invested in the assets used by the center. Planning and control focuses on the return on investment earned by the center (Welsch, et. al., 1999: 47).

### **2.1.7.3 Responsibility Accounting**

A responsibility accounting system is one of the fundamentals of PPC. Planning uses historical data, including past financial information, as one of its

launching platforms. Control includes the measurement of performance by using actual result, much of which must be provided by the accounting system. The accounting system must be designed to provide financial information separately for each organizational unit, which is being assigned authority and responsibility (Welsch, 1996: 41). Therefore PPC requires a responsibility accounting system that is one tailored to organizational responsibilities.

#### **2.1.7.4 Zero Based Budgeting**

As most administrators know, the usual approach to budgeting is to begin with the present level of operation and spending and then carefully justifies the new programs or additional expenditures desired for next year. In zero-based budgeting there are no “givens”. It starts with the basic premise that the budget of next year is zero and that every expenditure old and new, must be justified on the basis of its cost and benefit. Under zero-based budgeting every budget is constructed on the premise that every activity in the budget must be justified. So the discipline of zero-based budgeting takes a different approach- in fact, a reverse approach to this problem of justifying everything. What it says is this: begin with where you are and establish a business as usual budget for next year, the same way and the same things you would do if you weren’t concerned about constraints or total justification (Welsch, 1996: 44).

### **2.8 Profit Planning and Control Process**

Profit planning process should involve periodic consistent and depth re-planning, so that all operations are carefully reexamined and re-evaluated. The steps that arises in PPC process has been presented in table 2.1 as follows:

#### **2.1.8.1 Identification & 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. As the management planning focuses on the best manipulation of controllable and non controllable variables, these variables are considered separately. This is done in order to



minimize the potential unfavorable impacts. The comprehensive PPC approach is based on the expectation that these significant aspects of operations will be critically analyzed and evaluated periodically in an orderly manner (Welsch, et al., 1999: 74-75).

#### **2.1.8.2 Development of the broad objectives of the Enterprise**

In this phase of the PPC process, the executive management should express the mission, vision and ethical character of the enterprise. Its purpose is to provide identity, continuity of purpose and definition. It should be designed for wide dissemination and should be believable, which means, in the long run the company's actions must be in harmony with the statement" (Weslch, et al., 1999: 76).

#### **2.1.8.3 Development of specific goals for the enterprise**

This phase provides both narrative and quantitative goals that are definite and measurable. These are specific goals that relate to the enterprise as a whole and to the major responsibility centers. Executive management should exercise leadership in this planning phase so that there will be a realistic and clearly articulated framework within which operations will be conducted toward common goals (Welsch, et al.; 1999: 77-78).

#### **2.1.8.4 Development and Evaluation of Company Strategies**

The purpose of developing and disseminating enterprise strategies (long term or short term) is to find the best alternatives for attaining the planned broad objectives and specific goals. Although strategy formulation is of continual concern to executive management, periodic reassessment of the strategies is essential in the light of a careful analysis of all relevant variables and their probable future impact on the enterprise (Welsch, et al., 1999: 78).

#### **2.1.8.5 Preparation and Evaluation of Project Plans**

Apart from tactical planning and strategic planning, the concept of profit planning and control covers a systematic and integrated approach to project planning. “Project plans encompass such items as plans for improvement of present product, new and expanded physical facilities, and entrance into new industries, exit from products and industries, new technology and other major activities that can be separately identified for planning purposes (Welsch, et al., 1999: 79).

#### **2.1.8.6 Development and Approval of Strategic and Tactical Profit Plans**

Strategic or long range plan and the tactical or short range profit plan are usually developed at the same time. It is generally seen that the executive management develops the strategic and tactical profit plans but the backlash of this practice is that denies the full participation by middle managers in the planning process. And this can give rise to unfavorable behavioral effects (Welsch, et al., 1999: 80).

#### **2.1.8.7 Implementation of Profit Plans**

Once the plans are developed and approved, they need to be implemented in such a way that leads the subordinates in attaining enterprise objectives and goals. Thus, effective management at all levels requires that enterprise objectives, goals, strategies, and policies be communicated and understood by subordinates. There are many facets involved in management leadership. However, a comprehensive profit planning and control program may aid substantially in performing this function. Plans, strategies, and policies developed through significant participation establish the foundation for effective communication (Welsch, et al., 1999: 84).

#### **2.1.8.8 Use of Periodic Performance**

Performance reports are those reports that show actual results, planned results and variations between those two, to be analyzed to take necessary corrective

measures in the future. These performance reports are prepared by the accounting department on a monthly basis, however some special performance reports are prepared whenever needed (Welsch, et al., 1999: 85).

#### **2.1.8.9 Use of Flexible Expense Budget**

Flexible budget is completely different from the profit plan but it is used as a complementary to the profit plan. Flexible budget gives realistic information about expenses that make it possible to compute budget amounts for various output volumes or rates of activity in each responsibility center. To do this, the flexible budget provides a formula for each expense in each responsibility center. The formula gives the relationship of each expense to output in the centre. Each formula includes a constant expense factor and a variable expense rate. To apply this concept in a department, each expense must be classified into one of the three categories: (a) Fixed expense, (b) Variable expense and (c) Semi-Variable expense (Welsch, et al., 1999: 86).

#### **2.1.8.10 Implementation of Follow-Up**

To determine whether things are going on as per plans, a continuous follow up action is important. Because performance reports are based on assigned responsibilities, they are the basis for effective follow up actions. It is important to distinguish between the causes and results of that. The performance variations are the results and the management must determine the underlying cause. Analysis to determine the underlying causes of both favorable and unfavorable performance variances should be given immediate priority (Welsch, et al., 1999: 88).

#### **2.1.9 Development of PPC**

To develop a comprehensive profit planning and control following plans or budget should be prepared:

### **2.1.9.1 Sales Plan or Budget**

Sales plan is the starting point in the preparation of the comprehensive profit planning and control. All the other plans and budgets are dependent upon the sales budget. The budget is usually presented both in units and in dollars of sales revenue or sales volume. The preparation of sales plan is based upon the sales forecast. A variety of methods are used to forecast the sales for the planning period (Holmes, et al., 1970: 637).

### **2.1.9.2 Production Plan or Budget**

A production budget incorporates the estimates of the total volume of production with the scheduling of operations by days, weeks and months. The responsibility for the preparation and operation of production budget lies with production manager. The production budget is normally prepared in quantitative terms such as units of output tones of production etc. This budget is based on the previous requirements of sales department as well as normal inventory requirements. Moreover, the major changes in sales policy and inventory policy are also taken into account. Such changes would be reflected in sales budget and hence sales budget should be used as basis for production estimates and forecasts. At the same time, a comprehensive analysis of production scheduling, dispatching, inspection, plant capacity, etc., should also be carried out (Gupta, 1996: 541-542).

### **2.1.9.3 Material Plan or Budget**

In drawing up the production budget one of the first matters to be considered is materials. It should be based on production budget, since the amount of direct materials used in manufacturing varies directly with the number of units of output. The problems connected with the material budget include the preparation of estimates of raw material requirements necessary to produce the goods as shown in the production budget, scheduling purchases in required quantities at the specified time, and controlling of raw material inventories

(Gupta, 1970: 273). Materials budget can be classified into material requirement budget and material procurement budget.

