CHAPTER - I

INTRODUCTION

1.1 Background

Usually, profit do not just happen, profit are managed. There are several different interpretations of the term profit. An economist says that profit is reward for entrepreneurs for taking risk. A labour might say that it is a measure of labour's efficiency that provides a logical base for negotiating a wage increase. An investor might view it as a gauge of the return on his or her money. An internal revenue agent might regard it as a base for determining income taxes. An accountant will define it simply as the excess of revenue over the expenditure.

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

1.3 Research questions

There are many issues to be deal for the purpose of the study. The research attempts to sort out the answer to the following questions.

• What are financial budget and profit planning practice followed by HPPCL?
• What is the financial position of the HPPCL?
• What are the variation between budgeted and actual financial progress of HPPCL?
• What are the relationship among financial variables in profit planning ?

1.4 Objective of the Study

The basic objective of this study is to examine the planning and 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.

- To find out the financial budgets and profit planning in HPPCL.
- To analyse the financial position of the concern.
- To evaluate the variance between budgeted and actual financial progress of HPPCL.
- To find out the relationship among financial variables in profit planning .

1.5 Significance of the Study

This study has primarily focused on profit planning and control 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.

1.6 Limitation of the Study

This study is concerned to 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.

1.7 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.

- Population
- Sample
- Data Collection
- Research Design
- Nature and Sources of data
- Tools for analysis etc.

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

REVIEW OF LITERATURE

This chapter attempts to build strong theoretical background through the help of which further search for solutions of the research problems would be easier. Profit planning: its theoretical background, academic insights, nature, advantages, importance and other various issues have been addressed here in this chapter as contributed by different management experts and others towards this field. While reviewing literature different sources like books, documents, bulletins, reports, journals and articles etc. are consulted. Conceptual framework first and then empirical studies have been presented here in this chapter

2.1 Conceptual Framework

Every one desires for rapid socio-economic development of the country by utilizing the scarce resources. Public enterprise is one of the most important means of socio-economic development of the country. The rationale behind the establishment of public enterprises are basically to accelerate the rate of economic growth, to build infrastructures of development, to make provision of public utility, to generate employment opportunity, to supply essential commodities and service; and to reduce trade imbalance of the country. But in fact, operational efficiency of the Nepalese public enterprises does not seem satisfactory in accomplishing their objectives. Further, reason as to why profitability has been negative, and the factors responsible for such a state of affairs have been explored. The present section, conceptual framework has been made with a view to recapitulate the basic concept of literature to show how to complete the present line of study. They have analyzed and searched using appropriate tools and techniques. The chapter mainly incorporates concept of profit and profit planning, important and limitation of profit planning development of profit planning. Level of forecasting, corporate planning, budgets and budgeting, process of profit planning and the fundamentals of profit planning are the subjects to be dealt here.

2.1.1 Concept of Profit and Planning

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

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

Profit is essential to survive in any business concern for its successful operation, future expansion and growth. It is the primary measures of success of business organization. It is the excess income over the cost of production. The word profit implies a comparison of the operations of business between two dates, which are usually separated by an interval of one year. The term profit is very controversial and there are several different interpretation about it. It has various dimension and views to be realized. The researcher can say very frankly that, it has not yet been defined as such definition can solely, wholly and fully be accepted. The researcher has already accepted the view of Lynch and Williamson, an economist, labour leader, investor, revenue agent and an accountant of the concern has different view about profit. An economist will say that profit is the reward for entrepreneurship for risk taking. A labour leader might say that it is a measure of how efficiently labour has produced and that it provides a base for negotiating a wage increase. An investor will view it as a gauge of the return on his or her money. An internal revenue agent might regard it is the base for determining income taxes.

Profit is the reward for risk taking in business. An entrepreneur earns profit as reward for his innovations. The greater degree of monopoly power, the greater profit made by the enterprise (Joshi; 1993: 10). Economist's argues on profit may be put in three broad groups. The first looks upon profit as the reward for bearing risks and uncertainties, the second views profit as the consequence of perfection and in-perfection in the competitive adjustment of the economy to dynamic change, the third sees profit as the reward for successful innovation (Joel; 1997: 6). It could be noted

that profit is residual income left after the payment of the contractual rewards to other factors of production (Joshi; 1985: 45).

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

Planning consists of setting goals for the firm, both immediate and long range; considering the various means by which such goals may be achieved and deciding which of any available means would be best suited to the attainment of the goals sought under the condition expected to prevail (Lynch & Willamson; 1996: 5).

Dictionary meaning of planning is the act or process of making plans for something (for example, curriculum, financial and family planning also) and plan means something that you inter to do or achieve, a set of things to do in order to achieve something, especially one that has been considered in detail in advance and way of investing money for the future: a saving plan (Hornby; 2000: 962).

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

Planning is process of developing enterprise objectives and selecting a future course of action to accomplish them. It includes (a) establishing enterprise objectives, (b) developing premises about the environment in which they are to be accomplished, (c) selecting a courses of action for accomplishing the objectives, (d) initiating activities necessary to translate plans in to action and (e) re-planning to correct current deficiencies (Welsch et. al.; 1992: 3).

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

Management planning and control begins with the establishment of the fundamental objectives of the organization, and continues as the process by which necessary resources are provided and employed effectively and efficiently toward achievement of the goals. A management planning and control system provides the comprehensive framework within which this process is carried out.

To help reduce this massive concept to workable proportions, it is convenient to view it in terms of three subsystems, According to Lunch & Williamson, 1996:139

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

a) Strategic Planning

Strategic planning is along range in its time perspective and complete in its breadth of scope and depth of penetration. Involving as it does the determination and periodic change of organizational objectives, the acquisition and use of the resources, strategic planning is necessarily a top management function. Its timing is irregular and opportunistic. Thus, there must be a strong external orientation, with sensitivity to social, economic, political, and international and myriads of other influences.

b) Management Control

Management control is carried on within the environment established by strategic planning. Its primary emphasis is on carrying out the policies resulting from strategic planning, rather than on setting them. Its goals are tangible within the broad frame work of overall organizational objectives, and it's focus is on line management. Planning characteristic of strategic planning, management control requires administrative and persuasive skills in its successful implementation.

c) Operational Control

Operational control is employed to assure that management planning is carried to fruition effective and efficiently in the organizations. Its activity patterns are highly repetitive, and they are characterized by the close adherence to directions, with little exercise of initiative. Planning should start by deciding and defining the objectives of the company, making sure in the process that there are comparative with the skills and resources of the undertaking.

2.1.2 Concept of Profit Planning

After having some concept of profit and planning, the researcher think that it is necessary to know some concept about profit planning. Generally speaking planning for profit is known as profit planning. Profit planning directs the organization toward achieving profit because the task should implement according to plan. In other word if a management plans for profit for a certain period of time it is called profit plans. Welsch, al.; 1992

The term comprehensive profit planning and control is defined as a systematic and formalized approach for performing significant phases of the management planning and control functions. Specifically, it involves (1) the development and application of long range objectives for the enterprise; (2) the specification of enterprise goals; (3) a long range profit plan developed in board terms; (4) a short-range profit plan

Detailed by assigned responsibilities (division, products, projects); (5) a system of periodic performance reports detailed by assigned responsibilities; and (6) follow up procedures (Welsch, et. al.; 1992: 1).

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

spent in each expense category. Profit plan along with actual accounting information, becomes the basis for developing the next fiscal (accounting) years' budgets (Jack and Raymond; 1998: 133).

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

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

To co-ordinate plan of action & provide of realistic estimate of income and expenses, and comparison of actual results with budgeted .Comprehensive profit planning is a new term in literature of business. It is defined as a process designed to help management effectively perform

Significant phase of the planning function. The profit planning model includes development and application of broad and long range objectives of enterprise, specification of enterprise goals, development of long range profit plan in broad terms, specification of tactical short range profit plan detailed by assigned responsibilities (like division, department, projects) and follow up procedures.

2.2 Importance and Limitation of Profit Planning

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

2.2.1 Importance of Profit Planning

Profit planning is a base of the management process. Management requires a variety of information to plan, to control and to make decision. The information and guidance are given by profit planning and management & profit planning are closely inter-

linked. Profit planning is very important to any business organization. The following main arguments are usually given for profit planning and control (Welsch; 1992: 60)

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

2.2.2 Limitations of Profit Planning

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

2.3 Development of Profit Planning

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

2.3.1 Sales Plan

Sales plan is the starting point in the proportion of the comprehensive profit planning and control. All the other plans and budgets depend upon the sales budget. The budget is usually presented both in units and dollars of the sales revenue or sales volume. The preparation of sales plan is based upon the sales forecast. A variety of methods are used to forecast the sales for the planning period (Arthur and Meir; 1970: 684).

The sales plan should be worked out on a sound and reasonably detailed basis. It should reflect seasonal influences and any anticipated irregularities in sales. A well developed sales plan is generally built up on a quota basis in the first place. So, that the double check by individual quota on total plan is inherent in the building. In a multi-plant situation, where there is a choice of manufacturing product items in more than one plant, the geographical distribution of sales is of special importance for production planning. Adequate sales planning is basic fundamental to profit planning program (William; 1989: 502).

Unless there is a realistic sales plan, partially all other elements of a profit plan will be out of writer with reality. The sales plan is the foundation for periodic planning in firm because practically all other enterprise planning is built on it.

2.3.1.1 Sales Planning and Forecasting

Sales planning and forecasting often are confused. Although related, they have distinctly different purposes. A 'forecast' is not a plan; rather it is a statement and/or a quantified assessment of future conditions about a particular subject (e.g. sales revenue) based on one or more explicit assumptions. A forecast should always state the assumption upon which it is based. In contrast, a 'sales plan' incorporates management decisions that are based on forecast, other inputs, and management judgements about such related items as sales volume, prices, sales efforts, production, and financing (Welsch; 1992: 172).

