CHAPTER-I

INTRODUCTION

1.1. Back ground of the study

The excess income over expenditure is called profit. The word profit is brings for visions of reserves. "Profit does not just happen, profits are managed" (Lynch and Williamson, 1989:125) the concept of profit is not new but the concept of profit planning and control is new word in business literature. We can define profit planning and control is a tool of management used in profit making organization. The managerial skill which increase revenues and minimize the cost is called profit planning and control. Profit planning and control involves long-term commitment waiting for a reward which comes in future and always remains uncertain. Therefore, every planning entails some degree of uncertainty.

So, we can conclude profit planning and control is as an organized and formal approach for realize the planning, synchronization and control responsibilities of management which provides guidelines to the overall managerial task. Sound-controlled profit planning and control programs facilitate the management to keep a level of profits which will make certain the continuation of the business and the accomplishment of organization responsibilities. “Profit planning through volume of cost analysis, however, is a modern concept of management planning tools designated primarily for industrial enterprises. It involves a study of what a business cost and expenses should be and will be at different level of operations and it includes a study of the resultant effect due to this hanging relationship between volume and cost.” (Young, Dong, 2001)

Organizations may be viewed as the total management effort, operating in an application of selected techniques, procedures and the motivation of individual and group to accomplish specified objectives. Management manage every aspect of organization, planning enables manager to achieve confidence in its ability establish realistic objectives and to device efficient strategies to attain those objectives. The first essence of management is planning. No firm can get its goal and objective without proper plan. All functions of management are performed within the framework of planning. It is known as sole concept of enterprises, whether it is a large size or not. Planning is generally recognized as the most difficult task facing by manager and it helps managers to take right decision to right time, efficiently, effectively and economically. It is continues process and life blood of any organization because a firm can get hardly success without presentation of proper and scientific planning.

The two primary functions of the managers of an entity are planning and controlling operations. In business, government and private group activities, a planning and control is widely used in performing managerial planning and control responsibilities. It is a systematic approach for the performance of any organization to achieve success. Theoretically, profit is a broad aspect and sometime it can not be early seen but in actual practice it is management and some extent it is controllable. Profit is an essential part of business to survive. No company can run without profit for long time. So it is taken as ultimate measure of effectiveness for an enterprise. That's why it is a primary an objective of any organization. The primary propose of control is to ensure attainment of the objective, goals and standard of the enterprises. Control has many fact; such as direct observation, oral expression and performance report.

The concept and techniques of profit planning and control have wide application in individual business enterprises. Government units, charitable organization and virtually all group or individuals comprehensive profit planning and control viewed of a process designed to help management effectively perform significant phases of the planning and controlling function. Profit planning and control includes the following matters: (1) Development and application of broad and long-rang objective of the enterprises, (2) Specification of enterprises goals, (3) Development of a strategic long-range profit plan in broad terms, (4) Specification of a tactical short range profit plan detailed by assigned responsibilities, (5) Establishment of a system of periodic performance report detailed by assigned responsibility and (6) Development of follow up procedures. (Welsch, Hilton & Gordon, 2001)

Thus the term, comprehensive profit planning and control are defined as formulized approaches for performing significant phase of management planning and cost function. It refers the organizational techniques and procedure, where, long and short range plans are formulated, considered and approved responsibility. In profit planning and control we can use various of managerial approach and techniques such as; sale forecasting, capital budgeting, cash flow analysis, variable budgeting, time and motion study, standard costing accounting, strategic planning, production planning and control, management of organizational objective and organizational planning and control.

Some people say that comprehensive profit planning and control is only to be applicable for large and complex organization. But this is not true in all cases, it is applicable or can be adopted by any organization whether, it is profit oriented manufacturing, service oriented or not. Generally two types of profit plans are generated; long range objective (strategic long range plan) and short range plan (tactical short range plans). By the help of the comprehensive profit planning and control every business aims to gain realistic profit and return from their investment appropriately.

1.2. Public Enterprises (PEs)

Public enterprises are generally owned and or controlled by government and are usually autonomously organized with the government providing the initial capital and being responsible for a continuous overview of their activities. In one way, public enterprises should play a vital role by supporting government's policies and programs for the socio-economic development and another for their own survivability and growth. Due to the various causes private sector are unable to invest sufficient capital for aggregate development of the country. Therefore, public enterprises are the backbone for industrialization and development of the country. First public enterprises of the world were established in the port of London authority of Britain, which was formed in 1908. Friedman describes in his book the, "public enterprises is an institution operating service of an economic or social character on behalf of the government but an independent legal entity largely autonomous in its management though responsible to the public through government and parliament and subject to some direction by the government equipped on the other hand with independent and separate funds of its own and the legal and commercial attributer of a commercial enterprises."

According to the above definitions there will certain characteristics of PEs:

1. Government ownership
2. Service oriented aim
3. Government controlled management
4. Artificial personality
5. Autonomous
6. Public accountability
7. Mobilization of internal resources.

Accountability and control of Public Enterprises

Asian Organization of Supreme Audit Institutions (ASOSAI)-1978 (ASOSAI) is an Asian organization which is established to promote and encourage the PEs in 1978. It functions to exchange ideas and experiences to each other of its member country. There were 23 member countries including Nepal. PEs has artificial personality which are controlled and supervised by the government of each country. Surplus of PEs use by government and deficit also manage by the government of the country. However objectives of public enterprises are often not clear cut and result oriented as private company. Hence, public enterprises are necessary for the development of the country. Malaysia, Philippines, India, China have public enterprises 1345, 303, 1701, 800000 respectively. Nepal has 57 public enterprises only. The development of the country also depends on the number of public enterprises.

A lot of public enterprises in China, which proves the back bone for the development of country. There are so many public enterprises in India also, through which the development of the country (India) is possible. But there is not a lot of public enterprises in Nepal. So Nepal is in back side of development. In case of PEs, ASOSAI has mentioned the following function and characteristics of PEs.

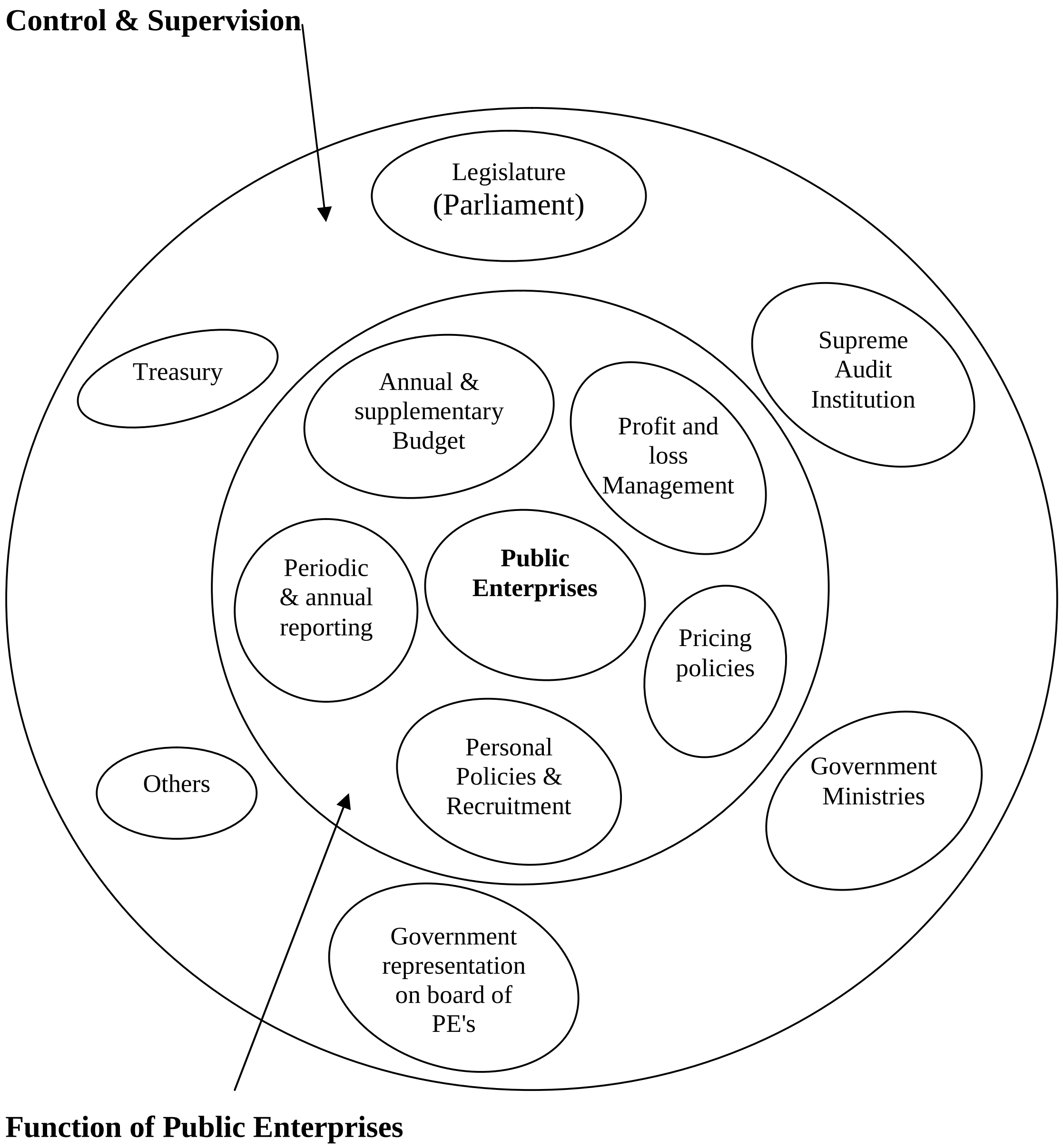


Figure 1
Source: Asian Organization of Supreme Institutions-1978 page: 5

1.3. PEs in Nepal :-

Nepal is a developing country and Nepal adopts mixed economy. Public enterprises in Nepal play a vital role for the socio-economic development of the country. Nepal Bank Limited was established in 1994 B.S, which are the first public enterprises has increased substantially in various fields of national economy. With the initiation of Nepal is planned economic development, which was initiated in 2013B.S with the launching of 1st five years plan. The main objectives of Nepalese public enterprises as follow:

Economic Objectives

1. Accelerating the rate of economic
2. Attaining the goals of planned economic development
3. Regional and balanced development
4. Making available goods and services cheaply and adequately
5. Acting as model entrepreneur
6. Saving foreign exchange and maintaining economic stability

Social Objectives

1. Prevent monopolistic practices
2. Generate employment opportunities
3. Reduction in disparity of income
4. Attaining social justice and social welfare
5. Avoiding concentration of wealth and means of production in fewer hands.
6. Making healthy and efficient

Political Objectives

1. National defense
2. Political ideology
3. For national interest
4. Political interest

1.4. Industrialization and Public Enterprises

Industrialization is still in its infancy stage in Nepal. Industrial sector have contributed in the national economy not more than 10% most of the Nepalese people are still depending on agriculture. So agriculture is the main basis of Nepalese economy that we have seen. Industrialization is essential for the sustainable long term development of the country in make a remarkable contribution to creating employment opportunities for the growing population solving the problems of unemployment and underemployment. Besetting the country earning foreign for exchange and balancing the payment position as well as foreign capital and technology have significant role in lest developed country like out which is just moving toward industrialization.

The first step toward industrial development was taken in 1930 by establishing industrial council. But this action did not any concrete result. However after the Nepal Company Act was enacted in 1936 and some industrial enterprises came into existence in private sector, planned effort toward industrialization were make only after 1951. NIDC was established in 1959 as a development bank with the objective of providing financial support to industries. Public enterprises were established in developed countries from the 18 the century. It was established as strong men of development after the Second World War. In developing countries it plays the major role to follow the industrialization activities in the country. This helps government making infrastructures for developing which consist of communication, transportation and power facilities. It is well known that public enterprises were established for raid socio-economic development of the country because of different public enterprises have different set of objective.

1.5. Types of Nepalese PEs

Public Enterprises are considered as greatest important instrument for socio-economic development of the country. It enjoys strategic and crucial position in our mixed economy. They have been established in many sectors for overall development of the country with different goals and objectives.

Since 1956, Nepal has been making of growth and development of public enterprises for the purpose of creating necessary infrastructure and run some of the large manufacturing industries for the people. Thus it is realized that the creation of number public enterprises plays as an instrumental for the infrastructural development of a country. There are many kinds of PEs in context of Nepal which are related with:

1. Public Utilities
2. Transport and communication
3. Food and agriculture
4. Development Finance Institute
5. Industrial
6. Trading
7 Manufacturing
8. Service

As per available of resources There may be other kinds PEs like:

1. Oil
2. Gas
3. Coal
4. Heavy engineering etc.

But Nepal doesn't have Oil, Gas, Coal and Heavy engineering Public Enterprises.

1.6. Profitability of Nepalese PEs

An analysis of financial performance of existing public enterprises shows that financial position of must public enterprises are far from satisfactory in Nepal. Almost all the Nepalese PEs have been suffering from regular operation loss as shown by the past annual budgets, economic surveys studies of the running projects. Therefore, they are unable to substantial return from their investment and contribution to the nation by providing expected return from or tax. They are creating a huge amount of liabilities to the government therefore after the restoration of Democracy, the government has adopted a policy to privatized and dissolve with the PES , which are operating at a loss and creating financial burden to the government exception public utilities , defense and some important for the nation. As of July 2004, Nepal has 36 public enterprises. Functions and activities are behaved as government organization so it one of the cause for privatization of public enterprise in Nepal. Government can invest in new sector for the development of country amount received from privatized company of public enterprises.

Only ten public enterprises constitute under industrial sector. By 2004, 24 public enterprises were privatized , 3 have been privatized by selling the assets and business such as; Bhrikuti paper Mills (BPM), Haarisiddi Brick and tile factory and Bansbari leathter and shoe factory.10 enterprises were privatized by selling shares, a privatized by liquidation/dissolution, one by selling the assets and leasing the building and land. Recognizing privatization of public enterprises as an integral part of its economic liberalization policy, beginning from F/Y 1992/93, Nepalese Gov. has privatized 24 public enterprises until F/Y 2003/04. In the Nepalese public enterprises, there is lack of proper planning in every sector including objectives setting, manpower recruitment and selection goal setting and strategy formulation and all.

1.7. Historical Background of NOC

As PEs have been accepted all over the world, most of the countries in the world started to practice PE. PEs have supposed to be means of rapid socio economic development of a country. Though PEs have been extended it differs among different countries. As PEs have been established the underdeveloped countries excessively felt its necessity. The developing country like Nepal also started to establish PEs. Among them Nepal Oil Corporation (NOC) is an example, which has been selected for the purpose of our analysis.

NOC is non manufacturing public corporation deals with petroleum products. It is trading PE of Nepal. It was established in 2027-9-26 BS with Authorized capital one crore and paid of capital 10 lakhs to supply and distribute petroleum products through import. Before the establishment of NOC, function of importing and distributing oil in Nepal was done by foreign companies Burmasale, Isso eastern in Corporation and Indian Oil International. The objective of these companies was to generate profit. However companies were failed to fulfill the demand of petroleum product then necessity of NOC was realized. Realizing the need to institutionalize the supply as well as distribution of petroleum products in the country Nepalese government established the NOC Ltd. in 1970 under the company Act 2021 (1964) as a state owned trading enterprise. The government owns the majority of its shares and four other state owned enterprises have also invested in NOC.

After few years of its establishment NOC got monopoly in the import and distribution of petroleum products. NOC got largest public sector organization in the kingdom of Nepal. It has been supplying continuously such a vital commodity as petroleum products to public industry, aviation field and development project of nation as well as fuel for transportation, lighting, heating etc. It has been providing significant contributions to the economic development of the country. NOC buys finished product from the international market and sales to the IOC in same rate then receives refined petroleum products for the same amount (not in quantity only in amount) under the product exchange agreement with Indian government. It serves customer's interest through quality and regularity of petroleum products supply in most part if the country. It was established with the authorized capital of Rs. 10

million and paid up capital of Rs.1.05 million. Authorized capital 50 crore and paid capital 9crore 67 lakh 15 thousand. Out of total paid capital 98.37% share was government and other 1.67% were shared by Rastriyabeema Sansthan, Nepal Bank Ltd., Rastriya Banijya Bank and National Trading Limited which has been shown in table below.

Portion of Shares in NOC

S.N.	Ownership of share	Paid up capital	Share
1	Government of Nepal	9,51,40,000	98.36%
2	National Trading Limited	7,50,000	0.78%
3	Rastriya Beema Sansthan	4,50,000	0.47%
4	Nepal Bank Ltd.	2,20,000	0.23%
5	Rastriya Banijya Bank	1,55,000	0.16%
Total		9,67,15,000	100 %

Source: NOC, Babarmahal, Kathmandu.

Objectives

- To manage for the import of petrol, diesel, kerosene, lubricants, grease, aviation fuel, etc. and other oils from different countries of the world.
- To complete the job mentioned in clause (1), manage for necessary place and technical assistance for the construction of storage tanks.
- To obtain the sole agency and distributorship of different countries for the marketing of petroleum products in Nepal.
- Import crude oil from different countries and refine the crude oil either in association with other foreign oil companies or setup own refinery.
- To setup industries for the exploration of oil and gas reserves of the country.
- To manage for the storage facilities of imported petroleum products in the country.
- To manage the supply & distribution of petroleum products in the country either by own arrangement of tank trucks or through private parties as per the requirement.

- To work on the other supporting activities required to fulfill the objectives of NOC.
- To establish other subsidiary companies and invest either in and or the business.

Source: www.nepaloil.com.np

1.8. Significance of NOC in Nepalese Economy

An enterprise's financial performance depends on how well its resources are planned, used and controlled. Budgeting is the key for financial planning and control. In the most of the public enterprises of Nepal, budgets are prepared at random basis and profit planning process is not applied in the real sense. Consequently, most of the PEs suffers from poor performance. The significances of the study are really on the examining whether the NOC is applying profit planning system properly or not.

Objective of accomplishment in every organization depends upon the application of resources. The availability of resources is scarce. Also the financial performance of an organization depends purely on the use of its resources. Budgeting is the key to financial planning. If planning process is effective and result oriented, the pace of development naturally forwards. Profit planning is the heart of management.

Profits are the most important indicator for judging managerial efficiency and they do not just happen. For this, every organization has to manage its profit. Various functional budgets are the basic tools for proper planning of profit and control over them. This study is intended to analyze and examine the profit planning system and its application in NOC. This study will be concise, practical, usable and valuable to the major parties interested in profit planning and will also be useful and beneficial to NOC, Nepalese government, personnel of NOC and others

1.9. Management and Directors

NOC is managed by the managing director under the supervision and control of board of directors. The managing director is appointed by the government. The board of directors of NOC is constituted by the body of 7 members all together. The executive director of NOC is the member secretary of NOC management committee. The members are from the commerce and import ministry, department of commerce, quality control department, and chairperson of trade union.

1.10. Human Resource Management

Human resource is also known as a kind of material as well as Money, Material and machine. NOC has realized human resource as one of the important assets of organization. It has two types of staffs. They are technical and administrative staffs. The current numbers of staffs 423 are not sufficient for well management of supply and distribution of Petroleum Products. According to annual publication of NOC There are only few young energetic staffs. It is an autonomous Trading organization. So it has to think for future to recruit well trained staff to run NOC smoothly in future.

Table No1

Personnel Status FY2064/65

SN.	Approved Position	Recent Number	Remarks
1	9	7	Management
2	325	223	Administration
3	243	193	Technicians
Total	577	423	

Source: Prabhat 2065

1.11. Duties and Rights of NOC

Every organization has its own functions. NOC has also its own functions. It makes plan for import and sales petroleum products. It functions to control quality of petroleum products. NOC has also other duties like well distribution, inventory management, human resource management, assets management, make plan for sales, keep record of financial statement, keep well cooperation with stakeholders etc. It has to amendment price of the Petroleum product as per international market. But it has to take approval of Government and follow up the Government rules and regulations.

Another valuable function is should be performed by it that is petroleum products mine should be research by NOC. The main functions are as follows:

Import

NOC imports petroleum products from different supply points of IOC. NOC brings about 6/7 different products such as MS (Petrol), HSD (Diesel), SKO (Kerosene), ATF (Aviation Fuel), LDO (Light Diesel Oil), FO (Furnace Oil), LPG (Liquidified Petroleum Gas) on regular basis. The import volume from Indian Oil Corporation reaches about LPG 111,576 MT and other POL 7,71,270 Kiloliter (KL) for the year 2065/66. NOC imports petroleum products form different supply center which are near to depots. High amount of POL products are imported from the Rakshauwl Boarder. HSD and SKO are highly imported then other petroleum products.

Storage

There are five regional offices for the management of petroleum products sales and distribution. There are ten depots all over the kingdom for the distribution of Petrol, Diesel, Kerosene and etc. The depots are in Biratnagar, Jankpur, Kathmandu, Birganj, Amlekhganj, Pokhara, Betalpur Bhairahawa, Mugalsraya Bhairahawa, Nepalganj and Dhangadi.