#### **2.1.9.4 Labor Plan or Budget**

The production budget (in units) is the basis for the preparation of the labor budget. The labor hours required for the budgeted production would give management information of labor requirements. The product of the labor hours and the standard rate per labor hour would give the direct labor cost of the budgeted production (Murthy, 1982: 291). The labor cost budget can be drawn up only when the time required to do one unit of work and the wages to be paid for it are known (Hingorani, et al., 1992: 272).

#### **2.1.9.5 Expenses Plan or Budget**

Expenses planning and controlling is not reduction of cost but it means better utilization of limited resources. Expenses planning and control should focus on the relationship between expenditures and the benefits derived from those expenditures. The desired benefits should be viewed as goals, and sufficient resources must be planned to support the operating activities essential for their accomplishment (Welsch, et al., 1999: 302).

Three different types of expenses can be visualized with changes in volume/level of activity as below: (Khan & Jain, 2000: 16.12).

##### **a) Fixed Expenses**

The fixed expenses are associated with inputs that do not fluctuate in response to changes in the total activity or output of the firm, within relevant range.

##### **b) Variable Expenses**

The variable expenses are those expenses that are assumed to fluctuate in direct proportion to production activity/sales activity/some other measure of volume.

### **c) Semi-Variable Expenses**

The semi-variable expenses are composed of both fixed and variable elements. The fixed part of this expense often represents expenses of capacity, while the variable element is influenced by changed in activity.

Three broad categories of expenses are included on expenses budget:

#### **A) Factory Expenses Budget**

Factory overhead budget is prepared with the anticipated expenses of factory other than direct material, direct labor and direct expenses. These factory expenses are grouped as variable, semi-variable and fixed. Normally, this budget is prepared for each division of the factory. Expenses for each division are allocated with reference to some directly related factors (Gupta, 1996: 549).

#### **B) Administrative Expenses Budget**

The functions performed by the management group of the modern concern are extremely important and varied in scope. In addition to the executive office, there are usually departments such as legal, public relations, accountancy, research, costing, statistical, buying and collection, planning, drawing and design, labor relations and budgeting (Gupta, 1970: 276-277).

#### **C) Selling and Distribution Expenses Budget**

Based on the Sales Budget, the selling program for the year is chalked out laying down in detail the plan to be followed, in order that the sales targets could be achieved. The expenses to be incurred in carrying out this plan will constitute the Selling and Distribution Expenses Budget (Swaminathan, 1970: 358).

### **2.1.9.6 Capital Expenditure Budget**

Capital budgeting may be defined as the decision making process by which firm evaluates the purchase of major fixed assets, including building, machine and equipment. It is a part of the firm's formal planning process for acquisition

and investment of capital (Hampton, 1994: 299). Capital expenditure budgeting refers to the investment decision making procedures of business firms and enterprises (Baumol, 1973: 458).

#### **2.1.10 Implementation of the Profit Plan**

After approval of a profit plan, the next step is its distribution to the center managers in the enterprise. The distribution policy should allow distribution of parts of the profit plan to middle and lower management. For example, a sales district supervisor would not be given a copy of the entire budget but should receive those parts that apply to the sales budget, expense budget, and advertising budget for his or her district.

After distribution of the profit plan, a series of profit plan conferences should be held. The top executives comprehensively discuss the plans, expectations, and steps in implementation. At this top-level meeting, the importance of action flexibility and continuous control should be emphasized. Use of the profit plan as a guide to action and performance, directed toward attaining or bettering the goals quantified in the annual profit plan, require continuous management effort and attention.

Budget conferences should be conducted until all levels of management are reached. Managers must clearly understand their responsibilities and how their part of the profit plan fits into the overall company profit plan. These conferences should induce “profit and cost awareness” throughout management and, if conducted properly, will tend to ensure positive support for the objectives (Welsch, et al., 1999: 472).

#### **2.1.11 Performance Report**

These reports are usually prepared on a monthly basis and follow a standardized format from period to period (but are not standardized among companies or industries). Such reports are designed to facilitate internal control

by the management. They should be composed of carefully selected series of data related to each responsibility center. Fundamentally, they report actual results compared with goals and budget plans. Frequently, they identify problems that require special reports, since these reports are designed to pinpoint the efficient and inefficient performance.

The effective performance report should be:

- a. Tailored to the organizational structure and locus of controllability.
- b. Designed to implement the management-by-exception principle.
- c. Repetitive and related to short time periods.
- d. Adapted to the requirements of the primary users.
- e. Simple, understandable, and report only essential information.
- f. Accurate and designed to pinpoint significant distinctions.
- g. Prepared and presented promptly.
- h. Constructive in tone (Welsch, et al., 1999: 543-544).

### **2.1.12 Analysis of Budget Variance**

The difference between planned result and actual result is called variance. Comparison of actual results with planned or budgeted goals has been emphasized as an integral part of the control process. A basic feature of performance report is the reporting of variances between actual results and planned or budgeted goals. If a variance is significant, a careful management study should be made to determine the underlying causes. The underlying causes, rather than the actual results, should lead to remedies through appropriate corrective action by management (Welsch, et al., 1999: 569).

In PPC process variance are analyzed basically in following areas:

- i. Sales Variance
- ii. Material Variance
- iii. Labor Variance
- iv. Manufacturing Overhead Variance
- v. Profit Variance



Following are the basic steps in analyzing variances:

- i. Setting Standards
- ii. Measurement of performance
- iii. Analyzing variances
- iv. Take corrective action

Variance can be either favorable or unfavorable, depending upon whether actual results are greater or less than standard results. The major purpose of variance analysis is to enable management to measure performance against predetermined norms to seek out the causes for the standard results, and to institute action (Lynch & Williamson, 1983: 201).

## **2.2 Review of Journals and Articles**

**Murugan and Manivel (2009)**, in their article, *“Profit Planning of an NGO Run Enterprise Using Linear Programming Approach”* have stated that Sarvodaya sanghams as affiliates of KVIC are engaged in the production of textile products and nontextile products. These sanghams are labour intensive and use semi-automatic machineries wherever necessary. Their approach to production is making fuller utilization of locally available resources and provision of employment to the rural folk. Marketing is given secondary importance.

Dropping of product is not common in sanghams even when the production of certain items is not economically viable. It is taken as the last resort. But in the present day competitive market the damage will be heavy if they go on produce the products without considering the product marketability and profitability. Making these decisions will be a difficult one especially the present approach of “rule of thumb” to decision making. Therefore, in this study, tool linear programming is tried to find out an optimum product mix which would maximize the profit, from the production and sale of textile and non-textile products, trying to demonstrate that the use of this tool is possible and

beneficial to the sanghams. In the present case at hand, four models were run and recommendations were analyzed both for textile and non-textile products. Finally suitable models which would help maximize the profit while assuring employment to the workforce, catering the needs of all existing market segments and proper utilization of existing resources.

### **2.3 Review of Thesis**

**Jha (2006)**, has made a study on *“Impact of Budgeting on Profitability of Manufacturing Industry: A case study of Ganga Rosin and Turpentine Industry.”* The objectives of the study are to examine the practice and effectiveness of profit planning in GRTI. The specific objectives of the study are as follows:

- a. To analyze the profit planning applied in GRTI.
- b. To analyze the major functional and financial plans formulated and implemented in GRTI.
- c. To examine the outcome of those plans in terms of achievement.
- d. To point out possible suggestions and recommendations to improve the performance of GRTI with the means to profit planning system.