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

2.3.1.2 Strategic and Tactical Sales Plan

As a practical approach, a company may schedule completion of the strategic (long-term) sales plan as one of the first steps in the overall planning process. For example, a company operating on a calendar year may complete a long-term sales plan at least in tentative form, by the end of July because this gives sufficient lead time for interim considerations essential to development of next year's comprehensive short-term profit plan during the latter part of the proceeding calendar year. Long-term

Tactical sales plan is a short-range sales plan that is prepared for a year in the future. According to Welsch, "A common approach used for short time horizons in a company is to plan sales for twelve months in to the future, detailing the plan initially by quarters and by months for the first quarter. Thus, tactical sales plans are usually subject to review and revision on a quarterly basis. The short-term sales plan includes a detailed plan for each major product and for groupings of minor products. Short-term sales plans are usually developed in term of physical units (or jobs) and in sales and/or service dollars. Short-term sales plan must also be structured by marketing responsibility (e.g. by sales districts) for planning and control purposes. Short-term sales plan may involve the application of technical analyses; however, managerial judgement plays a large part in their determination. The amount of detail in a tactical sales plan is a function of the company's environment and characteristics. A short-range sales plan should include considerable detail where as a long range plan should be in broad term (Welsch et. al.; 1992: 174).

2.3.1.3 Developing a Comprehensive Sales Plan

For developing a comprehensive sales plan, generally following steps should be taken. Budgeting : profit planning & control 2062 written by Goginder Goet, Ishwar Bhattari, Askshay Gautam .

Step Ist : Develop management guidelines for sales planning.

Step IInd : Prepare sales forecast.

Step IIIrd : Assemble relevant data.

- Manufacturing capacity.
- Sources of raw materials and supplies.

- Availability of key people and labour force.
- Capital availability.
- Availability of alternatives distribution channels.

Step IVth : Develop strategic and tactical sales plans.

Step Vth : Consideration of alternatives.

Step VIth : Develop pricing policies.

Step VIIth : Develop product line consideration.

Step VIIIth : Price cost volume consideration.

2.3.1.4 Methods of Projecting Sales

Following four methods are used in projecting sales (Welsch; 1992: 155).

1. Judgemental Methods

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

2. Statistical Methods

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

3. Special Purpose Methods

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

4. Combination Methods

2.3.2 Production Plan

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

Production planning and scheduling are factory functions involving determination of the amount of goods to produce and production timing; therefore the production plan is the primary responsibility of the manufacturing vice-president. It is prepared on the basis of sales budget plant capacity, opening inventory of finished goods, required closing inventory of finished goods and production policy of management.

2.3.2.1 Responsibility for Production Planning

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

2.3.2.2 General Consideration in Planning Production and Inventory Level

The production plan does not aim to set the precise amounts and timing of actual production during the budget period. Ruther, the production plan represents the implications of planned sales volume for planned production volume as a basis for

planning the various aspects of the manufacturing function plant capacity requirements, direct material and component requirements, timing of purchases, direct labour requirement and costs and factory overhead. 1. Total production requirements (by product) for the budget period.

2. Inventory policies about levels of finished goods, work-in-progress and the costs of carrying inventory.
3. Plant capacity policies, such as the limits of permissible departures from a stable production level throughout the year.

2.3.2.3 Developing the Production Plan

> Production managers must translate the quantities in the sales budget into unit production requirements for the budget period for each product while considering management inventory policies. The budgeted production for the budget period has been determined; the next problem is prorating this producing by interim periods during the budget year. Interim production must be planned to (1) provide sufficient goods to meet interim sales requirements, (2) keep interim inventory levels within policy constraints and (3) manufactured the goods as economically possible (Welsch et. al.; 1992: 213).

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

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

2.3.2.4 Setting Inventory Policy

In most business, inventories represent a relatively high investment and may have a significant impact on the major functions of the enterprise and its profit. If the level of inventory is greater than requirement, it is a sign of under utilization of their fund and cost of capital burden.

1. Quantities (in units) needed to meet sales requirements. Resolving this problem entails consideration of the sales budget and seasonal demand. The sales department executives should be directly involved in this problem.
2. Perishability of items.
3. Length of the production period.
4. Storage facilities.
5. Adequacy of capital to finance inventory production some time in advance of sales.

2.3.2.5 Setting Production Policies

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

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

2.3.3 Material Purchase and Usage Budget

2.3.3.1 Concept of Materials Purchase Budget

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

1. **Material Budget**

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

2. Purchase Budget

The purchases budget specifies the estimated quantities of raw materials and parts to be purchased and their estimated cost as well as delivery dates.

3 . Material Inventory Budget

The budget reports the planned levels of raw materials inventory items of quantities and cost.

4. Cost of Materials Used Budget

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

2.3.3.2 Materials and Parts Inventory Policies

The quantity differential planned between the materials and parts budget and the purchases budget is accounted for by the change in materials and parts inventory levels. As with the finished goods inventory budget, with respect to sales and

production, the materials and parts inventory budget provides a cushion between materials and parts requirements and purchases. If materials and parts requirements are seasonal, a stable materials and parts inventory level means that purchases must exactly parallel factory material and parts requirement. Yet, in the same case, purchase can be at a uniform level only if inventory is allowed to absorb variations in materials and part requirements. The timing of purchases will depend on inventory policies. The primary consideration in setting inventory policies for materials and parts are: (Welsch et. al.; 1992: 243).

1. Timing and quality of manufacturing needs.
2. Economics in purchasing through quantity discounts.
3. Availability of materials and parts.
4. Lead time (order and delivery).
5. Perishability of materials and parts.
6. Storage facilities needed.
7. Capital requirement to finance inventory.
8. Costs of storage.
9. Expected changes in the cost of materials and parts.
10. Risks involved in inventories.
11. Opportunity costs

2.3.3.3 Purchasing Policy

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

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

carrying cost of a annual's supply of the product. Such as the quantity seeks to balance the cost of inventory acquisition the cost of inventory possession.

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

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

Where,

A = Annual quantity used in units

O = Average annual cost of placing an order

C = Annual caring cost of one unit in inventory for one year (e.g. storage insurance, return as investment in inventory).

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

2.3.4 Direct Labour Budget

2.3.4.1 Concept of Direct Labour Budget

Direct labour is all labour expended in altering the construction, composition, confirmation or condition of the product. In other word, it is that labour that can be conveniently identified or attributed wholly to a particular job, product or process or expended in converting raw materials into finished goods. It includes payment made to labour engaged on the actual production of the product or in carrying out of an operation or process, labour engaged in aiding the manufacturing by way of supervision, maintenance, tool setting, transportation of material and inspectors, analysist etc. Specially required for such production. But wages paid to supervisors, inspectors etc. is not direct labour, can be treated as direct labour if they are directly

engaged on specific product or process and they spend their time on it can be directly measured without much of an effort.

2.3.4.2 Planning Standard Labour Time

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

1. Time and Motion Studies

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

2. Standard Costs

If a standard cost accounting system is used, careful analyzes of direct labour hour requirements per unit of production will generally have been made. In such cases, the standard labour time per unit of product used to derive labour hour requirements.

3. Direct Estimate by Supervisors

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

4. Statistical Estimates by a Staff Group

Cost accounting records of past performance usually provide useful information for converting production requirements to direct labour hours. This approach is

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

2.3.5 Overhead Budgets

2.3.5.1 Concept of Overhead Budget

Cost may be divided into two portions direct and indirect. The indirect portion of total cost is overhead. Which is the aggregate of indirect material, indirect labour and indirect expenses? Overheads comprise all expenditure incurred for or in connection with the general organization of the whole or part of the undertaking i.e. the cost of operating supplies and services used by the undertaking including the maintenance of capital assets. There are three main types of the overhead namely, manufacturing/ factory overhead, selling and distribution overhead and office and overhead.

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

2.3.5.2 Manufacturing/Factory Overhead Budget

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

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

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

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

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

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

After these above steps, per unit overhead rate for each product could be computed and by adding the direct material cost and indirect labour cost for each product. The position is in to compute the cost of goods manufactured.

2.3.5.3 Selling and Distribution Overhead Budget

Selling and distribution expenses include all cost related to selling, distribution and delivery of products to customers. The expenses are not cost and are not allocated to specific product. Welsch viewed, "fundamentally, the top marketing executive has the

direct responsibility for planning the optimum economic balance between (1) the sales budget, (2) the advertising budget and the distribution expenses budget. Therefore profit planning and control views sales, advertising, and distribution expenses as one basic problem rather than as three separate problems. This view is logical because of the interrelationship between them (Welsch et. al.; 1992: 314). There are two type of selling expenses namely (1) sales office expenses which cover the cost of sales man and their administrative support; and (2) sales direction and promotion expenses, which cover the cost of directing the sales efforts and promotional changes advertising.

2.3.5.4 Administrative Office and Administrative Overhead Budget

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

Administrative expenses budget covers the expenses incurred in framing policies, direction the organization and controlling the business operation. Although fixed expenses remain constant and are not related to salves volume in the short run, they are dependent upon sales in the long-run with a small change in output, they do not change. However, reduced by discharging the services of some member of the staff and lacking other economy measures. On the other hand with persistent increase in output or business activity, administration expenses will increase but they may lag behind business activity. According to Welsch, "It is advisable to base budgeted administrative expenses on specific plans and programs. Past experience, adjusted for anticipated changes in management policy and general economic conditions is helpful. Because most administrative expenses are fixed, an analysis of the historical record will often provide a sound basis for budgeting them (Welsch et. al.; 1992: 317).

2.3.6 Capital Expenditure Budget

2.3.6.1 Concept and Capital Budget

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

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

2.3.6.2 Method for Evaluation of Capital Budgeting

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

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

a. Average Rate of Return (ARR)

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

$$\text{ARR} = \frac{Average \quad Annual \quad \text{Pr}ofit \quad (After \quad Tax)}{Average \quad Investment \quad Over \quad the \quad Life \quad of \quad the \quad \text{Pr}oject} \times 100$$

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

Pay Back Period (PBP)

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

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

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

2. Internal Rate of Return (IRR)

because of the various short comings in the average rate of return and payback methods, it is generally that discounted cash flow methods provide a more objective base for evaluating and selecting investment projects. The internal rate of return for an

investment proposal is the discount rate that equates the present value of the expected cash flows with the present value of the expected inflows (Van Horne; 1997: 150). It is defined as the discount rate which equates the aggregate present value of the net cash inflows (cash flow after taxes) within the aggregate present value cash out flows of a project. It is represented by 'r' and calculated by the following formula.

$$A_0 = \frac{A1}{(1+r)} + \frac{A2}{(1+r)2} + \ldots\ldots\ldots\ldots\ldots + \frac{An}{(1+r)n}$$

Where ,

A_0 = The initial outlay

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

r = Internal rate of return

If there are a number of alternative proposals, the internal rate of return of all alternatives should be compared and the alternative which gives the maximum internal rate should be selected as the most profitable one.

