

CHAPTER -ONE

INTRODUCTION

1.1 General

Profit planning and control is a newly developed concept as a crucial way in the business organization. It is a recent phenomenon used extensively in the literature of business enterprise. It has not been familiar only by sample budgeting but a way of managing mostly in the better managed companies.

Managerial planning always includes the analysis of the alternative course of action which heads to process decision and evaluation of the alternatives to overcome the financial problem encountered by the enterprise. The tactical (short-range) and strategic (long-range) profit plan sometimes constitute many similar mode which can be the financial aspects of the enterprise in the process of profit planning constructing. A procedure such as decision models income summaries; cash-flow analysis and return on investment analysis provide critical information for assessing the impact of different alternative.

The term comprehensive profit planning is defined as systematic and formalized approach for performing significance phases of the management planning and control function specifically it involved (a) the development and application of broad and long-range objectives for the enterprise (b) the specification of enterprise goals. (c) The long-range profit plan developed in broad term (d) a short-range profit plan detailed by assigned responsibility (e) a systematic or periodic performance reports defiled by assigned responsibility (f) follow-up procedures.¹

Profit planning function the management rests upon some fundamental views that is the conviction that management can plan and control the long-range desisting of the manufacturing enterprise by making a continuing stream of well conceived decision. The trust of the comprehensive profit planning concepts goes to the very heart of management that is the decision making process. The profit planning is used for the development and acceptance of objectives, goals and organization efficiency to achieve these objectives and goals.

Control the long-range desiring of the manufacturing enterprise by making a continuing stream of well conceived decision. The trust of the comprehensive profit planning concepts goes to the very heart of management that is the decision making process. The profit planning is used for the

¹ Gann A. Welsch, Ronald W. Hilton, Pool N. Gordon “Budgeting Profit Planning and Control”, 5th Edition, P.30.

development and acceptance of objectives, goals and organization efficiency to achieve these objectives and goals.

Profit planning means the development and acceptance of objectives goals and making on organization efficiency to achieve the objectives and goals. Profit planning is not a separate technique that can be through of the separated indecently of the total management process. The broad concept of profit planning entails an integration of numerous managerial approaches and techniques that might be exploited of numerous managerial approaches and techniques that might be exploited such as sales forecasting, sales quto system capital budgeting, cash flow analysis, CVP analysis, variable budgets, time and motion study, standard costing accounting, strategic planning, manpower planning and cost control.

On the view of communication, project plan program can be one of the more effective communication networks in an enterprise. A comprehensive profit planning and underlying this is the measurement of actual performance against planed objectives, goal and understand and reporting of that measurement. The reporting extends to all area of operations and to all responsibility centers in an enterprise. It involves reporting (a) actual results (b) budgeted or planned result (c) performance variance.²

- a) Functional plan which includes sales plan, production plan, raw materials plan, direct labors plan and expenses plan.
- b) Financial plan which includes cash flow plan, capital expenditure plan, projected income statement and projected balance sheet.

Profit plans are prepared for two time dimensions, strategic long range (5-10 years) and tactical short-range plan for a year detailed by interim time periods. Having prepared a plan it is equally important to implement efficiently and to watch performance. Difference between actual and budgeted results should find out and corrective measures should be taken so that it assures the realistic of the forward plan.

1.2 Concepts of PEs

Public enterprises are enterprise set by the government. It has to be efficient and at the same time accountable to the government and the public. "PEs is autonomous bodies which are owned and managed by the government and which provides goods and services for a price. The ownership with government should be 51 percent or more to make an entity public enterprise."³

According to encyclopedia Britannica, "Public Enterprise may be defined as an undertaking that can be owned by a national state or local

² Welsch, Hilton and Gordon "Profit Plans can be Broadly Divided into two Parts", 5th Edition.

³ Laxmi Narayan, "Principle and Practice of PE management" 4th Edition, p. 42.

government supplies services or at a price and is operated on a more or less self supporting basis. Such enterprise may also be international intuited or inter-municipal in characters, i.e. owned and operated jointly by two or more national state or local governments.”⁴

In Nepal, some public enterprise have been set up under various legal entities such as special characters (i) manufacturing PEs i.e. Janakpur Cigarette Factory, Heatauda Cement Factory, Udayapur Cement Factory etc., (ii) Commercial PEs (iii) Financial PEs (iv) Public utilities PEs (v) Social services PEs.

1.3 Main Characteristics of PEs

- Government ownership
- Government control and management
- Public accountability
- Service objective
- Wide coverage of activities
- Autonomous functioning
- Financing by government
- Burden of bureaucracy
- Benevolent management
- Constituent of political and administrative structure

a) Role of the PEs in Developing Country

PEs has specific roles and motives all of lachich private sector is not known to contribute property. Further these are a sort of urgency and immediness in the process industrialization in under developed countries, which is quite different from the early storage of industries development in development countries.⁵ “PE plays a major role in achieving the twin objectives of social and economic development envisaged in the national policy.”

“So the establishment of PE was felt necessary to create the infrastructure for the balanced regional development, public welfare, generate employment opportunities, import substitution and export promotion and dissemination of the development activities according to the national priorities.”

⁴ Sharma R., “Management of Public Enterprise”, 1st Edition, 1994/95, p.19

⁵ Bajracharya, Puskar, Opt. Cit. p. 3.

PEs has become important instruments of socio-economic policies in developing countries in many cases, they have become dominant features of the economic scarier and claim lion share of public investment. Their micro levels plans generally get integrated with the macro-level national development plans. They are required to accomplish multidimensional objectives and discharge a complex array of obligations in recent years however their social objectives of providing essential goods. Services being looked upon as complementary to business objectives of making profits through surplus generation. PEs in developing countries are almost wholly depended either on government intermediary agencies for their financial resources which has traditionally provided justification for government central in their functioning. The number of the Board of Director, who manages the affairs of public enterprises appointed by the governments in PEs, may take the form of price administration, regulation of salaries and remuneration, apparition of surplus and the approval of their budgets and long-term plans etc.⁶

The political base for the establishment of PEs in Nepal can be ascribed to the constitutional arrangement for mixed economic system whether by public and private sectors co-exist to entrance public welfare by creating a society which is just dynamic, democratic and exploitation free. However the guiding rational for their establishment have been programmatic ones and sub-pragmatism as articulated in different plan document are creation private sector monopoly, enhance public welfare, huge capital investment.⁷

b) Public Utility Enterprises in Nepal

The public utility PEs has greater importance. To utilize the resources efficiently there have an important role of public utility sector in Nepal. “The PEs in manufacturing, trading and services sectors is operating at a less, whereas social, public utility, financial sector PEs is making profit.”⁸

Government have included there PEs in the sector which are as following.

1. Nepal Telecom (NTC)
2. Nepal Electricity Authority (NEA)
3. Nepal Water Supply Corporation (NWSC).

⁶ Fernands, Draxy, “Central System for PEs in Developing Countries”, ICPE, 1982.

⁷ Manandhar, Marian, “Tosses in Public Enterprise Management on Nepal”.

⁸ Target 8 Performance of PEs “MOF” 1998, p. ‘N’.

1.4 Profitability in Public Enterprises

Profit can be viewed from several angles. The most acceptable criteria are to look at percent of profit before tax to capital employed (Net fixed assets plus working capital) which is a measure of return on investment. Generally an enterprise sound efficient which has a good profitability base of its own good market standing. It is a well accepted principle that PEs should be run on business principles and generate commercial profit, which is an accepted accounting practice whereby performance results are gauged. In terms of net disposable profit after taxes and costs including the provision or depreciation.⁹

a) Financial Position of PEs in Nepal¹⁰

Analysis of PE of Nepal, the financial performance of 43 PEs, their financial situation is far satisfactory; HMG has invested Rs. 14779.4 million. As share capital and Rs. 44234 million as loan investment in these PEs till fiscal year 1997/98. However, it received only a negligible return of 0.16 percent on its share capital.

The analysis shows that, in FY 2052/53 manufacturing trade service and social sector PEs has been operating at one overall loss, whereas social sector PEs were in profit during FY 2052/53. However, if the losses incurred by the manufacturing trade service and social sector, PEs were deducted from the profit earned by the two by the two profit making sector sum of PEs, Rs. 1317.3 million in earned which comes to 1.62 percent of the net capital employed.

Out of the 43 PEs only 13 enterprises were able to complete their financial audit for the FY 2052/53. Remaining 30 enterprise have not completed their financial audit work yet of these enterprises.

1.5 General Introduction on NTC

The history of telecommunication development in Nepal is not long. The first telecommunication service was started in Nepal during the regime of Maharaja Chandra Shamsher in the year 1972 B.S. It was the first time and a good opportunity for Nepalese people to transmit message from Kathmandu to Birgunj. This telephone line attributed as magnet connected Birgunj with Kathmandu under the name of “Shree Chandra Telephone”. Through no remarkable development has been found at the time of Shree Chandra Shamsher. Another telephone line connecting at Kathmandu, Hargamani Gaur has been installed in the year 1980 B.S. In the year 1992 B.S. 25 automatic telephone lines were distributed among the high ranking personalities of Nepal

⁹ Mathur B.P. PE Management Mac Millan India Ltd., 1st Edition, p.161.

¹⁰ HMG, “Target Performance Report of PEs”, Ministry of Finance, 1999.

for their own individual uses. The telecommunication office was first established near Ranipokhari.

Another notable addition of telecommunication lines were made during the role of Prime Minister Judda Shamsheer by catering the line in the different districts to the extent of 300 miles long. The telephone lines were being extended from Kathmandu to Siraha, Saptari, while the same being extended up at Hanuman Nagar in 1994 B.S. In the year 1998 B.S. additional installation of telephone lines linking Dhankuta, Dharan and Biratnagar were distributed. A noticeable change happened toward telecommunication development during the period of Judda Shamsheer. About 200 miles long telephone line was also bought into use in the western part of Nepal No.1 west No.2 Pokhara, Palpa and Bhairahawa in the year 2007 B.S. So, before the advent of democracy, 500 miles long telephone live were established. The government of Nepal felt the need of telecommunication for effective administration and active participation of people to achieve national goals. So, 200 local C.B. telephone line were setup and distributed for His Majesty's offices having exchange office at Singh Durbar in the year 2012 B.S. Before the implementation of first five year plan, Nepal had 200 C.B. lines, 100 magnet lines, 15 automatic, 10 military exchange lines and 600 miles of trunk line connecting Kathmandu with other districts.

Before the implementation of first five years plan, Nepal had wireless relation only in 28 centers in various parts of the country. About 18 of these stations were equipped with modern equipments. As the material and machinery requisite for wireless services has been made available during the period of second world war, satisfactory service could not be achieved on account of the difficulty of transporting the petrol in the remote district.¹¹

In the rural sector, NTC has been able to provide telephone facilities to 1528 VDC. Using the VSAT system NTC has been able to provide reliable telecommunication service even to the remote district headquarters there by covering all the 75 district headquarters. To chapter the growing telephone demand, the telephone line capacity has been expanded to cover the 283000 and the local net work, has also been simultaneously expanded. Looking back at the achievement and made over the years in the local net work, rural net work and international sector leaves me with a feeling o satisfaction, however, there is still a lot to be done.

The restructuring of the domestic and international tariff is both voice and data sector proves that we are ready to take up the challenge and through

¹¹ Sitoula Prasad, "Telecommunication Development in Nepal", An Unpublished Degree, Thesis T.U. Kirtipur, 1978, pp.31-32.

“Change management” we are determined to take the leading role in the new liberalized telecom market in Nepal. It is never easy to predict that what will happen in the future. However, the direction we have taken is based on our mission to provide telecommunication service to the general public in each and every corner of the nation, there by supporting the national integration and the overall economic development of the country. We intend to achieve this through the implementation of 1000 VSATS and will systems in various parts of the country. With the introduction of many value-added services like GSM cellular mobile, internet, smart current payphone, we have helped the people to communicate more effectively and efficiently.

It is the age of information technology and competition. In order to stay ahead in the competition, NTC will have to shift its concentration from basis telephone to the access net work. Towards this goal NTC is embarking on a project to establish SDH optical fiber net work in the Kathmandu valley and establish PDH network out side the valley.¹²

a) Role of Nepal Telecommunication Corporation

Telecommunication is one of the fastest growing industries in the world. Presently, NTC is only telecom operator in Nepal holding total monopoly is the telecom sector and is a fully government owned and controlled organization. In Nepal, there are other means of communication also a number of means of transportation, postal service etc. But there are slower expensive and less convenient. Therefore, telecommunication is one of the quickest, cheapest and scientific means of telecommunication. It brings coordination among different government entities which ultimately promotes administrative efficiency. NTC has played a crucial role for the increase in agricultural production, which is a main source of national income. Telecoms have a major impact on agricultural production by providing information and market condition.

In developing country like Nepal, the role of importance and contribution of telecommunication in the development of country can not be explained. The international telecommunication system contributors to link the overseas countries in the field of economy as well as politics. It also contributes in the development of tourist industry. Thus the telecommunication system plays vital role to strengthen the national economy and bring national unity among the national and international people creating a brother hood relationship among the people.

¹² NTC, Annual Report 1998/99, p. 1.

Telecommunication has also contributed a lot for development of social condition of which teaches about the accumulation, exchange and transmission of knowledge between people. So, without communication human society would remain static and not much different from the society of other animal. “The effect of telecommunication on the rural areas and their contribution to rural development are extremely important yet rather difficult to measure”.¹³

b) Service Provided by NTC¹⁴

NTC has been providing several services to the countries people and facilities for transmission of written message, voice communication and variety or other communication. It provides telecommunications services both within the country and overseas. The services provided by NTC are as follows:

1. Basic Telephone Services
2. National Trunk Telephone Services
3. Rural Telecom Services
4. Bureau Fax Services
5. Pay Phone Services
6. Mobile Services
7. Packet Switching Services
8. International Sub-service Trunk Dialing Services
9. Internet Services
10. Inmarsat Mini-M Services
11. Home country Direct Dialing Services
12. Analogue Voice/Data and Telegraph Leased Circuit Services
13. International Telegraph Services
14. Telex Services
15. International Program T.V. Services

¹³ William B. Plerce, “International Telecom Union”, Seminar on Rural Telecom, New Delhi, 11-22 Sep. 1978, p. 6.

¹⁴ NTC Annual Report, 1998/99.

c) Milestones Data of NTC¹⁵

- 1913 - Establishment of first telephone line in Kathmandu.
- 1914 - Establishment of open wire trunk line from Kathmandu to Raxaul (India).
- 1935 - Installation of 25 lines automatic exchange in palace.
- 1936 - Installation of pen wire trunk line from Kathmandu to Dhadkuta.
- 1950 - Establishment of telegraph service.
- 1950 - Introduction of High frequency ratio system (AM)
- 1950 - Establishment of CB telephone exchange (100 lines) in Kathmandu.
- 1951 - Installation of pen wire trunk line from Kathmandu to Palpa
- 1955 - Distribution of telephone line to general public.
- 1962 - First public telephone line to general public.
- 1964 - Beginning of international telecommunication services using HF Ratio to India and Pakistan.
- 1965 - First automatic exchange in Nepal (1000 lines in Kathmandu).
- 1971 - Introduction of Telex Services.
- 1974 - Micro wave transmission links establishment for internal trunk.
- 1982 - Establishment of standard 'B' type earth station for international circuits.
- 1982 - Establishment of SPC telex exchange.
- 1983 - Establishment of digital telephone exchange.
- 1984 - Commencement of STD service.
- 1987 - Commencement of ISD service.
- 1995 - Installation of optical fiber net work
- 1996 - Conversion of all transmission links to digital transmission Link
- 1996 - Automation of the entire telephone net work.
- 1996 - Independent international Gateway Exchange established.
- 1996 - Introduction of VSAT Services.
- 1997 - Digital link with D.O.T. India through Optical Fiber in Birgunj-Raxaul.
- 1998 - Direct Link with Bangladesh.
- 1999 - Launching of GSM Mobile Service.
- 2000 - Launching of Internet Service.

¹⁵ NTC-Annual Report

- 2000 - Implementation of SDH Micro Wave Radio.
- 2001 - Launching of Payphone Service.
- 2002 - East West Highway optical fiber project.
- 2003 - GSM Prepaid Service.
- 2004 - Nepal Telecom (Transformation from corporation to Nepal Doorsanchar Company)

d) Ownership of NTC

NTC is full government owned public utility sector enterprises. NTC is administrated by a government appoint board of directors which includes the chairman, who is the secretary of the ministry of information and communications and four voting members.

e) Functions and Duties of Corporation (NTC)

According to communication corporation act and other related documents, the functions and duties of the corporation shall be as follows:

- i) The basic function of NTC is to provide essential nation wide low const reliable and really available telecommunication services to the general public for the overall improvement of national integrity and economic development.
- ii) To promote the industry and commerce of the nation.
- iii) To promote coordination and administrative efficiently.
- iv) To promote the business activities of the corporation.
- v) To endeavor to become a self relevant.
- vi) Under the directory of HMG, to fix the policies of the corporation and to take necessary action for its implementation.
- vii) To improve the work implementation procedures for maintaining a high grade of telecommunication services.

f) Rights of Corporation

The rights of the corporation are as follows:

- i) To do all works which seem to be inevitable and necessary for the fulfillment of the functions and duties of its own?
- ii) To collect fees from the customers.
- iii) To raise loans from national institutions, banks or individuals.
- iv) To open any branch office.
- v) To use special stamps for its own purpose.

g) Service Delivery Procedure of NTC

Consumer seeking services from telecommunication have to apply for a new line connection specifying the kind of services required. The incoming applications are checked for processing and the name list of consumers of finding who have applied for new line connection is circulated and noticed out. Consumers on finding their name in the list become subscribers and come to contact to telecommunication offices for new line connection by filling the application from referring their name, location, registered number of old application and other required documents like citizenship, certificates including other necessary documents. Then the service order is relayed to the engineer who makes detail survey and feasibility studies live connection cost estimate assessment of the available points at that locality and listing of the various materials required for installation. There is a survey from which has not to be field and the engineer has to make timely installation report after identifying the line number, telephone number, cable number etc. Then the cost information is passed on to the consumer who has to make the necessary deposits and pay installation charge. Technician connects the telephone line after these pre-requisites are fulfilled. The information about the connection of telephone lines are disseminated to maintenance control center for repairs and operations, inquiry section and telephone directory section and account section for the purpose of maintaining the customer ledger and so on. The information will then flow to the billing section the verifies, prepares and identifies the customers. Make necessary adjustments again dispatch this information to the account section which gives the receipts prepared and telephone care number to customers.¹⁶

¹⁶ Manohar Krishna Shrestha, "Improve in Service Delivery", Institute of Integrated Development, Kathmandu, pp.35-36.

h) Board of Directors¹⁷

NTC has managing director under the supervision and control of board of director. The composition of board of director is as follows.

Chairman

Mr. Mukunda Sharma Paudyal

Secretary, Ministry of Information and Communication

Member

Mr. Bidhyadhar Malik

Director, General Ministry of Finance (Dep. of tax)

Member

Mr. Raghubar Lal Shrestha

General Manager of NTC

Member

Mr. Sughat Ratna Kansakar

Director, Katmandu Regional Directorate, NTC

Member

Mr. Vishwa Nath Goel

Manager, Coble Networking Planning, NTC

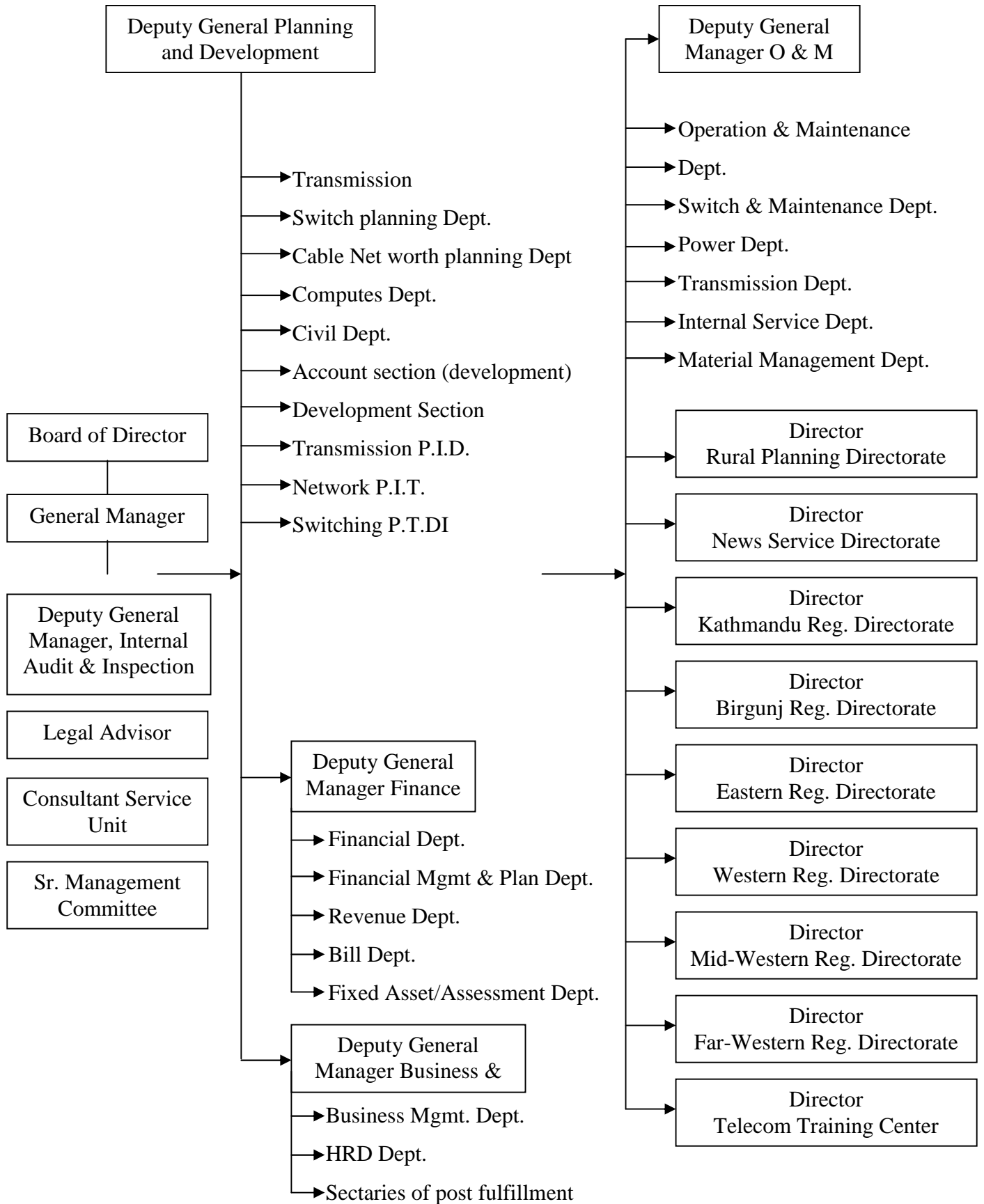
Secretary

Mr. Hari Karmacharya

Deputy General Manager (Intes Audit and Inspection) NTC.

¹⁷ NTC Annual Report 2002/03

Organization Chart



1.6 Statement of Problem

Nepal Telecom is a leading public enterprise functioning in public utility sector, financed by HMG. NTC is large scale PE of the country and single government institution in communication sector. NTC has to play a vital role than other PEs. Government has invested huge amount in NTC and its expectation from this corporation is to provide the communication service to all sectors and in return get sufficient amount of dividend to fulfill the national economic goal. Although NTC is a leading enterprise in communication sector it faces many operational management problems.

Therefore, the successful operation of an organization whatever the actual of the early depends upon the planning system that it has adopted. Profit plan is one of the most important managerial devices that plays a key role for the effective formulation and implementation of strategic as well as tactical plans of an organization. Theoretically profit is abroad and sometimes it seems vague. Planning is the sole concept of any concept of any enterprise. Hence it is the life blood of any enterprise.

Profit planning system requires the effective coordination between various function budgets of an organization. The successful operation of an organization, whatever the nature of it largely depends upon the planning system that it has adopted. It is clear that profit planning exploits the opportunities by using limited resources. Profit plan is a formal expressing of the enterprises plans, goals and objectives stated in financial terms for specific future period of time. Profit plan covers a definite period of time. Generally three types of profit plan are prepared. The first is long term profit plan (5-10 years). The second is strategic profit plan (1-5 years) and the third is short term profit plan (1 year generally). Majority of enterprises prepare long-range and short-range plans, they are prepared on ad-hoc basis.

Whether the corporation has maintained adequate inventory level to achieve sales budget. Further manpower planning and management capacity utilization, production costing system and classification of cost behavior has been tried to as certain separately. Out of this analysis, it would be also related to know the situation of profitability, liquidity, turnover and operating ratio of the corporation. Another considering problem related to the study are whether the management has tried to minimize administrative cost and practice to increase the overall financial performance.

Besides these above mentioned problems are as follows:

1. What are the reasons of the firm for poor performance being unrealistic and improper uses of budgeting?

2. What are the fundamental principles adopted in short range planning and long-range planning?
3. To what extent is there the base prepared for applying profit planning and process of profit plan followed by Nepal Telecommunication Corporation?
4. Whether the firm is applying budgeting system properly or not?
5. Whether the budget system is first introduced into the factory to cover the whole range of activities or it is introduced step by step?
6. What are the major problem faced by NTC in developing and implementing profit planning?
7. Necessary analysis should be made on cost-volume profit analysis, ratio analysis, cash-flow analysis and scientific technique should be used in segregating the cost of the enterprise.
8. What contemporary steps should be taken instantly to improve the profit planning system in NTC?

1.7 Objectives of the Study

The basic objectives of this study are to examine the practice and effectiveness of comprehensive PPC system applied in NTC audits effectiveness. Thus the objectives are as follows:

- i) To analyze the various functional budgets that is prepared in NTC.
- ii) To analyze the variance between budgeted and actual achievement of the NTC.
- iii) To sketch the trend of profit planning in NTC.
- iv) To draw picture of capacity utilization of NTC.
- v) To examine the present planning premises adopted by NTC on the basis of budgeting
- vi) To suggest some remedies for improving profit planning system

1.8 Important of the study

Nepal is a landlocked and remote country. The media of communication except the telecommunication are not providing quick service at the time of necessity because of the geographical formation of Nepal. Telecommunication is helping much more to sand the message of one place to another very fast. It is playing a great role to communication with other countries and to in clearance the field of development and construction, because it is also one element of basic foundation.

Telecommunication has also been regarded as one of the basic infrastructure for all round development of the country. Trunk call, micro wave, trunk system, local telephone exchange, Telex, Tele-printer is some of the important modern communication media which has made exchange of news

both the country and abroad. It has also bolstered of the development of the economic, social, and political and administration sectors of the country. The development of industry, trade and business had direct bearing upon the development of telecom services. In a mountainous country like Nepal, with limited facilities of road and air transportation, telecom occupies a crucial position in the all round development of the country. So that it is important to make sound profit planning to provide essential national wide low cost reliable and readily available telecom services to the general public.

1.9 Limitations of the Study

Today world is dynamic, everything existing here are of limited characters. Every principle, role, formula and conditions are applied within limitations. Likewise, this study can not escape from limitations. They are:

- i) This study is for partial fulfillment of MBS course of T.U., so it may not be useful for other aspects.
- ii) The study covers only the period of five years (i.e. FY 2060/061 to 2064/065) trend and data will be analyzed.
- iii) The accuracy of the study is based upon secondary data available from management of NTC.
- iv) Time and resource constraints are another limitation of the study.
- v) This study is only a case study, thus the result will not be applicable for all type of PEs.