The major findings of the study are as follows:

- a. The industry has not operated in full capacity. The highest capacity utilization is 76.0% recorded in the fiscal year 2062/063.
- b. Actual sales of Rosin are more fluctuating than Budgeted sales and Budgeted production of rosin are more fluctuating than Actual production.
- c. GRTI has a practice of preparing both strategic and tactical plans.
- d. GRTI has earned profit from the FY 2058/059 to 2062/063.
- e. The net profit and gross profit of GRTI are in increasing trend every year.
- f. Comparing net profit and gross profit, net profit is very low than gross profit, it shows over fixed cost or administration charge.
- g. There is positive and close correlation between budgeted and actual sales.
- h. GRTI was able to meet its BEP sales therefore, it was profit every year.

- i. GRTI has no practice of cost segregation.
- j. Investment in current assets is being higher than necessity, which may reduce the profitability of industry in the future.

**Dhungana (2007)**, has conducted a study on, “*Profit Planning in Nepal Telecom Limited*”. The main objectives of his study are as follows:

- a. To examine the practice and effectiveness of profit planning in Nepal Telecom.
- b. To observe the Telecom’s profit planning on the basis of overall managerial budgeting.
- c. To recommend measures to be taken instantly and further with the identified budgeting and profit planning problems.

The main findings of the study are as follows:

- a. The corporation makes plan in ad-hoc basis, the goals and objectives are not adequate for the development of corporation.
- b. The sales plan achievement of the Nepal Telecom is satisfactory but the profit earned by Nepal Telecom is not sufficient.
- c. Cash budget of Telecom is not actual transaction based, it is only tentative cash flow, so it is bearing cash deficit problem.
- d. Overhead budget is not prepared in a scientific and systematic way. All the expenses are included in operating expenses.
- e. The capital expenditure budget of Telecom is very high and flexible budgeting system is not prepared by Nepal Telecom.
- f. There is lack of proper co-ordination between various departments and the skilled manpower is centralized.

**Dangol (2008)**, has conducted study on “*Profit Planning in Nepal: A Case Study of Nepal Lever Ltd.*” The main objectives of the study are:

- a. To examine the practices and effectiveness of Profit Planning in NLL.

- b. To analyze the various functional plans formulated and implemented in NLL.
- c. To evaluate the variance between targets and actual of NLL.
- d. To evaluate the profit planning process applied in NLL with conceptual perspective.
- e. To point out feasible suggestion and recommendation to make better of Nepalese manufacturing enterprises with speed reference to NLL.

The major findings of the study are as follows:

- a. General Manager with mutual cooperation of other top level managers and which the board of directors finally approves to prepare yearly budget for income and expenditure.
- b. The company has no planning division. It has no skilled and expert planners as well.
- c. The company has no practice of sales forecasting. It does not prepare sales and production plans. They are made on ad-hoc basis.
- d. The company is unable to appoint sufficient number of reliable agents/dealers to improve its sales performance.
- e. Annual capacity of producing goods is 34,750 metric tones. The capacity utilization of the company is more deviated from their standard and targeted capacity utilization from year to year.
- f. 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.

**Maharjan (2009)**, has conducted a study on, “*Budgeting in Manakamana Darshan Private Limited.*” The objective of the study is to appraise the profitability of MDPL and to suggest recommendations based upon it. The specific objectives are:

- a. To analyze the budget of MDPL.
- b. To analyze the problems faced by MDPL in terms of budget formulation.

- c. To analyze the cost and profit trend of the MDPL in the light of budget.
- d. To evaluate the deviation between overall targets and actual achievements.
- e. To provide suggestions for improving the budgeting problems.

The major findings of the study are:

- a. MDPL has not the practice of preparing comprehensive sales plan. But it prepares only target sales in totality.
- b. The regression analysis and straight trend line suggests that the actual sales are in increasing trend.
- c. The actual sales and actual purchase is positively correlated. It means purchases are made on the basis of sales.
- d. MDPL is not in loss from the last few years except FY 2059/060. Analysis of profit pattern shows increasing trend of profit. This shows efficiency in Budgeting and Cost Control.
- e. The regression equation shows that there is negative relationship between planned sales and actual sales.

## **2.4 Research Gap**

The review of the above relevant literature has contributed to enhance the fundamental understanding and knowledge which is required to make study meaningful and purposive. All these research studies mentioned above are mainly concerned with Master budgeting but they have forgotten the role of controlling cost in profit planning process. So, this study has been conducted to evaluate the effectiveness of Master Budgeting of HPPCL, by embracing all the weakness in previous thesis.

## **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 (Paul & Donald, 1999: 134).

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 Nepal Bitumen and Barrel Udhyog 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 HPPCL

#### **3.2 Period Covered**

The study covered the period of 5 years from the fiscal year 2060/061 to 2064/065. Data were taken from HHPL and the analysis was made on the basis of these five years' data. Both budgeted and actual data were taken since the fiscal year 2060/061 to 2064/065.

#### **3.3 Source of Data**

Both primary data and secondary were used in this study. The primary data was collected from the HPPCL staff whereas secondary data was collected from HPPCL 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 HPPCL from the fiscal year 2060/061 to 2064/065.
- ) Prospectus of HPPCL
- ) Website of HPPCL (*www.hppcl.com.np*)
- ) 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 HPPCL.

#### **a) PPC Tools**

- ) Sales budget
- ) Production budget
- ) Material budget
- ) Expenses budget

- J Income statement
- J Cash Flow statement
- J Balance sheet

### **B) Statistical Tools**

- J Mean
- J Standard deviation
- J Coefficient of variance
- J Karl person's correlation coefficient
- J Least square method
- J Regression analysis
- J Percentage
- J Multiple bar diagrams
- J Pie chart
- J 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 HPPCL?
- b. What steps should be followed to improve profit planning and control system in HPPCL?
- 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 Master budgeting process of HHPL. 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. Master Budget 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 HPPCL**

HPPCL is a manufacturing company, which produces and sells herbal product. The object of this topic is to present the variance between the budgeted sales and the actual sales occurred during a certain fiscal year in order to provide the basis to take corrective action to meet the planned sales. The following schedule presents actual sales and budgeted sales of HPPCL from FY 2059/060 to 2064/065.