3. Net Present Value (NPV)

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

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

Where,

K = Overall cost of capital

t = No. of year (no of period)

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

From the above formula, NPV may be defined as the summation of the present values of the cash flow after tax in each year minus the summation of present values of the net cash outflows in each year.

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

Table 2.1

Capital budgeting decision criteria

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

2.3.7 Cash Budget

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

2.3.7.1 Approaches used to develop Cash Budget

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

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

1. Cash Receipts and Disbursement Approach

Cash receipts and disbursement approach is based on a detailed analysis of the increases and decreases in the budgeted cash account that should reflect all cash inflows and outflows from such budgets as sales, expenses, and capital expenditures (Welsch et. al.; 1992: 436).

2. Financial Accounting Approach

The starting point in this approach is planned net income shown on the budgeted income statement. Basically, planned net income is converted from an accrual basis to cash basis. This approach requires less supporting detail and provides less detail about the cash inflows and outflows. It is useful for making long-ranges cash projections.

This approach is also known as the indirect to or income statement approach. It is used for analytical purpose to develop the annual cash budget. The other cash inflows and outflows are estimated for non operating items such as sale of fixed assets, capital additions, and payment of debt and dividends.

2.3.7.2 Techniques for Improving Cash Flow

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

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

2.4.1 Concept of Forecasting

A forecast should always state the assumptions upon which it is based, a forecast should be viewed as only one input into the development of a plan. Forecasts are statements of expected future condition, definite statements of what will actually happen are patently impressible. Expectations depend upon the assumptions. If the assumption are plausible, the forecast has a better chance of being useful. Gupta

viewed, "when estimates of future conditions are made on the systematic and the figure or statement obtain is known as 'forecast'" (Gupta; 1993: 82).

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

2.4.2 Level of Forecasting

A large number of forecasting methods are available to management today. The selection of level of forecasting depends upon many of factors like the context of forecasts, the relevance and availability factors, the degree of accuracy of the data, the desirable time period to be forecast, the time available for making the forecast, and the cost of the forecasting. There are three levels of forecasting namely (1) short-term forecasting (2) intermediate-term forecasting, and (3) long-term forecasting.

2.4.2.1 Short-Term Forecasting

The short-term forecasting is a predication extending a maximum of two years into the future. The short-term forecasting provides more rationally ordered information and a sound base for decision making to the management. The internal estimates made by the adjoining department in the large enterprises can be integrated with up to date.

2.4.2.2 Intermediate-Term Forecasting

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

2.4.2.3 Long-Term Forecasting

Forecasts are frequently made in the form of long range projection that compete an economic situation with a minimum of five year into the future with present circumstances or with those of the relevant past. Some times these assumptions are varied to yield a range of possible result. Typically, long-range aggregate projections have been set in a gross national production framework. Once an appraisal has been made of the growth potential of the aggregate economy, consideration may be given first to the magnitude of future industry sales by product or services line as well as total.

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

2.4.3 Planning Verses Forecasting

Although related, they have distinctly different purposes. A forecast is not a plan; rather it is a statement and or a quantified assessment of future conditions about a particular subject (e.g. sales revenue) based on one or more explicit assumptions. A forecast should be viewed as only one input into the development of a sales plan.. In contrast, a sales plan incorporates management decisions that are based on the forecast, other inputs and management judgements about such related items as sales volume, prices, sales efforts, production and financing (Welsch et. al.; 1992: 172).

The distinction between forecasting and planning is not an easy; forecasting is our best thinking about what will happen to us in the future. In planning we develop our objectives in practical detail and we correspondingly develop schemes of action to achieve these achieves the objectives.

2.5 Budgets and Budgeting

2.5.1 Budget

A budget is a comprehensive and co-ordinated plan expressed in the financial terms, for the operation and utilization of resources of an enterprise for some specific period

in future (Pandey; 1993: 465). Budgeting is an amalgamation of managerial techniques and approaches where as the budget is financial expressions for certain period for certain field, it is more numerical rather than theoritical. A budget is a predetermined statement of management policy during a given period, which provides a standard for comparison with the results actually achieved.

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

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

2.5.2 Budgeting

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

The objective of budgetary control and standard costing is to enable management to conduct business in the most efficient manner. The system should supply the answer to the 'why' and 'how' of management. Let's then first set out, what management wants to know? (Management sometimes have to be educated before), what management should, how and what management wants to know? Coincide (Welsch et. al.; 1992: 466).

2.5.3 Budgetary Control

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

2.6 Review of Previous Related Research Works

There are some research works made on the topic of profit planning in Nepalese context and the same are relevant to review here in this section.

Ojha (2005) has a significant contribution on the topic “Profit Planning in Public Enterprises in Nepal: A Comparative Study of Royal Drugs Limited (RDL) and Herbs Production and Processing Company (HPPCL)” The study is to high light the applicability and effectiveness of profit planning in Nepalese public entireness. Planning and decision making process is highly centralized in RDL whereas planning and decision making process in HPPCL is participatory to some extent.

Chand (2006) has submitted a dissertation in the topic, “ Profit Planning in Herbs Production and Processing Company Limited" to the faculty of management central department T.U. in the course of practical fulfilment of MBA. The research paper is to examine what extent the company is applying comprehensive profit planning system but HPPCL has lack of budgeting exports and formulated on traditional adhoc basic.

Bhata (2007) has submitted a dissertation on the topic "Profit Planning in Royal Drugs Limited" this research of Mr. Bhatta was mainly concerned with the current practice of profit planning and examines that to what extent the RDL is apply profit planning system. And analyze the various functional budgets that are prepared in public enterprise of Royal Drugs Limited. Internal and external variables providing opportunities threats and strengths and weaknesses are not identified.

Mishra (2008) has a significant contribution on the topic "Profit Planning in Tokla Tea Estate (TTE)". The research paper are to examine how far the different functional budgets are being applied as a tool of profit planning in the estate. The production plan and actual production trend of the company but there is unrealistic production for casts.

K.C. (2008) has conducted a research on the topic, "Profit planning in Herb's production and processing co. Ltd." This research work is basically concerned is to highlight the current practice of profit planning and its effectiveness in herbs production and processing company limited but there is lack of proper coordination between the various responsible departments.

Prasai (2009) submitted a research study entitled “Profit Planning in HPPCL” has given focus upon profit-planning aspect of HPPCL. A research, conducted current estimates of future performance like flexible expenses budgets, cost volume profit analysis continuous budgeting, and variance analysis and budget revision but there is no cost classification system. Overhead are not classified systematically and it creates problem of analyze its expenses properly.

This paper aimed at determining the extent of financial distress in Nepalese enterprises, indicating how financial ratios deteriorate as the firm moves into financial distress, pointing the firm moves into financial distress, pointing out concessions to be made by various stakeholders in he restricting process, and analysing legal framework concerning financial distress in Nepal. The enterprise selected for this study consists of public enterprises only since available published information shows that financial distress is more chronic in public enterprises than in private enterprises. The attempts were also made to estimate various econometric models in order to explain the behaviour of financial ratios in financially distressed firms. In this study, an enterprise is considered to be in financing distress if it occurs losses.

2.7 Research Gap

Since the above mention studies offer limited findings, more extensive testing. The enterprise selected for this study consists of public enterprises only since available published information shows that financial distress is more chronic in public enterprises than in private enterprises. Previous studies were analyzed portfolios and return on equity, liquidity turnover, productivity ratio, and coverage ratios. And research in the same topic has been carried out in the past and it is a continuous process in future. So to obtain latest updated information this same topic is selected.

This study aims to attempt about profit planning and control in HPPC with using the modern tools.

CHAPTER- III

RESEARCH METHODOLOGY

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

3.1 Research Design

This research can preferably be said descriptive and explanatory as its attempts to describe and explore various aspects and dimensions of profit planning of HPPCL. This study is quantitative since the quantitative data have extensively employed. It is a type of survey study which is generally conducted to assess the opinions, behaviours or characteristic of a given population and to describe the situation and events occurring at present.

3.2 Nature and Sources of Data

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

3.3 Data collection methods

Data are the main arms for successful analysis. Data may be statistics, figures, facts, charts, etc. Data are of two types, i.e. primary data and secondary data. Primary data are collected from the sources through direct interview, questionnaire, dialogue, discussion, etc. Secondary data are used here for this research which can be collected through the different published and unpublished articles, annual reports, magazines, and previous study reports, etc.

3.4 Population and Sample

There are altogether 108 processing companies functioning all over the kingdom up to July-2010. But due to lack of time and resource factor, it is not

possible to include all of them in the study. Hence, judgemental random sampling method is used as sampling and the herbs production and processing company limited has been taken as sample.

3.5 Research Variables

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

3.6 Tools for Analysis

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

3.6.1 Financial Tools

1. Financial Ratio Analysis

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

Current Ratio

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

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

Quick Ratio

Quick ratio measures, like current ratio, short term solvency position of the company but with relying on sales of inventories.

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

Total Assets Turnover Ratio

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

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

Fixed Assets Turnover Ratio

This ratio measures the extent of efficient utilization of fixed assets to generate sales revenue of the company.

$$\text{Fixed Asset Turnover Ratio} = \frac{Sales}{Fixed \quad Assets}$$

Gross Profit Margin

Gross profit margin indicates how cost effective a company is to get its operating profit.

$$\text{Gross Profit Margin} = \frac{Gross \quad \text{Pr}ofit}{Sales}$$

Net Profit Margin

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

$$\text{Net Profit Margin} = \frac{Net \quad \text{Pr}ofit}{Sales}$$

Return on Assets

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

$$\text{Return on Assets} = \frac{Net \quad \text{Pr}ofit}{Total \quad Assets}$$

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

$$\text{Return on Capital Employed} = \frac{Net\ \ \text{Pr}ofit}{Capital\ \ \ Assets}$$

Debt Ratio

Debt ratio is the portion of debt capital that is employed to finance its total assets.

$$\text{Debt Ratio} = \frac{Debt}{Total\ \ \ Assets}$$

Debt/Equity Ratio

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

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

2. Cost Variability

Cost in terms of its variability can be classified as fixed and variable. Profit planning and budgeting, and any other decisions most having depend on the nature of cost.

