

SALES PLANNING AND BUDGETING
PRACTICES OF NEPAL OIL CORPORATION

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ABBREVIATIONS

ATF	:	Aviation Turbine Fuel
C V	:	Coefficient of Variation
DDC	:	Dairy Development Corporation
F/Y	:	Fiscal Year
FO	:	Fuel Oil
HPPCL	:	Herbs Production and Processing Company
HSD	:	High Speed Diesel
IOC	:	Indian Oil Corporation
KL	:	Kiloliters
LDO	:	Light Diesel Oil
LPG	:	Liquefied Petroleum Gas
M S	:	Motor Spirit
MT	:	Metric Tone
NOC	:	Nepal Oil Corporation
PE	:	Probable Error
PES	:	Public Enterprise
POL	:	Petroleum Oil and Lubricants
PP	:	Petroleum Product
PPC	:	Profit Planning and Control
R	:	Correlation Coefficient
RDL	:	Royal Drug limited
S d	:	Standard Deviation
SKO	:	Super Kerosene Oil

CHAPTER I

INTRODUCTION

1.1 General Background of the Study

a. Sales Planning and Budgeting

Sales planning are essential for profit planning and control for the organization having business motive. It is also a starting point in preparing profit plan. It provides the basic management decision about marketing. It is an organized approach for developing a comprehensive sales plan. If the sales plan is not realistic, most of the parts of profit plan are not realistic. Therefore, the management believes that if realistic sales plan cannot be developed, there is little justification for profit planning and control. Similarly, it is really impossible to assess the future. Revenue potential business, there would be little or no incentives to investors and prospective investors. Hence, the sales plan is both ends and means of profit planning and control.

The sales plan is the foundation for periodic planning in the firm because particularly all other enterprises' planning is built on it. The primary sources of cash is sales; the need to capital addition, the plan of expenses, the manpower requirement, production levels and other important operational depend on the volume of sales.

Although sales planning and sales forecasting are usually used synonymously, sales planning and forecasting are often confused. They have distinctly different purpose. A forecast is not a plan; rather it is a statement and/or quantified assessment of future condition about a particular subject based on one or more explicit assumptions. A forecast should always state the assumptions upon which it is based.

A forecast should be viewed as only one input for the development of sales plan. The management of the company may accept, modify or reject the forecast. In contrast, a sales plan are based on the forecast, other

inputs and management judgments about such related items as sales volume price, sales, efforts, production, and financing. A sales forecast is converted into a sales plan when management has brought to bear management judgment, planned strategy, commitment of resources and the managerial commitment to aggressive action on the sales goods. Sales forecasting is only one step in sales planning. That's why sales forecast is conditional. They normally must be prepared by prior to management decisions, price change, promotional programs, contraction of marketing activities and other resources commitments. Without proper sales planning, no company can survive with their goods according to customers' need for the long period of time. The planning is lifeblood of any organization.

A comprehensive sales planning includes both strategic and tactical sales plans. A sales plan incorporates such management decisions as objectives, goals, strategies, etc. These translate into planning decisions about planned volume of goods, services, price, promotion and other effect.

For the application of a profit plan, a company should prepare number of plans. One of them is sales plan; sales plan is the infrastructure of profit plan. Other plan of profit plan depends upon the sales plan. The prime objective of business is to earn net profit. So the first consideration of the sales must be made from profit plan. Sales are the major source of revenue and profit is the amount which is the difference between revenue and cost.

1.1.1 Types of Sales Planning

Sales plan is the first stage of every business organizations. Basically there are two types of sales planning which are as follows.

Long-Range Sales Planning

Long range sales planning is of more than 5 years but varies with the enterprise, sometimes extended to 10 years. Long range planning is one of the most difficult time spans involved in planning. As many problems in short-range planning cannot be traced due to the absence of a clear sense of direction and the practices which a comprehensive long range plan provides. Basically it is more important for broad and long living enterprises. Long-range planning is closely concerned with the concept of the corporation as long living institution. The main purpose of this plan is to serve primarily as a source of strategy, motivation and direction. The objectives of long range planning given by George R. Terry (1968) are to provide a clear picture of whether the enterprise is handed, to keep enterprise strong to focus on long-term opportunities, evaluate management personnel, to expedite new financing and to bring attention to new techniques. To be successful a long-range plan must be able to achieve the following objectives.

1. Incorporate the engineering department's development and support expense for new products, features and cost reduction plans.
2. Review of the plan capacity, personnel requirements in light of startup products, and existing plan capitalization. Identify future capital requirements for development departments, the manufacturing process, and support departments such as management information system and the building structure.
3. Reflect changes in cash requirements for salaries, material, capital, etc.

Consider what impact will be in inflation, fringe benefits, product cost and in overseas operations, the projected impact of exchange rates will have on the long range profitability of plan.

Short-Term Sales Planning

The short-term sales planning is synonymous with classical budgetary period of one year. The short-range planning is made after a freeze is taken on the consideration of possible alternative course of action. Such courses are outlines for medium range plan, which does not concern implementation. This aim is weeding out a plethora of possibilities which are for the most part long on promises and short on feasible, tangible results. The short range planning is selected to confirm to fiscal quarters or years. Short-range planning is limited time dimension usually it covers one year time period (Harold and Cyrill, 1964: 83). The management uses it as a substantial part of long-range and medium range plan (Welsch et al., 2000: 173).

1.1.2 Sales Budget

A sales budget is a forecast of what the company can expect to sell during a budget period. It is forecast of total sales express and incorporated in quantities and money. A sales budget is the starting point in which other budgets are also based. All other budgets such as production budget, purchase budget, labor budget, overhead budgets etc. are affected by sales budget. Therefore, sales budget can be referred as a nerve center or backbone of the enterprise while preparing a sales budget, the following factors should be considered:

1. Past sales figures
2. Assessment and reports by salesman.
3. Seasonal fluctuation.
4. Proposed management policies.
5. Availability of materials.
6. Analysis of the potential market (market research).
7. Extent of competition.

8. General trade prospectus.
9. Sales force size

1.1.3 Introduction of Nepal Oil Corporation Ltd. (NOC)

Nepal Oil Corporation Ltd (NOC) was established by the Government of Nepal as a public enterprise in 1970 (2027-2-26) under the Company Act 2021 (BS) . The purpose was to supply and distribute the petroleum oils and lubricant (POL) products in the country. It is the large public enterprise having monopoly in the import and distribution of petroleum products. It supplies essential products to general people, industries, aviation field, transportation and development projects of the nation. Indian Oil Corporation refines the crude products bought by Nepal Oil Corporation from the international market and then it is brought in Nepal. This state owned enterprise has the macro task of importing, stoking and distributing petroleum products to solve the energy problem of the nation. It plays a pivotal role to supply energy in the country. As energy is inevitable for development and prosperity, NOC is trying its best to cater this requirement as per the need of the emerging scenario. Though it's hardworking to mobilize its institutional resources to tackle the energy problem, it has been facing various problems on this path. However, NOC remains committed to the supply of energy being socially responsible to the people.

Though the government remains to be sole investor, other four public enterprises: National Insurance Corporation, Nepal Bank Ltd, National Commercial Bank and National Trading Limited have also invested in NOC. Authorized capital at the time of establishment was Rs. 10 Million and paid capital was Rs. 1.05 million.

Organizational structure of NOC is formed on the basis of functional and territorial requirements. The central office is in

Babarmahal0, Kathmandu. It consists of one managing director's office and three deputy managing directors' offices. Ten departments and one planning office are also there. Five regional distribution centers are stationed in five regions.

Biratnagar (Eastern), Amlekhgunj (Central), Bhairahawa (Western), Nepalgunj (Mid-western) and Dhangadhi (Far-western). There are sub-branches in Dipayal, Surkhet, Dang, Janakpur and Birtamod. Air fuel dipos have been established in Kathmandu, Bhariahawa, Biratnagar, Nepalgunj, Surkhet and Pokhara for national and international aircrafts (Parbhat, 2067, NOC).

Increasing road and air transportation and decreasing firewood fuels have led to the shortage of the energy. Further the speedy urbanization is also contributing to the high demand of fuels. NOC is facing problems to meet the gap between demand and supply which is further affected by the dwindling state of price of petroleum products in the international market (Parbhat, 2067:NOC).

Nepal is facing huge fuel crisis. Though potentialities, as there is tackle the increasing fuel demand, lack of technology and manpower harness available resources water (water, solar, natural gas etc.) is the hindrance. In the context of Nepal, condition of fuel resources is as follows:

Figure 1.1
Condition of Fuel Resource



1.1.4 Consumption Pattern of NOC

a) Import

In the initial period NOC imported POL product by buying crude oil crude third countries such as Kuwait, soviet Russia Bahrain and so on handling them over to corporation for refinement. IOC used to supply the refined product to NOC for distribution in Nepal. From 1984/85 NOC started buying the refined products itself.

Whole required petroleum products of our country are depending on the other countries. Nepal Oil Corporation is the one of the largest non manufacturing public organization. NOC buys crude products from the international market and hands over IOC for refinement and brings them under the products exchange agreement. NOC imported the whole petroleum products buying from Indian Oil Corporation to fulfill the national requirements.

Nepal oil corporation imports petroleum products from the given Indian depots i.e. solitude, Farbisaganj, Raxaul Gorakpur, Mangulsaraya, and other places so on. The purchase quantity of different types of petroleum products are shown by the following table.

Table 1.1

Import of petroleum products for different year

year	MS	HSD	SKO	ATF	LD O	FO	LPG	Total
2063/6 4	98435	29941 9	19256 7	6365 0	180	462 4	93562	752446
2064/6 5	10162 4	30321 2	15216 8	6853 4	308	294 0	96837	725623
2065/6 6	12837 2	48921 9	77799	7366 0	380	218 8	11581 3	888056

2066/6	16290	60806	52714	8282	240	261	14117	105053
7	2	7		4		2	1	0
2067/6	18808	65276	43399	9999	228	143	15298	114518
8	2	4		0		4	6	3

Source: NOC import report

b) Storage

Nepal Oil Corporation has storage facilities for petrol diesel and kerosene and aviation fuel only. These products are storage policy of NOC storage tanks as their capacity in various places in the country. The storage policy of NOC is to fulfill the requirements as long as it is possible. The products which can not be stored because of lack of storage and delays in transportation are directly sold to the dealer. The reserved stock is used for distribution; NOC has the reserve stock available for 30 days to fulfill the requirement of nation.

Table 1.2
Present storage spots and capacities

Location	MS	HSD	SKO	ATF	total
Kathmandu	1870	8400	4960	7710	22590
Amlekhgunj	1960	16100	5580	-	23640
Biratnagar	560	8510	2180	280	11530
Janakpur	30	140	70	-	240
Bhalbari	140	3055	394	60	3649
Pokhara	350	2280	760	64	3244
Nepalgunj	140	2280	760	280	3460
Surkhet	-	-	45	60	75
Dhangadi	85	1590	760	28	2480
Dipayal	-	15	45	-	60

total	5335	28789	28375	8469	70968
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Source: corporation profile

In this way, NOC has been built storage having different capacity in the different places of country. In the near coming future, NOC is going to expand its storage capacity in different places i.e. Bhairahawa, Nepalgunj, Dang and Birtamod.

c) Sales

Sales are the most important operation of NOC. Different types of oil products like petrol diesel and kerosene are sold through dealers. After the voucher for the payment of the order is produced, the products are delivered to the dealers at their place of business through tanks Lorries. In case of aviation fuel, the selling is done directly by NOC through its aviation depots.

POL products such as kerosene, diesel and petrol are marked through dealers appointed by the company. This dealer supplies those products to retailers to retailers of their respective areas covering all of the fourteen zones. But the aviation fuel is distributed directly from NOC. The quantities of different petroleum product sales by NOC are shown by the following table.

Table 1.3

Sales of petroleum products

year	MS	HSD	SKO	ATF	LD O	FO	LPG	Total
2063/6	10191	30668	19785	63778	179	455	93562	768525
4	2	7	0			8		
2064/6	10084	30270	15521	68938	306	291	96837	727763
5	2	6	5			9		
2065/6	12416	46646	70089	69520	377	217	11581	848022

6	9	8				1	3	
2066/6	16227	61250	55788	82631	238	258	14117	105719
7	4	5				9	1	6
2067/6	18764	65512	49495	10131	227	141	15928	115450
8	1	8		4		5	6	6

Source: NOC profile 2068

1.2 Statement of the Problem

Being a developing country, Nepal has not been able to harness the petroleum resources available within the nation. Lack of technology, capital, human resources and other factors are responsible for this. Therefore, Nepal is fully dependent in foreign countries to meet the demand of this vital product. Land- likeness has hampered its effectively in performance. Being a sole supplier of petroleum products, it has monopoly in the market but the service is being poor day by day.

Public enterprises of Nepal are in crisis and so the Government of Nepal is trying to move towards privatization process in a phase wise manner. NOC is also in crisis, for which various factors are responsible: weak management, poor coordination, poor motivation to human resources and lack of proper sales planning management. It needs to evolve effective sales. Planning and control for its affectivity and efficiency.

NOC targets to meet the demand of petroleum products, for which proper sales planning is very important factor. As the population, vehicles and industries are multiplying in the nation, the demand of petroleum products is also increasing. At this verge, NOC has so many problems:

1. What is the general trend of sales planning of Nepal oil corporation (NOC)?
2. What is the sales planning and budgeting of Nepal Oil Corporation effective?

3. What are the major problems for the formulation and implementation of sales plan?
4. What measures can be taken to enhance the sales planning system?
5. What are the effects of international market of petroleum products to the domestic markets Nepal?

1.3 Objective of the Study

The specific objective of the study is to examine and assess the present planning system especially the sales planning system used by NOC. The major objectives of this study are highlighted as follows:

1. To examine the sales planning practices of NOC.
2. To assess procurement policy adopted by NOC.
3. To analyze the problem and prospect of sales planning of NOC.