**Table 4.1**  
**Budgeted Sales and Actual Sales**

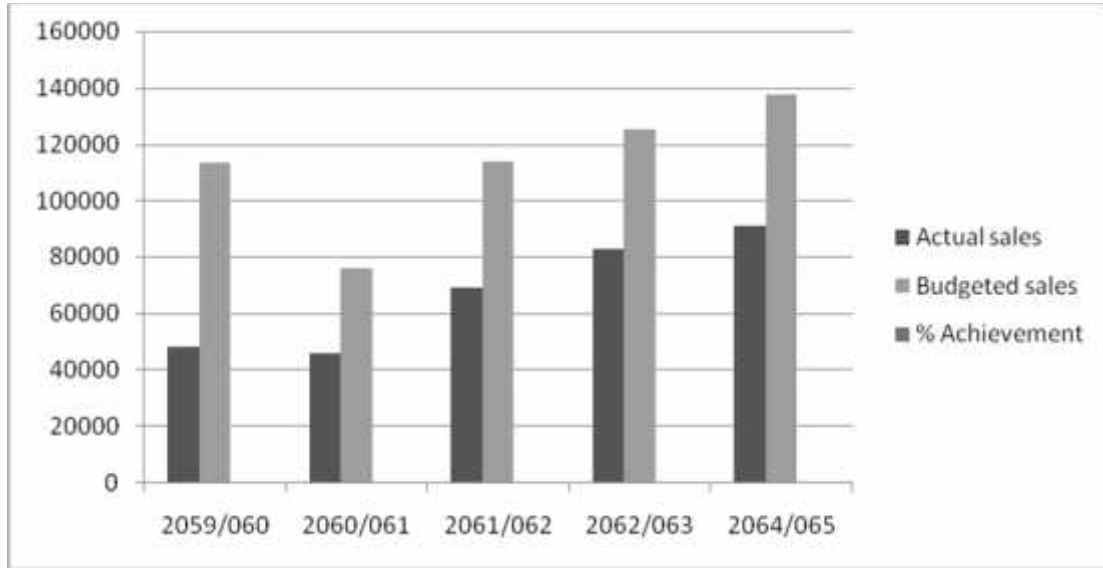
(Rs in '000')

<b>Fiscal Year</b>	<b>Budgeted Sales</b>	<b>Actual Sales</b>	<b>% Achievement</b>
2060/061	113480	47888.36	42.20
2061/062	75870	45916.58	60.52
2062/063	113805	68874.87	39.47
2064/065	125185.5	82649.84	33.97
2065/066	137704.05	90914.82	33.97

*(Source: Sales Department of HPPCL)*

**Figure 4.1**

**Actual Sales and Budgeted Sales of Overall Products of HPPCL**



The table 4.1 showed the budgeted sales and actual sales of HPPCL of the research period. It shows that the Actual sale is in increasing trend but actual sales is fluctuating. In fiscal year 2059/060 budgeted sales was Rs 113480, it decreased to Rs 75870 in fiscal year 2060/061 after that it is in increasing trend. Where actual sales was Rs 47888.36 in fiscal year and it is Rs 90914.82 in fiscal year 2064/065. And achievement of actual sales to budgeted sales is also in fluctuating trend. The achievement percentage is 42.20% in fiscal year 2059/060,60.52% in 2060/061, 39.47% in 2061/062 and 33.97% in fiscal year 2063/064 and 2064/065.from the above analysis we can conclude that the budgeted sales of HPPCL is in fluctuating trend but Actual sales is in increasing trend where as achievement is also in fluctuating trend. And achievement is below the target every year. Following figure clarifies the above findings.

#### 4.1.1 Comparisons of Budgeted Sales and Actual Sales

Table 4.2

##### Mean, S.D & C.V of Budgeted and Actual Sales

Statistical Tools	Budgeted Sales	Actual Sales
	(Metric Ton)	(Metric Ton)
Mean	113208.91	67248.89
Standard Deviation ( )	20678.84	18054.4
Coefficient of Variance (C.V.)	18.27%	26.85%

(Source: Appendix – I)

The table 4.2 showed the result of Appendix – I. The calculated mean of budgeted sales and actual sales are 11320.91 and 67248.89 respectively. The coefficient of variance of budgeted sales and actual sales are 18.27% and 26.85% respectively. The standard deviation of budgeted sales and actual sales are 20678.84 and 18054.4 respectively. The greater coefficient of variance 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.

#### 4.1.2 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).

$$\text{where, } r = \frac{\sum xy}{\sqrt{\sum x^2 y^2}} = +0.833 \text{ (from Appendix – I)}$$

Since, the value of  $r = + 0.833$  which is nearer to +1, the correlation coefficient between the budgeted sales and actual sales is perfectly 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 are 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.

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

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  $r < \text{P.E.}$ , it is insignificant, i.e. there is evidence of correlation.
- b. If  $r > 6 \text{ P.E.}$ , it is significant.
- c. If  $\text{P.E.} < r < 6 \text{ P.E.}$  nothing can be concluded.

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

$$\begin{aligned} \text{P.E.} &= 0.6745 \times \frac{1-r^2}{\sqrt{N}} \\ &= 0.6745 \times \frac{1 - (0.833)^2}{\sqrt{5}} \\ &= 0.092 \end{aligned}$$

$$\text{Here, } 6 \times \text{P.E.} = 6 \times 0.092 = 0.5536$$

Since,  $r > 6 \text{ P.E.}$  (i.e.  $r = +0.833$  and  $6 \times \text{P.E.} = 0.55$ ) then the value of 'r' is significant i.e. there was perfect correlation between budgeted and actual sales.

### 4.1.3 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:

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

- where,
- $\bar{X}$  = 113208.91
  - $\bar{Y}$  = 67248.89
  - $\sigma_x$  = 20678.84
  - $\sigma_y$  = 18054.4
  - $r_{xy}$  = 0.833 (from Appendix – I)

Then,

$$Y + 67248.89 = \frac{0.833 (X - 113208.91) \times 18054.4}{20678.84}$$

or,  $Y + 15085.73 = 0.7272X$

or,  $Y = 0.7272 X - 15085.73$

or,  $Y = -15085.73 + 0.7272 X$

From this regression equation it is clear that there is positive relation between budgeted and actual sales. The actual sales increased by Rs 0.7272 per one Rupee change in budgeted sales.

#### 4.1.4 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:

$$Y_c = a + bX \dots\dots\dots (i)$$

where,  $Y_c$  = Actual sales  
 a = Fixed value  
 b = Variable value

Now, the straight line is fitted by using least square method, assuming 2061/062 as base year.

**Table 4.3**  
**Fitting Straight Line trend of Actual Sales**  
**Using Least Square Method from the Fiscal Year 2059/060 to 2064/065**

<b>FY</b>	<b>Mid Value X</b>	<b>Actual Sales Y</b>	<b>X<sup>2</sup></b>	<b>XY</b>
2059/060	-2	47888.36	4	-95776.72
2060/061	-1	45916.58	1	-45916.58
2061/062	0	68874.87	0	0
2062/063	1	82649.84	1	82649.84
2064/065	2	90914.82	4	181829.64
		<b>Y = 344509.34</b>	<b>X<sup>2</sup> = 10</b>	<b>XY = 122786.18</b>

Now,  $a = \frac{\sum Y}{N} = \frac{344509.34}{5} = 68901.86$

$b = \frac{\sum XY}{\sum X^2} = \frac{122786.18}{10} = 12278.61$

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

$$Y_c = 68901.86 + 12278.61 X$$

The above calculation showed that Rs 12278.61 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 2065/066 can be calculated as follows, where value of 'X' is 3.

Estimated Actual sales for the fiscal year 2065/066 is,

$$Y_{2065/066} = 68901.86 + 12278.61 \times 3$$

$$= \text{Rs } 105737.71$$

#### **4.2 Production Plan in HPPCL**

HPPCL 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 2059/060 to 2064/065.