3. Cost – Volume of Profit Analysis

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

i. Profit volume ratio (P/V Ratio)
It is the ratio of contribution margin to sales revenue

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

ii. Break even point (BEP)

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

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

3.6.2 Statistical Tools

i. Coefficient of Variation (CV)

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

ii. Co-efficient of Determination (R^2)

R2 explains the ability of independent variable to predict the change in dependent variable.

iii. Standard Deviation (S.D.)

S.D. measures the extent of dispersion of observed variables from the average. This tool helps to recognize volatility of variable within a given time periods.

iv. F-test

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

v. t-test

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

vi. Simple Linear Regression Model

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

vii. Descriminant Analysis

Descriminant analysis is developed by Altmand and is also called altman model. This model can be employed to discriminate whether or not a company is consideration likely to fail in the near future. Analysis of each of the individual ratios sometimes be confusing and to avoid this z-score model developed by

Altman is employed. Z-score above 2.99 represents healthy firm. Z-score below

1.81 always represents unhealthy firms. Z-score between these two represent area of gray.

Z-score is calculated utilizing the equation:

$$Z = 1.2\ x_1 + 1.4\ x_2 + 3.3\ x_3 + 0.6\ x_4 + 1.0\ x_5$$

Where,

x_1 = Net working capital to total assets (NWC/TA)

x_2 = Current asset to current liabilities (CA/CL)

x_3 = Net profit to total assets (NP/TA)

x_4 = Net profit to sales (NP/Sales)

x_5 = Sales to total assets (Sales/TA)

viii. Percentage of sales method

It is emphasized to forecasting firm's two key financial statements: balance sheet and income statement as these provide a good picture of the firm's operations. It has seen that sales to assets turnover is an important control variable and reflects a fundamentally important proposition in planning – that the volume of firm's sales is a good predictor of the required investment in assets.

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

CHAPTER- IV

PRESENTATION AND ANALYSIS OF DATA

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

According to objective1: To find out the financial budget & profit planning in HPPCL

4.1 Sales Plan

Sales plan is the basic plan at which other plans depend. Table 4.1 presents budgeted sales and actual sales of HPPCL over the study periods.

Table 4.1

Target and Actual Sales

(In Rs. '000')

In Rs. '000') Year	Budgeted sales	Actual sales	Percentage achieved
2061/62	65071	35366.34	54.35
2062/63	95848	39345.71	41.05
2063/64	77102	42876.16	55.61
2064/65	113480	47888.36	42.20
2065/66	75870	45916.58	60.52
Mean	85474.20	40876.20	
Standard Deviation (σ)	17149.73	3940.38	
C.V.	0.201	0.0964	

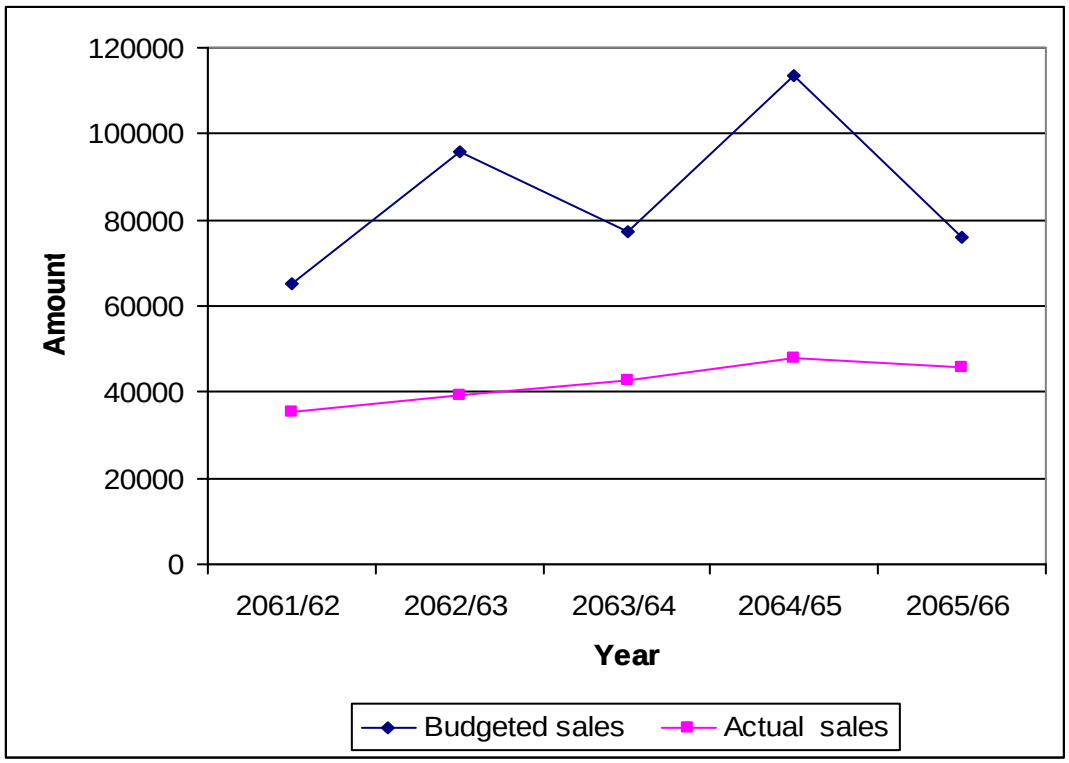
HPPCL prepares its sales plan for coming year. Sales plan is prepared by HPPCL according to the consumer's category i.e. Nepalese, India and overseas consumers.

To identify the sales trend of past and to forecast the future trend historical actual sales figures have been presented against the budgeted sales figures. The company's percentage sales achievement against target sales is 60.52 percent in FY 2065/66, the highest achievement of all the study period. HPPCL has recorded highest sales of Rs. 47888360 in 2064/65 followed by Rs. 45916580 in 2065/66 and Rs. 42876160 in 2063/64. Over the latter three years company has been able to increase its sales revenue.

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

Figure 4.1

Target and Budgeted Sales



Above figure shows that gap between budget and achievement is high. This high deviation creates difficulty to forecast sales.

Last three rows of table 5.1 present mean standard deviation and coefficient of variation of actual and budgeted sales. As indicated by standard deviation and C.V., the company's budgeted sales fluctuate more than actual sales. On the other way budgeted sales is more inconsistent. The increase and decrease of sales for the periods seem to be unpredictable due to the lack of clear policies and program of the HPPCL.

4.1.1 Sales Forecasting

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

i. Regression Equation of Actual Sales on Budgeted Sales

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

Table 4.2

Regression Results

Model	a	b1	R2	F	F-sig
AS = a + b1 BS	-9454.45 (-0.125) [0.908]	2.245 (1.265) [0.295]	0.348	1.6	0.295

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

ii) For detail see appendix -I

Coefficient of determination, R of this model is 0.348 that indicates that 34.8 percent variation between the two variables can be explained by the regression line.

Regression coefficient, b1 indicates that for every Rs. change in budgeted sales, actual sales will change by Rs. 2.245. F-value of the model and t-value of regression coefficient are both insignificant at 5 percent level of significance. Thus the independent variables do not do the best job explaining the variation in depended variables .

For forecasting purpose, regression equation is AS =a+b1 BS Now, budgeted sales for coming year is Rs. 63178.28. So actual sales would come to be:

AS = -9454.45+2.245× BS

Or AS = -9454.45+2.245× 63178.28

= Rs. 132380.79

Thus forecasted sales for coming year is Rs. 132380.79

ii. Time Series Analysis

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

Table 4.3

Regression Results

Model	A	b1	R2	F	f-sign
BS = a + b1.t	73705.20 (3.354) [0.044]	3923 (0.592) [0.595]	0.105	0.351	0.595

Note: (i) Figures in parenthesis ( ) and [ ] represent t-value and level of it being significance. ii) For detail see appendix I

Above table shows the regression of actual sales on time factor. Coefficient of determination, R2 is 0.105. Value of regression coefficient, b1 is positive. It indicates that sales increases for each of the subsequent periods.

To forecast regression by the way of time series, Regression equation is BS = a + b1 × t or BS = 73705.20 + 3923 × t. Since sales is to be forecasted for 6th year, forecasted sales would be as: BS = 73705.20 + 3923 × 6 = Rs. 97243.2 thousands.

Observing the f-values and t-value regression of equation of actual sales on budgeted sales is more relevant than time series equation. It is because f-value for 1st model is significant at 30 percent level while it is significant only at 60 percent level in case of (ii) model.

Annual sales report by territory from 2061/62 to 2065/66 is presented below.

Table 4.4

Sales Report by Territory

(Amount in Rs. '000)

Fiscal year	Domestic Sales		Indian Sales		Overseas sales		Total sales
	%	Amount	%	Amount	%	Amount	
2061/62	66	23341.78	25	8841.59	9	3183.00	35366.34
2062/63	52	20459.80	27	10623.34	21	8262.60	39345.71
2063/64	51	21866.84	39	16721.70	10	4287.62	42876.16
2064/65	62	29690.78	21	10056.56	17	8141.02	47888.36
2065/66	64	29386.61	25	11479.15	11	5050.82	45916.58

Profit planning is also affected by how sales is distributed among the different segments the company is operating. Table 4.4 shows the sales distribution among different sales territory. Domestic sales in FY 2061/62 are 66 percent that amounts to Rs. 23341.78 representing highest sales in domestic market. Domestic sales has

decreased following two years i.e. in 2061/62 and 2062/63 but after FY 2064/65 this sales has increased to 62 percent in 2064/65 to level up to 64 percent Percentage of Indian sales rounds from 21 percent to 39 percent, and shows fluctuating trend. Towards overseas sales the company progressed to 21 percent of total sales in 2062/63 from 9 percent in 2061/62. However, overseas sales has decreased to 10 percent in 2063/64, rise to 17 percent in 2064/65 and again deceased to 11 percent in 2065/66. Out of the total sales in each of the years, more than 50 percent sales is covered by domestic market. Indian market is in a second position to cover the sales of the company. Likewise overseas market accounts for 13.6 percent share of company's sales in an average.

iii. Estimated Sales

Estimated Sales for 2066/67 by types of product HPPCL has prepared sales plan by types of product as given in table below.