NOC has storage facilities for Petrol, Diesel, and Kerosene and aviation fuel only. These products are first stored in NOC storage tanks as per their capacity in various places in the country. The storage policy of NOC is to fulfill the requirement as long as it possible. The products which can not be stored because of lack of storage capacity are sold directly to the dealers (Sellers). In times of storage and delays transportation, the reserved stock is used for distribution. NOC has to reserve stock available for 30 days to fulfill the requirement of nation. NOC has no storage of LP gas. Private companies keep its storage, but that is enough only for 5 to 7 days' consumption.

Table No.2

Storage Points and Their Capacity of NOC (in KL)

Location	Petrol	Diesel	Kerosene	Jet AF	Total
Kathnandu	2,630	6,300	6,300	7,640	22,870
Amlekhgunj	1,960	10,380	11,120	0	23,460
Pokhara	350	1,520	1,520	64	3,454
Biratnagar	560	5,710	5,380	280	11,930
Dhangadi	100	1,590	830	30	2,550
Bhairahawa	140	1,914	1,535	56	3,645
Nepalgunj	140	1,520	1,520	280	3,460
Surkhet	0	0	44	29.3	73.3
Dipayal	0	15	45	0	60
Janakpur	30	140	70	0	240
Total	5,910	29,089	28,364	8,379.3	71,742

Source: NOC

In the way, NOC has built storage spots with different capacity in different places of the country. NOC has its plan to expand storage capacity in different other places.

Sales

Import and storage of petroleum products is ultimately for sales. 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 tank lorries. In case of aviation fuel the selling is done directly by NOC through its aviation depots. At present some selling depots in some parts of the country are also started by NOC in view of providing pure POL products to the public. POL products such as kerosene, diesel and petrol are marketed through dealers appointed by NOC. These dealers supply those products to retailers to their respective areas covering all of them fourteen zones. But the aviation fuel is distributed directly from NOC. NOC sold LPG 111,576 MT and other POL 728,351 in F/Y 2065/66 Sales revenue is collected from the sales of petroleum products. Petroleum products are sold within 3 days of demand to customers as per in sales rule.

1.12. Need of the Study

Most of the researches were done under the topic profit planning in Nepal Electricity Authority, Nepal Telecom and other financial analysis under the financial institute etc. But the research under the topic profit planning of NOC is not found. The research will try to find the answer of why the management of NOC receiving losses even on its monopoly market. Is there any other idea for increasing profit?

Every trading organization must have some profit to survive in market. Public enterprises also should have profit run its business. NOC is also a trading organization. It should have the profit to run smoothly otherwise it will be lay down as other organization. Sometime news comes in Medias that NOC is unable to import and distribute the petroleum product that's why without payment of balance to IOC. At that time question arises that every customer of petroleum product pays amount to receive Petroleum product. That's the curiosity for our study. So a study needs on it why NOC is loosing the profit.

1.13. Statement of the Problem

For the purpose this thesis has tried to analysis those issues of profit planning which are followed by NOC and tried to find out whether they are favorable or not for NOC. Those issues are firstly sales forecasts, Pricing Strategies, management of petroleum products leakage and why is it suffering from loses. We can see assume from the following table NOC is suffering form the actual losses. In the competitive market it has monopoly but it has losing and bearing heavy losses. Any organization needs profit to survive in the market. If NOC always suffers from losses it will impact on the development of Nepalese economy. NOC has to be cleared by each and every aspects whether financial; human resource; technological; managerial; etc. It should study the past event and able to forecast the future trend. The organization should first of all take care of its methodologies like accounting system. NOC is suffering from loss as well as lack of proper execution of plans. But these minor may turn into major in a little time if they are not properly treated on time. The present study intends to analyze and examine the practice of profit planning in NOC. Furthermore, the study tries to answer the following questions:

- What is the overall trend of profit planning in NOC?
- What are the major problems and issues relating to development and implementation of profit plan?

- To what extend the functional budget has been used in planning process?
- What steps should be taken to improve profit planning system?
- Are there correlations between sales and profit, sales and operating expenses, sales and import of petroleum product?

Profit and losses

Economic Year	Losses	Remarks
2059/60	1,823.1 million	
2060/61	898.1 million	
2061/62	308.1 million	
2062/63	3963.4 million	
2063/64	1921.3 million	
2064/65	5512.4 million	Auditing
Total loses	17098.8 million	

Annual publication of NOC Prabhat 2065

1.14. Objective of the Study

The general objective of this study is to analyze the profit planning and control tools adopted by NOC. The objective of the study is the assessing NOC's present situation and future prospects.

The other specific objective of the study can be outlined as:

- To analyze Budgeted sales and actual sales.
- To analyze Actual purchase and actual sales
- To analyze the trend of sales in amount, operating expenses and profit and loss
- To recommend the major and effective suggestions (based upon the findings) to the organizations.

1.15. Scope and Limitation of Study

This study has the following limitations:

1. It is concerned only in profit planning in NOC.
2. No one of regional office and depots have been studied.
3. Time period selected for this study is seven years i.e. 2059/60 to 2064/65

4. All details record for the study has been received as secondary data relating only to the central office of NOC.
5. There is time constraint as it is only a study to fulfill partial requirement of confining MBS Degree.

1.16. Overview of Thesis

According to the objectives of this study, the research work has been classified into five chapters.

Chapter 1: Introduction

This chapter includes focus of study on scenario of NOC, statement of problem, objectives of the study, significance of the study and limitation.

Chapter 2: Review of Literature

This chapter contains previous writing and studies to find the existing gap, review of text book, dissertation of thesis.

Chapter 3: Research Methodology

This chapter consists of research design, sources and nature of data gathering instruments, statistical tools used for the study.

Chapter 4: Data presentation and analysis

It is the main body of research. Various data gathered and tabulated as required by the research objectives. Data are interpreted and analyzed with the help of various analytical tools and techniques.

Chapter 5: Summary, Conclusion, and Recommendation

This Chapter includes summary and conclusion of the study. It also includes recommendation on the basis of study.

Besides this bibliography and appendices are attached.

Chapter II

Review of Literature

2.1. Meaning and Definition of Profit Planning and control

Profit planning and control is also called comprehensive budgeting, managerial budgeting and budgeting only. The word profit planning and control has recently introduced in the business literature. Most of profit oriented business concerns use profit planning and control as a managerial tools.

"A profit planning & control program can be one of the more effective communication networks in an enterprise. Communication for effective planning and control requires that both the executive and the subordinate have the same understanding of responsibilities ensure a degree of understanding not otherwise understanding of responsibilities and ensure a degree of understanding not otherwise possible. Full and open reporting in performing reports that focus on assigned responsibilities like wise enhance the degree of communication essential to sound management" (Welsch, Hilton & Gordon, 2001) "Profit planning is an example of short range planning . This planning focuses on improving the profit especially from a particular product over a relatively short period of time. Therefore as used here it is not the same as corporate planning of a cost rendition program" (Terry, 1968)

"Profit planning is a predetermined detailed plan of action developed and distributed as guide to current operations and as a partial basis for the subsequent evaluation of performance. Thus is can say that profit planning is a tool which may be used by the management in planning the future course of actions and controlling the actual performance "(Gupta, 1992:3)

"Profit planning is a comprehensive and co-ordinate plan expressed in financial terms for the operations and resource of an enterprise for some specific period in the future" (Fremgen, 1973:12) "Comprehensive profit planning and control is a systematic and formalized approach for accomplishing the planning, co-ordination and control responsibilities of management. (Welsch, Hilton & Gordon, 2001) Profit plan as an exact and rigorous analysis of the past and the probable and desired future experience with a view to substituting considered intention for opportunism in management the establishment of a system of periodic performance reports detailed by assigned responsibility and follow up procedures. (International management institution Geneva conference 1980) The role of profit planning and control is very important in profit oriented enterprises. Roles of PPC are as follows:

- To provide definite goals and objectives that serve as benchmarks for evaluation performance of business.
- To provide information to management timely.
- To point out efficiency and inefficiency.
- To reduce cost and make profit more.
- It provides a valuable means of controlling income and expenditure of a business, as it is a 'plan for spending'.
- It reflects weakness in the organization very promptly.
- To fix responsibility center for manager.
- It provides a tool through which managerial polices and goals are periodically evaluated tested and established as guidelines for the entire organization.

"Profit plan is estimation and predetermination of revenues and expenses that estimated how much income will be generated and how it should be spent in order to meet investment and profit requirements. In the case of institutional operation it presents a plan for spending income in a manner that does not result in a loss" (Ninemeir and Schmidgall, 1984:125)

Profit plan stand for an overall plan of accomplishment, covers exact period of time and prepares the planning decision of the management. It can be viewed as one of the major important approaches that have been developed to make easy successful presentation of the organization procedure. Now a days profit planning system is mainly common to business organization but the viability of it depends upon the size of the business. The common objectives of profit planning system whether applied to business administration are to make policy as well as with the execution of policy. And a purpose established after the deliberation of the feasible courses of events in the future. In conclusion profit planning is directed towards the final objectives of the enterprises and generally includes all of its important elements. It has main objectives of achieving the most favorable profit in the enterprises.

2.1.1 Profit as a concept:

Profit is excess income over expenditure. Profit is a basic element of profit planning and control. There is no meaning of profit planning and control with out profit. Every profit oriented business concerns involves to profit generating activities. "Oxford dictionary defines profit as financial gain or amount of money gained in business especially the difference between the amounts earned and the amount spent. Like wise, advantage or benefits gained from something is called profit "(Hornby & Cowie -1992:63) .The successes and failure of business entity measures by profit earned by them in certain period of time. The major concern of stack holder is profit so organization always wants to maximization of profit. Performance organization is measured by profit and loss. Survivability and sustainability of enterprises depends on profit.

Total Revenue-Total cost = Profit

There are two types of Profit.

i) Gross Profit

Generally profit is denoted by gross profit. Gross profit is that profit which comes by subtracting all the explicit expenditure form total revenue. Gross profit includes all the implicit cost, these are implicit wages, rent, interest on capital and loans, depreciation fund, windfall gain,, monopoly gain etc. So, gross profit is calculated as follows:

Gross Profit= Total Profit - All explicit Cost

ii) Net Profit

Net profit is the actual profit and it comes after deducting all the implicit cost from gross profit so that net profit is defined mathematically as follows.

Net Profit = Gross Profit - All Implicit Cost.

In supporting the net profit, Thomas has said that pure profits are only the remuneration for frisk taking.

Profits are not just happen but are managed. If a firm fails to make profit, it can't achieve capital for very long. So, it is the acid test of a business. "Profit is a signal for the allocation for resources and yard stick for judging managerial efficiency." (ISC and CCC) Profit measures the business enterprises' performance. As already mentioned that profit it the excess of income over cost of production so the management thinks of profit as:

- A measure of the organizational performance for achieving the goal.
- An inspiration to go ahead and to invest further more amount to business.
- A means of effective operation of overall task schedule of business.
- A measure of applying appropriate management follow-up

Profit as the reward for bearing risks and uncertainties and the reward for successful innovation, it is the key factor for the successful and continuous operation of a business organization. The management should make visible plan to meet profit goal. Without making profit, there is no any thinking. Profits are the means of surplus and emphasize to make profit. In any crisis of business environment, profit occupies a viable role. Profit makes planner, policy maker, labors and management more courageous where loss makes them nervous. New ideas, plans and strategies arouse along with profit. So lastly, we can say that profit makes profit whereas loss makes ruin. The best example making losses are Nepali PEs which are going to be dissolved (Phased out) out by one from government sector day by day

2.1.2. Long term and short term profit planning:

Strategic profit plan and tactical sales plan is known as long term short term profit planning. Strategic sales plan is prepared for 5 to 10 years. It is wide and universal in nature and developed by year and amount. "The strategic profit plan is broad and it usually encompasses five or more years in the future. The tactical profit plan is detailed and encompasses one year time horizon the up coming year. The development of strategic and tactical profit plans each year is a process that involves managerial decisions and ideally a high level of management participation " (Welsch, Hilton & Gordon 2006:173) While preparing the strategic profit plan state of economy , political stability, population study etc are keep in considerations. Like wise, tactical profit plan is prepared for short period of time. By the time it is prepare for a month, quarter, half year and a year.

2.1.3 Concept of Planning and control:

Planning is the basic element of profit planning and control. Planning is going according to plan the primary purpose of planning are to reduce uncertainty about future profit, to incorporate management judgment and decisions in to the planning process, to provide necessary information for developing other elements of comprehensive profit plan and to facilitate management control of sales activities." Operational planning is often referred to as short term budgeting and looks at resources, production etc for a financial period, usually a year. It provides a detailed plan of what the organization hopes will be achieved within the next financial year. Strategic planning often referred to as the long term plan and looks at where the organization is heading over a number of years, for example of five year plan would be a long term plan it presents the organization with an idea of the broad direction that it hopes o be heading in. The Strategic plan will incorporate the operational plans of the organization. The operational plan translating the strategic plan into achievable short term goals"(Lynch 2003:158) "Planning is the process of developing enterprises objectives and selecting a future course of action to accomplish them. It includes developing premises about the environment in which they are to be accomplished " (Welsch, Hilton, Gordon, 2001:45) Arrangement for doing or using something considered or worked out in advance is planning." Planning is the feed forwards process to reduce uncertainty about the future. The planning process is based on the conviction that management can plan its activities and condition the state of the enterprises that determine its destiny" (Pandey, 1991:325) Planning is a quantified assessment of future condition about a particular subject based on one or more explicit assumption. The management of organization make plan and it may accept, modify or reject. Planning is the intellectual mental process. It is goal oriented primary function of management. It is goal oriented primary function of management.

"The major component of profit planning and control is controlling. The dictionary meaning of control is having a power to regulate something standard of comparison for checking the results of the experiment" (Hornby 1992:84) " Control is the process that measures current performance and guides it towards some pre determined goals control is the process of checking to determine whether or not plans are being adhered to whether or not proper progress is being made towards the objectives and goals and acting if necessary to correct deviations. Controlling can be defined as a process of measuring and evaluating actual performance of each organizational component of an enterprise and initiating corrective action when necessary to ensure efficient accomplishment of enterprise objectives, goals, policies and standards. Planning establishes the objectives, goals, policies and standards of an enterprises control is exercised by using personal evaluation periodic performance, reports and special reports. Comparison with standard and actual is called controlling. Controlling is a one of the important aspect of managerial function.

Planning is the process of developing enterprises' goals and selecting a future course of action to accomplish them. It includes:

a) Establishing enterprises' objectives.
b) Developing premises about the environment in which they are to be accomplished.
c) Selecting a course of action for accomplishing the objectives.
d) Initiating activities necessary to translate plans into action.
e) Current preplanning to correct deficiencies. (Welsch, Hilton & Gordon-2000)

Thus, Planning is a rational way, intellectual process, goal oriented task, and the primary function of management. Planning directs all managerial activities and it is directed towards efficiency. Planning is the soul concept and backbone of any business organization. In the absence of scientific and practical/ proper planning, no firm can perform its predetermined goals and objectives. Hence, it is the life blood and constitution of any organization which makes them efficient towards competitive environment.

2.1.4 Profit Planning

After having some knowledge about profit and planning, now, it is tried to present some theoretical concept of profit plan. When the management plans for profit for a certain period of time it is called profit plan.

Profit planning is the basic foundation of and enterprise. Without proper profit planning, any enterprise cannot meet its objectives. Profit Planning is the heart of any business entity. So every enterprise should plan systematically for profit in a proper way. Profit planning is a comprehensive and coordinate plan expressed in financial terms for the operation of enterprise for some specific period in the future. (Fregmen James) "Various functional budgets are the basic tools or proper planning of profit and for controlling over the variances. Profit in fact is a managerial technique and a profit plan is such a written plan, win which all aspects of business operations with respect to a definite future period are included. It is a formal statement of policy, plan, objective and goal established by the top management in respect of some future period. It is a predetermined detailed plan of action developed and distributed to guide current operation, and it is a practical basis for the subsequent evaluation of performance. Thus we can say that profit planning is a tool which may be used by the management in planning the future course of actions and in controlling the actual performance." (Gupta)

Profit Planning and control is also called budgeting. It is a comprehensive view of budgeting. Some organizations who don't know about its broad advantages are using it as the narrow/ traditional view of a budget as a clerically derived set of quantitative schedules prepared by an accountant, following the stereotyped reporting formats used in external financial statements. In past, there was also tendency to view the budget as a primary mathematical model for an organization developed by computer programmes. These views completely overlook the most relevant aspect of the PPC concept.

a) PPC requires major planning decisions by management
b) PPC entails pervasive management control activities and
c) PPC recognizes many of the critical behavioral implications throughout the organization.

Comprehensive PPC is one of the more important approaches that have been developed to facilitate performance of the management process. The concepts and techniques of profit planning and control as discussed, here have wide application in individual business enterprises, government units, charitable organizations and virtually all groups. Thus, PPC has wide application. It can be applied both in profit making and non profit making organization and both in manufacturing and non manufacturing business.

PPC represent preparation of overall plan, covering a definite period of time and formulate the planning decision of management consisting of the different budgets (i.e. operating budgets, financial budgets, appropriation budget etc.) Thus it is a comprehensive and systematic formalized approach for communicating the firms expectations and accomplishing the planning, coordination and control responsibilities of management in such a way to maximize the use of given resources.

The board concept of PPC entails an integration of numerous managerial approaches and techniques such sale forecasting, sale quota system, capital budgeting cash flow analysis, CVP analysis, variable budgets, time and motion study, Standard cost accounting, strategic planning and cost control. Profit planning system is especially familiar to business organization, but its practicability depends upon the size of business. The most important factor in an effective PPC procedure is right information at the right time presented and formulated in a way that is easy to comprehend and follow.

"Modern profit planning encourages desirable action recognize the divisional and departmental autonomy and accountability of managers moving them to strive for attainment of their personal objectives. (Matz and Usury Milton). PPC process will facilitate the manager to accomplish management efforts in a systematic way. A PPC program help management to perform its control function by providing realistic goal and standard that is to be implemented and then compared with actual result to measure performance. Under PPC, this performance measurement extends from the top to the lowest organizational level in the enterprises.

2.1.5 Features of Profit Planning

Profit planning and control is flexible and depends upon the size of the firms, so that the format and rules regarding profit plan also vary according to the nature of business organization. There are some basic features of PPC; here is tried to point out such feature:

a) PPC is based on estimates

PPC must be on all available facts and sound managerial judgments. Estimating sales and expenses can not be exact science, however, numerous statistical, mathematical and other techniques that may effectively applied to produce realistic results with sound reasoning and judgments, flexibility is essential in using and interpreting the results.

b) PPC is the basic, comprehensive and coordinated plan.

To prepare the overall PPC programme of an organization, all the department prepare their different budgets and plans, lastly all the departmental budgets and plans are compiled and coordinated in a integrated way and that budget is known as comprehensive budget or profit planning.

c) PPC is not a substitute for management

It can not substitute for the lightened management. It is a system that con be aid in performing the management process.

d) PPC is expressed in financial terms.

All activities covered by budgets are related with funds. So the budget has to be expressed in monetary units i.e. in Rs., Dollar or pounds etc.

e) Execution of profit plan will not occur automatically

Profit plans will be effective only if all responsible executives exert continuous and aggressive efforts towards their accomplishment. Responsibility centre managers must accept responsibility for attaining or exceeding department goals specified in the profit plan. All levels of management must understand the program, must be convinced of its relevance to their function and must participate in its implementation in an appropriate way.

f) PPC is a plan for the firm's operating resources

A plan is a first operation guidance of the firm. Expenses and revenues are the main aspect of a company. The plan should be made for carrying out the operation. The planning for resources will include planning for funds.

g) PPC is a future plan for specific period

PPC is future Plan for specific period. Time dimension is most relevant factor for a budget. Such period may be short may be short medium term or long term.

h) PPC must be continuously adapted to fit changing circumstances.

A comprehensive budget program can not be started and perfected in a short time. PPC technique must continually be adapted for changing condition with in the enterprises. Continuous budget education is necessary, especially during the formative period

2.1.6 Objectives of Profit Planning

a) Goals setting
b) Identifying, evaluating and choosing best plan
c) Formulate detailed plan of action.
d) Organizational design
e) Personal management
f) Converting plans into budgets
g) Execution of programmes
h) Self controlling
i) Periodic review (financial analysis, statistical analysis etc.

2.1.7 Components of Profit Plan

"PPC process necessarily integrates the planning, leading and control functions of management. A PPC program includes more than the traditional idea of a periodic or master budget. Rather it encompasses the application of number of related management concepts through variety of approaches, techniques and sequential steps. The term comprehensive means;

1) The application of the broad concept of profit planning and control to all phase of operations in an enterprise and
2) The application of a total systems approach.

The typical components of a PPC program for a particular year are:

A. Substantive Plan

The substantive plan represents the broad objectives, strategies, specific plans and programmes of the organization. It is implemented by the concurrent commitment of management to long term range accomplishment of those objectives and plans. The substantive plan may be characterized as the "prose part" of the plan rather than the "numbers part" of the plan. It gives the foundation of the financial plan.

B. Financial Plan

The financial Plan quantifies the planned financial results of implementing managerial objectives, planed strategies and polices, the financial plan the represents a translation into financial terms of objectives, goals and strategies of management for specific period of time.