1.10 Research Methodology

To fulfill the objectives and requirements of this study, basically secondary data will be used. The sources of secondary data relating to this study are as follows.

- i) Budget Books of NTC.
- ii) Annual Report of NTC.
- iii) Magazines and Newspapers.
- iv) Financial Statement of NTC.
- v) Published Booklet of NTC.
- vi) Government report and other published statement.
- vii) Previous study made in this field.
- viii) Others.

1.10 Design of the Study (Chapter Scheme)

This study has been organized into six chapters. They are as follows:

Chapter I: Introduction

This consists of the focus of the study a brief review of Nepal telecom, statement of the problem, objective of the study, research methodology, limitation and importance of the study.

Chapter II: Conceptual Framework

This includes the fundamental concept and components of PPC. It also deals with various function budgets and development and process of profit plans.

Chapter III: Review of Literature

This includes the review of previous research work made in respect of PPC of NTC.

Chapter IV: Research Methodology

This includes the research design, data collection and procedure, period covered, nature and sources of data, statistical tools used and research variables

Chapter V: Presentation and Analysis of Data

This represents the presentation and analysis of data collected through various sources. These data have been interpreted and analyzed with the help of various financial and statistical tools and techniques.

Chapter VI: Summary, Conclusions and Recommendations

This includes the summary, conclusions and recommendations made on the basis of this study.

Beside this, bibliography and appendix are attached at the end of this study

CHAPTER -TWO

CONCEPTUAL FRAMEWORK

2.1 Profit

Profit is the primary measure of business success in any economy. It does not just happen, profits are managed.¹⁸ It firm can not make profit. It can not achieve capital for very long. It is exceed amount of a firm then investment it is the acid test of business.

There are several interpretations of the term 'profit'. An economist will say that profit is the reward for entrepreneurship, for risk taking. A labor leader might say that is a measure of low efficiently labor has produced and that it provides a base for negotiating a wage increase. An investor will view it is a gauge of the return on his or her money. An internal revenue agent might regard it as the base for determining income taxes. The accountant will define it simply as the excess of a firm's revenue over the expenses of producing revenue in a given fiscal period.

Using the accountant's measuring stick, management thinks for profit as:

1. A tangible expression of the goals it has set for the firm.
2. A measure of the performance toward the achievement of its goals.
3. A means of maintaining the health, growth, and continuity of the company.¹⁹

It is reward of business. Profit is obtained by subtracting by subtracting the cost from revenue. In the perfect competition market profit is earned with the help of innovation. So this motives is residual after distributing the reward to all the factors of production, it can be represented as.

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

Profit is the primary objective of a business. The word profit implies a comparison of the operation of the operation of business between two specific dates which is usually separated by an interval of one year. No company can survive long without profit. Profit is the ultimate measure of its effectiveness, and in a capitalist society, there is o future for private enterpriser

¹⁸ Richard M. Lynch and Robert W. Williamson, "Accounting for management", Planning and Control,[Tata-MC. G. Grawhill Publishing Co.Ltd. Third edition, 1984], page.99.

¹⁹ IBID, p.100.

which always incurs losses. Profit is a signal for the allocation of resources and yardsticks for judging managerial efficiency.²⁰

Profits are the ultimate yardstick of management's ability to coordinate plan and act in the interest of the consumer.²¹ A business firms in an organization designed to make profits and profits are the primary measures of its products, rate of progress, and behavior of prices. But these are test of desirability of the whole profit system in with in that system; profits are the best of the individual firm's performance.²²

Thus, economic theories of profit may be put in three broad groups. The first looks open profit is the reward for bearing risk and uncertainty, the second views profit as the consequence of traction and imperfection in the competitive adjustment of the economy to dynamic changes, the third sees profit as the reward for successful invocation.²³

2.2 Planning

Defined in its simplest terms planning is the determination of anything in advance of action, it is essentially a decision making process that provides a basis for economical and effective action in the future. Effective planning sets the stage for integrated action to take places, reduces the number of unforeseeable crises, promotes the use of more efficient methods and provides the basis for the managerial function of control thereby assuring focus on organization objectives.²⁴

Planning is a serious business; what make planning are not the targets, which merely express what we would like be see happen but the action that is taken to achieve these targets.

Planning may be defined as the conscious and deliberate choice of economic priorities by some public authority.²⁵

²⁰ P.V.Kulkarni, "Financial Management" [Himalayan Publishing House, Fourth Edition, 1992] p.380.

²¹ Duncan W. Reekie and Crook N. Jonethan, "Managerial Eco" [Heritage Publishers, Delhi, 1983,p. 380.

²² Joel Dean, "Managerial Eco", [Prentice-Hall of India Pvt. Ltd. 1992], p. 3.

²³ IBID, p. 6.

²⁴ Personnel Management: Edwin B. Flippo Sixth Edition, Mc Graw-hill Inter-nation edition, p.49.

²⁵ Dr. B. Wootton Freedom under Planning, p. 12.

An economic plan may be defined as a totality of arrangement decided up on in order to carryout a project concerned with economic activity of an economic.²⁶

The planning processes both short and long term is the most crucial component of the whole system. It is both the foundation and the bond for the other elements because it is through the planning process that we determine what we are going to do, how we are going to do it and who is going to do it. It operates as the brain center of an organization and like the brain, it both reasons and communicates.²⁷

Planning entails regular measurement of progress toward objectives and goals and the execution of strategies and action program. Yet it is clearly recognized that plans often have to be altered in the light of new circumstances.

Planning should be continuous process and not a once- a year exercise. It should involve all these whose jobs have a significant effect on the fortunes of the company.

It is clearly distinct from forecasting. Forecasting, one of the essential elements of planning is a prediction of an attempt to determine what should happen and then to take steps that will make it likely to happen.²⁸

2.3 Profit Planning

After defining about profit and planning now it is going present some theoretical concept of profit planning. When the management plans for profit for a certain period of time, it is called profit plan. Profit plan as defined “As an estimation and predetermination of revenues and expressed that estimates how much income sill be generated and how it would be spent in order to meet investment and profit requirement. In the case of institutional operations it presents a plan for spending income in a manner that does not result in loss.²⁹ It represents an overall plan of operations, covers a definite period of time and formulates the planning decisions of management.³⁰

²⁶ Charles Betteiheim Studies in the theory of Planning 1961, p. 3.

²⁷ Roy A. Gentles, “Alcan’s Integration of Management Techniques Raises their Effectiveness: AMA Forum April 1984, p. 32.

²⁸ IBID, p. 187.

²⁹ Jack D. Ninemeier and Raymond S. Schimidgall, “Basic Accounting Standard”, p. 133.

³⁰ Myers Johns H. “The Critical Event and Recognition of Net Profit, Financial Accounting Theory Issue and controversy”, p. 250.

According to I.M. Pandey, “Profit planning is a detailed plan of action during a period of one year or less. Profit planning helps a firm’s financial manager to regulate flow of funds which is primary concern.”³¹

Fremgen say that, “Profit plan is a short term financial plan. It is an action plan to guide managers in achieving the objectives of a firm. A profit plan is a comprehensive and coordinate plan resource of an enterprise for some specific period in future.”³²

Glenn A Welsch define the profit plan as, “A profit plan is a financial and narrative expression of the expected result form planning decision. It is called the profit plan because it explicitly states the goals in term of time for each major segment of entity.”³³ According to Glenn A. Welsch, he has used the descriptive term comprehensive profit planning and control other term used in the same context are business budgeting, managerial budgeting and budgeting. The term comprehensive profit planning and control is defined as a systematic and formalized approach for performing significant phases of the management planning and control function. Specially, it involves.

- i) The development and application of broad and long range objectives for the enterprises.
- ii) The specification of enterprise goals.
- iii) A long range profit plan developed in broad terms.
- iv) A short range profit plan detailed by assigned responsibilities (divisions, products, projects).
- v) A system of periodic performance report detailed by assigned responsibilities.
- vi) Follow-up procedures.

Profit planning is the heart of management. Without proper planning of profit it will not just happen. So every enterprise should systematically plan for profits in proper way. Various function budgets are the basic tools for proper planning of profit and control over them, profit planning in fact is a managerial techniques and a profit plan is such written plan, In 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

³¹ I.M. Pandey, “Financial Management”, [Printed at Gorgons Paper Ltd., Seventh Edition, A- 28 Sector –ix Nodia], p. 233

³² Fremgen, James M., “Accounting for managerial Analysis, [Irwh Inc. 1973], p. 144.

³³ Glenn A. Welsch, p. 34.

established by the top management in respect of some future period. It is a predetermined detailed plan of action developed and distributed as an audit to current operations and as a partial basis for the subsequent evaluation of performance. Thus, we can say that profit planning is a total which may be used by the management in planning the future course of action and in controlling the actual performance.³⁴

A profit plan is an advance decision of expected achievement based on the most efficient operation standards of in prospect of time. It is established against which actual accomplishment is regularly compared.³⁵ Profit is an outcome of effective and efficient management, which is affected by various factors; profit planning is that tool which manages all the factors efficiently and effectively. Mats and curry Milton F. emphasizing on, “Sound and intelligent planning of profits, costs and sales is both more important and more difficult than ever before in this age of rapid technological changes. Modern profit planning encourages action and recognizes the divisional and departmental autonomy and responsibility of managers, motivating them to strive for attainment of the corporate goal. Profit planning is directed to the final objectives of the business and generally includes all of its important elements. Profit planning is especially effective in enabling middle management to help plan profit and control cost. Profit planning is management’s primary tools to accomplish it objectives.³⁶

Profit planning is a capacity to make a grater risk for this is the way to improve entrepreneurial performance. The risk could be avoided form the proper information. According to Chorafas, “The single most vital factor in an effective profit planning procedures, right information at the right time, presented and formulated in a way that is easy to comprehend and follow.³⁷

Since profit plan is flexible and depends upon the size of the firm, so that the formats and rules regarding profit plan also varies according to the formats and rules regarding profit plan also varies according to the nature of business organization. Profit plan is prepared with in the environment of relevant variables and strength and weakness. Organizational broad objectives

³⁴ S.P. Gupta, “Management Accounting”, [Agra Shitay Bhawan, 1992], p. 521.

³⁵ Muers John, “The Critical Event and Recognition of Net Profit Financial Accounting Theory Issue and Controversy”.

³⁶ Peter A Noll and Edward A. Radetsky, Values of Profit Planning N.A.A. Bulletin Vol XLV, No. 6, p. 36.

³⁷ D.N.Chorafas Ibid, p. 245.

are defined and there specified in particular goals. Basic strategy and communicated to the line and staff managers. Generally two types of profit plans are generated for long term objectives strategic plans and for short term objectives tactical plans are developed. The type of profit plan depends upon the nature of business entity. Generally for manufacturing enterprises following plans is prepared (1) sales plan (2) production plan (3) raw material plan (4) purchase budget (5) inventory budget (6) Labor hours and cost budget (7) manufacturing overhead budget (8) administrative expenses budget (9) selling expenses budget (10) cash budget (11) capital expenditure budget (12) flexible budget (13) projected income statement (14) projected balance sheet (15) variances analysis of performance report.

Profit planning thus, becomes a well through out operational plan with its financial implication impressed as both long and short range profit plans in the form of financial statements, including balance sheet, income statements and cash and working capital projections.³⁸

“Profit planning is a comprehensive plan expressed in financial term by which an operating program is effective for given period of time. It includes the estimate of (a) the service activities and project comprising the program (b) the resultant expenditure requirements, (c) the resources usable for their support, Jones S. Garth N. says”.³⁹

Profit Planning

Profit planning through volume cost analysis, however a modern concept of management planning a tool designed primarily for industrial enterprise. It involves a stud of what a business cost and expenses should be a will be at different level of operations and it includes a study of the resultant effect upon profit due to this changing relationship between volume and cost.⁴⁰

In summary profit planning means the development and acceptance of objectives and goals and moving an organization efficiently to achieve objectives and goals.

³⁸ Mutz/Curry Cost Accounting Planning and Control fifth edition 1972, Printed in the United State of America.

³⁹ Article by Jones S. Gath N Budgeting for National Development, Edited by: A Moquit, Pakistan, p. 18.

⁴⁰ Young Dang John Profit Planning Through Volume Cost Analysis, p. 3.

2.4 The Basic Elements of Profit Planning

The basic elements of profit planning are as follows:

1. Basic Comprehensive and Co-ordinate Plans

The profit planning considers all activities and operations of an organization the budget prepared by different department inside the organization have to be complied or co-ordinates and it is done by profit planning so before preparing a profit planning firstly all the departments have to be complied and that budget is known comprehensive budget or profit planning.

2. It 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 Dollars, Rupee, pounds etc.

3. It is Plan for the Firms Operation and Resources

Budget is a mechanization to plan for the firms all operations or activities the budget must plan for and quantity revenue and express related to specific operations. The planning should be done for revenue and expenses only.

2.5 Purpose of Profit Planning

1. To state the firms expectation (goal) in clearly formal terms to avoid confusion and facilitate their attainability.
2. To avoid a detailed plan of action for reducing uncertainly and for its proper direction of individual and group efforts to achieve goals.
3. To communicate expectation to all concerned with management of the firms so that they are understood, supported and implemented.
4. To co-ordinate the activities and efforts in such a way that the use of resources is maximized.⁴¹

2.6 Advantage of Profit Planning and Control

The following main arguments are usually given for profit planning control.

1. It forces early consideration of basic polices.
2. It requires adequate and sound organization structure that is there must be a definite assignment of responsibilities.
3. It compels all members of management from top down to participate in the establishment of goals and plans.
4. It compels departmental managers to make plans of other departments and of the entire enterprises.
5. It requires that management putdown in fingers what is necessary satisfactory performance.
6. It requires adequate and appropriate historical counting data.

⁴¹ Welsch Glenn fifth edition.

7. It compels management to plan for the most economical use of labor, material and capital.
8. It installs at all levels of management the habit of timely, careful and adequate consideration of the relevant factors before reaching important decision
9. It reduce cost by increasing the span of control because fewer supervisors are needed
10. It frees exclusive from many day to day internal problems through predator mind polices and clear cut authority relationship. It thereby provides more excessive time for planning and creating thinking.
11. It trends to remove the cloud of uncertainty that exist in much organization especially among lower levels of management relative to basic policy and enterprises objectives.
12. It pinpoints efficiency and inefficiency.
13. It promotes understanding among members of management of there co-workers problems.
14. It forces a management to give adequate attrition to the effect of general business condition.
15. If forces a periodic self analysis of the company.
16. It aids in obtaining bank credit bank commonly require a projection of future operation and cash flow to support large loan.
17. It checks progress for lack of progress towards the objectives of the enterprises.
18. It forces recognition and corrective action.
19. It rewards high performance and seeks to correct unfavorable performance.
20. It forces management to consider expected future trends and condition.⁴²

2.7 **Basic Assumptions problem and Limitation of profit Planning.**

Profit planning system are more common in large companies to serve management still, the usefulness of profit planning to very small business could have been circumvented by an early attempt to quality the drams of head strong but sloppy thinking entrepreneurs who never directly faced the uncertainties of their venture.

But there are so many assumption of using profit planning program. Firstly, the basic plans of a business must b measured interns of money, if there is to be any assurance that money will be available for the needs of the business.

Secondly, it is possible in a comprehensive way co-ordination every other aspects to establish optimum profit goals.

⁴² Welsh Galenn 5th edition, p.60.

Thirdly, profit planning is re-planning not merely who to do it thinks workout as forecasted, but also what to do thinks workout differently from the fore cast. Because effective budgeting requires co-ordinate planning. It is essential that all personal participating in the building of the budget are planning toward the same objective and are contemplating the same company, industry and general economic condition this can be complete by issuing a statement of basic assumption prior to the start of the budgeting system.

Profit planning and control is a systematic approach to the solution of problems. But it is not fooling proof; it suffers from certain problems and limitations. The major problems in the development a PPC system are.⁴³

- i) Seeking the support and involvement of all levels of management.
- ii) Development meaningful forecasts and plans especially the sales plan.
- iii) Educating all individuals to be involved in the PPC process and gaining their full participation.
- iv) Establishing realistic objectives, policies, procedures and standard of desired performance.
- v) Applying the budgeting PPC system in a flexible manner.
- vi) Maintaining effectives follow-up procedures and adopting the budgeting system whenever the circumstance charges.

Management must consider the following limitation in using the PPC system as advice to solve managerial problems.⁴⁴

- The profit plain is based in estimates.
- A PPC program must be continually adopted fit changing circumstances.
- Execution of profit plan will not occur automatically. Profit plan will be effective only if all responsible executive exert continuous and aggressive efforts towards their accomplishment.
- Not a suitable for management; it is totally wrong to think that introduction of PPC is alone sufficient to ensure success and to guarantee future profits.
- It is not realistic to write out and distribute our goals, policies and guidelines to all it he supervisors.
- Budgeting places too great demand on management time, especially to revise budgets constantly. Too much paper work is required.
- It creates all kinds of behavioral problems.
- It adds a level of complexity that is not needed.

⁴³ I.M. Pandey , “ management Accounting, A planning and Approach”,p.360

⁴⁴ Glenn A.Welsch Hilton and Gardon, op. Cit., p. 60-63.

- It is too costly, aside from management time.
- Danger of rigidity; for use fullness, the PPC must be flexible and dynamic in every sense of the word.
- Proper evaluation, for find out the inefficiencies proper evaluation should be made on the absence of proper evaluation, budgeting will hide inefficiencies. So there should be continuous evaluation of the actual performances, standards also reexamined regularly.

2.8 Long Range and short Range profit planning

When managers of the various responsibilities center in the enterprise received the executive management planning instruction and the projected plans, they began intensive activities to develop their respective strategic and tactical short range profit plans. The strategic long range and tactical short range profit plans. The strategist long range and tactical short range profit plan are usually developed on currently. It is possible that executive management or the chief financial executive will develop the strategic and tactical profit plan. This approach is seldom advisable because it denies full participation can cause unfavorable behavioral effects. Assuming participatory planning and receipt of executive management instruction the manager of each responsibility center to develop strategic long range profit plan (5 years) and in a harmony with five year plan, a tactical short range profit plan (one year). Certain format and procedural instruction should be provided by centralized sources, normally the financial function, to establish the general format, amount of detail, and other relevant procedural and format requirements essential for aggregation of the plant of the responsibility centers in to the overall profit plans. All of this activity must be coordinated among the centers in conformity with the organization structure.

The format pertain of long range plan includes the following basic component detailed by each year, income statement, cash flow projection, capital expenditure plan and man power requirements, research plan and long range market preparation plan. The strategic plan does not include a format balance sheet however it is anticipated that important balance items would be included then the long range plan covers all the key area of anticipated activity, sales, expenses, T and D capital expenditure cast profit and return on investment.

In order to provide a broad general view of complete short range profit plan shown here deal primarily with annual result, detailed classification by month responsibility and products. Therefore, these two steps revision that upon receipt of the planning, premises and procedural instruction each manager

in charge of a major responsibility center will immediately initiate. Activities with his own functional with five years plan, a tactical short range profit plan for example a plan might consist of the following part:

- ❖ Basic purpose of objectives of the company.
- ❖ Marketing plans, manufacturing plans.
- ❖ Research development and engineering plans.
- ❖ Capital instrument plan.
- ❖ Financial projection.

2.9 Profit Planning and Planning

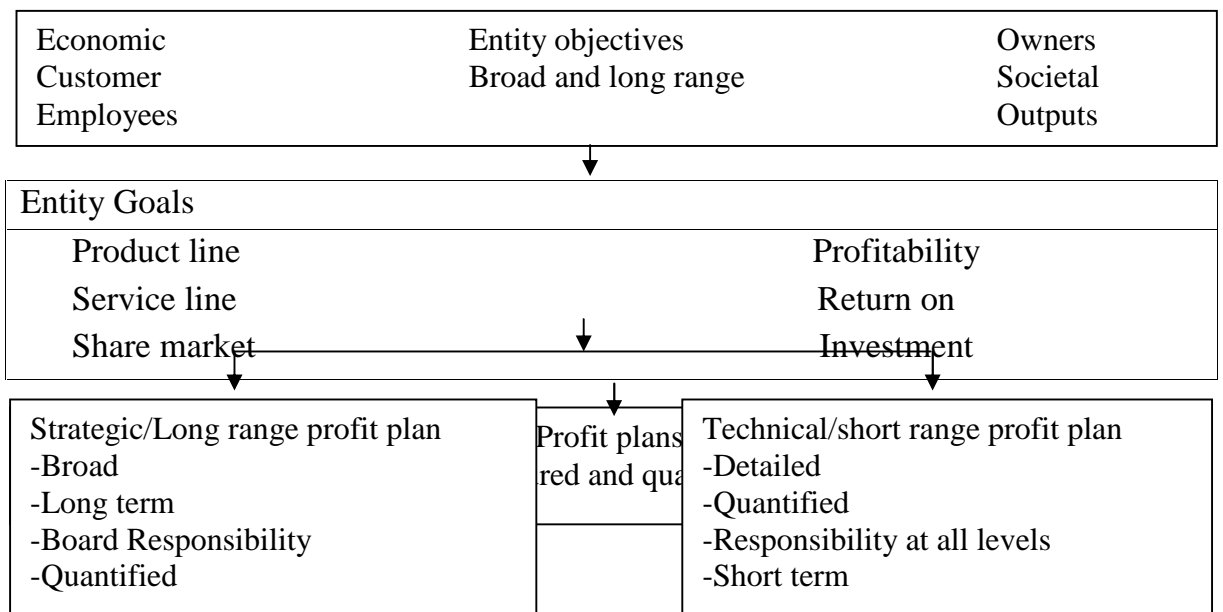
Profit planning is the final process in a comprehensive planning network. Business planning does not operate within any determined time limit but is conditioned by particular requirement of a company’s profit planning strategic profit plan monitors strategic planning to ensure that it meets the financial requirement of management interims of sales, profitability and growth. The annual profit plan is changed with the task of realizing the profit potential created by strategic planning.

The planning process of an enterprise would generally involve four fundamental steps.

- ❖ Establishing the objective.
- ❖ Determining the broad objectives or goal.
- ❖ Developing strategies.
- ❖ Formulating profit plan.

Following figure present a conceptual view of the linkage between planning and profit planning.

Figure: Relation between Planning and Profit Planning



2.10 Forecasting and Planning

Forecasting is the prerequisite for planning. Forecasts are the statements of expected future conditions. These expectations depend upon the assumption made. If assumptions are plausible the forecast has better chance of being useful. Forecasting assumptions and techniques vary with the kind of planning needed.

Forecasting may be of three types. They are:

- i) Intermediate term
- ii) Short term
- iii). Long term

Planning can only be done with forecasting. “The distinction between forecasting and planning is not an easy one.”

Webster gives-“To plan ahead as the leading definition of forecast.” Forecasting is our best thinking about what will happen to us in the future. In forecasting we define situations and recognize problems and opportunities. In planning we develop out objectives in practical detail and we correspondingly develop schemes of action to achieve these objectives.”⁴⁵

A forecast is a prediction of future event, condition or situation, whereas plan includes a program of intended future actions and desired results. Forecasting predicts the future events in such away that the planning process can be performed more accurately. “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 view as only one input into the development of sales plan. The management of the company may accept, modify or reject the forecast, other inputs and management judgment about such related items as sales volume, prices, sales efforts, production and financing. It is important to make a distinction between the sales forecast and the sales plan primary because the internal technical staff should not be expected or permitted to make the fundamental management decision and judgment implicit in ever sales plan. Moreover, the influence of management actions on sales potentials in difficult to quality for sales forecasting. Before, the elements of management experience and judgment must hold the sales plan.

⁴⁵ American Accounting Association “Reading in cost Accounting Budgeting and control”, p. 502.

Another reason for identifying sales forecasting as only one step in sales planning is that sales forecasts are conditional.”⁴⁶

2.11 Budgeting: As a Tool of Profit Planning

Budgeting is an expression of a firm’s plan in financial form for a period of time in future; it is an estimate of future needs calculated for a definition period. It anticipates income for a given period and costs as well as expenses of obtaining this income are set or limited within the ideas of earning a desired profit or an aid in controlling losses. A business budget is a plan covering all phases of operations for a definite period in future. It is a formal expression of policies, plans, objectives and goals laid down in advance by top management for the undertaking as a whole and every sub division there of.

“Budget, as a tool of planning and control is closely related to the broader system of planning and control in an organization. Planning involves the specification of the basic objectives that will guide it. In operational terms, it involves the step of setting objectives, specifying goals, formulating strategies and expressing budgets. A budget is a comprehensive and co-ordinate plan expressed in financial terms for the operations and resources of an enterprise for some specified period in future.”⁴⁷

A budget is a quantitative expression of a plan of action and an aid to coordination and implementation. Budgets may be formulated for the organization as a whole or for any sub unit. Budgeting includes sales, production, distribution and financial aspect of an organization. Budget program are designed to carry out a variety of functions, planning, evaluating performance coordinating activities, implementing plans, communicating, motivating and authorizing action.”⁴⁸

A budget is a written plan for the future. The managers of firms which use budgets are forced to plan ahead. Thus, these firms without financial goals may find it difficult to make proper decisions. A firm with specific goals in the form of a budget makes many decision ahead of time. A budget helps a firm to control its costs by setting guidelines for spending money for undead items because they know at all costs will be compared to the budget. If costs exceed the budgeted cost, an explanation will be required. Frequently exceeding the budget may even be grounds for dismissal. A budget helps to

⁴⁶ Welsch, Glenn A. fifth edition Opt. Cit., p. 172.

⁴⁷ Khan and Jain, P.K. “Management Accounting” MC Graw Hills Publishing Co. Ltd., p. 296.

⁴⁸ Horn Green Charles T. “Cost Accounting and Management Emphasis”. P. 123.

motivate employees to do good job. This is particularly true when employees help in setting up the budget. The complete budget for a firm is often called the master budget. The master budget consists of many functional budgets. These budgets include a sales budget, a production budget, a purchase budget, an expenses budget, an equipment purchase budget and a cash budget. Once all of these budgets are completed, the master budget for the entire firm is prepared.”⁴⁹

“Budgeting control is a system of controlling costs which includes the preparation of budgets, coordinating the departments and establishing the responsibilities. Comparing actual performance with that budgeted and acting upon results to achieve makes mum profitability.”⁵⁰ Thus budget is concerned with policy making policy. The common objectives of budgetary control is to formulate polices aimed at objective established after the consideration of the possible course of events in the future and to provide a means for the constant comparison of actual progress towards this goal against the preconceived results. Budgets not only compare the actual results with those of budgeted but also provide a standard of the performance. Company controls operations through its budgeting and responsibility reporting system. Top executives are able to control every area of the organization through a system of budgetary planning and control reporting by responsibility area. Yardsticks of performance are provided for all production and service area, and results of operations are accumulated and reported interims of these yardsticks at all supervisory levels.

While originally the budget constituted a financial document, it is now concerned with devising a coordinated program of operation, providing an effective means of communication among managerial personnel for the purpose of evaluating proposed plans of action, directing the diverse activities towards the accomplishment of predetermined goals and obtaining all requisite approvals. Thus there is an increasing trend toward extending the frontiers of business budgets to include planning, coordinating and controlling of the entire operations of a business. This has transformed budgets and budgetary control into a valuable tool of purposeful management.

Budgets encourage cogent thinking and help in the avoidance of vague generalizations as all executives have to quantify plans to examine their feasibility in terms of profit potential. They place the problem of profit in proper prospective by emphasizing that the only means of safeguarding the desired margin of profits lies in adopting costs to proceeds which are beyond the control

⁴⁹ Welsch, Glenn fifth Edition.