Table 4.5
Estimated Sales by Types of Product

S.N.	Particulars	Unit	Quantity	Rate	Total	% of total sales
1	Pamaroja oil	K.G.	1700	945	1606500	2.55
2	Sitronela oil	K.G.	11300	440	4972000	7.90
3	Lemongrass oil	K.G.	3050	710	2165500	3.43
4	Camomile oil	K.G.	375	15000	5625000	8.90
5	French Basil oil	K.G.	275	3798	1044450	1.65
6	Juklaliptus oil	K.G.	16500	800	1320000	2.10
7	Rojin	K.G.	190800	52	9921600	15.70
8	Tarpin	K.G.	47700	45	2146500	3.40
9	Sacho Himalayan	K.G.	3000000	10.47	31410000	49.72
10	Massage oil	K.G.	20000	35	600000	0.95
11	Silajit	K.G.	15000	115	1725000	2.73
	Total				63178280	100.00

Out of the total estimated sales 49.72 percent sales is of Sancho, the highest of all followed by Rojin, (15.70%), Comoile oil (8.90%) 0%), Sitronela oil (7.90%). All other products of the company covers sales of around 1 to 3 percent.

4.2 Production Budget

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

4.2.1 Production Budget in HPPCL

So far as the production budget of HPPCL is concerned , there is no effective preparation of long and short range production plan. HPPCL deals with various types medicinal and aromatic plants in pranced and unrepressed form. So the products of HPPCL are highly heterogeneous. By the nature of the HPPCL , it is very difficult to pre-determind the units to be produced in ling term . their 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 etc. Following table shows the actual production by types of productions form FY 2061/62 to 2065/66

Table 4.6

Production Budget of HPPCL

Sn	Products	Unit	20561/62		2062/63		2063/64		2064/65		2065/66	
			Actual	Budgeted	Actual	Budgeted	1153.70	12500	Actual	Budgeted	Actual	Budgeted
1	Pamarojaoil	K.G	510	497	1054	580	7668.70	8000	1288.60	1550	1235.52	1300
2	Sitronlaoil	K.G	1447	1447	6780	8000	2070	1500	8565.26	10000	8212.60	9510
3	Lemongrass oil	K.G	886	886	2541	3540	3800	3800	2311.86	2350	2216.7	2325
4	Mentha oil	K.G	1671.50	1600	125.60	128	254.50	375	3120.50	3000	4070	6000
5	Cammomile oil	K.G	112.70	100	167.8	278	186.60	500	390	450	272.50	95
6	Basil oil	K.G	102	110	226	450	256.50	240	208	650	199.90	180
7	Dhasingre oil	K.G	108	100	408	538	-		210	390	274.72	300
8	Jatamashi oil	K.G	102	98	224.20	354	305	-	110	-	-	-
9	Bojo oil	K.G	-	-	402	681	79	204	-	-	-	-
10	Tejpat oil	K.G	52.50	100	76	150	-	125	60.68	75	85	137
11	Katchur oil	K.G	88.20	102	61.20	61.20	82	-	-	-	-	-
12	Timul oil	K.G	40	95	69.70	69.70	2860	150	91.72	150	88	153
13	Uklatiptusoil	K.G	1005.5	1500	2528.40	2052	180	2680	214.60	3500	3063	4580
14	Khoto	K.G	98.6	85.30	158.90	268	2035960	210	200	240	193	193
15	Sancho	K.G	1100908	1200000	1906700	2000000	13573	2000000	2987810	2500000	2180333	2500000
16	Massageoil	K.G	5978	6500	18000	21520	10179	15575	131591	3500	14535	14535
17	Silajiest	K.G	4549	4661	90361	85310	206	10200	13469	14000	-	-
18	Sancho Herbal Drink	K.G	112	209	-	-	-	-	-	-	1441.20	16820
19	Parabin	K.G	595.20	608	1189.80	1190	1345.80	1400	1503.10	1510	138670	140008
20	Rojin	K.G	57240.3	15491	114482	90658	129488	130000	144624	45000	1367.10	1500
21	Tarpinoil	K.G	14310.10	15491	28620	28620	32372	45000	36156.20	38000		
22	Karpoo	K.G	574	650	1564	1564	1276.50	15750	1425.78	1525		
20	Rojin	K.G	57240.3	15491	114482	90658	129488	130000	144624	45000	1367.10	1500
21	Tarpinoil	K.G	14310.10	15491	28620	28620	32372	45000	36156.20	38000		
22	Karpoo	K.G	574	650	1564	1564	1276.50	15750	1425.78	1525		

Production of Jatomashi and Bojo oil is l 118 interrupted in some of the years . Same case is also visible for Sancho Herbal drink. Production of Sancho in bottles accounts for largest production volume of all the products. Production of Rojin in K.g. also significantly large and has been increasing gradually silajt pest (in kg) Tarpin oil (in ltr.) and massage oil (in kg) covers significant amount in the firm's production. All the product of HPPCL is not produced but some of them it purchased.

Following table shows the estimated production level for coming year i.e. for FY 2066/67 by types of product and branch.

Table 4.7

Estimated Production Level for FY 2066/67 by Types of Product andBranches

S.N.	Particulars	Units	Kathmandu	Tamaya	Belbari	Tikatpur	Dhantkuta	Total
1	Pamaroja oil	K.G	-	1700	-	-	-	1700
2	Sitronelaoil	K.G	-	4800	6500	-	-	11300
3	Lemongrass oil	K.G	-	3000	50	-	-	3050
4	Menthaoil	K.G	-	5500	100	-	-	5600
5	Cammomile oil	K.G	-	300	75	-	-	375
6	Basiloil	K.G	-	200	75	-	-	275
7	Dhasingre i	K.G	378	-	-	-	-	378
8	Jatamashi oil	K.G	-	-	-	-	-	-
9	Bojo oil	K.G	-	-	-	-	-	-
10	Tejpat oil	K.G	117	-	-	-	-	117
11	Katchur oil	K.G	-	-	-	-	-	-
12	Timul oil	K.G	121	-	-	-	-	121
13	Uklatiptus oil	K.G	2564	1000	300	350	-	4214
14	Khoto	K.G	200	-	-	-	65	265
15	Sancho	K.G	3000000	-	-	-	-	3000000
16	Massage oil	K.G	20000	-	-	-	-	20000
17	Silajit pest	K.G	15000	-	-	-	-	15000
18	Sancho Herbal Drink	K.G	-	-	-	-	-	-

19	Parabin	K.G	1983	-	-	-	-	1983
20	Rojin	K.G	190800	-	-	-	-	190800
21	Tarpin oil	K.G	47700	-	-	-	-	47700
22	Karpoor	K.G	1881	-	-	-	-	1881

4.3 Inventory Consideration

A certain level of inventory is needed fir smooth sales activities of industry, Finished goods inventory cuahion between sales and production . when production exceeds sales, then the excess production is kept into store and the inventory level will increase. The inventory level decrease w en sales exceeds production. According to the nature of product. Seasonality. production process, permissibility and other so many factors determine the level of inventory.

HPPCL is a multi-product company producing and purchasing multi-type product. Table reveals the inventory level of the company for the 5 year periods.

Table 4.8

Inventory and its Turnover

FY	Opening inventory	Closing Inventory	Inventory Turnover
2061/62	34398924.63	406719 .33	0.8275
2062/63	34067193.33	3322791 .03	0.9677
2063/64	33227916.03	3844893 .72	0.89
2064/65	38448938.72		1.158
2065/66	30354444.71	28822258.92	1.1082

Inventory level of HPPCL vary randomly between Rs. 30 million to 34 million indicating no any consistant inventory policy. Last column of above table is the company's inventory turnover ration for 5 years' period Durin the first 3 years, company's turnover of inventory is very poor indicating very slow moving inventories of the company. However same turnover has optimistically increased during the last two years' of study period that is 1.158 times in FY 2064/65 and 1.1082 times in FY 2065/66. This indicates that company has been able to convert its inventory into sale faster than the previous years.

4.4 Trend of Cost of Goods Sold and Estimation

Production cost is known as cost of goods sold. It is the aggregate of material cost, direct labour cost and factory cost. Cost of goods sold and gross profit has inverse relationship i.e. if cost of goods sold increases gross profit decreases and vice-versa.

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

Table 4.9
Cost of Goods Sold

(in Rs. '000)

FY	Sales	Gross profit	Cost of goods sold	
			Amount	Percentage of sales
2061/62	35366.34	6913.78	28452.56	80.45
2062/63	39345.71	6784.47	32561.24	82.76
2063/64	42876.16	10977.79	31898.37	74.40
2064/65	47888.36	8052.11	39836.25	83.19
2065/66	45916.58	13127.90	32788.68	71.41

Source: Annual Report of HPPCL

Cost of goods sold and gross profit show the production efficiency of a firm. Cost of goods sold of the company has increased during the year 2062 this has caused the gross profit to decrease from Rs. 6913.78 thousands to Rs. 6784.47. In fiscal year 2063/64 cost of goods has decreased as compare to the previous year's cost of goods sold resulted in higher profits than that of previous year. In fiscal year 2064/65 cost of goods sold has come to be Rs. 39836.25 thousands the highest ever recorded in company's account.

profit to decrease. At the last year or in fiscal year 2065/66 the cost of goods sold again has decreased to 32788.68 thousands. This has caused the gross profit to increase to Rs. 13127.90 thousands the highest gross profit the company has ever achieved. Cost of goods sold as a percentage of sales are 80.45, 82.79, 74.40, 83.19, and 71.41 for fiscal year 2061/62, 2062/63, 2063 /64, 2064//65 and 2065/66 respectively. More of the company's sales is taken away by the cost of production that result into the little or no profit for the company in these periods.