1.4 Significance of the Study

Let alone Nepal Oil Corporation, many public enterprises of Nepal lack of proper sales planning. It is very important for both manufacturing and non-manufacturing enterprises to achieve their goals. It assists to manage the required quantity of goods, sales budget, marketing spots, inventory management etc. Most of the business organizations are set up for profit and this goal is realizable only through proper sales planning.

Thus, sales planning needs to be formulated and implemented by every business organizations. Sales planning are an important instrument for healthy financial performance of enterprises. It minimizes future risks, maximizes the outputs from scarce resources and predicts the future. It also assists the managerial decision making in business enterprises. This study will be beneficial for the following parties:

1. Further researcher will get help from this research to do their

research in future.

2. Nepal Oil Corporation will get help to improve its sales plan.
3. University students who will be conducting studies in same subject will be benefited from this research.
4. Major parties, who are interested in sales planning of NOC, will find it as a valuable resource.
5. Valuable suggestions and recommendations will serve the concerned parties while making sales plan.

Thus, this research will be a valuable means to know about the sales plan of NOC and its controlling system. People who are interested in these aspects of NOC will be beneficial from this research. Further the deteriorating condition of NOC could be prevented to reinvigorate NOC through making proper sales plan and controlling mechanism recommended by the research.

1.5 Limitations of the Study

In any investigation work, limitation may occur because investigator can't investigate the entire study area. Moreover, collection of data through primary sources for the study would have been next difficult work for an individual researcher for various reasons. Therefore, factors which are limiting of the study are as follows:

1. This study covers only five years' annual reports (from 2063/64 to 2067/68), trends and data.
2. This study is concerned with the problems and sales trend of Nepal Oil Corporation.
3. Secondary data granted by the management of Nepal Oil Corporation is the main source of data for this study.

4. Sometimes the exact definition of terms and units used in a secondary data are not known.
5. Busy working environment in those enterprises may be a limiting factor for unavailability of more information.

1.6 Research Methodology

Descriptive and analytical research design will be used for this study. Secondary and primary data will be the foundation of this study, and mathematical and statistical tool will be used to analyze the data in order to draw conclusion.

The secondary data will be accumulated from sales departs and planning departs of Nepal Oil Corporation, other published and unpublished articles documents consulted in the library and media news. Primary data will be obtained from the office of Nepal Oil Corporation using primary data collecting tools like interview, schedules etc. mathematical and statistical tools and techniques will be employed to present and analyze the available data.

1.7 Organization of the Study

This study will be divided into five different chapters:

1. Introduction

This chapter will included the background, scenario of Nepal Oil Corporation, focus of the study, statement of the problem, objectives of the study, significance of the study, limitation of the study and research methodology.

2. Review of Literature

This chapter will be concerned with the concept of sales planning and conceptual setting and review of the related thesis to highlight the related terms and to present the available information about previous

related studies.

3. Research Methodology

This chapter will include introduction, research design, sources and nature of data and data collecting instruments.

4. Data Presentation and Analysis

Gathered data will be presented in table, graphs and in descriptive manner. Further, these data will be analyzed among different tools and techniques of data analysis.

5. Summary, Conclusion and Recommendation

This chapter will include summary and conclusion along with recommendation based on the study.

CHAPTER II

REVIEW OF LITERATURE

In order to make a research on the subject some other literature should also be revised. Main purpose of literature is to find out the work done in the subject on the areas of the research. Some possible study and conceptual matter available in this respect have been revised. This chapter is simply based on previous books, journals, bulletins, reports, news, statements, thesis etc. that are directly related for literature review.

2.1 Conceptual Review

2.1.1 about Sales Plans and Budget

The sales budget started in quantities and dollars, holds the key to each of the others budget and must be prepared first (modes and stettler, 1963: 132). The sells planning process is necessary parts of profit planning and control because; (a) it provides the basic management decision about marketing and (b) based on those decisions, it is an organized approach for developing a comprehensive sells planes. If the sells planes are not realistic, most of the other parts of the overall profit planes also are not realistic. Therefore, if the management believes that a realistic sells plan can not be developed, there is little justification for profit plans and control despite the views of a particular management, such a conclusion may be implicit admission of incompetence. Simply if it is really impossible to assess the future revenue of potential of a business, there would be little incentive for investment in the business initially or for communication of it except for purely speculative venture that most managers and investors prefer to avoid (Welch, et al., 2000: 103).

Sales budget are another essential management tools. They allot the potential market (after serious market study) to territories or system of

selling. They set up quotas to salesman so as to assure that all selling process contributes their proper share of activity. Throughout this adequate control of performance of all members of the organization is related. Practically all other budget is based on the sales budget. In some cases, the sales budget is also a tool to find the sales help and the promotion of advertising needed.

A plan of operations must necessarily be built around the activity or volume of business that can reasonably be expected during the specific period by the profit plan. Unless there is a realistic sales plan, practically all other elements of a project plan will be out of kilter with reality. The sales plan is foundation for periodic planning in the form, because practically all other enterprise planning is built on it. The primary source of cash each sales, the capital addition needed the amount of expensive to be plan, the manpower requirements, the production level and other important operational aspects dependent of the volume of sales.

In this way, sales budget is the major factor or primary factor of all other budgeting system and organizational activities. Sales budget is the very important for each and every organization, they may be manufacturing and non-manufacturing with out proper sales budget organization can not make the other budget, life purchase, expenses etc.

A reasonable degree of accuracy is frequently hard to achieve in sales budget but it is imperative owing to the dependency of other budget on sales budget. In case of degree of accuracy is not large, some of the other predetermined figure, particularly the production estimate is based on erroneous premises which may have serious consequences for the business. The necessary for accuracy has hastened the abandonment of the method. No method will ensure absolute accuracy but reasonable current forecast are more likely to result from throughout market research and analysis application of this knowledge of the individual

circumstances of a particular business. The preparation of sales budget is always difficult even incase where much experience has been gained by carrying out work over a number of years. Throughout such factors as experience, wise judgment, knowledge of market trends and business condition are of almost help, they have to be used with great care and sometime, even these are useless to the development and operations of circumstance as well as events which were impossible of prediction as the time, sales estimate were made.

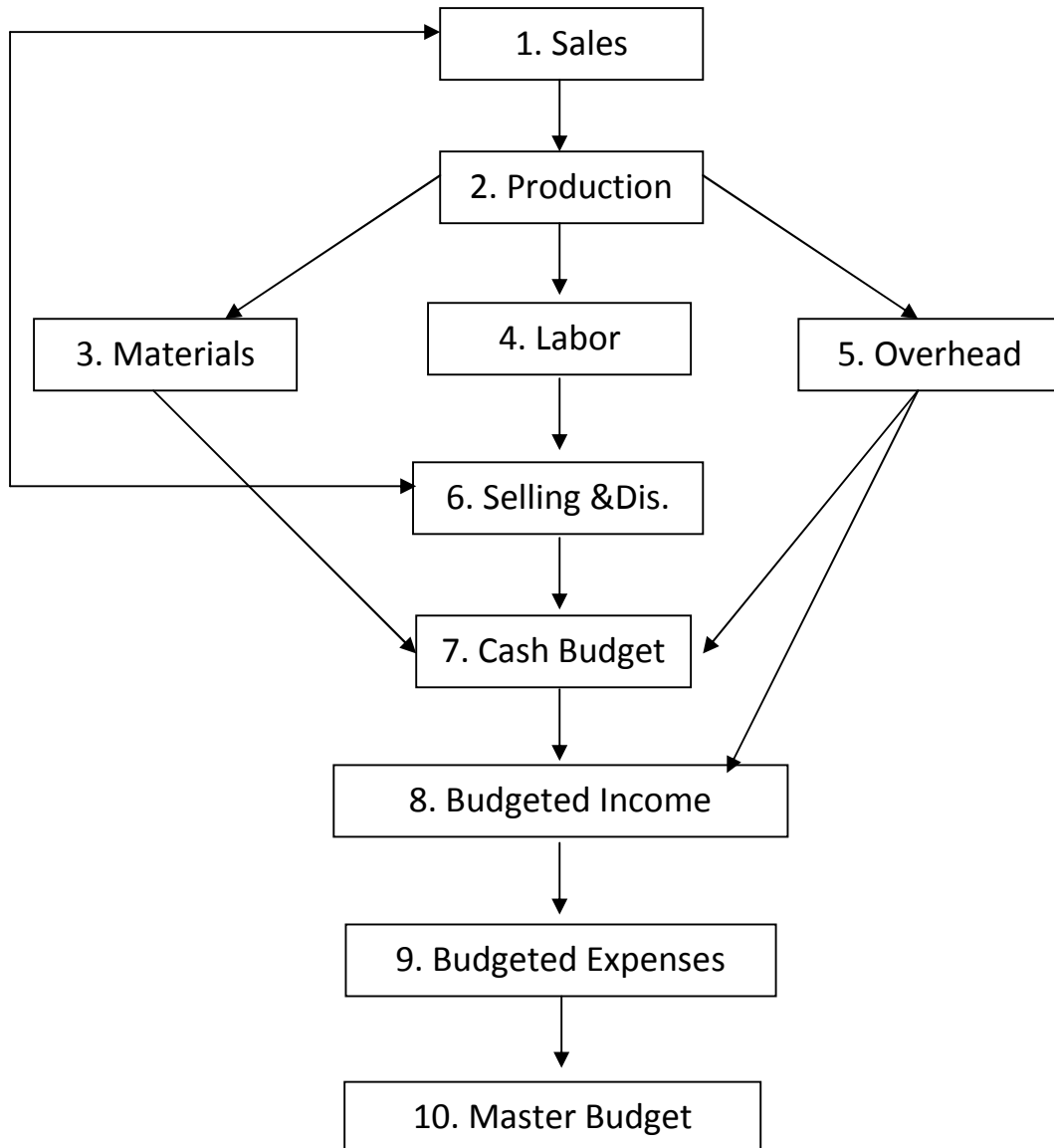
Welses, et al, explained the primary purposes of sales plan are as follows:

-) To reduce uncertainty about future revenues.
-) To incorporate management, judgment, decision in to the planning process.
-) To provide necessary information for development other elements of comprehensive profit planes.
-) To facilitate management control of sales activities.

According this statement, sales budget is milestone for all other budget. This can be shown more clearly by figure.

Figure 2.1

Sales plan and budget



Source: Acharya et al, 2009

Sales budget is a functional budget and is a primary budget. Therefore it is very important above figure also clarifies the important of sales budget.

2.1.2 Sales Planning vs. Sales Forecasting

Those sales planning and sales forecasting are usually used synonymously distinctly different purpose. A forecast is not a plan rather it is a statement or a quantified assessment of further conditions about a

particular subject base on or more explicit assumptions. A forecast should always state the assumptions upon which it is based. A forecast should be viewed as only an input for the development of a sales plan, the management of the company accept, modify or reject the forecast.

In contrast, a sales plan incorporates the management decisions that are based on the forecast other inputs and management judgment about such related items as sales volume, price, sales effort, production and financing.

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 decision and judgment implicit in every sales plan (Goet, et al, 2005).

The short term sales forecast provides the basis for the current year's sales plan and the finished goods inventory plan. At the same time the influences of the long term sales forecast are related in the capital expenditure plan and in the finished goods inventory plan. Since inventory at the end of this year is the beginning inventory for the next year's business, it is necessarily influenced by the long term sales thinking as well as by the current year's short term forecast, the long term sales forecast provides the basis for developing, in rough outline, the capital expenditure plan. That portion of the plan falling within the current year is reflected in the capital expenditure budget. Major differences between sales forecast and sales budget can be attributed as:

-) The sales forecast is merely the initial statement of future sales, whereas sales plan is the projection approved by the budgeted committee that describes expected sales in units and rupees.
-) Sales forecast is a merely educated estimate of future expected demand of a specific product whereas sales budget is the

quantitative expression of business plan and policies to be pursued in future.

) A sale plan provides standard for comparison with the result achieved, those, it is an important control device of management whereas forecasting merely of probable events over which no control can be excised. Sale plan begins where and when sale forecast end. Sale forecast is the input to sale plan; sale plan is the foundation of profit and control (Ojha and Gautam 2011).

2.1.3 Steps for Developing Comprehensive Sale Planning

Welsch, Hilton and Gordon suggest these steps for developing of comprehensive sales plan.

Step 1

Develop management guidelines for sale planning including the sale planning process and planning responsibilities. Following activities are performed under this step.

1. Defining objectives and goals like expansion or intensification of the organization.
2. Preparation of long-term or strategies sales plan.
3. Development of general pricing policies, marketing strategies, competitive position etc.

Step 2

Sales forecast is the prediction of possible demand in specific area for specific period of time under specific condition. It is a technical projection of the probable sale. One or more sales forecast should be prepared and each of them should use different assumptions which should be clearly explained in the forecast.

Step 3

Assemble other relevant data that will be relevant in developing comprehensive sale plan. Under these steps, analysis of factors influencing the sales needed to be done. Evaluation of the following data might be done here.

1. Capacity of the plan.
2. Availability of raw material in market and its types.
3. Availability of capital and labor.
4. Types of market i.e. competitive or seasonal or regular.
5. Alternative sources of supply i.e. product for another source.

Step 4

Develop the strategies and tactical sales plan. The process of developing a realistic sales plan should be unique to each company because of the company's characteristics it is products, it is distribution channels, and the competence of its marketing group. Four different participative approaches are widely used characterized as follow:

1. Sales force composite (maximum participation)
2. Sales division managers composite (participation limited to managers only)
3. Executive decision (participation limited to top management)
4. Statistical approaches (technical specialist plus limited participation)

Step 5

Secured managerial commitment to attain the goals specified in the comprehensive sales plane.

1. Top level management must be fully committed to attaining the sales goal specified in the sales plan.

2. Good communication must be required between sales managers of the goals approved marketing plan and strategic by sales responsibilities (welsch, et al 2000:171).