⁵⁰ Glenn A. Welsch IBID

of an enterprise. Then, by maintain the various activities of a concern in proper relation to one another; business budgets bring a sense of balance and direction in the affairs of an undertaking. Budget is also a Psychological device that obtains results. It makes those responsible for the implementation of the budget proposals ever conscious of its existence with the consequence that, through no monetary reward is offered to them, there is stranger probability of their achieving the budget goals than in the absence of predetermined targets. To that extent, budget acts an impersonal policeman that maintains ordered efforts and brings about efficiency in results.

2.11.1 Objectives of Budgets and Budgetary Control

The basic objectives of budgets and budgetary control are:

- i) To smooth out seasonal variation in production by developing new 'fill in' products and there by accomplishing one phase of economic planning. To conform to good business practice by planning for the future.
- ii) To operate most efficiently the divisions, departments and cost centers of a plant.
- iii) To establish divisional and departmental responsibilities.
- iv) To coordinate the various divisions of a business namely production, marketing, financial and administrative divisions by consultation among the divisional heads and mutual agreement on company policies.
- v) To forecast operating activities and financial position.
- vi) To provide a method of measurement of operating activities listed.
- vii) To provide more definite assurance of earning the proper return on capital invested.
- viii) To prevent waste, to reduce expenses and to obtain the income desired.
- ix) To aid in obtaining better inventory control and turnover.
- x) To aid in controlling cash.
- xi) To centralize management's control and to obtain a more economical use of capital.
- xii) To ensure that adequate working capital is available for the efficient operation of the business.

2.11.2 Advantages of Budgets and Budgetary Control

- i) The reduction in seasonal variation in production, brought about by the budgets, decreases the cost of production by the increasing volume.
- ii) Advance planning inherent in the budgets is looked upon with favor by credit agencies as indicative of sound management.
- iii) The coordination of the main divisions of a concern makes smoother operation and less internal friction which results in the achievement of budget goal.
- iv) The efficient operation of the entire unit depends upon all employees working towards a common goal which is ensured by the budget.
- v) The establishment of divisional and departmental responsibilities prevents 'buck passing' when the budget figures are not achieved.
- vi) The forecast of operations and financial conditions sets a goal to shoot for and becomes a basis for dynamic action rather than historical cost system's postmortems.
- vii) The use of budget figures as measurements; of operating performance and financial position makes possible the adoption of standard cost principle in divisions other than the production division.
- viii) The desired earning on a given investment of capital sets up a profit point objectives which is the logical basis to be used in working out the estimated sales volume.
- ix) The budgets as stimuli to meet the predetermined goals for both incomes and expenses thereby achieving desired profits or reducing existing losses.
- x) The budget of cash expenditures and cash receipts make it possible for the financial management to forecast their needs for credit and arrange for it in advance.
- xi) The centralization of budgetary control over all divisions and departments helps in carry out a uniform age of an authoritarian type of business organization.
- xii) The forecast of sales enables the management to work out the economic balance between plant and machinery, storage, warehouse and inventories.
- xiii) As goals are setup for begin attained and achievements or failures are revalued only with reference to these goals, results can be viewed objectively with minimum of personal prejudice.

2.11.3. Requirements for Effective Budgeting

1. Support of Top Management

The budget program can only be successful when top management offers the whole hearted support and when all managers are motivated about the implementation of budget program.

2. Clearly Defined Organization

Business organization should be defined so as to provide maximum benefits. There should be a sound plan with well defined and adequately maintained responsibilities. Records should be clear, consistently departmentalized and established in such a manner as will indicate definite responsibility on each unit or section of the business.

3. Accurate Accounting System

Accounting system should be developed so far to hold each part of the organization to its responsibilities. The budget fosters coordinated action and whenever this is broken down or interfered with, the responsible factor should be unmistakably revealed.

4. Unambiguous Policy

A budget program is always based on certain fundamentals, the collection of which is called the “policy” of business. Naturally, therefore, no program can be prepared without the knowledge of the business policy to be adopted during the period covered by two budgets.

5. Preparation by Responsible Executives

Formulation of budget in the participation of executives who are entrusted with the performance and implementations is one of the essentials of effective budgeting.

6. Logical Sequence in the Budget Preparation

It is essential that proper procedures should be evolved for the preparation, submission, examination and review of budget figures in logical sequence.

7. Constant Vigilance

An effective system of budgetary control requires that prevision must be made for the comparison on budgeted and actual results at frequent intervals. As soon as unfavorable trends are detected, immediate action should be taken to remedy them.

8. Continuous Budget Education

An essential condition for the success of budgeting is that it must be able to sustain the interest of those who should bear the responsibility of putting budget proposals into effect. This needs continuous “Budget Education” which is concerned with briefing the employees of him undertaking on the objectives, potentials and techniques of budgeting as well as making them understand its uses and limitations.

9. A Degree of Flexibility

Flexibility for both possible and unforeseen circumstances requires essentially in budgeting.

2.12 The Fundamental of Profit Planning of Control

Basically comprehensive profit planning and control offers a systematic practical and proven approach to the management process properly viewed. Profit planning and control is a comprehensive system to coordinate all aspects of the management process, carefully knitting together the loose ends of management and operation. This all inclusive concept of the profit planning and control process is frequently minimized or completely overlooked in much of the literature and discussions on the subjects.

A. Fundamental Distinctions⁵¹

- i) The mechanics of profit planning and control mechanics are such matters as design or budget schedules, clerical methods of completing such schedules and routine computations.
- ii) The techniques of profit planning and control are special approaches and methods of developing information for managerial use in the decision making process. The techniques are many varying from the simple to the sophisticated.
- iii) The fundamentals of profit planning and control in concern effective implementation of the management process in reasonable complex endeavors. The fundamentals, as we define them at this point, represent desirable management orientations, activities and approaches necessary for proficient and sophisticated application of comprehensive profit planning and control. These fundamentals need to be established on a suitable foundation of managerial commitment.

⁵¹ Welsch, Glenn A, “Budgeting: Profit Planning and control” Prentice Hall of India, New Delhi fourth edition 1986, pp. 29-30.

B. An Outline of the Fundamental Concepts of Profit Planning and Control⁵²

- i) A management process that includes planning, organizing, staffing, leading and controlling.
- ii) A managerial commitment to effective management participation by all levels in the entity.
- iii) An organization structure that clearly specifies assignment of management authority and responsibility at all organization levels.
- iv) A management planning process.
- v) A management control process.
- vi) A continuous and consistent coordination of all the management functions.
- vii) Continuous and feed forward. Feed back, follow up and replanting through defined communication channels.
- viii) A strategic (long range) profit plan.
- ix) A tactical (short range) profit plan.
- x) A responsibility accounting system.
- xi) A continuous use of the exception principle.
- xii) A behavioral management program

C. Managerial Involvement⁵³

Managerial involvement entails managerial support, confidence, and participation and performance orientation in order to engage competently in comprehensive profit planning and control. All level of management, especially top management must consider following in order to make profit planning and control program successful.

- i) Understand the nature and characteristics of profit planning and control.
- ii) Be convinced that this particular approach to managing is preferable for their situation.
- iii) Be willing to devote the effort required to make it operative.
- iv) Support the program in all its ramification; and
- v) View the results of the planning process as performance commitments.

⁵² Welsch, Glenn A, Hil-n, Ronald W. and Gordon; Paul N. "Budgeting: Profit Planning and Control" New Delhi, Prentice Hall of India fifth ed. 1999, pp. 31-32.

⁵³ Welsch Galenn A., "Budgeting Profit Planning and Control" Delhi: Prentice Hall of India, fourth Edition, 1986.

For a comprehensive profit planning and control program to be successful. It must have the full support of each member of management starting with the president, the impetus and direction must come from the very top.

D. Organizational Adaptation⁵⁴

“A profit planning and control program must rest upon sound organizational structure for the enterprise and a clear-cut designation of lines of authorities and responsibilities. The purpose of organizational structure and the assignment of authority are to establish a framework within which enterprise objectives may be attained in a coordinated and effective way on a continuing basis. The scope and interrelationship of the responsibilities of each responsibilities of each individual manager are specified”

E. Responsibility Accounting⁵⁵

Planning uses historical data, including past financial information as one of its launching platforms. Control includes the measurement of performance by using actual results, much of which must be provided by the accounting system. Actual results are compared with objectives goals and standards to determine variance (favorable or unfavorable) that shed light on performance. Therefore, the accounting system must be designed to provide financial information separately for each organizational unit that is by assigned authority and responsibility, accounting system that is one tailored to organizational responsibilities with in this primary accounting structure.

F. Full Communication⁵⁶

Communication is a necessary activity in all facets of management. Communication can be broadly defined as an interchange of thoughts or information to bring about a mutual understanding between two or more parties. It may be accomplished by a combination of words, symbols, messages and subtleties of understanding that come from working together, day in and day out, by two or more individuals. All communications involve a sender, a message and a receiver. Communication may be thought of as the link that brings together the human elements in enterprises. Managerial decision and leadership are actuated by communication, the means by which behavior is affected, modified and energized. Too often communicating is taken for

⁵⁴ IBID, P. 33

⁵⁵ Welsch Glenn a., Hill-n Ronald w. and Gordon, Paul n. “budgeting; profit planning and control” New Delhi; prentice hall India, fifth edition, 1990, 41.

⁵⁶ IBID, pp. 57-58.

granted; consequently, information inflows are inadequate. There must be three primary flows of information in an entity, downward, upward and laterally in the organization.

A profit planning and 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 and goals. Profit plans if developed through full participation and in harmony with assigned responsibilities, ensure a degree of understanding not otherwise possible. Full and open reporting in performance reports that focus on assigned responsibilities likewise enhances the degree of communication essential to sound management.

G. Realistic Expectation⁵⁷

In profit planning and control, management must be realistic and avoid being either unduly conservative or irrationally optimistic. The care with which budget goals are set for such items as sales, production levels, costs, capital expenditure. Cash flow and productivity determines the usefulness of a profit planning and control purpose, enterprise objectives and specific budget goals should represent realistic expectations. To be realistic, expectations must be related (i) to their specific time dimension and (ii) to as assumed (projected) external and internal environment that will prevail during that time span. With in these two constraints, realistic expectations should assume a high level of overall efficiency; however; the objectives and goals should be attainable. Goals that are set so high that they require no special effort will provide no motivation. Thus, enterprise objective are specific budget goals, in order to constitute realistic expectation must represent a real challenge to managers and to operational units. The top management of the enterprise has the direct responsibility for defining the level of challenge that should be represented by realistic expectations.

⁵⁷ IBID, pp. 53.

H. Time Dimensions⁵⁸

Effective implementation of the profit planning and control concept requires that the management of the enterprise establish a definite time dimension for certain types of decisions. Two important timing issues require careful attention if the planning function is to be carried out effectively. One relates to the concept of a planning horizon and the other relates to the timing of planning activities. Time dimension perspectives in managerial planning activities. Time dimension perspectives in managerial planning require clear cut distinctions between historical consideration and future considerations. Planning horizon refer to the period of time into the future for which management should plan and timing of planning activities suggests that there should be definite management time schedule established for initiating and completing certain phase of planning process.

I. Flexible Application⁵⁹

This fundamental stress that a profit planning and control program (or any other management technique) must not dominate the business and the flexibility in applying the plan must be forth right policy so that “strait jacket” are not imposed and all favorable opportunities are seized even through “they are not covered by the budget”.

In the area of control flexibility is especially important. Expense and cost budget must not be used and interpreted rigidly: the budget must not constrain rational decision that should be made with respect to expensive merely because and expenditure was not anticipated. Also variable expenses budget are frequently used to meet on of the problems of cost control arising form a change in circumstances.

J. Behavioral Viewpoint⁶⁰

The motivation of human resources through dynamic leadership is central to effective management. The behavioral aspects of the management process have been accorded extensive and intensive investigation by psychologists, educators and businessmen. This attention is increasing in scope and intensity in recognition that there are many unknowns, misconceptions and

⁵⁸ Welsch, Gtlenn A. “Budgeting Profit Planning and Control” New Delhi, Prentice Hall of India fourth edition 1986, pp. 40-41.

⁵⁹ IBID, P.45.

⁶⁰ IBID, P.46-47.

speculation concerning the response of the individual and the group in varying situation. The comprehensive profit planning and control approach to managing brings many of these behavioral problems into sharp focus on a positive approach to resolve certain behavioral problems clearly, the approach cannot resolve certain behavior problem but in many respects it an provide one effective approach to their partial resolution Goal orientation in characteristic of ambition and competent individuals, who are normally involved in management process. Such individuals have strong personal goal needs; their performance is enhanced through a hierarchy of realistic goals with which they can identify for positive motivation. There must be a harmony of goal orientation between the personal interests of the manager and his relationship with enterprise. Monetary rewards, although goal satisfying in certain ways for most individuals can not satisfy all or even most, goal needs of competent and intelligent people. The more sub tie goals needs relate to the satisfactions that one gets from accomplishment and from being a participant in activities that upper relevant to him. Related to goal orientation is the recognition that managers at all levels one much more likely to understand, accept and pursue those goals and plans that they help formulate in a meaningful way participation in the establishment of enterprise objectives, goals and policies with which they will be directly involved has come to be recognized as one of the more effective approaches to managerial motivation at all organizational goal needs. From this perspective behavioral consideration in regard of the rewards performance and results should be taken intensively.

K. Activity Costing⁶¹

Responsibility accounting system generally accumulates costs by department, and product costing system associate costs with units of product or service. Organizations also frequently find it useful to associate costs with activities. By decomposing on organization's production process into a discrete set of activities, and then accounting costs with each of those activities. Management is in a better position to determine the cost and benefits of continuing the activities moreover, by systematically identify redundant activities. Some managers have found to their surprise that the same activity was being done in a dozen different laces in the company. An activity cost analysis an assist managers in eliminating redundant activities, eliminating

⁶¹ Welsch, Galenn A., Hil-n Ronald W. and Gordon. Pant N. "Budgeting, Profit Planning and Control" New Delhi, Prentice Hall of India fifth edition 1990, pp. 42-43.

activities that are not cost- benefit effective and achieving grater coordination among the activities that remain.

L Zero-Base Budgeting⁶²

Associated with the concept of activity costing is zero-based budgeting under zero-based budgeting, every budget is constructed on the premise that every activity in the budget must be justified. Zero-base budgeting has been used by much organization-both private organizations and governmental units. It starts with the basic premise that the budget for next year is zero and that every expenditure, old and new, must be justified on the basis of its cost and benefits. The discipline of zero-base budgeting takes a different approaches-in fact, a reverse approach to this problem of justifying everything. What is says is this begin with where you are and establish a business-as-usual budget for next year the subway, and the same things you would do if you were not concerned about constraints or total justification.

M. Exception Principle⁶³

A comprehensive project planning and control program facilitates control in many ways, underlying these is the measurement of actual performance against planned objectives, goal and standards and the reporting of the measurement in performance reports. This measurement and reporting extends to all areas of operations and to all responsibility centers in the enterprise. In involves reporting (i) actual results (ii) budgeted or planned results and (iii) the difference (performance variation) between the two. This type of reporting represents an effective application of the well recognized management exception principle. The exception principle holds that the manager should concentrate primarily on the exceptional or usual items that appear in daily, weekly and monthly reports, thereby leaving sufficient managerial time for over all policy and planning consideration. It is the “out-of-line” items that need immediate managerial attention to determine the causes and to take corrective action. The items that are not ‘out of line’ need not utilized extensive management time; however, they should trigger “remands” in appropriate ways. To implements the exception principle, techniques and procedures must be adopted to call. The manager’s attention to the “out-of-contract” items conventional accounting reports tend to present a mass of figure with no basis for calling attention to the unusual or exceptional items

⁶² IBID, pp. 43-44.

⁶³ IBID, P. 45.

N. Coordination Using PPC⁶⁴

Some management authorities list coordination as a separate function of management; however most view it as an effect that ensues when the managerial functions of planning, organizing, staffing, directing and controlling are accomplished. Coordination is the synchronization of an entity effectively works toward the common objectives, with due regard for all other subdivisions and with unity of effort. Such a result is often referred to as goal congruence. It means developing and maintaining the various activities with the enterprise in proper relationship to each other. This harmony of effort toward the enterprise objective is one of the control takes of management because it involves a reconciliation of difference in effort, timing, policies and allocation of resources. Frequently, a lack of coordination in an enterprise is apparent when an aggressive department head is permitted to expand the department out of production to others or to base major decisions on the specific needs of the department only, although the decision may negatively affect other departments and alter their effectiveness. For example, there must be very close coordination between to sales and production departments. Sales should not plan to sell more than production can provide and vice-versa. These must be coordination at all vertical levels on well as horizontally.

How is coordination attained? Fundamentally, coordination is attained through effective performance of the management functions. However, certain of those functions have particular relevance in this respect. Coordination involves the interpersonal relationships of people in the work situation as they exchange views, technical expertise gossip and attitudes. When management at all levels understand how their particular functions contribute to the over all enterprise objectives, a basic foundation for coordination is established. It is important that each member of management, from the top to the lowest level knows well in advance what is planned and how. When and by whom it is to be accomplished. Communication downward upward and horizontally is fundamental to coordination.

⁶⁴ IBID, pp. 49-50.

O. Management Control Using PPC⁶⁵

The primary purpose of control is to ensure attainment of the objectives, goals and standards of the enterprise. Control has many facets, such as direct observation, oral expression, narrative memoranda, policies and procedures, report of actual results, and performance report. Comprehensive profit planning and control focuses on performance reporting and evaluation to determine the causes of both high and low performance.

P. Follow- Up⁶⁶

This fundamental holds that both goods and substandard performance should be carefully investigated, the purpose being three fold.

- i) In the case of substandard performance, to lead in constructive a manner to immediate corrective action.
- ii) In the case of outstanding performance to similar operation .and
- iii) To provide a basis for better planning and control in the future.

2.13 Establishing the Foundation for PPC⁶⁷

Establishing a sound foundation is necessary to successful implementation of the profit plan program. For this the enterprise should taken certain steps. Welch, Hilton and Gordon have summarized the steps into six points for initiating PPC program.

- i) Commitments by the top management to the board concept of PPC and a sophisticated and understanding of its implications and operations.
- ii) Identification and evolution of the controllable and non controllable variables of the environment and the characteristics off the enterprise.
- iii) Evolution of the organizational structure and assignment of managerial responsibilities and implementation of changes deemed necessary for effective planning and control.
- iv) Evaluation of recognition of the accounting system to ensure that it is a tailored to the organizational responsibilities.
- v) A policy determination must be made in respect to the time dimensions to be used for PPC purpose.

⁶⁵ IBID, p. 40.

⁶⁶ Welsch, Glenn A., “Budgeting: Profit Planning and Control” New Delhi: Prentice Hall of India fourth Edition, 1986, p. 49.

⁶⁷ Glenn A. Welsch IBID.

- vi) Development of budget education program to inform management at all levels about: (a) the purpose of the program, (b) the manner in which it will operate, (c) the responsibility of each levels of management, (d) the way of program which can facilitate the performance of each manager's functions.

2.14 Components of PPC⁶⁸

A PPC program should have all its components that are required to fulfill the objectives which are supposed to be fulfilled by the PPC program. Welsch, Hilton and Gordon have presented the following component of PPC program.

A. The Substantive Plan

- i) Broad objectives of the enterprise.
- ii) Specific enterprise goals.
- iii) Enterprises strategies.
- iv) Executive management planning instruction (planning premises).

B. The Financial Plan

- i) Strategic long range profit plan.
 - a) Sales, cost and profit projections.
 - b) Major projects and capital addition.
 - c) Cash flow and financing.
 - d) Personnel requirements.

- ii) Tactical short range (annual) profit plan.
 - a) Operating Plans:
 - Planned income statement
 - 1) Sales plan
 - 2) Production (or merchandise purchase) plan.
 - 3) Administrative expenses budget.
 - 4) Distribution expenses budget.
 - 5) Appropriation type budgets (e.g. research and development, promotion, advertising).
 - b) Financial position plan
 - Planned balance sheet
 - 1) Assets
 - 2) Liabilities
 - 3) Owner's equity

⁶⁸ Glenn A. Welsch IBID.

- c) Cash flow plan.
- d) Variable expenses budget
- e) Supplementary data
- f) Performance reports (Including any special report) each month end as needed.
- g) Follow-up, corrective action and re-planning report.

2.15 Profit Planning Process⁶⁹

The major processes of profit planning are as under.

- 1) Identification and evaluation of external variables.
- 2) Development of the broad objectives of the enterprise.
- 3) Development of specific goals for the enterprise.
- 4) Development and evaluation of company strategies.
- 5) Executive management planning instructions.
- 6) Preparation and evaluation of project plans.
- 7) Development and approval of strategic and tactical profit plans.
- 8) Implementation of profit plans.
- 9) Use of periodic performance report.
- 10) Implementation of follow up.

2.16 Master Budget-Budgeting for Short Range

Budgeting for the short range is concerned with facilitating and controlling the activities of responsibility center on an annual or even month to month basis. Short range budgeting provides managers with a means for comparing actual operational with budgeted figures and reporting the result of these comparisons to higher level managers.⁷⁰

The master budget is the organizations primary short term budgetary device. These comprehensive budgets often prepared through a standard cycle of events that occur on a specific timetable each year.⁷¹ Master budget is a summary budget which in corporate all functional budgets and it may take the form of profit and loss account and balance sheet as at the end of the budget period.⁷²

⁶⁹ Glenn A. Welsch IBID

⁷⁰ John R. Schermerhorn, J.R., Management for Productivity John Willey and Son SA, p. 482.

⁷¹ John R. Schermerhorn, J.R., Management for Productivity John Willey and Son USA, p. 482.

⁷² Gupta S.P. Op. Cit, p. 554.

The complete budget for a firm is often called master budget. The master budget consists of many functional budgets. These budgets include a sales budget, production budget, purchase budget, an expenses budget an equipment purchase budget and a cash budget. Once all these budgets are completed the master budget of the entire firm is prepared, a master budget is a summary of functional budgets plan and profit or loss during the budget period.⁷³ The master budget is the profit and loss statement for the next financial year or other period covered by the budget.⁷⁴ It may be recalled that a budget with reference to planning and control refers to comprehensive and coordinated budgets generally known as master budget. A master budget normally consists of three types of budget. (1) Operating budgets (2) financial budgets and (3) special decision budget. Another classification of a master budget is (i) fixed/static budget and (ii) flexible/variable budget.⁷⁵

The preparation of master budget is major event in any organization. This complex process involves the efforts of many people from all levels of management. Master budget preparation is a negotiation process in which initial proposals by responsibility managers are subject to revision as the different components of the budget are brought and reviewed.

2.17 Development of Profit Plan

2.17.1 Sales Budget or Sales Plan

Preparation of sales budget is the starting point for the development of profit plan. After having the planning premises of the organization the sales plan is developed.

The strategic and tactical sales plans have distinct parts (i) The planned volume of sales at the planned sales price per unit for each product (ii) The sales promotional plan (advertising and other promotional cost) and (iii) the sales elements of a comprehensive profit plan (iv) to facilitate management's control of sales activities.⁷⁶ The sales budget is the sales master plan for the future period. The sales budget itself is an estimate for three main figures (a) The income that will be earned from sales (b) the cost and expenses of making

⁷³ Dale L Ilesher and Tonya K. Flesher, "Accounting Principles for mid management" p. 406.

⁷⁴ T.S. Mcalpine, Op. Cit, p.30.

⁷⁵ P.V. Rathman, Op. Cit. p. 31.

⁷⁶ Welsch Glenn, A., Fifth Edition, p. 135.

these sales and (c) The sales surplus the income from the sales will depends on the quantity and the price of the goods which will be sold.⁷⁷

All the other plans and budgets are dependent upon the sales budget. The budget is usually presented both in units and dollars of the sales revenue or sales volume. The preparation of sales plan is based upon the sales forecast. A variety of methods are used to forecast the sales for the planning period.⁷⁸

Unless there is a realistic sales plan, practically all other elements of a profit plan will be out of kilter with reality. The sales plan is the foundation for periodic planning in the firm because practically all other enterprise planning is built on it. The primary sources of cash is sales, the capital additional needed. The amount of expenses to be planned.

The manpower requirements, the production level and other important operational aspects depend on the volume of sales. In inventory with the comprehensive profit plan, both strategic long term and tactical short term sales plans must be developed. Thus one commonly observes a five year strategic sales plan. Many management decisions commit a large amount of resources involving a life span of many years. Basic strategies and major moves often involve irreversible commitment of resources and long time span.⁷⁹

The primary purpose of a sales plan is (i) to reduce uncertainty about future revenues. (ii) To incorporate management judgments and decision into the planning process (iii) to provide necessary information for developing other elements of a comprehensive profit plan (iv) to facilitate management's control of sales activities.⁸⁰

⁷⁷ Halball J.M. "How to Preparation Operating Budget" Longman Group Limited, 1974, pp. 57-58.

⁷⁸ Author W. Holmes/Robert A Meir and Donald F. Pabst "Accounting for Control and Decision" Texas, p. 687.

⁷⁹ Welsch Glenn A. Fourth Edition, pp. 139-140.

⁸⁰ Welsch Glenn A. Fifth Edition, p. 172.

2.17.2 Sales Planning and Forecasting

It is important to make distinction between sales planning and forecasting because they are often confused. A forecast is not a plan. They have different purpose but, are relative. A forecast is a statement of future conditions about a particular subject based on one or more assumption. Management may accept reject, or modify the forecast. It is only one input of a comprehensive sales plan. A sales plan incorporates all management decisions that are based on forecast other inputs and management judgment about such related items as sales volume, price, production financing. A sales plan is not conditional but forecast is condition. It is also technical staff function.

2.17.3 Strategic and Tactical Sales Plan

A comprehensive project plan, both strategic long term and tactical short term sales plans must be developed. The usual case is a five or ten year's strategic sales plan and one year tactical sales plan.

Strategic or long term sales plans usually involve in depth analyses of future market potentials, which was to built up form a basic foundation such as population changes, state of economy, industry projections and finally company objectives. Long term managerial strategies would affect such areas as long term pricing policy, development of new products and innovations of present products, new directions in marketing efforts, expansion or change in distribution changes and cost patterns.

Tactical or short term sales plan is prepared to plan sales for 12 months for the first quarter. At the end of each month or quarter throughout the year, the sales plan is restudied and revised by adding a Period in the future and by dropping the period just ended. Thus tactical sales plans are usually subject to review and revision on a quarterly basis. The short term sales plan are usually developed intern's sales plan includes a detailed plan for each major product and for grouping of minor products. Short terms sales plans must also be structured by marketing responsibility for planning and control purpose. Short term sales plans may involve the application of technical analysis; however, managerial judgment plays a large part in their determination. A short range sales plan should include considerable detail, where as a long range plan should be in broad terms.⁸¹

⁸¹ Welsch Fifth, pp. 173-175.

2.17.4 Development of Comprehensive Sales Plan

To develop a comprehensive sales plan the following process should be followed.⁸²

- Step 1. Develop management guidelines for sales planning.
- Step 2. Prepare sales forecast
- Step 3. Assemble relevant data
 - Manufacturing capacity
 - Sources of raw materials and suppliers
 - Availability of key people of labor forces
 - Capital availability of alternatives distributions channels.
- Step 4. Develop strategic and tactical sales plans.
- Step 5. Consideration of Alternatives.
- Step 6. Developing pricing policies.
- Step 7. Developing product line consideration
- Step 8. Price cost volume consideration

2.17.5 Component of Comprehensive Sales

The component of sales plan is as follows:⁸³

Component	Strategic plan	Tactical plan
1. Management policies	Broad & general	Detailed and specified for the year.
2. Marketing plan (Sales Service revenue)	Annual mounts; major groups	Detailed by product and responsibility
3. Advertising & Promotion plan	General; by year	Detailed and specific for the year.
4. Distribution (Selling) Expenses plan	Total fixed total variable expenses; by year By responsibility	Fixed and variable expenses; by month &

⁸² Welsch

⁸³ Welsch Glenn A. Gillton Ponal W. Gerdon Paul N. Budgeting: Profit Planning and control fifth Edition Prentice Hall or India, New Delhi 1990,

2.18 Production Plan Budget

The production planning refers the development of policies about efficient production level, use of production facilities and inventory levels. The second step of profit planning and controlling is the production budget. Quantities planned in marketing budget, adjusted to confirm to production and inventory policies, Volume of out puts that must be manufactured by production and by interim time period are the areas of production planning.