4.5 Estimation of Cost of Goods Sold

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

Table 4.10

Result of Regression of CGS on Sales

Regression equation	A	b1	R2	F	F-sign
CGS = a + b	4082.21 (0.366) [0.739]	0.687 (2.614) [0.079]	0.695	6.832	0.079

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

ii) For detail see appendix-I

Coefficient of determination, R^2 of the above model is 0.695 indicates that out of total variation in sales, CGS can explain 69.5 percent. Value of regression coefficient, b_1 is 0.687 indicates that for every rupee value change in sales CGS changes by Rs. 0.687. The positive sign indicates the positive relationship. This result is significant as t-value is significant at 10 percent level of significance. Likewise this model can best explain the CGS as f-value is also significant at 10 percent level. Since company has estimated to achieve sales revenue Rs. 63178280 during the year 2062/63, its cost of good sold would be:

CGS = a + b1× sale

= 4082.21 + 0687 × Sales

= 4082.21 + 0687 × 63178280 = Rs. 43407560.57

4.6 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 centres should be pinpointed. Total costs of company can be subdivided into following ways:

i. Prime cost

ii. Factory overhead

iii. Administrative

iv. Selling and distribution overhead

v. Other expenses

Prime costs include direct material, direct labour and other direct charges. Factory overhead includes all costs associated to manufacture products and to factory. Administrative costs include those expenses other than manufacturing and distribution. Selling and distribution expenses include all costs related to provide and sale products to customers. Besides these expenses, other operating and non-operating expenses are also incurred in the manufacturing 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 centres.

Table 4.11

Expenses of HPPCL

(In Rs. '000)

Particulars	2061/62	2062/63	2063/64	2064/65	2065/66	Average	S.D.	C.V.
Prime cost	134555.39	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			

** Office and administrative overheads include provision for interest on loan.*

*** Factory and selling overheads reported altogether.*

From the above table one can observe that factory and selling overhead of HPPCL is more than all other costs averaging to Rs. 17484.98 thousand for over the 5 year periods. Prime costs of the company is also significantly larwhich averages to Rs. 15512.67 thousands. Administrative overheads beats third position in terms of the costs of the company. Likewise depreciation of the company is 1780.22 thousands in an overage.

Prime cost of the company is more inconsistent showing CV 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.

Table 4.12

Actual and Forecasted Cost Statement for 2066/67 and 2067/68

(In Rs. '000')

Particulars	FY 2066/67		FY 2067/68	
	Rs. Amount	%	Rs. Amount	%
Prime Cost	29960	55.70	35468	61.81
Factory & Sell oil	9637	17.91	10385	18.10
Administrative oil	12349	22.96	10329	18.00
Depreciation	1850	3.43	1200	2.09
Total	53796	100.00	57382	100.00

Source: Annual report HPPCL, 2067

Total cost of HPPCL is expected to rise by 3586 thousands to level to Rs. 57382 during the next fiscal year prime cost will account for 61.81 percent of total cost and this cost is expected to rise to 61.81 percent from its previous level of 55.70 percent. Likewise factory and selling overhead is also expected to increase to Rs. 10385. Unlike previous trend administrative overheads and depreciation are estimated to decrease.

4.6.1 Capital Expenditure Plan for HPPCL

Capital budgeting is the planning future 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 enterprise 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 budget amount on capital expenditure capital adjustment are 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. Total amount is allocated for capital expenditure and manager or authority decides what to purchase according to the necessity of the company within the limitations of the allocated amount. Therefore, there is no systematic budgeting procedure in the context of capital expenditure plan.

Table 4.13

Capital Expenditure of HPPCL

(In Rs. '000')

Fiscal Year	Capital Expenditure
2061/62	820.43
2062/63	381.87
2063/64	305.43
2064/65	863.38
2065/66	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 2065/66 amounted to Rs. 1730.50 Followed by FY 2064/65 (Rs. 863.38), 2061/62 (Rs. 820.43), FY 2062/63 (Rs. 381.87) and in FY 2063/64 (Rs. 305.43).

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

Table 4.14

Estimated Capital Expenditure for FY 2062/63

(In Rs. '000')

Particulars	Rs.
Office machinery	50
Distillation plant	-
Pump	-
Overhead tank	-
Furniture	55
Water processing pla nt	-
Form machine	-
Form tools set	70
Vehicle	-
Distillation shed construction	200
Fencing	700
Tractors	-
Total	1100

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,

Rs. 55000 is to purchase furniture, Rs. 70000 is to purchase form tools set. Estimated in this way, total capital expenditure for coming year comes to be Rs. 1100000.

4.7 Planning of Cash

Cash budget is effective way to plan and control the cash flows, assess cash needs and effectively use of excess cash. A cash budget shows the planned cash inflows, outflows and ending cash position by the interim period for a specific time span. The basic two of each budget are the planned cash receipt and planned cash disbursements. It coordinates cash with total working capital, sale revenue, expenses, investments and liabilities . HPPCL do not have systematic and scientific practice of cash budget. It has not developed any systematic cash panning formal . But it is clear that the main source of cash of HPPCL is cash sales, the main it s of cash used are purchase of herbs and container salaries, production and processing administrative salaries etc. To analyze the major cash application and sources following cash flow statement is prepared with the help of balance sheet and income statement of the year.

Table 4.15

Cash Flow Statement for FY 2065/66

Particulars	
A. Cash from operating activities	
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 employees privilege fund	121929.50
Cash paid for gratitude and medical treatment	(2670644.10)
Cash from operating activities	4301006.78
B. Cash from inventing activities:	
Purchase of Fixed assets	(1730502.12)
C. Cash from financing activities	NIL
D. Cash increase during the year (A + B + C)	2570504.66
E. Plus : Cash at the beginning:	
In hand : 3400444.6	3436761.00
At Bank : 36316.40	
F. Cash at the end	6007265.66

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

From the statement above firm's 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 sources 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 FY 2065/66 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 sources 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 and balance is in hand.

4.8 Forecasting of Financial statement percentage of sales Method

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

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

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

Table 4.16

Income Statement for FY 2065/66

Sales Revenue	Rs.45916581.22
Less: cost of goods sold	32786677.57
Gross profit	13127903.65
Less: operating expenses	11163007.77
Operating profit	1964895.88
Less: Provisions	5631584.1
Net	(3666688.22)

Table 4.17

Balance of HPPC for the FY 2065/66

Liabilities and equity	Amount(Rs.)	Assets	Amount(Rs)
Share capital	27517000	Current assets	36336064.49
Loan	49349000	Net fixed assets	15504094.53
Grant from UNDP	15037456.03	Employee's privilege fund	7976075.35
Current liabilities	34498300.08	Profit & Loss A/C: last year 95243673.54 this year3666688.22	98910361.76
Provision for interest on loan	2324840.21		
Equity & liabilities	158726596.30		
Total liabilities and equity	**158726596.30**	**Total**	**158726596.30**

To begin with above actual financial statements of HPPCL are demonstrated. To forecast the company's financial statement for 2066/67 following assumption has been made:

•Company's all the expenses vary directly with sales.

• Forecasted sales as forecasted by the company for FY 2066/67 is Rs. 63178280 have been taken as a basis for projection purpose.

• A provision of the company remains unchanged.

• Fixed assets and current assets vary directly with change in sales and also current liabilities show same type of behaviours. Besides these all the balance sheet items remain unaffected.

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

First: Preparation of forecasted income statement:

Table 4.18

Performa income statement for FY 2067/68

Particulars	Amount (Rs)
Sales Revenue	631 78280
Lesss: cost of goods	45248375.05
Gross profit	17929904.95
Less: operating exp	15404950.72
Operating profit	2524954.23
Less: Provisions	5631584.10
Net profit	(3106629.87)

Percentage change in sales = $\frac{63178280 - 45916581}{45916581} = 0.38$

Second : Preparation of forecasted balance sheet

Table 4.19

Proforma Balance Sheet

Liabilities	Figures in 2065/66	Figure in 2067/68	Assets	Figures in 2065/66	Figure in 2067/68
* Share capital	27517000	27517000	** Fixed assets	15504094.53	21395650.48
* Loan	49349000	49349000	**Current assets	36336064.49	50143769.00
* Grant from UNDP	15087456.03	15037456.03	*Employees privilege fund	7976075.35	976075.35
** Current liabilities	34498300.08	47607654.11	Profit& Loss A/C	98910361.76	102016991.6
* Provision for into on loan	3232840.21	32324840.21			
Addition funds needed (balancing figure)	-	9696536.08			
Total	158726596.30	181535486.50		158726596.30	181535486.50

**indicates items those remain unchanged though sales changes.*

** * Indicates items those change with change in sales.*

Observing the above financial statements it is clear that firms operating profit will increase to Rs 2524954.23 from base year's operating profit of Rs. 1964895.88 given the sales forecasted by the company and above assumptions are valid. Net loss will decrease to Rs. 3106629.87. From the forecasted balance sheet of the company it is

clear that asset will increase by Rs.22808890.20. This incremental assets is financed spontaneously with current liabilities of Rs. 13109354.03(i.e. 4760764.11 – 34498300.08) and balance of Rs. 9696536.08 should be financed with external funds shown in forecasted balance-sheet as balancing figure.

Here,

External fund needed =[Increase fixed assets + Increase current asset

+Increased loss]-increased Current Liabilities

=[5891555.95+13807704.51+3106629.84]

-13109354.03

=Rs.9696536.27

Thus HPPCL needs Rs.589555.95 to finance incremental fixed assets and Rs. 13807704.51 to financed incremental current assets and Rs.3106629.84 to finance accumulated loss. Out of these Rs. 13109354.03 will be available to the HPPCL through incremental current liabilities and balance should it raise from external source.

4.9 Identification of Cost Variability

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

HPPCL being a manufacturing concern, the cost analysis is a matter of vital significant. Classification of cost helps to determine the volume of operation and to maintain the company's profitability. However HPPCL has he any practice for classifying its costs into fixed and variable comp components for decision making purpose. Here, an attempt has been made towards the cost classification. Detailed calculations are made (In Appendix ….).

Company's total cost as on the FY 2060/61 is classified into fixed and variable component. All costs are roughly classified into fixed and variable company's total variable cost (VC) during the year is 27963796.17 and total fixed cost during the year is Rs. 24612787.95 result into total cost of Rs. 52576584.12.

Table 4.20

Total Fixed and VC for FY 2065/66

Particulars	Amount (Rs.)
Sales Revenue	45916581.22
Fixed cost	24612787.951
Variable cost	27963796.17

Profit volume ratio (P/V ratio) of the company is (1 – VC/Sales) = 1 – 27963796.17/45916581.22 = 1 – 0.609 = 0.390. Thus the company would have been BEP at sales level of Rs. 63109712.69(i.e. BEP = FC/P/V ratio = 24612787.95/0.39 = 63109712.69). The company sales in only Rs. 45916581.22 have resulted in to loss in FY 2060/61. If the company would have generated sales of Rs. 63109712.69 it would have achieved break-even. Though company seems to be earning operating profit. The company's operating profit could not maintain the interest and other provisional expenses resulted in loss. The company would be better to increase sale volume and price of products it produces to come out of the heavily loss it has been making over the last decades.