1) Strategic/ long range profit plan
a) Sales, cost, and profit projections.
b) Major projects and capital additions
c) Cash flow and financing
d) personnel requirements

2) Tactical/ short range profit plan
a) Operating Plan (Planned income statement)
i) Sales Plan
ii) Production Plan
iii) Administrative expenses, Budget
iv) Distribution type budgets (e.g. research and development, promotion, advertising)

b) Financial Position (Planned balance sheet)
i) Assets
ii) Liabilities equity
iii) Owners equity
c) Planned cash flow
    a) Variable expenses budgets (output-expenses formulate)

b) Supplementary Data (e.g. Cost volume profit analysis, ratio analysis)

c) Performance reports including any special reports each month end and as needed.

d) Follow up, corrective action and re-planning reports.

2.1.8 Forecasting

Forecasting is an integral profit of decision-making activities of management. An organization established goal and objectives, seeks to predict the environmental factors, then selects actions that hopes results in attainment of goals and objectives. The need for forecasting is increasing as a management attempts to decrease it dependence on chance and become more scientific in dealing with its environment. Science each area of an organization is related to all others, a good or bad forecast can affect the culture organization.

Forecasting is a prediction of a future event, condition or situation, where as a planning includes a program of intended future actions and desired results. "A forecast is not a plan, rather it is a statement and or a quantified assessment of future conditions about a particular subject (e.g. sales revenue) based on one or more explicit assumptions. A forecast should be viewed as only one input into the development of a sales plan. The management of a company may accept, modify or reject the forecast." (Glenn A. Welsch,)

Forecasting plays an important role in planning. Forecasts are the prepared statements of expected future conditions. Definite statements of what will actually happen are patently impossible. Forecast depends upon the assumption is made for long -term and short-term as well.

2.1.9 Planning vs. Forecasting:-

Forecasting and planning are not the same meaning. Forecasting expected future conditions. This expectation depends up the some assumptions, which are very useful. Forecasting is our best thinking about what will happens to us in future. Planning can only do with forecasting.

Planning entails regular measurement of progress toward objectives and goals and the execution of strategic and action program. Yet it is clearly recognized that often have to be altered in the light of new circumstances. It should be continuous process and not a once year experience. It is clear distinct from forecasting .Forecasting one of the essential elements of planning is a predications of what will happen on the basis of certain assumption, Planning is an attempt to determine what should happen and then to take steps that will make it likely to happen.

Forecasting is not a plan; rather it is statement and / or a quantified assessment of future condition about a particular subject based on one or more explicit assumptions. A forecasting should always state the assumption upon which it is based. A forecasting should be viewed as only one input into the development of the plan. The management of a company may accept, modify or reject the forecast. Planning incorporates management decisions that are based on the forecasting, other inputs, and management judgment about such related item as sales volume, prices, sales efforts, production, and financing. It is important to make a distinction between the forecast and plan. Plan primarily because the internal technical staff should not be expected or permitted to make the fundamental decision and judgments implicit every plan. Forecasting as only one step in planning is that forecasting is conditional.

Forecasting is the best tool to be used for proper planning when company policy and forecast have been formulates, planning can start. This means planning, the tactical to be used in achieving the objectives, should be based on forecasts and policy.

2.1.10 Budgeting: As a tool of PP

A budget is a formal expression of policies, plan, objectives and goals laid down in advance by management for the whole undertaking every subdivision there of. Budget is expressed in financial form for a period of time in future. Budgeting is closely related to the broader system of planning and control in an organization.

Planning involves the specification of the basic objectives, selection of goals, formulating strategies and expressing budgets.

In brief a budget is comprehensive and coordinated plan expressed in financial terms for proper mobilization of the resources enterprise for specified period in future. A comprehensive PP or budgeting is a systematic and formalized approach for stating and communicating the firm's expectation and accomplishing the planning, coordination and control responsibility of management in such a way as to maximize the use of given resources.

Budgetary control is a system of controlling the costs by preparing budgets, coordinating departments and establishing responsibilities, comparing actual performance with that budgeted and acting upon results to achieve maximum profitability. Thus, budget is concerned with policy making while budgetary control results form the implementation of the policy. Budgets not only compare the actual results with those of budgeted but also provided a standard of the performance. Top executives are able to control every area of the organization through the system of budgetary planning and control reporting.

2.1.11 Requirements for Effective Budgeting

Development of effective budgeting is not an easy task. Requirements and considerations for effective budgeting are as follows:

1. Support of top management while developing the budget and implementing the programme.
2. Clearly defined responsibility for each responsibility center.
3. Accurate and clear accounting system.
4. Unambitious policies
5. Preparation by responsible executives
6. Logical and sequential process in preparation, submission and review.
7. Immediate action in variance between actual and budgeted results
8. Continuous budget education to employees.
9. Flexibility for both possible and unforeseen circumstances.

2.2. Fundamentals of Profit Planning

"Basically, comprehensive profit planning offers a systematic, practical and proven approach to the management. Profit planning and control is a comprehensive system to coordinate all aspects to the management process carefully together the loose ends of management and operations. This inclusive concept of the profit planning process is frequently minimized of completely overlooked in much of literature and discussion on the subject. (Glenn, P, Hilton &/gorda-1992) In earlier years, the common view of budgeting was that the accountants in a firm should be assigned the responsibility for developing a financial evaluation of what the future year probably will hold.

Nowadays, there has been a tendency to view profit planning and control primarily as "mathematical model" for the entity obviously. This attitude tends to overlook the single most relevant aspect that is budgeting. is an integral aspect of management process and it is basically a decision making activity of management with behavioral implication.

Thus, the above fundamentals are concerned with effective application of the theory at management process. It is applied for desirable management orientations. A successful and sound PPC system is based upon certain prerequisites. Those prerequisites represent management attitude, organizational structure and managerial approaches necessary for the effective and efficient application of PPC system.

PPC is broad concept; without strong base, it can not give effective direction to the organization. The fundamentals are concerned with effective application of the theory at management process. For the desirable management orientation, these fundamentals need to be established as a foundation of managerial commitment. Following are the some important fundamentals of PPC.

2.2.1 Managerial Involvement and Commitment

Managerial support, confidence participation and performance orientation are included in managerial involvement. Specially, top level management should engage itself to comprehensive PPC, Involvement in PPC means that all the departments must understand, select, devote and support the PPC Programmes and evaluate the performance of PPC.

Managerial involvement and commitment on the other hand stand on the values that the financial executive is not only responsible to prepare budget, the chief executive who himself also is so much to be engaged to initiate, prepare and implement the comprehensive PPC. Thus, the modern concept has been changed and the fact managerial involvement and commitment is viewed as a "performance expectation" rather than as 'fiscal expectation". In order to engage completely in comprehensive PP, all levels of management should consider the following points:

- Understand the nature and features of PPC
- Conform the particular approach preferable for the particular situation
- Be willing to devote the efforts required
- Support the programme in all its ramification
- View the results of the profit planning as performance commitments.

2.2.2 Organizational adaptation

For the successful execution of PPC program, organizational adaptation is the main environment. A PP programme must rest upon the sound organizational structure and a clear cut designation of the lines of authority and obliged about their own department for efficient and effective execution of direction and programmes. So delegation of authority and accountability must be clarified in an organization. In this way to attain the goal of PPC program, the organizational set up must be favourable and all the functional sub units have to participate actively.

Thus, (1) delegation of authority and responsibility by creating accountability, (2) subdivision of the whole organization into different functional subunits, (3) preparation of periodic and annual plan by each sub unit, And (4) based upon such plan and program, a master plan is to be prepared by the higher management are the themes of he organizational adaptation.

2.2.3 Responsibility Accounting

Responsibility accounting system is that where the responsibilities of the various divisions are defined and the relevant parameters of the cost, revenue and other financial data should be utilized for preparing. Planning is done with the help of historical data which are received from accounting section and control is done by comparing actual data with projected data. Accounting system of the enterprise must be according to the responsibility structure of organization that is called responsibility structure accounting. Actual results are compared with objectives, goals and standards to determine variances. Therefore, accounting system must be designed to provide financial information separable for each organizational sub unit (by assigned authority and responsibility). Effective profit planning and control requires that the accounting system must be primarily oriented toward the planning and control need of management. An accounting system tailored only to the external needs and to generally accepted accounting principle although essential is inadequate for internal management planning and central needs.

2.2.4 Full Communication

Communication is most essential factor in modern management concept as well as for PPC. Communication can be broadly defined as an exchange of thoughts and information to bring a mutual understanding between two or more parties. For comprehensive PPC, effective communications means development of well defined objectives, specification of goals, development of profit plans and reporting and follow up activities related to performance evaluation for each responsibility centre. There must be understanding of responsibilities and goals, full participation in all matters, well defined downward flow of information and well defined reporting system is needed for effective communication in profit planning process. Thus, it is an interchange of thought or transmission of ideas and news from one sector to another sector, from one level to other level and one person to another person etc. Communication is compulsory for all aspect like as feed forward and feedback; without proper communication system, no organization can move smoothly. Organization should establish a effective communication channel communication should be fully followed. Communication is essential because in modern age, in every sector, in every second, new things are being happened. So, by lack of proper communication system, the organization may fail to attain its goal.

2.2.5 Realistic Expectation

Realistic expectation and estimation is very important in PPC. the management should not take irrational and more high expectation, non attainable aim ma be worst for the organization. So, a realistic assumption should be made by analyzing the past performance and viewing the present operation, then estimate the future program that can be easily performed. More optimistic thinking can not give any advantage rather than loss of (pessimistic) nor irrationally optimistic. To be realistic, expectations must be related to: (i) their specific time dimension, and (ii) an assumed external and internal environment that will prevail during that time span.

2.2.6 Time Dimension

"Whether an individual or an entity is idle or busy, time asses at the same rate. The problem of the manager in one hand is to accomplish the planned activities in a given time and on the other hand is to prepare the plan itself. Phasing of PP are of two types:

a) Planning Horizon

Planning horizon refers to the period of time in the future for which management should plan. In practical situations, a need exists for a number of different planning horizons. The conscious of managerial decisions constitutes the totality of managerial planning. Each planning decision reflects a plan about future events, and the aggregate of all decisions constitutes the overall policies and plans of the organizations.

b) Timing of Planning Activities

Timing of planning activities suggests that there should be a definite management time schedule established for initiating and completing certain phase of the planning process. Profit planning should be viewed as a continuous process at all levels of management. It must be continually releasing the future, replanning and revising prior in the decision making process.

2.2.7 Flexible Application

Flexible application is the other important factor in fundamental of PPC. Expenses and cost budgets must not be rigid in nature. Sometimes by one or the other reason, variable costs have to be spending much for the benefits of the organization. The benefits necessarily need not to be in the form of monetary terms. Budget should not be regarded as "Straight jacket" and the management should not regard the budget as the constraint for the profit planning to seize the opportunities beneficial in long run.

2.2.8 Individual and Group Recognition

Behavioural aspects of human being are of the field of the psychologist, educators and businessmen and finding is that there can be so many unknown misconception and speculations which have to be considered for an efficient management. A good and dynamic leadership can resolve this problem by integrating all the group efforts for betterment of the organization. Finding of relevant study conducted by an industrial psychologist have described about the effects of pressure on human behaviour. Another aspect of behavioural recognition is that the individual recognition of the work should be carefully done. The system or recognizing the efficient work of an individual manager and identification of an efficient manager should be done and efficient one should be rewarded. For implementing the PPC programme effectively, there should be a proper coordination between individual's goals, needs and that of organization by way of motivation.

2.2.9 Follow Up

Follow up is also the very important point in fundamental of PPC. The quality of performance should be checked as for as possible. Poor performance should be subject of correction and outstanding performance should be recognized and rewarded.

Therefore, the follow up PP programme holds that both good and substandard performance should be carefully investigated, the purpose being three,

1) In the case of substandard performance, to lead in a constructive manner for immediate corrective action.
2) In the case of outstanding performance, to recognize it and perhaps provide for a transfer a knowledge to similar operation.
3) To provide a basis for better planning and controlling in the future.(Thompson)

2.2.10 Zero-Based Budgeting:

The budgeting which is always start from Zero is called zero base budgeting. "Begin with where you are an establish a business as usual budget for next year the same way and the same things your would do if you weren't concerned about constraint an total justification" (Welsch, Hilton, Gordon 2006:43)

2.3 The Profit Planning and Control Process

The process of PPC outlines the sequential phase that management must perform from the development of objective for the business through control, corrective action and replanning. "Economic, political, social and technological factors operating in the external environments have significant impact on all organization, the management must understand them and try to harmonize the internal environment with them. Thus, the basic tasks of management-planning, organizing, directing and controlling are the same in business and non-business enterprises." (Glenn, Hilton, and Gordon)

PPC process necessarily integrates the planning, leading and control functions of management. A PPC program includes more than the application of a periodic master budget rather, it encompasses the application of a number of related management concepts through a variety of approaches, techniques and sequential step. The PPC process typically is repeated for each budget period. Also, the components of a PPC program are restated for each budget period. Thus, all the basic steps in the planning phase would be reviewed and evaluated periodically.

The planning process should involve periodic, consistent and in depth replanning so that all aspects of operations are carefully reexamined and reevaluated. This prevents a budget planning approach that involves only justification of increase over the period. An overview of the PPC process is presented as follows:

Management Function	Phases	Primary responsibility
Planning	External relevant variables-identify and evaluate Broad objectives of the business-develop and revise Specific enterprise goals-develop consistency with item 2 above. Enterprise strategies-specify major thrusts to attain the objectives and goals. Executive management planning instructions-specify planning premises (or guidelines) for managers (based on items 4 above) Project plans-develop and evaluate for each project. Strategic profit plan (long-range) develop for 3, 5 or 10 years	Top level Management
Leading	Tactical profit plan (Short range)-develop for upcoming year. Implementation of profit plans-implement throughout the budget period.	Middle level
	Performance reports-prepare monthly reports by responsibility	All level
Controlling	Follow up- provide feed back, take corrective action and replan	

2.3.1 Identification and Evaluation of External Variables

The environmental variables exert major influences on an enterprise. The variable identification phase of the PPC process focuses on identifying and evaluating the effects of the external variables. Identification also involves separate consideration of variables that are non controllable and those that are controllable. This means that management planning must focus on how to manipulate the controllable variables. Moreover, there must be a planning of how to work with the non controllable variables. That is for both kinds of variables, how can management take advantages of potential favourable impacts and minimize potential unfavourable impacts on the enterprises. Analysis and evaluation of the environmental variables must be a continuing concern of management. This activity should expect various staff groups to provide data and recommendations. Particularly, significant phase of this analysis includes an evaluation of the present strength and weakness of the enterprise.

2.3.2 Development of the Broad Objectives of the Enterprise

Based on a realistic evaluation of the relevant variables and an assessment of the strengths and weakness of the organization, executive management can specify or restate this phase of PPC process. The statement of broad objectives should express the mission, vision and ethical characters of the enterprise. The purposes of statement of broad objectives are essentially as follows:

1) To define the purpose of the company.
2) To clarify the philosophy and character of the company
3) To create a particular "climate" with in the business.
4) To set down a guide for manager so that the decisions they make reflect the best interests of the business with fairness and justice to those concerned. (Steward)

The statement of broad objectives normally should not specify quantitative goals. Rather, it should be an expression of the purpose, objectives and philosophical character of the business.

2.3.3 Development of Specific Goals for the Enterprise

The purpose of the "goals phase" of the PPC process is to bring the statement of broad objectives into sharper focus and to move from the realm of general information to more specific planning information; it provides both narrative and quantitative goals that are definite and measurable. These goals should be developed by executive management as the second component of the substantive plan for the upcoming budget period. Executive management should exercise leadership in these planning phases so that there will be a realistic and clearly articulated framework with which operations will be conducted toward common goals.

Specific goals relate to the enterprise as a whole and to the major responsibility centers. The specific goals provide a basis for performance measurement. Thus, statement of specific enterprise goals should define such operational goals as expansion or contraction of product/service lines. Geographic areas, market share, growth trends, production goals, profit margins, return on investment cash flow.

2.3.4 Development and Evaluation of Company Strategies

Company strategies are the basic trusts, way and tactics that will be used to attain planned objectives and goals. A particular strategy may be short term or long term. The purpose of developing and disseminating enterprise strategies is to find the best alternatives for attaining the planned broad objectives and specific goals. In the development of basic strategies for enterprise, executive management must focus on identification of the critical areas that influence the long range success of the enterprise. Some basic examples of basic strategies are:

- Penetrate the market for long term with the help of advanced technology
- Emphasize product quality & price,
- Expand market to large area.
- Market the product with low price to expand volume (units).
- Use both institutional and local advertising.
- Improve employees' morale and productivity by initiating a behaviour management programme.

Although strategy formulation is a continual concern to executive management, better managed companies are found that periodic reassessment enterprises.

2.3.5 Executive Management Planning Instructions

This phase involves communication of the substantive plan to middle and lower management levels. It explains the broad objectives, goals, strategies and other executive management instructions needed to develop the strategic and tactical profit plans. The executive planning instructions issued by top management, communicate the planning foundation necessary for the participation of all levels of management in the development of the strategic and tactical profit plans for the upcoming budget period.

2.3.6 Preparation and Evaluation of Project Plans

Project plans encompass variable time horizons because each project has a unique time dimension. Project plans encompass such items as plans for improvement of present products, new and expanded physical facilities, entrance into new industries, exit from products and industries, new technology and other major activities that can be separately identified for planning purpose. The nature of project is such that they must be planned as separate units. In planning for a project, the time span considered must normally be the anticipated life span of the project. During the formal planning cycle, management must evaluate and decide upon the plan status of each project in process and select any new projects to be initiated during time dimension covered by the upcoming strategic and tactical profit plans. Thus, preparation and evaluation of current and future profit plans are essential on a formal basis as one of the profit planning phases.

2.3.7 Development and Approval of Strategic and Tactical Profit Plans

The strategic (long range) Plan and the tactical (short range) plan we develop concurrently. The chief executive and executive management usually develop the strategic and tactical profit plans. This approach is seldom advisable because it denies full participation which may cause unfavourable behavioural effects. The manager of each responsibility center can begin intensive activities within his/her responsibility center to develop a strategic (long range) profit plan and in harmony with such plan, a tactical profit plan also. All of these activities must be coordinated among the centers in conformity with the organizational structure. As the two profit plans are being completed, the approval, disapproval or revision based on either (a) action by executive management (b) presentation and justification by the manager of the responsibility centers to the next higher level of authority.

2.3.8 Implementation of Profit Plans

Implementation of management plans that have been developed and approved in the profit planning process involves the management function of leading subordinates in attaining enterprise objectives and goals. Effective management at all levels requires that enterprise objectives, goals, strategies and policies should be communicated and understood by subordinates. A comprehensive PPC program may aid substantially in performing this function. It is desirable that the distribution of the profit plan include a "statement of planning premises" from the top executive that emphasizes performance, challenge and positive motivation. After distribution of the profit plans, a series of profit plans conferences should be initially meet with the top executives to discuss implementation and action in conference with the objectives and goals specified in the profit plans similar conference should be conducted until all major responsibility centers are reached.

2.3.9 Use of Periodic Performance Reports

As profit plans are being implemented during the period of time specified in the tactical plan, periodic performance reports are needed. These performance reports are prepared by the accounting department on a monthly basis. Also some special performance reports are prepared more often on "as needed" basis which are: (a)compare actual performance with planned performance and (b) show each differences as a favourable or unfavourable performance variation.

2.3.10 Implementation of Follow Up

Follow up is an important part of effective control. Performance reports are based on assigned responsibility, so they are the basis for effective follow up actions. It is important to distinguish between cause and effects. The performance variations are the effects, management must determine the underlying causes. The identification of cause is primarily a responsibility of line management. Analysis to determine the underlying the underlying cause of both favourable and unfavourable variances should be given immediate priority. In the case of unfavourable performance variance after identifying the basic causes as opposed to the result, an alternative for corrective action must be selected; the corrective action must be implemented. Finally there should be a special follow up actions .This step should be designed to: (i) determine the effectiveness of prior corrective action and (ii) provide a basis for improving future planning unfavourable and control procedures.

2.3.11 Timing of the Planning Process

Profit planning involves the selection of defined periods of time for the strategic and tactical profit plans. The annual phase of these budgets proceeds the budget year. Replanning to take into account, fee back information occurs throughout the budget period as needed. This timing pattern is appropriate that can plan realistically one year in advance.

Some organizations experience conditions that make it inadvisable to plan very far into the future, such organization can use continuous profit planning. This approach requires frequent planning and replanning because of the dynamics of the environment or technology. An annual profit plan is prepared by each division of the company. These individual divisional plans are then combined and summarized into the overall profit plan with respect to the frequency of profit plan preparation and revision. Well managed companies (that have had many years of experience with profit planning and control programms) have experienced that replanning should be undertaken formally and extensively at least on an annual basis.