“The production budget is an estimate of the quantity of goods to be manufactured during the budget period in developing production budget the first step is a stability policies relative to inventory levels. The next step is to determine the total quantity of each production that is to be manufactured during the budget period. The third step I to schedule this production budget in the initial step in budgeting manufacturing operation. To plan production effectively, the manufacturing executive must have or over lap, information relative to the manufacturing operations necessary for each product. They must have at hand information relative to the use and capacities of each manufacturing department. The company cost accounts should provide certain historical data essential in planning production quantities and cost. The direct of profit planning and control should provide staff assistance when needed. When the recommended production is completed by the production department it should be submitted to the executive. Committee for appraisal and then to the president for tentative approval prior to its use as a basis for developing the materials, labor and factory overhead budgets.⁸⁴

We can understand the production planning mathematically as where.

Production = planned sales + final investment – initial inventory

Production budget includes the production, finished goods inventory work in process inventory and factory overhead.

“To plan production effectively, the manufacturing managers must develop information about the manufacturing operation necessary for each product. The manager should develop information about the uses and output capacities of each manufacturing department. The managers must provide historical data about production quantities, costs, and availability of resource. Control should provide staff assistants when needed.⁸⁵

⁸⁴ Welsch Glenn A. Fourth Eddition, . 105.

⁸⁵ Welsch Glenn A. Fourth Eddition, p.213.

When the production plan has been completed by the production manager, It should be give to be the executive committee for evaluation and then to the president for tentative approval prior to its use as a basis for developing the direct material direct labor and factor overhead budgets

2.18.1 Responsibility for Production Planning

The completed marketing plan should be given to the manufacturing executive who is responsible for translating it in to a production program consistent with managerial policies and subjects to certain constraints. Planning scheduling and dispatching of the actual production through the year are functions of the production department therefore, it is essential that responsibility for the planning of these functions be performed by the production managers. The mangers have first hand knowledge of the plant of personal capabilities, availability of material and production managers, top management policies must be considered in such matters as inventory level stability of production and capital additional (Plant capacity)

2.18.2 General Consideration in planning production and inventory level

To develop the production, manufacturing executives must resolve the problem of coordination sales, inventories and production so that the lowest possible overalls cost results. The important of coordination of production planning cannot be overemphasized. Because it affects so many decision relating cost, capital commitment employees and so on. Decision required to develop the production plan includes the following.⁸⁶

1. Total production requirement (by product) for the budget period.
2. Inventory policies about levels of finished goods work in progress and cost f carrying inventory.
3. Plant capacity policies such as the limits of permissible departures form a stale production level through the year.
4. Adequately of manufacturing facilities (expansion or contraction of plan capacity).
5. Availability of direct materials, purchased components and labor.
6. Length of the processing time.
7. Economic lots or runs.
8. Timing of production throughout the budget period, by product and responsibility centers

⁸⁶ Welsch Glenn A. Fifth (213-214).

2.18.3 Long range VS Short Range Production Plan

Planned levels of production are important long range and short range issues. To develop a long range plan (say five years I the future), broad estimates of production levels are necessary to plan plant capacity requirements, factory cost structures, personnel requirements and cash flows. For long range planning purpose, only major increase or decrease in inventories need to be taken into account.

Developing a tactical shot range profit plan requires a different approach because of the need for greater precision and detail. The short range production plan should be a harmony with the time dimensions used in the short range profit plan. Thus the common pattern should be an annual production plan detailed by products and by months or quarters. Also the production activities should be planned by responsibility centers within the manufacturing division.⁸⁷

2.18.4 Developing the Production Plan

Production managers must translate the qualities in the sales budget into production requirements for the budget period for each product while considering management inventory policies. The production plan is developed prior to the end of the current year; the beginning inventory for the budget period must be estimated after determining the budget production. It should be produced by interim time periods. Interim production must be planned to (i) provide sufficient goods to meet interim sales requirements (ii) keeping interim inventory level within policy constraints and (iii) manufacture the goods as economically as possible. An efficient requirements, essential inventory levels and stable production level.

The following formula is generally used to calculate the planned production.

Planned production	
Requirements for sales (units)	XXXX
Add:- Desired final inventory of finished goods	XXXX
Total required production	<u>XXXX</u>
Less: - Initial Inventory of finished goods	<u>(XXXX)</u>
Planned Production for the year	XXXX

⁸⁷ Welsch fifth, p. 214.

2.18.5 Setting Inventory Policies

In most business, inventories represent a relatively high investment and may exert significant influence on the major functions of the enterprise. Each function tends to generate different and frequently consistent, inventory demands. Inventory policies should include (i) establishment of inventory standards such as maximum and minimum levels of turnovers and (ii) the application of techniques and methods that will assure conformity to selected inventory standards. Budgeting the requires that inventory levels from month to month. In determining inventory policies for finished goods, management should consider these important factors.⁸⁸

- ❖ Quantities needed to meet sales requirement.
- ❖ Perishability of item
- ❖ Length of the production period
- ❖ Storage facilities
- ❖ Adequacy of capital to finance inventory production some time in advance of sales.
- ❖ Cost of holding the inventory.
- ❖ Protection against raw material shortage.
Protection against price increases.
- ❖ Risk involved in inventory
- ❖ Price declined
- ❖ Obsolescence of stock
- ❖ Casualty loss and theft
- ❖ Lack of demand
- ❖ Customer return policies

There are mainly three types of production policies as under

- i) **Stable production VS unstable inventory policy**
In every month or specified period, fixed production units are to be produced equally while closing inventory of finished goods is to be unstable in this policy, therefore, budgeted sales of the period are unequal.
- ii) **Unstable production VS stable inventory policy**
The production units are to be fluctuated or unstable in each period and units of final inventory are to be stable at the end of each period. The number of units produced and budgeted sales are directly related.
- iii) **Flexible in both production and inventory policy**

⁸⁸ Welsch fourth, pp. 1992-1993

The flexible units are produced as well as flexible units of final inventory are maintained in this approach for specific budget period. Sometime this policy may be beneficial and sometime it may be harmful for the production budget but it reduces. Some disadvantages of both first and second policies to some extent these policies of production are depend upon the nature of sales and inventory policies. For example, assuming the seasonal sales, it is possible to maintain a stable production level only if inventories are allowed to fluctuate inversely with sales. On the other hand, a stable inventory level is possible only if production is allowed to fluctuate directly with sales from the point of view of economic operations; it is generally desirable to keep both inventories production stable, a situation that is impossible given seasonal sales.

In many companies where sales of the primary product are seasonal, production levels are stabilized by developing new products that can stored or that have inverse seasonal patterns. Stabilization of production is desirable for a number of compelling reasons and generally results in significant reduction of cost and improvements in operations.

One potential hazard of significant ups and downs in production is the effect on personnel. Periodic layoff and subsequent effort to hire employees tends to lower morale and may discourage competent employee. Such a policy is counter to an important objective to management, which is to provide reasonable job security.

2.19 Material Budget or Plan

When the sales plan and required quantities of each product to be manufactured are specified in production plan, the next step is to prepare material budget. When the production budget is completed then the requirement of raw materials and components to be in the process of manufacturing the finished products could be estimated. Based on the production budget, the quantities of materials to be used is determined and this determination of materials usage leads to the solution of the problem of when and how much to purchase of each material. A purchase budget gives the details of material purchase to be made in the budget period.

While preparing the material plan there should be coordination planned and controlled among the following items, (a) production requirements for materials and component parts (b) raw material and parts inventory levels, and (c) purchase of raw materials.

To ensure that the appropriate amounts of raw materials and component parts will be on hand at the time required and to plan for the loss of such materials and parts, the tactical short term profit plan should include (1) a

detail budget that specifies the quantity and cost of such materials and parts and (2) a related budgeted of materials and parts usually requires the following four sub budgets.⁸⁹

2.19.1 Material and Parts Budget

Direct materials, as a manufacturing cost, is represented by the materials and parts used directly in manufacturing finished goods. This budget specifies the planned quantities of each raw material and part required for planned production. It should specify quantities of each raw material and part by time, product, and responsibility center. The basic input is the number of units of each type of material and part required to manufacture each unit of finished goods. Thus, preparation of the direct materials and parts budget requires a careful study of the products to determine unit usage rate the unit usage rate. The unit usage rates are multiplied by the planned number of unit of finished good to be produced to compute the total unit of materials and parts required.⁹⁰

The materials budget includes only the quantities to direct materials, factory supplies, and indirect materials that are included in the manufacturing or factory overhead budget. The budgeted quantities of each raw materials and part needed for each finished product must be specified in the materials and parts budget by interim period and by responsibility centers. The manufacturing managers should be responsible for developing the data included in the materials and parts budget.

The basic inputs to develop the direct materials and parts budget are (i) volume of output planned and (ii) standard usage rate by type of raw materials and part for each finished product. Material usage rates are applied to the production data to develop the materials sand parts budget. Unit usage rates can be derived (i) during initial development of the products, (ii) from engineering studies, (iii) from part consumption records and bill of materials. In many manufacturing situations, it is not difficult to determine standard unit usage rates for unit raw materials and part used in each department per unit of finished product but where specific unit usage rates cannot be developed, planning of raw material and part requirements may be a critical budget problem.

⁸⁹ Welsch Fifth Edition, p. 240.

⁹⁰ Welsch Fifth Edition, p. 137.

2.19.2 Material and Parts purchase Budget

The purchase budget specifies the estimated quantities to be purchased and the estimated cost for each raw material and the required delivery dates. The material and parts budget provides the purchasing manager with the data needed to develop purchase plan. Careful planning of purchase can result in significant cost saving in many enterprises. The purchasing manager should be assigned the responsibility of preparing a detail plan of purchase. It is direct responsibility of purchasing manager to be knowledge about the market for items that must be purchased, and to plan the unit cost for use in the purchase budget. Purchased and amount (dollars) to purchase materials. The purchase budget is directly concerned with the finding of actual receipt of raw material rather than with the timing of usage or purchase orders. The purchase manager orderly maintain the time of purchase materials and inventory requirement by material. To develop the purchase budget the purchasing manager responsible for the following.

- 1) Adhering the management policies about materials and parts inventory levels.
- 2) Determines the number of units and the timing of each type of material and part to be purchased.
- 3) Estimating the unit cost of each type of material and part to be purchased. Formula for budgeted purchase quantity of each material can be given as under.
- 4) $\text{Planned material and parts purchase} = \text{total material and part used} + \text{final inventory} - \text{beginnings inventory}$

2.19.3 Material and Parts Inventory Budget

This budget specifies the planned levels of raw material and parts inventory in terms of quantities and cost. The difference in unit between the requirements as specified in the material and part budget and the purchase budget is shown as planned increase or decrease in materials and part inventory budget. As with the finished goods inventory budget with respect to sales and production. The material and parts inventory budget provides a cushion between material and parts requirements and purchase. The timing of purchase will depend on inventory policies. The primary consideration in setting inventory policies for material and parts.

- 1) Timing and quantity of manufacturing needs.
- 2) Economic in purchasing through quantity discount.
- 3) Availability of material and parts.
- 4) Lead time (order and delivery)
- 5) Perishability of materials and parts.

- 6) Storage facilities headed.
- 7) Capital requirements to finance inventory.
- 8) Cast of storage.
- 9) Expected changes in the cost of materials and parts protection against shortages.
- 10) Risks involved in inventories.
- 11) Opportunity costs (inadequate inventory)

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 not carrying enough management policy with respect to purchase and inventory should be specified. The two basic timing factors are (i) how much to purchase at a time (ii) when to purchase. How much to purchase at a time is determined by a well-known approach collected economic order quantity (EOQ). EOQ can be calculated by using the following formula:

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

Where,

A = Annual requirement in units

O = Average annual cost of placing an order

C = Annual carrying cost of carrying one unit in inventory for one year.

The second question, when to purchase is determined by reorder point. Re-order point is the same when a purchase is made the re-order point is reached when the inventory level is equal to the time to re-order and receives the replacement.

2.19.4 Cost of Material Used Budget

This budget specifies the planned cost of the material and parts that will be used in the productive process. The quantity of materials and parts required for the planned production is specified in the materials and parts budget and unit material and parts cost are specified in the purchase budge, thus, quantity and unit cost data are available to develop the budgeted cost of materials and parts that will be used. If the purchase budget anticipates a constant unit cost for a material or parts during the planned period, multiplication of units by unit cost yields the budgeted material or parts cost. Alternatively, when a changing unit price is planned for material and parts, the budget of the cost of material and parts used and the related inventory budget must be developed using a selected

inventory flow such a FIFO, LIFO, moving average, or weighted average. FIFO is usually referred because of its internal consistency.

In conclusion, the four separate sub budgets listed above are directly related. Collectively, they can be viewed as the material and parts budget, and this budget should be designed in such a way that the related activities and costs will be budgeted in terms of responsibility center, interim time periods, type of raw materials and parts and type of finished product.

2.20 Direct Labor Cost Budget or Plan

Planning labor cost involves major and complex problem areas. (i) Personnel need (ii) recruitment (iii) training (iv) Job description and evaluation (v) performance measurement (vi) Union negotiations and (vii) wage and salary administration. A comprehensive profit planning program should incorporate appropriate approaches applicable to each problem, area. A profit planning program can not resolve special personal problems, but it direct careful consideration to them and aids in placing them in perspective. Effective planning if long term and short term labor cost will benefit both the company and it's complies.⁹¹

When production budget is completed and planned units of each product to be produced is budgeted then labor will be prepared by multiplying the estimated labor hours per units and units to be produced for each product to determine the direct labor hours to be planned.

Labor generally is classification as direct or indirect. Direct labor costs include the wage paid to the employees who work directly on specific productive output. As with direct material cost, labor costs that can be directly traced to specific production and defined as direct. Indirect labor (labor) involves all other labor costs such as supervisory salaries and wages paid to tool makers repair personnel, storekeeper, and custodians. Direct material and direct labor costs are frequently referred to collectively as the prime cost of product.⁹²

⁹¹ Welsch fifth edition 280.

⁹² IBID, p. 280 (Carm Welsch).

2.20.1 Approaches Used in Planning Direct Labor Cost

The approach used to develop the direct labor budget depends primarily on the (i) method of wage payment (ii) type of production process involved (iii) Availability of standard labor times and (iv) adequacy of the cost accounting records relating to direct labor cost.

Basically, three approaches are used to develop the direct labor budget.⁹³

- Estimate the standard direct labor hours required each unit of each product, and then estimate the average wage rates by department, cost center or operation. Multiply the standard time per unit of product by the average hourly wage rate, giving the direct labor cost per unit of out-put for the department cost center or operation by the unit direct labor cost rate obtain the total direct labor cost by product.
- Estimate ratios of direct labor cost to some measure of out-put that can be planned realistically.
- Develop personnel tables by enumerating personnel recreating (including costs) for direct labor in each responsibility center.

2.20.2 Objectives of Direct Labor Plan

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

2.20.3 Planning Direct Labor Hours and Wages Rates

Internal factors may indicate the most practical approach to use for planning direct labor hours. An important function of industrial engineering is to develop standard labor time for various operations and products. In some producing departments, reliable labor time standards can be developed. In some cases, it is impractical to estimate direct labor time except in term of average based on experiences. Four approaches commonly used in planning labor times are the following:

- 1) Time and motion studies.
- 2) Standard costs.
- 3) Direct estimate by supervisor.
- 4) Statistical estimate by a staff group.

⁹³ IBID, p. 281 (Carm Welsch).

Therefore the planned direct labor hours = planned production × standard rate. If it is possible to relate planned production to direct labor hours and to plan wage rates realistically for each productive department, computation of planned direct labor cost involves multiplying planned labor hours by planned wage rates.⁹⁴

It is also important for services and retail companies to budget labor costs. Labor accounts for a very promotion of expenditure in bank, restaurants, hotels and hospitals and transportation companies. Such companies do not generally use the classification of direct labor and labor costs are usually referred to as an operating expense.⁹⁵

2.21 Expenses (Overhead) Budget or Plan

In developing a profit plan expenses, must be planned carefully planning expenses should flows on (1) projecting cash out flows, and (2) effective cost control: Managers should view expenses level essential to support the objectives and planned programs of the enterprise. Thus, expenses planning should not focus on decreasing expenses but rather on better vitalization of limited resources. Viewed in this light realistic expenses planning and control may prompt either decreased or increased expenditures, the gain to the enterprise (such as profit return on investment, cash) accrue as a result of better operational programs, increasing scope of activities, improved quality, and higher employee, performance, expenses planning and control must focus on the relationship between expenditures and benefits derived form those expenditures. The essential benefits must be developed as planned goals, and sufficient resources must be developed the program essential for their accomplishment.⁹⁶

⁹⁴ IBID, pp. 282-285

⁹⁵ IBID, p. 289.

⁹⁶ Welsch fifth p. 260

2.21.1 Cost Behavior⁹⁷

i. Fixed Expenses

Those expenses that are constant in total form month to month, regardless of fluctuations in output or volume of work done. Because any expense can change this concept must be applied (a) to realistic or relevant range of output and (b) in relation to a give set of conditions (management polices, time constraints and characteristics of the operation).

ii. Variable Expenses

Those expenses, those change in total, directly with change on out put or volume of work done. The out put must be measured in terms of some activity base. Such as units completed, direct labor hours sales dollars or number of service calls, depending on the activities in the responsibility center.

iii. Semi Variable Expenses

Those expenses are neither fixed nor variable because they pose some characteristics of both. As out put changes semi variable expenses changes in the same direction but not in proportion to the change in out put.

2.21.2 Planning Manufacturing or Factory Overhead

After the production plan is completed, these cost budgets normally are developed simultaneously and are then consolidated into a budget appropriately labeled the planned cost of goods manufactured. The budget requires that all manufacturing cost be identified, either directly or by allocation with each product.⁹⁸

Manufacturing overhead is that part of total production cost not directly identifiable with (Traceable to) specific product or jobs. Manufacturing overhead consists of (i) indirect material (ii) indirect labor (including salaries) and (iii) all other miscellaneous factory expenses items such as taxes, insurance depreciation, supplies, utilities and repairs. (Each of these cost present major problems in themselves. In highly mechanized manufacturing situations, overhead costs typically are considerably higher than in less mechanized situation).⁹⁹

⁹⁷ Welsch fifth p.307

⁹⁸ IBID, Fifth, p.

⁹⁹ IBID, fifth, p

For the budgeting and cost accounting purpose manufacturing overhead involves the following two problems.

1. Control of manufacturing or factors overhead.
2. Allocation of manufacturing of factory overhead to products manufactured.

2.21.3 Planning Selling and Distribution Expenses

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

Fundamentally, the top marketing executive has the direct responsibility for planning the optimum economic balance between (i) the sales budget (ii) the advertising budget (iii) distribution expenses budget. Therefore profit planning and control views sales, advertising and distribution expenses are one basic problem rather than as three separate problems. All these expenses must be systematically planned by responsibility center.

2.21.4 Planning Selling and Distribution Expenses

Administrative expenses include operational costs other than manufacturing and administration. In general, they are incurred in the supervision of land service to all major functions of the business rather than in the performance of any on function. Because a large portion of administrative expenses are fixed rather than variable, the nation persists that they can not be controlled. Outside of certain to management salaries, which in the case of a corporation, may be set by the board of directors, most administrative expenses one determined by management policies and decisions. It is common to find administrative costs top heavy when measured by the volume of business line. Generally it is best to base budgeted administrative expenses on specific plans and programs. Past experience, adjusted for articulated change in management policy the general economic conditions are helpful. Because most administrative expenses are fixed, on analyzes of the historical record will generally provide a sound basis for budgeting them.¹⁰⁰

¹⁰⁰ Welsch fourth 1986 (276-277)

2.22 Capital Expenditure Budget or Plan

The investment decisions of a firm are generally known as the capital budgeting, or capital expenditure decisions. A capital budgeting decision may be defined as the firm decision to invest its current funds most efficient in long term assets in anticipation of an expected flow of benefit over a series of years.¹⁰¹

Capital budgeting is the making of long term planning decision for investment and their financial capital budgeting them consists in planning the deployment of available capital for the purpose of maximizing the long term profitability of the firm.¹⁰²

A capital expenditure is the use of funds to obtain operational assets that will (a) help earn future revenues or (b) reduce future costs. Thus capital budgeting is the process of planning and controlling the strategic and tactical expenditure for expansion and contraction of investments in operating assets. Capital expenditure includes such fixed (i.e. operational) assets as property, plant, equipment, major renovations, and patents. Typically, capital expenditure projects involve large amount of cash, other resources, and debt that are tied up for relatively long period of time.

Capital expenditure becomes expenses in the future as their related goods and service are being used to earn higher future profits form future revenues or to achieve future cost savings. Therefore, capital expenditures involve two planning and controlling phases: (a) Investment and (b) expenses.¹⁰³

Capital expenditure budget is the firm's formal plan for the expenditure of money to purchase fixed assets. It is an internal corporate document that lists the allocated investment projects for a given fiscal period.¹⁰⁴

Capital budgeting involves the generation of investment proposals, the evaluation of cash flows, the selection of projects based upon acceptance

¹⁰¹ Pandey I.M. Financial Management 7th edition, Vikas Publishing House Pvt. Ltd. P.353.

¹⁰² C.T. Horhgren, Op. Cit, p. 452.

¹⁰³ Welsch fifth Edition, pp. 394-395.

¹⁰⁴ Menderson, Gleen V. Tren Opt. Gray Land Wert, James E. "An Introduction to Financial Management", p.119.

criterion and finally continual revaluation of investment projects after their acceptance.¹⁰⁵ Thus capital budgeting involves following steps.

- 1) Consideration of investment proposal including alternatives.
- 2) Application off profits, cash flows and analysis of cost benefit of the project.
- 3) Estimation of available funds and utilization of funds.
- 4) The objective is to maximize the profit with the utilization of available funds.¹⁰⁶

The top executive, working with other members of executive management has the primary responsibility for the capital additions budget. However, the primary responsibility for the projects and other proposals should include divisional and departmental managers. There are three stages of capital budgeting, proposal generation, analysis and implementation. The important step involved in capital budgeting process are (a) project generation, (b) project evaluation, (c) project selection and (d) execution, Welsch, Hilton and Gordon has suggested the following process for planning and controlling capital expenditure.¹⁰⁷

Phase Activity

- 1) Identify and generate capital additions projects and other needs.
- 2) Develop and refine capital additions proposal.
- 3) Analyze and evaluate all capital additions, proposals, and alternatives.
- 4) Make capital expenditure decisions to accept the best alternatives and the assignment of project designations to select alternatives.
- 5) Develop the capital expenditure budget.
- 6) Establish control of capital expenditure during the budget year by using periodic and special performance report by responsibilities centers.
- 7) Conduct post completion audits and follow up evaluation of the actual results form capital expenditures in period after completion.

¹⁰⁵ James C. Vanhorne, "Financial Management and Policy," Prentice Halo of India Pvt. Ltd. 8th Edition (1976), p. 66.

¹⁰⁶ P.V. Rathnam, Op. Cit., p. 154.

¹⁰⁷ Welsch, IBID.

2.22.1 Capital Expenditure Decision¹⁰⁸

Capital expenditure decision means the selection of one alternative from the completing capital expenditures alternatives or projects by the management. While doing such decision focus should be given mainly on two over riding problems; first investment decision selecting the best alternatives based on their economic worth to the company, and second financing decisions – determining the amount and source of fund needed to pay for the selected alternatives. These cash constraints may necessarily limit the projects and proposals that can be initiated. There are numbers methods available for making such decisions usually following methods are used for evaluating investment proposals.

1. Discounted cash flow method.
 - Net present value
 - Internal rate of return
2. Short-cut and simple method
 - Pay back period.
 - Accounting rate of return.

2.23 Planning and Controlling the Cash Flow

The planning and controlling of the cash inflows, the cash flows, and related financing are important in all enterprise. Cash budgeting is an effective way to plan and control the cash flows, assess cash needs, and effectively used excess cash. A cash budget shows the planned cash inflow, out flow and ending position by interim periods for a specific time span. Most companies should develop both long term and short term plan about their cash flows. The short term cash budget basically included two parts: (i) The planned cash receipts (inflows) and (ii) The planned cash disbursement (outflow).

The cash budget focuses exclusively on the amounts and timing of cash inflows and outflows. In contrasts, the other budget focuses on the timing of all transactions both cash and non cash. The primary purposes of the cash budget are to¹⁰⁹

1. Give the probable cash position at the end of each period as a result of planned operations.
2. Identify cash excesses or shortage by time.

¹⁰⁸ IBID, P. 402.

¹⁰⁹ Glenn, A Welsch, IBID.

3. Establish the need for financing and/or the availability of idle cash for investment.
4. Coordinate cash with (a) total working capital (b) sales revenue (c) expenses (d) investment and liabilities.
5. Establish a sound basis for continuous monitoring of the cash position.

2.23.1 Techniques for Improving Cash Flows¹¹⁰

Planning the cash flows of a company should include consideration of how to improve cash flows. Improving cash flow basically involves increasing the amount of available cash on day today basis. To accomplish this objective, the management should focus on (a) the cash collection process to speed up cash collections, (b) The cash payment process to show down the payments of cash, and (c) The investment policies for the immediate investment of idle cash balance to maximize interest earnings.

Some of the ways often used to improve the ways often used to improve the efficiency of the cash collection process are as follows.

1. Review the lag the date of sales of goods and services on credit to the mailing of (a) invoices and (b) the first billing.
2. If cash discounts are given to customers for early payment, review their effect on early cash collections and whether the discount is too high too low. Also, monitor whether the discount policy is being violated in the company.
3. Review of credit granting process to determine whether bad credit risks are being screened out.
4. Consider ways to decrease the time between the date that customers pay by check and the date that the cash is available for use in the company's bank account.

Some of the ways often used to improve the efficiency of the cash payment process are as follows:

- 1) Make all the payment on the latest non penalty day, don not pays early.
- 2) Make all payments by cheque preferable on Friday to maximize float in favor of the company.
- 3) Take all cash discounts allowed for early payment.
- 4) Establish a policy of no cash advance (to both out side and employees).
- 5) Establish policies, and a payment process, to minimize the possibility of fraudulent payments by company employees.

The company should develop a specific policy about the investment of temporarily idle cash. Such as (a) type and mix of acceptable securities, (b)

¹¹⁰ P.V. Rathnam, Op. Cit., p. 154.

monthly reporting and monitoring of the portfolios, and (c) safeguarding and disposal of temporary investments.

2.23.2 Other Sub- Budgets Required for Completion of the Profit Plan

The planning process involves a long-range profit plan and a short range profit plan. In developing these plans, many budgets schedules are prepared to detail plans for each phase of a company's operations. The final step in planning process is to complete the profit plan by combining the component schedules and preparing planned financial statements. Planned income statement the planned balance sheet, and the planned and the planned statements of cash flows are prepared in order to determine the implications of the company's plans for its future financial conditions.¹¹¹

At this point in profit planning, the budget directors have an important respectability. A side from designing and improving the overall system, the budget director has been described as an advisor to the various managers helps to develop plans for responsibility center.