According to objective 2 : To analyze the financial position of the concern.

4.10 Financial Ratio Analysis

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

Table 4.21

Financial Ratio of HPPCL

Name of ratio	Formula	2061/ 62	2062/63	2063/564	2064/65	2065/6 6
Current ratio	Current Assets / Current Liabilities	2.48	1.41	1.26	1.08	1.05
Quick ratio	Quick Assets / Current liabilities	.19	0.11	0.06	0.15	0.22
Inventory turnover ratio	CGS / *inventory*	.83	.97	.89	1.16	1.11
Total assets turnover	Assets / *Total Sales*	.28	.28	.28	.31	.29
Return on capital employed	Net Profit / Capital Employed	-0.03	-.05	-.02	-.03	-.02
Debt –Equity ratio	Debt / Equity	2.24	2.24	2.24	2.24	2.24
Net profit margin	Net profit / sales	-0.19	-0.14	-0.16	-02	-0.08
Return on Assets	Net profit / Total Assets	-0.05	-0.04	-0.04	-0.006	-0.02

From the table above one can observe that the company's liquidity has been deteriorating each year. Current ratio of in FY 2061/62 is 2.48 and same can be considered to be good however after this year same has decreased. Current ratio is 1.41 in FY 2062/63, 1.26 in 2063 /64, 1.08 in 2064/65, and 1.05 in 2065/66. These decreasing current ratio indicate that the company's ability to pay its debts obligation has seriously been injured.

Quick ratio of the company is far below then traditional standard of 1:1.Company's position of liquidity, thus, can be said as poor. Inventory turnover ratio indicates the quality and velocity of inventory, as the turnover is less than 1 time in first three years. Though it is greater than 1 times in latter two years, even this cannot be regarded as good.

Total assets turnover of the company is uniform for the first three years, increased to 0.31 in forth year to level up to 0.29 in fifth year. The ability of the company's assets

to generate sales is not good as the turnover of assets is poor. This also indicates the company's inability to manage its assets.

Another dismal aspect of the HPPCL is to have very low and negative return on 0.5 percent to 2 percent . This negative operation return on capital employed is due to ineffective utilization of capital.

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

Net profit margin and total assets turnover give the return on assets if multiplied together. ROA is negative for all the period . These all the ratio, in absolute term indicates that the company is a difficult verge. To examine this issue further a model is employed .

According to objective 3: To evaluate variance between budgeted & actual financial progress of HPPCL

4.11 Discrimination Analysis: Measure of Company's Overall Performance

Discriminate analysis is developed by Altman and is also called Altman model. This model can be employed to discriminate whether or not a company is consideration likely to fail in the near future. Analysis of each of the individual ratios sometimes be confusing and to avoid this z-score model developed by Altman is employed. Z-score above 2.99 represents healthy firm. Z-score below 1.81 always represents unhealthy firms. Z-score between these two represent area of gray.

Z-score is calculated utilizing the equation:

$$Z = 1.2\ x_1 + 1.4\ x_2 + 3.3\ x_3 + 0.6x4 + 1.0\ x5$$

Where,

x_1 = Net working capital to total assets (NWC/TA)

x_2 = Current asset to current liabilities (CA/CL)

x_3 = Net profit to total assets (NP/TA)

x_4 = Net profit to sales (NP/Sales)

x_5 = Sales to total assets (Sales/TA)

Now,

Z-score

$= 1.2\ x_1 + 1.4\ x_2 + 3.3\ x_3 + 0.6\ x_4 + 1.0\ x_5$

$= 1.2 \times 0.066 + 1.4 \times 1.46 + 3.3 \times (-0.1948) + 0.6\ x_4 \times (-0.1948) + 1.0 \times 2862$

$= 1.64968$ or 1.65

HPPCL average z-score is 1.65 is lower than standard z-score of 2.99. Hence HPPCL can be regarded as insolvency in near future if it were not in a position to improve its a failure company and could go in profitability, liquidity and turnover. Lower z-score is mainly due to the nearly losses of the company. So it should initiate different cost-cutting measurers so to improve profitability

Table 4.22

Calculation of Z-score

Year	NWC/TA	CA/CL	NP/TA	NP/Sales	Sales/TA
20 61/62	0.1731	2.48	-0.0515	-0.1853	0.2781
2062/63	0.0747	1.41	-0.1143	-0.4088	0.2796
2063/64	0.0546	1.26	-0.0467	-0.1639	0.2849
2064/65	0.0164	1.08	-0.0619	-0.1362	0.3110
2065/66	0.0114	1.05	-0.0228	-0.0799	0.2857
Average	0.0660	1.46	-0.0594	-0.1948	0.2862

According to objective 4: To find out relationship among financial variables in profit.

4.12 Multivariate Regression Analysis

A multivariate regression model is developed and tested to identify what sort of relationship does net profit have on cost of the company.

Regression equation is :

NP = a + b1 FOH + b2 AOH + b3 Depr

Where,

NP is net profit FOH is factory and selling overheads
AOH is administrative overhead
Depr is depreciation a is regression constant, and
b1, b2, b3 are regression coefficients.

Table 4.23

Regression Results

Equation	A	b_1	b_2	b_3	R^2	F	F-sig
NP = a + b_1 FOH + b_2 AOH + b3 Depr	5818.09 (0.271) [0.797]	-0.404 (0.245) [0.816]	-0.105 (0.048) [0.963]	-3.472 (0.539) [0.613]	0.117	0.220	0.878

Note(i) Figures in parenthesis () and [] represent t –value and level of being significance.
(ii) For detail see appendix-I

Coefficient of determination, R2 , of this model is 11.7 percent indicates the very weak explaining power of independent variables. Values of b1,b2 and b3 are negative. This suggests that net profit have negative relationship with FOH, AOH, and depr. Meaning that when each of these costs increase net profit decrease .On the other way incremental costs of the company are more than incremental profit causing profits to

be negative . Company tends to bear cost without considering the effect the costs may have upon profits. However this result is not conclusive as the t-values of b1, b2 and b3 are not significant at 5 percent or 10 percent level of significance. Likewise, f-value at the last column of the table is not also significant at 5 or 10 pt level.

4.13 Major Finding of the Study

Major findings based on the whole study can be drawn in the following Table:

Table 4.24

Sn.	Activities done on HPPCL	2061/62	2062/63	2063/64	2064/65	2065/66
1.	% achieved in T & A sales	54.35	41.05	55.61	42.20	60.32
2.	% sales report by territory:					
	Domestic sales.	66	52	51	62	64
	Indian sales.	25	27	39	21	25
	Overseas sales.	9	21	10	17	11
3.	Inventory turnover ratio:	.8275	.9677	.89	1.158	1.1082
4.	Cost of goods sold.	80.84	82.76	74.40	83.19	71.41
5.	Coefficient of variation	.097	.087	.078	0.15	
6.	Capital expenditure (Rs000)	820.43	381.87	305.43	863.38	1730.5
7.	Financial ratios:					
	Current ration.	2.48	1.41	1.26	1.08	1.05
	Quick ratio.	.19	.11	.06	.15	.22
	Inventory turnover ratio.	.83	.97	.89	1.16	1.11
	Assets turnover ratio.	.28	.28	.28	.31	.29
	Return on capital employed.	-.03	-.05	-.02	-.03	.02
	Debt equity ratio.	2.24	2.24	2.24	2.24	2.24
	Net profit margin.	-.05	-.04	-.04	-.06	.02
8.	Discrimination (z - value)					
	NWC/TA	.1731	.0747	.0546	.0164	.0114
	CA/CL	2.48	1.41	1.26	1.08	1.05
	NP/TA	-.0515	-.1143	-.0467	-.0619	-.0228
	NP/Sales	-0.1853	-.4088	-.1639	-.1362	-.0799
	Sales/TA	.2781	.2796	.2849	.3110	.2857

CHAPTER- V

SUMMARY,CONCLUSION AND RECOMMENDATIONS

This chapter attempts to summarise the whole study. After summarising the study, a conclusive and suggestive framework has been built. The conclusion and suggestion would be great help for the concerned company. This chapter is divided into two parts namely 'summary and conclusion' first and 'recommendation and suggestion' second which are as follows:

5.1 Summary

Profit planning is known as planning for profit, Profit planning is a base of the management process. Management requires a variety of information to plan, to control and to make decision. The information and guidance are given by profit planning and management & profit planning are closely inter-linked. Profit planning is very important to any business organization.

Chapter one as the profit planning and budgeting practices that is followed by HPPCL, to evaluate the variance between budgeted and actual financial progress of HPPCL, to sketch profitability and financial position of the company and to find out the relationship among financial and accounting variables. This research paper has tried to examine that to what extent HPPCL is applying profit planning system.

Chapter two includes review of literature as to see what new contribution can be made to receive some idea for developing a research design. Books, previous thesis have been reviewed here which are related to this field of study. Sales plan of the company is analysed. The company's percentage sales achievement against target.

Chapter three defines methodology used. The study is based on the secondary data from 2004-2005 to 2008-2009. The data have been basically obtained from annual reports and unpublished master's degree thesis. Financial as well as statistical tools have been used in order to analyze and interpret the data and information. Under statistical analysis coefficient of correlation and trend analysis have been used. This

analysis gives clear picture of the performance of the bank with regard to its investment operation.

Chapter four is concerned with analysis of different practices by products Various tools have been used while analyzing the data. Table and figure have also been used to where necessary.

5.2 Conclusion

Based on the overall study the main things to be concluded as follows:

1. *Sales* plan is prepared by HPPCL according to the consumer's category i.e. Nepalese, India and overseas consumers. Company's percentage i.e. sales achievement against target sales is 60.52 percent in FY 2065/66, the highest achievement of all the study period. Domestic sales in FY 2061/62 are representing highest sales in domestic market. Indian sales shows fluctuating trend towards the overseas sales . Out of the total sales in each of the years, more than 50 percent sales are covered by domestic market. Indian market is in a second position to cover the sales of the company.
2. Using regression of actual sales on budgeted sales the forecasted sales actual and budgeted sales for coming year. However sales and time factor observing the f-values and t-value regression of equation of actual sales on budgeted sales is more relevant than time series equation. It is because f-value for former model is significant.