**Table 4.4**  
**Production Budget of HPPCL**

SN	Products	Unit	2060/061		2061/062		2062/063		2063/064		2064/065	
			Actual	Budgeted	Actual	Budgeted	Actual	Budgeted	Actual	Budgeted	Actual	Budgeted
1.	Pomoraja Oil	K.G	510	497	1054	580	1153.70	12500	1288.60	1550	1235.52	1300
2.	Sitroneal Oil	K.G	1447	1447	6780	8000	7668.70	8000	8565.26	10000	8212.60	9510
3.	Lemon Grass Oil	K.G	886	886	2541	3540	2070	1500	2311.86	2350	2216.70	2325
4.	Mentha Oil	K.G	1671.50	1600	125.60	128	3800	3800	3120.50	3000	4070	6000
5.	Cammomile Oil	K.G	112.70	100	167.80	278	254.50	375	390	450	272.50	95
6.	Basil oil	K.G	102	110	226	450	186.60	500	208	650	199.90	180
7.	Dhasingre Oil	K.G	108	100	408	538	256.50	240	210	390	274.72	300
8.	Jatamashi Oil	K.G	102	98	224.20	354	-	-	110	-	-	-
9.	Bojo oil	K.G	-	-	402	681	305	204	-	-	-	-
10.	Tejpat Oil	K.G	52.50	100	76	150	79	125	60.68	75	85	137
11.	Katchur Oil	K.G	88.20	102	61.20	61.20	-	-	-	-	-	-
12.	Timil oil	K.G	40	95	69.70	69.70	82	150	91.72	150	88	153
13	Uklatiptus Oil	K.G	1005.5	1500	22528.40	2528.40	2860	2680	3214.60	3500	3063	4580
14	Khoto	Ton	98.6	85.30	268158.90	158.90	180	210	200	240	193	193
15	Sancho	Bottle	1100908	1200000	1906700	1906700	2035960	2000000	2987810	2500000	2180333	2500000
16	Massage oil	Bottle	5978	6500	18000	18000	13573	13573	13159	13500	-	14535
17	Silajit Pest	Bottle	4549	4661	90361	90361	10179	10179	13469	14000	14535	-
18	Sancho Herbel Drink	Sachet	112	209	-	-	206	206	-	-	1441.20	16820
19	Parabin	Bottle	595.20	608	1189.80	1189.80	1345.80	1345.80	1503.10	1510	138670	140008
20	Rojin	Bottle	57240.3	15491	114482	114482	129488	129488	144624	145000	1367.10	1500
21	Tarpin oil	Ltr	14310.10	15491	28620	28620	32372	32372	36156.20	38000		
22	Karpor	Bottle	574	650	1564	1564	1276.50	1276.50	1425.78	1525		

Source: Production department of HPPCL

Table 4.4 shows the overall production plan of HPPCL. HPPCL deals with various types of medical and aromatic plants in processed and unprocessed form. So the products of HPPCL are highly heterogeneous. By the nature of the HPPCL, it is very difficult to pre-determine the units to be produced in long-term. Other factors that create complication in production plan is the lack of skilful manpower and effective coordination between the branches. The production of HPPCL is highly depended upon the availability of crude herbs is determined by the various factors like weather, policy of Nepal government.

Production of jotamoshi and bojo oil is interrupted in some of the years like wise same case is also visible for sancho herbal drink. Production of sancho in bottles accounts for largest production volume of all the products. Like wise what it produces and purchases are highly uncertain to forecast precisely. HPPCL also does not consider inventory while preparing production. Production level is forecasted on the basis of previous year's sales and judgmental approach. Following table 4.5 shows the budgeted production and actual production of HPPCL and their comparison.

**Table 4.5**  
**Budgeted Production and Actual Production of HPPCL**

(in Rs 000)

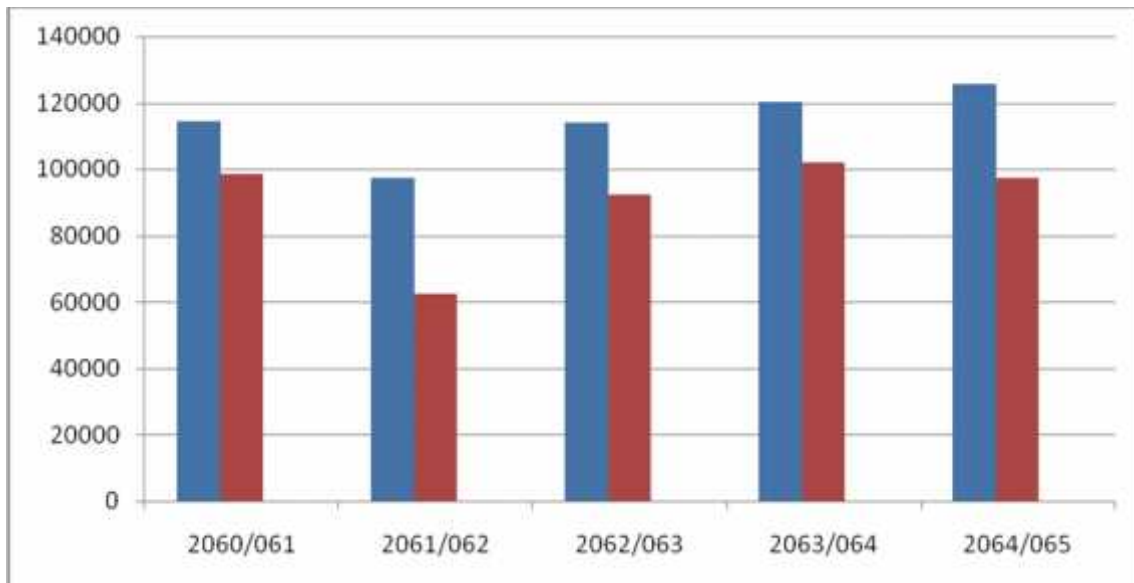
<b>Fiscal Year</b>	<b>Budgeted</b>	<b>Actual</b>	<b>%</b>
2060/061	114520.14	98320.30	14.14%
2061/062	97250.01	62520.12	35.71%
2062/063	113900	92200.14	19.05%
2063/064	120051.21	102005.10	15.03%
2064/065	125516.40	97245.23	22.52%

*(Source: Corporate Office of HPPCL)*

The above table 4.5 showed that in the fiscal year 2060/061 to 2064/065, the change percentage of actual Herbal production had ranged from 14.14% to 22.52%. 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 14.14% in fiscal year 2060/061, 35.71 in 2061/062, 19.05% in 2062/063, 15.03% in 2063/064 and 22.52% in fiscal year 2064/065. The result is presented in following figure 4.2.

**Figure 4.2**  
**Actual Production of Overall Products of HPPCL**



#### 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 4.6.

**Table 4.6**  
**Mean, S.D. & C.V of Budgeted and Actual Production**

<b>Statistical Tools</b>	<b>Budgeted Production</b>	<b>Actual Production</b>
	<b>(Metric Ton)</b>	<b>(Metric Ton)</b>
Mean	114247.552	90458.178
Standard Deviation ( )	4241.6	6402.43
Coefficient of Variance (C.V.)	3.71%	7.08%

*(Source Appendix-II)*

The table 4.6 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 HPPCL 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;

$$\begin{aligned} \text{Probable Error (P.E.)} &= 0.6745 \times \frac{1-r^2}{\sqrt{N}} \\ &= 0.6745 \times \frac{1 - (0.913)^2}{\sqrt{5}} \\ &= 0.0502 \end{aligned}$$

$$\text{Here, } 6 \times \text{P.E.} = 6 \times 0.0502 = 0.3012$$

Since,  $r > 6 \text{ P.E.}$  (i.e.  $r = +0.913$  and  $6 \times \text{P.E.} = 0.3012$ ) 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:

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

where,

$$\begin{aligned} \bar{X} &= 114247.55 \\ \bar{Y} &= 90458.17 \\ \sigma_x &= 4241.6 \\ \sigma_y &= 6402.43 \\ r_{xy} &= 0.913 \text{ (from Appendix - II)} \end{aligned}$$

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:

$$Y_c = a + bX \dots\dots\dots (i)$$

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 4.7**  
**Fitting Straight Line trend of Actual Production**  
**Using Least Square Method from the Fiscal Year 2004/05 to 2008/09**

<b>FY</b>	<b>Mid Value (X)</b>	<b>Actual Production (Y)</b>	<b>X<sup>2</sup></b>	<b>XY</b>
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
		<b>Y = 452290.89</b>	<b>X<sup>2</sup> = 10</b>	<b>XY = -59910.39</b>

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

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

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,

$$Y_{2065/066} = 90458.17 - 5991.039 \times 3 \\ = \text{Rs } 72485.053$$

#### 4.2.5 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:

$$\text{Here, } r = \frac{\sum xy}{\sqrt{\sum x^2 y^2}} = + 0.60 \text{ (from Appendix - III)}$$

Since, the value of  $r = +0.60$  is nearly equal to +1, we cannot deny from the truth that there was perfect 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;

$$\begin{aligned} \text{Probable Error (P.E.)} &= 0.6745 \times \frac{1-r^2}{\sqrt{N}} \\ &= 0.6745 \times \frac{1 - (0.60)^2}{\sqrt{5}} \\ &= 0.19 \end{aligned}$$

$$\text{Here, } 6 \times \text{P.E.} = 6 \times 0.19 = 1.15$$

Since,  $r < 6 \text{ P.E.}$  then the value of 'r' is not significant that means HPPCL couldn't get success 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 HPPCL during the research period is presented in Table 4.8 below:

**Table 4.8**

**Annual Performance Analysis of Raw Material Purchase of HPPCL**

(Units in Rs.)

Fiscal Year	Raw Material Purchase		Achieved	Variance in		
	Budgeted	Actual	%	Rs.	%	Remarks
2060/061	81437	84098.436	103.27%	-2661.436	-3.27	Unfavourable
2061/062	81871.25	58973.197	72.03%	22898.053	27.97	Favourable
2062/063	170496	141523.192	83.01%	28972.808	16.99	Favourable
2063/064	228640	192532.653	84.21%	36107.347	15.79	Favourable
2064/065	194600	178961.363	91.96%	15638.637	8.04	Favourable

(Source: Annual Report of HPPCL)

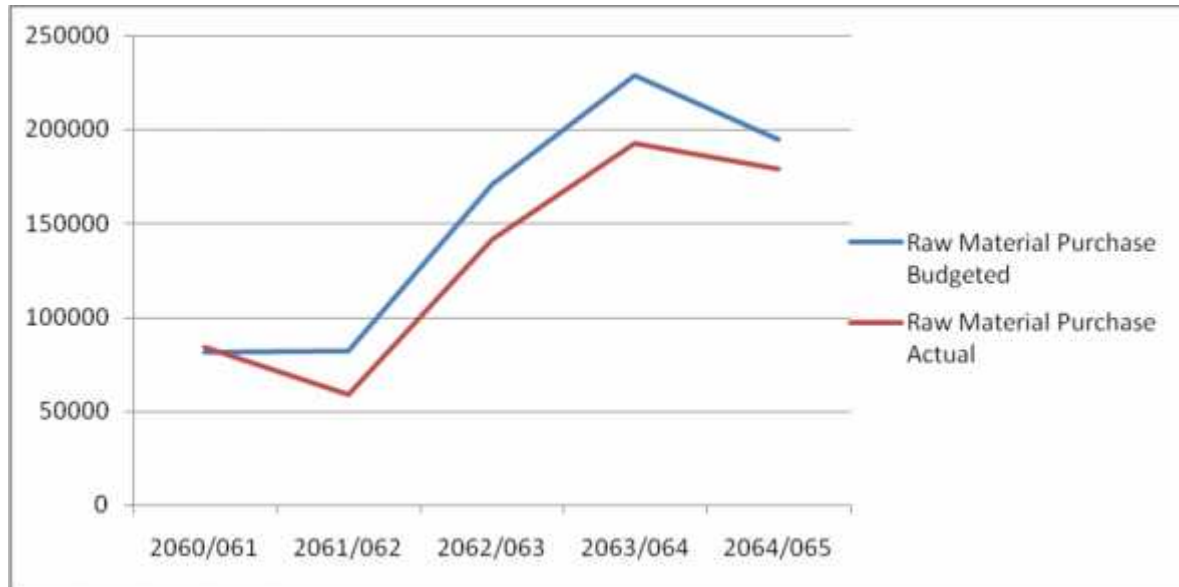
The table 4.8 showed that HPPCL had good control over raw material purchase except in the fiscal year 2060/061 where variance was -3.27%. HPPCL incurred 103.27%, 72.03%, 83.01%, 84.21% and 91.96% of budgeted purchase as actual purchase of raw material in the fiscal year 2060/061, 2061/062, 2062/063, 2063/064 and 2064/065 respectively. On average, HPPCL made a purchase of 86.90% of budgeted purchase on reality which was a favorable result. HPPCL 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 HPPCL.



**Figure 4.3**

**Annual Performance Analysis of Raw Material Purchase**



**4.4 Expenditure Budget of HPPCL**

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

1. Prime cost.
2. Factory overhead.
3. Administrative expenses.
4. Selling and distribution overhead.
5. Other expenses.

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

separately. Following table shows how total costs of the company apportioned in different cost centers.

**Table 4.9**  
**Expenses of HPPCL**

(in 000)

Particulars	060/061	061/062	062/063	063/064	064/065	Average	S.D	C.V
Prime Cost	13455.39	14980.30	18111.33	15548.64	15467.67	15512.67	1501.48	0.097
Factory and Selling Overhead	15570.98	17600.22	20232.41	17062.38	16958.89	17484.98	1528.42	0.087
Administration	11636.80	13095.11	13690.18	11825.40	11341.47	12263.19	956.92	0.078
Depreciation	2157.66	1985.30	1759.70	1532.09	1466.34	1780.22	262.69	0.15
Total	42820.83	47660.93	53793.62	45968.51	47905.01			