2.4 Line and Staff Responsibilities on PP

The chief executive has ultimate responsibility of PPC. However, there must be a concomitant assignment of responsibility to line and staff executives. Each line executive must be assigned center responsibility for (1) operational decision inputs in to the plan, (2) implementation and (3) control. The PPC programme must be established upon a firm foundation of line responsibility and commitment to develop, implement and attain the role of each centre in the enterprise objectives and goals. We cannot over emphasize that a PPC program should be viewed as an approach to assist managers in line positions in carrying out their basic responsibility. Staff executives shouldn't be assigned the responsibility for "enforcing the budget." The typical staff duties are as follow:-

1) Advise the chief executive, appropriate top management committees and other on all aspects of PPC program.
2) Recommend the PPC procedures and technical requirements for each component of the program.
3) Assume responsibility of program and the necessary time schedules to make it operative.
4) Provide overall technical supervision of PPC program.
5) Design and recommend essential forms, schedules and reports.
6) Supervise the preparation and revision of PPC manual.
7) Furnish analysis of past and future cost, revenues and some on requested by appropriate managers.
8) Translate certain preliminary policy decisions probable of alternative financial effect on future operations.
9) Prepare performance reports.
10) Help, analyze and interpret variance between actual and planned goals.
11) Perform specific clerical work associated with the PPC program.
12) Supervise revision of both the profit plans and the PPC program.
13) Perform various statistical analysis that is related to the PPC program.
14) Receive tentative plans and transmit them to appropriate executives for review and revision.

15) Organize coordinate and conduct appropriate training sessions and conference related to the PPC program.
16) Reproduce and distribute the various components of the profit plan inconformity with instructions of the chief executive.

Similarly, the responsibilities of top level management in PPC program are as follows;

1) Develop the substantive plan.
2) Receive and review profit plans from the major responsibility centre and make appropriate recommendations for their improvement.
3) Recommend decisions on major items incorporated into the profit plans where may be conflict or lack of coordination among the functional subdivisions of the enterprises.
4) Recommend change to improve the planning and control process related to the PPC program.
5) Receive and analyze periodic performance reports from the responsibility centers.
6) Consider various alternatives and make recommendations and decisions for corrective action.
7) Make recommendations for changes in PPC program policies and procedures for greater effectiveness.

2.5 PPC Policies manual

A Profit planning and control manual is normally desirable to enhance communication, specify producers, and provide reasonable stability in the operation of the system. A profit planning and control manual should include the following:

1. A statement of objectives of the PPC program.
2. Procedures to be followed in developing profit plans.
3. A profit planning and control calendar specifying completion dates for each part of the profit plan and for the submission.
   - Instruction and forms to be used.
   - A procedures for making Planning decision.

(a) Operating executives.

(b) Staff executives.

(c) Top management budget committee.

4. Distribution instructions for profit plan schedules.

5. Instruction and procedures with respect to performance reports.

(a) Responsibility and procedures for preparation of reports:

- Actual results
- Budgeted data and variations.
- Analysis of variances.

(b) Form, content of, and procedures for performance reports.

(c) Distribution instruction for performance reports.

6. Procedures for taking corrective action on variances.

- Unfavourable variances
- Favourable variances.

7. Follow up and replanning procedures.(Glenn)

2.6 Development Procedures of Budget

Budget is a guideline for a specified period to perform the future plan and objectives of an organization. Master budget is the most important tool in PPC for implementing the activities of an organization. Master budget is a summary budget which incorporates all functional budgets and it may take form of projected profit and loss account and balance sheet as at the end of the budget period" (Gupta)

The following is a simplified sub classification/ procedure of master budget or plan. Many subsidiary budget schedules are necessary in actual practice. (Flesher and Flesher)

Master Budget

Operation Budget	**Financial Budget**
- Budgeted income statement	- Cash budget
- Sales budget	- Receipts

- Production budget
- Material budget
- Direct labor budget
- Factory overhead budget
- Inventory budget
- Cost of goods sold budget
- Selling expenses budget
- Administrative expenses budget. (Horngreen)
- Disbursements
- Balance sheet
- Statement of Sources and applications

The complete budget for a firm is often called the master budget. The budget consists of many functional budgets. These budgets include a sales budget, a production budget, a purchase budget, an expenses budget and cash budget. Once all of these budgets are completed, the master budget of the entire firm is prepared.

In the process of preparing budget planning, enterprise should prepare several functional budgets. The summarization of all the functional budgets into a statement is necessary to calculate the overall income and expenditure of the company. Such overall budget is known as master budget. Master budget is consolidation of all the different department and sectional budgets. By this, the organization forecast the total income and total cost and expenses of the budget period. The preparation of a master budget is a complex process and it involves the efforts of many people from all levels of management. There are 12 basic steps in preparing a master budget for a business firm these step are:

1. Forecast demand for products and or services.
2. Identify cost patterns for responsibility centers.
3. Estimate production costs.
4. Specify operating objectives.
5. Develop a sales budget.
6. Develop a production budget.
7. Develop a purchasing budget.
8. Develop budgets for responsibility centers.
9. Formulate a profit plan.
10. Compare profit plan with operating objectives.
11. Formulate a projected cash budget.
12. Prepare a projected income statement and balance sheet.

A detail profit plan can be functional budget. This process is started with the preparation of sales budget and ends with the completion of budgeted profit and loss account and balance sheet.

2.6.1 Sales Budget

Sales budget is the starting profit point for the development of profit plan. "Sales budget is one of functional or operating budgets and essentially a forecast of sales to be affected in a budget period. In fact sales budget defines the quantities and values of expected sales in total as well as period product wise and area wise during a definite future period. Sales budget forms the fundamental basis for other functional budget and it is needed to coordinate the production function with expected demand for a particular product. The preparation of sales budget requires forecast of quantities to be sold and also the standard prices at which these quantities are sold." (Gupta)

The primary purposes of sales budget are as follows:

1. To reduce uncertainty about future revenues.
2. To incorporate management judgments and decisions into the planning process.
3. To provide necessary information for developing other elements of a comprehensive profit plan.
4. To facilitate management in controlling sales activities.

To develop a comprehensive sales budget, the following process should be followed:

1. Develop management guidelines specified to sales planning (Process & responsibility).
2. Prepare on or more sales forecasts consistent with specified guidelines and assumptions.
3. Assemble all other data relevant to sales plan.
4. Based on above (1-3), apply management evaluation and judgment to develop a comprehensive sales budget.

5. Secure managerial comprehensives sales budget.

These steps must be revised and implemented in various ways depending upon the characteristics of the organization and the exercise of the management.

While developing a realistic sales plan, the following considerations are necessary:

1) Price-cost -volume consideration:- Price and sales volume are mutually interdependent in a competitive market because sales volume and price are so closely tied together; a complicated problem is posed for the management of almost every company. Thus, estimation of the demand curve and the unit cost curve must be considered in sales budget.
2) Product line consideration:- In the development of sales budget, the number and variety of products should be determined. The strategic and tactical sales plan must include tentative decisions about new product lines to be introduced, old product lines to be dropped, innovations and product mix.

2.6.2 Production Budget

The marketing plan specifies the planned volume of each product for each time period throughout the planning period. The next step in a manufacturing enterprise is to develop a production plan. This entails the development of policies about efficient production levels, use of production facilities and inventory levels. The quantities specified in the marketing plan, adjusted to conform production and inventory policies, given the volume of goods that must be manufactured by product and by interim period. The production plan involves determining the number of units of each product that must be manufactured to meet planned sales and faintain desired inventory level of finished goods. Thus, the production budget can be represented in this way-

Sales Volume ± Change in Finished goods inventory = Required Production (Glenn, Welsch, Hilton and Gordon)

Production budget is prepared on the basis of

- Sales budget
- Plant capacity
- Opening inventory of finished goods
- Closing inventory of finished goods and
- Policy of management.

Planning, scheduling and dispatching of the actual production through out the year are functions of the production department. Therefore, it is essential that responsibility for the planning and control of these functions be performed by the production managers.

Considerations in planning production and inventory level

1. Total production requirement for the budget period.
2. Inventory policies about levels of finished goods, work in process and the cost of carrying inventory.
3. Plant capacity policies, such as the limits of permissible departures from a stable production level throughout the years.
4. Adequacy of manufacturing facilities.
5. Availability of direct materials, purchased components and labor.
6. Length of the processing time.
7. Economic lots or runs.
8. Timing of production through out the budget period by product and by responsibility centers.

Inventory and inventory policies

In most business, inventories represent a relatively high investment and may have a significant impact on the major function of the enterprise and its profit. The objectives of inventory policies should (1) to plan the optimal level of inventory management ad (2) through control to reasonable maintain these optimal levels. Inventory levels should be maintained between two extremes: an excessive level causing excessive carrying costs, risks and investment and other inadequate level to meet sales and production demand promptly. Inventory policies should include (i) the establishment of inventory standards, such as maximum and minimum level or planned turnover rates and (ii) the application of techniques and methods that will ensure conformity with planned inventory standards. Budgeting requires that inventory policies should be established and provided for reporting variances of actual inventory level from standard levels from month to month.

Considerations for Inventory Level

1. Quantities needed to meet sale requirements
2. Perish ability of items
3. Length of the production period.
4. Storage facilities
5. Adequacy of capital to finance inventory for production some time in advance of sales
6. Distribution time requirements
7. Cost of holding inventory
8. Protection against direct material and component shortages
9. Protection against materials and parts price increases
10. Risks involved in inventory

    a) Price declines
    b) obsolescence of stock (outdating of stock)
    c) casualty loss and theft
    d) lack of demand
    e) customer return policies

The production Budget as a Planning, Coordinating and Control tool

The production budget contributes to planning, coordination and control developing the detailed decisions about production plans, materials and component requirement, plant capacity, capital additions and inventory policies. Production budget is the primary basis for planning raw material and component requirements, labor needs, capital additions, cash requirements and factory cost. Therefore, the production plan becomes the foundation for factory planning in general. an adequate production control system is essential for managerial control of costs, quality and quantities. The principal procedures involved in production control are the following.

1. Material control
2. Analysis of production processes by responsibility centers in the production
3. Routing Production
4. Scheduling Production
5. Dispatching production
6. Follow up. (Glenn, Welsch, Hilton and Gordon}

The production plan is and important tool of planning, coordination and control. By expressing the manufacturing budget as a planning tool, it establishes the foundation for planning all aspects of factory operations such as raw material needs, factory labor need, supervisory needs, factory overhead, plan capacity and factory service activities. The coordination among sales plans, inventory policies and production requirements comes into focus and is resolved in the production plan. It is also an important factor in the overall coordination of such functional activities as cash flow planning, financing, research and development, engineering and capital additions. It establishes the basis for control of production, inventory, production costs and labor in the factory. (Glenn, Welsch, Hilton and Gordon)

2.6.3 Material budget

Material budget is also called planning 'material purchased and usage budget'. The material budget consists of (1) requirements of materials and component parts for production (2) Raw material and parts inventory levels and (3) Purchase of raw materials. To ensure that the appropriate amounts of raw materials and components parts will be on hand at the time required and to plan for the costs of such materials and parts, the tactical (short term) profit plan should include (1) a detailed budget that specifies the quantity and cost of such materials and parts and (2) a related budget of material and parts purchase. Planning of raw materials and parts usually requires the following four sub budgets.

1. Material and parts budget (Quantity by product & responsibility center)
2. Material and parts purchase budget (Cost and delivery dates)
3. Material and parts inventory budget (Level of inventory)
4. Cost of material and parts used budget

In designing each of these budgets, two basic objectives, in addition to planning are overriding.

1. Control: By responsibility and time periods.
2. Product costing: Product cost i.e. manufacturing costs.

Materials and Parts inventory policies

The timing of purchase will depend on inventory policies like finished goods inventory policies, raw material and parts inventory policies are intended to minimize the sum of two classes of costs: The cost of carrying the inventory and the cost of placing and order. Management policy with respect to purchase and inventory should be specified. Two basic timing factors are: (1) How much to purchase at a time (2) When to purchase

Materials to be purchased can be calculated as follows:

Material required for production (units)	....
Add: Ending inventory of materials	....
Total Material required	xxxxxxxxxxxxxx
Less: Beginning inventory of materials	....
Materials to be purchased	xxxxxxxxxxxxxx

A well-known approach to purchase material is economic order quantity, which is computed as follows: (Glenn, Welsch, Hilton and Gordon)

Economic order quantity (EOQ) = (2AO/C)

Where, A= Annual quantity used in units.

O= Average annual cost of placing an order.

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

Just Time in Purchasing

A recent development in material and parts inventory control is called just-in-time (JIT) purchasing and manufacturing. Its primary objective is to minimize inventory levels and the resulting costs. In this approach materials and parts are purchased until need for production, there by inventory holding cost in minimized. When to purchase is also determined by Reorder level (ROL). At this level, the inventory is equal to the quantity needed to sustain production for a period required for a period required for reorder and replenishments. Often safety stock is included in ROL.

Considerations in setting inventory policies:-

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

2.6.4.1 Direct Labor Budget

An estimate of direct Labor requirements essential for achieving the target of production budget gives birth to direct labor budget. This budget may give details about direct labor cost (i.e. Budgeted units of production may be multiplied by labor cost per unit) or about both direct labor hours are estimated for budgeted units and then multiplied by wage rate per hour.

"Direct labor hours are estimated on the basis of past experience for each category of workers with reference to budgeted units of production. Internal factors like type of the production process factors like the types of payment and system of cost records will decide the possibility of expressing production units in term of labor hours. The personnel department will suggest the wage rates that are likely to prepaid. It is mostly calculated on the bases of historical relationship between wages paid and direct labor hours worked in the department or for the product after considering the current situation. This budget may also be termed as manpower Budget.

Direct labor is defined as those labor costs directly identifiable with the production of specific units of finished production.

The main objectives of direct labor budget are as follows;

- To asses labor requirement.
- To prepare manpower planning.
- To estimate per unit labor cost.
- To estimate per unit labor cost.
- To estimate cash requirements.
- To give information for cash budget
- To control the labor budget.

2.6.4.2 Developing the direct labor budget

The approach used to develop the direct labor budget depends primarily on the:

1. Method of wage payment.
2. Types of production process involved.
3. Availability of standard labor times and
4. Adequacy of cost accounting records relating to direct labor costs. (Welsch: 281)

Basically there are three approaches to the development of direct labor budget as follows (Welsch: 244)

i. Estimate the standard direct labor hours for each unit of each product, then estimate the average wages rates by department, cost center or operation;

multiple the standard time per unit of product by the average hourly wage rate, giving the direct labor cost per unit of output for the department, cost center or operation by the unit direct labor cost rate to obtain the total direct labor cost by product.

ii. Estimate ration of direct labor cost to some measure of output that can be planned realistically.

iii. Develop personnel tables by enumerating personnel requirements (including in each responsibility center)

2.6.5.1 Overhead Budget

Overhead expenses budget plays important role for organization to accomplish profit planning and control objectives. It is classified by responsibility, designated as controllable and non- controllable and estimated with respect to their behavior pattern. There are three broad categories of expanses: factory or manufacturing overhead, selling and distribution expenses and general administrative expenses.

Manager should view expense planning and control as necessary to maintain reasonable expenses levels to support the objectives and planned programs of the enterprise. Expense planning should be not focus on decreasing expenses, but rather on better utilization of limited resources. Viewed in this light, expenses planning and control may causes either decreased or increased expenditures. Expenses planning and control should focus on relationship between expenditures and the benefits derived from those expenditures. The desired benefits should be viewed as goals, and sufficient resources must be planned to support the operating activities essential for their accomplishment.

Knowledge of cost behavior that is the response of cost to different volumes of output is essential in cost planning and control entire enterprise or in the context of a specific responsibility center. There are three distinct categories of expenses when they are viewed in relation to change in output are:

i) Fixed Expenses: Those expenses that is constant in total, regardless of fluctuation in output. Because ant expenses can change, these expenses must be applied a) to realistic or relevant range of output and b) in relation to a given set of conditions. The examples of fixed expenses are salaries, property taxes, insurance, depreciation rent etc.

ii) Those expenses, which in total, it is directly relation with change in output. Examples of variables expenses are direct materials, direct labor, power usage etc.

2.6.5.2 Manufacturing overhead expenses

Manufacturing overhead is that part of total production cost not directly identifiable with specific products or jobs. Manufacturing overhead consists of (1) indirect material, (2) indirect labor (including salaries), and (3) all other miscellaneous factory expenses , such as taxes, insurance, depreciation, supplies, utilities and repairs. Manufacturing overhead includes many dissimilar expenses; therefore, it causes problem in the allocation of these costs to products.

There are two distinct types of responsibility centers in most manufacturing companies: Production and services. Producing centers are those manufacturing departments that work directly on the products manufactured. Service department do not work on the products directly, but rather they furnish service to the producing department and to other service departments. Responsibility for the operation of each department should be classified separately in the chart of accounts used by the cost accounting department.

To developing the manufacturing overhead budget, the following steps should be taken:

i) Translate the requirement specified in the production plan into output or activity in each department.

ii) Plan department overhead expenses

iii) Allocate the planned departmental expenses to the producing department.

iv) Allocate the producing departments' expenses to the products departments.

2.6.6. Selling and Distribution Expenses Budget

Selling and distribution expenses include all costs related to selling, distribution, and delivery of products to customer. These expenses are not identified to specific product and hence are not allocated directly to each product. A separate distribution expenses plan should be developed for each responsibility center in the distribution function. Many companies allocate these expenses as a certain percentage out of total expenses. The top marketing executive has the overall responsibility for developing the distribution expenses plan. The manager of each responsibility center should be assigned direct responsibility for that department's distribution expenses plan. Thus the promotion manager should be responsible for developing promotion plan, and the field manger for developing both their marketing plan and distribution expenses budget. These budgets should be detailed by the sales managers should be based on planned volume of activity or output. Usually the activity base chosen is the sales amount in Rs/ Dollars.

Carefully planning of such expenses affects the profit potential of the firm. Fundamentally the top marketing executive has the direct responsibility for planning of the optimum economic balance (for profit potential) (1) the sales budgets (2) the advertising budget and (3) the distribution expenses budget. Therefore, profit planning and control views sales, advertising, and distribution expenses as the basic problem rather than as three separate problems. (Ibid 314)

2.6.7 Administrative Expenses Budget

Administrative expenses include those expenses other than manufacturing and distribution. They are incurred in the responsibility centers that provide supervision of and service to all functions of the enterprise, rather than in the performance of anyone function. Because large portions of administrative expense are fixed rather than variable, the notion persists that they cannot be controlled. Aside from certain top management salaries, most administrative expense are determined by management therefore; there is strong tendency to overlook their magnitude and effect on profits. Each administrative expense should be directly identified with a responsibility center, and the center manager should be responsible for planning and controlling the expenses. (Welsch: 316)

This fundamental of expense control is especially important for administrative costs because there is often a failure to pinpoint responsibility for expenses of a general nature. For this and other reasons, many companies have found it helpful to apply the fixed variable expense concept to administrative expenses. It is advisable to base budgeted administrative expenses on specific plans and programs. Experience, adjusted for anticipated changes in management policy and general economic conditions is helpful. Because most administrative expenses are fixed, an analysis of the historical record will often provide a sound basis for budgeting them.

2.6.8. Flexible Budget

Flexible expenses budget focus on both planned expenses and the control of expenses. Its concept is complementary to the tactical profit plan. Flexible budgets directly relate only to expenses. Flexible budgets are also called variable, dynamic, activity and output adjusted expense budgets. The fundamental concepts of flexible budgets for expenses are incurred because of (a) the passage of time (b) output or productive activity or (c) a combination of time and output or activity. Application of this concept means that:

1. Expenses must be identified as to their fixed an variable components when related to output or productive activity.
2. Expenses must be reasonably related to output or productive activity.
3. Output or productive activity must be reliably measurable.
4. Flexible budget formulae for each expense must be for a specified relevant range of output or productive activity.
5. For planning and control purpose, flexible budget formulae must be developed for each Responsibility center in an enterprise.

Thus flexible budget has three specific uses.

a. Preparing the expense budgets for the tactical profit plan
b. Provide expense goals.
c. To prepare the monthly performance reports.

2.6.9. Capital Expenditure Budget

Capital expenditure often called capital budgeting. Capital budgeting is the process of planning and controlling the strategic and tactical expenditures for expansion and contraction of investments in operating assets. The capital expenditure budget is an important part of a comprehensive profit plan. It is directly related to a company's operating assets, especially land, equipment and other operational assets and cash. The capital expenditures budget is variously referred as to the capital addition budgets, plant and equipment budget, of plan addition budget. Capital expenditure budget estimate cash outflows and cash inflows and then select the project by applying different techniques as:

a. Average rate of return. (Higher ARR preferred)
b. Payback period. (Lower PBP preferred)
c. IRR method. (Higher IRR preferred)
d. Profitability index. (Higher PI preferred)
e. NPV method. (Accept positive or zero)

Lastly the project is accepted or rejected according to the result of the above analysis.

Thus, capital budgeting involves the following features:

1. Consideration of investment proposal.
2. Analyzing the cost benefit aspect of the project.
3. Estimation of available funds & their utilization.
4. Objective to maximize the profits with the optimal utilization of available funds.