2.1.4 Consideration of Alternatives in Developing a Realistic Sales Plan.

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

In addition to advertising expense, selling expense, and marketing plans, a completed sales plan encompasses work programs and organization for sales efforts and a host of other coordinative understandings necessary fir efficient and aggressive efforts to maximized sales revenue at minimum cost. Many combinations of emphasis are possible. This suggest the importance in sales planning of applying standard approaches to the fullest extent possible and use of computers for data processing and analysis. It also implies numerous subject judgments and decisions by management. The standard analysis techniques and approaches provided more relevant information then otherwise upon which this managerial judgments and decision are made under conditions of uncertainty. To the extent that the standard approaches shed additional light on the probable outcomes of different alternatives, they contribute to the quality of management decision by reducing uncertainty.

For illustrative purpose we will consider two percussive sales planning problems:

A. Price Cost- Volume Consideration in Sales Planning

Price- cost- volume strategy is a vital part of sales planning. In a competitor market price and sales volume are mutually interdependent. Because sales volume and price are so closely tied together, complicated problem is posed for the management of almost very company. Thus two related basic relationship involving the sales plan must be considered:

1. Estimation of the demand curve that is the extent to which sales volume various at different offering prices. And,
2. The unit cost curve which various with the level of productive output. This price cost volume relationship has a significant impact on the managerial strategy that should be adopted.

There is an obvious, but frequently overlooked contrasting relationship that should be analyzed in depth in the development of pricing strategy. An increase in sales price with no result and change in volume is reflected dollar or dollar in pretax- profits. Alternatively an increase in sales volume with no increase in sales piece is reflected in pretax profit only by the difference between sales dollars per unit and variable cost per unit of product. To illustrate-Simple Trading Company sells one product. The tentative 19x2 budgeted income statement shows the following (dollars in thousands):

Sales: 5000units at \$2(000) per unit cost: fixed \$4000 (000), which will remain constant during the year. The members of the executive committee have tentatitavely concluded that this budget does not meet the company's profit objectives. At their last meeting, they briefly discussed two competing alternatives: A- increase price by 10percent or B- increase

volume (units) by 10percent. Should be recommended? Analysis is shown in exhibit 5-3 with a third alternative added.

B. Product Line Considerations in Sales Planning

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

Product mix refers to the volume relationship among two or more products. For example assume that 1000 units of product R and 2000 units of product S were sold and that the sales plan for the coming year cells for 1200 units of product R and 1800 units of products S. the total production units in 3000 in each case: therefore, a change in sales mix is planned for next year. The product with the highest contribution margin per unit should be pushed to the extent that is realistic.

Assuming the long range sales plan includes change in product line, with broad specification as to the timing of such changes, those changes anticipated for the coming year (the period for which the short range sales plan is being developed) must be brought in to sharp focus through management decisions and be include in the short range plan. To develop the annual sales plan, top management must make decision about product line development and marketing activities. Policies must respond to such issues as the followings:

-) Which product will be pushed?
-) Which product will be dropped and when?
-) What quality and style change will be made?
-) What about “loss leaders”?

These effects on plans in other areas of the companies, such as plan capacity, financing, territorial expansion and research.

A primary objective in sales planning should be to maximize profits in the long run rather than the short run. For example, certain short run decisions may increase immediate profit but adversely affect in the long run. Thus we see that if care is not exercised, short run decisions may be in conflict with long term objectives.

2.1.5 Level of Sales Planning

Strategic Sales Planning

Strategic sales plan is the long range sales plan of an enterprise. Usually, it is of 5 to 10 years. It is broad and general. It is usually developed by air and annual amount. It is prepared by considering future market potential, population changes, state of economy, industry projections, company objection and long term strategies because they affect in such areas as pricing, development of new product line , innovation a product , expansion of distribution channel, cost patterns, etc (Ojha and Gautam, 2011)

Tactical Sales Plan

Tactful sales plan is a short range sales plan. It is developed for a short period of time usually a year, initially by quarters and by months for the first quarter. The tactical sales plan includes a detailed plan for each major product and of groupings of minor products. Tactful sales plans are usually developed in terms of physical units and in sales rupees for planning and controlling purpose, the short term sales plan must be developed by sales responsibility. At the end of each month or quarter through out the year, the sales plan is re-studied and revised by adding a period in the future and by dropping the period just ended. Hence tactical

sales plans are usually reviewed and revised on quarterly basis. It is also necessary for completing other components of annual profit plan.

2.1.6 Purpose of Sales Plan

The main purpose of sales plan is to express future sales revenue for a specific period. It is based upon:

-) Present knowledge of a company
-) The impact on the firm of enterprise objectives
-) Management strategies

The main purposes of sales planning are as follows:

-) To reduce uncertainty about future revenue.
-) To incorporate management fragments and decisions in to the planning process. E.g. in the marketing plan.
-) To provide necessary information for developing other elements of a comprehensive profit plan.
-) To facilitate management control of sales activities

2.1.7 Components of Comprehensive Sales Plan:

Table 2.1
Components of comprehensive sales planning

Component	Strategic plan	Tactful plan
1.Management policy and assumptions	Broad and general	Details and specific for the year
2.Mkt plan (sales and service revenue)	Annual amounts major group	Detailed by product and responsibility
3.Advertising and promotional plan	General, by year	Detailed and specific for the year
4.Selling and distribution expanses plan	Total fixed and total variable expanses by year	Fixed and variable expenses by month and by responsibility

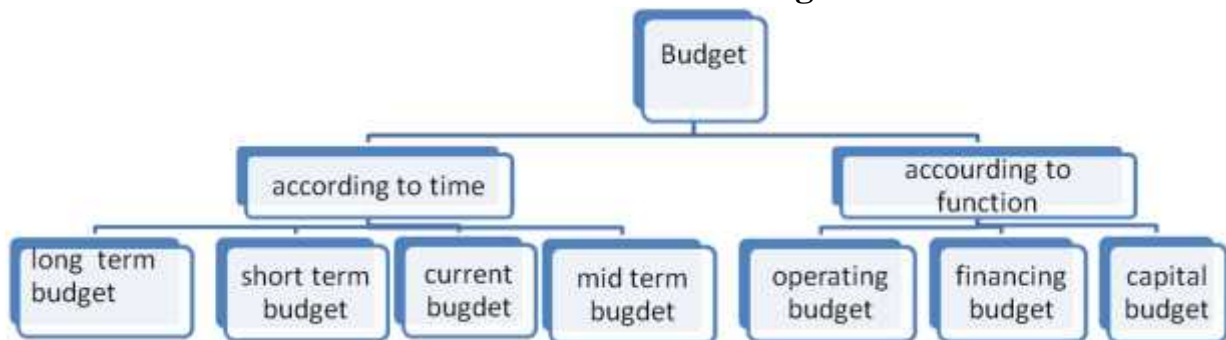
(Source: Welsch, et.al.2000)

2.2 Classification of Budget

PPC is the systematic and formalized approach to accomplish planning. Coordination and control responsibilities of an organization are a comprehensive budget that includes normally two types of budget which are shown below:

Figure: 2.2

Classification of budget



Classification According to Time

Budgets are classified into four major parts of the time factor:

1. Long Term Budget

Long term budget is known as strategic plan. Usually it is 5 to 10 years strategic or long term budget. It requires dept analysis of future market potentials. This may build up for a basic foundation such as population changes, state of economy, industry projection and company objectives. These budgets are related to planning the operations of an organization expressed in physical quantities.

2. Short Term Budget

Short term budget is known as tactical plan. Usually it is of 12 month detailed for each major product and for grouping products. For planning and control lowing purpose, short term budget must be developed by reasonability center. Because short term profit plan

provides major consideration for planning and controlling purpose physical units or jobs and expressed in by months and quarterly budget. Short term budget includes detailed plan monetary terms.

3. Current Budget

These budgets cover a period of one month or more. The short term budgets are modified according to current conditions or prevailing situation.

4. Mid Term Budget

These budgets are drawn usually for a mid period of whole budgeted years. It is also called intermediate amendment of term budget. These types of budgets are required to adjust the economic fluctuation on long term and short term budget.

Classification According to Function

Budgets are classified into three major parts of function. They are:

1. Operating Budgets

Operating budgets are the budgets that are related to the planning of operations of the enterprise, such as sales, productions, inventory etc. operating budgets is composed of two parts: a programmed or activity budget that specifies the operations or function to be performed during the next year, and a responsibility budget that specifies plan in terms of individual responsibilities.

2. Financial Budgets

Financial budget are concerned with the financial implications of the operating budget: the expected cash inflows and cash outflows, financial position and the operating results.

These budgets are concerned with:

1. search of and used of final capital i.e. cash budget
2. Perform a financial statement i.e. balance sheet, income statement and statements of changes in financial position.

3. Capital Budget

There are the budgets which involves the planning to acquire the projects that requires large sum of funds and have long term implications for the together with the timing estimated cost and cash flow of each project. “Capital budgets are difficult to prepare because estimates of the cash flows over a long period have to be made which involve a great degree of uncertainty”.

2.3 Method of Preparing Sales Budget

Different kinds of methods are available to prepare the sales budget. Different enterprises adopt the different methods according to their financial position and quality of their manpower. Mainly the following four methods are used to prepare sales budget.

I. Analysis of Past Sales

Analysis of past sales for a number of years, say 5 to 10 years, viz. long term trend, seasonal trend, cyclical trend, various other factors. The long term trend represents the movement of the fortunes of a business over many years. The seasonal trend may affect. May types of the business and hence this factor must be taken in to account when studying figures for consecutive month over a numbers of years. The cyclical trend represents the fluctuation in the business activity due to the effect of the trade cycle. In order to study the cyclical trend it is desirable to disregard the effect of the long term and seasonal trends. Sundry factors included,

such as a strike in the industry or a serious fire or flood. From such analysis it will be possible to suggest future trend. In analyzing such sales, considerable help can be obtained from statically report produced by the trade units and commercial intelligence units, government publication etc.

II. Field Estimate by Own Sales Staff

The sales man in each area should be have an intimate knowledge of the factors likely to affect his sales in the next few months or years. He can probably make a guess about the unsold stock in the shops of his customer. He is then in a position to make an estimate of future sales. When such estimates are available for a number of years, the actual sales for the year can be compared with the estimated sales and a correction factor calculated to allow for each salesman's tendency to over estimate.

III. Analysis of the Potential Market

Market research people may report on the state of the market, population on the state of the market, population in area, fashion, trend, the types of product design of people, activities of competitors and the prices the consumers are likely to pay.

IV. Studying the Impact of Factors Affecting Sales

Any changes in the company policy or methods should always be considered. For example introduction of special documents, special salesman, a new design of the product, new or additional advertising campaigns, improved delivers, after sales services should have some market effect on a sales budget. While preparing such forecast, the sales manager must be considered the opinion of divisional managers and other sales staff, the budget offers and the accountant. It will be observed that

the preparing of a sales budget involves many actors on cells for a high degree of knowledge of conditions, and of ability of deduce from the known fact and various estimate, the probable course of sales over the budgeted period . if sales be the principal budgeted factor, then the sales budget is prepared first. If purchase is the key factor of the merchandize purchase budget should be built up first and the sales budget must be dram up within the limits imposed by the purchase budget.

2.3.1 Principles of Budgeting

The principle of budgeting is as follows:

-) The budget has to be prepared in term of cash; both receipts and payment are made in cash.
-) Budget should be prepared on an annual basis. This enables the authorities to review their financial position.
-) The budget should draw a clear picture of the financial transaction of the year.
-) Budget estimates should be gross and net.
-) Budge estimates shall be made on departmental basis.
-) The budge is subject to rule of lapse that unspent portion of the budget shall not be diverted to any other purpose

2.3.2 Characteristics of Good Budgeting

The characterizes of good budgeting are as follows:

-) Budgets may be formulated for the organizations as a whole or for any sub unit.
-) A good system of accounting is also essential to make the budgeting useful.

-) A budget is a quantitative expression of a plan of action and aid to coordination and implementation.
-) A good budgeting system should involve person at different levels while preparing the budgets. The subordinates should not feel only imposition on term (khan and jain, 1993).

2.3.3 Essentials of an Effective Budgeting

A successful and sound planning and budgeting system is based upon certain prerequisites. These pre-requisites represent management attitude. Organization structure and management approaches necessary for the effective and efficient application of the budgeting system. The following are the essentials aspect of a successful budgeting:

1. Sound Forecasting

Business forecasts are the foundations of budgets; forecasts are discussed by the executive and when the most profitable combinations are selected, they become budgets. The sound forecasting brings better result in the budgeting system. Hence, forecast should be based on mere estimate or personal whims: these should be made by using most scientific and statistical method and technique.

2. an Adequate and Planned Accounting System

There should be proper flow of accurate and timely information in the business which is must for the preparation of budgets. This can be ensured only by having an adequate and planned accounting system in the business.

3. Efficient Organization with Definite Lines of Responsibility

An efficient, adequate and best organization is imperative for budget preparation and its operation. Those a budgeting system should always be supported by a sound organizational structure demonstrating clearly the lines of authority and responsibility. Not only this, their should be a clearly delegation of authority from top to bottom levels of management. This will provide adequate opportunity to all executives to make best decisions and also to participate in the function of budget preparation. Those, an efficient organization help not only in the budget preparation but it also plays important role in budget coordination and operation.

4. Formation of Budget Committee

A budget committee receives the forecasts in the targets in each department as will as periodic reports and finalizes the final acceptable targets in from of master budget and also approved the departmental budgets. Involvement of all executive is desired in order to make them emotionally committed.

5. Clearly Defined Business Policy

Every budget reflects the business policy formulated by the top management. Budget should always be prepared taking into account the policies set for the particular department or function. But for these purpose, policies should be precise and clearly defined as will as free from any ambiguity. Every department executive must have a clear knowledge of the impact of business policies on his department, so that he may start his budget exercise in right direction and can also submit constructive suggestions.

6. Availability of Statistical Information

Since budgets are always prepared and expressed in quantitative terms, it is necessary that sufficient and accurate relevant data should be made available from accounting system alone and therefore they may be processed through statistical techniques.