To complete the annual profit plan of an enterprise the following sub-budgets are required.¹¹²

1. Planned statement of cost of goods manufactured.
2. Planned statement of cost of goods sold.
3. Planned statement of cash flows.
4. Planned balance sheet.
5. Planned income statement.

2.24 Alternative in Developing the Profit Plan¹¹³

The clerical and mechanical parts of the profit plan development might suggest clerical activities that result in the production, inventory, purchase, labor and materials budgets. These views in misleading because it ignores the fundamental importance of decision making. Policy formulation and consideration of alternative action through the planning process. We have emphasized the importance of participation by all members of management in providing the decisional inputs. The development of decisional inputs and preparation off sub-budgets by the manager of each responsibility center is the heart of a comprehensive profit planning and control program. Numerous situations have been cited to show how management, in the process of developing the profit plan, is faced with alternative are:

¹¹¹ Glenn A. Welsch, Hilton and Gardon. Op Cit., p. 491.

¹¹² IBID, pp. 466-467.

¹¹³ IBID, pp. 468-469.

- 1) Sales price: - Management must set pricing policies and estimate the quantities of goods that can be sold at given prices.
- 2) General Advertising Policies: - Limitation of advertising expenditure local Vs national, product Vs institutional advertising.
- 3) Sales territory and sales force expansion or contraction.
- 4) Sales mix – Sales refers to the relative sales emphasis given to the various products sold by the company.
- 5) Balance between sales, production and inventory levels.
- 6) Research and development expenditures.
- 7) Capital expenditures.
- 8) Testing alternative decisions.

If the profit in industry is satisfactory preparation of the profit plan can be continued. If the profit is unsatisfactory, management should examine the alternative decisions made to date.

2.25 Implementing the Profit Plan¹¹⁴

The ultimate test of whether the effort and cost of developing a profit plan are worth is its usefulness to management; this is a cost benefit test. This poses some fundamental questions. How should the plans be implemented? Should the plans be followed under all circumstances? Should the profit be used as a pressure device? How should it be used by the top, middle, and low levels of management?

We have emphasized that a profit plan should represent potentially attainable goals, yet the goals should present a challenge to the enterprise. The plan should be developed with the conviction that the enterprise is going to meet or exceed all major objectives. Participation enhances communication. If the principle is to be effective, the various executives should have a clear understanding to their implementation responsibilities.

After approval of a profit plan, the next step is its distribution to the center managers in the enterprise. The guiding principle in establishing the distribution policy might to be providing one copy to each member of the management team according to his or her overall responsibilities while taking in to account the problem of security. After distribution of the profit plan, a series of profit plan conference should be held. The top executive comprehensively discusses the plans, expectations and steps in implementation. At this top level meeting, the importance of action flexibly and continuous control should be emphasized. In particular each manager must

¹¹⁴ IBID, pp. 471-472.

understand that the budget is a tool. The budget conference should be conducted until all levels of management are reached. Managers must clearly understand their responsibilities and how their part of the profit plan fits to the overall company's profit plan. These conferences should include "Profit and cost awareness" throughout management and if conducted properly, will trend to ensure positive support for the objectives.

The profit plan, regardless of how well designed and how carefully developed, cannot manage. In the final analysis, people, not budgets (or other similar tools) perform the management functions. Use of the profit plan as a guide to action and performance, directed towards attaining or bettering the goal quantified in the annual profit plan, requires continuous management effort and attention.

CHAPTER -THREE

REVIEW OF LITERATURE

The review of literature is a crucial aspect of the planning of the study. The main purpose of literature review is to find out what works have been done in the area of the research, problem under the study and what has not been done in the field of the research study being undertaken.

In my literature review following points will be highlighted.

1. Concepts of PEs
2. Empirical Studies

1. Concepts of PEs

Public enterprises are enterprise set by the government. It has to be efficient and at the same time accountable to the government and the public."PEs is autonomous bodies which are owned and managed by the government and which provides goods and services for a price. The ownership with government should be 51 percent or more to make an entity public enterprise.

According to encyclopedia Britannica, "Public Enterprise may be defined as an undertaking that can be owned by a national state or local government supplies services or at a price and is operated an a more or less self supporting basic. Such enterprise may also be international intuited or inter-municipal in characters, i.e. owned and operated jointly by two or more national state or local governments.

The profit earned by the firm is the main financial indicator of business firm. Profit is the result of successful management, cost control, credit risk management, efficiency of operations etc. Profit is essential for an enterprise to survive and grow and to maintain capital adequacy through retained earnings. Profit is essential to raise the market price of the shares and to attract the customers.

Public enterprise have become important instruments of socio-economic policies in developing countries in many cases, they have become dominant features of the economic scarier and claim lion share of public investment. Their micro levels plans generally get integrated with the macro level national development plans. They are required to accomplish multidimensional objectives and discharge a complex array of obligations in recent years however their social objectives of providing essential goods.

Very important literatures are available in this field some of the notable literatures relevant to the study are reviewed in this study to identify the relevance of the present study. Some reviews are as below.

2. Empirical Studies

3.1 Jeevan Kumar Acharya¹¹⁵

Thesis presented by Mr. Acharya on the topic “A Study on Profit Planning in NTC”. The sources of data used were both primary and secondary, but main data are collected form secondary sources. The main objectives of the study are follows:

- ❖ To highlight the NTC.
- ❖ To analyze the various functional budgets those are prepared in NTC.
- ❖ To evaluate the variance between target and actual of the enterprise.
- ❖ To draw picture of capacity utilization of NTC.
- ❖ To assess the financial/Performance/analysis of NTC.

Mr. Acharya has point out some major finding passed on analysis of data and available information's are as under:

- ❖ The top level executive are only involved in planning decisions making and lower level participation is not encourage.
- ❖ The NTC fail to maintain its periodic performance report systematically. Goals objectives are limited only to the high ranking officials.
- ❖ There is lack of proper coordination between the various departments.
- ❖ There is inadequate supply of man power.
- ❖ Lack of systematic profit planning and plans are prepared on “Adhoc Basic”.
- ❖ There is lack of dynamic and effective cost control program and there is also no separate costing department.
- ❖ The variance analysis is completely ignored in this corporation.
- ❖ Since the overhead are not classified systematically, it crates problem to analyze its expenses properly.
- ❖ The cooperation is suffering from fixed cost.
- ❖ NTC is operating under 6 year study period, but the profit earned by NTC is not enough

¹¹⁵ Acharya Jeevan Kumar “Profit Planning in NTC” Unpublished Master Degree Thesis, Submitted Central Department of Management, T.U., Kirtipur, April, 1999.

3.2 Suman Acharya¹¹⁶

Mr. Acharya has submitted this thesis on the topic “Profit Planning in Public Utility Undertaking of Nepal (NTC and NEA)”. In this study the main sources of data used are both from primary and secondary but the main data collected is from the secondary source. The study period is FY 2050/51 to 2060/61. The main objectives of the study are listed below.

- ❖ To examine the broad and specific objectives of NTC.
- ❖ To interest the trend of profit planning of NTC.
- ❖ To see how far the public utility undertaking is participating on contributing the national development.
- ❖ To find out the major problems in developing and implementing profit planning in NTC.

Mr. Acharya has point out some major finding based on analysis of data and available information, which are as follows.

- ❖ The financial position in NTC is satisfactory.
- ❖ There is a problem of autonomy in NTC.
- ❖ There is not any concept of profit planning system in NTC.
- ❖ There is a system of management information system report in NTC.
- ❖ There is a communication gap between department to department and top level management to lower level management.
- ❖ NTC is suffering from high fixed cost.
- ❖ NTC has started 3 month billing system to its customers who have only local telephone facility, which is very beneficial.
- ❖ Here in the corporation, the top level executives are only involved in the planning and decision making.
- ❖ In NTC overheads are not classified systematically and it crates problem to control cost

¹¹⁶ Acharya Suman, “Profit Planning in Public Utility Undertaking on Nepal (NTC and NEA)” Unpublished Master Degree Thesis, Submitted Central Department of Management, T.U., Kirtipur, April, 2000.

3.3 Nandlal Dhakal¹¹⁷

Mr. Dhakal has submitted a thesis on the topic “Profit Planning of Nepal Telecommunication Corporation”. The main objectives of the study are as follows:

- ❖ To highlight the NTC.
- ❖ To analyze the variance between actual and standard budget of the NTC.
- ❖ To point out valuable suggestion and recommendation.
- ❖ To observe the NTC profit planning on the basis of several management budgeting.

The main findings of this report as pointed out by Mr. Dhakal are:

- ❖ The actual production lines are more variable than budgeted production lines.
- ❖ NTC cannot succeed in selling telephone lines according to the demand of the consumers.
- ❖ The financial analysis shows that the financial performance of NTC is not so good in the study period.
- ❖ The analysis shows that NTC main revenue source is ISD sector. It covers more than 60 percent of total revenue.
- ❖ The cash budget shows huge amount of cash or bank balance.
- ❖ NTC has completely ignored the variance analysis.
- ❖ The profit pattern of NTC is going in increasing order.

3.4 Binod Kumar Shah¹¹⁸

Mr. Shah has submitted his research report on the topic ‘profit planning in NTC’. The study covered only five years. The main objectives are:

- ❖ To assess the financial/performance/analysis of NTC.
- ❖ To point out suitable suggestion and recommendation.
- ❖ To examine the practice and effectiveness of profit planning in NTC.
- ❖ To analyze the various functional budgets those are prepared in NTC.

Some of the major findings pointed out by Mr. Shah are as follows:

- ❖ The balance sheet of NTC shows huge amount of cash bank balance remaining idle and it indicates. Some deficiency of the corporation to utilize its liquid assets.
- ❖ The leverage ratio shows decreasing pattern of total debt.

¹¹⁷ Dhakal, Nandalal, “Profit Planning in Nepal Telecommunication Corporation” Unpublished Master Degree Thesis, Submitted Central Department of Management, T.U., Kirtipur, August, 2000

¹¹⁸ Shah, Binod Kumar, “Profit Planning in NTC” Unpublished Master Degree Thesis, Submitted Central Department of Management, T.U., Kirtipur, April, 2001

- ❖ Net profit of NTC is going on increasing trend.
- ❖ Turnover ratio is not good.
- ❖ NTC is operating in profit in profit but is not satisfactory in monopoly situation.
- ❖ According to the regression equation, actual production relationship with budgeted production is positive.
- ❖ Liquidity ratios shows high portion of current assets, which is not a good sign of NTC.
- ❖ Sales of NTC are going to increasing every year but increasing rate is not fixed.

3.5 Tej Bahadur Thakulla¹¹⁹

A dissertation presented by Mr. Thakula on the topic “Profit planning in Nepal Telecommunication Corporation” has shown the following objectives and findings.

The main objectives are:

- ❖ To examine the present planning premises adopted by NTC on the basis of budgeting.
 - ❖ To sketch the trend of profit and profit planning in NTC.
 - ❖ To recommend measures to encounter with identified profit planning problems.
 - ❖ To analyze the various functional budgets prepared in NTC.
- Some of the major findings presented by Mr. Thakulla are as below:
- ❖ The cost-volume-profit analysis shows that BEP is satisfactory.
 - ❖ Assets turnover ratios are going in increasing trend, which is good for NTC.
 - ❖ The flexible budget analysis shows that the NTC is able to earn good operating profit.
 - ❖ Working capital ratios are going in decreasing trend and net working capital ratio are going in increasing trend, which shows that NTC has earned good profit.
 - ❖ Overhead expenses are not classified systematically. Thus, it creates problem to analyze its expenses properly.
 - ❖ NTC has a practice of preparing long range sales budget and short-range sales budget. But here, it is not prepared in a detailed manner.

¹¹⁹ Thakulla, Tej Bahadur, “Profit Planning in Nepal Telecommunication Corporation” Unpublished Master Degree Thesis, Submitted Central Department of Management, T.U., Kirtipur, August, 2001.

3.6 Mr. Manohar Krishna Shrestha

Mr. Manohar Krishna Shrestha on this study of Revenue collection Improvement in service delivery of NTC made in 1994 has and geed about the revenue collection to NTC these shadows designed to show the actual revenue collection position problems in severe collection and to singe the workable suggestions for improving the revenue collection position the study covered the period of ten years from 1983 to 1992. He found that problem of revenue generation in telecommunication a rise from congested local service bringing system failures unsatisfactory clearance if faults in local cable distribution net works shortage if circuits, normal large, unmet demand , large overdue bill from government department, agencies etc.

He recommended that NTC should take an immediate action such as display of customers service chart it the conger , maintain complaint desk, provide adequate manpower ,encourage payment through banks, simplify new line connection prelature maintain free telephone counter for calling information etc.

The long –term measures should included contracting sane of the service term related to telecommunication such as maintenance to private sector and specification of the quality and standard of service.

3.7 Prem Lal Adhikari:

Mr. Prem lal Adhikari has submitted a thesis and the topic. An evaluation financial position of NTC. The main findings of Mr. Adhikari are as follows.

- I. Liquidity position: There is no serious liquidity position in NTC. The current assets of NTC are greater than the current liabilities in each year. It shows the better liquidity position of NTC. But it is does not indicate this is no any liquidity problems in NTC. The current ratios are affected by the huge amount of sundry debtors.
- II. Utilization of fixed assets. NTC has invested the huge amount to purchase the fixed assets but the revenue generation ability of NTC is very low in comparison with the investment only 0:04 times this shows that there is no effective utilization of fixed assets.
- III. Utilization of total Assets: Although there is increasing trend of total assets turnover ratio, it is not increased significantly. The total assets turnover ratios are still too low. In average the total assets turnover ratio is only 0.22 times. Therefore it can be said that the management of NTC is not able to utilize the assets properly because the gross

operating revenue is very low in comparison with the investment on total assets.

IV. Receivable management: From the analysis of financial statement, we know that a sundry debtor is the most sensitive sector for the management of NTC. In an average, the collection period is 132 days. Only in the two fiscal year, the collection period is below the standard (average). Debt collection period and in other three years the collection period is highly greater than the standard debt collection period. Due to taking long period to collect the outstanding debt there is very low debtor's turnover ratio. Therefore, it is not adopting the proper receivable management policy. If 90 days are standard debt collection period, the actual debt collection period is greater from the standard debt collection period in all the five-year study period.

V. Major issues and Gaps:

- ❖ There is no effective utilization of asset in NTC
- ❖ NTC has been seriously facing the problem of outstanding debt collect each fiscal year , the collection period is to long in comparison with allowed collection period .
- ❖ Profit earned by NTC is not sufficient to make NTC self-reliance actives.
- ❖ Increasing in cost in each fiscal year is another important issue. They have not adopted the cost control tools and techniques in NTC.
- ❖ NTC is not able to fulfill the requirement of funds from the successful opening of the corporations' activities. It has been taking considerable amount of loan to fulfill the requirement of funds.
- ❖ Another hottest issue is that NTC is not conflicted under the business principal. The idea of privatization is coming into the Telecommunication sector. But NTC is not in a position to mere the competition with the private sectors.

1.8 Mr. Dipendra kumar Neupane :

Another researcher MR. Dipendra Kumar Neupane has concluded his research report on the topic “A study on Profit Planning in Telecommunication Corporation”. He has pointed out some findings as follows:

- ❖ The corporation is not able to maintain to proper co-ordination between various directorates concerning the goals and objectives of the corporation.
- ❖ Net profit of NTC is on increasing trend. However, the balance sheet of NTC shows the huge amount of cash and bank balance remaining idle. It indicates the inefficiency of the corporation to utilize its liquid assets.
- ❖ There is no clear-cut boundary to separate cost into fixed and variable. Fixed cost and non-manufacturing costs are growing higher.
- ❖ The concept of variance analysis is ignored in the corporation .Variance analysis shows sales in units of NTC unfavorable & sales in Rs are favorable production budget is favorable in first three years & unfavorable in remaining two years during study period. Overhead expenses are all favorable during study period.
- ❖ The corporation has been facing some problems in profit planning system. Management lacks adequate knowledge about the following facts, nature & concept of broad & long range objective & coordination system in the organization. NTCs management system needs change.

CHAPTER- FOUR

RESEARCH METHODOLOGY

4.1 General

Research methodology refers to the various sequential steps (along with a rationale, of each such step) to be adopted by a researcher in studying a problem with certain object/objects in view. It is also the way to solve systematically about the research problem. This study has intense relation with the application of PPC in manufacturing concern, regarding the objectives of the present research is to highlight the current practice of PPC in NTC. It therefore requires and appropriate research methodology. As the basic objective of the present research is to highlight the current practice of PPC and its effectiveness in Nepalese PEs, the research methodology followed here is to achieve the basic objectives and goals of this research work. Following are the major content of research methodology in course of this dissertation.

4.2 Research Design

In order to make any type of research, a well set research design is necessary, which fulfills the objectives of the study. Generally research design refers to the conceptual structure within which the research is conducted.

“A research design is the arrangement of conditions for collection and analysis of data in manner that aims to combine relevance to the research purpose with economy in procedure”.¹²⁰ The preparation of the design involves the consideration of the following.

1. The means of obtaining the information
2. The availability and skills of the research staff and/or agencies
3. Methodology
4. The time and cost of the research.

The present research work here mainly is related with the quantitative plans and accounts of NTC, so analytical approach has been considerably adopted to present the data. But the qualitative aspects of the research, such as, effectiveness of the profit planning in NTC and implementing the project plans are explained in words, where necessary. The present research design here specially deals with secondary data.

¹²⁰ Claire Selltiz and Others, “Research Methods in Social Sciences”, Rev, 1962, p.50.

4.3 The Population and the Sample

The research work is related with project planning aspect of PE in Nepal, so the whole public enterprises in Nepal are the population of the study. Due to time, resources and other constraints only one representative PE is randomly selected i.e., Nepal telecommunication corporation.

4.4 Period Covered

Profit planning has two dimensions: long range and short range. For long range planning it is analyzed five years trend from fiscal year 2057/58 to 2061/62 and for short range planning, one year data i.e., for fiscal year 2061/62 are taken.

4.5 Nature and Sources of Data

Information is the life blood of any research. So, the significance of the research depends upon the nature, availability and accuracy of information. To fulfill the objectives of this study, especially secondary data have been used. These data have been taken from published and unpublished articles, financial statement of NTC, similar previsions dissertations, magazines and newspapers, booklets, financial report of national planning commission, NTC annual report, budget books of NTC, financial report of financial ministry etc.

4.6 Tools Used

Secondary data are managed and analyzed in proper table and formants. Interpretation and explanations are made wherever necessary. To analyze the collected data financial and statistical tools such as standard deviation, C.V.P. analysis, correlations coefficient, probable error, regression coefficient, time series analysis, flexible budget and diagrams have been used as per need.

4.7 Research Variables

Sales, production, expenses, power losses, manpower, profit and loss, capital expenditure and cash-flows relating long-term and short-term period of NTC are the research variables of present study.

4.8 Research Procedure Followed

1. The various books are collected and explored.
2. Useful secondary data are used.
3. Data are described and explained in the light of theoretical basis.
4. The collected data are presented and arranged in tabulation forms and analyzed applying the various statistical and financial and accounting tools.

CHAPTER- FIVE

DATA PRESENTATION AND ANALYSIS

5.1 Introduction

The main purpose of this research is to examine the profit planning system in public utility enterprise in the context of profit planning in public system in public utility enterprise in the context of profit planning in public utility concern and Nepal Telecom Company (NTC) has been selected for this purpose. To accomplish these objectives, this chapter of research paper will analyze the various aspect of profit planning and their achievement and related variance of the corporation. Profit planning means the development and acceptance of objectives and goals and moving an organization efficiently to achieve the objectives and goals. “An effective mechanism of financial management and control can be built upon a sound comprehensive budgeting system.”¹²¹

The main objective of this study as mentioned in introduction chapter is to analyze the profit planning of NTC. In order to fulfill this objective concrete course of research methodology has been attempted to follow which is explained in chapter four. Now in this chapter the author has tried to analyze the profit planning and then also tried to compare actual and identify related variance of the NTC.

Public enterprise were established in order to prepare infrastructure service to produce the required goods and other information in the country to increase export items and decreases imports to help in controlling price situations to create opportunities for employment to increase government national development as well as assists in the country’s economic advancement. For manufacturing PEs like NTC, profit planning and control is important for the best utilization of exchange capacity and effective and efficient achieving and accomplishing the goals and objectives in sales planning, production planning, overhead expenses, capital budgeting, cash flow and manpower are planning. In Nepal, PEs established with the explicit objectives of mobilizing resource and earning reasonable profit necessary for the development of the country as envisaged in the second plan of late government has issued

¹²¹ J.K. Pathak, “Some Observations and Management Problem of PEs in Nepal”, Public Administrative Journal.

instructions to the public enterprise to earn a minimum return on the capital employed.¹²²

Generally two types of profit planning are formulated to achieve the organizational objectives NTC has a practice of preparing both strategic long-range and tactical short-range profit plan. Though, it prepares both long range and short range profit plan, the present study does not deserve the quality to analyze it in detail because of time and research constraint. Therefore the study mainly focuses on tactical short range profit plan of the NTC. However, the sales, production and other related figures of previous year are also presented and analyzed to know the overall economic and financial trend to estimate the possible future trend of the NTC. For the purpose the study covers the period of five years for fiscal year 2060/61 to 2064/64

The short term profit plan is analyzed by taking relevant figures and various functional budgets of one fiscal year. One FY may represent the technical process and other procedures of preparing budget, their use for the purpose of profit planning, comparison with actual achievement and analysis of variance for other years, because such process are some for every year and repeated each year in the time of preparing and analyzing budgets. For this FY 2064/65 has been taken as representative year to analyze the short term plan various functional budgets of 2064/65 their bases of preparation, actual achievement and related variances between budgeted and actual are analyzed in detail. Attempt is made to point out the reason behind the deviation between budgeted and actual results and some recommendation have also pointed.

2. Sales Budget of NTC

The sales budget is the foundation for planning in business organization. It is the primary step in developing the overall budget procedure and it is the primary source of cash and all other functional budgets are prepared on the basis of sales budget. The sales plan is that step which opens the door of financial plan. It is an estimation of sales for uncertain period of future when actual sales is not for from the planned sales then it is known as good plan. For this, sales budget preparation should be done in realistic ground. If sales budget is not realistic, all other budgets will not be realistic.

Sales plan is prepared on the basis of sales forecast, generally sales plan and sales forecast are used in a same sense but they are not the same. A sales forecast has to be translated into sales plan and various factors have to be taken

¹²² J.K. Pathak, "Profitability in Nepalese Manufacturing PEs", Management Dynamic Volume 2. Number 1. 1982. P.32.

into consideration. Sales plan preparation involve the following four inter related step. (A) The sales forecast, (B) the marketing plan (C) the advertising and expenses budget, (D) the selling expenses budget.

The overall responsibility of preparing sales budget is up on planning directorate of NTC. Maintaining coordination with revenue section, the sales budget is prepared by planning directorate. Like as other manufacturing concern, it has no distribution channels, consumers contact themselves to get telephone service. These are no competitor of NTC and it enjoys absolute monopoly in communication sector.

Now, the attempt begins to present the corporation previous sales performance and their achievements to know about the sales trend of past and to forecast the possible future trend of the NTC. For this purpose we have to analyze the past sales data of the corporation.

The following table presents the sales budget and actual sales achievement in unit and in Rs. from the fiscal year 2060/61 and 2064/65

Table 5.1
Sales Budget and Achievement

(Rs. in Million)

Fiscal Year	In units			In Rs.		
	Budgeted	Actual	Achievement	Budget	Actual	Achievement
2060/61	36997	30538	82.54	2556.86	2677.02	104.70
2061/62	52007	38426	64.27	3020.71	3310.68	109.60
2062/63	41572	32845	79.00	3411.15	4321.05	126.67
2063/64	42570	40561	95.28	4522.40	4534.29	100.26
2064/65	42288	33914	80.20	5161.68	4902.48	94.99

Source: Annual Report of NTC.

The above presented table shows that the budgeted and actual achievement sales performance of NTC. It shows that the systematic sales budget and sales performance is satisfactory. When we analyze the budgeted and actual sales figure of each year, we can say that actual sales achievement of NTC is highly consistent with target sales. Actual sales revenue is more than the budgeted revenue in every year. This indicates the consistency of sales plan and realistic targets.

In order to find out the nature of variability of sales budget and actual sales of different years, we have to calculate the arithmetic mean, standard deviation, and coefficient of variation of the budgeted and actual figures of

NTC for 5 years form FY 2060/61 to 2064/65. The data calculations of these statistical tools are presented in Appendix No.1.

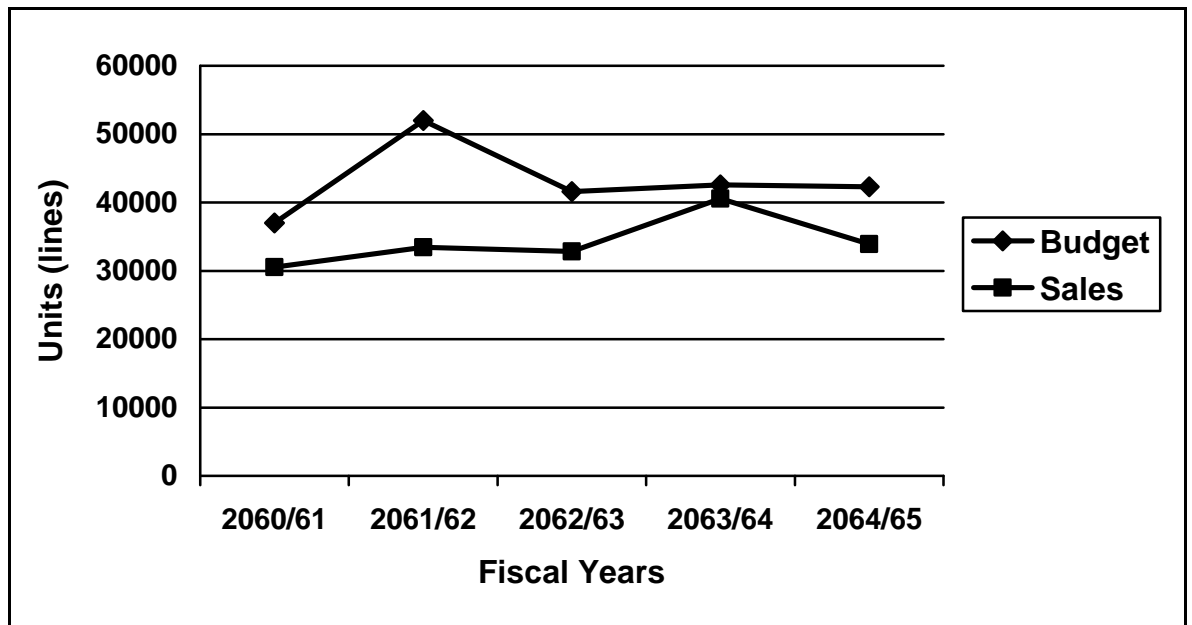
Now, summarizing the result is given below.

Particular	Sales budget in unit (lines) X	Sales achievements in units (lines) Y
Mean (X)	43351.20	39345.60
S.D. ()	4896.00	3358.00
C.V.	11.36%	9.810%

The above table shows the three result of calculated statistical tools. According to the calculation, the mean of actual sales is lower than budgeted. Also the standard deviation and coefficient of variation is also lower than budgeted. Lower coefficient of variation indicates more consistency or lower degree of variability. Therefore an actual sale of NTC shows that nature of less variability than budgeted sales.