In this way capital budgeting is helpful:-

a. to avoid idle operating capacity
b. to avoid excess capacity
c. to avoid investment in less profitable sector
d. to evaluate alternative proposals of investment

2.6.10 Cash Budget

Cash budgeting is an effective way to plan and control the cash flows, assess cash needs and effectively use excess cash. A primary objective is to plan the liquidity position of the company as a basis for determining future borrowing and future investment for example, excess cash not invested incurs and opportunity cost, that is loss of the interest that could be earned. Cash flows can be controlled in many ways by the management, such as increasing the effectiveness of credit and collection activities, making payments by time drafts rather than by cheques, making payments on the last day of discount periods, batching payments and giving discounts on cash sales. Cash management is important in enterprises, whether large or small. Many lending agencies require cash flow projections before granting large loans. The primary purpose of the cash budgets are:

1. Give the probable cash positions at the end of each period as a result of planned operations.
2. Identify cash excess or shortages by time periods.
3. Establish the need for financing and/ or the availability of the cash for investment
4. Coordinate cash with; total working capital, sales revenue, expenses, investment and liabilities.
5. Establish a sound basis for continuous monitoring of the cash position.

A cash budget shows the planned cash inflows, outflows, and ending position by interim periods for a specific time span. Most companies should develop both long term and short term plans about their cash flows. The short term cash budget basically includes two parts. (i) the planned cash receipts (inflows) and (ii) the planned cash disbursements (outflows) Planned beginnings period. Planning the cash inflows and outflows will indicate: - the need for financing probable cash deficits or the need for investment plans to put excess cash for profitable use.

2.7. Completion and Application of the Profit Plan

In developing profit plans, many budget schedules are prepared to detail plans for each phase of a company's operations. The final step in the planning process is to complete the profit plan by combining the component schedules and preparing planned financial statements of financial positions. Projected income statement and cash flows are prepared in order to determine the implications of the company's plan for its future financial condition.

The profit plan is them distributed to appropriate managerial personnel to guide them in conducting operations throughout the planning period. Although some retail firm budget only sales, stock levels, and purchases, a comprehensive profit planning and control program extending to all phases of operations is desirable. In such cases, the several sub budgets, (Sales, stock, purchases, expenses, capital expenditure, cash and so on) are summarized in the budgeted income statement, budgeted balance sheet and cash flow budget.

2.8. Control Process of Profit Planning

Profit Planning and control originally starts from planning system, focusing the management to plan various functional budgets in a long range of a short range time period. Accounting to the planning process as various profit plans are prepared, like as control process should be started in a systematic manner. There are certain processes to control profit plan.

a. Cost volume and profit analysis. (Break even analysis)
b. Performance evaluation and management control.
c. Analysis of budget variances etc.

2.9 Importance of PPC

The PPC can be adopted to all types of organization large and small, manufacturing and non manufacturing etc. The PPC has vary important effect in the organizations adopting it. Such effect can be pointed as follows:

a. It forces early consideration of basic policies.
b. It sets responsibilities of employees in relations to each function.
c. It enhances cooperation and coordination.
d. It prioritizes the economy in every step.
e. It emphasizes rewards and punishments.
f. It develops the understanding among all levels of management.
g. It reduces unfavourable variances by the way corrective actions.

2.10 Limitation of PPC

In developing and using a profit planning and control program, certain limitation can occur they are-

1) The profit plan is based on estimates.
2) A PPC program mustn't be continually adopted to fit changing circumstances.
3) Execution of a profit plan will not occur automatically.

4) The profit plan will not take the place of management and administration.
5) Thus, the profit plan should be regarded not as a master, but as a servant.

The most important is to make sure, by intelligent use of the profit plans that all attainable benefits are derived from the plans as rendered.

2.11 Review of Previous Related Research Works

Research works are regularly done of various fields as searching gives better, more feasible, more profitable alternative for business organizations. Management accounting is the major field of research work. Numbers of research works are found on profit planning and control of various manufacturing and non manufacturing enterprises. But very few are specific on parts of budgeting. Effectiveness of sales budgeting and planning is one of the basic topics under profit planning and control which is being studied by this researcher. Some previous related search findings and the recommendation are as follows.

Mr. Binaya Raj Adhikari (2006) has made a study entitled, Effectiveness of Sales Budgeting and Planning with reference to NOC" presented to TU. The basic objective of the study was to study the effectiveness of sales budgeting and planning of NOC. Mr. Adhikari's findings are budgeted sales and Actual sales are correlated. When change comes in budgeted sales the actual sales also changes in same direction. Actual sales are more consistent than budgeted sales. Actual sales are more variable than Budgeted sales. Actual purchase is more variable than actual sales. Actual sales are more consistent than actual purchase. But there is no strategic and tactical plan for sales. There is not storage for LPG.

However there is positive correlation in budgeted sales and actual sales the researcher advised to make strategic plan and tactical plan for sales. NOC has to make storage for the LPG and increase the storage capacity of other petroleum products. The researcher also advised to install the refinery plant in country side to reserve outflow of heavy amount on refine crude oil. NOC has to update and train human resources to suit the prevailing environment.

Mr. Diwakar Lal Karna (2004) has made a study entitled, "Profit Planning and Control - A Case Study of Nepal Electricity Authority" submitted to TU. The main objective of the study is to highlight the degree of application of profit planning concept in NEA. The researcher found that budgeted sales and actual sales have perfect correlation. Actual sales are more consistent than budgeted sale of electricity. Actual production of electricity is more variable than actual sales. NEA prepares the various functional budgets to implement profit planning system in some extent but there is lack of coordination. Its financial position is also poor that why its current ration is below standard and return on net worth of equity is also low.

The researcher has recommended solving those disasters by recruiting the qualified and energetic personnel. Periodical performance should be prepared variance classified as favorable and unfavorable and analyze in time and required action over the result should be taken as fast possible. Cost volume profit relation should be considered while formulating profit planning i.e. sales budget, pricing strategies and flexible budget, etc. Overhead budget should be developed and classify in scientific way.

Mr. Kiran Shrestha's (2009) has presented a study entitled, Profit Planning and Control in Public Utilities Sector (Comparative study of Nepal Water Supply Corporation and Nepal Telecom). The basic objectives of the study were to study expenses and its effectiveness on the company. Nepalese public enterprises have lack budgeting experts and skilled planners. Plans are formulated on traditional adhoc basis. Sales plan achievement is satisfactory in NTC. NTC has not practiced to prepare long-term sales plan. But in NWSC, sales achievements are below than sales targets. This signals that sales plans are not made by considering all components which affecting sales. Planning department of NTC and NWSC does not have any authority to decide and create new ideas while formulating various plans. Basically few higher-level officials formulate plans, participatory decision-making is not considered necessary in the corporation. Pricing system of Public utility sector is not scientific. PEs adopts traditional pricing methods. Usually, cost- plus pricing method is applied to determine price. Certain products are priced below costs as per HMG circular. Cost-volume profit relationship has not been considered while developing the sales plans; fixed assets purchase plan and pricing strategy. As BEP is increasing each year, it is not a good symptom for the corporation.

Mr. Kiran Shrestha has recommended All PEs should adequately identify and evaluate the internal and external variable, which has influences on the enterprises. These enterprises should have in- depth analysis of company's strength and weakness. NWSC and NTC should decide to develop effective program to expand growth rate. Both NWSC and NTC should adopt participatory management policy as well as Management By Objective (MBO), so as to make the employees feel they are working for their own company. Cost-Benefit Analysis and Cost volume profit analysis should be taken into consideration while developing sales plan, fixed assets purchase plan and pricing strategies. Sales forecasting should be made on the realistic ground. Forecasts should include strategic and tactical forecasts that are consistent with the time dimensions used in the comprehensive profit plans. The process of developing a realistic sales plan should be unique according to the requirement of the enterprise.

Mr. Gurung has presented a study on Profit planning and control of Nepal Food Corporation. The researcher had found the achievements of NFC are not encouraging as it has committed. The achievement of actual sales has not reached the targeted sale which shows the weak planning management of NFC. NFC is suffering from operating loss due to heavy portion of administration and transportation cost. Financial ratios most are not in favorable situation. The liquidity position of NFC is weak. The profitability of NFC is also not satisfactory. As a whole the economic condition of NFC is very weak.

From the study and based on the findings of NFC, Mr. Gurung has made some recommendations which could be important for the NFC: Firstly, NFC has to make short-term and long-term planning to fulfill the goals of the corporation. There should be separate department for planning. NFC should allow dealing on other food grains items also for profit generation. NFC has to revise its pricing policy. It should let the price set as per the market competition. NFC should identify its strengths and weakness. The profitability of NFC was also not satisfactory for this NFC should increase in sales.

2.12 Research gap

The entire above thesis have been prepared for partial fulfillment of master degree. All these studies have been done under 5 year data. They analyzed profit planning and control of public enterprises. They have suggested for strategic and tactical sales plan. On going research of profit planning and control on public enterprises – A case study of NOC, the researcher has tried to compare the actual sales and budget sales of seven years which is better then 5 year data. Trading company has to mention the stock but earlier researchers have not mentioned the stock although the recommended for strategic and tactical sales plan. So researcher has tried to sales forecast for coming next year and what type of impact will be in the sales and stock of petroleum products. The researcher also tries to evaluate the profit and loss account which is necessary for the organization. Sales in quantity are not only the measure of the profit planning and control, other measures also need to study the performance of companies' activities. It means not only good looks of a person proves he is fine or well if he has pain in his any part of body will suffer for his life so it must be treated carefully.

Thus this research is quite different the other and it will show the financial position of NOC also.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Introduction

Research may be defined as the objective and systematic method of finding solution to a problem. Research Methodology is the way to solve systematically about the research problem (C. R. Kothari, "Research Methodology, Methods and Analysis"). It helps to analyze and interpret the various aspects of research works like sales planning, production planning, and over all profit planning. For this various financial statements, statistical tools and other related documents have been studied.

3.2 Research Design

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure (Claire Seltiz). Thus the research design is a framework that keeps the researcher in a particular track. The research design for this study is analytical and descriptive type. This study examines and analyses the budgeting procedure in the process of profit plan of NOC. Thus the study is closely related to draw the picture of various functional budgets, evaluate sales planning, and other accounting statements as well as actual results based on budgets.

3.3 Period Covered

The present study is undertaken for a period of 7 years i.e. from the fiscal year 2059/60 to fiscal year 2065/66 and on this basis the strength and weakness of managerial planning and control of NOC are identified.

3.4 Nature of Data

Basically secondary data are used in this study.

3.5 Sources of Data

The data used in this study have been collected from following sources:-

- Official records and publication of NOC.
- Published and unpublished reports.
- Magazines Publications.

3.6 Statistical Tools Used

Data collected from various sources are managed, analyzed and presented in proper tables and formats. Such tables and formats are interpreted. To analyze the collected data, financial and statistical tools like mean, standard deviation, correlation, regression line, percentage, diagrams, etc have been used.

3.7 Research Variables

Actual Sales, Budgeted sales, Actual Purchase and Actual sales (in Qty.), Profit and loss account, expenditures, etc are the research variables of this study.

Chapter-IV

Data Presentation and Analysis

4.0 General Introduction

The main purpose of this research paper is to examine the profit planning the profit planning system in NOC. This chapter of the paper will analyze the various aspects of profit planning and their accomplishment.

Usually, profit don not just happen profits are managed. When a management plan its' profit performance that is known as profit planning. Profit planning is a part of overall planning process of an organization. The process of preparing and using budget to achieve management objective is called budgeting.

Profit planning is systematic approach for attaining effective management performance. Since the profit is a primary measure of business success in any enterprise, the primary purpose of profit planning in business then is to increase the chances of making profit. Comprehensive profit planning and control or budgeting continues to be primary importance in virtually all organization. Planning involves the controllable and non-controllable, and reduces the impact of uncertainty so that the enterprise could be saved from the chances of making losses.

The profit plan is a tool of direction, coordination, and control and as such it is the most important device of administration for these purposes. Profit planning is a predetermined detailed plan of action develop and distribution as a guide to current operations and as a partial basis for the subsequent evaluation of performance. Thus we can say that profit planning is a tool, which may be used by the management in planning the future course of actions and the controlling the actual performance and by the help of it, any enterprise should earn realistic profit return earn realistic profit return on investment.

Comprehensive profit planning and control is a new term in the literature of business. Though it is a new term it is not a new concept in the management. The other terms, which we can be used in same contest, are comprehensive budgeting, managerial budgeting and simply budgeting.

In order to gain a depth of understanding of the concept of comprehensive profit planning and control-one must recognize that is not a separate technique that can be thought of and operated independently of the total management process. Rather than broad concept of profit planning and control entails an integration of numerous managerial approaches and techniques that might be exploited, such as sales forecasting, sales quota system, capital budgeting, cash flow analysis, cost-volume profit analysis, variable budgets, time and motion study, standard cost accounting, strategic planning, production and control, inventory control, management by objectives, organizational planning manpower planning and cost control.

Comprehensive profit planning and control be defined as a process designed to help management effectively perform significant phase of the planning and control function.

The PPC model includes:

1) Development and application to broad and long-range objective of the enterprises.
2) Specification of enterprises goals.
3) Development of a storage long-range profit plan in broad terms.
4) Specification of a tactical short range profit plan detailed by assigned responsibilities (division/dept, projects)
5) Establishment of a system of periodic performance reports detailed by assigned responsibilities.
6) Development of follow up procedure.

Profit planning represents an overall plan of operations. It covers a definite period of time and formulates the planning decision of management. It consists of three main budgets:

a) Operating budget
b) Financial budget
c) Appropriation budget

The operation budget covers revenues and expenses. The main budgets under operating budget are sales budget, purchase budget, production budget, labour budget and other different expenses budgets. The financial budget contains the budget the balance sheet and supporting schedule. The appropriations budget covers budgets under profit planning and control, we can say, it is formal expression of the policies, plans, objective and goals established by the management for the concern as a whole and for each sub-division.

Finally, Welsch summaries the concept of profit planning is "the profit planning and control means the development and acceptance of objectives and goals and moving an organization efficiently to achieve the objectives and goals."

Sales plan are generally of two types. Strategic or long term and tactical or short term plan. Strategic sales plan is for long period of time which is generally of 5 to 10 years and tactical sales plan are of short term of one year. NOC does not prepare strategic plan and tactical or short term plan is also well prepare. The data made available to this researcher are all of short term nature. So this study focuses on short range plan. Past figures of sales and import are also presented and analyzed here so that sales trend and overall economic condition. Sales, import and other related figures in units and amount are taken of fiscal year 2059/60 to 2065/66 for analyzing and interpretation, so as to complete the objectivity of this study.

4.1 Budgeted sales and Actual Sales of Petroleum product

Public enterprises established in Nepal have motive of social welfare. By the purpose and nature of their establishment, they are socially bounded with various obligations. Fulfillments of basic requirement for people, social security, balanced development etc are their prime objectives. Profit is secondary objective for those enterprises. Only socially obliged enterprises, if don't care the profit, can not survive longer. So for the survival too they need to plan for profit. Profit can generated with well planned activities. Sales plan is one of the techniques that help the enterprise on planning all other activities so that they can gain their basic survival profit. In our country, the problem is seen on projecting realistic plan. Strategic or long term plans are rarely been practiced since short term plan too looks far from the reality what could be the situation of long term plan: It can be predicted easily.

NOC prepares sales plan for a short period only. Only coming fiscal year is cared during the planning action. Plans are not guided by the objectives of NOC but they are guided by present consumer voice. Consumers are divided into domestic, commercial and noncommercial and industrial. The demand created by these consumers determines the sales budget of NOC for next fiscal year. Past years record of sales give sales trend for the enterprise and slight change of modification is done as per consumer's demand that complete determine NOC's sales budget. The table below presents sales performance of NOC of seven years which sketches possible future plan of sales of the corporation. Beside this, it also clarifies the achievement of the degree of considity of plan and actual sales of the enterprise.

Table 4.1

Sales Plan and Achievement of NOC in (KL)

Fiscal year	**Plan**	**Actual**	**Variance = budgeted sales-actual sales**	**Achievement (in %)**
846,329	846,329	783,995	62,334	92.63
060/61	854,630	755,413	99,217	88.39
061/62	847,474	700,294	147,180	82.63
062/63	816,040	670,275	145,765	82.14
063/64	804,500	674,963	129,537	83.90
064/65	832,255	630,926.10	201,329	75.81
065/66	689,000	728,350.50	-39,351	105.71
Total	5,690,228	4,944,217	746,011	86.89
Average	812,890	706,317	106,573	86.89

Source: Distribution Department; NOC, Babarmahal

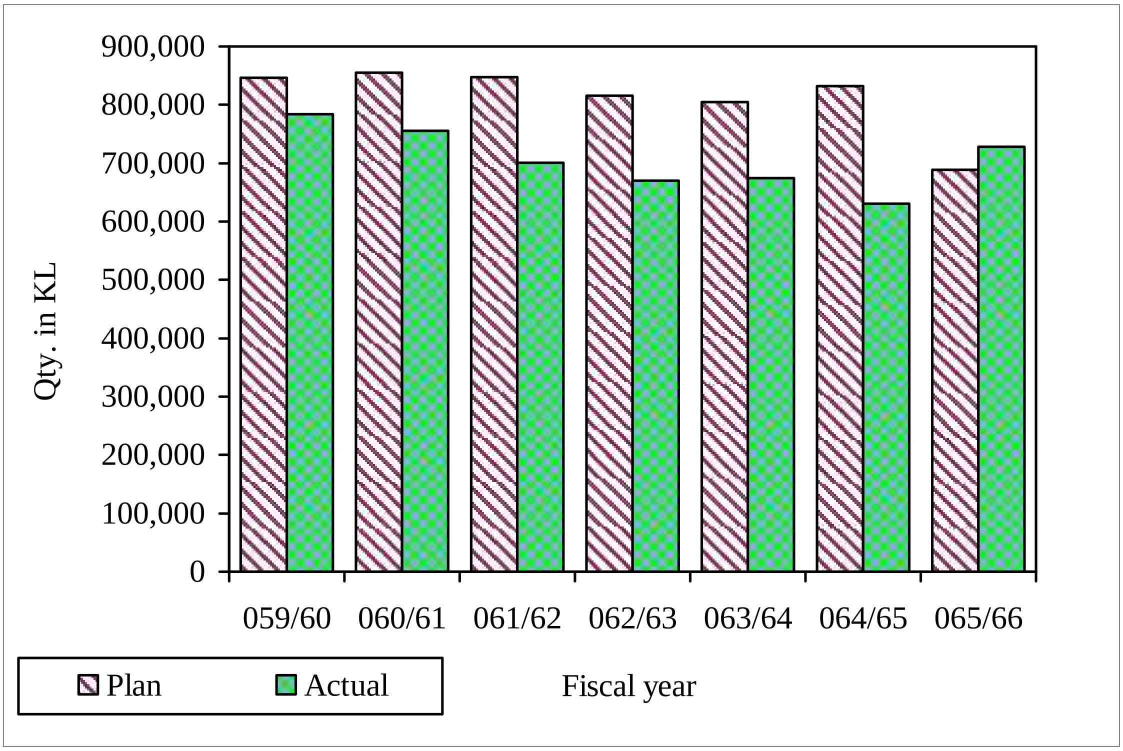
From the figure shown in the table 4.1 clarifies that sales performance of NOC. The performance achievement in planned and actual sales in average is 86.89%. However the performance achievement in some fiscal year is 75.81 which is 11% low than average performance. It is not satisfactory in comparison with the average performance. In fiscal year 065/66 the performance achievement in planned sales, actual sales is above average performance. In fiscal year 2065/66 the sales plan of petroleum product is decrease than other previous fiscal year. Actual sales is higher and budgeted sales is lower than actual sales however it the prediction of sales is based on previous sales. Variance between budgeted and actual sale is the highest in

F/Y 2064/65. But sales quantities increased other than fiscal year 059/60 and 060/61. How ever it is not satisfactory because the vehicles and industrializations are increasing in our country. NOC has to increase its sales plan as well as its actual sales due to increasing demand of petroleum product. That's why industrialization and vehicles are increasing in Nepal.

The above figures of sales plan and the achievement can be better presented in graphical from to make it clear.

Diagram 4.1

Budgeted Sales and Actual Sales



From the above graphical chart, budgeted sales decreased in fiscal year 065/66 which is the lowest budgeted sales among fiscal year 059/060 to fiscal year 065/66. Actual sales were in the highest quantity in fiscal year 059/60 other than fiscal year 060/61 to 065/66. From the above chart there was no satisfactory planning for sales of petroleum product. This can be better understood as plan is factual. They are not far. In order to find out nature of variability of budgeted sales and actual sales of different years from fiscal year 059/60 to fiscal year 2065/66 we need to calculate arithmetic mean, standard deviation and coefficient of variance of budgeted and actual sales of the petroleum products. The details of calculation of those statistical tools are presented in appendix A

Statistical tools	Budgeted sales (X) in KL '0000'	Actual Sales (Y) in KL '0000
Mean	81.29	70.63
Standard deviation (S.D.) ∃	5.3264	4.9181
Coefficient of Variation(C.V)	6.55%	6.96%

The above result shows that actual sales are more variable than budgeted sales. There is uniformity in budgeted sales than actual sales which is shows from less CV of budgeted sales. Calculated mean of actual sales is lower than budgeted sales. Standard deviation of actual sales is lower than budgeted sales. In other words the sales achievements should increase as budget increases or vice versa. To find out the correlation between budgeted figures and actual figures, we can take help of Karl Pearson's coefficient of correlation and it is denoted by©. By calculation © we can examine whether there is positive correlation between budgeted sales and actual sales or not.