7. Support of Top Management

If a budget programme is to be made successful, the sympathy of each member of the management team towards it should start preferably from top. The enthusiasm for budget operation as well as direction for it should initiate and come from top. It should be remembered that each member of the management team has a feeling to resist change and there may be some sort of resentment against budget particularly when budgeting is being used as a pressure device. Therefore, the whole system should enjoy the support and cooperation of top management.

8. Good Reporting System

An effective budgeting system also requires the presence of a proper feedback system. As work proceeds in the budget period, actual performance should not be recorded but it should also be compared with budgeted performance. The variations should be reported promptly and clearly to the appropriate level of management. The reporting system should be designed in such a way that along with variations, the cause for such variations and the person responsible for them are also reported; so that management can decide suitable remedial.

9. Motivational Approach

All the employees should be strongly and properly motivated towards budgeting system. Human beings, by nature, do not like any

pressure and they resent or even rebel against anything imposed on them. There needs to be made each staff member feel too much involved in the budgeting system. To meet this end, motivational approach towards budgeting should be followed.

2.3.4 Limitation of Budgeting

I. Budget Plan is Based on Estimates

The success or failure of budget depends, to a large extent, upon the accuracy of basis estimates of forecasts. It should always be remembered that a certain judgment is always present in such estimate forecasts. These aspects of budgeting should always be kept in view while interpreting the result of others.

II. There is a Danger of Rigidity

As budget estimates are quantitative expression of all relevant data, there is tendency to attach some short or rigidity or finality to them. Budget estimates relate to business conditions which may be constantly changing, and it becomes imperative to change the budget estimates in the light of changed business conditions.

III. Budgeting is not Suitable for Management

It should be remembered that budget is not a substitute for management. It is totally misconception to think that the introduction of budgeting is sufficient to ensure success and to guarantee future profits.

IV. Budget Execution is not Automatic

Budget will not ensure its proper execution. It is very much required that each executive must feel responsibility and should make efforts to attain the budgeted goals.

V. Budgeting is a Costly Affair

The installation of budgeting system is an elaborate process involving too much time and costs. Normally, it is costly that small concerns cannot afford it. Even for a large concern, it is suggested that there should be some correlation between the cost of operating and budgeting system and the benefits derived from it.

2.4 Product Line Consideration

Petroleum crude of hydrocarbon is compound of hydrogen and carbon found deep the earth surface and seabed. Petroleum products are obtained after refining petroleum crude in refinery. The following are some of the products recovered from refining the crude which we encounter them in our day life. NOC is selling these products by its dealer.

a. Liquefied Petroleum Gas (LPG)

It is a mixture of propane and butane in the ratio of 55.45 and mainly used as domestic cooking fuel. In Nepal “INDANE” (Indian oil brand name) is being marketed which is compared generally in 14.2 kg cylinder. During the course of crude refining the first product we get from the refinery are methane, ethane, Butane and propane. The first two products are used in chemical plants and the combination of the latter two is used as LPG.

b. Motor Spirit (MS)

Widely used in international automobile engines as fuel, motor spirit is commercially known as petrol. Its boiling point lies between 80 [to 215 [. Indian oil from where NOC gets its MS requirement bands MS in two categories namely 87 Octane and 93 Octane.

c. High Speed Diesel (HSD)

High speed diesel is used as a fuel in auto ignition engine in automobile or railway engines.

d. Super Kerosene Oil

Generally known as kerosene is a middle distillate white oil used mainly in illumination, burning of stoves for cooking and heating. Most of the people in rural area used it for lighting lamps. Flash point of Kerosene is limited to 35 degree centigrade minimum and the standard colors.

e. Aviation Turbine Fuel (ATF)

It is used as a fuel in aircraft with turbine engines. It is highly refined kerosene prepared to meet the aircraft engine specification particularly the freezing point and the thermal stability.

f. Light Diesel Oil (LDO)

It is used as fuel oil in slow speed operating at around 500 rpm. In comparison with speed diesel it has higher carbon residue and sulphur content. Color of this product is greenish black and is relatively cost effective product.

g. Fuel Oil (FO)

Fuel Oil also named as furnace oil is very heavy petroleum product and used as fuel in the burner of industrial furnace, marine boilers and engine.

2.5 A Review of Pervious Related Research Works

2.5.1 Concept

Literature review is the study of past research that was conducted by previous researchers in selected area or topics of profit planning. The purpose of literature review is to find out what research studies have been conducted in the chosen field of study and what remains to be done? It provides the basis for developing comprehensive thyroidal framework from which hypothesis can be developed for testing. Literature review can be done by consulting library where there are all kinds of published materials, including thesis, business report, government publication and other concerned articles.

There are very few research papers concerning this particular i.e. sales planning and budgeting. Most of the students of account group have done the research in the topic of profit planning and control of different public and non public enterprises. Some dissertations reviewed here are on the topics of sales planning and budgeting.

Narayan (2008) has tried to investigate the role of sales budgeting in the profitability of public enterprise. The major objective of the study is to examine the techniques of sales budgeting as a major tool for profit planning applied by Dairy Development Corporation (DDC). Other objectives are.

-) To examine the sales budgeting process adopted by DDC.
-) To analyze the relationship between sales and profitability of DDC.
-) To compare the performance status of sales budgeting system of DDC.
-) To find out the case of deviation on sales budget of DDC.

His major findings are:

-) DDC does not have comprehensive profit plan based on the realistic expectation.
-) DDC does not have long term strategic sales plan.
-) Lack of communication between high level and low level staff.
-) Sales forecasting is based on the personal judgments of top level staff.
-) Actual sales are lower than budgeted sales.
-) Lack of segregation of cost into fixed and variable.
-) Rate of increase in cost is higher than the rate of change in sales.

On the basis of his findings, he has recommended the following facts:

-) DDC needs to set the goals like profit margin, product, sales etc.
-) DDC needs to develop comprehensive profit planning and controlling techniques.
-) Long term plans need to be developed with short term plan as its subsidiary.
-) Expert planners are required with separate planning department.
-) DDC needs to emphasize on the production of subsidiary milk product rather than milk only.

Paudel (2008) has tried to investigate the “sales budgeting and effectiveness” in manufacturing public enterprises. The major objectives of this study is to analyze the present sales planning system of Royal Drugs limited (RDL). Other major objectives are:

-) To analyze the sales budgeting prepared by RDL with theoretical prescription.

-) To analyze the cause of sales fluctuation in different month and years.
-) To study the relationship of sales plan with production plan inventory and different overheads made by RDL.
-) To study about variance between actual and budgeted sales.

On the basis of his finding, he has recommended the following facts:

-) For the effective implementation of budgetary system work sheet of manuals should be communicated to all the levels of management.
-) Cost volume profit relationship should be considered while formulating profit plan. Especially in determining sales volume, selling price and profit.
-) HPPCL should have the competitive pricing policy according to the market situation gain high market share.
-) Environment of entrepreneurship and commercial concept should be developed in the overall operation on of the HPPCL.
-) HPPCL should formulate and prepare profit planning and controlling calendar.

2.6 Research Gap

A brief review of above mentioned dissertations, it is seen that of the public enterprise are not operating effectively and they have also not applied the full concept of planning parties which is related on the major findings of their studies.

This study so would be of different values as its forces on special areas of over of overall profit planning i.e. sales planning and budgeting with special references to NOC a non manufacturing enterprises.

It would be a significant step on knowing about the sales planning and budgeting in NOC sand its problem and prospects of sales planning and budgeting. The study attempts to analyze the sales planning budgeting practice of NOC. This study is very new in the field of researches related to profit planning and control.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Introduction

Research methodology is the process of arriving at the solution of the problems through a planned and systematic dealing with the collection analysis and interpretation of the fact and figures. Research methodology is the way to solve systematically about the research problem. It consists of the research design, research population and sample, sources and types of data, variables and method of analysis and presentation.

3.2 Research Design

The research design is an organized approach and not a collection of loose unrelated parts. It is an integrated system that guides the researcher in formatting, implementing and controlling the study. Useful research design can Product the answers to the proposed research questions. The research design is thus an integrated frame that guides the researcher in planning and executing the research works.

Data and information are the life of blood or major portion of any study. This study is attempt to show the relationship among sales planning and budgeting practice, and various fundamental budgets for their achievement and effective application within the conceptual framework of profit planning for solving the problem that have accrued in NOC. This study based in analytical as well as descriptive research design. A study design is the arrangement of the conditions for collection and analyze of data in manner that aims to combine relevance to the study purpose with the economy in producer. This study is an intensive based on analysis of the past financial performance. To fulfill the objective of

the study primary data as well as secondary data are used and study design is descriptive as well as analytical.

3.3 Data Collection Procedure

Primary data as well as secondary data have been used in this study paper. Primary data are based on questionnaire as well as unstructured dialogues with the executives and other staffs of NOC. Secondary data have been taken mainly from the published and unpublished articles, annual reports of NOC, sales budget and plan of NOC, profile of corporation, annual magazine and reports etc.

3.4 Data Processing Procedures and Tools Used

Data collection from primary and secondary source are managed, analyzed and presented in the required table and formats. Such table and format are interpreted wherever necessary. To analyze the collection data statistical tools such as variance analysis correlation. Regressions have been used as per need.

3.5 Research Variables

Mainly the research variables of this study are related with sales statement of NOC. Budgeted and actual sales in units, sales trend, pricing trend are the research variable of this study.

3.6 Period Covered

This study is based on the historical data covering last five years i.e. fiscal year 2063/2064 to 2067/2068 and the NOCs strength and weakness of managerial planning budgeting and other related things are identified.

CHAPTER IV

DATA PRESENTATION AND ANALYSIS

4.1 Introductions

The basic objective of this study has been mentioned in the first chapter. The sales budgeting and planning practices has been discussed in the “review of literature”. In the “**Research methodology**” necessary analytical tools and techniques have been employed for accomplishment of prescribed objective.

In this chapter effort have been made to process the obtained data analysis and interpretation them. The available data are presented in table and graphs and they are presented in the table and graphs and they are analyzed with the help of statistical, mathematical tools and are finally interpreted to explore the fact. In this study, it will be explained of seven petroleum products they are Speed Diesel (HSD), Super Kerosene Oil (SKO) Motor Spirit (MS) Aviation Turbine Fuel (AFT) Light Diesel Oil (LDO) Fuel Oil (FO) and Liquefied Petroleum Gas (LPG).

For the application of profit plan, a company should prepare numbers of plans; one of them is a sales plan. Sales plan is the infrastructure of the profit plan. Other plan of profit plan depends upon the sales plan. The prime objective of business is to earn net profit, so the first consideration of the sales plan must be made from the profit plan. Sales are the major source of revenue and cost. Generally two types of sales budget and planed are prepared. The first is long range sales plan and the second is the infrastructure of profit plan. NOC does not prepare the long range profit plan and sales plan. Short range sales budgeting and planning are not also clearly prepared. This study mainly focused short range plan. However, sales imports and other related figure in units and amount of previous are also presented and analysis to know overall

economic and sales trend for the purpose. This study covers the periods of five years from FY 2063/64 to 2067/68.

The main objectives of the study to examine and analyze sales planning practice of Nepal Oil Corporation (NOC) similarly, also tries to assess the impact of sales planning and budgeting of NOC. Other object is to examine the problem and prospect of sales planning of NOC.

1. Analysis of secondary data
2. Analysis of primary data

Part-I

Analysis of Secondary Data

This part is focused on the analysis and presentation of secondary data. The secondary data have been obtained from financial statements and other related newspapers. The available data have been tabulated and presented in graphs, chart and analyzed to reach the conclusion.

4.2 Sales Plan of NOC

Sales revenue planning is the foundation in business organization it is also the primary step in developing the overall budget procedure and it's the primary source of cash and all other functional budgets prepared on the basis of sales budget. If sales budget is not realistic all other budgets also will not be realistic.

In Nepalese public enterprise, the objectives are mainly social welfare and commercial fulfilling of the social obligation. Basically, most of the best objectives are social welfare. Profit is less important at the same time there is also commercial obligation, in this case the corporation should earn certain profit too.

In case of non-manufacturing public enterprises, there is not realistic sales plan. NOC fixed the sales for the coming fiscal year only. Every plan or profit plan is prepared to fulfill the objective of the

enterprise. There is not clear objective related to sales plan. It depends upon the demand of customers. Consumers are divided into domestic, commercial, non-commercial and industrial etc. Now it is worthwhile to present the corporations previous sales performance and their budget. To know about sales trend of past and to forecast the possible future trend of the corporation. The following table and diagram present the budgeted sales and actual sales achievement from the fiscal year 2063/64 to 2067/68.

Table 4.1
Budgeted sales and actual sales of NOC

(In KL)

detail Fiscal year	Budgeted sales (x)	Actual sales (y)	achievement
2062/63	686715	768525	89.35
2063/64	669351	727763	91.97
2064/65	658884	848022	77.70
2065/66	834500	1057196	78.93
2066/67	828000	1154506	71.72
Total	3677450	4556012	80.72
average	735490	911202.4	80.72

Source: NOC profile 2068

From the above table we can see that its actual sales are higher than budgeted sales in fiscal year 2063/64 and similarly in FY 2064/65, 2065/66, 2066/67, 2067/68. The actual sale is lower than budgeted sales is not found any year.