We can present the actual and budgeted sales by the help of graphical presentation.

Fig:5.1
Budgeted and Actual Sales of NTC



The graphical diagram shows that budgeted sales are more than actual sales. There is a large gap in the FY 2061/62 and than other FY, which is not a good sign for the corporation but it is trying the reduce gap in the coming year. To analyze the relationship between budgeted sales and actual sales another statistical tools i.e., the coefficient of correlation is used. The sales achievement should increase as the budgeted increase means there should be positive correlation between the budgeted sales and actual sales. To find out the correlation between the budgeted and actual figure, we should take the help of Karl Pearson's coefficient and thus it is denoted by the symbol (r). By calculating the (r), we can test whether there is positive correlation between actual and budgeted sales or not. To calculate the value of (r), we should assume the budgeted sales as X and as independent variable and assume Y to actual sales and dependent variable.

The calculated value (r) shows that there is a positive correlation between the budgeted and actual sales. In other words, the actual sales will change in the same direction of the change in budgeted sales. After examining the relationship between the variables, we have to test the significance of (r) and this can be tested by the help of probable error r . If correlation coefficient (r) is greater than probable error ($r = 0.29$) (Appendix 1). Here, correlation coefficient

$(r) = 0.18 < \text{probable error } (r) = 0.29$. So, it can be said that the value of (r) is insignificant or there is imperfect correlation between budgeted and actual sales. We have the following values as calculated above.

	X Budget	Y Actual
Mean (X)	43086.80	34286.80
S.D. (σ)	4896	3358

$$r = 0.18$$

Then,

This regression equation shows that actual sales is in increasing trend and the actual will be increased by 0.1234 units, per unit increase in budgeted sales unit. By the help of the regression equation, we can estimate the expected sales achievement with given value of budgeted sales (X). We have the budgeted sales (X) of the FY 2060/61 i.e., 44948 lines. If we use the equation the expected sales achievement (Y) will be as follows:

$$Y = 0.1234 \times 44648 + 28969.89$$

$$Y = 34479 \text{ lines}$$

If the relationships between budgeted and actual sales remain same as previous year, the actual sales for the FY 2064/65 will be 34479 lines as stated by the above regression equation.

Time element is also an important factor with the passage of time, the actual sales are changed which can be expressed by the component of time series. The 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 and year (time period). Here in this method, it is assumed that sales will consistently change with the change in time. To fit the straight line trend, the time factor is considered as independent variable and actual sale is considered as dependent variable.

Here, the straight line trend by the least square trend method for actual sales upon time is expressed by:

$$Y_c = a + bX$$

Where, Y = actual sales and X is the time.

Calculate of straight line trend by least square method.

Table 5.2
Fitting Straight Line Trend by Least Square Method

FY	Actual sales Y units (lines) '000	X = year middle time	X ²	XY
2060/61	30.538	-2	4	-61.076
2061/62	33.426	-1	1	-33.426
2062/63	32.845	0	0	0
2063/64	40.561	1	1	40.461
2064/65	33.914	2	4	67.828
Total	ΣY = 171.284	ΣX = 0	ΣX ² = 10	ΣXY=13.887

FY 2061/62 assumed as base year, therefore the value of X is zero.

Substituting the value in straight line equation. $Y_c = a + bx$

$$a = \frac{\sum Y}{N} = \frac{171.284}{5} = 34.2568$$

$$b = \frac{\sum XY}{\sum X^2} = \frac{13.887}{10} = 1.3887$$

$$Y_c = 34.256 + 1.3887x$$

This trend line shows the positive sales figure. The sales will be increased by 1.388 units (lines) every year.

By using the trend equation, we can estimate the sales for FY 2061/62 (base year) 2062/63

The value of X for FY 20623 + 3

$$\begin{aligned} \text{Then, } Y_c &= 34.2568 + 1.3887 \times 3 \\ &= 34.2568 + 4.1661 \\ &= 38.42289 \text{ units (lines)} \end{aligned}$$

If the past sales trend does not change then the possible future actual sales will be 38.4229 lines. By this method, we can say that the trend of actual sales will be increasing trend.

After analyzing the past trend of NTC in report of sales, now we are going to analyze the annual sales budget for the fiscal year 2064/65 NTC has the practice of preparing short range budget for coming year. This budget is manifestly prepared by classifying various sales revenue sector of NTC in each fiscal year. The actual sales revenue from domestic sales and international sales are analyzed in appendix - 2, it represents the sales achievement of NTC from FY 2060/61 to 2064/65.

Table 5.3
Summary of Sales Budget and Achievement of NTC for FY 2064/65

Particulars	Budgeted		Actual	
	Sales	%	Sales	%
Sales in unit				
Sales in Rs. (million)	5161.68		4902.48	
Local telephone	963.44	18.66	1051.84	21.45
S.T.D.	1060.26	20.54	1070.92	21.84
I.S.D.	1540.47	29.84	1406.54	28.69
Intl. Calls Adjustment	1272.75	24.65	902.75	18.41
Cellular mobile & internet	21.38	0.41	177.61	3.62
Total telephone	4858.30	94.12	4609.66	94.03
Telex	34.55	0.67	31.12	0.63
Inland message	1.00	0.02	0.98	0.02
International message	0.90	0.02	0.00	-
Total telegraph	1.90	0.04	0.98	0.02
Leased circuits	42.81	0.83	22.14	0.45
Others	224.12	4.34	238.58	4.81
Total	5161.68	100.00	4902.48	100.00

Source: Annual Report of NTC.

Table 5.4
Summary of Actual Sales in Each Sector FY 2064/65

Particulars	2060/61	2061/62	2062/63	2063/64	2064/65
Local telephone	429.18	559.04	734.02	736.00	1051.84
S.T.D.	510.18	641.39	814.91	964.22	1070.92
I.S.D.	1060.31	1165.85	1265.18	1405.70	1406.54
Intl. Calls Adjustment	457.21	698.92	1216.63	1209.50	902.75
Cellular mobile & internet	-	-	-	-	177.61
Total telephone	2456.88	3065.20	2672.10	4315.42	46.9.66
Telex	42.51	34.88	39.37	16.45	31.12
Inland message	1.70	1.17	1.02	1.02	0.98
International message	1.58	30.32	0.98	0.00	0.00
Total telegraph	3.28	31.49	2.00	1.02	0.98
Leased circuits	25.03	10.77	48.99	28.34	22.14
Others	148.72	168.34	170.17	172.00	238.58
Total	2677.02	3310.68	4321.05	4534.24	4902.48

Source: Annual Report of NTC.

Table 5.5
Actual Sales Budget

Fiscal year	Actual sales in Rs.	Change in actual sales	Percentage change
2060/61	2677.02	529.73	24.67
2061/62	3310.68	623.73	23.67
2062/63	4321.68	1010.37	30.52
2063/64	4534.24	213.19	4.93
2064/65	4902.48	368.24	8.12

The above table shows that actual sales units are lower than budgeted sales units and actual sales revenue is higher than target sales revenue in FY 2060/61 to 2064/605 But in FY 2064/65 actual sales revenue is lower than budgeted revenue and actual sales unit is higher than target sales unit. In other words there is substantial gap between sales achievement and sales target in the fiscal year 2060/61 to 2063/64 except 2064/65. In this case we can say that the sales forecasting system of NTC is not in realistic basis, because there is very different between target and actual performance.

By analyzing the sales plan of NTC, the following points can be pointed out in conclusion.

1. There is low positive correlation between actual and budgeted sales.
2. NTC cannot succeed in selling telephone lines according to the consumers demand.
3. There is imperfect correlation between budgeted and achievement and correlation coefficient is not highly significant.
4. The regression equation shows the increasing trend of actual sales and the straight line trend shows the positive figure for future.
5. The budgeted sales are more variable than actual sales.
6. This analysis suggests that the corporation should change in its pricing policy.

5.3 Production Budget of NTC

The preparation of production plan is based on sales plan and this is the second step in developing the profit plan. The production plan involves the determination of the number of units of each product that must be manufactured to meet the planned sales and maintain the planned inventory levels of finished goods. In case of manufacturing enterprise the sales plan must

be converted to production requirement. But in respect of public utility concern the production plan goes in the long rang and according to the availability of utility it seeks its consumers. Though in practice, utility concern also estimates their demand for the long rang and makes their production plan.

Our selected PE is the utility concern. It prepares the telephone point generation budget of NTC. In terms of telephone points production the problem of opening and closing inventory is not to be faced by NTC because there is no possibility of storing the telephone points. NTC prepares its production budget for a fiscal year in short term. The production budget of the corporation is prepared by planning directorate.

Here, the previous trend of the production of NTC and their budget are going to be analyzed. Possible future trend of the corporation can be forecasted by analyzing the previous trend of production. Therefore the following table represents the production (budgeted) and actual and their actual achievements in unit from FY 2060/61 to 2064/65. We assume the planned sales as planned production.

Table 5.6
Budgeted and Actual Production Budget of NTC

Fiscal year	Budgeted	Actual	Achievement
2060/61	36997	47333	127.93%
2061/62	52007	56342	108.33%
2062/63	41572	29278	70.43%
2063/64	42570	31756	74.59%
2064/65	42288	33914	80.20%

The above table shows the budgeted and actual production and their achievements in terms of percentage. The NTC shows the highest achievement in FY 2060/61 which goes on decreasing and is consistent in the FY 2061/602 and 2063/64 and gradually its achievement rise in FY 2064/65. In overall this result shows that the production budget is not satisfactory.

To find out the variability of production budget and actual production of different years arithmetic mean, standard deviation and coefficient of variation have to be calculated.

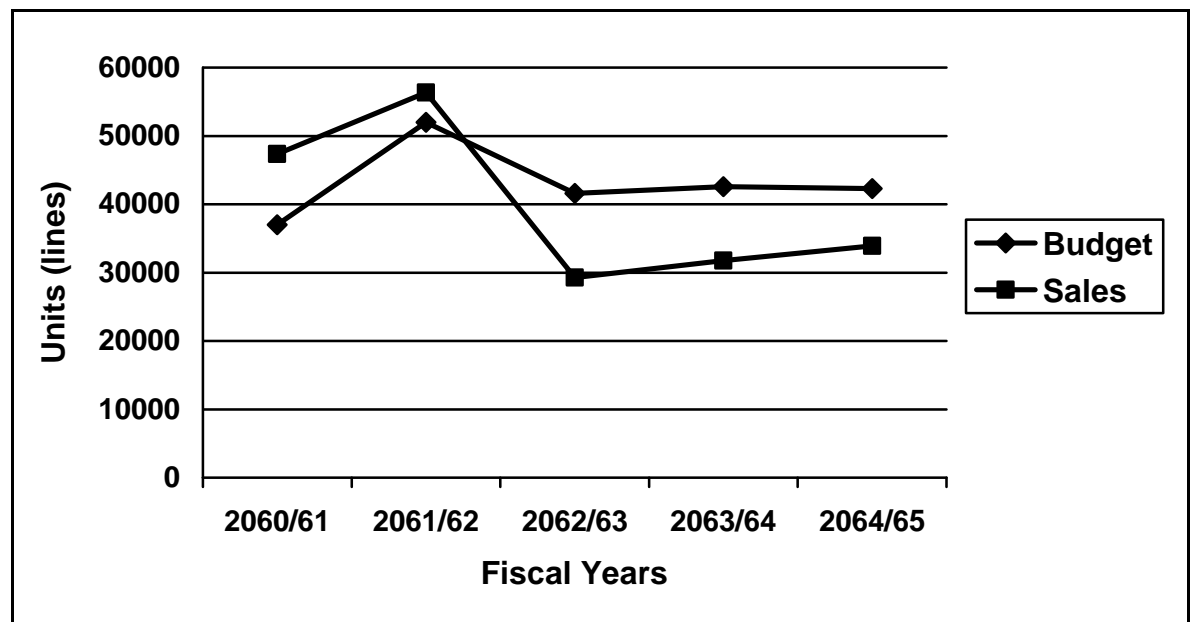
Budgeted and Actual Production in Units

Components	Budget production (X) in unit	Actual production (Y) in units
Mean ()	43.0868	39.7246
S.D. (σ)	4.896	10.396
C. V.	11.36	26.12%

The above analysis shows that the mean of budgeted production is high and the S.D. of actual is high. The C.V. of actual production is high than budgeted. This shows that the actual production is of the nature of high variability than budgeted production. The following graphical presentation shows the budgeted and actual production.

Fig: 5.2

Budgeted and Actual Production of NTC



The graphical presentation shows that the gap between budgeted production and actual production. The actual production is high in the FY 2060/61 and 2061/62 and low in remaining fiscal year.

A statistical tool correlation of coefficient (r) can be used to analyze the relationship between budgeted production and actual production. For the purpose of calculating (r) budgeted figures denoted by (x) are assumed to be independent variable and actual figure denoted by (Y) are assumed to be dependent. The detail calculation of (r) and probable error of (r) is presented in Appendix -3 and from this we have calculated the value of (r) is 0.50.

The figure (r) denotes that there is positive correlation between actual and budgeted production. The significance of (r) can be tested by the help of probable error (r). We have the probable error of (r) = 0.22 (from Appendix -3). Since $r > Pe$ ($0.50 > 0.22$), the value of (r) is definitely significant. So it can be said that the actual production will be in the same direction of budgeted production.

A regression line can also be fitted to show the degree of relationship between actual and budgeted. For this purpose the actual production has been assumed to be dependent upon budgets. So, the regression line Y on X or Y is as follows.

The calculated values are as follows:

Components	Production budgeted (X)	Production achievement (Y)
Mean (X)	43086.80	39724
S.D. (σ)	4896	10396
C. V.	0.50	-

Applying the given values in formula.

We get,

$$\text{Or, } Y - 39724 = 1.06 - 45672$$

$$\text{Or, } Y = - 5984 + 1.06 X$$

Thus, the regression equation shows that there is negative relationship between actual and budgeted production. With this regression equations, we can ascertain the expected production achievement with given value of target production, say X. If we use this equation to ascertain the expected production achievement for fiscal year 2065/66, the following result is achieved.

For example, the budgeted production units (lines) for FY 2065/66 are 44648 units (lines).

From this we can achieve the expected production as follows.

$$\text{i.e., } Y = -5948 = 1.06 \times 44648$$

$$Y = 41378.88 \text{ units (lines)}$$

If the relationship between budgeted and actual production remain in same direction as previous year, the actual production for the FY 2065/66 will be 41378.88 units.

The least square method can also be used to analyze the trend of actual production and to estimate the possible future production for a given year. A straight line trend by this method will show the relationship between year and actual production of that relevant year to fit the straight line trend and time factor is considered as independent factor and production is considered as dependent factor.

Table 5.7
Fitting Straight Trend by Least Squares

FY	Actual production Y units	X	X ²	XY
2060/61	47333	-2	4	-94666
2061/62	56342	-1	1	-56342
2062/63	29278	0	0	0
2063/64	31756	1	1	31756
2064/65	33914	2	4	67828
Total	∑Y=198623	∑X=0	∑X ² =10	∑XY=-51424

Here FY 2059/60 is assumed as base year. By using the equation of straight line trend $Y_c = a + bX$.

We get,

Where,

$$a = \frac{\sum Y}{N} = \frac{198623}{5} = 39724.6$$

$$b = \frac{\sum XY}{\sum X^2} = \frac{-51424}{10} = -5142.4$$

Therefore, $Y_c = 39724.6 - 5142.4X$

This trend line equation shows the negative figure. By this trend equation, we can estimate the actual production for FY 2060/61 (assuming 2062/63 as base year).

The value of X for FY 2062/63 is 3.

$$\begin{aligned} \text{Therefore, } Y_c &= 39724.6 - 5142.4 \times 3 \\ &= 24297.4 \text{ units (lines)} \end{aligned}$$

Thus, from the above analysis of the production budget of NTC, some major points can be concluded as follows:

1. The regression equation shows that there is negative relationship between actual and budgeted production.
2. There is positive correlation between actual and budgeted production.
3. The trend line equation shows the negative figure of the production.
4. Actual production is the nature of high variability than budgeted production.
5. Both short term and long term production budgets are prepared by NTC, long term budgets are influenced by many factors like government policy, completion of new projects and other factors also.

5.4 Overhead Budget of NTC

After preparing the production budget, the expenses budget must be established for each responsibility center and the firm should formulate its factory expenses and administrative expenses plan which is termed as overhead budget. The production budget provides the basic foundation for planning factory overhead. Factory overhead budget is prepared for the purpose of controlling factory expenses and administrative expenses. Manufacturing overhead is the part of the total production cost not directly identifiable with specific production or job. It consists of (a) Indirect materials (b) Indirect labor (including salary), (c) other miscellaneous factory expenses items such as taxes, insurance, depreciation, supplies and utilities.

Nepal Telecom does not prepare the separate budget like manufacturing overhead, administrative overhead budget and selling and distribution overhead budget. It prepares the overhead budget in combined way which is named as "Operation and Maintenance expenditure Budget".

If we take the case of Nepalese manufacturing PEs they are attempting to reduce expenses without adequate planning benefits failed to commit, sufficient resources to maintenance of assets. Such as equipment and buildings, although temporarily reducing expenses soon cause even higher costs because of breakdown, inefficient machines, frustrated employees, faulty machine tolerance, major repair cost and shortened assets lives. NTC is not an exception for the case.

The following table shows that the expenses trend and condition of NTC in different 5 fiscal years. The expenses are employees cost, operating and maintaining cost, administrative expenses, interest and depreciation.

Table 5.8
Actual Expenses Trend of NTC

S. N.	Types of cost	Fiscal year				
		2060/61	2061/62	2062/63	2063/64	2064/65
1.	Employees cost	229.25	260.47	326.05	397.86	759.93
2.	Operating & maintenance	181.06	269.32	284.75	303.49	385.85
3.	Administrative expenses	115.18	221.90	127.86	163.94	196.46
4.	Interest	280.55	329.63	381.42	333.98	326.98
5.	Depreciation	483.79	588.71	667.09	764.66	786.86
	Total	1290.33	1670.03	1787.17	1963.33	2456.08
	% of increase on the previous year based	125.36	129.42	107.01	109.86	125.1

Source: Annual Report of NTC.

The above table shows the various types of cost of the NTC of every fiscal year. The last column indicates the expenses increasing trend in every FY based on previous FY. Also this table shows the administrative expenses are low and depreciation expenses is high in the corporation. The above table can also be show in the form of diagram as follows:

Fig: 5.1
Expenses trend of NTC

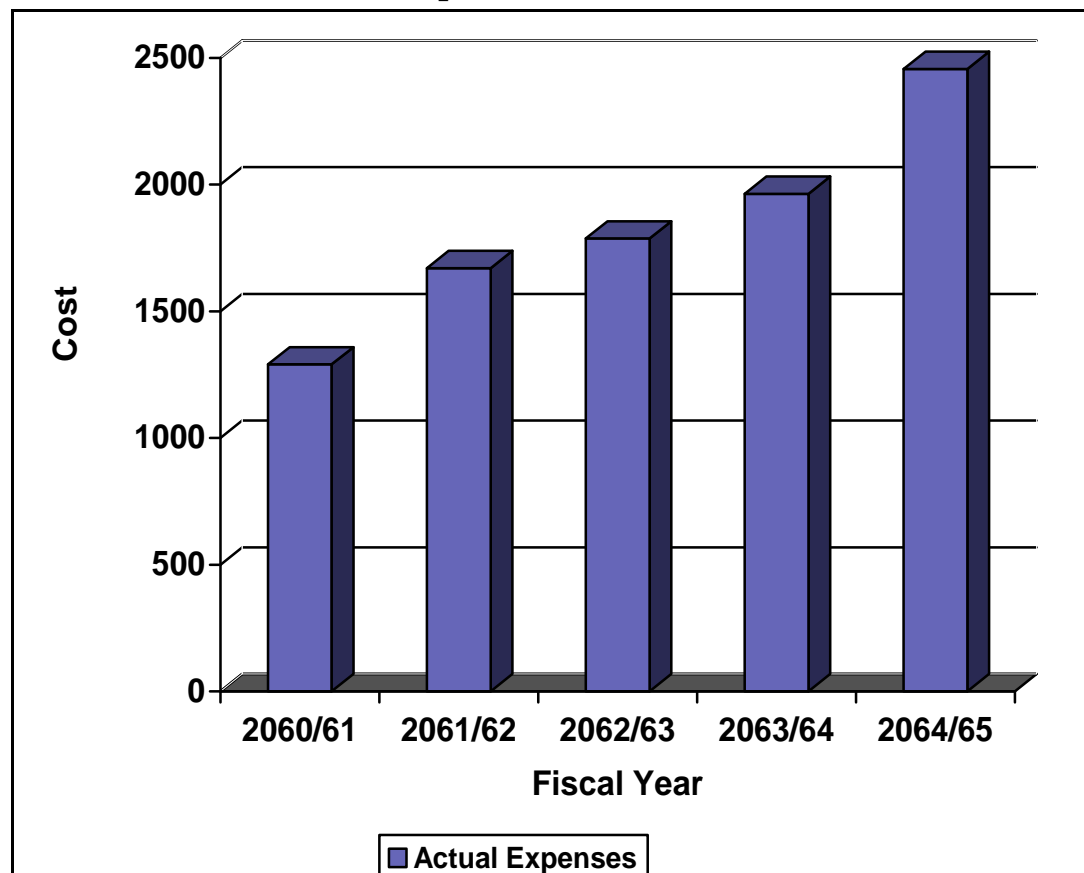


Figure 5. 1

The above diagram shows that the expenses are going on increasing trend. Here the least square method can also be used to analyze the actual expenses trend of the possible future expenses. A straight line trend by this method will show the relationship between time of the year and actual expenses of that relevant year. To fit the straight line trend the time factor is considered as dependent factor upon time.

Table 5.9
Time Series Analysis

FY	Actual overhead expenses (Y)	X	X ²	XY
2060/61	1290.33	-2	4	-2580.66
2061/62	1670.03	-1	1	-1670.03
2062/63	1787.17	0	0	0
2063/64	1963.33	1	1	1963.33
2064/65	2456.08	2	4	4912.16
Total	∑Y=9166.94	∑X=0	∑X ² =10	∑XY=2624.8

* FY 2062/63 is assumed as based year.

By the straight line equation $Y_c = a + bX$

Where,

$$a = \frac{\sum Y}{N} = \frac{9166.94}{5} = 1833.39$$

$$b = \frac{\sum XY}{\sum X^2} = \frac{2624.813.887}{10} = 262.48$$

$$Y_c = 1833.39 + 262.48x$$

The trend line equation shows the positive expenses figure for the future. Thus the expenses will be increased by 262.48 million every year, if the overhead expenses trend of the past year continues in the future.

We can estimate the actual expenses for the FY 2060/61 by using this trend line equation.

Then, putting the value of X in the above equation we get,

$$\begin{aligned} Y &= 1833.39 + 262.48 \times 3 \\ &= 142620.83 \text{ (million)} \end{aligned}$$

If this trend does not change, the possible expenses for 2060/61 will be Rs. 2620.83 million.

Next, we analyze the actual expenses of employees cast, operating and maintenance cost and administrative expenses of the FY 2064/65 from the following tables.

Table 5.10
Actual Employee Cost of NTC for FY 2064/65

Rs. in Million

S.N.	Particulars	Amount	Percentage
1.	Salaries & wages	3590.45	29.11
2.	PFO contribution	27.04	2.05
3.	Earned leave salary	44.64	2.25
4.	Cloth allowances & others	169.82	15.82
5.	Overtime allowances	56.00	2.43
6.	Medical expenses	48.73	3.76
7.	Pension and gratuity	62.53	14.03
8.	Incentive	120.97	13.76
9.	Bonus	180.67	16.79
Total		1069.44	100.00

Source: Annual Report of NTC.

The above table shows the actual employee's cost behavior. Here in this corporation, the employee's cost-expenses are high in salaries. Also the cost expenses is high is clothing allowance, pension and incentives.

Table 5.11
Actual Operation and Maintenance Cost of NTC FY 2064/65

Rs. in Million

S.N.	Particulars	Amount	Percentage
1.	Office equipment	89.61	6.17
2.	Building	16.98	5.18
3.	Plants	113.14	39.79
4.	Power, heating and lighting	125.02	23.67
5.	Fuel for vehicles	23.17	5.24
6.	Vehicle maintenance	17.65	4.72
7.	Freight and carriages	25.68	0.65
8.	International channel rent	162.75	14.57
Total		574	100.00

Source: Annual Report of NTC.

The above table shows the actual operation and maintenance cost of NTC of FY 2064/65 in this corporation has highly incurred O and M cost in plants than others.

Table 5 12
Actual Employee Cost of NTC for FY 2064/65

Rs. in Million

S.N.	Particulars	Amount	Percentage
1.	Traveling expenses	30.62	10.00
2.	Rent, rate, taxes	32.64	16.34
3.	Meeting fees/ expenses	2.71	0.74
4.	Printing and stationary	27.43	11.93
5.	Advertisement	8.86	3.98
6.	Bank charge	2.11	1.08
7.	Training expenses	18.57	22.65
8.	Entertainment	3.17	1.07
9.	Office furnishing	2.84	1.60
10.	Insurance	43.02	7.78
11.	Audit fee and expenses	1.40	0.53
12.	Bad debts written off	0.66	0.27
13.	Provision for doubtful debts	21.07	24.18
14.	special charge	124.37	-
15.	Commission	9.91	10.95
16.	Postage	1.20	0.59
17.	Subscription and donation	1.49	1.83
18.	Legal and professional fees	0.46	0.18
19.	Expenses on lost of goods	42.08	9.03
20.	Royalty / rural dev. Fund	405.27	5.09
21.	Miscellaneous expenses	14.18	10.26
22.	Obsolete and damage fixed	2.97	2.34
23.	License fee	17.58	-
Total		814.34	100.00

Source: Annual Report of NTC.

After analyzing the actual overhead budget of the NTC, the following are pointed out. They are as follows:

1. The overhead is going on in increasing trend in each fiscal year.
2. Least square method shows the increasing trend of the overhead expenses of NTC.
3. The administrative expenses is low than other expenses.
4. The depreciation expenses is high than other expenses.

5.5 Manpower Planning of NTC

Man power planning or human resource planning is not an easy rather complex task for the organization. However the well planned human resource is the wealth of the organization. Therefore the comprehensive profit planning includes the human resource planning.

The budget points out the estimate of manpower requirements necessary to produce the service. To apply the concept of profit planning in public utility, effective planning and controlling man power cost is essential. Human resource or manpower planning includes personal need requirements, training, job description and evaluation, performance appraisal, union negotiation and wage and salary administration.

There is no systematic approach of manpower planning in NTC. NTC has fixed salaried employees and few daily wage workers and some contract workers are employed in the corporation. These daily wage workers are allowed to work if the necessary is felt. They have no any guarantee of their work. The staffs who are employed permanently are paid on the basis of time not on the basis of productivity. The productivity of daily wage worker who work in contract are completely neglected by the corporation.

The following table shows the planning of human resources of NTC in current year.

Table 5.13
Manpower Allocation (Man power Plan)

S.N.	Name of office	Technical	Administration	Total
1.	Head office	88	502	590
2.	Kathmandu region	1263	421	1684
3.	Biratnagar region	524	174	698
4.	Birgunj region	384	128	512
5.	Bhairahawa region	377	125	502
6.	Nepalgunj region	249	83	332
7.	Dhangadhi region	210	70	280
8.	Development Dept.	408	136	544
Total		3503	1639	5142

Source: NTC Head Office, Bhadrakali Plaza, Kathmandu

The above table shows that NTC has a total of 5142 employees to undertake the activities of the corporation. Those staff is employed in the various regions all over the country. The total manpower is classified as technical and administrative. There are altogether 553 offices level staff and 4589 assistant staff. About 40 percent of NTC's officer is working under planning and administration in the central office.