For the calculation of assumed ©, budgeted figures denoted by (*X*) are assumed independent variable and actual figures denoted by *(Y*) are assumed to be dependent variable. The significance of © can be tested by the help of probable error of©. The detail calculation of © and probable error is presented in appendix A. We have calculated value of © is 0.0217. The figure of the value of © shows that budgeted sales and actual sales are correlated positively. Since © has positive 0.0217, we can say that there is positive correlation. But the correlation is not strong or perfect. It means there low positive relation. This correlation explains that NOC has not perfect budgeting system that can run close to actual sales.

The significance of © is tested by the help of probable error of r we have probable error 0.2548. Since © is less than (p.e.). Probable error, the value of © is not significant. So It can be said that actual sales will go on the opposite direction that of budgeted sales.

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 the purpose actual sales achievements have been assumed to be dependent upon budgets. So the regression line of achievement *Y* on budget *X* or *X* on *Y* is as follows:

$$y - \bar{y} = r \times \frac{\sigma_{\bar{y}}}{\sigma_{\bar{x}}}(x - \bar{x})$$

We have the following calculated value:

Statistical tools	Budgeted sales (X) in KL '0000'	Actual Sales (Y) in KL '0000
Mean	81.29	70.63
Standard deviation (S.D.)	5.3264	4.9181
Correlation Coefficient	0.0217	

Then,

$$y - 70.63 = 0.0217 \times \frac{4.9181}{5.3264}(x - 81.29)$$

or, $y = 0.0217 \times (x - 81.29) + 70.63$

or, $y = 0.0217x + 68.866$

This regression shows that positive relationship between target sales and actual sales. It is clear the actual sales are increasing trend and actual sales will increase by 0.0217 units in budgeted sales unit. By the help of this regression equation we can ascertain the expected sales achievement with given value budgeted sales say (*X*) ascertain in expected sales achievement of fiscal year 066/67.

IF, *X*=900,000 KL

Then expected sales achievement will be,

$y = 0.0217x + 68.866$

or, $y = 0.0217 \times 90 + 68.866$

or, $y = 70.819$

$\therefore y = 708{,}190$ KL

If the relationship between budgeted sales and actual sales remains same as previous year the achievement of sales for the year 066/67 will be 708,190 KL as stated by the above regression equation. The sales achievement will be 78.69%.

Least square method can also be used to analyze the trend of actual sales and to estimate possible future sales for given period of time. A straight line trend by this method will show the relationship between actual sales ad years. In this method, it is assumed that the sales are consistently changed in the time. To fit the straight line trend, the time factor is considered as independent variable and actual sales are considered as dependent variable. Then the straight line trend of actual sales upon time is expected by,

$$y = a + bx$$

Where y = actual sales, x is the time calculation of the straight line trend by least square method is as follows.

Table 4.2

Actual sales

Year	**Actual sales(*Y*)**	**Year (*X*)**	**X^2**	**XY**
059/60	783,995	-3	9	-2,351,985
060/61	755,413	-2	4	-1,510,826
061/62	700,294	-1	1	-700,294
062/63	670,275	0	0	0
063/64	674,963	1	1	674,963
064/65	630,926	2	4	1,261,852
065/66	728,350	3	9	2,185,051
Total	$\sum y = 4944217$	$\sum X = 0$	$\sum X^2 = 28$	$\sum XY = -441238$

Fiscal year 062/63 is assumed as base year. Therefore the value of *X* in 062/63 is zero and negative for the year before this year and positive for the year after 062/63.

To fit straight line trend, the time factor is considered as independent factor and sales is considered as dependent factor upon time. Then the straight line trend of actual sales *Y* upon time expressed by $Y=a+bX$, where *X* is the time.

Substituting the value in the straight line equation we get,

Then,

$$a = \frac{\sum Y}{n}$$

$$= \frac{4944217}{7}$$

$$= 706317$$

Now,

$$b = \frac{XY}{X^2}$$

$$= \frac{-441238}{28}$$

$$= -15758.5$$

Hence,

$$y = 706317 - 15758.5 \times x$$

This trend shows future sales goes decreasing. the actual sales decrease by 15758.5 KL, if this trend goes continuously for future. By using this trend equation we can estimate the actual sales for fiscal year 066/67 (base year 062/63).

The above value of x for Fiscal year 066/67 is 4

Then Y = 706317- 15758.5×4

Y = 643283 KL

If the trend does not change the actual sales for fiscal year 066/67 will be 643,283 KL.

To conclude that the characteristics of sales figure (Target and achievement of NOC following points can be pointed out as summary.

1. There is positive correlation between budgeted sales and actual sales but it is low degree it means weak relation found.
2. r < p.e, it is not significant. There is no evidence of correlation.
3. Actual sales are more variable than budgeted sales.
4. The straight line trend shows future sales passes on decreasing trend.
5. Regression line trend shows there is positive relationship between budgeted sales and actual sales.
6. NOC prepares the budget for the forth coming year only not for long term.
7. NOC prepares budget in adhoc basis.

4.2 Actual Purchase and Actual Sales of petroleum products

For non manufacturing enterprises purchase budget is next very important budget that specifies the quantity of goods required to purchase. For this any enterprises require fund which is to be managed before going to purchase. Purchase budget provides the information of units of goods being purchased and also supplies information of money required for the purpose. Profit plan of any enterprise becomes incomplete in absence of purchase budget or plan. Purchase budget is prepared with the help of sales plan and inventory strategy of enterprises.

Purchase budget = Sales budget + Closing inventory - Opening inventory

Purchase budget is an estimate of the quantity of goods to be demanded during the planned period. The purchase is based on the capacity of strong and the requirement of sales plan. Major objective of the purchase plan is to fulfill the sales plan requirement.

4.2.1 Purchase procedure of NOC

The prospect of crude oil exploration in Nepal has not yet been proved a feasible one. So the entire national demand is met by import alone. From the very beginning of NOC's trading activities, a special and long-term supply arrangement is made with Indian Oil Corporation Ltd. (IOC), a leading national oil company of India having more than 55% of market share. NOC imports petroleum products by buying crude oil from the third countries such as Kuwait, Soviet Russia, Bahrain etc. Such imported crude oil is handed over to IOC for refinement.

Currently, NOC purchases finished petroleum products and sales to IOC in same rate. Then NOC exchanges petroleum products under product exchange agreement with IOC. NOC takes delivery of different petroleum product from IOC India through various depots of Indo-Nepal boarders.

4.3.2 Purchase Budget of NOC

Generally purchase budget is prepared on the basis of budgeted sales and planned inventory levels. Purchase budget should be prepared on units and amounts. But NOC prepares its purchase budget by units only. Purchase budget also depends upon the capacity of storage. Presently NOC has storage capacity for 71742 KL. But it cannot store petroleum products more than seven days (21000 KL) because of various causes. Petroleum products are petrol, diesel, kerosene, jet aviation fuel etc. The following table below is presented to show trend of purchase activities both on budget and actual form of the period starting fiscal year 059/60 to fiscal year 065/66

Purchase plan = Sales plan + Closing inventory - Opening inventory

Table 4.3

Purchase plan of NOC (Qty in KL)

Fiscal year	Sales plan	Opening inventory	Closing inventory	Purchase plan	Variance= Purchase - Sales
059/60	846,329	5,143	11,250	852,436	6,107
060/61	854,630	11,250	9,627	853,007	-1,623
061/62	847,474	9,627	16,065	853,903	6,429
062/63	816,040	16,056	34,056	834,040	18,000
063/64	804,500	34,056	58,856	829,300	24,800
064/65	832,255	58,856	71,560	844,959	12,704
065/66	689,000	71,560	111,560	729,000	40,000

Source: NOC

From the above purchase and sales plan show that there is no exact store system. There is not possibility of stock of 111,560 KL where full storage capacity is for only 71,742 KL. Although the NOC applies the fist come first out method for sales of petroleum products. It shows fiscal year from 062/63 to 065/66 with out management of inventory (POL storage) sales and purchased budget prepared. Planed purchase quantity is higher in each relative year other than sales plan. There is low variance in budgeted purchase and budgeted sales. If the ignore of inventory and reaming other factors, planned purchase and sales is good.

Table 4.4

Budgeted purchase and actual purchase (in KL)

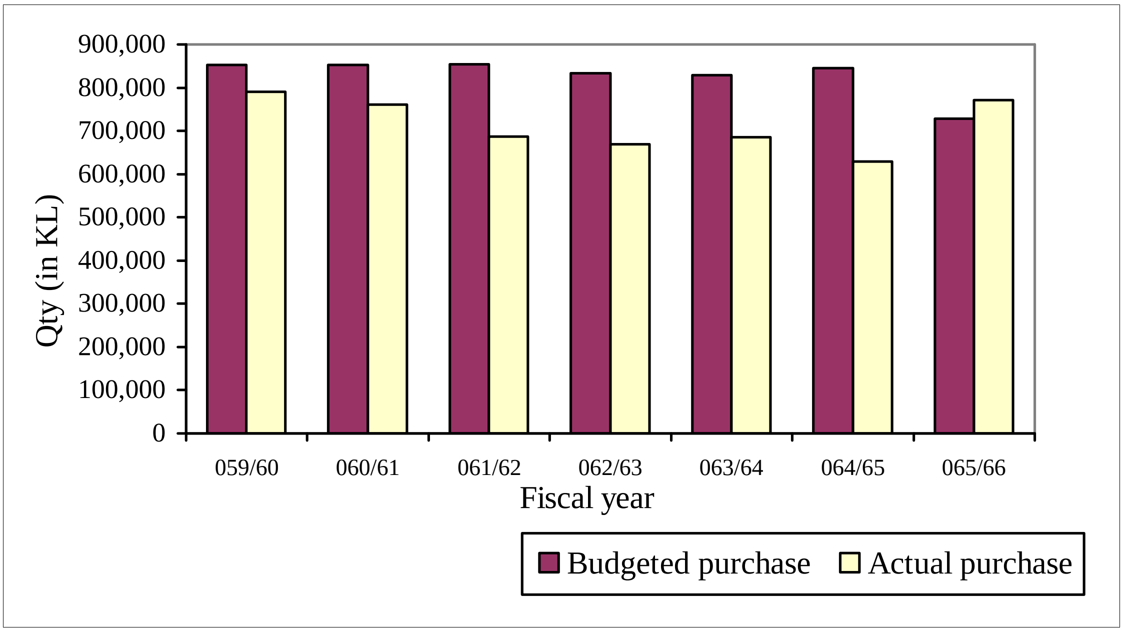
Fiscal Year	Budgeted purchase	Actual purchase	Variance = Budgeted-Actual	Achievement in %
059/60	852,436	790,508	61,928	92.27%
060/61	853,007	761,392	91,615	89.25%
061/62	853,903	686,715	167,188	80.42%
062/63	834,040	669,351	164,689	80.25%
063/64	829,300	685,884	143,416	82.70%
064/65	844,959	628,768	216,191	74.41%
065/66	729,000	771,270	-42,270	105.79%

Source: NOC

The above present table 4.4 shows that budgeted purchase is higher than actual purchase. Achievement of actual purchase seems decreasing year by year. However actual purchase quantities are increased in fiscal year 065/66. But the present status of budgeted purchase with its achievement looks satisfactory. The above presentation can be better presented in following bar. From the variance Budgeted and actual purchase of F/Y 065/66 actual purchase is higher than budgeted purchase. And other remaining F/Y planed purchase is higher than actual purchase of POL

Diagram 4.2

Budgeted Purchase and Actual Purchase



The diagram of actual purchase is lower than of budgeted purchase and the tendency of their difference seems decreasing and can be more on future years.

Now let us have a comparative look on actual purchase and actual sales. The following table below shows actual purchase and actual sales of NOC from fiscal year 059/60 to fiscal year 065/66.

Table 4.5

Actual Purchase and Actual Sales (Qty in KL)

Fiscal year	Actual Purchase	Actual Sales	Variance= Actual Purchase-Actual sales	Achievement (%)
059/60	790,508	783,995	6,513	99.18
060/61	761,392	755,413	5,979	99.21
061/62	686,715	700,294	-13,579	101.98
062/63	669,351	670,275	-924	100.14
063/64	658,884	674,963	-16,079	102.44
064/65	628,786	630,926	-2,140	100.34
065/66	771,270.00	728,350.50	42,920	94.44
Total	4,966,906	4,944,217	22,689	99.54

Source: NOC, Babarmahal

This table shows that the actual purchase and actual sales are not much different. More than 99% of purchase is sold. It also clarifies that NOC purchase petroleum products in accordance with the sales. While purchasing POL products actual sales level is considered rather than target purchase. In order to check the validity correlation and other statistical measures mean, standard deviation, coefficient of variation and correlation coefficient are calculated the details of the calculation is present in appendix B.

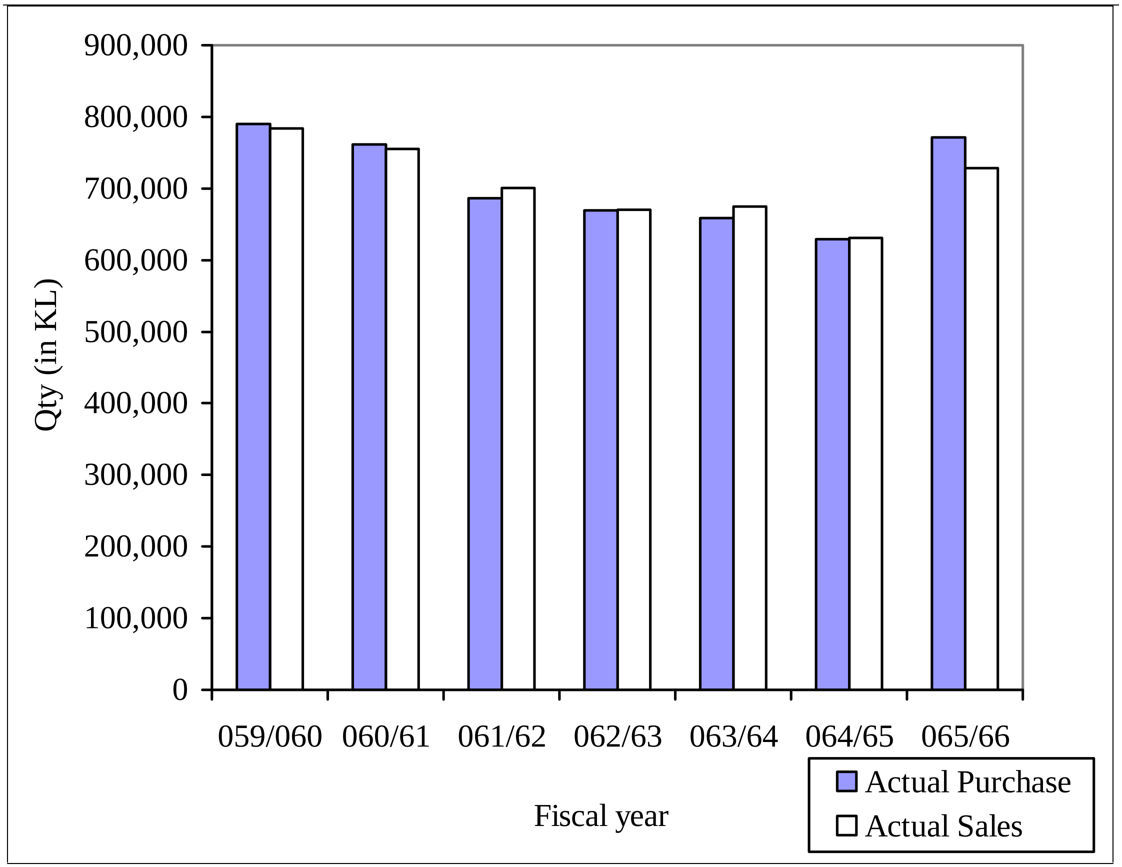
Statistical tools	Actual purchase	Actual sales
Mean	709,558	706,316
Standard Deviation	63,611	53,122
Coefficient of Variation (C V)	8.96%	7.52%
Correlation Coefficient	0.9596	

The above summarizing table shows that actual purchase is more variable than actual sales. Actual sales seem more consistent than actual purchase. But variation of both purchase and sales is very small and their difference too is very small. There is uniformity in actual sales than actual purchase from the less C.V of actual sales than actual purchase. Actual purchase and actual sales should have positive and strong relationship. It means they must be strongly correlated to each other. Because to meet the demand of higher sales there must be similar purchase also and if it seems to be lesser sales, purchase should be likely decreased. This is why correlation between actual purchase and actual sales of NOC from 059/60 to 065/66 is checked and the correlation coefficient is calculated in appendix B. The result of the calculation shows that the correlation between them is 0.9596. It signifies their strong correlation.

For the calculation of correlation coefficient actual purchase is denoted by X and actual sales by Y where purchase is dependent variable upon actual sales. From the calculation so done shows © =0.9596 and the probable error (p.e.) 0.0215 is definitely significant. From this we can conclude that actual purchase actual sales are perfectly correlated. The figure of actual purchase and actual sales can be better present in following gar graph.

Diagram 4.3

Actual Purchase and Actual Sales



The bar presented above can clearly illustrate that they are very close to each other. An actual sale is almost meeting to actual purchase.

Actual Purchase or import and actual sales from fiscal 059/60 to 065/66 is taken with the sum of total products of Motor Sprit (MS), High Speed Diesel (HSD), Super Kerosene Oil (SKO), Aviation Turbine Fuel (ATF), Light Diesel Oil (LDO) and Furnace Oil (FO). Now these products are separately presented in the table below.

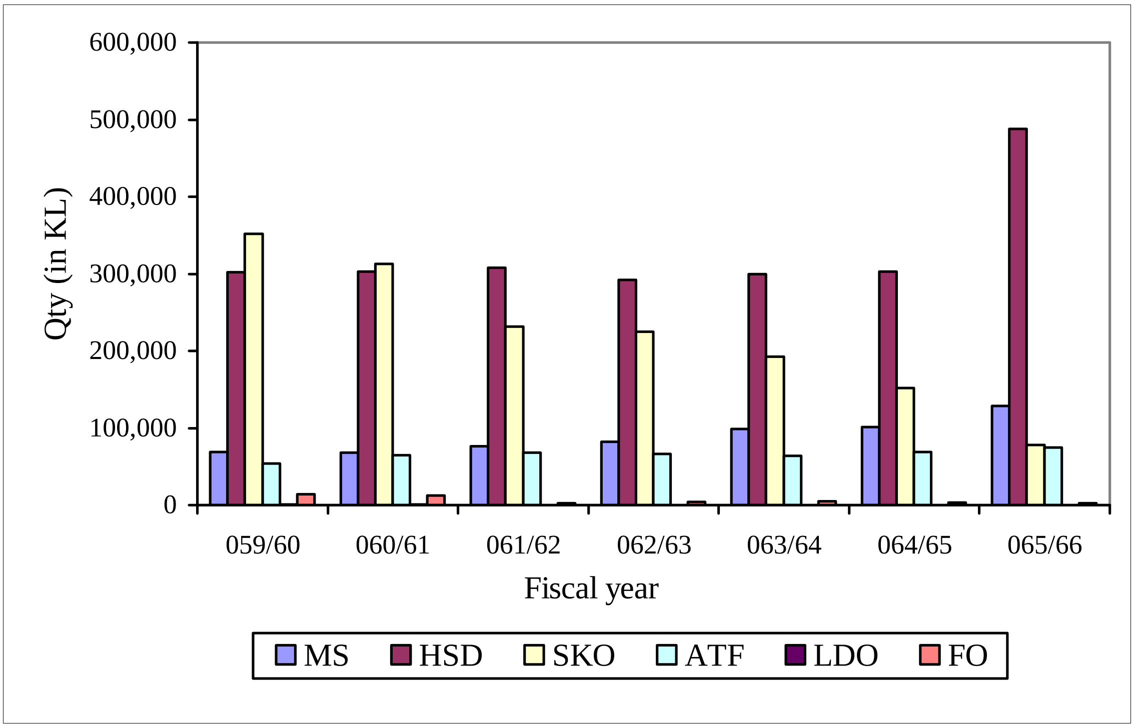
Table 4.6

Import of Petroleum Products [in KL except LPG]							
Fiscal year	**059/60**	**060/61**	**061/62**	**062/63**	**063/64**	**064/65**	**065/66**
MS	68,482	67,965	76,097	81,817	98,435	101,624	128530
HSD	301,672	302,644	308,076	292,381	299,419	303,212	488003
SKO	351,696	313,127	231,463	225,007	192,576	152,168	77882.8
ATF	53,546	64,394	68,340	66,100	63,650	68,534	74286
LDO	610	590	88	292	180	308	380
FO	14,502	12,672	2,651	3,754	4,624	2,940	2188
Total	790,508	761,392	686,715	669,351	658,884	628,786	771,270

Source: NOC

Diagram 4.4

Actual purchase of petroleum products except LGP



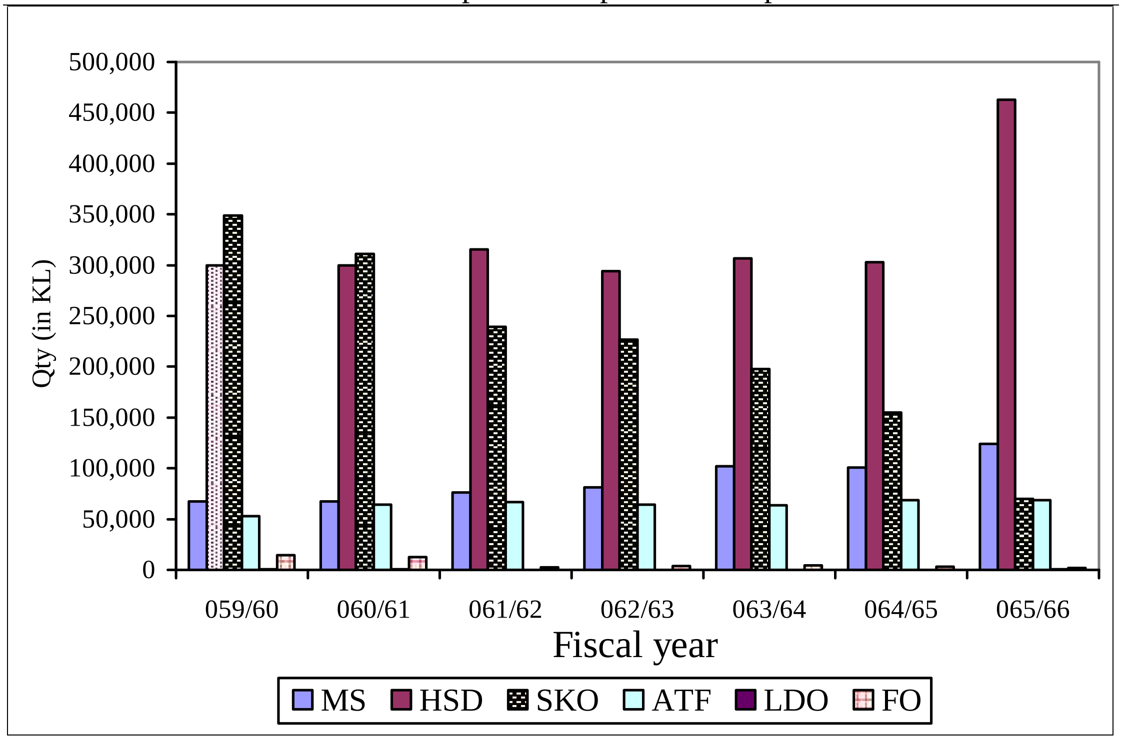
From the above table 4.6 and diagram 4.4 shows that actual purchase of petroleum products from fiscal year 059/60 to fiscal year 065/66. Diagram also clears that import of MS, HSD, ATF are in increasing trend and import of SKO, LDO, FO are in decreasing trend. We can also observe actual sales of petroleum products from fiscal year 059/60 to fiscal year 065/66.