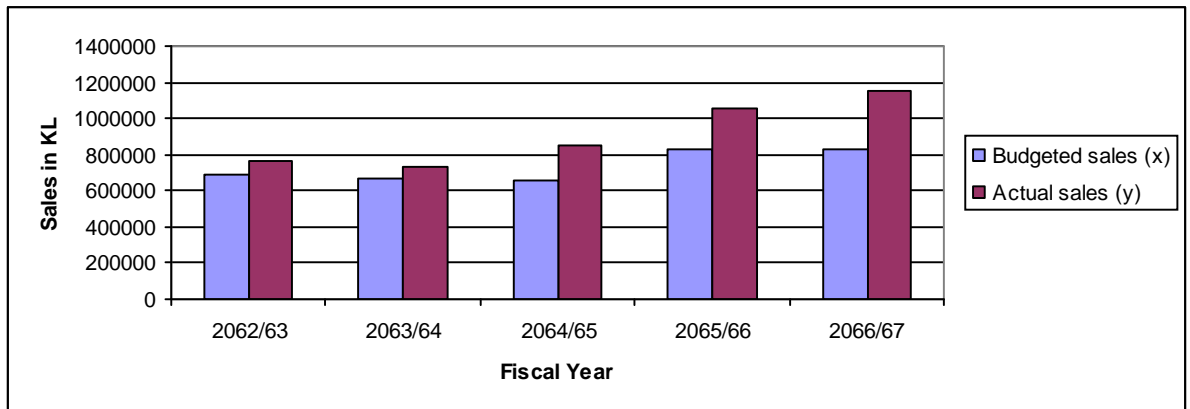
There are not any systematic rules of preparing sales plan of NOC. The planning section of NOC prepares the next year's plan of the basic of last years actual sales increasing by 15% to 20% per year. Budgeted sales

are only on the assumption of management. On the other hand NOC does not prepare sales plan in among every year.

The budgeted sales and actual sales and achievement of NOC can be personated from the following diagram.

Figure 4.1

Budgeted sales and actual sales of NOC



The above figure presentation indicates the small gap between actual sales and budgeted sales. Except fiscal year 2066/67 actual sales is higher than the budgeted sales.

4.3 Statistical Tools Used

To, find out the nature of validity of budgeted sales and actual sales of different year from 2063/64 to 2067/68. We have to calculate mean, standard deviation and coefficient of variance of budgeted and actual sales of NOC products. To, find out the correlation between the budgeted and actual sales. Karl Pearson coefficient of correlation (r) is determined for the purpose of calculation of (r). Budgeted sales (x) are assumed to be independent variables and actual sales (y) are assumed to be dependent variables. The correlation between x and y variables should be positive. To know the significance of the calculated value of r it's calculated below:

Table 4.2
Standard deviation, coefficient of variance and correlation coefficient
between budgeted sales and actual sales. (In KL)

Fiscal year	Budgeted sales (x)	Actual sales (y)
2063/64	686715	768525
2064/65	669351	727763
2065/66	658884	848022
2066/67	834500	1057196
2067/68	828000	1154506
Mean (x)	735490	911202.4
Standard deviation	78718.39	166438.81
Coefficient of variance (CV)	10.7	18.27
correlation	0.9296	

Source: appendix IV

The above analysis show that budgeted sales (x) have more variable than actual sales. The calculated mean of actual sales is higher than budgeted sales. C.V of budgeted sales is higher than actual sales. Higher C.V indicated more variable of data than lower C.V. therefore, it is concerned that variability of budgeted sales in NOC is high. Standard deviation of budgeted sales is higher than actual sales. Therefore actual sales are the less variable than planned sales.

The significant of r can be tested by the help of probable error of r. the detail calculation of r and probable error is presented in above table. We have calculated value of r as 0.9296.

The calculated value of r shows there is positive correlation between budgeted sales and actual sales. Since the value of r is 0.9296. But there is low positive correlation between budgeted sales and actual sales.

The significant of r is tested by the help of probable error of r. we have probable error of P.E =0.041. Since probable error (P.E) is less than the value of r is definitely insignificant so, it can be said that actual sales went on the same directions that of budgeted sales.

Similarly a regression line can also be fitted to show the degree of relationship between budgeted sales and actual sales. Budgeted sales and actual sales forecast the possible actual sales with given budgeted figures. For this purpose, actual achievement has been assumed to be dependent upon budgeted. So, the regression line of achievement y on budgeted x is as follows:

Table 4.3
Summary of mean, SD and correlation coefficient r

Tactical tools	Budgeted sales (x)	Actual sales (y)
Mean	735490	911202.4
Standard deviation	10.7	18.27
Correlation coefficient (r)	0.9296	

$$y - \bar{y} = r \frac{\sigma_y}{\sigma_x} (x - \bar{x})$$

$$y - 911202.4 = 0.9296 \frac{166438.81}{79718.39} (x - 735490)$$

$$y = 1.9409x - 1427476.51$$

The regression line shows positive relation between budgeted sales and actual sales. It is clear that the actual sales are in increasing trend and actual sales will increase by 0.9823 units in budgeted sales units. By help of this regression equation, we can ascertain the expected sales achievement with given value of budgeted sales. Supposed (x) ascertain in expected sales achievement of figure 2066/67= 10000KL.

So, $X = 10000$ units

Then expected sales achievement

$$Y = (0.9823 \times 10000) + 1.6188$$

$$Y = 9824.6188$$

Therefore $y = 9824.6188$ KL

If the relationship between budgeted sales and actual sales remain same as previous year then the achievement sales for the year 2066/67 will be 9824.6188 KL.

To find out actual future sales for given time period, least square equation method will show the relationship between given time and actual sales. This method assumes that a sale is constantly changed with changed in time and such changed can be expressed as component of time series.

To fit straight line trend, the time factor is considered as independent factor (X) and sale (y) as dependent factor, dependent upon time.

$$yc = a + bx$$

Where,

yc = slope of total sales

a = constant

b = slope of trend line

x = Independent variable

Table 4.4

Fitting straight line trend by simple regression

year	Actual sales 'y' in kl	X= (x- year)	x ²	xy
2063/64	768525	-2	4	-1537050
2064/65	727763	-1	1	-727763
2065/66	848022	0	0	0
2066/67	1057196	1	1	1057196
2067/68	1154506	2	4	4618024
	y= 4556012	x= 0	x ² = 10	xy= 3410407

Fiscal year 2065/66 assumed the base year, therefore, the value of x in 2065/66 is zero and negative for the year before 2065/66 and positive for the year after 2065/66.

To fit straight line trend, the time factors is considered as dependent factor and sales is considered as dependent factor upon time. Then the straight line trend of actual sales y upon time expressed by:

$$y = a + bx$$

$$\text{Then, } a = \frac{\sum y}{N} \dots\dots\dots (1)$$

$$b = \frac{\sum xy}{\sum x^2} \dots\dots\dots (2)$$

Substituting the value of above figure or equation

$$\text{We get, } a = \frac{4556012}{5} = 911202.4$$

$$b = \frac{3410407}{10} = 341040.7$$

Now,

$$Y = a + bx$$

$$Y = 911202.4 + 341040.7 \times x$$

For the fiscal year 2068/069 the value of x will be 3 due to the assumed base year 2065/066.

We have

$$Y = 911202.4 + 341040.7 \times 3$$

$$Y = 1934324.5$$

The trend shows the positive figures of sales for future. If the sales trend of past year will be continue for future. If the trend does not change, the possible sales will be 1934324.7 KL.

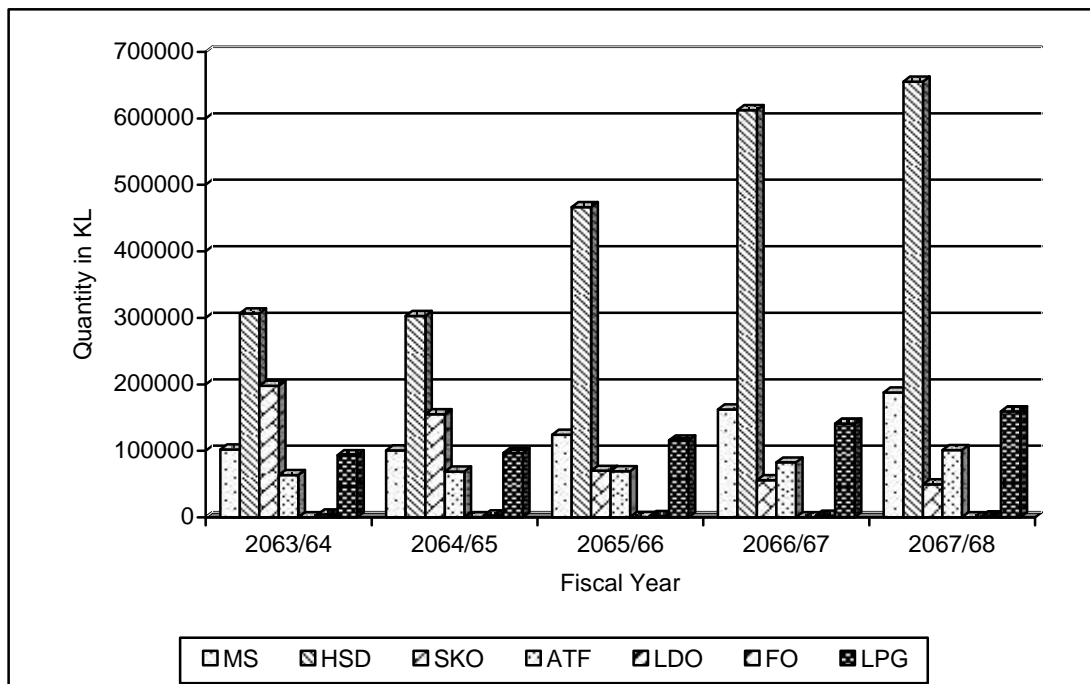
Table 4.5

Budgeted sales and actual sales of NOC by product and time for the year 2063/64 to 2067/68

	year	MS	HSD	SKO	ATF	LDO	FO	LPG	Total
Budgeted sales	2063/64	76097	308076	231463	68340	88	2651	77594	686715
	2064/65	81817	292381	225007	66100	292	3754	81005	669351
	2065/66	98435	299419	192576	63650	180	4624	93563	658884
	2066/67	114500	360000	180000	72000	-	-	108000	834500
	2067/68	114000	456000	66000	78000	-	-	114000	828000
	Actual sales	2063/64	101912	306687	197850	63778	179	4558	93562
2064/65		100842	302706	155215	68938	306	2919	96837	727763
2065/66		124169	466468	70089	69525	377	2171	115813	848022
2066/67		162274	612505	55788	82631	238	2589	141171	1057196
2067/68		187641	655128	49495	101314	227	1415	159286	1154506

Source: NOC profile 2068

Figure 4.2
Sales of petroleum products



In the above figure and table show that the actual sales unit of different types of petroleum products from the fiscal year 2062/63. This graphical and tabular presentation indicates the higher sales units of kerosene (SKO) then other products.

The sales quantity of petrol (MS) is almost equal in every year and sales quantity of light diesel oil (LDO) is lower.

4.4 Purchase Budget

After preparing the sales plan next preparing purchase budget in non manufacturing enterprise. In the case of non manufacturing enterprise the sales plan must be converted to purchase requirement. The purchase budget is an estimate of the quantity of goods to be demanded during the planned period. The purchase is based as the capacity of

storage and the requirement of sales plan. The main objective of the purchase plane is to fulfill the sales plan requirements.

The following table shows the target and actual purchase of NOC from fiscal year 2063/64 to 2067/68

Table 4.6

Budgeted purchase and actual purchase of NOC (In KL)

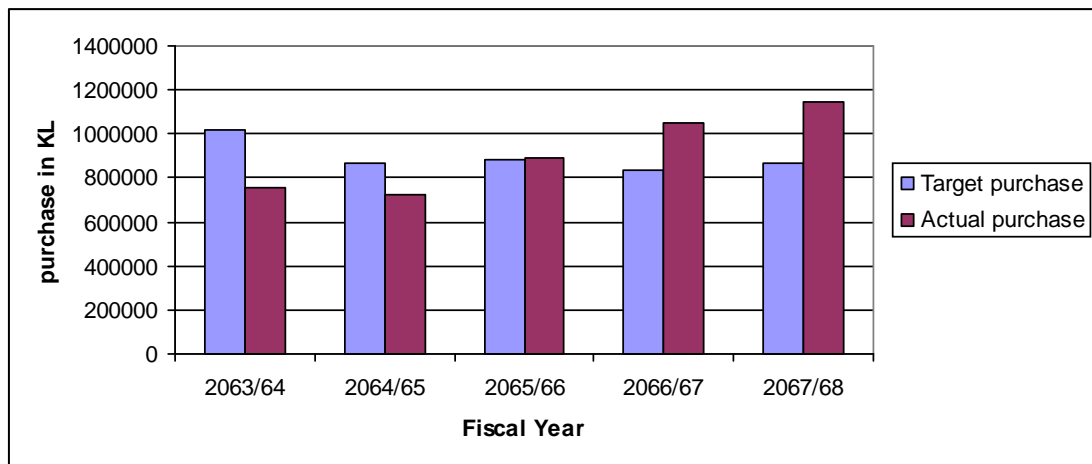
year	Target purchase	Actual purchase	% achievement of purchase
2063/64	1015546	752446	134.96
2064/65	871000	725623	120.0
2065/66	883347	888056	99.47
2066/67	834000	1050530	97.39
2067/68	864000	1145183	95.45

Source: corporation profile 2068.

The purchase plan depends upon sales plan. The above table shows the target and achievement purchase of NOC in different year. According to the table, the achievement of target purchase has been fluctuation of the different years. In fiscal year 2065/066 to 2066/067 and 2067/068 NOC has not achieve target. Only in 2063/064 and 2064/065it has highly fulfilled the target. It means there is no so effective planning system for purchase. The figure of table can be shown more effectively in line chart.

Figure 4.3

Budgeted purchase and achievement of NOC



Above figure shows the very nearest point for target and actual purchase in fiscal year 2063/064 and 2064/065 and shows the large gap between target and actual in FY 2067/068. Actual purchase exceeds target purchase only in 2066/067.