3. Out of the total estimated sales 49.72 percent sales is of Sancho, the highest of all followed by Rojin, (15.70%), Comoile oil (8.90%), Sitronela oil (7.90%). All other products of the company covers sales of around 1 to 3 percent.
4. It is a multi-product company producing and purchasing mutti-type products. During the first 3 years, company's turnover of inventory is very poor indicating very slow moving inventories of the company. However same turnover has optimistically increased during the last two years' of study period. This indicates that company has been able to convert its inventory into sale faster than the previous years.

5. Cost of goods sold of the company has increased during the year 2063 cost of goods able to convert its inventory into sale faster than the previous years. Its resulted in higher profits than that of previous year. At the fiscal year the cost of goods sold again has decreased.
6. Cash flow statement of the company shows that operating activities is the main source. A main source of cash in this regard is sales revenue. On the other main outflows are for direct expenses administrative , manufacturing and selling expenses. During the year company has achieved positive cash change.
7. The ales forecasted by the company and given assumptions is valid. his incremental assets is financed spontaneously with current liabilities of Rs. 13109354.03 (i.e. 47607654.11 – 34498300.08) and balance of Rs. 9696536.08 should be financed with external funds shown in forecasted balance-sheet as balancing figure.

8. Ratio analysis shows the company's ratio one can know that the company's liquidity has been deteriorating each year. This decreasing current ratio indicates that the company's ability to pay its debts obligation has seriously been injured. Quick ratio of the company is far below then traditional standard of 1:1. Company's position of liquidity, thus, can be said as poor. Inventory turnover ratio indicates the poor quality and velocity of inventory, as the turnover is less than 1 time in first three years. Though it is greater than 1 times in latter two years, even this cannot be regarded as good. This also indicates the company's inability to manage its assets. Company employed more of debt capital as indicated by debt- equity ratio. Net profit margin and total assets turnover give the return on assets if multiplied together. ROA is negative for all the periods.

9. HPPCL average z-score is 1.65 that is lower than standard z-score of 2.99. Hence HPPCL can be regarded as a failure company and could go in insolvency in near future if it were not in a position to improve its profitability, liquidity and turnover. So it should initiate different cost-cutting measurers so as to improve profitability.

10. Perusal of regression of net profits on factory overhead, administrative overhead and depreciation shows that R^2, of this model is 11.7 percent indicates very weak explaining power of independent variables. Values of b_1, b_2 and b_3 are negative. This suggests that net profits have negative relationship with FOH, AOH and dept. Perhaps it is also a reason why the HPPCL has been incurring huge losses over the periods.

5.3 Recommendation

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

1. Huge gap of actual and budgeted sales must be addressed through the coordinated and integrated efforts of all the branches and departments. Sales must be forecasted using the statistical tools and techniques rather than on the basis of guess and hunch. Company should also try to estimate its expenditure using the statistical tools to come up with the more reliable forecasting.

2. Company is suggested to maintain its domestic sales and to increase its Indian and overseas sales that helps to contribute towards its profitability positively. For this, promotional campaign should be initiated in national and international level.
3. Since sancho is accounted for larger amount of sales revenue, the customer value should be analysed on the product to enhance its quality further. Production of goods on the basis of Pure judgmental approach is wrong in the context of modern managerial context and the approach must be replaced by the modern forecasting techniques.

4. Company is recommended to adopt cost reduction techniques like just in time purchase, value analysis, Restructuring, training of employees etc. to maximize its profits. Some of the costs like selling overhead of the company is very high and have no any impact upon the profit of the company and some time having negative impact upon profit as revealed by this study. Such cost is recommended to minimize initiating various cost cutting measures.

5. A main source of cash for HPPCL is sales revenue. On the other main outflows are for direct expenses administrative, manufacturing and selling expenses. In this regard, Company should maintain cash flow synchronization

by which the outflow and inflow timed each other so that the company may not run out of cash.

6. From the forecasted balance sheet of the company it is clear that asset will increase by Rs. 22808890.20. These incremental assets are financed spontaneously with current liabilities of Rs. 13109354.03 (i.e. 47607654.11 – 34498300.08) and balance of Rs. 9696536.08 should be financed with external funds shown in forecasted balance sheet as balancing figure. The company is suggested to raise this amount through the source that does not violate or maintain the optimum capital structure of the company.
7. Liquidity of the company has been deteriorating each year. Proper management of cash, inventory and receivables helps to correct this problem. The turnover of assets also seems to be poor. HPPCL is suggested to acquire quality assets and to discard obsolete ones.
8. Negative operating return on capital employed is due to ineffective utilization of capital. So company is suggested to search for productive area to invest its unproductive capital. Company employed more of debt capital as indicated by debt- equity ratio. This ratio for the company is uniform for all the periods. That means no capital restructuring has been considered over time, which may be disadvantageous for the company's profitability.
9. HPPCL average Z score is 1.65 is lower than standard Z score of 2.99. Hence HPPCL can be regarded as a failure company and could go in insolvency in near future if it were not in a position to improve its profitability, liquidity and turnover. Lower Z score is mainly due to the continuous losses the company has been facing over its history. So it should initiate different cost-cutting measures so as to improve its profitability.
10. An incremental cost of the company is more than incremental profits causing profits to be negative. This may be due to cost ineffectiveness of the company. Company tends to bear cost without considering the possible effect of such costs may have upon profits. Perhaps it is also a reason why the HPPCL has been incurring huge losses over the periods. This should be corrected by the practices of "Total Quality Management (TQM)".

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APPENDIX- I

Regression results

1.1 Regression of AS on BS

Variables Entered/ Removed[b]

Model	Variables Entered	Variables Removed	Method
1	BSa		Enter

a. All requested variables entered.

b.. Dependent Variable: AS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.590a	.348	.130	4696.24563

a. Predictors: (Constant), BS

ANOVA[b]

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	35278397	1	35278396.79	1.600	.295a
Residual	66164169	3	22054722.99		
Total	1.01E+08	4			

a. Predictors: (Constant), BS

b. Dependent Variable: AS

Coefficients[a]

Model		Unstandardized Coefficients	Standardized Coefficients	t	Sig.
1	(Constant)	B	Std. Error	Beta		
	BS	29039.871	10676.135		2.720	.073
		.155	.122		1.265	.295

1.2 Regression of BS on time factor

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Ta		Enter

a. All requested variables entered.

b. Dependent Variable: BS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error Of the Estimate
1	.324a	.105	-.194	20949.67168

ANOVA[b]

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1.54E+08	1	153899290.0	.351	.595a
Residua	1.32E+09	3	438888743.6		
Total	1.47E+09	4			

a. Predictors: (Constant), t

b. Dependent Variable: BS

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficient	t	Sig
	B	Std. Error	Beta		
1(Constant)	73705.200	21972.201	.324	3.354	.044
t	3923.000	6624.868		.592	.595

a. Dependent Variable: BS

1.3 Regression of CGS on AS

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	**ASa**		**Enter**

a. All requested variables entered.

b. Dependent Variable: CGSb

Model Summary

Mode	R	R Square	Adjusted R Square	Std. Error of The Estimate
1	.834a	.695	.593	2645.46341

a. Predictors: (Constant), AS

Model	Sum of Squares	df	Mean Square	F	Sig.
1Regression	47811155	1	47811154.52	6.832	.079a
Residual	20995430	3	6998476.650		
Total	68806584	4			

ANOVA[b]

a. Predictors: (Constant), AS

b. Dependent Variable: CGS

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficient	t	Sig
	B	Std. Error	Beta		
1Constant)	4082.207	11167.690	.834	.366	.739
AS	.687	.263		2.614	.079

1.4 Regression of NP on FOH, AOH, and Depr.

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Depr, FOH, AOH		Enter

a. All requested variables entered.

b. Dependent Variable: NP

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of The Estimate
1	.342a	.117	-.413	4443.61959

a. Predictors: (Constant), Depr., FOH, AOH

ANOVA[b]

Model	Sum Of Squares	Df	Mean Square	F	Sig.
1Regression	13052713	3	4350904.222	.220	878a
Residual	69079301	5	3026433.63		
Total	1.12E+08	8			

a. Predictors: (Constant), Depr, FOH, AOH

b. Dependent Variable: NP

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
1	B	Std. Error	Beta		
(Constant)	5818.087	21463.361	-.654	.271	.797
FOH	-.404	1.650	-.107	-.245	.816
AOH	-.105	2.173	-.574	-.048	.963
Depr	-3.472	6.437		-.539	.613

APPENDIX-II

Financial and Accounting Input Data

2.1 Financial Variables to Compute Ratios and Z Score

Year / Particulars	2061/62	2062/63	2063/64	2064/65	2065/66
Current Assets	36905.76	35909.22	40415.97	35227.42	36336.06
Current Liabilities	14895.63	25391.62	32176.35	32705.17	34498.30
Quick Assets	8083.50	2681.30	1967.03	48725.98	7513.80
Total Assets	127280.17	140737.10	150482.76	153980.46	160691.49
Operating profit	-2666.62	-4239.80	-975.79	-3165.56	1964.90
LTD	64386.46	64386.46	64386.46	64386.46	64386.46
Equity	27517.00	27517.00	27517.00	27517.00	27517.00
Capital employed	91903.46	91903.46	91903.46	91903.46	91903.46
NWC	22010.13	10517.60	8239.62	2522.25	1837.76

2.2 Data for regression analysis

2.2.1 Actual, Budgeted sales and CGS

Year	Budgeted sales	Actual sales	CGS
2061/62	65071	35366.34	28452.56
2062/63	95848	39345.71	32561.24
2063/64	77102	42876.16	31898.37
2064/65	113480	47888.36	39836.25
2065/66	75870	45916.58	32788.68

2.2.2 NP, FOH, AOH, and Depr

Variables Year	NP	FOH	AOH	Depr.
2061/62	-2666.6	15570.9	2157.66	2157.66
2062/63	-4239.8	17600.22	1985.3	1985.3
2063/64	-975.7	20232.41	1759.7	1759.7
2064/65	-3165.5	17062.38	1532.09	1532.09
2065/66	1964.9	16958.89	1466.34	1466.34