Table 4.7

Actual Sales of Petroleum Products [in KL except LPG]							
Fiscal year	**059/60**	**060/61**	**061/62**	**062/63**	**063/64**	**064/65**	**065/66**
MS	67,457	67,586	75,989	80,989	101,912	100,842	123782.6
HSD	299,973	299,730	315,368	294,329	306,687	302,706	463140.4
SKO	348,620	310,826	239,328	226,637	197,850	155,216	69944.62
ATF	52,839	64,041	66,825	64,335	63,778	68,938	68934.85
LDO	610	577	88	290	179	306	377.17
FO	14,496	12,653	2,696	3,695	4,558	2,918	2170.9
Total	783,995	755,413	700,294	670,275	674,964	630,926	728,351

Figure presented in table 4.7 can be presented in diagram 4.5 which can clear the actual sales of petroleum products.

Diagram 4.5
Actual sales of petroleum product except LPG



From the above figure and diagram show that actual sales of MS, HSD, and ATF are in increasing trend and SKO, LDO and FO are in decreasing trend. It also seems decreasing trend of SKO is being replaced by other sources like biogas, solar power, LPG etc. as fuel.

Liquefied Petroleum Gas (LGP)

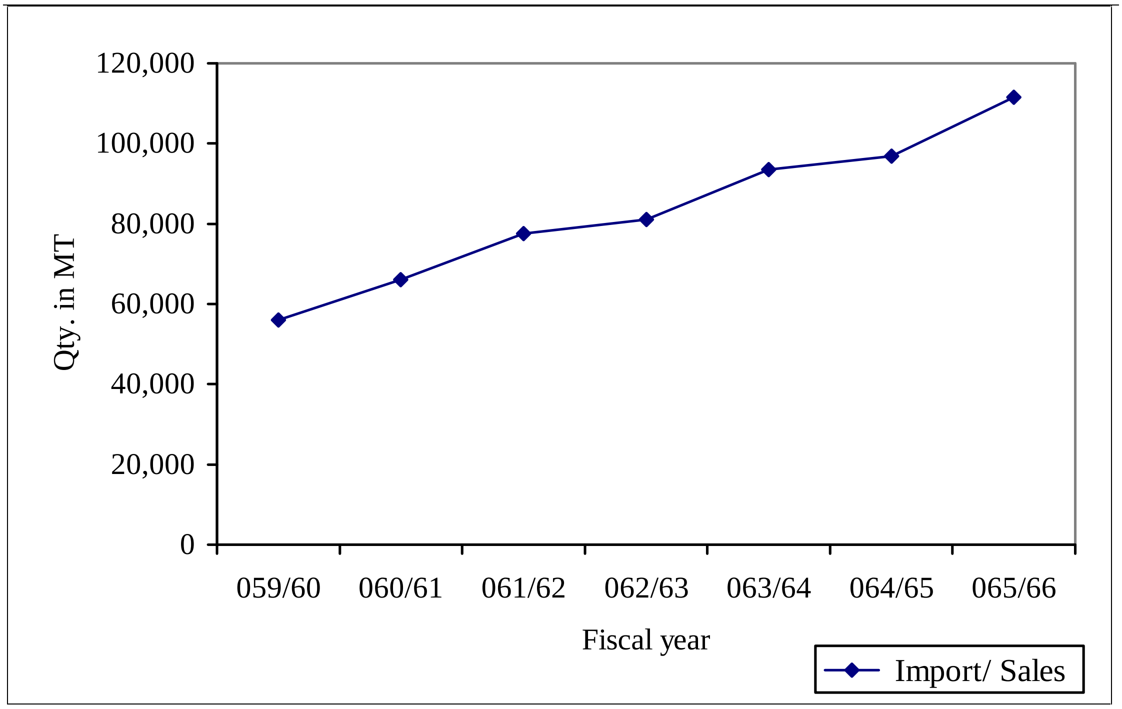
Liquefied petroleum gas (LPG) is separately treated here as this is differently treated by NOC also. LPG is used mainly as domestic cooking fuel. It is also used as fuel as small size of vehicles like micro bus and tempo. NOC has no storage for LPG. NOC sales direct LPG to dealers. NOC does not prepare any plan for LPG. So its import and sales are almost same. The table presented in below shows import and sales of LPG from fiscal year 059/60 to fiscal year 065/66.

Table 4.8
Import and sales quantity of LPG

Fiscal year	Import	Sales	Increase/ decrease (%)
059/60	56079.00	56079.00	13.05
060/61	66142.28	66142.28	17.94
061/62	77594.00	77594.00	17.31
062/63	81005.00	81005.00	4.40
063/64	93562.00	93562.00	15.50
064/65	96836.84	96836.84	3.50
065/66	111576.89	111576.89	15.22
Average			12.42

The above Table 4.8 shows that the import and sales of LPG is in increasing trend due to people's excessive use. The average increase is 12.42%. Consumption of LPG is increasing each year. Actual purchase and actual sales are equal in each year. NOC does not have storage of LGP. NOC sells the LGP direct to dealers. Increasing trend of LGP consumption NOC has to develop the storage of LGP for regular supply. The above import and sales data of LPG (table 4.8) also presented in diagram 4.6.

Diagram 4.6
Import and sales of LPG



Graph also shows the purchase and sales of petroleum product are in increasing trend.

<u>**Petroleum Line Consideration**</u>

Petroleum crude of hydrocarbon is compound of hydrogen and carbon found deep under 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 to day life. NOC is selling these products through its dealers.

a. Motor Sprit (MS)

Widely used in international automobile engines as fuel, motor sprit is commercially known as petrol. Its boiling point lies between 80° to 215°. Indian Oil Corporation gets its MS requirement blends MS in two categories namely 87 Octane and 93 Octane.

b. High Speed Diesel (HSD)

High speed diesel is used as fuel in auto ignition engine in automobile, railway engines. This commercially is known as diesel.

c. Super Kerosene Oil (SKO)

Generally known as Kerosene, is middle distillate white oil, use mainly in illumination, burning of stoves for cooking and heating. Most of people in rural area use it for lighting lamps.

d. Liquefied Petroleum Gas (LPG)

It is 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 compressed 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 use in chemical pants and the combination of the last two is use as LPG.

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 engines operating at around 500rpm. In comparison with speed diesel it has higher carbon residue and sulphur context. Colour of this product is greenish black and is relatively cost effective product.

g. Furnace Oil (FO)

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

Quality is a prime concern of NOC. Its head office based laboratory is equipped with necessary facilities for testing quality standards of petroleum product laboratory testing regularity carried out and quality norms are strictly adhered to. In order to ensure quality of NOC's separate quality and pollution control department was already set up with in NOC. It has initiated programmes and allocated resources to rise public awareness regarding ways of fuel conservation and pollution control for even better quality testing practices or quality monitoring through mobile laboratory vans.

4.4 Purchase Policy

NOC operates in the growth market. The demand for petroleum product has been steadily showing an upward trend. Developing, increasing industrialization, and changing life style of people and society the demand of petroleum products are increasing day by day.

According to agreement of IOC and NOC; NOC sales the crude oil to IOC with purchasing from international market and NOC purchases the refined petroleum products from IOC. But NOC is unable to purchase crude oil from the international market because of risk on high amount payment for cargo. However IOC has been supplying the need of petroleum products to NOC. NOC makes payment in four installments in each month of last month's purchases.

The market situation not only offers NOC opportunity for expansion but also presents a challenge of it. The challenge of meeting the ever-spiraling demand with the degree of managerial efficiency that keeps it a viable entity. Looking at the increased economic activities of the country NOC has met the growing demand of the market; it intends to meet future demand too, together with other J/V partners, in the oil business if necessary.

4.5 Sales and Distribution System of NOC

Distribution and sale of ATF is solely done by the corporation as it requires very stringent quality control measures. Sale of all other products are done by retail dealers numbering 2,403 through out the Nation. Approximately 70% of all petroleum products are consumed in the Central Region.

The product is transported from the depots to the retail dealers by tank truck. The number of transporters throughout the Nepal is 445 and the number of tank trucks so engaged is 1153 including (Nepali, Indian and AdhocTransportor).

To ensure quality of the products reaching the customers, in case of MS and HSD only, two samples of each products are drawn, one sample is kept safely at the dispatching location and the other one is in the custody of retail dealer and regular monitoring of the quality of the products are performed by means of surprise checks and for this purpose lab van is being used. Such surprise checks are conducted by a committee comprising of the following representatives:

- One from the Consumer Forum.
- One from the Bureau of Standards and Weight and Measures.
- One from the Dealer's Association.
- Two from NOC.

Any retail dealers found to be selling out substandard products are penalized as per the existing rules and regulations.

The region wise demand of NOC is met through the purchase of petroleum products from the IOC depots, Terminal and Refinery located near the border with Nepal.	
Supply Points	
For Eastern Region	Barauni Refinery
For Central Region	RaxualDepot
For Western Region	Betalpur Depot, Mugalsari Terminal
For Mid Western Region	Allahabad Ternimal, Gonda Depot
For Far Western Region	Banthara Depot

Import of petroleum products from RaxualDepot is more than 60% of total import of NOC. So NOC has planning to keep pipeline RaxualDepot to Amlekhganj.

Distribution system usually followed by NOC for marketing is
Selling and distribution channel:

A) Except LPG

NOC → Dealer → Consumer

b) For LPG

NOC → Consumer

The numbers of dealers Located in different places of NOC are as follows:

Table 4.9

Regional wise Dealers

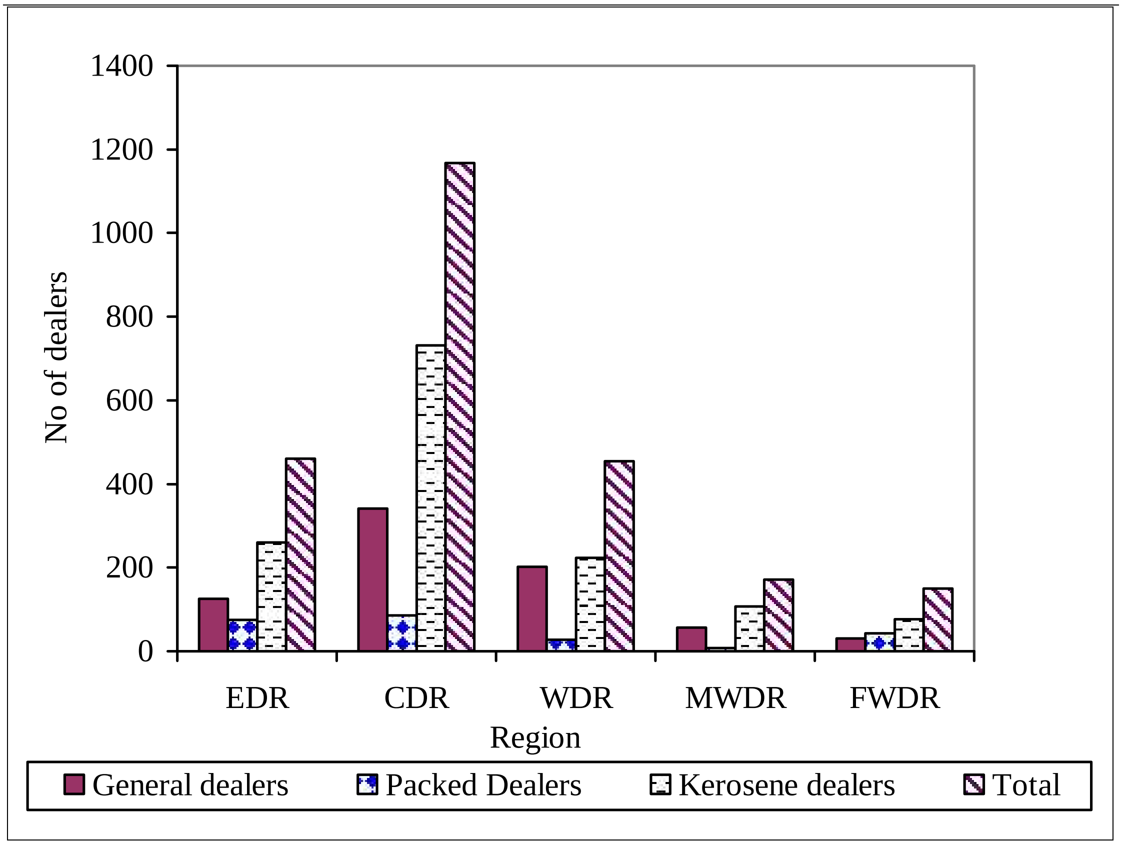
Regions / Dealers	EDR	CDR	WDR	MWDR	FWDR
General dealers	126	341	202	57	31
Packed Dealers	75	85	28	7	43
Kerosene dealers	260	731	224	107	77
Total	461	1167	454	171	150

Source: NOC

This information of dealers can be shown in better way in following diagram

Diagram 4.7

Region Wise Dealers of Petroleum Products



Above presented table and diagram clearly indicate that Central Development Region has most of the dealers of the country. Eastern and Western regions have next; Mid and Far western regions have lowest number of dealers. This can clarify that fuel consumption in those regions very few in comparison to Central Development Region. It shows that the consumption

4.6 Income statement of NOC

Profit is essential part for any enterprise to survive in the market otherwise it has to loose from market. Reviewing the income statement of the NOC sales revenue is less than cost of petroleum product sold. From economic year 2060/61 to 2064/65, NOC has unable to meet to cost of goods sold. Every year cost of goods sold is higher than sales revenue. Cost of goods sold includes the purchase cost of petroleum product, import tax, insurance, road tax, transportation charge, municipality and local tax.

Selling and distribution expenses are decreasing each year but administrative expenses are increased year by year however sales Quantity decrease or increase. From the payment of interest also shows it has high amount of loan. It is unable to pay its loan and paying high amount of interest. So it has bearing high amount of losses although it has monopoly market. It has planning to earn sales revenue 500million per month. It is also trying to update the price of petroleum product in each month's thirdday. The relative data are shown in appendix C.

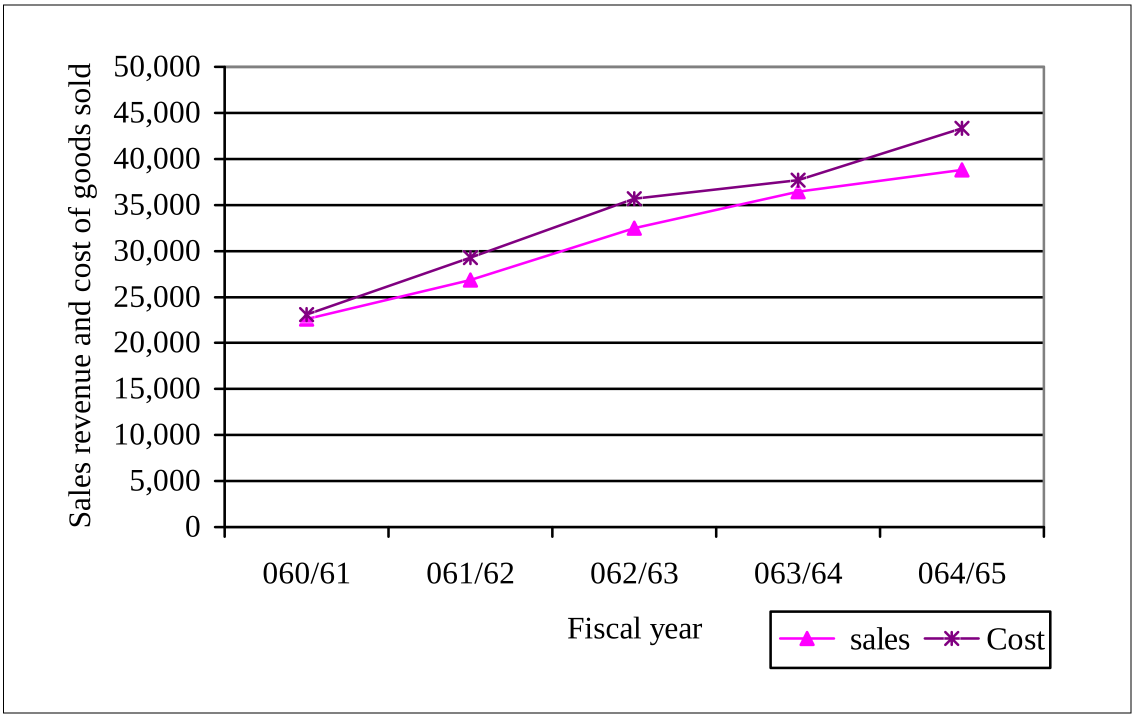
Table 4.10

Revenue, Cost and Operating Loss (in Rs.)

Economic year	Revenue	Cost (-)	Operating loss
2060/61	22,596,815,463	23,122,392,596	-525,577,133
2061/62	26,858,238,830	29,296,883,854	-2,438,645,024
2062/63	32,459,635,941	35,689,728,537	-3,230,092,596
2063/64	36,412,641,877	37,700,118,199	-1,287,476,322
2064/65	38,836,030,123	43,335,736,714	-4,499,706,591

Diagram 4.8

Sales revenue and cost of petroleum products (in Rs. '000000')



From the graph Table 4.10 and diagram 4.8 show the revenue and cost of NOC on sales of petroleum product. Revenue and cost both are in increasing trend. Cost is higher than sales revenue. NOC is unable to mark up the price of petroleum product. Except F/Y 063/64 from F/Y 061/62 to F/Y 2064/65 Sales revenue, cost of POL, and losses are increased year by year. The trend of revenue, cost of sold goods, and loss are in increasing trend. From the behaviour of revenue, cost and loss it is proved that high sales high loss.

From the appendix C, we can find that NOC is paying high amount of interest for loan year by year. The interest increased in fiscal year 064/65. An administrative expense is also in increasing trend. But a selling and distribution expense is in decreasing trend. Thus the NOC has bearing heavy losses from the sales of petroleum products. Administrative expenses, interest paid for loan and selling and distribution expenses are remain to add in operating loss. So the loss shown in the table increased to Appendix C. Such kind of weakness brings other problems and it has to go away from the market.

4.7 Findings of the study

Every researcher tries to find out core and new things which may be useful for respective person, organization, researcher etc. From the case study of NOC on sales budget, researcher found many remarkable issues. NOC is only one corporation which deals to petroleum products with fulfilling social and economic development of Nepal. NOC does not have such systematic and scientific planning system that resemble with all facts. There is insignificant positive relation between budgeted sales and actual sales of petroleum products. From the regression analysis and trend analysis actual sales is in decreasing trend. NOC does not have fixed inventory policy. Plans are made by planning department with the base of previous year for the coming next year only. Budgeted sales are less variable than budgeted sales. Import and sales of Petroleum products like MS, HSD and ATF are increasing. Import and sales of LPG is also in increasing year by year. Actual sales unit is more uniformity than actual purchase unit and there is perfect correlation between actual purchase and actual sales. NOC does not have storage of LPG. NOC is not utilizing the full capacity of storage 71742 KL.