5.6 Capital Expenditure Budget of NTC

Capital expenditure is the process of planning and controlling the long term and short term expenditures of expansion and contraction of investments in operating (fixed) assets. A capital expenditure is the use of funds to obtain operational assets that will help to earn future revenues or to reduce the future costs. Capital expenditure includes include such fixed assets as property, plan equipments, major renovations and patents. In capital expenditure projects, funds are tied up for relatively long period of time. Capital expenditure budget enables management to plan the amount of resources that should be invested in capital additions. A major issue in controlling the actual expenditures is consistent with the plans and that funds are available when the expenditures are incurred.

NTC prepares both short-term and long-term capital expenditure budget. But the long-term budget is not prepared in detail. It is not published for external use, only the concerned corporation and analyze and long-term capital expenditure budget, in case of NTC, capital expenditure plan is prepared and finalized by the general manger of the NTC. Evaluation is made by planning manager with the help of finance department and account department. The purpose of plant and machinery, heart and lighting, office equipment, spare parts, furniture and fixture, vehicles and other various constructions of buildings, electronic equipments, repair and maintenance etc. all are included in the capital expenditure budget. The following table shows the budgeted and actual capital expenditure budget of NTC for the FY 2064/65

Table 5.14
Budgeted and Actual Expenditure Budget of NTC.

S.N	Code No.	Description	Budget	Actual	Achievement
1.	0103	Plant and machinery	1374.72	941.88	68.51
2.	0104	Heating and lighting	18.85	5.58	26.53
3.	0105	Furniture and fixture	6.50	6.50	1.00
4.	0106	Office equipment	63.72	31.66	49.69
5.	0107	Vehicles	25.10	4.08	16.25
6.	0301	Spare parts	121.23	48.77	40.23
7.	0304	Tools	19.50	2.84	14.56
8.	3002/0	Administrative expenses	57.12	40.71	71.27
9.	08	Repair & maintenance equipment	29.00	17.00	58.62
10	09	Repair & maintenance equipment	40.5	23.71	58.54
		Total	1686.74	1082.2	64.15

Source: Annual Report of NTC.

5.7 Cash Budget of NTC

The planning and controlling of the cash inflows, cash out flows and related financing is important in an enterprise. Cash budget is not as expenses budget, it is a plan of cash flows, effective way to control the cash flows, and asses cash inflows, cash out flows, opening and closing position of cash balance of the enterprises. A basic objective is to plan the cash flow of the enterprise in determined future borrowing and future investment. Planning cash flow presents the need of cash financing when deficit exists and the need of excess cash investment to profitable use. The cash budget is prepared with the help of other functional budget such as the sales budget, production budget, material purchase budget, expenses budget and the capital expenditure budget. The cash budget is necessarily prepared at the end of the annual planning cycle along with the planned income statement and balance sheet. A cash profit planning and control program (CPPCP) establishes the foundation for a realistic cash budget. There must be a balance between available cash and cash demanding activities operation, capital expenditure and so on.

Many enterprises do not develop long-term and short-term plan about their flows. NTC prepares short-term cash plans for one year. There are mainly two sources of cash inflows in NTC. They are the internal and external source.

- a) Internal source are: (i) collection of revenue, (ii) inter administration, (iii) subscribers deposit collection of VAT+SER charge, (IV) other incomes.
- b) External sources are: (i) World Bank loan, (ii) Korean loan, (iii) Danish grant loan, (iv) NDF loan, (v) Japanese grant, (vi) Belgium loan.

The cash out flows sectors of NTC are as follows: (i) Operating and maintenance expenses, (ii) re-payment of liabilities, (iii) payment of VAT and SER charge, (iv) capital expenditure, (v) investment, (vi) Interest paid on long-term loan.

The following table presents the budgeted and actual amount of cash inflows and outflows and balance of NTC for the F|Y 2064/65.

Table 5.15
Budgeted and Actual Cash Inflows and Outflows of NTC FY 2064/65
(Rs. in Million)

Particulars	Budgeted	Actual
A. Operating cash balance	3517.35	3909.55
Add: receipts	-	-
1. Internal Sources	-	-
a) Collection of revenue	3705.75	3752.91
b) Inter-administration	1250.00	850.00
c) Subscribers deposit	287.47	225.60

d) Collection of VAT and SER charge	840.00	831.00
e) Maturation of govt. securities	30.30	60.30
f) Other income	350.00	330.00
B. Total internal sources	6463.52	5719.81
2. External Sources		
a) World bank	200.00	9960.00
b) Danish grant loan	-	-
c) NDF loan	-	-
d) Japanese grant	-	-
e) Korean loan	78.72	-
f) Belgium loan	300.00	48.00
C. Total external sources	578.72	147.60
D. Total Cash available payments	10559.59	9770.96
1. Total Construction and purchase		
a) Internal	3119.36	1194.87
b) External	578.72	147.61
2. Operating expenses	1051.73	856.75
3. Repayment of liabilities	2659.75	2728.84
4. Investment	280.00	135.00
5. Payment of VAT and SER charge	840.00	737.55
E) Total Cash payments	8529.56	5800.07
Closing balance of cash	2030.03	3970.89

The above table shows that the major source of cash receipt is sales revenue than other incomes. Actual cash receipt is less than budgeted cash receipt is less than budgeted cash receipts in the internal source. It shows major payment in repayment of liabilities and construction and purchases. The closing balance of the NTC is positive. This shows that the corporation earns good profit in future, if the monopoly remains same as the present situation.

5.8 Profit and Loss account of NTC

Profit is considered as one major element of each of every business endeavor for survival, further development and fulfilling social expectation. In modern business, efficiency and effectiveness of any business organization or management are measured from earning power of profit. However, the concept of profit is changing time to time. At present reasonable profit approach has been becoming at a strong position. NTC also prepares to know the possible future trend of profit or loss. It shows the final conclusion of operation on an accounting year. At the end of each accounting year, the financing department

prepares the income statement of NTC. NTC's operational position is in a good condition. Every year NTC is going on profit.

Under presented table shows the profit pattern of NTC for five years from FY 2060/61 to 2064/65.

Table 5.16
Profit Pattern of NTC

(Rs. in million)

FY	Net profit	Profit% based on previous year
2060/61	953.90	123.23%
2061/62	1154.34	121.00%
2062/63	1856.80	160.85%
2063/64	1722.52	92.77%
2064/65	1590.44	92.33%

Source: Income statement of NTC.

We can see from the above table that the profit pattern of NTC is fluctuating. The profit decreases in FY 2061/62 and again it rises in FY 2062/63 and again it is decreasing trend in FY 2063/64 and 2064/65. It earns maximum profit in FY 2062/63.

5.9 Balance Sheet of NTC

The projected balance sheet reports the effect of the plan of operation on the assets. Balance sheet is also a financial tool, which shows the overall financial condition of a firm. It is a statement of assets and liabilities, which indicates the strength and weakness of the company.

Thus, it shows the overall condition of a company. It is prepared at the end of each FY. NTC prepares the projected balance sheet in advance for coming year.

Now, we analyze the actual balance sheet of NTC for the fiscal year. The detail balance sheet is shown in appendix-5. The balance sheet of NTC represents the position of assets, liabilities, reserve position, loan etc.

Table 5.17
Actual, Summarized Balance Sheet of NTCFY 2060/61 to 2064/65
(Rs. in Million)

Year ended Ashad	2060/61	2061/62	2062/63	2063/64	2064/65
Total fixed assets	6187.35	6659.47	6917.97	7990.84	8272.65
Total Current Assets	4879.42	6188.69	9129.50	10539.28	12058.45
Total assets	11066.77	12848.16	16047.47	18530.12	20358.10
Total equity & reserve	5546.79	6710.40	8554.37	10979.12	12819.24
Net long term debt	2346.79	2757.24	29903.38	1928.98	1076.59
Total liabilities	2747.54	2538.64	352.14	4312.71	4902.24
Total equity & liabilities	11066.77	12848.16	16047.47	18530.12	20358.10

Source: Annual Report of NTC.

The above table shows the actual summarized b/s of NTC from FY 2060/61 to 2064/65. The balance sheet shows that the corporations' final structure is not properly structured because in all FY net long-term debts are below 30 percent of net worth and current liabilities are also in very high amount. The fixed assets are in decreasing trend in each FY to the proportion of total assets. Cash and bank balance is high in spite of decreasing the amount of accounts receivable increased debtors. It denotes the weakness of NTC to collect the debt from its customers. High cash and bank balance in the b/s denotes that it is not a good sign for NTC activities.

5.10 Cost Volume Profit Analysis

Cost-volume-profit analysis includes the related concepts of (a) contribution analysis and (b) break even analysis. Both analysis rests upon the concept of cost variability (i.e. fixed or variable expenses budget) contribution analysis involves a series of analytical techniques to determine and evaluate the effects on profits of changes in sales volume, sales price, fixed expenses and variable expenses.

i.e., Contribution margin = Revenue - Variable cost

Break even analysis focuses on the break even point. This is usually graphed to show the relationship between revenue, fixed expenses and variable

expenses fixed expenses divided by the contribution margin equals break even sales volume.

The analysis of relationship among the cost of production, the volume of the product and fixed cost is known as cost-volume-profit analysis, CVP analysis is an analytical management tool for studying the relationship between volume, cost, price and profit. It shows which level of activity is necessary to be break even of to generate certain amount of profit.

According to the cost behavior, cost can be broadly divided into two ways one is the fixed cost and the other is variable cost. Fixed cost remains fixed in total for a certain range of output for a certain time. It is capacity cost such depreciation, taxes, insurance, salary etc. variable cost change directly with change in output but remains constant in per unit basis. Those expenses that are neither fixed nor variable in nature are known as semi-variable costs.

Cost-volume-profit analysis of NTC is based on certain assumption which is as follows:

1. Miscellaneous income which is a non-operating income is excluded from CVP relationship.
2. Concept of variability is valued. Therefore, cost can be classified as fixed and variable.
3. There is no assumption or supposition of telephone line inventory.
4. Cost-volume structure is based on the accounting data of FY 2064/65

Table 5.18
Planning Profit with Cost-Volume-Profit Analysis of NTC

Particulars	Behavior	Amount based on F/Y 2064/65
Employees cost	Fixed	759.93
Operating and maintenance cost	Variable	385.85
Administrative exp.	Fixed	196.46
Interest	Fixed	326.98
Depreciation	Fixed	786.86
Total Cost		2456.08

Total sales units = 33914 lines
 Total sales revenue = Rs. 4902480
 Total variable cost = Rs. 385847
 Total Fixed cost = Rs. 207015

a) Variable Cost Volume Ratio (V.V.Ratio)

The ratio shows the proportion of variable cost and sales revenue. The following formula is used to calculate the V.V.Ratio.

$$\text{V.V Ratio} = \frac{\text{Variable cost}}{\text{Sales Revenue}} = \frac{385847}{4902480} = 0.078 \text{ or } 8\%$$

b) Profit Volume Ratio (P.V. Ratio)

This ratio shows the proportion of contribution margin left for fixed cost and profit per Rs. of sales. The formula is

$$\text{P.V. Ratio} = 1 - \frac{\text{Variable Cost}}{\text{Sales Revenue}} = 1 - \frac{385847}{4902480} = 0.92 \text{ or } 92\%$$

With the help of this P.V. Ratio, we can calculate the break even point (BEP) of NTC for FY 2061/62.

$$\text{BEP in Rs} = \frac{\text{Fixed Cost}}{\text{P.V. Ratio}} = \frac{207015}{0.92} = \text{Rs. } 225016.3$$

This result shows that the NTC will be break even when the sales revenue will be Rs.

$$\begin{aligned} \text{Profit} &= (\text{sales revenue} \times \text{P.V. Ratio}) - \text{Fixed Cost} \\ &= (4902480 \times 0.92) - 207015 \\ &= 4303266.6 \end{aligned}$$

The NTC is in break even point or it has operated above breakeven point under the present cost structure. It indicates the satisfactory position of NTC in terms of cost-volume-profit analysis.

C.V.P. analysis of FY 2060/61 (in thousand)

Sales units = 30538 lines
 Total Sales revenue = Rs. 2677020
 Total Variable Cost = Rs. 362765
 Total Fixed cost = Rs. 58436

$$\text{Profit Volume ratio} = 1 - \frac{\text{Variable Cost}}{\text{Sales Revenue}} = 1 - \frac{362765}{2677020} = 0.85 \text{ or } 85\%$$

85%

$$\text{Break even point in Rs.} = \frac{\text{Fixed Cost}}{\text{Profit - Volume - Ratio}} = \frac{58436}{0.85} = \text{Rs. } 68748$$

$$\text{Profit} = (\text{sales revenue} \times \text{P.V. Ratio}) - \text{Fixed Cost}$$

$$= (2677020 \times 0.85) - 58436$$

$$= \text{Rs. } 2217031$$

C.V.P analysis of FY 2058/59 (in thousand)

Sales units = 33426 lines

Total Sales revenue = Rs. 3310680

Total Variable Cost = Rs. 714041

Total Fixed cost = Rs. 95349

$$\text{Profit Volume ratio} = 1 - \frac{\text{Variable Cost}}{\text{Sales Revenue}} = 1 - \frac{714041}{3310680} = 0.78 \quad \text{or}$$

78%

$$\text{Break even point in Rs.} = \frac{\text{Fixed Cost}}{\text{Profit - Volume - Ratio}} = \frac{95349}{0.78} = \text{Rs. } 122242.3$$

Profit = (sales revenue \times P.V.Ratio) - Fixed Cost

$$= (3310680 \times 0.78) - 95349$$

$$= \text{Rs. } 2486981.4$$

C.V.P analysis of FY 2059/60 (in thousand)

Sales units = 32845 lines

Total Sales revenue = Rs. 4321050

Total Variable Cost = Rs. 1568345

Total Fixed cost = Rs. 125638

$$\text{Profit Volume ratio} = 1 - \frac{\text{Variable Cost}}{\text{Sales Revenue}} = 1 - \frac{1568345}{4321050} = 0.64 \quad \text{or}$$

64%

$$\text{Break even point in Rs.} = \frac{\text{Fixed Cost}}{\text{Profit - Volume - Ratio}} = \frac{125638}{0.64} = \text{Rs. } 196309.37$$

Profit = (sales revenue \times P.V.Ratio) - Fixed Cost

$$= (4321050 \times 0.64) - 125638$$

$$= \text{Rs. } 2639834$$

C.V.P analysis of FY 2060/61 (in thousand)

Sales units = 40561 lines

Total Sales revenue = Rs. 4534240

Total Variable Cost = Rs. 1635460

Total Fixed cost = Rs. 165368

$$\text{Profit Volume ratio} = 1 - \frac{\text{Variable Cost}}{\text{Sales Revenue}} = 1 - \frac{1635460}{4534240} = 0.64 \quad \text{or}$$

64%

$$\text{Break even point in Rs.} = \frac{\text{Fixed Cost}}{\text{Profit - Volume - Ratio}} = \frac{165368}{0.64} = \text{Rs.}258387.5$$

$$\begin{aligned} \text{Profit} &= (\text{sales revenue} \times \text{P.V.Ratio}) - \text{Fixed Cost} \\ &= (453420 \times 0.64) - 165368 \\ &= \text{Rs. } 273645.6 \end{aligned}$$

The above calculation of CVP for FY 2064/65 shows that the NTC will be in break even when the SR will be Rs. 225016.3 thousand. At present cost structure the sales revenue of NTC is Rs. 4902480 which is above the break even which means NTC is generating surplus. It indicates the satisfactory position of NTC in terms of cost-volume-profit analysis. With the help of above computed accounting calculation and budgeted sales revenue, we can calculate the expected profit loss for the coming FY 2064/65. If the present cost structure remains constant and sales revenue will be according to the budget then the profit for FY 5-2060/61 will be Rs. 4303266.6. This analysis shows the NTC's future earning trend will be encouraging if it can increase its revenue.

5.11 Financial Performance Analysis of NTC by Applying the Tool of Ratio Analysis

Financial analysis is the most essential factor to know the performance of the organization which presents actual situation of the organization. It is a helpful tool which helps to measure the financial efficiency, which is one of the significant elements to achieve the goal of any enterprise. It is necessary to maintain financial strength and reduce financial weakness of any enterprise to encourage financial efficiency. Since financial soundness is vital demand to achieve the goal, management of the organization should know in which condition the organization should know in which condition the organization is running. If the present condition in which the corporation is running is assessed then the management can predict the future financial position and can take corrective action before it fails. Corrective action in time helps to improve financial position is considered to be an important action. So each enterprise needs to analyze its financial position to acquire knowledge of the financial position of the corporation whether it is running effectively or not.

Ratio analysis is a widely used tool of financial analysis, the term 'Ratio' refers to the numerical or quantitative relationship between two variables. A ratio is calculated by dividing one item of the relationship with the other based. In other word, ratio is indicated quotient of two mathematical expression and relationship between or more things.

Ratio analysis is a financial tool that is used to measure the financial position of NTC that makes a relationship between the figures of balance sheet and helps to analyze the major strength and weakness of NTC. Financial analysis can be done by applying different kinds of ratios which are as under.

- 1) Profitability ratio
- 2) Turnover/activity ratios
- 3) Liquidity/financial ratios
- 4) Leverage ratios

In spite of calculating all the ratios, some major ratios that are also used as indicators of HMG, Ministry of finance to analyze the financial position of PEs are calculated here.

5.11.1 Profitability Ratios

Profit position of NTC can be found by applying the profitability ratios. Profitability ratios are of utmost important for a concern. These ratios are calculated to enlighten the end result of business activities which is the sole criteria of the overall efficiency of a business concern. The following are the important profitability ratios of NTC.

5.11.1.1 Net Profit Ratio

Net profit ratio shows the relationship between net profit and sales. In the following table we have presented the five years data of net profit and sales revenue of NTC to calculate the net profit to sales ratio.

Table 5.19
Net Profit Ratios of NTC FY 2057/58 to 2061/62

FY	Net profit	Actual sales	Ratio
2060/61	953.9	2677.02	0.3563 or 35.63%
2061/62	1154.34	3310.68	0.3488 or 34.48%
2062/63	1856.80	4321.05	0.4297 or 42.97%
2063/64	1722.52	4534.24	0.3977 or 30.77%
2064/65	1590.44	4902.48	0.3244 or 32.44%
Average	1455.90	3949.09	0.3686 or 36.86%

Source: Annual Report of NTC

The above table indicates that NTC is operating under the net profit position over the five years. The net profit ratio of NTC shows higher ratio, which is better than lower ratio, high net profit is a sign of good financial position higher ratio shows better efficiency of the concern.

5.11.1.2 Operating Ratio

Operating ratio shows the relationship between operating expenses/profit and sales. Highest the operating ratio indicates the operating ratio indicates the higher operating profit .operating Ratio can be calculated as below:

Operating profit ratio = operating profit

—————
Net sales

The NTC's operating profit can be presented in the following table for FY 2060/61 to 2064/65.

Table 5. 20
Operating profit ratio of NTC (FY 2060/61 to 2064/65)

FY	Net profit	Actual sales	Ratio
2060/61	1573.75	2677.02	0.5879 or 58.79%
2061/62	1893.87	3310.68	0.5720 or 57.20%
2062/63	2735.50	4321.05	0.6331 or 63.31%
2063/64	2618.67	4534.24	0.6030 or 60.30%
2064/65	2452.67	4902.48	0.5003 or 50.03%
Average	2254.87	3949.09	0.5710 or 57.10%

Source: Annual Report of NTC

5.11.1.3 Return on Total Assets Ratio

Return on total Assets shows the relationship between total assets and net profit. It is calculated to measure the profit after tax against the amount invested in total assets to as certain whether the assets being utilized properly or not, the formula used is:

$$\text{ROA} = \frac{\text{Net Profit}}{\text{Total Assets}} \times 100$$

Table 5.21
Computation of Return on Total Assets (FY 2060/61 to 2064/65)

FY	Net Profit	Actual Sales	Ratio
2060/61	953.90	6130.52	0.1556 or 15.56%
2061/62	1154.34	6596.47	0.1750 or 17.50%
2062/63	1856.80	6807.90	0.2727 or 27.27%
2063/64	1722.52	7869.72	0.2189 or 21.89%
2064/65	1590.44	8151.53	0.1951 or 19.51%
Average	<u>1455.60</u>	7111.23	0.2047 or 20.47%

Source: Annual Report of NTC

Higher the ratio, higher will be the return on total assets for the firm. From the above table, we analyze that in the FY 2060/61, 2061/62 and 2064/65, the corporation has not covered even the average rate of return. This is not satisfactory. The average rate of return on total assets is 20.47 percent which is affected by the higher rate of return in FY 2062/63. Therefore, the rate of return on total assets of NTC cannot be said satisfactory.

5.11.1.4 Return on Capital Employed Ratio

Return on capital employed ratio is an indicator of the earning capacity of capital employed in the business. By capital employed, we mean not only the equity share capital, but also in addition to that the various fixed liabilities representing borrowed amount as also capital reserves, revenue reserves, undistributed profit as reduced by fictitious assets. The ratio is calculated as follows:

$$\text{Return on capital employed} = \frac{\text{Net Profit}}{\text{Capital Employed}} \times 100$$

Calculation of return on capital employed ratio of NTC for last five fiscal year 2060/61 to 2064/65 is as follows.

Table 5.22
Return on Capital Employed of NTC (FY 2060/61 to 2064/65)

FY	Net profit	Capital Employed	Ratio
2060/61	953.90	8592.23	0.1110 or 11.10%
2061/62	1154.34	10309.52	0.1119 or 11.19%
2062/63	18.56.80	12526.33	0.1482 or 14.82%
2063/64	1722.52	14217.41	0.1212 or 12.12%
2064/65	1590.44	15455.96	0.1029 or 10.29%
Average	1455.60	12220.29	0.1191 or 11.91%

Source: Annual Report of NTC.

A project earning higher return is favored. The above table shows that the ratios reflect the overall efficiency with which capital is used. Thus this ratio provides helpful for making capital budgeting decisions in the NTC. This ratio is also helpful for NTC as the total capital employed rate of NTC is above than 10 percent every fiscal year for last five years.

5.11.2 Activity/ Turnover Ratio

These ratios are very important for a concern to judge how well facilities at the disposal of the concern are being used or to measure the effectiveness with which a concern uses its resources at its disposal. These ratios are usually calculated on the basis of sales or cost of sales and are expressed in integers

rather than as a percentage. Such ratios should be calculated separately for each type of asset. Higher the turnover ratio, the better the profitability and use of capital or resources will be. The following are the important turnover ratios:

5.11.2.1 Capital Turnover Ratio (Sales to Capital Employed)

This ratio shows the efficiency of capital employed in the business by computing how many times capital employed is turned over in a stated period. The ratios are as curtailed as follows.

$$\text{CTR} = \frac{\text{Sales}}{\text{Capital Employed (i.e. Shareholders fund + long - term liabilities)}}$$

The following table presents the capital turnover ratio of NTC for last five years

Table 5.23
Capital Turnover Ratio of NTC (FY 2060/61 to 2064/65)

FY	Actual Sales	Capital Employed	Ratio
2060/61	2677.02	8592.23	0.3116
2061/62	3310.68	10309.52	0.3211
2062/63	4321.05	12526.33	0.3450
2063/64	4534.24	14217.41	0.3189
2064/65	4902.48	15455.96	0.32172
Average	3949.09	12220.29	0.3232

Source: Annual Report of NTC

The higher the ratio, the greater are the profits. A low capital turnover ratio should be taken to mean that sufficient sales are not being made and profit is lower. The above table shows that the ratio is just likely constant of we say that it is very low. This indicates that sufficient sales are not being made and profits are very low. Therefore NTC should increase the actual sales to increase the profitability.

5.11.2.2 Total Assets Turnover Ratio

The ratio expresses the number of times total assets are being turned over in a stated period. This ratio shows how well the assets are being used in the business. It is calculated as under:

$$\text{ATR} = \frac{\text{Sales}}{\text{Total assets}}$$

Table 5.24
Total assets turnover Ratio of NTC

FY	Actual Sales	Capital Employed	Ratio
2060/61	2677.02	6130.52	0.4367
2061/62	3310.68	6596.47	0.05019
2062/63	4321.05	6807.90	0.6362
2063/64	4534.24	7869.72	0.5762
2064/65	4902.48	8151.53	0.6041
Average	3949.09	7111.23	0.5553

Source: Annual Report of NTC

The higher the ratio is an indicator of overtrading of total assets while a low ratio reveals idle capacity. The above table shows that ratio are going in increasing trend in each fiscal years which shows a good a good sing for the corporation.

5.11.2.3 Working Capital Turnover Ratio

This ratio shows the number of times the working capital is turned over in a stated period. It is calculated as follows:

$$\text{WCTR} = \frac{\text{Sales}}{\text{Net working capital (current assets-current liabilities)}}$$

Table 5.25
Working Capital Turnover Ratio of NTC (FY 2060/61 to 2064/65)

FY	Actual Sales	Capital Employed	Ratio
2060/61	2677.02	2404.88	1.11:1
2061/62	3310.68	3650.05	0.914:1
2062/63	4321.05	5608.36	0.77:1
2063/64	4534.24	6226.57	0.73:1
2064/65	4902.48	7183.31	0.68:1
Average	3949.09	5014.63	0.79:1

Source: Annual Report of NTC

The higher is the ratio, the lower is the investment is working capital and the greater are the profits. However, a very high turnover of work of capital is a sing of over trading and may put the concern into financial difficulties. On the other hand, a low w/c turnover ratio indicates that w/c is not efficiently utilized. The above table shows that the ratios are going in decreasing trend and net working capital are goring in increasing trend, this means that NTC earns good profit and working capita is not efficiently utilized.

5.11.3. Liquidity/ Financial Ratios

There ratios are calculated to judge the financial position of the concern from long -term as well as short-term solvency pointy of view. Essentially these nations are comparison of short-term obligation with the resources available and measured by current ratio and quick ratio. In case of NTC we use only quick ratio to judge its liquidity position.

5.11.3.1 Quick (or acid test of Liquid) Ratio

This is the ratio of liquid assets to liquid liabilities 1.1 ratios is considered ideal ratio for a concern because it is wise to keep the liquid assets at least equal to the liquid liabilities at all times. Liquid assets are those assets which are readily converted into cash. Liquid liabilities include all items of current liabilities except bank over draft.

$$\text{Quick Ratio} = \frac{\text{Total current assets- Inventories}}{\text{Total current liabilities}}$$

The quick ratio of NTC for the list five years are presented below.

Table 5.26

Quick Ratio of NTC (FY 2060/61/2064/65)

FY	Actual Sales	Capital Employed	Ratio
2060/61	4628.40	2474.54	1.87:1
2061/62	5816.12	2534.64	2.29:1
2062/63	8732.12	3521.14	2.48:1
2063/64	10080.85	4312.71	2.34:1
2064/65	1160.26	4902.14	2.37:1

Source: Annual Report of NTC

The above table shows good or strong liquidity position of NTC. The ratio between quick assets and current liabilities should be 1:1 and theoretically it is the best ratio. Actually NTC has high liquidity ratio however we can say it has sound liquidity position. The quick ratio shows the ability to pay immediate current debt from quick assets. Analyzing the quick ratio of NTC, we can conclude that management of NTC is not ready to bear any risk so; they have maintained the liquidity position more than standard. The overall liquid will use less if they do not use it properly.