In order to calculate the variability of purchase the arithmetic mean, standard deviation and coefficient of variation from available data from FY 2063/064 to 2067/068 for five years data can be calculated as below:

Table 4.7
Mean, standard deviation, coefficient of variation, coefficient of correlation and probable error of budgeted purchase and actual purchase:
(In KL)

Description	Target purchase (x)	Actual purchase (y)
mean	893578.6	912367.6
Standard deviation	63111.06	163909.35
Coefficient of variation(CV)	7.06	17.97
Correlation coefficient (r)	-0.5830	
Probable error (P.E)	0.4775	
6 × P.E	2.865	

Source: appendix V

The above analysis shows that budgeted purchase is more variable than actual purchase. The calculated mean of actual purchase is greater than budgeted purchase. C. V of budgeted purchase is lower than actual purchase. Higher C.V includes more variable of data than lower C.V. Therefore, it is concluded that variability of budgeted purchase in NOC is high. S.D of budgeted purchase is higher than actual purchase.

The significance of 'r' can be tested by the help of probable error of 'r'. The detail calculation of 'r' and probable error is presented in above table. We have calculated value of 'r' as -0.5830. The actual value of 'r' shows there is negative correlation between budgeted purchase and actual purchase.

There is very low negative correlation between budgeted purchase and actual purchase.

Similarly a regression line can also be fitted to show the degree of relationship between budgeted purchase and actual purchase.

To calculate the regression line of purchase budgeted (x) is assumed as independent and achievement (y) as dependent variable and get regression line 'y' on 'x' as under:

Table 4.8
Summary of AM, SD and 'r' **(In KL)**

Statistical tools	Budgeted purchase (x)	Actual purchase (y)
mean	893578.6	912367.6
S.D	63111.06	163909.35
r	-0.5830	

Source: appendix V

$$y - \bar{y} = r \frac{\sigma_y}{\sigma_x} (x - \bar{x})$$

$$y - 4561838 = -0.5830 \frac{163909.35}{63111.06} (x - 912367.6)$$

$$y = -1.5141x + 5943292.75$$

The regression line shows that positive relationship between budgeted purchase and actual purchase.

It is clear that the actual purchase is in increasing trend and actual purchase will decrease by 0.045 units in budgeted purchase unit. By help of this regression equation we can ascertain the expected purchase achievement with given value of budgeted purchase,

Table 4.9
Fitting straight line trend by least square method of purchase achievement of NOC

year	Actual purchase y 'ooo' kl	X=(x-year)	x ²	xy
2063/64	752446	-2	4	-1504892
2064/65	725623	-1	1	-725623
2065/66	888056	0	0	0
2066/67	1050530	1	1	1050530
2067/68	1145183	2	4	4580732
	y= 4561832	x= 0	x ² = 10	xy= 3400747

Assumed the base year 2065/066

The trend line equation is

$$y = a + bx$$

$$\text{Then, } a = \frac{\sum y}{N} \dots\dots\dots (1)$$

$$b = \frac{\sum xy}{\sum x^2} \dots\dots\dots (2)$$

Putting the value of table in above both equation

$$\text{Then, } a = \frac{4561838}{5} = 900367.6$$

$$b = \frac{3400747}{10} = 340074.7$$

Now, putting this values of a and b are trend line equation.

We get, $y = a + bx$

$$y = 900367.6 + 340074.7 x$$

The straight line trend shows the negative purchase figure. The purchase figure increase by 340074.7 KL per year if year is past purchase trend will continue in figure using this trend line purchase for 2068/069 estimate (x) is assuming 3 the base year 2065/066.

$$y = 900367.6 + 340074.7 x$$

$$y = 900367.6 + 340074.7 \times 3$$

$$y = 900367.6 + 1020224.1$$

$$y = 1920591.7$$

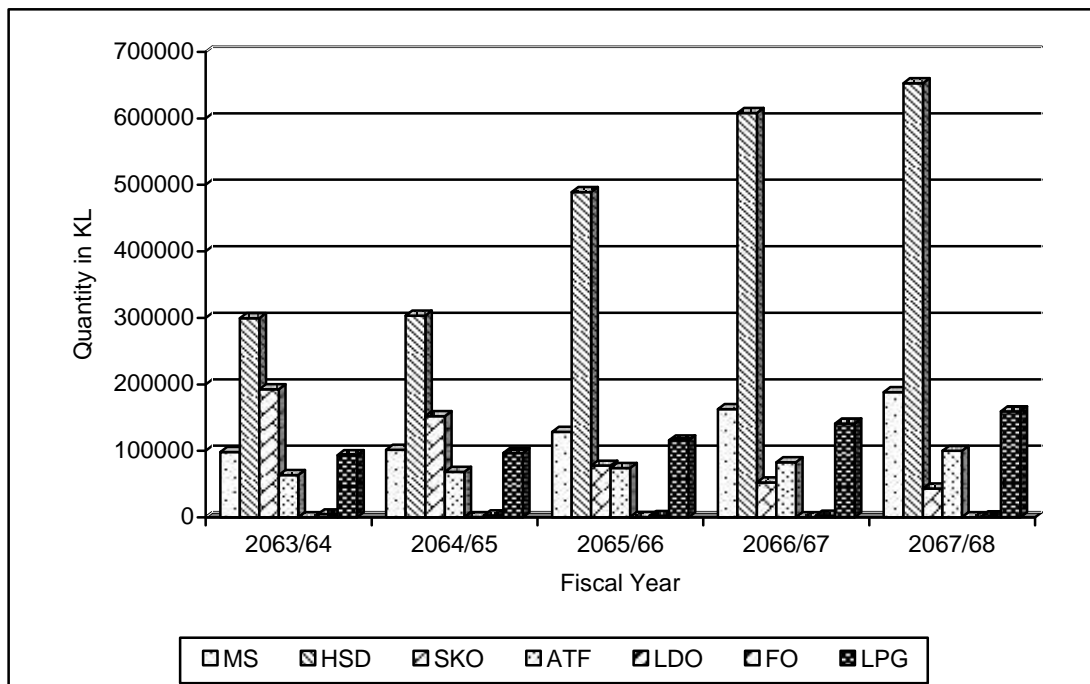
According to this trend the purchase of 2068/069 will be 1920591.7 KL

Table 4.10
Target purchase and actual purchase of NOC by time and product

	year	MS	HSD	SKO	AFT	LDO	FO	LPG	Total
Budgeted purchase	2063/64	71482	349623	426744	71697	6000	30000	60000	1015546
	2064/65	71816	295810	370249	54345	316	15345	63119	871000
	2065/66	72833	313188	308815	88720	540	14328	84923	883347
	2066/67	114000	360000	180000	72000	-	-	108000	834000
	2067/68	120000	480000	66000	84000	-	-	114000	864000
	Actual purchase	2063/64	98435	299419	192576	63650	180	4624	93562
2064/65		101624	303212	152167	68534	308	2940	96837	725623
2065/66		128372	489219	77799	74286	380	2188	115813	888056
2066/67		162902	608067	52714	82824	240	2612	141171	105053
2067/68		188082	652764	43399	99990	228	1434	159286	1145183

Source: NOC Profile 2068

Figure 4.4
Actual purchase of petroleum products



This above graphical and tabular presentation indicates the import of different kinds of petroleum products from the fiscal year 2063/2064 to 2067/2068. This table and diagram show the different quantity of the petroleum products of different year by the products.

The import quantity of (HSD) diesel is higher than other products in every year. The import quantity of super kerosene oil (SKO) is in decreasing trends.

4.5 Liquefied Petroleum Gas (LPG)

It is a mixture of propane and butane in the ratio of 55.45 and mainly used as domestic cooking fuel. It is also used as fuel for small size vehicles like microbus and tempo. Now a day the demand of LPG also is in increasing trend.

The actual import and sales of LPG have been presented in the following table.

Table 4.11
Import and sales of LPG

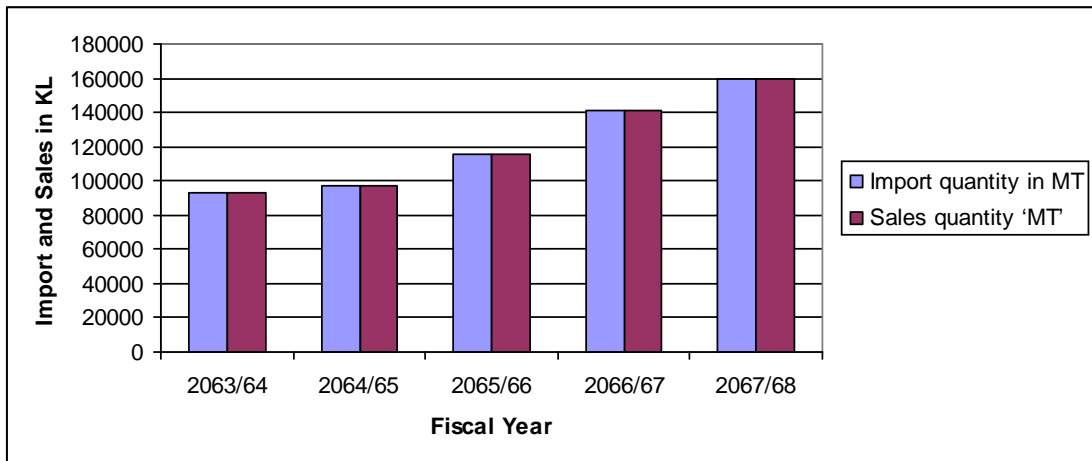
year	Import quantity in MT	Sales quantity 'MT'	In/dec%
2063/64	93562	93562	17.31
2064/65	96837	96837	4.40
2065/66	115813	115813	15.5
2066/67	141171	141171	3.50
2067/68	159286	159286	19.60
total	502615	502615	3.5

Source: NOC profile 2068

The above table shows that the import and sales quantity of LPG is in increasing trend due to the increasing trend of customers demand.

We can present the import and sales quantity of LPG more effectively by the following diagram.

Figure 4.5
Import and sales quantity of LPG



The above diagram shows that sales quantity of LPG is increasing every year.

4.6 Sales and Distribution System of NOC

NOC Is regular product included petrol, diesel, kerosene, aviation fuel oil and LDO. To meet the demand for the petroleum products all over the country NOC has a fairly wide distribution network only through private dealers. The numbers of private dealers in the country at present is over 1850. NOC is five seasonal offices six branches and numbers of sales deposit make the distribution of petroleum products to these dealers.

The consumer in general gets the organization from these outlets. So the corporation has given equal importance to the infrastructure requirements of these outlets. Compliance to follow the dealer's regulation is mandatory for all of them. Keeping in view of government intention of deregulation of this sector NOC has adopted a vision to provide it is service and product with some added value and direct catering to it is estimated consumer by setting up company owned and company operated and company owned and dealers operated pumps.

In meeting the nation wide demand for petroleum products, NOC has basic challenges to extend its distribution network further to cover the hilly and mountainous areas of the country, which are only scantily lowered at present. Future marketing efforts of NOC will be directed towards expansion of its market even in the remote parts of the country.

The POL product of NOC are consistency gaining popularity as shown by the consistent increase in its demand some of the POL products are so popular that they have acquired essential goods. The POL products are related to our basic needs. So the POL products are gaining popularity.

POL products such as kerosene, diesel and petrol are marketed through dealers appointed by the company. These dealers supplies to retainers and their respective areas covering all the fourteen zones.

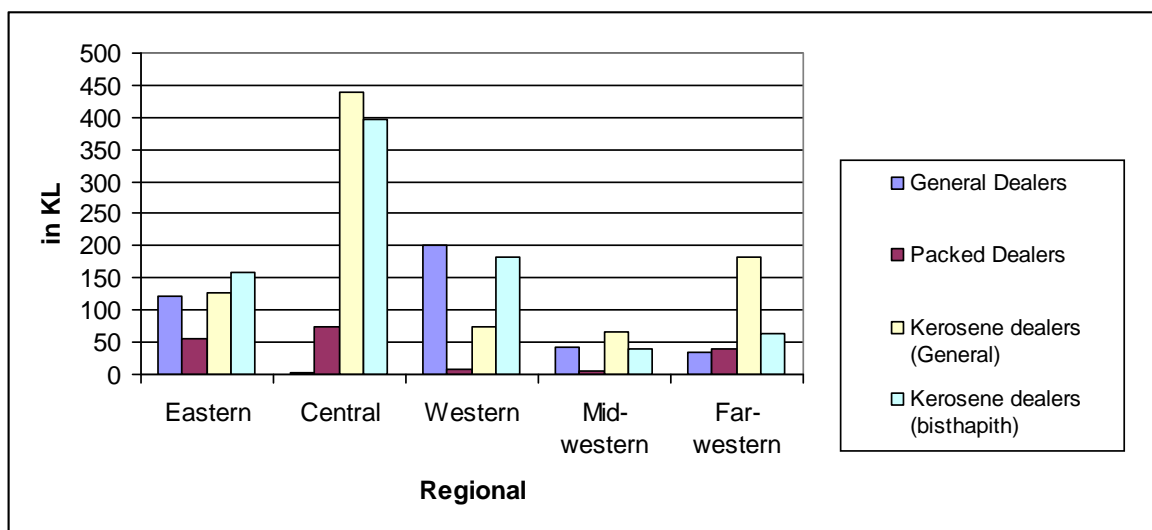
The number of dealers located in the different places of the country is as follows:

Table 4.12
Region-wise Petroleum Dealers (Till 2065/09/03)

	Eastern	Central	Western	Mid-western	Far-western
General Dealers	122	3/2	201	43	35
Packed Dealers	56	73	9	5	41
Kerosene dealers (General)	128	439	73	65	182
Kerosene dealers (bisthapith)	160	398	183	39	63
Total	466	1282	466	152	157

Source: NOC Profile

Figure 4.6
Region-wise Petroleum Dealers (Till 2067/11)



From the above data, it is clear that the highest sales quantity is in central region of Nepal. It covers 1282 of total sales. The lowest sales are in the mid-western region.

petroleum products is in mid-western region of Nepal. It covers only 152 of total sales.

POL products such as kerosene, diesel and petrol are marketed through dealers appointed by the company. These dealers supplies to retailers of their respective areas covering all the fourteen zones. But the aviation fuel distribution direct from NOC. The distribution system is usually followed by NOC for marketing.