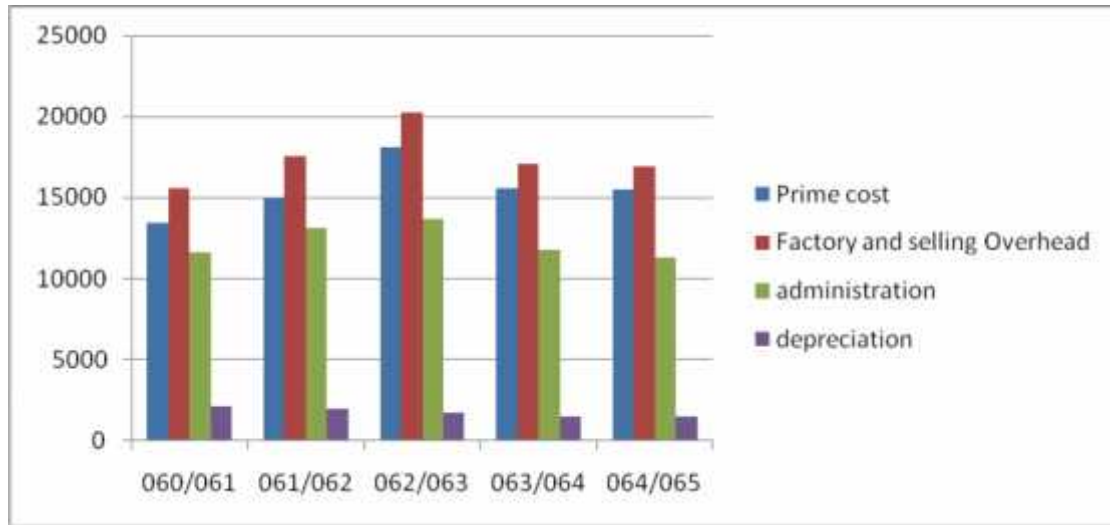
*Source: Annual Report HPPCL*

From the above table it is seen that factory and selling overhead of HPPCL is more than all other costs averaging to Rs 174884.98 thousand for over the five year periods. Prime cost of the company is also significantly large which averages to and 15512.67 thousands. Administrative overheads bear its third position in terms of the costs of the company. Like wise depreciation of the company are 1780.22 thousands in average.

Prime cost of the company is more inconsistent showing C.V of 0.097. Followed by factory and selling overhead (C.V= 0.087) and administrative overhead (0.078). In an absolute term factory and selling overhead is dispersed more from its average costs as it has highest S.D. of 1528.42 following figure clarifies the above analysis.

**Figure 4.4**

**Annual Performance Analysis of Direct Labor Cost**



**4.5. Capital Expenditure Plan for HPPCL**

Capital budgeting is the planning feature investment in plants, equipments and other types of assets. How much and when expenses are made is decided previously. So capital expenditure is the use of funds to obtain operational assets that will help to earn revenue or reduce future costs.

Capital expenditure is a kind of investment as they occurred at some time to receive benefit in the future. Most of Nepalese manufacturing enterprises do not have any particular planning for capital expenditure. In the context of HPPCL some amounts are provided in annual budget for capital expenditure and within the budgeted amount on capital expenditure, capital adjustment is made as per the necessity. Since capital additions are made where urgency of such expenditure occurred, the purchasing decisions are not made based on the evaluation criteria of capital expenditure and manager or authority decides what to purchase according to the necessity or the company within the limitations of the allocated amount. Therefore, there is no systematic budgeting procedures in the context of capital expenditure plan.

**Table 4.10**  
**Capital Expenditure of HPPCL**

(In Rs 000)

Fiscal Year	Capital Expenditure
2060/061	820.43
2061/062	381.87
2062/063	305.43
2063/064	863.38
2064/065	1730.50

Since HPPCL does not prepare its separate capital expenditure plan. Actual expenditure of HPPCL is calculated and shown as in table above. Capital expenditure of HPPCL is highest in fiscal year 2064/065, amounted to Rs 1730.50. Followed by FY 2063/064 Rs 863.38.FY 2062/063(Rs 305.43), FY 2061/062(Rs 381.87), 2060/061 (Rs 820.43).

HPPCL estimates total fixed assets to be purchase for rent year. HPPCL has estimated following expenditure under different headings of fixed Assets:

**Table 4.11**  
**Estimated Capital Expenditure**

(In Rs 000)

Particular	Amount(Rs)
Office machinery	50
Distillation plant	-
Pump	-
Overhead tank	-
Furniture	55
Water processing plant	-
Form machine	-
Form tools set	70
Vehicle	-
Distillation shed construction	200
fencing	700
Tractors	-
Total	1100

*Source: Adm HPPCL*

Total capital expenditure of the coming for forthcoming fiscal year is Rs 1100000. Out of this total estimated budget Rs 200000 is for construction of distillation shed Rs 700000 is for fencing. Likewise Rs 50000 is to purchase office machinery etc. in this way estimated capital expenditure for coming year comes to be Rs 1100000.

#### **4.6 Financial analysis of HPPCL**

Financial analysis is the process of identifying the financial strengths and weakness of the firm by properly establishing relationships between the items of the balance sheet and the profit and loss account (Pandey, 1979: 109). 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 HPPCL, some major financial tools have been analyzed here.

##### **4.6.1 Planning of Cash**

Cash Flow statement describes the sources and uses of cash of an organization. It provides information about the inflow and outflow of cash of firm in an accounting period. It can be defined as a statement which explains the change in cash position from one balance sheet date to the next balance sheet date. The cash flow statement of HPPCL is presented in Following Table 4.12.

**Table 4.12**  
**Cash flow Statement For FY 2064/065**

(In Rs)

	<b>Particulars</b>	<b>2064/065</b>
<b>A</b>	<b>Cash from operating activities</b>	
	Operating profit during the year	1964895.88
	Depreciation	1466339.25
	Cash from decrease in current assets	1633291.90
	Cash from increase in current liabilities	1785194.35
	Decrease in employee privilege fund	121929.50
	Cash paid for gratitude and medical treatment	(2670644.10)
	) <b>Cash from operating activities</b>	<b>4301006.78</b>
<b>B</b>	<b>Cash from investing activities</b>	
	Purchase of fixed assets	<b>(1730502.12)</b>
<b>C</b>	Cash from financing activities	Nil
<b>D</b>	<b>Cash increase During the year (A+B+C)</b>	<b>2570504.66</b>
<b>E</b>	Plus: at beginning	
	In hand                      3400444.60	<b>3436761.00</b>
	At bank                      36316.40	
<b>F</b>	<b>Cash at end</b>	<b>6007265.66</b>

Cash at the end includes cash in bank Rs 5879281.99 and in hand, 127983.67

From the statement above firms operating activities is the main source from where cash comes operating activities is the net result of firm's cash inflow and outflow in operation. Main source of cash in this regard are sales revenue. On the other main outflows are for direct expenses administrative, manufacturing and selling expenses. HPPCL has net cash inflow of Rs. 4301006.78 from its operation.

The Company Has purchased total fixed assets of Rs. 1730502.11 in FY2064/65 and it is the only item of outflow in the heading of investing activities. Firm's has no any funds from its financing activities as all the items of firm's financial source has remained unchanged till the last date.

During the year company has achieved positive cash change of Rs. 2570504.66 thus has achieved ending cash balance of Rs. 6007265.66. Out of which Rs. 5879281.99 is in bank balance is in hand.

#### 4.7 Income Statement of HPPCL

Profit is the lifeblood of any organization. All the activities are performed with a motive to earn profit. It is the base for survival and reason for the establishment of any firm. Following is the income statement.

**Table 4.13**  
**Income Statement for fiscal year 2064/065**

<b>Particular</b>	<b>2060/061</b>	<b>2061/062</b>	<b>2062/063</b>	<b>2063/064</b>	<b>2064/065</b>
Sales Revenue	47888362.68	45916586.23	68874871.59	82649842.21	90914821.21
Less: Cost of Good Sold	31245965.23	32894592.55	54693691.44	59853241.26	65452002.42
Gross Profit	16642397.40	13021993.68	14181180.1	22796601.01	25462819.09
Less : Operating Expenses	10342131.9	6479558.48	8071859.90	18921855.8	12814479.89
Operating Profit	6759343.12	6542435.12	6109320.2	3874745.2	12648339.2
Less: Provision	6542435.12	13277285.12	9931584.20	9931584.20	9931584.20
	<b>216908</b>	<b>-6734850</b>	<b>-3822264</b>	<b>2943161</b>	<b>2716755</b>

**Table 4.14**

**Balance Sheet of HPPCL from the fiscal year 2060/061 to 2064/065**

(Units in Rs.)