5.11.4 Leverage Ratio

Leverage refers to an increased means of accomplishing some purpose. In financial management, it refers to employment of funds to accelerate rate of return to owners. It may be favorable or unfavorable; Deb equity ratio, debt to capital ratio and interest coverage ratio are included in leverage ratio. Now I am

going to calculate debt ratio of NTC. Total debt includes short-term and long term borrowing financial institutions.

5.11.4.1 Total Debt Ratio

Several debt ratios may be used to analyze the long term solvency position of a corporation. The NTC may be interested in knowing the proportion of interest bearing debt in the capital structure. The following table presents the total debt ratio of NTC for FY 2060/61 to 2064/65.

$$\text{Total debt ratio} = \frac{\text{Total debt}}{\text{Capital employed (Total debt + Net worth)}}$$

Table 5.27
Total Debt Ratio of NTC (FY 2060/61 to 2064/65)

FY	Total Debt	Total debt+Net worth	Ratio
2060/61	2924.84	8471.59	34.50%
2061/62	3435.24	10145.64	33.86%
2062/63	3702.39	12256.76	30.21%
2063/64	3050.78	14029.90	21.24%
2064/65	2076.59	14895.83	13.94%
Average	3037.90	11959.94	26.85%

Source: Annual Report of NTC.

The above table shows that the debt ratio of NTC is not satisfactory. The ratios are below than 35 percent of capital employed in each fiscal year. This means that NTC does not want to take risk.

5.12 Variance Analysis

The difference between standard cost and actual cost is variance. Variances are deemed to be favorable and unfavorable, depending on whether they reflect performance above or below standard. Variance analysis or comparison of actual results with planned budget goal been emphasized as an integral part of control process. A basic feature of performance reports is the reporting of variances between actual results and budgeted goals. If a variance is significant a careful management study should be made to determine the underlying causes. There are numerous ways to investigate variance to determine the underlying causes.

- Direct observation
- Investigation by staff groups
- Internal Audits
- Special Studies
- On the spot investigation by line managers.

- Analysis of work situation including the flow of work, co-ordination of activities, effectiveness of supervision and other prevailing circumstances.

Variance Analysis

Variance analysis involves a mathematical analysis of two sets of data in order to gain insight into the underlying causes of variance, one amount is treated as the base standard of reference point. Variance analysis has wide application in financial reporting. It is frequently applied in following situations.

- Investigation of variance between actual result and standard costs. The standard costs are used as the base.
- Investigation of variance between actual of the current period and the actual results of prior period. The prior period is considered as the base.
- Investigation of the variances between actual result and planned goals reflected in the profit plan. The planned goals are used as the base.

In each these situation, variance analysis involves the some analytical approach. The only difference is in the data being analyzed.

The following steps are involved in analyzing variance.

- Setting standards
- Measurement of performance.
- Analyzing variances.
- Taking corrective action

5.12.1 Sales Variance of NTC (in unit)

When actual sales are high than budgeted sales, it is known as favorable variance and such as variance is usually a sign of efficiency of the NTC and vice-versa. NTC has not well developed scientific system of pre-determining standard regarding various expenses and profit. Generally it can be seen that it has ascertained the deviations between budgeted and actual sales and target expenses and actual expenses.

The below table shows the sales variance of NTC for the last five fiscal years.

Table 5. 28
Sales Variances of NTC (Telephone Lines)

FY	Budgeted sales	Actual Sales	Variances	Remark
2060/61	36997	30538	6459	Unfavorable
2061/62	52007	33426	19518	Unfavorable
2062/63	41527	32845	8527	Unfavorable
2063/64	42570	40651	2009	Unfavorable
2064/65	42288	33914	8374	Unfavorable

Source: Annual Report of NTC.

From, the analysis of the above table, we find that the actual sale is low in each fiscal year, which remarks (or) shows that variances are unfavorable for every fiscal year.

5.12.2 Sales Variance of NTC (in Rs.)

When actual sales revenue is higher than budgeted sales revenue, then the variance will be favorable and vice-versa.

The following table shows the sales revenue variance of NTC (in Rs.) for the last five fiscal year.

Table 5.29
Budgeted and Actual Sales Revenue Variances of NTC

FY	Budgeted sales	Actual Sales	Variances	Remark
2060/61	2556.86	2677.02	120.16	favorable
2061/62	3020.71	3310.60	289.97	favorable
2062/63	3411.15	4321.05	909.90	favorable
2063/64	4522.40	4534.24	11.84	favorable
2064/65	5161.68	4902.48	259.20	Unfavorable

Source: Annual Report of NTC.

From the analysis of the above table, we find that the sales revenue variances are positive except in FY 2064/65. So that it is favorable, which means NTC is operating in efficiency. But in FY 2064/65 the situation is unfavorable.

5.12.3 Overhead Expenses Variances of NTC

The deviation of the actual overhead expenses from the budgeted overhead expenses is known as variance. When actual overhead expenses are less than budgeted overhead expenses, it is known as favorable variances. Usually, such a variance is a sign of efficiency of the NTC. On the other hand, if actual overhead expenses are more than budgeted expenses, then it is unfavorable which indicates inefficiency of the corporation.

Table 5.30
Overhead Expenses Variances of NTC

FY	Budgeted sales	Actual Sales	Variances	Remark
2060/61	1529.67	1290.33	239.34	Favorable
2061/62	1963.56	1670.03	293.53	Favorable
2062/63	2175.78	1787.17	370.61	Favorable
2063/64	2233.27	1923.33	309.94	Favorable
2064/65	2627.74	2456.08	171.66	Favorable

Source: Annual Report of NTC.

From the analysis of the above table, we find that the variance is positive, which shows the favorable situation in every FY. This indicates the efficiency of NTC.

5.12.4 Production Variance of NTC (in Units)

The deviation of actual production from the budgeted production is known as variance. If actual production is more than budgeted production, then it is known as favorable variance and if actual production is less than budgeted production then it is unfavorable.

The following table shows the production variances of NTC (in units) for the last five fiscal years.

Table 5. 31
Production variances of NTC in Units (lines)

FY	Budgeted sales	Actual Sales	Variances	Remark
2060/61	36997	43333	6336	Favorable
2061/62	52007	56342	4335	Favorable
2062/63	41572	29278	12294	Unfavorable
2063/64	42570	31756	10814	Unfavorable
2064/65	42288	33914	8374	Unfavorable

Source: Annual Report of NTC.

The above table shows that in the first two years production variances are favorable, which indicates the efficiency of NTC. But in the remaining three years production variances are unfavorable, which indicate the inefficiency of the corporation.

5.13 Findings

The various functional budgets have been presented along with their achievements by comparing budgets and actual results .By analyzing the various functional budgets and financial position using different types of statistical and financial tools. We come to know that there are many internal as well as external problems existing in the corporations profit plans. On the basis of different analysis, observation and informal discussion the following major findings have been drawn.

- 1) The sales of NTC are increasing every year, but the increasing rate is not fixed. Actual sales line is always below than budgeted sales but actual sales revenue is always high then budgeted. But in FY 2064/65 actual sales revenue is low then budgeted sales revenue.
- 2) The balance sheet of NTC shows huge amount of cash and bank balance (requiring) lying idle and this indicates some deficiency of the corporation to utilize its liquid assets.
- 3) Actual production lines are of the nature of high variability than budgeted production line.
- 4) NTC prepares both long-range and short-range sales budget, but these are not prepared in detail. Also there is a system of keeping management information system (MIS) report in this corporation.
- 5) The cost-volume profit analysis in NTC shows that BEP (Break even point) is satisfactory.
- 6) Working capital ratios are going in increasing trend and net working capital ratios are going increasing trend which shows NTC has earned more profit. Also the assets turnover ratios are moving to increasing trend, which is a good sign for NTC.
- 7) The corporation moves in the track of gaining good operating and net profit in future because the financial position is in satisfactory situation.
- 8) The Net Profit of NTC is going on increasing trend. Also the cash budget shows huge amount of cash and bank balance.
- 9) Overhead expenses are not classified systematically and this creates problem to analyze its expenses properly.
- 10) There is lack of proper coordination between the various responsible departments and only the top level executives are involved in planning and decision making process and lower level participation is not encouraged.

- 11) Internal and external variables providing opportunity, threat and weakness are not identified clearly. The goals and objectives are not in a clear-cut way.
- 12) NTC is operating in profit but this is not satisfactory in monopoly situation.

CHAPTER- SIX

SUMMARY, CONCLUSION, AND RECOMMENDATION

6.1 Summary

In Nepal PEs were established with the objectives of accelerating the rate of economic growth, mobilization of available resources, generate employment opportunities as well as earning reasonable profit necessary for the development of the country. But new Nepal is in a state of crisis, fundamentally rooted in a failure of productive organization associated with its economic and ineffectiveness due to lack of managerial efficiency. To out come from such situation, profit planning is one of the most important tools used to control enterprise operations.

Profit planning and control means the development of objective and goals and motivate the organization to achieve the goals and objectives effectively and efficiently. This is one of the most important management tool for planning and controlling business operation, the effective operation of a business concern resulting in to the excess of income over expenditure fully depends upon as to what extent the management follows proper planning, effective coordination and dynamic control only preparation of plan is not sufficient for the success full operation of the business in addition this effective implementation follow-up system is very important.

Most of the Nepalese PE is facing the problems of government intervention and their autonomy is only confined in words NTC is also suffering from this intervention phobia. Most of the executives have direct link and affiliation with political parties and they want o manipulate in the interest of their concerned political party that is in communication services. Not only this, NTC's panning and policy making system is also affected by the regular change in the government of the country. By this kind of intervention and instability of the government, a PE's performance is influenced and NTC cannot be expectation of this. Nepal Telecom was established in 2032 B.S. The head office is located in Bhadrakali, Kathmandu. This study has tried to examine and analyze that to what extent the corporation is applying comprehensive profit planning system and sub objectives are to analyze financial performance. The scope of the study is limited to the namely Nepal Telecom and only five years trend FY 2060/61 to 2064/65 data have been analyzed for the purpose of analyzing short term budgets. In this study, secondary source of data have been collected to analyze the various functional budgets. Related literature have been reviewed which consist of books, reports, periodic articles and government officials publication etc. and six dissertation. A general concept has been given in conceptual framework.

The study has been organized in six main chapters consisting of introduction, conceptual framework, review of literature, research methodology, presentation and analysis of data and summary, conclusion and recommendations.

6.2 Conclusions

After analyzing in detail the present practice of profit planning system in 'Nepal Telecommunication Corporation' this study concludes the following points.

1. NTC prepares both long-term and short-term profit plans but the long-term profit plan is confined only to top level.
2. There is perfect positive correlation between budgeted sales and actual sales, between sales production and planned production and actual production showed by different statistical tools.
3. NTC has not adequately considered controllable and non-controllable variables affecting the organization.
4. NTC fails to analyze its strengths and weakness in depth because of the absence of the competitors, it has become monopolistic concern and hence, it is not alert towards its possible threat and opportunities.
5. Profit earned by NTC is not sufficient to make NTC self-reliance in its activities.
6. The balance sheet of NTC shows huge amount of cash and bank balance lying idle and it indicates some deficiency of the corporation to utilize its liquid assets.
7. NTC has been earning certain amount of net profit in each fiscal year but it is very low in comparison with the investment on net worth.
8. Cost volume profit analysis shows that BEP is satisfactory but C.V. analysis neither is nor considered in corporation, which has a vital impact upon profitability.
9. Planning department of NTC have no adequate authority to decide and create new ideas to formulate various plan.
10. There are no clear cut boundaries to separate cost into fixed and variable.
11. The corporation is not able to maintain a proper coordination between various directorates in regard on the goals, objectives and strategies of the organization.

12. NTC prepares cash flow plan for coming up year, but it does not apply the method of determining financing.
13. Long term liability is high but current liability is lower than current assets.
14. Overhead expenses are all favorable in NTC in the study period.
15. Liquidity ratios shows high portion of current assets which is not a good sign for corporations operations. the leverage ratio shows decreasing pattern of total debt and the turnover ratio is not good in this monopoly market situation of NTC
16. All the employees are paid on time basis, which gives them a fixed salary, due to the fixed payment on time basis qualified and creative personal are frustrated.
17. The actual sales lines are always below the budgeted but actual sales revenues are always higher than budgeted.
18. Net profit of NTC is going in increasing trend as shown by the income statement.

6.3 Recommendations

After the detail analysis of the profit planning system in NTC as the representative case study of corporation public enterprise, it seems necessary to develop, implement and improve the profit planning system in NTC from initial stage to end. Following suggestions can be recommended to improve the performance of the corporation.

1. NTC has no practice of allocating overhead costs into different headlines which makes problem on controlling costs so NTC should allocate overhead costs in to appropriate heading. Actual overhead of NTC crosses the budget discipline should be established.
2. The corporation liquidity position is satisfactory how ever it is Important for this corporation to behave like entrepreneur to make the best use of liquid funds it has no estimate of how much fund needed for immediate use and all the un use funds should be invested in marketable securities to generate some income. If idle fund if working capital is not invested, NTC will sacrifice some amount.
3. To increase the net profit of NTC there should be control in the operating as well as non operating expenses. There is increasing some unnecessary and wasteful expenses, which are bad debts written off, repair and maintenance expenses, management and committee fees etc. There is possibility to bring down those unproductive expenses if the management & staff of NTC are to be more careful in cost factor.

4. The corporation's staffs are the main brain to utilize the corporation's assets more effectively & efficiently through which NTC can increase its profit earning capacity. The corporation must prepare the highly, qualified, dynamic & energetic personnel. Therefore it would be better to open an own training center for the personnel.
5. There should be proper coordination between various directorate of the corporation in regard of budget formulation & implementation of the budget.
6. Profit plan manual should be communicated from the top of lower level & all the personnel of the corporation must get the chance of participating in decision making & planning process.
7. General Managers or executive directors should be appointed for some long period & the right person should be chosen in the right place.
8. To make profit planning system more progressive, the concept of PPC should be applied in order to improve overall performance.
9. Account receivable is in increasing trend which is a remarkable condition. NTC should expand the pay card system nation wise to reduce the account receivable.
10. The waiters of telephone lines are very big in number. So NTC should expand its capacity immediately.
11. The sales budget must be prepared on the realistic ground because all other budgets depend upon the sales budget.
12. Without giving more autonomy, NTC management cannot work effectively and the decision. Making procedure is very long. Without taking government acceptance NTC cannot take any vital decision. Due to these causes NTC cannot take any vital advantages of opportunity. Therefore, government should provide more autonomy to the management of NTC & make them responsible & accountable according to their work.
13. The financial position of the corporation should be timely evaluated through ratio analysis and other relevant financial and statistical tools models are recommended to evaluate its financial position
14. NTC must open a separate profit planning department and must appoint a profit planning director for a achieve corporations goals.
15. Domestic style of management should be followed while formulating plans and policies of the organization. Lower level management participation should be encouraged in profit planning and similarly there should be proper communication to all levels of management about the tactical and strategic plan of the corporation.

16. Variance analysis should be effective. The favorable and unfavorable variance must; be analyzed carefully and the course for unfavorable variance should be diagnosed and identified immediately.
17. At last systematic approach should be made towards comprehensive profit planning. This can considerably contributed profitability of the corporation.
18. The finance and budget directorate of the corporation should be more unvoiced in planning corporation activities. It should also build up a management information system (MIS) to help top management to take timely and appropriate action.
19. The data between annual reports and budget books shows different figures, which is a serious problem in both of the documents.
20. Long-term objectives should be clearly formulated so as to make a clear distinction between profit motives and social motives.

BIBLIOGRAPHY

Books

Anthony, R.N. and Reece, J.S.(1977); **Management Accounting Principles**. (Taraporevala. Nepal)

Armstrong, J. Scott (1978); **Long Range Forecasting From Crystal Ball to computer** (New York.)

Art has F. Brownoser,(1967) **Seat-A Process of Alternative Management Accounting**

Bajarachary, Puskar Opt Cit pp 3

Bhusan, Y.K. (1976); **Fundamentals of Business Origination and Management**, (Sultan Chand and Sons Publisher, New Delhi) 8th Edition,

Donnelly, M.Rebort, (1984); **Guide to Planning**, (Van Nastard Reinhold Publication Company,).

Druckker F Peter,(1964) :**Long -Range Planning for Management**.

Fern ends Dray, (1982): **Central System For Public Enterprise in Developing Countries**, ICPE,

Garrison, Ray H.(1985); **Management Accounting Concept For Planning Control and Decision Making**,(Business Publication Inc.,Plano,Texas,4th Ed.,).

Glenn, A. Welsch, Ronald W. Hilton, Paul N. **Gordon, Budgeting: Profit Planning and Control**, 5th Edition.

Gupta, S.P., **Management Accounting**.

Horngren, Chasles, T,(1976):; **Cost Accounting a Managerial Emphasis**, (New Delhi, 3rd Edition,).

Joel, Dean (1992); **Managerial Economics**, (Prentice Hall of India Pvt. Ltd.,).

Joshi, Shy am, (1993); **Managerial economics**, (Taleju Prakashan).

Joshi, Shyam, (2051) :**Public Enterprise Managements**

Karn, Anant Lal (1985); **Business Policy: A Conceptual and Analytical Framework**, (KMC, Kirtipur), July II

Koontz Harold and Donne lyric,(1964): **Long Range Planning for Management**, (Harper and Raw Publishers, New York).

Kulkarni, P.V.,(1992); **Financial Management**, (Himalayan Publishing House, Bombay. 4th Edition,).

Lynch M. Richard and William Sun W. Robert,(1984); **Accounting for Management, Planning and Control**, (Tata-Mc Grow Hill Publishing C. Ltd., 3rd Edition).

Manandhar, Narayan, **Issues in public Enterprise Management in Nepal**.

Math or, B.P., **Public Enterprise Management**, Mac Million India Ltd., 1st Ed.

Memorial, C.B.,(1990) ; **Personnel Management**, (7th Edition,).

Narayan, Laxmi, **Principle and Practice of PE Management**, (S. Chand Co. Ltd., 4th Edition).

Pandey, I.M.(1999); **Financial Management**, (7th Edition, Printed at Godson Paper Ltd., Maida).

Panday, I.M., (1976); **Management Accounting a Planning and Control Approach**, (Vikas Publishing House Pvt., Delhi, 3rd Edition)

Robert M. Donnelly,(1984); **Guide to Planning**, an Enliven Nostard Reinhold Publication V a Nostard Reonhold C.

Saksena, S.C.,(1970) **Business Administration and Management**, (3rd Edition Schermerhon, John Jr.,(1984) **Management for Productivity**, (John Willey and Sons, New York)

Sharma, R.,(1994); **Management of Public Enterprise**, 1st edition

Sultan, C.F.,(1953) **Business Forecasting**, A Paper Present at the 24th National Conference, Held at London

Terry, George R., **Principle of Management**, 5th Edition.

Thomas, William, **American Accounting Institution Institution In Cost Accounting, Budgeting and Control**.

Van Horne James C.,(1976); **Financial Management and Policy**, (Prentice Hall of India Pvt. Ltd., 8th Edition,).

Welch Glenn A Hilton Ronald W. and Gordon Paul N (1998)., **Budgeting Profit Planning and Control**, (Prentice Hall of India, New Delhi, 5th Edition).

William B. Pierce,(1978); '**International Telecommunication**', Seminar on Rural Telecom, (New Delhi, 11-22 Sep.).

Willsonore, A.W., **Business Budgets and Budgeting Control**, Edition London.

Wolf Howard K. and, Prem Raj, (1975); **Social Science Research and Thesis Writing**, (University Press, T.U., Kathmandu).

Dissertations

Acharya, Suman,(1995); **Profit Planning In Policy Undertaking of Nepal** (NTC and NEA), Unpublished Master's Degree, Thesis Submitted In Central Department of Management, T.U., Kirtipur, April, .

Chap again, Krishna Prasad, (2001); **Profit Planning In Manufacturing Enterprises in Nepal**, Unpublished Master's Degree, and Thesis Submitted in Central Department of Management, T.U., Kirtipur, and May

Dhami, Bharat Kumar,(2001); **Profit Planning In Public Utility**, Unpublished Master's Degree, Thesis Submitted in Central Department of Management, T.U., Kirtipur, August,

Shah, Binod Kumar,(1999); **Profit Planning In NTC**, Unpublished Master's Degree, Thesis Submitted in Central Development of Management, T.U., Kirtipur, April

Sitaula, Matrika Prasad,(1995); **NTC In Nepal**, Unpublished Master's Degree, Thesis Submitted in Central Development of Management, T.U., Kirtipur.

Thakulla, Tej Bahadur,(2001); **Profit Planning In NTC**, Unpublished Master's Degree, Thesis Submitted in Central Development of Management, T.U., Kirtipur, August .

Journals, Reports, Articles and Government Publications

Management Dynamic, A Journal on Management and Economics.

National Planning Commission of 8th and 9th Plan.

NTC Annual Reports, 2062/63, 2063/64, 2064/65

NTC Budget Book, 2060/61 to 2064/65.

NTC Income Statement.

NTC Miscellaneous Report.

Statistical Year Book of Nepal, (1999); Central Bureau of Statistics, HMG, NPCA.

Targets and Performance Of Public Enterprising HMG Ministry of Finance, (1999).

Vikas, a Journal of Development, National Planning Commission Secretariat Nepal, Vol. 19, July, 1999.

APPENDEX –1

Supplementary Questionnaire

Name of the Respondent:

Position:

Age:

Sex:

Tenure of Service:

Education Qualification:

(Please tick as (0 or 1 in the boxes and fill in the blanks as required)

1. Would you point out the long-range objective of NTC Limited?
 - a)
 - b)
 - c)
 - d)
 - e)

2. To what extent do you agree that the long-term objectives set by the NTC are achieved?

a)	Great	()
b)	To some extent	()
c)	Little	()
d)	Not agree	()

3. What were the specific goals targeted for the Fiscal year 2064/065?

a)	Capital utilization	()
b)	Growth objective	()
c)	Increased Deposit	()
d)	Net Profit Margin on loan disbursement	()
e)	Return on Net Capital employed	()
f)	Others	()

4. Was the achievement satisfactory?

- a) Yes () b) No ()
5. If No would you please mention the main 3 causes of low achievements?
- a)
- b)
- c)
6. What level of management is responsible for the preparation of budgeting and profit planning?
- a) Top level ()
- b) Middle level ()
- c) Lower level ()
- d) Any other ()
7. Do NTC have a separate Profit Planning and budgeting department?
- a) Yes () b) No ()
8. To what extent the managerial commitment is applied regarding budgeting and profit planning?
- a) Great ()
- b) To some extent ()
- c) Little ()
- d) Not applied ()
9. Would you please mention the period covered by profit planning in this NTC?
- a) Long range (Strategic plan) in years
- b) Short range (Tactical plan) in years.....
10. What is the main SWOT of the NTC?
- a) Strengths
-
 -
 -
- b) Weaknesses
-
 -
 -

- c) Opportunities
 -
 -
 -

- d) Threats
 -
 -
 -

11. What approaches are used for loan disbursement?

.....

12. Who Prepare the Credit Plan?

.....

13. Loan are given on the basis of:

- a) Primary Security ()
- b) Collateral security ()
- c) Both Primary and Collateral security ()
- d) Personal Guarantee ()

14. What pricing method has been accepted?

- a) Cost Plus Pricing ()
- b) Marginal Cost Pricing ()
- c) Subsidized pricing ()
- d) Others (.....) ()

15. Who evaluates the relevant variables?

- a) Budget Committee ()
- b) Planning Department ()
- c) Top Management ()
- d) Consultants ()

e) Others ()

16. What is the wages Payment System?

- a) Daily basis ()
- b) Monthly basis ()
- c) Piecework basis ()
- d) Others ()

17. Whether the cost is segmented into fixed and variable or not? If yes, what are the variables?

Fixed Cost	Variable Cost
.....
.....
.....

18. How are the employee recruited in the NTC?

.....

19. What is the performance evaluation system of the NTC?

- a) Ratio analysis ()
- b) Standard costing ()
- c) CVP analysis ()
- d) Flexible Budget ()

20. What evaluation criteria are used to evaluate the major capital expenditure?

- a) NPV ()
- b) IRR ()
- c) PBP ()
- d) ARR ()
- e) Others ()

21. What impact do you feel from the interference of NTC.

.....

22. If yes, point out the main 3 procedural techniques

.....
.....
.....

23. What are the major steps that the bank can take to improve the profit planning of the NTC?

.....
.....
.....

APPENDIX -2

Computation of Mean, Standard Deviation, Coefficient of Variation and Correlation Coefficient of Budget and Actual Sales Figures

	B.S (X)	A.S.(Y)	(X-X)=X	(Y-Y)=Y	X ²	Y ²	XY
060/61	36.997	30.538	-6.0898	-3.7188	37.086	13.829	22.65
061/62	52.007	33.426	8.9202	-0.8308	79.570	0.690	-7.41
062/63	41.572	32.845	-1.5148	-1.4118	2.295	1.993	2.14
063/64	42.570	40.561	-0.5168	6.3042	0.267	39.743	-3.26
064/65	42.288	33.914	-0.7988	-0.3428	0.638	0.1175	0.274
	X=	Y=	X=0	Y=0	X ² =	Y ² =	XY=
	215.4	171.284			119.855	56.37	14.39

i) Calculation of Arithmetic Mean

$$\bar{X} = \frac{\sum X}{N} = \frac{215.434}{5} = 43.0868$$

$$\bar{Y} = \frac{\sum Y}{N} = \frac{171.28}{5} = 34.2568$$

ii) Calculation of Standard Deviation ()

$$\dagger x = \sqrt{\frac{1}{N} \sum (X - \bar{X})^2} \quad \text{or} \quad \dagger x = \sqrt{\frac{\sum X^2}{N}} = \sqrt{\frac{119.855}{5}} = 4.896$$

$$\dagger y = \sqrt{\frac{1}{N} \sum (Y - \bar{Y})^2} \quad \text{or} \quad \dagger y = \sqrt{\frac{\sum Y^2}{N}} = \sqrt{\frac{56.37}{5}} = 3.358$$

iii) Calculation of Coefficient of Variation (CV)

$$C.V (X) = \frac{\dagger X}{X} \times 100 = \frac{4.896}{43.0868} \times 100 = 11.36\%$$

$$C.V (Y) = \frac{\dagger Y}{Y} \times 100 = \frac{3.358}{34.2568} \times 100 = 9.80\%$$

iv) Calculation of Correlation of Coefficient (r)

$$r_{XY} = \frac{\sum XY}{\sqrt{\sum X^2} \sqrt{\sum Y^2}} = \frac{14.39}{\sqrt{119.855} \sqrt{56.37}} = 0.18$$

v) Calculation of Probable Error

$$PE (r) = 0.6745 \times \frac{(1 - r^2)}{\sqrt{N}} = 0.6745 \times \frac{(1 - (0.9676)^2)}{\sqrt{5}} = 0.29$$

Annex -5

Forecasted Telephone Capacity

Distribution

*In
Thousand
s*

AD	2004/05	2005/06	2006/07	2007/08
BS	2060/61	2061/62	2062/63	2063/64

Capacity Add.				
PSTN	93902	64476	45350	86488
GSM MOBILE/postpaid & pre-paid	5000	50000	45000	120000
CDMA	0	0	0	0
V sat	530	200	275	400
WLL	733	99	260	0
TOTAL	100165	114775	90885	206888

Distribution				
PSTN	65253	75363	55696	60083
GSM MOBILE/postpaid & pre-paid	6360	20000	60000	129000
CDMA	0	0	0	0
V sat	200	200	275	250
WLL	102	99	200	100
TOTAL	71915	95662	116171	189433

Source: Nepal Telecom's Budget Books from FY 2060/61-64/65