NOC Dealers Consumer
 NOC Consumers

Part

Analysis of Primary Data

An empirical investigation has been conducted in order to find out various aspects of Accounting Information System. The major tools used for this purpose is an option questionnaire. A total of 513 sets of questionnaires were distributed to the various level s of employees. Out of which all filled questionnaires were collected from the respondents. The response received from various respondents have been arranged, tabulated and analyzed in order to facilitate the descriptive analysis of the study.

4.7 Reason behind not able to Supply the Petroleum Products as per Demand

Table 4.13
Reason behind not able to supply the petroleum products as per demand

Reasons	Frequency	Percent
Lack of proper Distribution Centers	0	0
Obstacles Created by IOC	0	
Low price of POL in Comparison to International Market	6	100
Total	6	100

Source: Field Survey

Nepal oil Corporation has faced different problems. The above table presents the response of the NOC resource persons about the reasons of the NOC not able to supply the petroleum products as per demand. According to the respondent the NOC have not able to supply the petroleum products because if the low price of POL in comparison to international market.

4.8 Simplify the Process of Import of NOC

NOC have only one importer of the petroleum products which is IOC. So it faces many difficulties while importing the petroleum products. In order to simplify the import process the Nepal Oil Corporation can do the following process according to the respondents view.

Table 4.14
Simplify the process of Import of NOC

Process	Frequency	Percent
Minimize Dependency of NOC on IOC	0	0
Try to Import POL from other countries	3	50
Pressurize India for easing the import process	3	50
Total	6	100

Source: Field Survey

The above table presents the simply process of import of NOC. It is seen in the table that 50% of the respondent think that it is better to try import POL from other country. Similarly 50 percentage of the respondent suggested that giving pressure to the India is also way of the easing the import process.

4.9 Ways of Increase the Incremental Demand of POL Every Year

Table 4.15

Ways to increase the international demand of POL Every Year

Ways	Frequency	Percent
Try to make oil agreements with other oil producing countries	4	66.67
Try to import oil through China	2	33.33
Total	6	100

Source: Field Survey

NOC should be done different remedies to increase the rate of supply to cover the incremental demand of petroleum product every year. The above table demonstrates the ways to increase the incremental demand of POL. It is revealed that 66.67 percentage of respondents assumed that try to make oil agreements with other oil producing countries and 33.33 percentage of the respondent feel that import of oil through China is the ways to increase the incremental demand of POL every year.

4.10 Steps to be Adopted to Run the NOC in a Managed Way

NOC faced different management related problem. It should adopt diverse steps to run the NOC in a managed way.

Table 4.16

Steps to be adopted to run the NOC in a Managed Way

Steps	Frequency	Percent
Privatization the NOC	0	0
Develop the skills of NOC personal's	1	16.17
Implement the public private partnership in managing NOC	5	83.33
Total	6	100

Source: Field Survey

The above table presents the steps to be adopted to run the NOC in a managed way. Interpretations according to the above table 83.33 percentage of the respondent think that implement the public private partnership in managing NOC is the way of managing NOC. Likewise, 16.17 percentage of respondent feels that a development of the skills of the NOC personals is way to run the NOC in a managed way.

4.11 Reason behind continuous price hike of POL by NOC

The government regularly hikes the price of petroleum products in the wake of soaring crude oil prices the world over, but the move prove so unpopular that it has forced to suspend its fuel hike. Protectors are all over the place, they oppose the price hike and call a general strike, and sensing that it may add fuel to the fire, and then government under political consideration compels to decide to take back its decision of price hike.

Table 4.17

Reason behind continuous price hike of POL by NOC

Reason	Frequency	Percent
To maintain hike of POL in international markets	0	0
Due to vested interests of certain groups in oil business	6	100
Total	6	100

Source: Field Survey

The above table reflects the reasons behind continuous price hike of POL by NOC. It is seen in the table that all respondent feels that due to vested interest of certain groups in oil business is the main reason of continuous price hike of POL by NOC.

4.12 Reason behind buying rate of POL is higher than the selling rate in Nepal

Government forces Nepal OIL Corporation to sell oil well below what it costs to buy, the debts of NOC is rising and India has cut back its petroleum supply to Nepal. So the buying rate and selling rate is not in balance.

Table 18

Reason behind buying rate of POL is higher than the selling rate in Nepal

Reason	Frequency	Percent
Due to politicalization in NOC	1	16.67
Due to social responsibility if NOC	2	33.33
Due to the protest of different groups	3	50
Total	6	100

Source: Field Study

According to the above table it can be concluded that the main reason behind buying rate of POL is higher than the selling rate in Nepal is due to the protest of different groups i.e. 50 % of the respondent. Likewise 33.33 and 16.67% of the respondent feels that buying rate is higher than selling rate because due to politicalization of NOC and due to social responsibility.

4.13 Ways to minimize the Transport Cost of POL

Table 4.19

Ways to minimize the transport cost of POL

Ways	Frequency	Percent
Short cut routes should be opened soon	0	0
Pipeline and railway should be built	0	0
Water canal should be made to join up to sea	6	100
Total	6	100

Source: Field Survey

4.14 Measures to make the subsidy in kerosene more effective

Subsidy is not new and as the concept of welfare state is getting global, more nations are practicing this form of protection. Today, no matter how hard they preach in support of free trade, in reality, countries such as the United States and Japan too provide huge subsidies to their farmers. But here in the context of Nepal, the efficiency of the subsidy is open to question because some researchers have estimated that heavily subsidized kerosene and LPG does not reach targeted households. They are reaped of the air, by the richer half of Nepal's urban population.

Table 4.20

Measures to made the subsidy in kerosene more effective

Ways	frequency	Percent
Opening designated centers for subsidy purpose	0	0
Subsidy should be given only from the designated centers and government should monitor it	0	0
By stopping subsidy to cut off the deficit of NOC	6	100
Total	6	100

Source: field survey

The above table exhibits the measures to make the subsidy in kerosene more effectively. All of the respondents feel that the subsidy be stop to cut off the deficit of NOC. It just cannot afford to make subsidy its best policy forever. It is high time the government took some tax off petroleum products.

4.15 Measures for effective distribution of POL throughout Nepal

The oil shortage is seen on the market time to time in Nepal. People are waiting hours to fill up their vehicles in the various petrol pumps of Kathmandu, and no one knows how long we will have this problem NOC should make distribution system effective.

Table 4.21

Measures for effective distribution of POL throughout Nepal

Measures for Distribution	Frequency	Percent
Ensuring proper distribution plan suited to geography and demand	4	66.67
Open the new petrol pump by NOC itself	2	33.33
Increase the territorial distribution centers of NOC	0	0
Total	6	100

Source: Field Survey

The above table reveals the measures for effective distribution of POL throughout Nepal. According to the above table 66.67% of the respondent feels that to make distribution plan suited to geography and demand. Likewise only 33.33% of the respondents think to open the new petrol pump by NOC itself is the effective measures for the distribution of POL throughout Nepal.

4.16 Make the HR of NOC more skilled motivated and professional

Human resource is the key element for every organization. To retain good staff and to encourage them to give of their best while at work requires attention to the financial and psychological and even physiological rewards offered by the organization as a continuous exercise.

Table 4.22

Make the HR of NOC more skilled, motivated and professional

Skills	Frequency	Percent
Participating in decision making	2	33.33%
Training	1	16.67%
Making their job challenging	-	-
Reward and punishment	3	50%
Total	6	100

Source: Field Survey

The above table provides the different views of the respondent about the how can management make the human resource of NOC more skilled, motivated and professional. 50% of the respondent thinks that reward and punishment is the best way to motivate the employee so on 33.33% of the employee feels that participating in decision making is the best way where as only 16.67% of the respondent feels that training is the effective way to make the HR of NOC more skilled motivated and professional.

4.17 Priority Goal of NOC

Table 4.23
Priority goal of NOC

Priority goal	Frequency	Percent
Social responsibility	3	50
Balancing social responsibility and profit making	3	50
Profit making	0	0
Total	6	100

Source: Field Survey

According to the above table 50 percentage of the respondent are in the side of social responsibility and other 50 percentage are of balancing social responsibility and profit making should be the priority goal of the NOC.

4.18 Solutions of burgeoning crises seen in the supply of POL

Government just cannot afford to make subsidy but implied best policy forever. Something must be done to overcome Nepal's petroleum problems.

Table 4.24

Solution of burgeoning crises seen in the supply of POL

Solution	Frequency	Percent
Privatization is the solution	3	50
Privatization is not solution	3	50
Total	6	100

Source: Field Survey

The above table provides the different ways of the respondent about solution of burgeoning crises seen in the supply of POL. According to the above table 50 percentage of the respondent feels that the privatization is the solution of the burgeoning crises seen in the supply of POL likewise remaining 50 percentage feels that this privatization is not solution.

4.19 Major findings of the study

-) NOC doesn't have a practice of systematic and scientific sale planning and budgeting.
-) The corporation has no clear pricing method.
-) NOC does not carry out any kind of sales research to know the consumer's reaction and the external forces that could affect NOC's business in the long run,
-) Budgeted and actual sales have been prepared by NOC in quantity but not in rupees.
-) The budgeted purchase and actual purchase are not correlated.
-) NOC has so many dealers in every retail outlets to further enhance the image if NOC in the market.

-) NOC has so many dealers in every prime location of the cities and highways. Some of NOC's dealers have built very good retail outlets to further enhance the image of NOC in the market.
-) Every price hike decision turns out to be a big propaganda or issue in the country.
-) NOC doesn't have clear-cut goal, objectives, policies, long term plans, strategic programs etc.
-) Regression line about sales and purchase of NOC indicates a positive trend.
-) Least square straight line of sales trend of NOC shows that sales will be high in future if present efforts are frequently being improved.
-) There is no good performance evaluation method of corporation.
-) NOC had not forecasted sales on realistic ground because there is not significant and low positive correlation between budgeted and actual sales which indicate that if targets are high, achievement won't also be high.
-) Top managers are less committed for budgeting although they have high participation in decision making and implementation, employees are moderately responsible for the deviation between budgeted and actual.
-) NOC prepares the sales plan and purchase plan only to fulfill the formality, NOC has not able to implement the plan and sales plan effectively.
-) At last, overall sales plan is also not so clear and we can say that the budgeting procedure followed by NOC is not so clear and reliable the performance of NOC is very weak.

-) NOC is unable to supply the petroleum products as per demands of market due to the low price of POL in internal market in comparison to in international market.
-) To meet the incremental demand to POL. NOC should simplify the import process either by importing from other countries or by pressurizing India for earning the import process.
-) NOC can be well managed by developing the skill of NOC personals and by implementing the public private partnership in managing NOC.
-) NOC is a public enterprise and so it has social responsibility but reason behind the improper sales planning of POL is due to the politicization of NOC and vested interest of certain groups.
-) Due to land lockness of Nepal, import cost is very high and so pipeline and railway should be made from sea coast to Nepal that is comparatively cheaper.
-) Subsidy plan should be implemented from certain authorized centers and effective distribution of POL can be materialized by ensuring proper distribution plan suited to geography and demand.
-) Reward and punishment, participating in decision making and timely training can make the personals of NOC more skilled, motivated and professional.

CHAPTER-V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Nepal oil corporation Ltd is one of the largest public sector organizations in the republic of Nepal. It has been supplying continually such a vital commodity as POL products to the general public enterprises aviation field and the development projects of the national and international levels. It has been making significant contribution to the economic development of the country.

Today the concept of privatization is also arising in this sector smoothly. NOC has been trying to improve it self as a capable institution in copying with the new policy guidelines of the elected government by adopting itself within the framework of objectives of Government of Nepal aimed at liberalization of economy and transition to a market oriented economy based on competition and efficiency. The lack of technology, poor economic conditions, lack of skilled man power etc. therefore all POL

Nepal being on of the land locked countries of the south-Asia has to depend on India for the supply and distribution of various petroleum products as the eastern southern and western part of the country is attached with India. Although, there is some sources of petroleum goods in our country. They have not been exploited due to products have to be imported from other countries imports as will as distribution of POL products in Nepal were initiated first by the Burma and then by the standard vacuum oil company and the Indian oil corporation (ICO) in late 1940s. Realizing the need to institutionalize the supply as will as distribution of POL products in the country it have served regularly.

NOC headquarter Kathmandu has cover the years expanded and now has 5 regional offices, branch offices, fuel depots. Aviation fuel

deposit with total existing storage capacity of 10309 kiloliter (L) and employing 440 permanent work forces. The highest policy making and controlling body if NOC is Board of directors. The board is represented by all the share holders currently the chief executive officer (CEO) of NOC is the executive chairman who has the overall responsibility of ready to day operations besides the chairmanship of NOC board.

The operations of NOC are coordinated and executed by 3 divisions, each headed by deputed managing director.

The present study has undertaken to examine sales planning practice by NOC. The study has tried to assess the impact of sales planning and budgeting of petroleum products applied by NOC. Similarly it has tried to analysis problems and prospect of sales planning of NOC. The scope of study is limited for this micro level analysis. The five years 2063/64 to 2067/68 trend of data had been examined.

Both primary and secondary data are used in the study. The data has been analyzed with various statistical techniques like mean, standard deviation, graphs, correlation, regression, covariance, time setting analysis. The condition of import and sales of POL products purchase policy and sales system applied by NOC, budgeted and actual sales have also been analyzed.

Related literature has been reviewed with consist of books, reports, periodical articles and dissertations.

5.2 Conclusion

As per objective and analysis of the study following conclusion have been drawn as bellow.

-) The sales planning and achievement seems to be satisfactory for expansion but there is no particular person to prepare appropriate sales plan. NOC makes sales forecasting on realistic ground

because there is highly significant and positive correlation between budgeted and actual sales which indicate that if targets sales are high achievement there will also be high of actual sales.

) NOC has followed a fluctuating procurement policy because it depends upon the IOC. Generally, it has been policy of keeping finished goods inventory equal to one years supply of future sales, though the policy is not strictly followed.