Sales revenue is less than cost of goods sold. Pricing policies also found weak. During the plan of sales and purchase of petroleum product, NOC does not prepare the budget in amount. NOC is bearing heavy losses. It also proves that there is no coordination in different department in planning and implement of business strategy. NOC has ignored the administrative and other expenses during the pricing decision and budget planning. That is the main weakness of NOC.

NOC is one of the public enterprises which is continuing sales of petroleum products to fulfill the social obligation with bearing heavy losses. NOC has to hard work to sustain in present situation. It must earn profit otherwise it will be in history only. NOC needs rigorous management.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

NOC is one of the largest public enterprises in the county in fact it is the largest enterprise from economic turnover profit of view. NOC is established to generate/develop/establish a strong corporate identity as a premier energy supplier to the people for their utmost satisfaction. NOC has done significant contribution in all round the development of the country with providing regular supply of petroleum products. It is not slipped out of its major objectives although it has suffered huge crisis of fund due to loss. The country can be paralysed in lack of NOC's operation. This is why it is to be run effectively and well planed way. This isn't the responsibility of only the government, but also we people living in the country.

This is the essential enterprise in the country which has suffered from heavy loses. NOC knows its further operation leads towards further more losses in the future but it is socially obliged and has to be operated at any cost. Presently voice of privatization has raised in this sector also and it is good too. This type of organization should run with the environment of competition, in these liberalize economic scenarios. Competition takes the services towards economic and efficient to have better dealing with consumer than the competitors.

Although government adopted policy of allowing private sector organization to enter in this business in 2046 B.S., it has been the single importer of major petroleum products still now. No Private sectors are influenced in this business. It is due to present situation of NOC i.e. regular crisis and enforced to consist price in the country

Every organization wants to earn profit from their investment. Profit is said life of any organization. But the condition of NOC is found terrible in the context. Although NOC is socially obliged but should work of basic profit that can politically and is also undesirable to the public. This is why well planning is required for the enterprise. Systematic profit plan can contribute a lot for the fulfillment of its objectives and sustain longer life for this enterprise. Various separate plans are incorporated within profit plan and sales plan has been the most important one.

Sales budget and plan provide the basic management decisions about marketing. It is an organized approach for developing a comprehensive sales plan. If the sales plan is not realistic most of other parts of profit plans are not realistic. Therefore, sales plan is the most essential part of every business organization. Two types of sales plan are prepared. They are strategic sales plan and tactical plan. There is vast relationship between sales plan and profit plan. Profit plan cannot be considered without sales plan and its effective implementation. Sales plan with its significant performance only profit plan can get success.

The present study has been undertaken to examine sales budget and plan adopted by NOC. The study has tried to examine sales system and trend of petroleum products supplied by NOC. Similarly it has tried to examine budgeted and actual sales plan and its trend, purchase plan and policy adopted by NOC. It is also tried to examine its sales, cost, and profit. The scope of study is limited for this micro level analysis. The time period form the fiscal year 2059/60 to 2065/66 is analysed to complete this study. This study has been organized with five main chapters i.e. introduction, review of literature, research methodology, data presentation and analysis and summary, conclusion and recommendation.

The secondary data have been used for analysis and descriptive design. Statistical tools like percentage, graph, mean, standard deviation, variation of coefficient, correlation coefficient, regression, straight lie and least square trend, variation of coefficient, correlation coefficient, straight line ad least square trend have been used to analyse the data.

Detail presentation of the data relating to NOC consists of target and actual sales. The condition of import and sales of petroleum products, purchase policy, sales trend and policy along with its system applied by NOC are presented in previous chapter. Budgeted and actual sales and other quantities have been analysed with various statistical tools. Descriptive approach equally has been used to analyse the quantitative data where necessary.

5.2 Conclusion

This study has provided to be challenge to the researcher. This study has created a new window of opportunity for future MBS students to pursue study on sales planning of public enterprises. Practical and theoretical observation of data and situations of NOC are minutely studied.

NOC is a state owned public enterprise established to fulfill social obligation of supplying petroleum need of the country. Although it is treated as independent enterprises it has does not have the freedom of making decision independently. NOC Prepares only quantitative sales budget but not prepare the sales budget in amount (Rs.). It prepares the sales budget for coming year on the basis of previous year. It has storage capacity of 71 thousand KL but it is utilizing only 21 thousand KL which fulfill the need of country for seven days NOC does not have the storage of LPG. NOC Applies the FIFO method for selling petroleum products. It has enough agents or dealers to distribute the petroleum products. Pricing is the main problem for NOC, every price hike decisions are treated politically and has to face extreme shock nationally. It has no formal strategy for stock management. NOC does not prepare long term as well as short term. It has no well defined systematic and scientific planning. It has no well defined pricing polices. There is positive correlation between the actual sales and actual purchase. Petroleum products are purchased on the basis of capability of payment, political situation, security

Regression line shows positive correlation in budgeted sales and actual sales and sales achievement will be decrease in future other than F/Y 065/66. Least square method also shows the decrease forecast for the F/Y 066/67. Sales budgeting should prepare with sensitively. There is higher fluctuation in its budgeted sales than actual sales of petroleum products. It also proves that powerful mechanism for controlling, adulteration and mixing lacking with NOC. There is lack of well trained human resources lack of performance evaluation system in the enterprise. The personnel are shown as passive as government employee.

NOC has unable to do the refinery function of petroleum products after purchasing crude oil. NOC has planning to keep pipe line to import petroleum product form Raxual to Amlekhgunj which is risky and costly, should be manage effectively. NOC has a lot of loan which shows from its interest paid amount. Pricing policy is not weak which is shown from its revenue and cost of petroleum products. The remaining administrative, selling and distribution and other expenses are not managed properly which are essential for any organization. NOC has not conducted any research work to study consumers' demand and their reactions on present situation for future course of actions. NOC has bearing heavy losses in each year. Main cause of loss is lack of sales planning with budgeted amount (in Rs.) as well as sales budget in quantity.

It is helping to develop socio-economic condition of the country with heavy losses. But it is needed to gain profit to survive in the market.

5.3 Recommendations

Based on those findings of the study of budgeting and planning of NOC some suggestions and recommendations are drafted below. Present situation of NOC should not last long. It goes in the same way for few years it will be collapsed in near future. So such disastrous situation must be cured properly as soon as possible. It is hoped that although the suggestions given here are tough to implement, the points of recommendation will be implemented so that NOC can overcome the present situation.

The management of NOC must be reorganized. Qualified and energetic staffs should be recruited who can manage the present situation of the NOC. NOC should prepare plans and policies along with clear goal and objectives so that everybody in NOC can be more responsible and accountable. NOC has to prepare the sales budget, purchase budget and other functional budget with strategic and tactical plan. During the budget planning, there must be the coordination among the all departments of NOC. Managers, Regional officers and other managing level staffs should be trained with comprehensive profit plan of NOC.

NOC is bearing heavy losses on sales of petroleum products however it has perfect correlation between actual purchase and actual sales of petroleum products. It must study the sales price of the petroleum product. Huge amount of loss has been observed due to LPG. NOC should quickly step towards its storage system or should leave its transactions. Although price hake is publicly undesired, it has to fix the price of petroleum products at least just above its cost price. Because of the burden of interest in loan NOC should reorganize the cash collection and disbursement policy. If NOC cannot set up the price of petroleum product that should be stop to sell. Other wise it will be in heavy losses again. NOC should make a fixed inventory policy so that its planning becomes easier. NOC has to make proper plan for storage of petroleum products. Public awareness campaign are to be launched that can help on reducing pamphlets and booklets are to be issued by NOC that can clarify its present situation. That can contribute on realization of price hike need for the public.

NOC has to work for getting independent in politically free existence so that it can pull NOC back from unbearable loss. Alternative transportation means are to be searched that can ensure smooth supply of petroleum products in any political environment. Illegal drawing back of petroleum products to India from our open borders should be strongly checked and the government should be made responsible for it. NOC has to control leakage and spoilage. NOC and the government should attempt jointly for the establishment of refinery mechanism of crude oil that can save huge amount being paid to IOC for refinement. NOC has been the single importer or trader of petroleum products in Nepal, Private sectors also are to be invited in this field along with its privatization procedure.

Finally, NOC is the important corporation which is established as public enterprise to import and sell of petroleum products. It has to fulfill social obligation with surviving own self. So with studying the past and present situation NOC must plan for future.

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BIBLIOGRAPHY

Books

Fago Ghanendra, “Profit Planning and Control, 1st edition, Buddha Academic Publisher and Distributors. Pvt. Ltd. Kathmandu, Nepal

Flesher Dale and Flesher Tonya, Accounting Principles for Mid Management

Fregmen, J.M (1976) , Accounting for management Analysis, Horne wood: Richard Irwin

Gupta S.P (2002). Statistical Methods (31st Edition), Sultan Chand & Sons, New Delhi.

Gupta, S.P (1992), Managument Accounting Budgeting, Business Budget & budgetary Hinsdale Illions.

Hornby, A.S & Cowie, A.P (1992), Oxford Advance Learner’s Dictionary of Current English, Indian Edition, Calcutta. Indian edition, oxford university press.

ISC and CCC Sectoral Corporate Planning Performance of PCS in Nepal Manager Analysis 1980.

Khan, M.Y and Jain, P. K, Management Accounting 4th Ed. New Delhi: Wiley Eastern Ltd. 1990

Kothari, C.R. (1990). Research Methodology. New Delhi: Vishwa Prakashan

Lynch, Richard M & Williams, R.W (1989), Accounting for Management, New Delhi:D. Tata Acgraw Hill Publishing co.

Matz and Milton F., Cost Accounting Planning and control, Sixth Edition, 1985

Ninemeire, Jack D & Schmidgall, Raymond S.(1984) , Basic Accounting standards, Air Publishing Company.

Pandey, I.M, “Management Accounting”, Vikash Publishing House, New Delhi. 1994

Pandey, I.M, “ Financial Management”, Vikash Publishing House, New Delhi. 1991),

Terry Geogre R., Principle of Management, 5th Edition.

Thomson, Montgomery, Management Accounting Information Reading Mass: Addision Wsley 1979, Welsch Garema Hilton, Ronald W. Gordon Pani N. Budgiting DDC New Delhi

Welsch, Glenna, Ronald, W.Hilton, Paul, N.Gordon (2006) Budgeting Profit Planning Control, updated edition, New Delhi: Prentice Hall of India.

Welsch, Glenna, Ronald, W. Hilton, Paul, N. Gordon (1999) Budgeting Profit Planning Control , 5th edition , New Delhi: Prentice Hall of India.

Weston and Bigham, (1980). Managerial Finance .7th Ed. USA, The Dryden press,

Wolf, Howard K and Pant, Prem R. (2002), Social Science Research and Thesis Writing, Third Edition

Young, Dong John, “Profit Planning Through Volume of Cost Analysis”, ISC, 2001

Journals

Corporate profile, Nepal Oil Corporation, 2065

Economic survey 2061/62

Nepal Government, Ministry of Finance, “Economic Survey” FY 2061/062

Prabhat Published by Nepal Oil Corporation, 2061

Prabhat Published by Nepal Oil Corporation, 2063

Prabhat Published by Nepal Oil Corporation, 2065

Dissertations

Adhikari, Binaya Raj, “Effectiveness of Sales Budgeting and Planning with reference to Nepal Oil Corporation” An unpublished Master Degree Thesis submitted to Shankerdev Campus, Ramshaha path Kathmandu, 2006

Bhandari, Pashupati, “Profit Planning Royal Drugs Limited –A Case Study” An unpublished Master Degree Thesis submitted to Shankerdev Campus Ramsahpath Kathmandu 2004

Thapa, Balaram, “A Study on The Financial Position of Nepal Oil Corporation” An unpublished Master Degree Thesis submitted to Tribhuvan University Central Devlopment of Management Kirtipur, 2003

Poudel, Umesh raj, “Profit Planning and control of the Government Corporation, A Case Study of Salt Trading Corporation” An unpublished Master Degree Thesis submitted to Shankerdev Campus, Ramshaha path Kathmandu, 2007

Poudel, Manjit, “Profit Planning and Control in Nepal Telecommunication Corporation”, An unpublished Master Degree Thesis submitted to Nepal commerce Campus, Minbhawan, Kathmandu, 2002

Appendix-A

Calculation of Standard deviation, Coefficient of variation and Correlation Coefficient

Budgeted Sales and Actual Sales in units (‘0000’)

Fiscal year	Plan Sales (x)	Actual Sales (y)	$u = x - \bar{x}$	$v = y - \bar{y}$	u^2	v^2	$u \times v$
059/60	84.63	78.40	3.34	7.77	11.17	60.37	25.97
060/61	85.46	75.54	4.17	4.91	17.41	24.12	20.49
061/62	84.75	70.03	3.46	-0.60	11.95	0.36	-2.08
062/63	81.60	67.03	0.31	-3.60	0.10	12.98	-1.13
063/64	80.45	67.50	-0.84	-3.13	0.71	9.82	2.63
064/65	83.23	63.09	1.94	-7.54	3.75	56.81	-14.59
065/66	68.90	72.84	-12.39	2.21	153.51	4.86	-27.32
Total	$\sum x = 569.02$	$\sum y = 494.42$	$\sum u = 0$	$\sum v = 0$	$\sum u^2 = 198.6$	$\sum v^2 = 169.32$	$\sum uv = 3.98$

Where,

Number (N) =7

Budgeted sales is denoted by ‘x’ and

Actual sales is denoted by ‘y’

For Budgeted sales ‘x’

$$\text{Mean } (\bar{x}) = \frac{\sum x}{N}$$

$$= \frac{569.02}{7}$$

$$= 81.29$$

=812,900 KL.

Standard deviation (S.D.),

$$\sigma_x = \sqrt{\frac{\sum u^2}{N}}$$

$$= \sqrt{\frac{198.6}{7}}$$

$$= 5.3264$$

= 53,264 KL.

Coefficient of Variation (C.V) = $\frac{\pm_x}{\bar{x}} | 100\%$

$= \frac{5.3264}{81.29} | 100\%$

$= 6.55\%$

For Actual sales '*y*'

Mean $(\bar{y}) \text{X} \frac{y}{N}$

$\text{X} \frac{494.42}{7}$

$\text{X} 70.63$

= 706,300 KL.

Standard deviation (S.D.),

$$\pm_y \text{X} \sqrt{\frac{1 \; v^2}{N}}$$

$$\text{X} \sqrt{\frac{1 | 169.32}{7}}$$

$$\text{X} 4.9181$$

= 49,181 KL.

Coefficient of Variation (C.V) = $\frac{\pm_y}{\bar{y}} | 100\%$

$= \frac{4.9181}{70.63} | 100\%$

$= 6.96\%$

Calculation of Correlation Coefficient (¥)

Karl Pearson's Correlation Coefficient between X and Y is given by

$$¥_{xy} \text{X} \frac{uv}{\sqrt{\; u^2}\sqrt{\; v^2}}$$

$$\text{X} \frac{3.98}{\sqrt{198.6}\sqrt{169.32}}$$

$$\text{X} 0.0217$$

Probable Error of¥ (p.e) = $0.6745\frac{(1 Z ¥^{2})}{\sqrt{N}}$

$$= 0.6745\frac{(1 Z 0.0217^{2})}{\sqrt{7}}$$

$$= 0.2548$$

Appendix-B

Calculation of Standard deviation, Coefficient of variation and Correlation Coefficient

Actual purchase and Actual Sales in units ('0000')

Fiscal year	Actual Purchase (*x*)	Actual Sales (*y*)	u X $x Z \bar{x}$	v X $y Z \bar{y}$	u^2	v^2	$u \mid v$
059/60	79.05	78.40	8.09	7.77	65.46	60.37	62.86
060/61	76.14	75.54	5.18	4.91	26.82	24.12	25.44
061/62	68.67	70.03	-2.29	-0.60	5.24	0.36	1.37
062/63	66.94	67.03	-4.02	-3.60	16.20	12.98	14.50
063/64	65.89	67.50	-5.07	-3.13	25.72	9.82	15.89
064/65	62.88	63.09	-8.08	-7.54	65.31	56.81	60.91
065/66	77.13	72.84	6.17	2.21	38.03	4.86	13.60
Total	x X 496.69	y X 494.42	u X0	v X0	u^2 X 242.78	v^2 X 169.32	uv X 194.58

Where,

Number (N) =7

Actual purchase is denoted by 'x' and

Actual sales is denoted by 'y'

For Budgeted sales 'x'

Mean $(\bar{x})$ X $\frac{x}{N}$

X $\frac{496.69}{7}$

X 70.96

= 709,600 KL.

Standard deviation (S.D.),

$$\pm_x \; X \sqrt{\frac{1 \quad u^2}{N}}$$

$$X \sqrt{\frac{1 \,|\, 242.78}{7}}$$

=5.8892

= 58,892 KL.

Coefficient of Variation (C.V) = $\frac{\pm_x}{\bar{x}} \,|\, 100\%$

$$= \frac{5.8892}{70.96} \,|\, 100\%$$

= 8.29%

For Actual sales '*y*'

Mean $(\bar{y}) \; X \frac{y}{N}$

$$X \frac{494.42}{7}$$

X 70.63

= 706,300 KL.

Standard deviation (S.D.),

$$\pm_y \; X \sqrt{\frac{1 \quad v^2}{N}}$$

$$X \sqrt{\frac{1 \,|\, 169.32}{7}}$$

X 4.9181

= 49,181 KL.

Coefficient of Variation (C.V) = $\frac{\pm_y}{\bar{y}} \,|\, 100\%$

$$= \frac{4.9181}{70.63} \,|\, 100\%$$

= 6.96%

Calculation of Correlation Coefficient (¥)

Karl Pearson's Correlation Coefficient between X and Y is given by

$$¥_{xy} \, X \frac{uv}{\sqrt{\quad u^2}\sqrt{\quad v^2}}$$

$$X \frac{194.58}{\sqrt{242.78}\sqrt{169.32}}$$

$$X 0.9597$$

Probable Error of ¥ (p.e) = $0.6745 \frac{(1 Z ¥^2)}{\sqrt{N}}$

$$= 0.6745 \frac{(1 Z 0.9597^2)}{\sqrt{7}}$$

$$= 0.0201$$

Appendix C

Income statement of NOC from fiscal year 060/61 to fiscal year 064/65

Economic year	**2060/61**	**2061/62**	**2062/63**	**2063/64**	**2064/65**
POL Sales Qty in KL	783,995	755,413	700,294	670,275	630,926
LPG Sales in MT	66,142	77,594	81,005	93,562	96,837
Revenue from sales	22,596,815,463	26,858,238,830	32,459,635,941	36,412,641,877	38,836,030,123
Cost (-)	23,122,392,596	29,296,883,854	35,689,728,537	37,700,118,199	43,335,736,714
Operating Profit/loss	(525,577,133)	(2,438,645,024)	(3,230,092,596)	(1,287,476,322)	(4,499,706,591)
Administrative (-)	209,562,115	219,517,668	216,089,120	273,847,517	393,797,414
Selling & Distribution (-)	106,929,235	145,234,723	51,311,382	38,320,113	69,973,483
EBIT	(842,068,483)	(2,803,397,415)	(3,497,493,098)	(1,599,643,952)	(4,963,477,488)
Interest paid (-)	5,200,709	176,962,809	340,566,080	291,866,318	514,419,289
Depreciation (-)	21,173,917	60,805,769	59,457,630	58,479,796	58,213,082
Miscellaneous income (+)	30,323,367	20,679,213	34,152,124	36,133,643	78,864,247
Equity loss (-)				7,416,000	
	(838,119,742)	(3,020,486,780)	(3,863,364,684)	(1,921,272,423)	(5,457,245,612)
Income tax (-)	60,000,000	60,000,000			
Loss	(898,119,742)	(3,080,486,780)	(3,863,364,684)	(1,921,272,423)	(5,457,245,612)

Source: NOC

Conversion factor

1 Barrel	=	159 Ltr.
1 Gallon	=	4.54359 Ltr.
1 Tola	=	11.6638 Gram
1 Gallon	=	1.20095 US Gallon
1 US Gallon	=	3.78333 Ltr.
1 Meter	=	3.28085 Ft.
1 KL	=	1000 Ltr.
1 MT	=	1000 Kgs.
1 Inch	=	2.54 Cms.

MS (Motor Sprit)	1 MT	=	1.411 KL
HSD (High Speed Diesel)	1 MT	=	1.210 KL; 7.45 Barrel
SKO (Superior Kerosene Oil)	1 MT	=	1.285 KL; 7.9 Barrel
ATF (Air Turbine Fuel)	1 MT	=	1.288 KL
FO (Furnace Oil)	1 MT	=	1.070 KL
LDO (Light Diesel Oil)	1 MT	=	1.172 KL
LPG (Liquefied Petroleum Gas)	1 MT	=	1.785 KL

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