Details	Fiscal Year				
	2060/061	2061/062	2062/063	2063/064	2064/065
<b>Liabilities</b>					
<b>1. Capital and Reserve fund</b>					
a. Share capital	21068000	21068000	21068000	21068000	21068000
b. Reserve fund and Profit	216908	-6734850	-3822264	2943161	2716755
<b>Total</b>	<b>21284908</b>	<b>14333150</b>	<b>17245736</b>	<b>24011161</b>	<b>23784755</b>
<b>2. Mid-term &amp; Long- term Loan</b>	-	-	-	-	
a. Secured Loan	-	-	-	-	
b. Unsecured Loan	-	-	-	-	
<b>Total</b>					
<b>Grand Total</b>	<b>21284908</b>	<b>14333150</b>	<b>17245736</b>	<b>24011161</b>	<b>23784755</b>
<b>Assets</b>					
<b>1. Fixed Assets</b>	<b>12812663</b>	<b>11150215</b>	<b>10556536</b>	<b>11139260</b>	<b>9807692</b>
<b>Machine Uninstalled</b>		<b>986560</b>	<b>986560</b>		
<b>2. Investment</b>					
<b>3. Current Assets</b>					
a. Inventory	28663094	22069872	18856704	13459404	14534996
b. Debtors	57234755	49816861	55891813	92438038	102211515
c. Cash and Bank Balance	657696	1567241	4617138	3074340	4276458
d. Advance, Loans and Deposit	9086266	9636756	9004478	10893859	11519142
<b>Total</b>	<b>95641811</b>	<b>83090730</b>	<b>88370133</b>	<b>119865641</b>	<b>132542111</b>
<b>Less: Current Liabilities and Provisions</b>					
a. Current Liabilities	28767442	31463243	29991990	38466246	51007166
b. Short term Loan	54638757	45897581	48204031	60991505	56671500
c. Provisions	3763367	3533531	4471472	7535989	10886382
<b>Total</b>	<b>87169566</b>	<b>80894355</b>	<b>82667493</b>	<b>106993740</b>	<b>118565048</b>
<b>Net Current Assets</b>	<b>8472245</b>	<b>2196375</b>	<b>5702640</b>	<b>12871901</b>	<b>13977063</b>
<b>Grand Total</b>	<b>21284908</b>	<b>14333150</b>	<b>17245736</b>	<b>24011161</b>	<b>23784755</b>

Above table shows the income statement and balance sheet of HPPCL. From income statement it is seen that profit of HPPCL is in fluctuating trend. HPPCL



is in loss on fiscal year 2061/062 and 2062/063. And it is in profit on the remaining year. Above balance sheet shows the assets and liabilities situation of HPPCL.

#### **4.8 Major Findings**

The major findings after the detailed analysis of Master Budget of HPPCL are mentioned below.

- J HPPCL did not have any systematic plans for the formulation and implementation of comprehensive Master Budgeting. So that budgeting system is not based on accounting standards.
- J HPPCL produces herbal products like pamaroja oil, citronela oil, leamon grass oil, rojin, bojo, sancho, etc. market of its products is domestic as well as foreign country.
- J Budgeted sales of HPPCL is in fluctuating trend but Actual sales is in increasing trend where as achievement is also in fluctuating trend. And achievement is below the target every year NBBUL forecasts sales and production giving preference to government budget separated for road construction purpose.
- J The greater coefficient of variance of actual sales than budgeted sales indicated that actual sales are more risky than budgeted sales. the correlation coefficient between the budgeted sales and actual sales is perfectly positive(+0.833). It means that actual sales increased with the increase in budgeted sales and vice versa and actual sales are directly proportional to budgeted sales. And from this regression equation it is clear that there is positive relation between budgeted and actual sales. The actual sales increased by Rs 0.7272 per one Rupee change in budgeted sales.
- J 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 14.14% in fiscal year 2060/061, 35.71 in

2061/062, 19.05% in 2062/063, 15.03% in 2063/064 and 22.52% in fiscal year 2064/065.

) Actual production is 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.

)  $r > 6$  P.E. (i.e.  $r = +0.913$  and  $6 \times \text{P.E.} = 0.3012$ ) 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. The actual production increased by Rs 0.9485 per one Rupee change in budgeted production.

) Straight line trend shows that Rs 5991.039 will decrease in actual production in every year if the trend of past years continues in future also

) The value of  $r = +0.60$  is nearly equal to +1, so there was perfect correlation between actual sales.

)  $r < 6$  P.E. then the value of 'r' is not significant that means HPPCL couldn't get success in creating a good relationship between actual sales and actual production within this research period.

) HPPCL had good control over raw material purchase except in the fiscal year 2060/061 where variance was -3.27%.

) Factory and selling overhead of HPPCL is more than all other costs, prime cost of the company is also significantly large and administrative overheads bear its third position in terms of the costs of the company, where prime cost of the company is more inconsistent showing C.V of 0.097

) Capital expenditure of HPPCL is highest in fiscal year 2064/065. Total capital expenditure of the coming for forthcoming fiscal year is Rs 1100000.

) HPPCL has net cash inflow of Rs. 4301006.78 from its operation on fiscal year 2064/065.cash on hand at end is Rs 6007265.66.

## **CHAPTER - V**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Summary**

Master budget means the development of objectives, which motivates the organization to achieve the objectives effectively and efficiently. It is one of the most important mechanisms for planning and controlling business operations. The effective operation of a business concern resulting into the excess of income over the expenditure fully depends upon as to what extent the management follows proper planning, effective co-ordination and dynamic control.

The basic objective of the research is to study, evaluate and highlight the degree of application of Master Budget in HPPCL. The study could be significant to the management and shareholders of HPPCL and general public also. For the fulfillment of the objectives of research, various function budgets of HPPCL from the fiscal year 2060/061 to the fiscal 2061/062 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 HPPCL 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 Master budget in HPPCL, the researcher considered that there is not complete and comprehensive Master budget system. HPPCL 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 HPPCL are 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 HPPCL 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.

HPPCL 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-orders level also while purchasing material. The Costs are classified as Prime cost factory expenses, administrative expenses and selling & distribution expenses. It has weak control over expenditure.

### **5.3 Recommendation**

On the basis of analysis of the operations of HPPCL, it needs some suggestions to improve the application of Master budget system for its better operation in future. So the study recommends the following aspects to improve the HPPCL'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 applied for efficient performance measurement.
- ) 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.
- ) HPPCL should plan for acquisition of fixed assets; it should prepare capital expenditure budget taking into consideration the discounted cash flow.
- ) HPPCL should disseminate information to various departments and various levels so that communication barriers can be eliminated.
- ) HPPCL 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, HPPCL 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 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.
- ) HPPCL should classify cost into fixed and variable and should prepare flexible budget and locate break even point.
- ) HPPCL should pay attention in reducing loan in order to get relief from burden of interest.
- ) HPPCL should follow SWOT analysis. Strength and weakness should be analyzed and opportunities and threats should be identified.

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