) Profit planning is the life blood of the organization. Any business organization could not run for a long period of time without profit plans helps manufacturing or non-manufacturing, public enterprises to improve overall aspects of their operation.

) Profit planning and control means the development and objectives, goals and motivation to achieve the objectives and goals, effectively and efficiently. It is one of the most important management tools for planning and controlling business operations.

) The profit plan is one of the broad plans of business organization. It is divided in two groups as functional plan and financial plan. Functional plan includes sales plan, productions plan, purchase plan, labors plan, personal plans and expenses plan. The financial plan includes cash flow plan, capital expenditure plan, projected income statement and projected balanced.

The sales plan and budget is the most important part of profit planning and control for every business organization. It provides the basic management decisions about marketing. It is an organized approach for developing comprehensive sales plan. If the sales plan is not realistic, most of other parts of profit plan are not also realistic. Therefore sales plan is the most essential parts of every business organization.

Two types of sales plan are prepared. They are strategic sales plan and tactical sales plan. There are various relationships between sales plan and profit plan. Profit plan can not be consider with out sales plan, with out effective implementation of sales plan with its significance performance, the profit plan can not get success.

5.3 Recommendations

Based on the summary and figures of study of sales planning of NOC, some important suggestions have been recommended to improve the current policy of the country. It seems necessary to develop improvement process of sales planning in the NOC. It is hoped that falling recommendation will provide to be used for the management of the corporation.

-) Sales planning and budgeting should be understood by every managers of the corporation. Role of budget and planning should be understood by every managers of the corporation. Leakage should be completely controlled. Adulteration of different types of products must be controlled. Corporation should be developed the detail systematic periodic performance to locate by responsible person for accomplishing planning objectives.
-) For the better marketing planes and quick decisions in the comprehensive atmosphere, NOC should computerize all its activities so as to understand the exact financial position of the company at any point of time.
-) The availability of in line information regarding import, storages and sales of the products would really help in planning in certain strategic marketing move in the field. Moreover the use of modern technologies in the various activities will help to increases the productivity and reduce the marketing cost.

-) NOC should give proper attention to main power planning unnecessary pressure from the government should be avoided. The manager should be selected by the corporation who is more familiar having advanced knowledge about concern business. When problems arise he can deal easily and handle effectively.
-) The corporation should have depth analysis of corporation's strengths and weaknesses. It should try to overcome the weakness by using the strengths.
-) NOC should restructure its pricing modalities and try to do the pricing as per the actual cost basis. Whenever NOC gets new pricing from IOC.
-) NOC must have clear cut goal, objective, and policy, long term plan, strategic programmed etc. Sales and purchase budget must be prepared on realistic manner. NOC should be responsible and committed to accomplish them within the specified period of time.
-) NOC can establish a different set of pricing approaches for different customers. The commercial users are getting more benefit from the subsidized price of kerosene and LPG as they are paying the same price as the low income people pay for kerosene and housewives pay for LPG. NOC can suggest the government for the dual pricing of LPG so as to minimize the loss of LPG.
-) As NOC does not have any detail selling station as their properties, they should either try to buy or enter into separate agreement with most of the petrol pumps located at the prime area of the country. This ensures to retain most of the market share with NOC even in the changing context.

-) Corporation should develop the details systematic periodic for performance report assigned by responsible person for accomplished planning objectives.
-) Regarding the transportation of POL, NOC should issue tenured for the transportation in some areas and try to segment transport in different categories so as to bring down the transportation cost and make the transportation business competitive one.
-) There should be annual evaluation of the statements of the broad objectives of the corporation by the executive committee.
-) NOC should further try to reduce the cost that would have been incorporated while deriving the refinery transfer price by IOC and insist for all bonded product in real sense. This would help to reduce the cost of the petroleum products and NOC would be able to offer more competitive retail selling price in the market.
-) Integrated the price of POL in accordance with the international market in a flexible manner.
-) Skill of NOC personal should be updated and they should be motivated by participating in decision making and importing justice over them and their activities.
-) Depolarization of NOC is must and its autonomy should be given on the skilled hands, so that NOC can balance is dual goals and social responsibility and profit making.
-) Concept of public private partnership can be viable for managing the oil import and distribution. Proper strategy should be made towards this concept.
-) Pipeline and railway can be the best way to reduce the high import cost of POL and so the government should made intention towards this end.

-) Subsidy plan should be well regulated by designating certain caterers for subsidy distribution.
-) NOC should insist the government to allow the NOC to keep certain margin for its overhead expenses development and investment activities. If there is decline in the costing due to fall of IOCs monthly price drive on the basis of international pricing, it should try to pass on some benefit to the consumers too.
-) Finally, NOC should restructure its pricing methodologies and try to do the pricing as per the actual cost basis. Whenever NOC gets new pricing from IOC, selling price and dealers of tentative brakes down and justification have to be provided to the public and press.

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Appendix I
Problem and prospect of NOC

Analysis of primary Data

Name of the respondent.....

Position:

Department:

Sex:

Would you please answer the following questions properly? Please tick () for choosing your answer.

Why is NOC not able to supply the petroleum product as per demand of the people?

- a. Due to lack of proper distribution centers,
- b. Due to the obstacles created by IOC,
- c. Due to low price of petroleum products in comparison to

International market that makes NOC run in deficit,

2 what can the NOC do to simplify the process of import?

- a. Minimize the dependency of NOC on IOC,
- b. Try to import petroleum products from other countries,
- c. Pressurize India for easing the import process,

3. What should be done to increase the rate of supply to cover the incremental demand of petroleum product every year?

- a. Look for the further ways to make the oil agreement with other oil producing countries,
- b. Try to import oil through China,

4 What measures or steps should be adopted to run the NOC in a managed way?

- a. Privatization the NOC,
- b. Develop the skills of NOC personal's
- c. Implement the concept of public-private partnership in the management of NOC,

5 What is the reason behind perennial price hike of petroleum product by NOC?

- a. To maintain hike of petroleum product in international markets,
- b. To serve the vested interested of certain groups involved in oil business,

6 Whu the buying rate of petroleum product is higher than the selling rate in Nepal?

- a. Due to politicalization in NOC,
- b. Due to the social responsibility of NOC That should consider the purchasing capacity of people,
- c. Due to the protest of different groups,

7. What should be done to minimize the transport cost of petroleum product?

- a. Should –cut routes should be opened soon,
- b. Pipeline and railway should be built,
- c. Water canal should be made to join up to sea,

8. What measures should be adopted to make the subsidy in kerosene more effective?

- a. This responsibility should be authorized to private sectors,
- b. Subsidy should be given only from the designated centers and government should monitor it,

- c. Subsidy should be stopped to cut off the deficit of NOC

9. What should be done for effective distribution of petroleum products throughout Nepal?

- a. **Make and implement proper distribution plan according to geography and demand,**
- b. Open the new petrol pump by NOC itself,
- c. Increase the territorial distribution centers of NOC,

10 How can the management make the human resource of NOC more skilled, motivated and professional?

- a. Participating in decision making,
- b. Training,
- c. Making their job challenging,
- d. Reward and punishment,

11 What is a solution of burgeoning crises seen in the supply of petroleum products?

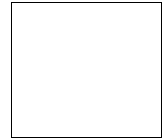
- a. Privatization is a solution since it enhances the outreach to international market,
- b. Privatization is not a solution since it has n any sense of social responsibility.

12 What is the priority goal of NOC?

- a. Social responsibility,
- b. Balancing social responsibility and profit making,
- c. Profit making,

--

13 Who re responsible for price hike and distribution mismanagement?



- a. Private dealers, because they sell the petroleum products with high commission,
- b. NOC itself because its poor regulatory capacity,

Appendix II
Processing of Primary data

	description	No	%
Not able to supply the petroleum products as per demand	i. Lack of proper distribution centers	-	-
	ii. Obstacles created by IOC	6	100
	iii. Low prices of POL in comparison to international market		
Simplify the process of import of NOC	i. Minimize dependency on IOC	-	-
	ii. Try to import POL from other countries	5	50
	iii. Pressurize India for easing the import process	5	50
Ways to increase the incremental demand of POL every year	i. Try to make oil agreements with other oil producing countries	7	67
	ii. Try to import oil through China	5	33
Steps to be adopted to run the NOC in a managed way	i. Privatization the NOC	-	-
	ii. Develop the skills on NOC Personals	2	17
	iii. Implement the public private partnership in managing NOC	5	83
Reason behind continuous price hike	i. To maintain hike of POL in international markets	8	100
		-	-

of POL by NOC	ii. Due to vested interests of certain group in oil business		
Buying rate of POL is higher than the selling rate in Nepal	i. Due to politicalization in NOC	1	17
	ii. Due to social responsibility of NOC	3	34
	iii. Due to the protest of different groups.	5	50
Ways to minimize the transport cost of POL	i. Short cut routes should be open soon	-	-
	ii. Pipeline and railway should be built	8	100
	iii. Water cannel should be made to join up to sea	-	-
Measures to make the subsidy in kerosene more effective	i. Opening designated counters for subsidy purpose	6	100
	ii. By stopping subsidy to cut off the deficit of NOC	-	-
Measure for effective distribution of POL throughout Nepal	i. Ensuring proper distribution plan suited to geography and demand	6	67
	ii. Open the new petrol pump by NOC itself	3	33
	iii. Increase the territorial distribution center of NOC	-	-
Make the HR of NOC more skilled motivation and professional	i. Participation o in decision making	2	33
	ii. Training	2	17
	iii. Making their job challenging	-	-
		3	50

	iv. Reward and punishment		
Priority goal of NOC	i. Social responsibility	4	50
	ii. Balancing social responsibility and profit making	4	50
	iii. Profit making	-	-
Solution of burgeoning crises seen in the supply of POL	i. Privatization is the solution	3	50
	ii. Privatization is not solution	3	50
Responsible for price hike and distribution mis management	i. Because they sell the POL with high commission	8	100
	ii. Because its poor regulatory capacity.	-	-

Appendix III
List of respondents

S.N	Name	Department
1.	Mr Shiva Parsad Pudashaina	Economy depart
2.	Mr Mukunda Parsad Dhungal	Supply distribution and Aviation depart
3.	Mr Subas Chandra Dahal	Quality control and Monitoring
4.	Mr Ramesh Chandra Koirala	Planning and administration and H R department
5.	Mr Chranjivi Thapa	Account department

Appendix IV

year	X	Y	x=X-X̄	x ²	y=Y-Ȳ	y ²	xy	
063/64		686715	768525	-48775	2379000625	-142677.4	20356840471	6959090185
064/65		669351	727763	-66139	4374367321	-183439.4	33650013472	12132498477
065/66		658884	848022	-76606	5868479236	-63180.4	3991762944	4839997722
066/67		834500	1057196	99010	9802980100	145993.6	21314131241	14454826336
067/68		828000	1154506	92510	8558100100	243303.6	59196641773	22508016036
total		3677450	4556012	0	30982927382	0	1.38509E+11	60894428756

Suppose;

X= budgeted sales

Y= actual sales

$$\text{Average of budget sales } (\bar{x}) = \frac{\sum x}{N} = 735490$$

$$\text{Average of actual sales } (\bar{y}) = \frac{\sum y}{N} = 911202.4$$

$$\text{Standard deviation } (\sigma_x) = \frac{\sqrt{\sum x^2}}{N} = 78718.39$$

$$\text{Standard deviation } (\sigma_y) = \frac{\sqrt{\sum y^2}}{N} = 166438.81$$

$$\text{Coefficient of variation (CV) of } x = \frac{\sigma_x}{\bar{x}} \times 100 = 10.70\%$$

$$\text{Coefficient of variation (CV) of } y = \frac{\sigma_y}{\bar{y}} \times 100 = 18.27\%$$

$$\text{Correlation coefficient (r)} = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} = \frac{60894428756}{\sqrt{30982927382} \cdot \sqrt{13850938900}} = 0.9296$$

$$\text{P.E} = 0.6745 \times \frac{1 - r^2}{\sqrt{N}} = 0.02123$$

$$6 \times \text{P.E} = 0.1274$$

Appendix V

year	X	Y	x=X-X̄	x ²	y=Y-Ȳ	y ²	xy
2063/64	1015546	752446	121968	14876193024	-159921.6	25574918147	-19505317709
2064/65	871000	725623	-22578	509766084	-186744.6	34873545629	4216319579
2065/66	883344	888056	-10234	104734756	-24311.6	591053894.6	248804914.4
2066/67	834000	1050530	-59578	3549538084	138162.4	19088848774	-8231439467
2067/68	864000	1145183	-29578	874858084	232815.4	54203010477	-6886213901
total	4467890	4561838	0	19915090032	0	1.34331E+11	-30157846584

Suppose;

X= budgeted purchases

Y= actual purchases

$$\text{Average } (\bar{X}) = \frac{\sum X}{N} = 893578.6$$

$$\text{Average } (\bar{Y}) = \frac{\sum Y}{N} = 912367.6$$

$$\text{Standard deviation of X } (\sigma_x) = \frac{\sqrt{\sum x^2}}{N} = 63111.06$$

$$\text{Standard deviation of Y } (\sigma_Y) = \frac{\sqrt{\sum y^2}}{N} = 163909.35$$

$$\text{Coefficient of variation (C.V)} = \frac{\sigma_x}{\bar{X}} \times 100 = 7.06\%$$

$$\text{Coefficient of variation (C.V)} = \frac{\sigma_y}{\bar{Y}} \times 100 = 17.97\%$$

$$\text{Correlation of coefficient (r)} = \frac{\sum xy}{\sqrt{\sum x^2} \cdot \sqrt{\sum y^2}} = \frac{-30157546584}{\sqrt{19915090032} \cdot \sqrt{134331373900}} = -0.5830$$

$$\text{PE} = 0.6745 \times \frac{1-r^2}{\sqrt{N}} = 0.4775$$

$$6 \times \text{PE} = 2.865$$